

IBM Z Performance and Capacity Analytics  
Version 3 Release 1

*CICS Performance Feature  
Guide and Reference*



**Note**

Before using this information and the product it supports, read the information in [“Notices” on page 367](#).

This edition applies to version 3, release 1 of IBM Z Performance and Capacity Analytics (program number 5698-AS3) and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Preface

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This book describes how to use IBM Z Performance and Capacity Analytics and the CICS Performance Feature to collect and report performance data generated by Customer Information Control System (CICS).

This book:

- Helps you understand general performance characteristics
- Describes performance issues and how they affect the level of services you can offer users
- Guides you through the component-selection, installation, and implementation processes
- Explores performance characteristics shown in IBM Z Performance and Capacity Analytics reports so that you can analyze the characteristics of your system

The terms MVS™, OS//390, and z/OS are used interchangeably throughout this book.

## Who should read this book

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The *CICS Performance Feature Guide and Reference* is for:

- Anyone who analyzes or monitors CICS performance
- Anyone responsible for establishing or meeting service-level objectives for CICS user groups
- IBM Z Performance and Capacity Analytics administrators (primarily as a guide to feature installation and as a reference to table and report definitions)
- Users with various backgrounds who are interested in analyzing CICS performance data and improving CICS performance

The IBM Z Performance and Capacity Analytics CICS Performance Feature helps you monitor CICS, even if you have little experience with CICS. However, to make the best use of the CICS Performance Feature to improve CICS performance, you should know CICS, the terms that are unique to CICS, and the terminology associated with database design and performance. (If you are not familiar with CICS, refer to the *CICS General Information* manual which describes the basic concepts of CICS and introduces you to some CICS terminology.)

Also, the better you understand the interaction of processor cycles, storage, and I/O, the easier it is to identify performance constraints. The CICS product library (specifically the *Performance Guide* and the *Customization Guide* for either CICS/Enterprise Systems Architecture (CICS/ESA) or CICS/Multiple Virtual Storage (CICS/MVS) is the authoritative source for information about understanding and tuning CICS performance.

**Note:** For information about licensed programs either required or recommended for use with IBM Z Performance and Capacity Analytics, refer to the *Administration Guide and Reference*.

## What this book contains

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Use this book for guidance in collecting CICS-generated performance data from SMF logs and creating the reports supplied with the CICS Performance Feature. This book explains how to create and display IBM Z Performance and Capacity Analytics reports to both monitor and understand CICS performance.

This book contains the following parts:

- Use Part I, "Guide" for developing and executing your performance and service-level strategy:
  - [Chapter 1, "Introducing the CICS Performance Feature,"](#) on page 1 explains basic concepts of systems management and offers suggestions on establishing performance objectives and service-level agreements. It also describes the CICS Performance Feature's role in the IBM Z Performance and Capacity Analytics environment.

- Chapter 2, “Implementing the CICS Performance Feature,” on page 7 contains a task-oriented description of how to plan for and set up the CICS Performance Feature so that useful reports and information for decision support is available immediately.
  - Chapter 3, “Monitoring CICS performance,” on page 23 describes certain issues and concerns associated with systems management and how you can use the IBM Z Performance and Capacity Analytics CICS Performance Feature to explore those issues and concerns.
  - Chapter 4, “Using the CICS Partitioning Feature,” on page 35 describes how to use the CICS Partitioning feature and provides descriptions of the supplied data tables.
  - Use Part II, “Reference” for a detailed description of the CICS Performance feature:
    - Chapter 5, “Data flow and IBM Z Performance and Capacity Analytics objects,” on page 45 describes the flow of data from log record to report (or list record), showing IBM Z Performance and Capacity Analytics definitions. It also provides a simple explanation of the supported logs, their structure, and the common fields and conditions associated with each log. It shows how the CICS Performance Feature maps log data into tables.
    - Chapter 6, “Data tables, lookup tables, and control tables,” on page 55 describes the supplied data tables and updates, including columns and expressions. It contains similar descriptions of lookup tables and control tables.
    - Chapter 7, “Reports,” on page 293 contains examples of the CICS Performance feature reports and shows where the data comes from.
  - Use Part III, “Appendixes” as a reference for obtaining support for IBM software products.
- A glossary and index follow the appendix.

## Publications

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This section describes how to access the IBM Z Performance and Capacity Analytics publications online.

For a list of publications and related documents, refer to [“IBM Z Performance and Capacity Analytics publications” on page 369](#).

### Accessing publications online

Publications for this and all other IBM products, as they become available and whenever they are updated, can be viewed on the IBM Knowledge Center website from where you can also download the associated PDF.

#### **IBM Z Performance and Capacity Analytics V3.1.0**

[https://www.ibm.com/support/knowledgecenter/SSPNK7\\_3.1.0](https://www.ibm.com/support/knowledgecenter/SSPNK7_3.1.0)

#### **IBM Knowledge Center**

<https://www.ibm.com/support/knowledgecenter>

## Accessibility

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Accessibility features help users with a physical disability, such as restricted mobility or limited vision, to use software products successfully. With this product, you can use assistive technologies to hear and navigate the interface. You can also use the keyboard instead of the mouse to operate all features of the graphical user interface.

For additional information, refer to the IBM Accessibility website:

<https://www.ibm.com/accessibility>

## Support information

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If you have a problem with your IBM software, you want to resolve it quickly. IBM provides the following ways for you to obtain the support you need:



- Searching knowledge bases: You can search across a large collection of known problems and workarounds, Technotes, and other information.
- Obtaining fixes: You can locate the latest fixes that are already available for your product.
- Contacting IBM Software Support: If you still cannot solve your problem, and you need to work with someone from IBM, you can use a variety of ways to contact IBM Software Support.

For more information about these three ways of resolving problems, see [Appendix A, “Support information,”](#) on page 365.

## Conventions used in this book

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This guide uses several conventions for special terms and actions, operating system-dependent commands and paths, and margin graphics.

The following terms are used interchangeably throughout this book:

- MVS, OS/390®, and z/OS.
- VM and z/VM.

## Typeface conventions

This guide uses the following typeface conventions:

### **Bold**

- Lowercase commands and mixed case commands that are otherwise difficult to distinguish from surrounding text
- Interface controls (check boxes, push buttons, radio buttons, spin buttons, fields, folders, icons, list boxes, items inside list boxes, multicolumn lists, containers, menu choices, menu names, tabs, property sheets), labels (such as **Tip**, and **Operating system considerations**)
- Column headings in a table
- Keywords and parameters in text

### *Italic*

- Citations (titles of books, diskettes, and CDs)
- Words defined in text
- Emphasis of words (words as words)
- Letters as letters
- New terms in text (except in a definition list)
- Variables and values you must provide

### **Monospace**

- Examples and code examples
- File names, programming keywords, and other elements that are difficult to distinguish from surrounding text
- Message text and prompts addressed to the user
- Text that the user must type
- Values for arguments or command options

## What's new in this edition (September 2020)

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This edition contains editorial improvements. No technical changes have been added.



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# Chapter 1. Introducing the CICS Performance Feature

IBM Z Performance and Capacity Analytics is a reporting system that collects performance data logged by computer systems, summarizes the data, and presents it in a variety of forms. IBM Z Performance and Capacity Analytics consists of a base product and several optional features that are used in systems management.

The IBM Z Performance and Capacity Analytics base includes:

- Interactive System Productivity Facility (ISPF) host reporting and administration dialogs
- Log collector
- Log and record definitions for all records used by the features

Each feature provides:

- Update definitions for DATABASE 2 (Db2®) tables
- Table definitions
- Report definitions

The IBM Z Performance and Capacity Analytics database stores all reporting data, which comes from several sources. For example, logs from System Management Facilities (SMF), Resource Management Facility (RMF), Customer Information Control System (CICS), and Information Management System (IMS) can be consolidated into a single report. If you install all components of all features and set system and subsystem data-recording parameters as recommended for each feature, you can ensure a steady supply of data about the operation of the entire DP center.

This chapter offers suggestions on establishing performance objectives and service-level agreements, and it also describes the role of the CICS Performance Feature in the IBM Z Performance and Capacity Analytics environment.

IBM Z Performance and Capacity Analytics assists you in performance management and service-level management of various computer systems. The CICS Performance Feature provides reports for your use in analyzing the performance of CICS/ESA, CICS/MVS, and CICS/TS. This section prepares you for using IBM Z Performance and Capacity Analytics in practical systems analysis.

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## Implementing performance management

As a performance analyst, your responsibility is to satisfy user requirements. To perform your duties, for example, you might:

1. Define performance objectives.
2. Gather performance data.
3. Create reports from the performance data.
4. Analyze performance reports to see if your objectives have been met.
5. Determine major constraints in the system.
6. Gather detailed performance data about suspected constraints.
7. Decide where you can afford to make trade-offs, and which resources can bear an additional load.
8. Tune the system to improve performance.
9. Verify the removal of performance constraints.

[Figure 1 on page 2](#) shows the cycle of performance management.

## Establishing performance objectives

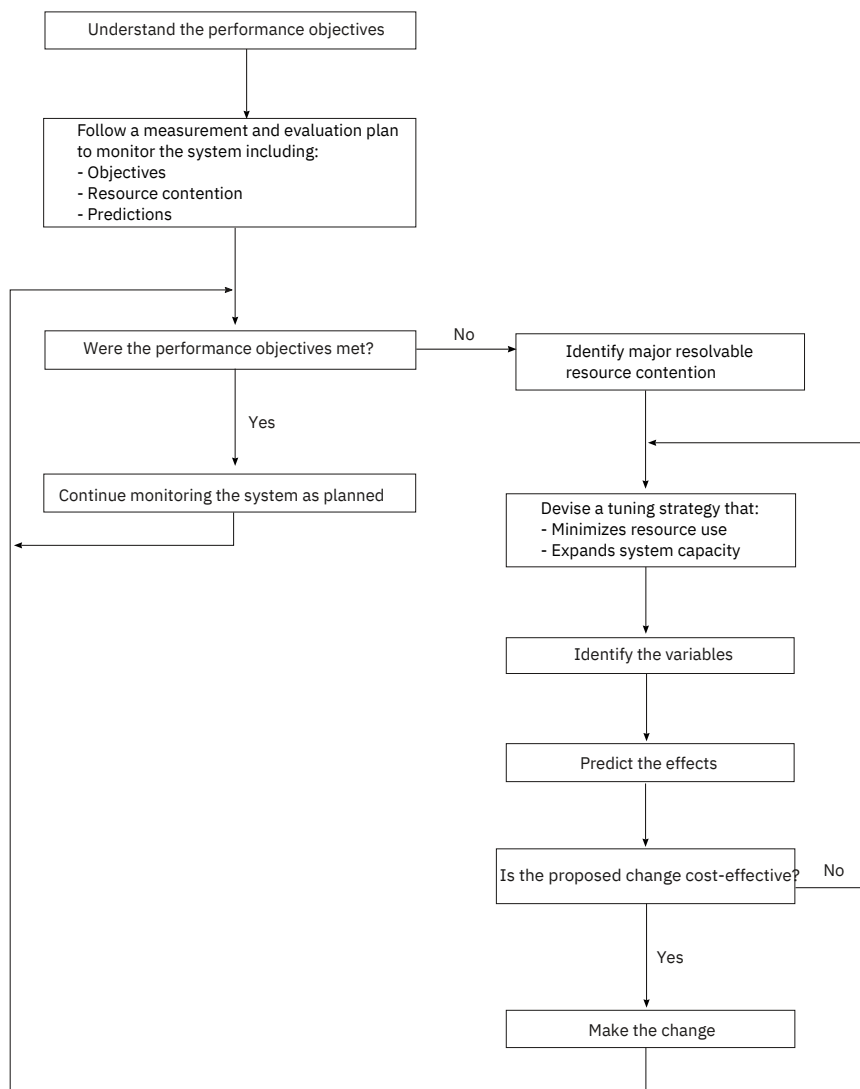


Figure 1. Performance-management cycle

## Establishing performance objectives

Before you can analyze the performance of any computing system, you must establish a measurable criteria for performance. The purpose of performance objectives is twofold:

- To state what is expected of the system in specific terms for each workload category. For example, trivial versus nontrivial transactions at distinct time periods; prime shift, off-shift, and peak periods within each shift.
- To understand and document the resources required to meet the objectives.

From the nature of these two goals, establishing performance objectives is an iterative process. Expect to update your performance objectives as the workload changes, as resource requirements change, and as turnaround and response time requirements change. Detailed performance objectives and detailed analysis of system performance make such changes noticeable. They help you identify solutions to performance problems that arise because of the changing nature of the system workload.

Performance objectives should be realistic, in line with your budget, understandable, and measurable. Objectives used at many organizations include:

### Acceptable response time

Duration within which some percentage of all applications have completed.

**Average throughput levels**

The total number of transactions completed within a given time.

**System availability criteria**

Including mean time to failure and the durations of down times.

Such objectives define the workload for the system and determine the requirements for data processing resources: processor speed, storage amounts, additional software, and so on.

Users usually have input to performance objectives. A mutual agreement on acceptable performance, between the data processing and user groups in an organization, is often formalized and called a *service-level agreement*. Service-level agreements can include expectations of query response time, the transaction throughput per day, hour, or minute, and schedules provided for batch jobs. They list criteria for determining whether or not the system performs adequately.

Each user group may require a different level of service. If so, formalize a service-level agreement with each user group, and establish service criteria for that user group.

## Defining performance objectives

---

**About this task**

Follow these steps to define performance objectives.

**Procedure**

1. Define the terms in which to specify objectives.

The basic types of performance objectives are:

- a) User-oriented objectives

These reflect the way an end user would rate the services provided by the system. They include:

- Response time for interactive work.
- Turnaround time for batch work.

- a) System-oriented objectives

These reflect the workload supported by the system. They include:

- Batch throughput.
- Interactive transaction rate.
- Number of concurrent interactive users

2. Decide how to measure the objectives.

When choosing the terms in which to define your objectives, also determine how to measure and report performance in relation to your objectives.

For user-oriented objectives, note any differences between measured objectives and what a user sees. Times reported by measurement tools are usually system-oriented elapsed times that do not include such delays as job output distribution and network time.

3. Document the current workload (categories and amount) and consider the following:

- Priority.
- Different time periods during which objectives and priorities vary.
- Resource requirements.
- Types of user groups and machines, with varying objectives.
- The applicable service-level agreement for the user or user group.
- How to track and report each service-level agreement. For example, by department or by user group.

You document workload categories to distinguish work for different resource requirements, different objectives, different priorities, and so on.

Also define factors for each level of each workload category. For example, determine factors for batch, TSO, CICS, IMS, and other subsystems. Within each subsystem, define even more factors: batch work divided into job classes; TSO, CICS, and IMS divided into types of transactions; all categories divided by peak hours and off-shifts.

#### 4. Set objectives for each workload category.

Use your documentation to state objectives for a percentage of the transactions in a class. For example, you could state, "90% of all CICS transactions should receive a three-second response time; 85% of all jobs in class A should receive a one-hour turnaround time."

While stating your objectives in these terms, also state objectives for the remaining percentage of transactions. For example, state performance objectives for the remaining 10% of all CICS transactions and the remaining 15% of all jobs in class A. Set objectives for 100% of the work in the system.

**Note:** When setting user-oriented objectives, be sure to consider any time the user sees that is not reflected in the measurement of the objective. For example, if trivial transactions require a four-second response time, you might set the objective to three seconds to account for network delays not reflected in response-time measurements.

#### 5. Measure and document resources used by each workload category.

To measure the resources used by different workload categories, choose the means by which to measure resource consumption. For example, measure and document service units, seconds, number of events, and so on.

Essentially, you want to identify the amounts of processor, storage, and I/O resources required for each workload category. This resource data further defines the workload categories. From this data, you can set resource limits for each category, for example, one processor minute for each job in job class X.

#### 6. Measure resources used against objectives.

If measured objectives meet defined objectives, simply monitor system performance. If measured objectives do not meet defined objectives, analyze the system to identify performance constraints and potential resource trade-offs.

Table 1 on page 4 summarizes the basic items in an initial service-level agreement.

| Table 1. Sample performance objectives in a service-level agreement |                         |                        |
|---|-------------------------|------------------------|
| System type   | Transactions per minute | Internal response time |
| CICSA   | 100                     | 5 seconds              |
| CICSB   | 200                     | 5 seconds              |
| TSO   | —                       | —                      |
| TSOC  | —                       | —                      |

In the sample, you promise CICSA users a five-second response time, provided that the load is less than 100 transactions per minute. You also promise CICSB users a five-second response time. Because CICSB users do more profitable work, the agreed limit is 200 transactions per minute.

This sample agreement is simple; a real agreement would probably specify groups of transactions rather than whole CICS regions, percentiles rather than averages for response time, and terminal rather than internal response time.

Remember that certain qualifications exist. For example, if users submit more work, it runs, but with increased response time. Also, this agreement is valid only for transactions already in production. This restriction prevents users from adding more work to the batch applications under the same service-level agreement.

You can refine the service-level agreement over time. You can include objectives for such items as system availability, reliability, and security. But the main point is to identify *measurable* objectives.

For more detailed information about defining performance objectives and formalizing them in a service-level agreement, refer to the *CICS Performance Guide* <http://examples.oreilly.com/cics/CDROM/pdfs/cicsts/dfht300.pdf>.

## Collecting performance data

Before you can analyze data to understand CICS characteristics, you must first collect the data. All IBM systems and subsystems provide data on how well they perform.

To produce usable information from data and present only needed data to users, you use several products. These products gather performance and management data and write that data to records. You customize these products to gather only the data needed to write the necessary records to the specific logs. Customizing the products helps organize the information, create the required reports, and reduce the performance impact.

IBM Z Performance and Capacity Analytics and the CICS Performance Feature collect from SMF records only the data required to meet CICS users' needs, combine that data with more data (called *environment data*), and present the data in reports. Figure 2 on page 5 illustrates how data is organized for presentation in IBM Z Performance and Capacity Analytics reports.

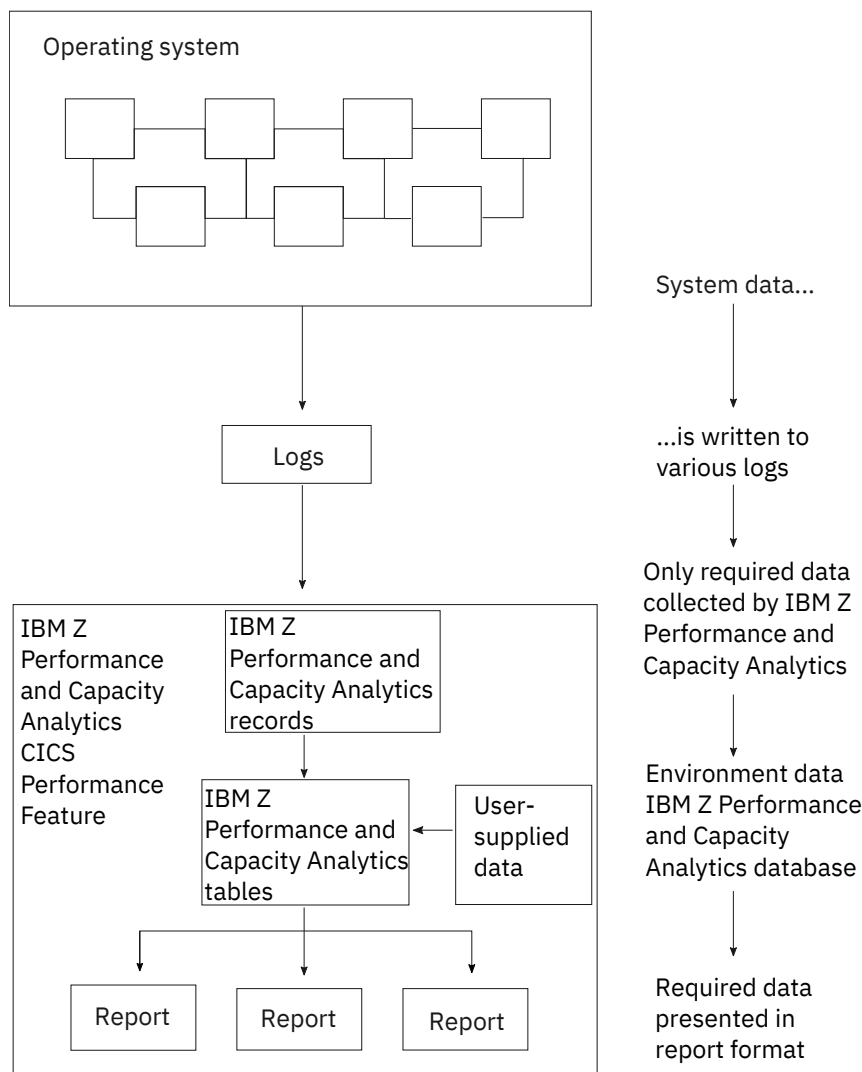


Figure 2. Organizing and presenting system performance data

The key to successful implementation of IBM Z Performance and Capacity Analytics is knowing:

- The information and resources on which you want to report and how to perform customization to select them

## Collecting performance data

- The way you want to organize, set objectives for, and process the data (used later to define the environment)

**Note:** The process of entering and maintaining environment data is called *administration*. IBM Z Performance and Capacity Analytics provides an administration dialog for maintaining resource information. Refer to the *Administration Guide and Reference* for information on how to use the administration dialog.



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## Chapter 2. Implementing the CICS Performance Feature

This chapter describes how to plan for and set up the CICS Performance Feature. It supplements the procedure in the *Administration Guide and Reference* for installing a component with information specific to the CICS Performance Feature.

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### Planning the implementation process

Before installing the CICS Performance Feature, you must follow these steps to plan the implementation process:

1. Describe users' tasks. Then determine what data the CICS Performance Feature must gather to help users accomplish those tasks.
2. Determine which components you must install to meet the users' needs.
3. Determine the administration tasks you must perform for the selected components and make any decisions required by these tasks. These tasks help you customize IBM Z Performance and Capacity Analytics and the CICS Performance Feature to work efficiently and effectively with your computer system.
4. For each selected component, determine the tasks you must perform to customize the supported products to work with IBM Z Performance and Capacity Analytics and with the CICS Performance Feature.

If this is your first exercise in implementation planning, *follow all these steps* to ensure that the CICS Performance Feature implementation is consistent. If you are reading this chapter in preparation for modifying your system, you might not need to perform all of these tasks.

Use the planning process to prepare for these main customization tasks:

- Customizing CICS/MVS, CICS/ESA and CICS/TS to gather the performance data that is written to SMF and other log files. You customize these products to generate the data required by the components you install.
- Defining environment data, which is all the information (besides the input data) that the CICS Performance Feature needs to create reports. Environment data controls the data-collection process and provides more information in the reports.

[Figure 3 on page 8](#) illustrates the overall process for implementing the CICS Performance Feature.

## Considering which components to install

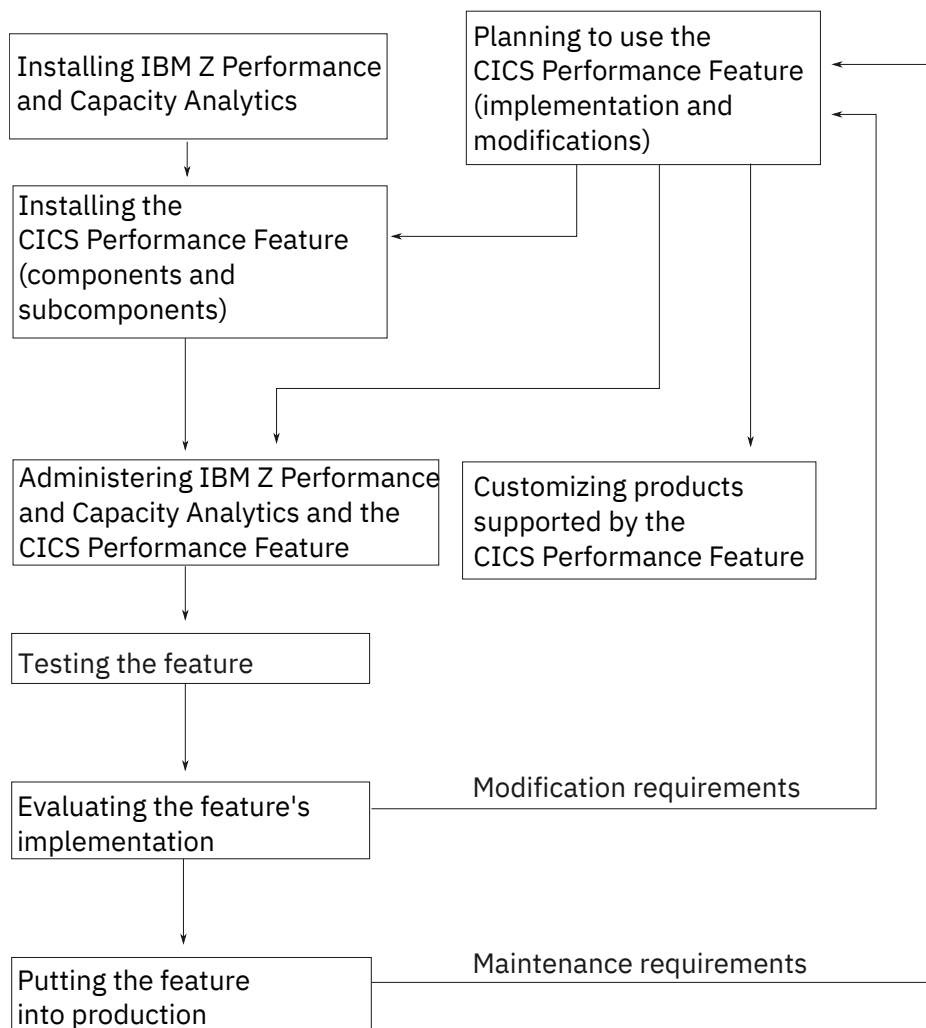


Figure 3. Implementation process for the CICS Performance Feature

## Considering which components to install

Your most critical planning task is determining what kind of information users need from the CICS Performance Feature. For example, users may be interested only in system resource availability or transaction response time. Installing only those parts of the feature needed to meet user requirements ensures that the feature benefits users while it minimizes the performance impact caused by data collection and interpretation activities.

The CICS Performance Feature uses these information categories for selecting the information for reports:

### Performance

Response time, resource use, and volumes and throughput for CICS-related activity affect performance. Generally, performance is stated as response time: the elapsed time to process a single user interaction with known characteristics, such as a simple inquiry or update.

Response time can be regarded as:

- Internal response time excluding transmission delay (for example, a CICS pseudoconversational task life)
- Terminal response time as perceived by the user

### Exceptions and incidents

Exceptions and incidents are events that exceed limits for:

- A service-level agreement

- Installation standards

Exceptions also include events that do not affect general CICS availability but do affect transaction and CICS resources. You will most likely monitor exceptions for these purposes:

- To detect causes of system downtime
- To identify user groups or transactions with excessive exceptions

An incident is an exception that indicates a more serious limit condition. As explained in [“Monitoring exception and incident data” on page 31](#), you should investigate and correct incidents.

Although IBM Z Performance and Capacity Analytics can analyze data and produce reports for all of these information categories, you might not need all that data. [Figure 4 on page 9](#) shows that the CICS Performance Feature is divided into four components. The CICS Monitoring component is divided further into 16 subcomponents. The CICS OMEGAMON® monitoring component is divided further into 5 subcomponents. Components and subcomponents provide support for specific operating systems, subsystems, and licensed programs.

#### CICS Performance Feature

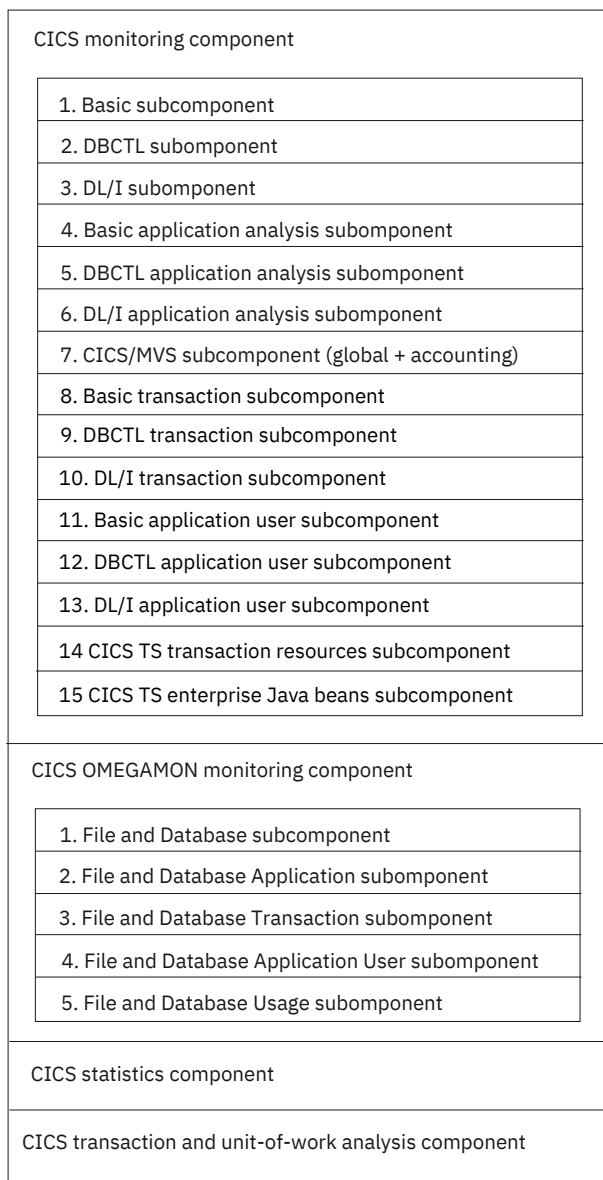


Figure 4. CICS Performance Feature structure

Consider carefully which components to install. Components are groups of IBM Z Performance and Capacity Analytics *objects* (for example, predefined update definitions, data tables, and reports). If you find that you need reports from a component that you have not installed, you must install that component and then wait several days or weeks until enough data has been collected to create reports. However, if you install more components than you need, IBM Z Performance and Capacity Analytics collects needless data, which takes up disk space and uses processor time.

**Note:** You cannot uninstall an individual subcomponent. As described in the *Administration Guide and Reference*, you must uninstall a component, then reinstall it, selecting only those subcomponents you need.

At this point, you might find it helpful to examine the predefined reports for each subcomponent. For more information, see [“Chapter 7, “Reports,” on page 293.](#)

## Evaluating the CICS Monitoring component

The CICS Monitoring Facility (CMF) provides the performance data for the CICS Monitoring component. [Figure 4 on page 9](#) shows the subcomponents contained in this component.

### Note:

1. Subcomponents 1-3 summarize data by transaction, subcomponents 4-6 summarize data by application, subcomponents 8-10 summarize data by transaction and user, and subcomponents 11-13 summarize data by application and user.
2. To make efficient use of the Application Analysis subcomponents (subcomponents 4, 5, and 6), you must update the CICS\_LOOKUP\_APPL table. For more information, see [“Updating CICS\\_LOOKUP\\_APPL” on page 20.](#)

### 1. Basic subcomponent

This first subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize, by transaction, basic data gathered by CMF. Consider using this subcomponent as a starting point.

### 2. DBCTL subcomponent

Database control (DBCTL) is a DL/I interface that uses an address space separate from CICS. It is available only for CICS/ESA and CICS/TS. If you run DBCTL, consider installing this subcomponent. It summarizes data by transaction. Its tables contain the DBCTL monitoring fields. (You must verify the presence of these fields in the performance monitoring record, as described in [“Making input data available” on page 13.](#))

### 3. DL/I subcomponent

This subcomponent processes data from the local interface to a DL/I database. If you run DL/I, consider installing this subcomponent. It summarizes data by transaction. Available for CICS/MVS, CICS/ESA, and CICS/TS, its tables contain the DL/I monitoring fields. (As with the DBCTL subcomponent, verify the presence of the DL/I fields in the performance monitoring record, as described in [“Making input data available” on page 13.](#))

### 4. Basic Application Analysis subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize transaction data by application. See [“Updating the lookup tables” on page 19](#) for information on the customization needed to use this subcomponent.

### 5. DBCTL Application Analysis subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize DBCTL transaction data by application. For the CICS Performance Feature to summarize transaction data by application, you must use the customization procedure in [“Updating the lookup tables” on page 19.](#)

**6. DL/I Application Analysis subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize DL/I transaction data by application. Again, you must use the customization procedure in [“Updating the lookup tables” on page 19](#) for the CICS Performance Feature to successfully summarize transaction data by application.

**7. CICS/MVS subcomponent (global + accounting)**

Only CICS/MVS users should consider installing this global and accounting subcomponent. Its tables contain the IBM Z Performance and Capacity Analytics objects necessary to summarize global and accounting data only for CICS Version 2.

**8. Basic Transaction subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize, by transaction and user, basic data gathered by CMF.

**9. DBCTL Transaction subcomponent**

Database control (DBCTL) is a DL/I interface that uses an address space separate from CICS. It is available only for CICS/ESA and CICS/TS. If you run DBCTL, consider installing this subcomponent. It summarizes data by transaction and user. Its tables contain the DBCTL monitoring fields. (You must verify the presence of these fields in the performance monitoring record, as described in [“Making input data available” on page 13](#).)

**10. DL/I Transaction subcomponent**

This subcomponent processes data from the local interface to a DL/I database. If you run DL/I, consider installing this subcomponent. It summarizes data by transaction and user. Available for both CICS/MVS, CICS/ESA, and CICS/TS, its tables contain the DL/I monitoring fields. (As with the DBCTL subcomponent, verify the presence of the DL/I fields in the performance monitoring record, as described in [“Making input data available” on page 13](#).)

**11. Basic Application User subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize transaction data by application and user. See [“Updating the lookup tables” on page 19](#) for information on the customization needed to use this subcomponent.

**12. DBCTL Application User subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize DBCTL transaction data by application and user. For the CICS Performance Feature to summarize transaction data by application and user, you must use the customization procedure in [“Updating the lookup tables” on page 19](#).

**13. DL/I Application User subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize DL/I transaction data by application and user. Again, you must use the customization procedure in [“Updating the lookup tables” on page 19](#) for the CICS Performance Feature to successfully summarize transaction data by application and user.

**14. CICS TS Transaction Resources subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to collect data on transaction resources from SMF\_110\_1 class 5 record.

**15. CICS TS Enterprise Java™ Beans subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to collect enterprise bean-related data from SMF\_110\_1 class 3 monitoring record.

### 16. CICS Resource Manager Interface subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize by transaction Resource Management Interface data if this option is enabled in the Monitoring Control Table (MCT).

## Evaluating the CICS OMEGAMON Monitoring component

OMEGAMON XE for CICS provides the performance data for the CICS OMEGAMON Monitoring component. Figure 4 on page 9 shows the subcomponents contained in this component. IBM Z Performance and Capacity Analytics Version 1.8.0 supports OMEGAMON XE for CICS from Version 4.1.

### Note:

1. Subcomponent 1 summarizes data by transaction and user, subcomponent 2 summarizes data by application, subcomponent 3 summarizes data by transaction, subcomponent 4 summarizes data by application and user, and subcomponent 5 summarizes data by transaction.
2. To make efficient use of the Application Analysis subcomponents (subcomponents 2 and 4), you must update the CICS\_LOOKUP\_APPL table. For more information, see [“Updating CICS\\_LOOKUP\\_APPL” on page 20](#). You must verify the presence of the OMEGAMON fields in the performance monitoring record, as described in [“Making input data available” on page 13](#).

### 1. File and Database subcomponent

This subcomponent processes file and database usage information from the data OMEGAMON XE for CICS appends to the SMF type 110 record. It summarizes the data by transaction and user.

### 2. File and Database Application subcomponent

This subcomponent processes file and database usage information from the data OMEGAMON XE for CICS appends to the SMF type 110 record. It summarizes the data by application.

### 3. File and Database Transaction subcomponent

This subcomponent processes file and database usage information from the data OMEGAMON XE for CICS appends to the SMF type 110 record. It summarizes the data by transaction.

### 4. File and Database Application User subcomponent

This subcomponent processes file and database usage information from the data OMEGAMON XE for CICS appends to the SMF type 110 record. It summarizes the data by application and user.

### 5. File and Database Detailed Usage subcomponent

This subcomponent processes file and database usage information from the SMF type 112 subtype 203 record, created by OMEGAMON XE for CICS. It summarizes the data by transaction.

## Evaluating the CICS Statistics component

Statistics, supported only for CICS/ESA and CICS/TS, are a tool for monitoring a CICS system; they collect information on the CICS system as a whole, without regard to tasks. Consider installing this component if you are interested in these types of statistics (written to SMF data sets by the CICS statistics domain):

- Interval
- End-of-day
- Requested
- Unsolicited

For information about statistics, refer to the appropriate *CICS Performance Guide*.

## Evaluating the CICS Transaction and Unit-of-Work Analysis component

The CICS Transaction and Unit-of-Work Analysis component collects data about a transaction as it migrates from one CICS region (or processor complex) to another and back, letting you determine the total resource requirements of the combined transaction as a unit of work.

**Note:** Unit-of-work data collection generates intensive processing, which significantly increases collection time.

If you install this component, collect its data with a separate collect job, and for a limited time (15 minutes should be sufficient). Do not include this component's table in your normal collect job. Otherwise, data collection takes too long to complete and results in a table that is too large to manage. For more information, see [“Optimizing data collection” on page 16](#).

## Evaluating the CICS Transaction Gateway component

CICS Transaction Gateway records statistics in SMF type 111 records, which are collected by the CICS Transaction Gateway component.

## Evaluating the Key Performance Metrics (KPM) CICS component

The Key Performance Metrics (also referred to as KPM) CICS component has been designed to only collect data that is considered to be key metrics. It collects CICS monitoring SMF records only, by hourly interval and per CICS transaction level.

Consider installing this component if you require a simple overview of the performance of your CICS transactions.

This component can be installed stand alone, or it can be installed along with the other CICS components, if more detailed analysis is required.

### Calculating local time

This component differs from the traditional CICS components in the way that it calculates local time. Traditional CICS components calculate local time using the supplied lookup table CICS\_TIMEZONES. The KPM CICS component does not require this lookup table to calculate local time. It uses the SMF-supplied value instead to convert the monitoring time to local time, before storing the data in the database.

### Reviewing table space profiles

A table space profile allows you to define in one place all the settings for the creation of Db2 table spaces, tables, and indexes. These settings can then be used at component install time for all the Db2 table spaces, tables, and indexes.

The KPM CICS component is table space profiling enabled. The table space profiling allows you to implement partitioning by growth or range when installing any of the enabled components for the first time, without having to customize any of the object definitions. A default profile is provided for KPM CICS which supports partitioning by growth. However, you have the option to review and modify all the profile settings (which includes partitioning settings as well as table space and index parameters) before you install the component. Refer to the section "Working with table space profiles" in the *Administration Guide and Reference* for more information on how to review and modify your default profile settings for the Key Performance Metrics (KPM) CICS component tablespaces, tables, and indexes.

## Making input data available

The CICS Performance Feature uses CICS monitoring facility (CMF) and CICS statistics to generate data. For CICS/MVS, CICS/ESA and CICS/TS, verify that you have suitable values in the system initialization table (SIT) and in the monitoring control table (MCT). For CICS/MVS only, verify that you have suitable values in the journaling control table (JCT).

### Verifying CICS/ESA and CICS/TS requirements

IBM Z Performance and Capacity Analytics supports CICS/ESA and CICS/TS performance, statistics, and exception data recorded through SMF.

#### CICS/ESA and CICS/TS CMF requirements

##### DFHSIT (the system initialization table)

Specify these operands:

- MN=ON enables CMF recording.
- MNPER=ON generates performance data.
- MNEXC=ON generates exception data.

In the DFHSIT, code MNCONV=YES to separate reporting for each terminal interaction of a conversational transaction. If MNCONV=NO, the response time for these transactions includes operator think time, which distorts average values.

Also, specifying MNEVE=ON in the DFHSIT generates SYSEVENT data. Although not supported by the CICS Performance Feature, SYSEVENT data is a useful performance-analysis tool and can be collected by the System Performance Feature. Refer to the appropriate *CICS System Definition Guide* for information about defining DFHSIT. Refer to the *System Performance Feature Guide* for information on using the System Performance Feature for performance analysis.

As an alternative to revising the SIT, you can control CMF dynamically by using either master-terminal transaction commands or system-programming commands.

Refer to the appropriate *CICS CICS-Supplied Transactions* for descriptions of these applicable master-terminal transaction commands:

- CEMT SET MONITOR ON PERF
- CEMT SET MONITOR ON EXCEPT
- CEMT SET MONITOR ON EVENT

Refer to the appropriate *CICS System Programming Reference* for descriptions of the applicable SP commands.

##### DFHMCT (the monitoring control table)

Code the TYPE=INITIAL instruction with the operand CPU=YES if you need processor time measurements. (Note that CPU=YES is not required for CICS V4.1 and above.) There is a small processing overhead but, if you do not code this, the CPU time columns are zero in the CICS101, CICS403, and CICS404 reports.

Code the TYPE=INITIAL instruction with the operand CONV=YES if you want separate reporting for each terminal interaction of a conversational transaction. If CONV=NO, the response time for these transactions includes operator think time, which distorts average values.

If you run a database manager (either DBCTL or DL/I) and have chosen to install a subcomponent that contains their monitoring fields, check that these fields are present in the MCT.

If you want to record all system-defined performance data (no exclusions) and if you have no user-defined event monitoring points (EMPs), then you do not have to define DFHMCT for either CICS/ESA or CICS/TS. If you choose not to define DFHMCT, however, two defaults are active: CPU=NO and CONV=NO.

#### CICS/ESA and CICS/TS statistics requirements

In the DFHSIT macro, specify a STATRCD=ON operand to record interval and unsolicited statistics. To provide enough statistical data for meaningful reporting, use the default statistics interval of three hours. You can dynamically turn on or off requested and unsolicited statistics data by using either CEMT or SP commands. Refer to the appropriate *CICS CICS-Supplied Transactions* for a description of the CEMT command CEMT SET STATISTICS. Refer to the appropriate *CICS System Programming Reference* for a description of the SP command EXEC CICS SET STATISTICS.



CICS/ESA and CICS/TS record statistics data at the end-of-day expiry time and at shutdown, regardless of settings that control requested and unsolicited statistics data. Refer to the appropriate *CICS Performance Guide* for details of CICS statistics.

## Verifying CICS/MVS requirements

### DFHSIT (the system initialization table)

Specify these operands:

- MCT=xx enables use of the monitoring control table, where xx represents the MCT suffix.
- MONITOR=(ACC,PER,EXC) enables monitoring of accounting, performance, and exception data.

In the DFHSIT, code MNCONV=YES to separate reporting for each terminal interaction of a conversational transaction. If MNCONV=NO, the response time for these transactions includes operator think time, which distorts average values.

To generate the most detailed IBM Z Performance and Capacity Analytics reports, code DFHSIT to continuously record CICS monitoring data to the SMF log. Refer to *CICS/MVS Resource Definition (Macro)* for information about defining DFHSIT.

As an alternative to revising the SIT, you can control CMF dynamically by using the CSTT transaction. Refer to *CICS/MVS CICS-Supplied Transactions* for a description of the CSTT transaction.

### DFHMCT (the monitoring control table)

Define separate TYPE=RECORD entries for each of these classes of monitoring data:

- CLASS=ACCOUNT enables recording of accounting data.
- CLASS=EXCEPTION enables recording of exception data.
- CLASS=PERFORMANCE enables recording of transaction performance data.

You can control whether CMF uses separate journals for each class, or whether it records some combination of classes into one journal.

If you run DL/I, and have chosen to install a subcomponent that contains its monitoring fields, check that these fields are present in the MCT.

Refer to the *CICS/MVS Resource Definition (Macro)* for information about defining DFHMCT.

### DFHPPT and DFHPCT

Monitoring entries are required in the CICS system definition (CSD) file (online resource definitions) or in the processing program table (PPT) and the program control table (PCT) (macro definitions). To determine how to control CMF when using online resource definitions, refer to the *CICS/MVS Operations Guide* and *CICS/MVS Resource Definition (Online)*. To determine how to control CMF when using macro resource definitions, refer to the *CICS/MVS Operations Guide* and *CICS/MVS Resource Definition (Macro)*.

### DFHJCL (journaling control table)

Specify these operands:

- FORMAT=SMF records data in SMF type 110 record format.
- JTYPE=SMF writes journal buffers to the SMF log.

Refer to *CICS/MVS Resource Definition (Macro)* for information about defining DFHJCT.

For information about the data provided in the accounting, performance, and exception class records, refer to the *CICS/MVS Performance Guide* and the *CICS/MVS Customization Guide*.

## Verifying OMEGAMON XE for CICS requirements

If you want to record the OMEGAMON XE for CICS performance data, you have to define those event monitoring points in the MCT. For more information on defining the MCT, see the OMEGAMON XE for CICS on z/OS Version 4.1 Knowledge Center. IBM Z Performance and Capacity Analytics Version 1.8.0 supports OMEGAMON XE for CICS Version 4.1.

### Optimizing data collection

Your first task in optimizing data collection is to install only the components and subcomponents that meet your needs. Use the information in [“Considering which components to install” on page 8](#) to evaluate components and subcomponents.

The *Administration Guide and Reference* describes how to optimize IBM Z Performance and Capacity Analytics data collection by specifying only the needed tables in the INCLUDE (or EXCLUDE) clauses of the COLLECT statement. The example in [Figure 5 on page 16](#) shows how to selectively include data tables supplied with the CICS Performance Feature.

```
//JOB CARD
//COLLECT EXEC PGM=DRLPLC,
//  PARM=('SYSTEM=DB2A',
//        'SYSPREFIX=DRLSYS',
//        'SHOWINPUT=YES')
//STEPLIB DD DISP=SHR,DSN=DRLxxx.LOAD.LIBRARY
//DRLLOG DD DISP=SHR,DSN=XXX.CICS33.LOG1 LOG DATA SET
//DRLDUMP DD SYSOUT=*,DCB=(RECFM=VB,LRECL=32756,BLKSIZE=32760)
//DRLOUT DD SYSOUT=*,DCB=(RECFM=F,LRECL=132)
//DRLNDICT DD DISP=OLD,DSN=XXX.CICS.NODICT.RECORDS.LOG
//DRLIN DD *
      SET PREFIX      = 'DRL'      ;
      COLLECT
        SMF
        INCLUDE
          DRL.EXCEPTION_T,
          DRL.CICS_DBCTL_TRAN_D,
          DRL.CICS_DBCTL_TRAN_W,
          DRL.CICS_DBCTL_USR_D,
          DRL.CICS_DBCTL_USR_H,
          DRL.CICS_DBCTL_USR_W,
          DRL.CICS_DLI_TRAN_D,
          DRL.CICS_DLI_TRAN_W,
          DRL.CICS_DLI_USR_D,
          DRL.CICS_DLI_USR_H,
          DRL.CICS_DLI_USR_W,
          DRL.CICS_A_BASIC_H,
          DRL.CICS_A_BASIC_W,
          DRL.CICS_A_DBCTL_H,
          DRL.CICS_A_DBCTL_W,
          DRL.CICS_A_DBCTL_USR_H,
          DRL.CICS_A_DBCTL_USR_W,
          DRL.CICS_A_DLI_H,
          ...
          DRL.CICS_S_TRANSIENT_T
        REPROCESS
      ;
/*
```

Figure 5. Sample COLLECT job with an INCLUDE clause

See [“Processing dictionary data” on page 52](#) for the line:

```
//DRLNDICT DD DISP=OLD,DSN=XXX.CICS.NODICT.RECORDS.LOG
```

### Verifying CICS Transaction Gateway requirements

CICS Transaction Gateway recording to SMF is enabled by adding a parameter in the GATEWAY section of the configuration file:

- statsrecording=on

For more information see the *CICS Transaction Gateway z/OS Administration Guide*.

## Defining the operating environment

To organize the system data collected from SMF and other logs, you must define the operating environment to IBM Z Performance and Capacity Analytics. This process (described in the *Administration Guide and Reference*) occurs for any component. Tables contain the environment data, and IBM Z Performance and Capacity Analytics uses these tables when it processes data and creates reports.

## Installing the components

### About this task

After the system programmer has successfully installed the IBM Z Performance and Capacity Analytics base and features, you can choose whether to load any feature components and subcomponents. IBM Z Performance and Capacity Analytics installs the necessary log and record definitions, record procedures, and updates definitions to IBM Z Performance and Capacity Analytics system tables. IBM Z Performance and Capacity Analytics also installs the predefined tables (described in “Chapter 6, “Data tables, lookup tables, and control tables,” on page 55) and reports (described in “Chapter 7, “Reports,” on page 293).

Each component and subcomponent of the CICS Performance Feature is optional. All IBM Z Performance and Capacity Analytics features, components, and subcomponents install the same way. Using the administration dialog, you select which components of the CICS Performance Feature to install.

Perform these steps:

### Procedure

1. From the IBM Z Performance and Capacity Analytics **Administration** window (Figure 6 on page 17), select 2. **Components** and press Enter.

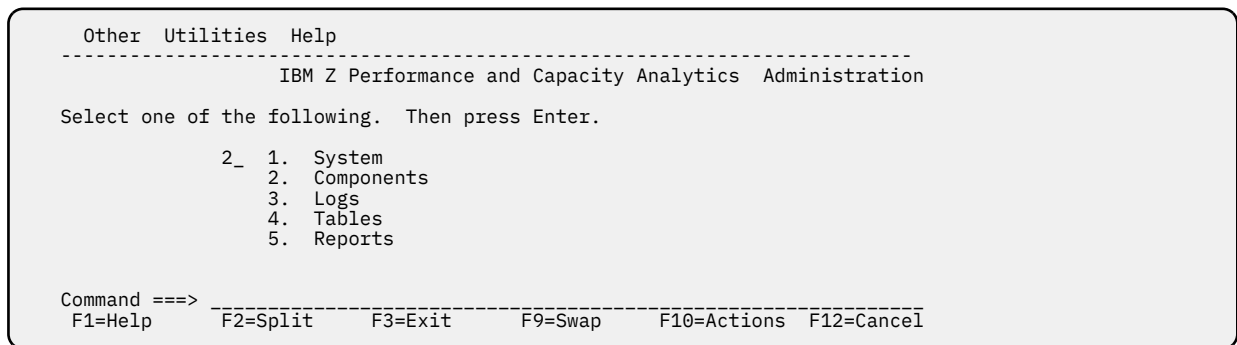


Figure 6. IBM Z Performance and Capacity Analytics Administration window

IBM Z Performance and Capacity Analytics displays the **Components** window (Figure 7 on page 18).

```

Component Space Other Help
-----
Command ==> Components Row 1 to 22 of 74
-----
Select one or more components. Then press Enter to Open component.

/ Components Status Date
- z/OS Performance Management (MVSPM) Component Installed 2007-08-01
- z/OS System (MVS) Component Installed 2007-08-01
- z/OS Availability Component
- z/OS Interval Job/Step Accounting Component
- z/VM Performance Component
/ CICS Monitoring Component
- CICS Monitoring Partitioned Component
- CICS OMEGAMON Monitoring Component
- CICS Statistics Component
- CICS Statistics Partitioned Component
- CICS Tran&UOW Analysis Partitioning Component
- CICS Transaction and UOW Analysis Component
- Data Set Component
- Db2 Component
- DFSMS Set Component
- DFSMS/RMM Component
- EREP Component
- HTTP Server for z/OS (ICSS) Component
- IMS 10.1 CSQ Collect Component
- IMS 10.1 Log Records Component
- IMS 7.1 Collect Component
- IMS 7.1 CSQ Collect Component
F1=Help F2=Split F3=Exit F5=New F6=Install F7=Bkwd
F8=Fwd F9=Swap F10=Actions F12=Cancel

```

Figure 7. Components window

- From the **Components** window, select the component to install (here, the CICS Monitoring component) and press F6.

Because the CICS Monitoring component contains subcomponents, IBM Z Performance and Capacity Analytics displays the **CICSMON Component Parts** window (Figure 8 on page 18).

```

Component Space Other Help
-----
Command ==> CICSMON Component Parts Row 1 to 13 of 16
-----
Select the parts of the component you want to install. Then press Enter.

/ Component Part Status Date
/ 1 Basic Subcomponent
- 2 DBCTL Subcomponent
- 3 DL/I Subcomponent
- 4 Basic Application Analysis Subcomponent
- 5 DBCTL Application Analysis Subcomponent
- 6 DL/I Application Analysis Subcomponent
- 7 CICS/MVS Global and Accounting Subcomponent
/ 8 Basic Transaction Subcomponent
- 9 DBCTL Transaction Subcomponent
- 10 DL/I Transaction Subcomponent
- 11 Basic Application User Subcomponent
- 12 DBCTL Application User Subcomponent
- 13 DL/I Application User Subcomponent
F1=Help F2=Split F7=Bkwd F8=Fwd F9=Swap F12=Cancel

DFSMS/RMM Component
EREP Component
HTTP Server for z/OS (ICSS) Component
IMS 10.1 CSQ Collect Component
IMS 10.1 Log Records Component
IMS 7.1 Collect Component
IMS 7.1 CSQ Collect Component
F1=Help F2=Split F3=Exit F5=New F6=Install F7=Bkwd
F8=Fwd F9=Swap F10=Actions F12=Cancel

```

Figure 8. CICSMON Component Parts window

- Select the subcomponents to install and press Enter to display the **Installation Options** window (Figure 9 on page 19)

Start with subcomponent 1. Then test it and install more subcomponents as required.

| Component                                 | Space  | Other                                      | Help   |
|---|--|--|--------|
| CICSMON Component Parts ROW 1 TO 13 of 13 |  |  |        |
| S   | Installation Options                           |  | Enter. |
| /   | Select one of the following. Then press Enter. |  | Date   |
| /   | -- 1. Online                                   |  |        |
| -   | 2. Batch                                       |  |        |
| -   | F1=Help  | F2=Split F6=Objects F9=Swap F12=Cancel     |        |
| -   | 7 CICS/MVS subcomponent (global + accounting)  |  |        |
| 7   | 8 Basic Transaction subcomponent               |  |        |
| -   | 9 DBCTL Transaction subcomponent               |  |        |
| -   | 10 DL/I Transaction subcomponent               |  |        |
| -   | 11 Basic Application User subcomponent         |  |        |
| -   | 12 DBCTL Application User subcomponent         |  |        |
| -   | 13 DL/I Application User subcomponent          |  |        |
| ***** BOTTOM OF DATA *****                |  |  |        |
| Command ==>                               |  |  |        |
| -   | F1=Help  | F2=Split F7=Bkwd F8=Fwd F9=Swap F12=Cancel |        |
| -   | F8=Fwd   | F9=Swap F10=Actions F12=Cancel             |        |

Figure 9. Installation Options window

- Using the component-installation procedure in the *Administration Guide and Reference*, specify whether to install the subcomponent online or in batch mode.

Installation of the CICS Performance Feature can result in a lot of output, so it is recommended that you install CICS components in batch.

- If you specify online installation, IBM Z Performance and Capacity Analytics displays the Lookup Tables window. (See [“Updating the lookup tables”](#) on page 19 for more information.)
  - To edit a lookup table using ISPF edit, select a table and press Enter.
  - If the lookup table is wider than 255 characters, you must use the QMF table editor:
    - To edit a lookup table using the QMF table editor in add mode, press F5 (QMF add).
    - To edit a lookup table using the QMF table editor in change mode, press F6 (QMF chg).
- If you specify batch mode, IBM Z Performance and Capacity Analytics starts an ISPF edit session, from which you can edit and submit the installation JCL. Batch installation messages identify the lookup tables that require editing. (See [“Updating the lookup tables”](#) on page 19 for more information.)

### What to do next

When you have finished editing lookup tables, installation continues. After installation is complete, IBM Z Performance and Capacity Analytics returns to the **Components** window, and the **Status** field indicates that the component is installed.

## Updating the lookup tables

To accurately analyze performance data from your system, group the data by user groups, workload types, project groups, and so on. Each installation has different criteria for grouping the data. All components of the CICS Performance Feature, except for the Key Performance Metrics (KPM) CICS component, include lookup tables that you can customize to specify the groupings you want reflected in your reports.

To decide how you want data grouped, develop a performance and service-level strategy using the information in [“Establishing performance objectives”](#) on page 2. After developing your strategy, use the administration dialog to modify the lookup tables for each subcomponent to implement your strategy. You can edit tables using either the ISPF editor or the QMF table editor.

**Note:** As the needs of your organization change, so will your service-level strategy. You might need to update the lookup tables periodically to reflect these changes.

## Updating the lookup tables

With the CICS Performance Feature, customization involves updating the CICS\_TIMEZONES, CICS\_LOOKUP\_APPL and CICS\_LOOKUP\_SYSTEM lookup tables.

### Updating CICS\_TIMEZONES

This table can be filled in through the IBM Z Performance and Capacity Analytics dialogs. For more information about customizing the lookup tables through the dialogs, refer to the *Administration Guide and Reference*.

Another way to fill in this table is with statements similar to those shown in [Figure 10 on page 20](#).

```
SQL INSERT INTO &PREFIX.CICS_TIMEZONES
(MVS_SYSTEM_ID, TIMEOFF) VALUES (('MVS1', -60))
SQL INSERT INTO &PREFIX.CICS_TIMEZONES
(MVS_SYSTEM_ID, TIMEOFF) VALUES (('MVS2', 60))
SQL INSERT INTO &PREFIX.CICS_TIMEZONES
(MVS_SYSTEM_ID, TIMEOFF) VALUES (('MVS3', 0))
```

Figure 10. Sample fill in for the CICS\_TIMEZONES lookup table

For MVS1, the local time is calculated by subtracting 60 minutes (one hour) from the GMT time read on the record. For MVS2, the local time is calculated by adding 60 minutes (one hour) to the GMT time read on the record. For MVS3, the time is left unchanged.

Note that the Key Performance Metrics (KPM) CICS component does not use this lookup table to convert monitoring time to local time when collecting data to the database. The KPM CICS component uses the offset provided in the SMF record instead to calculate the local time. This means that the KPM CICS data is always converted to local time by default, enabling you to relate this data to other SMF data collected by TDSz, for example Workload information.

### Updating CICS\_LOOKUP\_APPL

Decide whether you require reports by CICS transaction or by both CICS transaction and CICS application. To enable reporting on CICS applications, update the CICS\_LOOKUP\_APPL table to identify application components; otherwise, your reports will not show CICS application data.

For example, a simple way to fill the CICS\_LOOKUP\_APPL table is to first fill the CICS\_TRANSACTION\_D table with valid data by collecting a log. If your transactions have a generic naming standard for your order-entry application (such as OE01, OE02, OE03, and so on), you can update the CICS\_LOOKUP\_APPL table with the SQL statement shown in [Figure 11 on page 20](#).

```
INSERT INTO CICS_LOOKUP_APPL
(MVS_SYSTEM_ID,
CICS_SYSTEM_ID,
APPLICATION_NAME,
TRANSACTION_ID,
TRAN_RESP_BND1_SEC, TRAN_RESP_BND2_SEC, TRAN_RESP_BND3_SEC,
TRAN_RESP_BND4_SEC,
APPL_RESP_BND1_SEC, APPL_RESP_BND2_SEC, APPL_RESP_BND3_SEC,
APPL_RESP_BND4_SEC)
SELECT DISTINCT
MVS_SYSTEM_ID,
CICS_SYSTEM_ID,
'ORDER_ENTRY',           --application name (variable)
TRANSACTION_ID,
1,2,5,10,1,2,5,10      --response time boundaries (defaults)
FROM CICS_TRANSACTION_D
WHERE TRANSACTION_ID LIKE 'OE%'      --generic transaction identifier (variable)
```

Figure 11. Sample update to the CICS\_LOOKUP\_APPL lookup table

**Note:** For other applications, you can repeat the statements shown in [Figure 11 on page 20](#) and just change both the application name and the generic transaction identifier.

If you decide that you require reports by both CICS transaction and CICS application, you must install at least one of these application analysis subcomponents:

- Subcomponent 4, basic application analysis
- Subcomponent 5, DBCTL application analysis

- Subcomponent 6, DL/I application analysis

As described in “Evaluating the CICS Monitoring component” on page 10, subcomponents that summarize data by transaction are prerequisites for their corresponding subcomponents that summarize data by application. The example in Figure 12 on page 21 shows update definition code that uses the table for application analysis subcomponents.

```
APPLICATION_NAME = VALUE(LOOKUP APPLICATION_NAME
                          IN &PREFIX.CICS_LOOKUP_APPL
                          WHERE MVS_SYSTEM_ID LIKE
                                MVS_SYSTEM_ID
                                AND CICS_SYSTEM_ID LIKE
                                CICS_SYSTEM_ID
                                AND TRANSACTION_ID LIKE
                                TRANSACTION_ID,
                          'OTHER'))
```

Figure 12. Update definition supplied in subcomponent 4, basic application analysis

This summarizes all transactions that do not match under the ‘OTHER’ application. For information about using LIKE in a COLLECT statement, refer to the *Language Guide and Reference*.

**Note:** The example in Figure 12 on page 21 can be modified to look only for exact matches (with some improvement in performance) by exchanging LIKE for equal signs (=).

## Updating CICS\_LOOKUP\_SYSTEM

This table can be used to group CICS systems. You can then create reports that report on groups of CICS systems, specifying a group name, such as PRODUCTION. Update CICS\_LOOKUP\_SYSTEM with statements similar to those shown in Figure 13 on page 21.

```
APPLICATION_NAME = VALUE(LOOKUP APPLICATION_NAME
                          IN &PREFIX.CICS_LOOKUP_APPL
                          WHERE MVS_SYSTEM_ID LIKE
                                MVS_SYSTEM_ID
                                AND CICS_SYSTEM_ID LIKE
                                CICS_SYSTEM_ID
                                AND TRANSACTION_ID LIKE
                                TRANSACTION_ID,
                          'OTHER'))
```

Figure 13. Sample update to the CICS\_LOOKUP\_SYSTEM lookup table

CICS\_LOOKUP\_SYSTEM is not used in the supplied tables and reports.

For more information about customizing lookup tables, refer to the *Administration Guide and Reference*.

## Updating other lookup tables

If your system also has the System Performance Feature installed, you can cause IBM Z Performance and Capacity Analytics to collect data regarding CICS region activity by updating the MVS\_WORKLOAD2\_TYPE table. This information can prove helpful when you need reports on CICS availability. For more information, refer to the *System Performance Feature Reference Volume 1*.

## Testing the installation

Before starting the daily use of the CICS Performance Feature, run a few tests to ensure that the installation was successful. This step verifies that IBM Z Performance and Capacity Analytics is collecting the right data, storing the data correctly, and using the proper data to create reports. Testing the installation also confirms that the lookup tables contain appropriate values.

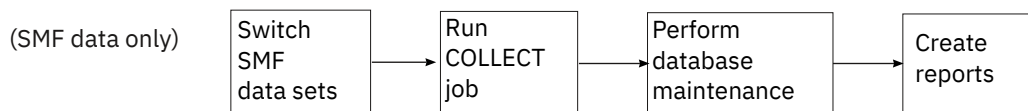
Refer to the *Administration Guide and Reference* for the steps involved in testing component installation.

## Putting the feature into production

After you run the tests and verify that the installation is successful, you can put the CICS Performance Feature and its components into production.

## Putting the feature into production

The following figure shows the daily steps involved in using IBM Z Performance and Capacity Analytics.



*Figure 14. Daily steps involved in using IBM Z Performance and Capacity Analytics*

You can run reports in batch, after setting batch parameters for each report using the administration dialog.

For detailed information about these steps, refer to the *Administration Guide and Reference*.



## Chapter 3. Monitoring CICS performance

To understand performance data it is important to study the way CICS performs at your installation. Analyze the work using the CICS basic building blocks: transactions. Group the transactions into categories of similar resource or user requirements, and describe each category's characteristics. Understand the workload that CICS performs for each transaction. Also, it is important to understand the volume of transactions expected during any given period. IBM Z Performance and Capacity Analytics can show you various types of data for the transactions currently processed by CICS.

IBM Z Performance and Capacity Analytics feature components and subcomponents include lookup tables that you can customize to specify the groupings you want reflected in your reports. For more information, see [“Updating the lookup tables” on page 19](#).

A service-level agreement for a CICS user group defines commitments in several areas of quantifiable CICS-related resources and services. As described in [“Considering which components to install” on page 8](#), CICS service commitments belong to one of these areas:

- Availability
- Performance
- Exceptions and incidents

This chapter describes certain issues and concerns associated with systems management and how you can use the CICS Performance Feature to explore those issues and concerns.

### Monitoring availability

CICS, in the SMF logs, provides availability information for the overall subsystem, as well as the connection to Db2. This information is collected by IBM Z Performance and Capacity Analytics in the CICS\_Avail\_T\_,\_D,\_W tables (see pages [“CICS\\_Avail\\_T” on page 119](#) and [“CICS\\_Avail\\_D,\\_W” on page 120](#) for details). The CICS\_Avail\_RES lookup table needs to be customized with the name of the resources (CICS regions and Db2 connections) to be monitored. In addition to the above specific data, other considerations and measurements can be performed as follows.

Users of CICS applications depend on the availability of several types of resources:

- Central site hardware and the operating system environment in which the CICS region runs
- Network hardware, such as communication controllers, teleprocessing lines, and terminals through which users access the CICS region
- CICS region
- Application programs and data

Application programs can be distributed among several CICS regions. More than one set of such resource types might exist, all of which must be available to satisfy application requirements.

The information provided by CICS and MVS limits the accuracy with which IBM Z Performance and Capacity Analytics can report availability. A process of deduction can yield some helpful analysis of CICS availability. If CICS uses a resource, that resource must have been available. Records and messages indicating that CICS used a resource tell you that the resource was available at that time. But, if a resource is not used for a known period, it is not necessarily unavailable.

You can define dependencies between resources by specifying MVS subsystem resource type, name, and availability objectives in the common lookup table AVAILABILITY\_PARM and the MVS lookup table MVS\_WORKLOAD\_TYPE.

You can create reports that show CICS region and resource availability.

## Monitoring CICS resource availability

Although CICS keeps status information about its resources in its internal control tables, this information is not usually available externally. CICS writes an exception for line and terminal out-of-service information to destination CSMT. To ensure complete data capture for CICS/MVS, run CSTT AUT at CICS termination (for example, through the shutdown PLT).

CMF performance class records, CICS/ESA and CICS/TS statistics show transaction types and terminals used within any selected time interval. These records contain usage counts for all CICS resources identified in the CICS control tables where you define your system and tailor it to your environment, as described in [Chapter 2, “Implementing the CICS Performance Feature,”](#) on page 7.

### Note:

1. When you infer resource availability from usage in this way, carefully choose resources to monitor. Resources must be active often enough to make it unlikely that they are inactive during a monitoring interval. Otherwise, zero use falsely designates unavailability.
2. When creating reports to show CICS resource availability, compare reporting periods for resources required by more than one CICS region. IBM Z Performance and Capacity Analytics can correctly report CICS resource availability when you logically combine information. For example:
  - Distributed applications, either multiregion operation (MRO) or intersystem communication (ISC), need resources in two or more connected CICS regions. The availability of each resource may be inferred from its use in each system.

The availability of the application can only be developed by combining availability information and determining that the application was available in every CICS region that supplies resources.

  - VTAM® terminals may be shared between CICS regions. The availability of a terminal may be inferred from its use by any subsystem. A global view of the availability of the terminal can be developed by finding it active in any one of the connected systems. (It cannot be available in all systems at the same time.)
3. CICS uses an *extended recovery facility* (XRF) to reduce the duration of unplanned outages, thereby allowing a higher level of CICS availability. The main source of CICS information for XRF is the *CICS XRF Guide*. For a detailed analysis of XRF and VTAM performance effects, refer to the *CICS Performance Guide*.

## Monitoring file and data base usage

OMEGAMON XE for CICS writes information on file and data base usage to SMF type 110 records as well as to SMF type 112 subtype 203 records. These records contain counts and elapsed times for commands issued by transactions against various file and database types. [Figure 15 on page 24](#) shows a IBM Z Performance and Capacity Analytics sample report. This report can be used to determine transaction averages on Db2 request counts, Db2 request response times, Db2 wait counts, and Db2 wait elapsed times.

| OMEGAMON transaction Db2 averages, hourly                    |                |               |                       |                |               |
|--|----------------|---------------|-----------------------|----------------|---------------|
| MVS ID: 'SYS ' CICS ID: 'CICSXX64'                           |                |               |                       |                |               |
| DATE: '2007-06-07'   |                |               |                       |                |               |
| HOUR   | TRANSACTION ID | REQUEST COUNT | REQUEST RESPONSE TIME | Db2 WAIT COUNT | Db2 WAIT TIME |
| 20   | AMG1           | 1446          | 5.118E-03             | 684            | 3.136E-06     |
| IBM Z Performance and Capacity Analytics Report: CICSOMEG007 |                |               |                       |                |               |

Figure 15. CICS Application Response Times, Detail report

## Monitoring response time

IBM Z Performance and Capacity Analytics reporting methods show CICS response as *internal response time*, that is the amount of time from the recording of a transaction request to its processing termination.

Internal response time does not measure how long the message took to get from the terminal operator, through a communication controller, across a communication line, through another communication controller, through the communication access method, and finally through any delays before a channel program enqueued the request to a CICS region. It also does not account for any delay before the terminal regains control, finds the message, and requests CICS services. Figure 16 on page 25 shows the elements of CICS internal response time. (For details about the response-time elements, refer to the description of SNA transaction flows in the appropriate *CICS Performance Guide*.)

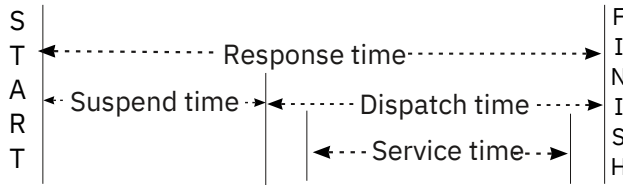


Figure 16. CICS internal response-time elements

CICS response-time reports show only the CICS application internal response times. As described in the , the Network Performance Feature generates reports that show the total, end-to-end average response time (operator transit time) for VTAM applications (for example, a CICS region) on an individual logical-unit (LU) basis. The operator transit time consists of the host transit time and the network transit time, which are also shown in the Network Performance Feature reports. Using these reports, you can isolate a response-time problem either to the network or to CICS and act on it accordingly. Should the problem be in CICS, you can use CICS Performance Feature reports to identify the application causing the response-time degradation.

For example, the CICS Application Response Times, Overview report (in Figure 17 on page 25) shows average internal response times for applications defined in the CICS\_LOOKUP\_APPL lookup table. It compares actual response times to response times established in the service-level agreement. The applications shown are those with the most frequent transactions.

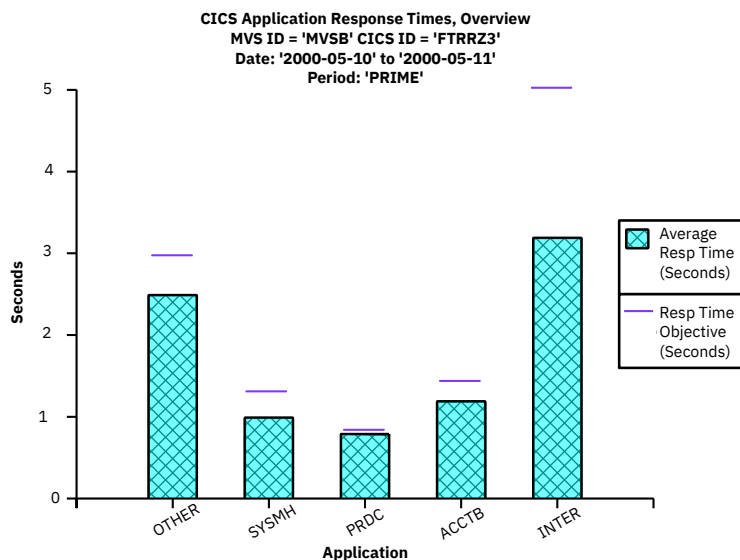


Figure 17. CICS Application Response Times, Overview report

IBM Z Performance and Capacity Analytics can also show trends in response time for a particular workload. The CICS Application Response Times, Trend report (in Figure 18 on page 26) contains weekly average internal response times for applications defined in the CICS\_LOOKUP\_APPL lookup table.

## Monitoring response time

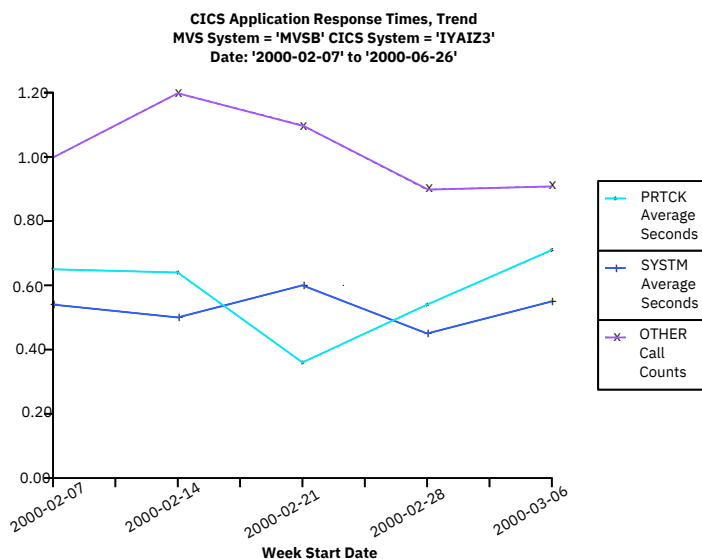


Figure 18. CICS Application Response Times, Trend report

IBM Z Performance and Capacity Analytics uses service time and suspend time when it calculates the information contained in the CICS Application Response Times, Detail report (in [Figure 19 on page 26](#)).

**CICS Application Response Times, Detail**  
MVS system = 'MVS8' CICS system = 'FGAI23'  
Date: 2000-05-10

| Application name | Tran count | Average elapsed (sec) | Average CPU (sec) | Average disp (sec) | Average disp wait (sec) | Average suspend (sec) | Average program load (sec) | Average TD IO wait (sec) | Average TS IO wait (sec) | Average TC IO wait (sec) | Average FC IO wait (sec) | Average JC IO wait (sec) | Average MRO wait (sec) | Average except wait (sec) |
|------------------|------------|-----------------------|-------------------|--------------------|-------------------------|-----------------------|----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------------|---------------------------|
| OTHER            | 507        | 6.964                 | 0.000             | 0.000              | 0.064                   | 0.307                 | 0.025                      | 0.001                    | 0.023                    | 0.403                    | 0.000                    | 0.678                    | 0.069                  | 6.657                     |
| SYSTEM           | 120        | 2.439                 | 0.000             | 0.000              | 0.058                   | 0.201                 | 0.077                      | 0.000                    | 0.011                    | 0.002                    | 0.000                    | 1.921                    | 0.001                  | 2.237                     |
|                  | =====      |                       |                   |                    |                         |                       |                            |                          |                          |                          |                          |                          |                        |                           |
|                  | 627        |                       |                   |                    |                         |                       |                            |                          |                          |                          |                          |                          |                        |                           |

IBM Z Performance and Capacity Analytics Report: CICS403

Figure 19. CICS Application Response Times, Detail report

Response times depend on the speed of the processor and on the nature of the application. The CPU time is zero if CPU=YES is not specified in the MCT. Suspend time is the time a task must wait for resources. Because processor service time is but a fraction of a second, the processor usage is generally acceptable, even at high processor utilization levels. However, look for the symptoms of resource contention: growing suspend and exception wait times.

Observe consistency among response times. Sharp variations indicate erratic behavior. The typical way in which response times in a system deteriorate with increasing transaction rate is gradual at first, then suddenly rapid. A typical curve appears in [Figure 20 on page 27](#). It shows a sharp change when, suddenly, the response time increases dramatically for a relatively small increase in transaction rate.

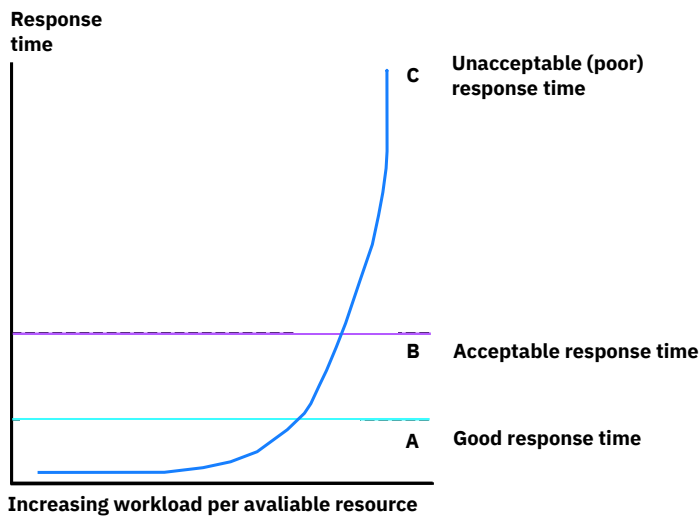


Figure 20. Example of deteriorating response time due to increased workload

Response time is the main performance factor to track when measuring service levels in CICS regions. Because interactive workload is usually variable, you should collect data from periods of peak activity (volume of transactions) to get a true picture of system activity. Activity peaks can differ among individual users or among localized groups of terminals. Examples of this difference are peak activity levels among different departments or on different teleprocessing lines. Refer to the *CICS Performance Guide* for information about response-time measurement techniques (for example, full-load measurement and single-transaction measurement).

## Monitoring resource use

Poor response time usually indicates inefficient use of either the processor or storage (or both). This section describes how IBM Z Performance and Capacity Analytics-supplied reports can help you isolate a resource as the cause of a CICS performance problem.

### Monitoring processor use

IBM Z Performance and Capacity Analytics supplies a CICS Application CPU Utilization, Trend report (in [Figure 21 on page 28](#)) that shows weekly averages of CPU use for the timespan you specify.

## Monitoring resource use

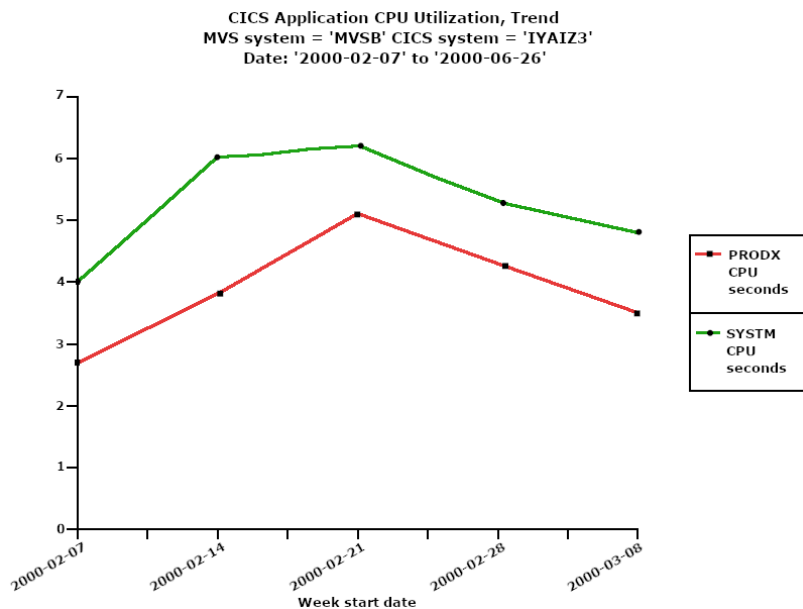


Figure 21. CICS Application CPU Utilization, Trend report

If both the CICS Performance Feature statistics component and the System Performance Feature MVS component are installed and active, these reports are available for analyzing transaction rates and processor use by CICS region:

- The CICS Transaction Processor Utilization, Monthly report (in [Figure 22 on page 28](#)) shows monthly averages for the dates you specify.
- The CICS Transaction Processor Utilization, Daily report shows daily averages for the dates you specify.

These reports have the advantage that they do not need CMF data. Statistics incur less processing overhead.

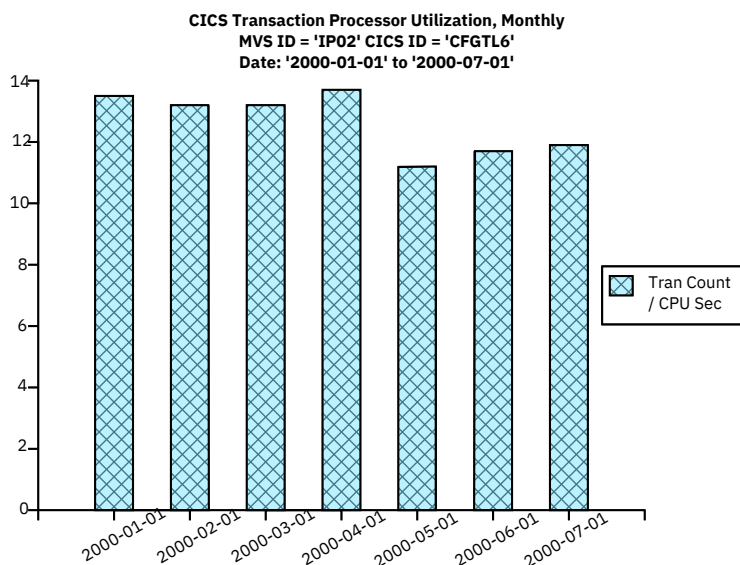


Figure 22. CICS Transaction Processor Utilization, Monthly report

## Monitoring storage use

Storage stress occurs when CICS is short of dynamic storage or extended dynamic storage. It can indicate:

- Resource constraints, causing tasks to remain in storage longer than necessary
- Too many tasks in storage, overwhelming available free storage
- Poorly designed applications and programs, requiring unreasonable amounts of storage

Symptoms of storage stress include:

- Poor response times
- Short-on-storage (SOS) conditions
- Heavy paging activity
- Dramatic increase in I/O activity on DFHRPL program libraries
- Program compression (applicable only to CICS/MVS)

IBM Z Performance and Capacity Analytics produces several reports that can help identify storage stress. For example, the CICS Dynamic Storage (DSA) Usage report (in [Figure 23 on page 29](#)) shows pagepool usage.

| CICS Dynamic Storage (DSA) Usage                         |                |                    |                            |                          |                         |          |           |
|--|----------------|--------------------|----------------------------|--------------------------|-------------------------|----------|-----------|
| MVS ID = 'IP02'  |                |                    |                            | CICS ID = 'CSRT5'        |                         |          |           |
| Date: '2000-05-01' to '2000-05-02'                       |                |                    |                            |                          |                         |          |           |
| Pagepool<br>name   | DSA<br>(bytes) | Cushion<br>(bytes) | Free<br>storage<br>(bytes) | Free<br>storage<br>(pct) | Largest<br>free<br>area | Getmains | Freemains |
| CDSA   | 1048576        | 65536              | 802816                     | 76                       | 765952                  | 3695     | 3620      |
| ECDSA  | 8388608        | 262144             | 7667712                    | 91                       | 7667712                 | 8946     | 7252      |
| ERDSA  | 3145728        | 262144             | 1302528                    | 41                       | 1290240                 | 204      | 3         |
| EUDSA  | 8388608        | 262144             | 8388608                    | 100                      | 8388608                 | 1        | 1         |
| UDSA   | 4194304        | 65536              | 4186112                    | 99                       | 4182016                 | 6        | 4         |
| IBM Z Performance and Capacity Analytics Report: CICS809 |                |                    |                            |                          |                         |          |           |

Figure 23. Dynamic Storage (DSA) Usage report

CICS/ESA and CICS/TS differ from CICS/MVS in its defenses against stress. CICS/MVS compresses programs (deleting all nonresident, not-in-storage programs) when it issues a GETMAIN that does not successfully complete. CICS/ESA and CICS/TS dynamically manage incremental and progressive program compression as free storage decreases, removing least-recently-used programs from storage. CICS/ESA also slows dispatching of new tasks incrementally and progressively as free storage diminishes. The overhead of a full program compression is avoided, if possible, by CICS/ESA.

## Monitoring volumes and throughput

CICS/ESA and CICS/TS use MVS subtasks to fast load programs from DASD to MVS library lookaside dataspace in extended storage. This process practically eliminates DASD I/O for critical programs. Paging from DASD increases demands on processor resource, but paging from library lookaside areas has almost no effect on processing performance.

Because CICS/ESA and CICS/TS use an MVS subtask to page and because an MVS page-in causes a MVS task to halt execution, the number of page-ins is a performance concern. Page-outs are not a concern because page-outs are scheduled to occur during lulls in CICS processing. If you suspect that a performance problem is related to excessive paging, you can use IBM Z Performance and Capacity Analytics to monitor page-ins from data that RMF creates and then writes to SMF.

Consider controlling CICS throughput either by using MXT, AMXT, and CMXT in CICS or by using the DL/I CMAXTSK specification in the DLZACT. Fewer concurrent transactions require less central storage, cause less paging, and process faster than a lot of transactions.

The degree of sensitivity of CICS regions to paging from DASD depends on the transaction rate, the processor loading, and the average internal lifetime of the CICS tasks. An ongoing, hour-on-hour acceptable rate can easily increase to unacceptable levels during peak processing.

## Interpreting combined CICS and Db2 performance data

| CICS Transaction Performance, Detail |            |                     |                    |                      |                  |                |             |                             |                        |                        |
|--------------------------------------|------------|---------------------|--------------------|----------------------|------------------|----------------|-------------|-----------------------------|------------------------|------------------------|
| MVS ID ='IP02' CICS ID ='CFGTV1 '    |            |                     |                    |                      |                  |                |             |                             |                        |                        |
| Date: '2000-03-19' to '2000-03-20'   |            |                     |                    |                      |                  |                |             |                             |                        |                        |
| Tran ID                              | Tran count | Avg resp time (sec) | Avg CPU time (sec) | Prog load reqs (avg) | Prog loads (avg) | FC calls (avg) | Excep-tions | Program storage bytes (max) | Getmains < 16 MB (avg) | Getmains > 16 MB (avg) |
| QUIT                                 | 7916       | 0.085               | 0.017              | 0                    | 0                | 18             | 0           | 74344                       | 22                     | 0                      |
| CRTE                                 | 1760       | 4.847               | 0.004              | 0                    | 0                | 0              | 0           | 210176                      | 1                      | 0                      |
| AP00                                 | 1750       | 0.184               | 0.036              | 0                    | 0                | 8              | 0           | 309800                      | 66                     | 0                      |
| PM94                                 | 1369       | 0.086               | 0.012              | 0                    | 0                | 6              | 0           | 130096                      | 24                     | 0                      |
| VCS1                                 | 737        | 0.073               | 0.008              | 2                    | 0                | 7              | 0           | 81200                       | 14                     | 0                      |
| PM80                                 | 666        | 1.053               | 0.155              | 1                    | 0                | 62             | 0           | 104568                      | 583                    | 0                      |
| CESN                                 | 618        | 8.800               | 0.001              | 0                    | 0                | 0              | 0           | 41608                       | 0                      | 0                      |
| SU01                                 | 487        | 0.441               | 0.062              | 4                    | 0                | 126            | 0           | 177536                      | 38                     | 0                      |
| ...                                  |            |                     |                    |                      |                  |                |             |                             |                        |                        |
| GC11                                 | 1          | 0.341               | 0.014              | 1                    | 0                | 2              | 0           | 37048                       | 10                     | 0                      |
| DM08                                 | 1          | 0.028               | 0.002              | 0                    | 0                | 0              | 0           | 5040                        | 3                      | 0                      |
| =====                                | 20359      |                     |                    |                      |                  |                |             | =====                       |                        |                        |
|                                      |            |                     |                    |                      |                  |                |             | 309800                      |                        |                        |

IBM Z Performance and Capacity Analytics Report: CICS101

Figure 24. CICS Transaction Performance, Detail report

The best indicator of a transaction's performance is its response. For each transaction ID, the CICS Transaction Performance, Detail report (in Figure 24 on page 30) shows the total transaction count and the average response time.

Use this report to start verifying that you are meeting service-level objectives. First, verify that the values for average response time are acceptable. Then check that the transaction rates do not exceed agreed-to limits. If a transaction is not receiving the appropriate level of service, you must determine the cause of the delay.

## Interpreting combined CICS and Db2 performance data

For each CICS task, CICS generates an LU6.2 unit-of-work ID. Db2 also creates an LU6.2 unit-of-work ID. Figure 25 on page 30, shows that IBM Z Performance and Capacity Analytics can use the Db2 accounting token to correlate CICS records with Db2 records for the same task.

DB2 accounting record

| PLAN | TOKEN | GET PAGE | SELECT | GRANT |  |
|------|-------|----------|--------|-------|--|
|      |       |          |        |       |  |

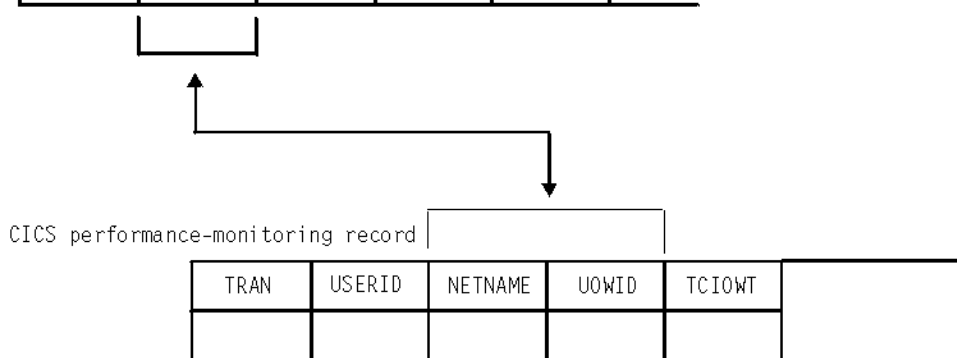


Figure 25. Correlating a CICS performance-monitoring record with a Db2 accounting record

The ability that IBM Z Performance and Capacity Analytics has to match the NETNAME and UOWID fields in a CICS record to the TOKEN field in a Db2 record, lets you create reports that show the Db2 activity caused by a CICS transaction.



## Monitoring exception and incident data

---

An *exception* is an event that you should monitor. An exception appears in a report only if it has occurred; reports do not show null counts. A single exception need not be a cause for alarm. An incident is defined as an exception with severity 1, 2, or 3.

The CICS Performance Feature updates the EXCEPTION\_T table for these incidents and exceptions:

- Wait for storage
- Wait for main temporary storage
- Wait for a file string
- Wait for a file buffer
- Wait for an auxiliary temporary storage string
- Wait for an auxiliary temporary storage buffer
- Transaction ABEND
- System ABEND
- Storage violations
- Short-of-storage conditions
- VTAM request rejections
- I/O errors on auxiliary temporary storage
- I/O errors on the intrapartition transient data set
- Autoinstall errors
- MXT reached
- DTB overflow
- Link errors for IRC and ISC
- Journal buffer-full conditions
- CREAD and CWRITE fails (data space problems)
- Local shared pool (LSR) string waits (from A08BKTSW)
- Waits for a buffer in the LSR pool (from A09TBW)
- Errors writing to SMF
- No space on transient-data data set (from A11ANOSP)
- Waits for a transient-data string (from A11STNWT)
- Waits for a transient-data buffer (from A11ATNWT)
- Transaction restarts (from A02ATRCT)
- Maximum number of tasks in a class reached (CMXT) (from A15MXTM)
- Transmission errors (from A06TETE or AUSTETE)

Use the CICS001 (CICS Exceptions) and CICS002 (CICS Incidents) reports to report on these events.

## Monitoring SYSEVENT data

---

SYSEVENT data is a special type of transaction timing information. If the SYSEVENT option is used, CICS issues a SYSEVENT macro at the end of each transaction. For each transaction, this macro records:

- Transaction ID
- Associated terminal ID
- Elapsed time

By using CICS Monitoring Facility (CMF) with MVS System Resource Manager (SRM), you can monitor transaction rates and internal response times without incurring the overhead of running the full CMF and

associated reporting. This approach is especially useful when you require only transaction statistics, rather than the detailed information that CMF produces.

Refer to the *CICS Performance Guide* for information about this SRM macro and its invocation.

## Understanding CICS unit-of-work reporting

---

In a CICS multiple region operation (MRO) or intersystem communication (ISC) environment, the available measurement data presents opportunities for tracing a transaction as it migrates from one region (or processor complex) to another and back. This measurement data lets you determine the total resource requirements of the combined transaction as a unit of work, without having to separately analyze the component transactions in each region. The ability to combine the component transactions of an MRO or ISC series makes possible precise resource accounting and chargeback, and capacity and performance analysis.

CICS Monitoring Facility (CMF) contains fields designed to allow association of transactions executing in different regions in an MRO or ISC relationship.

### Examining MRO and ISC characteristics

The use of MRO and ISC is often a solution to a variety of CICS system problems and constraints. Spreading CICS activity across several discrete CICS address spaces can provide such benefits as relief for virtual storage constraints, increased availability, performance improvements, added security, and easier maintenance.

Although these benefits outweigh any disadvantages of using MRO and ISC, there is one consequence of this technology. Transaction activity is more difficult to trace, because CICS monitors write transaction performance records for each of the MRO/ISC *component* transactions. For one typical unit of work, a record is written for the terminal-owning region (TOR), the application-owning region (AOR), and the file-owning region (FOR). Also, the data for the independent regions may be written to different SMF data sets.

MRO-related transactions running in multiple regions can have different transaction IDs. The most obvious examples are function-shipping transactions. Transaction IDs for requests for file, DL/I, and other services are generated by CICS. The first three characters of the transaction IDs for these mirror transactions are CSM.

Two data fields allow tracing of MRO and ISC activity as transactions migrate from one region to another: unit-of-work ID (UOWID) and network name (NETNAME). When a transaction is initiated through a terminal, CICS establishes values for these fields reflecting the region and transaction of origin, and these values get picked up and assigned to the corresponding fields in the performance monitor record written for that transaction. When this local transaction causes one or more remote transactions to be initiated, the values for UOWID and NETNAME are passed through the remote link and assigned to the performance monitor records written for the remote transaction(s) in their respective regions.

The UOWID is an eight-byte field whose value is derived from the system time-of-day clock. The value in the UOWID is a copy of the TOD clock value, with the high-order byte chopped off. CICS uses the low-order two bytes for what it calls a *period count* and, according to the *CICS Customization Guide* its value depends on synchpoint activity. Therefore, it can change during the life of a transaction.

The NETNAME value is used to identify the region of origin for MRO and ISC transactions. For MRO, the NETNAME value is taken from the terminal control table (TCT) of the region of origination. For ISC transactions, the NETNAME is *networkID.LUname* and can be up to 17 characters long. The NETNAME obtained from the TCT for MRO is not the same as the name by which the region is known to VTAM, that is the VTAM APPLID.

The CICS UOW Response Times report (in [Figure 26 on page 33](#)) shows an example of how IBM Z Performance and Capacity Analytics presents CICS unit-of-work response times.

| CICS UOW Response Times                                  |                              |  |                                      |                      |                           |
|--|------------------------------|--|--------------------------------------|----------------------|---------------------------|
| Time: '09.59.00' to '10.00.00'                           |                              |  |                                      |                      |                           |
| Date: 2000-03-10   |                              |  |                                      |                      |                           |
| Adjusted<br>UOW<br>start<br>time                         | Tran<br>ID                   | CICS<br>ID                                   | Program<br>name                      | UOW<br>tran<br>count | Response<br>time<br>(sec) |
| 09.59.25   | OP22<br>OP22                 | CICSPROD<br>CICSPRDC                         | DFHCRP<br>OEPCPI22                   | 2                    | 0.436                     |
| 09.59.26   | AP63<br>AP63                 | CICSPRDE<br>CICSPROD                         | APPM00<br>DFHCRP                     | 2                    | 0.045                     |
| 09.59.26   | ARUS<br>CSM5<br>ARUS         | CICSPROD<br>CICSPRDB<br>CICSPRDC             | DFHCRP<br>DFHMIR<br>AR49000          | 3                    | 0.158                     |
| 09.59.26   | CSM5<br>GCS6                 | CICSPRDB<br>CICSPROD                         | DFHMIR<br>GCSCPS20                   | 2                    | 0.068                     |
| 09.59.27   | CSM5<br>CSM5<br>MQ01<br>MQ01 | CICSPRDB<br>CICSPRDB<br>CICSPROD<br>CICSPRDD | DFHMIR<br>DFHMIR<br>DFHCRP<br>CMQ001 | 4                    | 0.639                     |
| ...  |                              |  |                                      |                      |                           |
| IBM Z Performance and Capacity Analytics Report: CICS902 |                              |  |                                      |                      |                           |

Figure 26. CICS UOW Response Times report



## Chapter 4. Using the CICS Partitioning Feature

This chapter describes the CICS Partitioning Feature.

The CICS Partitioning Feature enables customers that have a multiple z/OS environment to perform a parallel collection of data produced by CICS on different z/OS systems. This parallel collection provides an improvement in the total collection time for large amounts of CICS data running on different z/OS systems.

The CICS Partitioning Feature uses partitioned Db2 tablespaces. The use of partitioned tablespaces enables you to update in parallel the same tables, provided that the data belongs to different partitions. Thus the Db2 tablespaces, tables and indexes have been implemented to allow the possibility of addressing data, produced on different z/OS systems (that is, having different MVS\_SYSTEM\_IDs), to different partitions.

### Considering which components to install

Figure 27 on page 35 shows that the CICS Partitioning Feature is divided into three components. The CICS Monitoring component is divided further into nine subcomponents. Components and subcomponents provide support for specific operating systems, subsystems, and licensed programs.

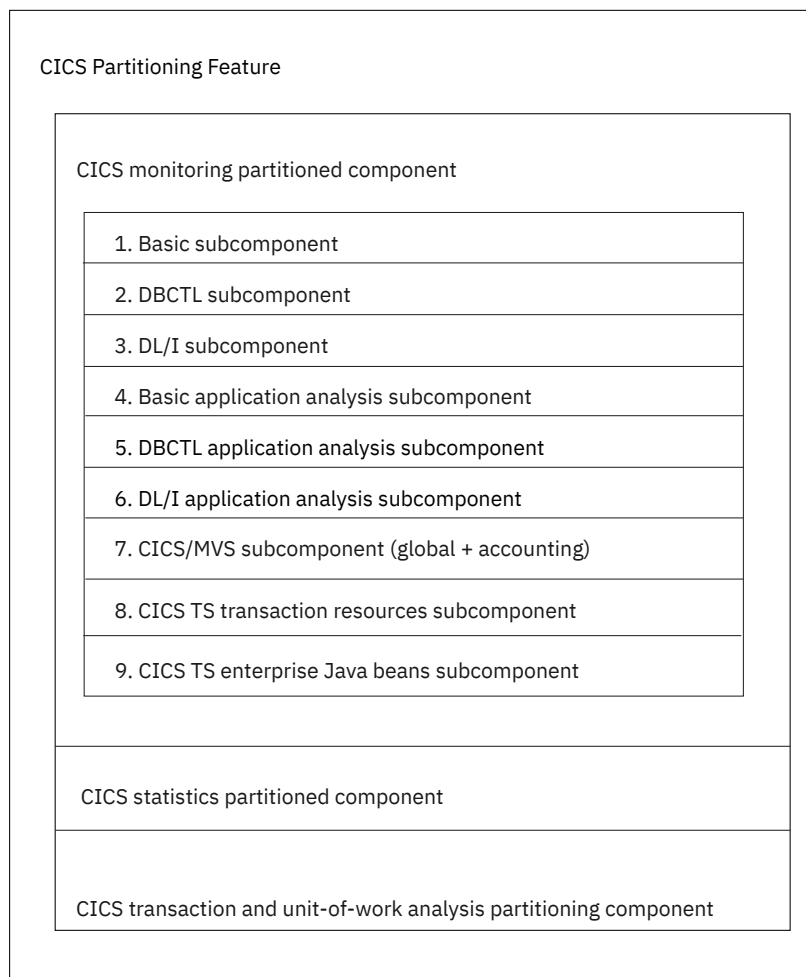


Figure 27. CICS Partitioning feature structure

Consider carefully which components to install. Components are groups of IBM Z Performance and Capacity Analytics *objects* (for example, predefined update definitions, data tables, and reports). If you

find that you need reports from a component that you have not installed, you must install that component and then wait several days or weeks until enough data has been collected to create reports. However, if you install more components than you need, IBM Z Performance and Capacity Analytics collects needless data, which takes up disk space and uses processor time.

**Note:** You cannot uninstall an individual subcomponent. You must uninstall a component, then reinstall it, selecting only those subcomponents you need. Refer to the *Administration Guide and Reference* for details.

At this point, you might find it helpful to examine the predefined reports for each subcomponent. For more information, see [Chapter 7, “Reports,” on page 293](#).

## Evaluating the CICS Monitoring component

The CICS Monitoring Facility (CMF) provides the performance data for the CICS Monitoring component. [Figure 27 on page 35](#) shows that this component is the only CICS Performance Feature component that contains subcomponents.

### **Note:**

1. Subcomponents 1 through 3 summarize data by transaction, and subcomponents 4 through 6 further summarize data by application.
2. To make efficient use of the Application Analysis subcomponents (subcomponents 4, 5, and 6), you must update the CICS\_LOOKUP\_APPL table. For more information, see [“Updating CICS\\_LOOKUP\\_APPL” on page 20](#).

### **1. Basic subcomponent**

This first subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize, by transaction, basic data gathered by CMF. Consider using this subcomponent as a starting point.

### **2. DBCTL subcomponent**

Database control (DBCTL), is a DL/I interface that uses an address space separate from CICS. It is available only for CICS/ESA and CICS/TS. If you run DBCTL, consider installing this subcomponent. It summarizes data by transaction. Its tables contain the DBCTL monitoring fields. (You must verify the presence of these fields in the performance monitoring record, as described in [“Making input data available” on page 13](#).)

### **3. DL/I subcomponent**

This subcomponent processes data from the local interface to a DL/I database. If you run DL/I, consider installing this subcomponent. It summarizes data by transaction. Available for CICS/MVS, CICS/ESA, and CICS/TS, its tables contain the DL/I monitoring fields. (As with the DBCTL subcomponent, verify the presence of the DL/I fields in the performance monitoring record, as described in [“Making input data available” on page 13](#).)

### **4. Basic Application Analysis subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize transaction data by application. See [“Updating the lookup tables” on page 19](#) for information on the customization needed to use this subcomponent.

### **5. DBCTL Application Analysis subcomponent**

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize DBCTL transaction data by application. For the CICS Performance Feature to summarize transaction data by application, you must use the customization procedure in [“Updating the lookup tables” on page 19](#).

## 6. DL/I Application Analysis subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize DL/I transaction data by application. Again, you must use the customization procedure in [“Updating the lookup tables” on page 19](#) for the CICS Performance Feature to successfully summarize transaction data by application.

## 7. CICS/MVS subcomponent (global + accounting)

Only CICS/MVS users should consider installing this global and accounting subcomponent. Its tables contain the IBM Z Performance and Capacity Analytics objects necessary to summarize global and accounting data only for CICS Version 2.

## 8. CICS TS Transaction Resources subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to collect data on transaction resources from SMF\_110\_1 class 5 record.

## 9. CICS TS Enterprise Java Beans subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to collect enterprise bean-related data from SMF\_110\_1 class 3 monitoring record.

## 10. CICS Resource Manager Interface subcomponent

This subcomponent contains the IBM Z Performance and Capacity Analytics objects necessary to summarize by transaction Resource Management Interface data if this option is enabled in the Monitoring Control Table (MCT).

## Evaluating the CICS Statistics component

Statistics, supported only for CICS/ESA and CICS/TS, are a tool for monitoring a CICS system; they collect information on the CICS system as a whole, without regard to tasks. Consider installing this component if you are interested in these types of statistics (written to SMF data sets by the CICS statistics domain):

- Interval
- End-of-day
- Requested
- Unsolicited

For information about statistics, refer to the appropriate *CICS Performance Guide*.

## Evaluating the CICS Transaction and Unit-of-Work Analysis component

The CICS Transaction and Unit-of-Work Analysis component collects data about a transaction as it migrates from one CICS region (or processor complex) to another and back, letting you determine the total resource requirements of the combined transaction as a unit of work.

**Note:** Unit-of-work data collection generates intensive processing, which significantly increases collection time.

If you install this component, collect its data with a separate collect job, and for a limited time (15 minutes should be sufficient). Do not include this component's table in your normal collect job. Otherwise, data collection takes too much time to complete and results in a table that is too large to manage. For more information, see [“Optimizing data collection” on page 16](#).

## How the CICS Partitioning Feature processes CMF data

The data sections of the following CMF records consist of records of identical format that relate to one of these monitoring classes:

- Dictionary data (class 1)

## How CICS Partitioning processes CMF data

- Accounting data (class 2) for CICS/MVS only
- Performance data (class 3)
- Exception data (class 4)

Dictionary data describes fields in CMF-generated performance data sections. CICS writes a new dictionary record whenever performance monitoring is activated. The DRL2CICS record procedure updates the CICS\_DICTIONARY table with any new dictionary records. As it processes a CMF record, IBM Z Performance and Capacity Analytics loads into memory SMF log dictionary records and any dictionary records stored in CICS\_DICTIONARY.

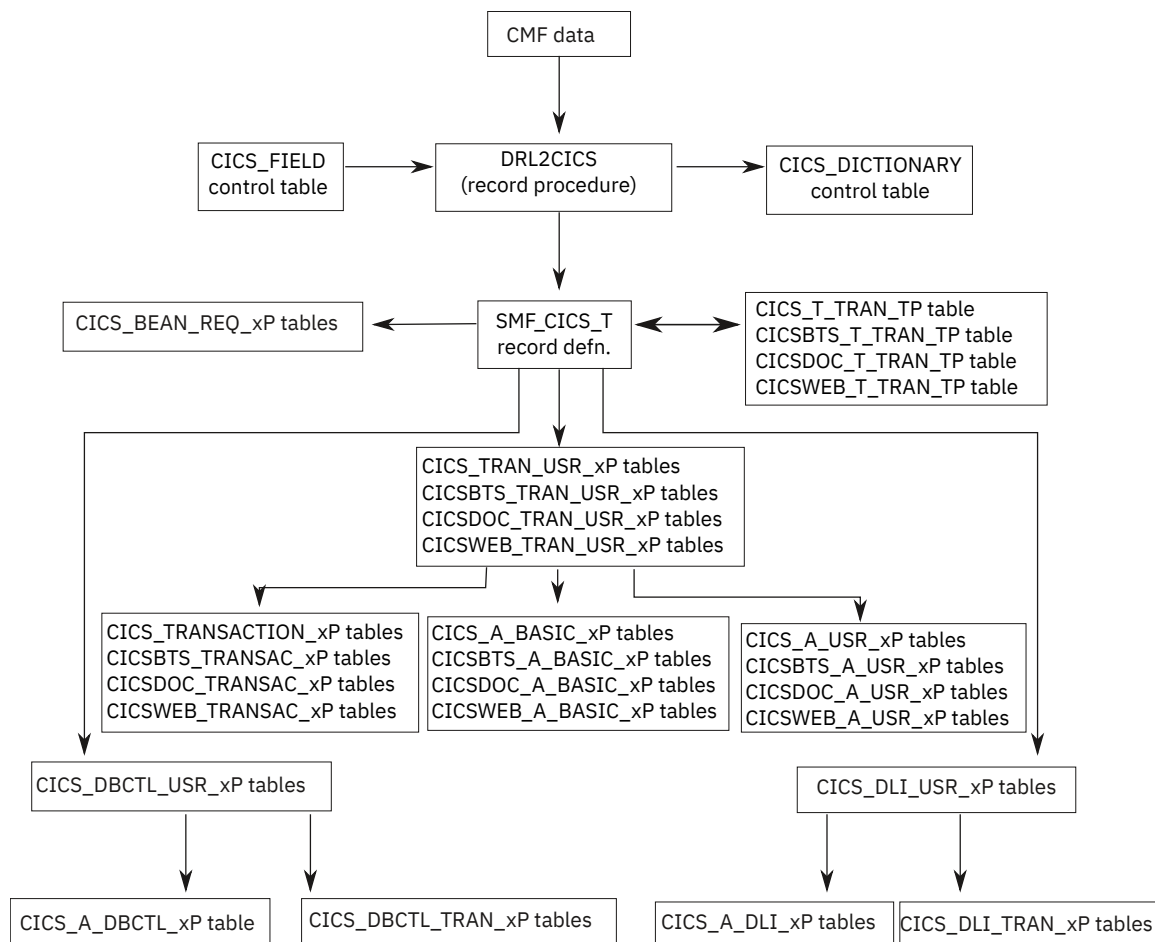


Figure 28. How CMF performance records are processed by the CICS Partitioning Feature

IBM Z Performance and Capacity Analytics uses the most recently generated dictionary section (that matches the MVS system ID, CICS system ID, and class values) to resolve field values in each performance record. As shown in Figure 28 on page 38, DRL2CICS creates a common transaction performance record (SMF\_CICS\_T) from the CICS transaction performance records.

The log collector uses the DRL2CICS record procedure to map field values for data in accounting, performance, and exception records to intermediate records mapped by these record definitions:

### SMF\_CICS\_A

Maps accounting records that IBM Z Performance and Capacity Analytics generates from CICS/MVS accounting records

### SMF\_CICS\_T

Maps transaction performance records that IBM Z Performance and Capacity Analytics generates from CICS/MVS, CICS/ESA, and CICS/TS performance records



**SMF\_CICS\_E2**

Maps exception records that IBM Z Performance and Capacity Analytics generates from CICS/MVS exception records

The CICS/ESA or CICS/TS exception data section is a single, fixed-length record, mapped by the SMF\_110\_E record definition. Update definitions store exception data in the IBM Z Performance and Capacity Analytics common table EXCEPTION\_T, but some rows in this table are also created from exceptional conditions in CICS/ESA or CICS/TS statistics records.

IBM Z Performance and Capacity Analytics stores data in Db2 columns that correspond to most fields found in CICS performance data. If you need to add fields to CMF performance records, remember to update the IBM Z Performance and Capacity Analytics CICS\_FIELD control table with your fields, and add fields in the SMF\_CICS\_T record definition with the offset and length that you specify in CICS\_FIELD. The CICS\_FIELD table is loaded using the SQL statements in the DRLxxx.SDRLDEFS(DRLTCIFI) member. Use this member as a template for additional entries. The SMF\_CICS\_T record definition is in the DRLxxx.SDRLDEFS(DRLRS110) member. For more information about SMF records and data fields that CMF produces for CICS refer to the appropriate *CICS Customization Guide*.

The log collector uses the DRL4CICS record procedure to map field values for data in transaction resource monitoring records (class 5). The output record to map these fields is SMF\_CICS\_TR.

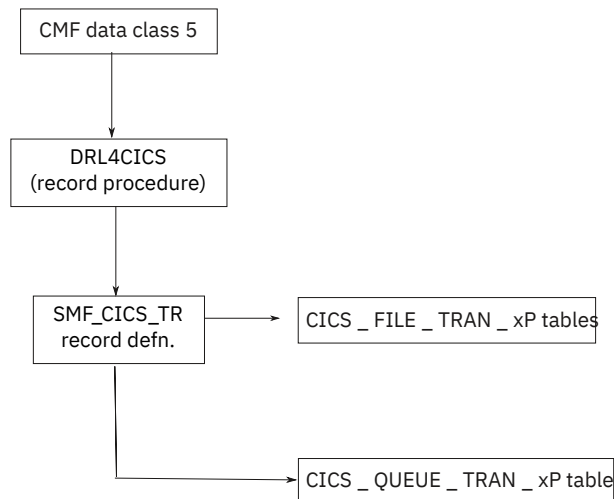


Figure 29. How CICS/TS transaction resource records are processed by the CICS Partitioning Feature

## Data tables in the CICS Partitioning feature

The data tables for the CICS Partitioning feature are the same as the data tables for the CICS Performance Feature. The only difference is in the name, which has a **P** added to the end, for the CICS Partitioning feature. For example, the CICS Performance data table CICS\_S\_AUTO\_TER\_T is the same as the CICS Partitioning data table CICS\_S\_AUTO\_TERM\_TP.

For a description of the tables that belong to the CICS Partitioning feature, refer to the description of the data tables that belong to the non-partitioning feature in [Chapter 6, “Data tables, lookup tables, and control tables,”](#) on page 55. For more details about the data table naming convention, refer to [“Naming standard for CICS Partitioning tables”](#) on page 39.

**Note:** The CICS\_EXCEPTION\_T data table has the same name in the CICS Performance and CICS Partitioning features.

### Naming standard for CICS Partitioning tables

The names of the CICS Partitioning Feature tables use this format:

**CICS\_prefix\_content\_suffix**

Where:

- **prefix** identifies the component or subcomponent type (for example, **S** for the statistics component and **A** for the Application Analysis subcomponents). Table names for subcomponent 1, the basic subcomponent, do not contain prefixes; table names for the remaining six subcomponents do contain a prefix.
- **content** is a description (for example, CICS\_ **TRANSACTION** for subcomponent 1's partitioned CICS transaction statistics).
- **suffix** indicates the summarization level of the data in the table (for example, CICS\_TRANSACTION\_ **DP** for partitioned CICS transaction statistics summarized by day). A table name can have these summarization-level suffixes:

**\_TP**

The table holds nonsummarized, partitioned data (**timestamped** data).

**\_HP**

The table holds partitioned data summarized by **hour** (hourly data).

**\_DP**

The table holds partitioned data summarized by **day** (daily data).

**\_WP**

The table holds partitioned data summarized by **week** (weekly data).

**\_MP**

The table holds partitioned data summarized by **month** (monthly data).

## Tables in the CICS Monitoring component

As described in “Evaluating the CICS Monitoring component” on page 36, the CICS Monitoring component is the only CICS Partitioning feature component that contains subcomponents. This section groups data tables for the CICS Monitoring component by these subcomponents:

1. Basic subcomponent
2. DBCTL subcomponent
3. DL/I subcomponent
4. Basic Application Analysis subcomponent
5. DBCTL Application Analysis subcomponent
6. DL/I Application Analysis subcomponent
7. CICS/MVS subcomponent (global + accounting)
8. CICS TS Transaction Resources subcomponent
9. CICS TS Enterprise Java Beans subcomponent

Subcomponents 1 and 4 are based on the transaction data, and the tables are almost the same, differing only in their key structure.

## Tables in the CICS Statistics component

As described in “Evaluating the CICS Statistics component” on page 37, the CICS Partitioning feature supports statistics only for CICS/ESA and CICS/TS. If you install the CICS Statistics component, IBM Z Performance and Capacity Analytics loads into its system tables the data tables described in [Chapter 6, “Data tables, lookup tables, and control tables,” on page 55.](#)

## Tables in the CICS Transaction and Unit-of-Work Analysis component

As described in “Evaluating the CICS Transaction and Unit-of-Work Analysis component” on page 37, if you install the CICS Transaction and Unit-of-Work Analysis component, IBM Z Performance and Capacity Analytics loads into its system tables the data table and view tables described in [Chapter 6, “Data tables, lookup tables, and control tables,” on page 55.](#)

If you install this component, use a separate collection job for it. In the daily CICS collection job, exclude the data table provided with this component. Otherwise, data collection takes too much time to complete

and results in a table that is too large to manage. For more information, see [“Optimizing data collection”](#) on page 16.

## Environment restrictions

Consider the following restrictions are:

- The CICS Partitioning Feature can be installed only if Db2 Version 4 or later is installed. This is because TYPE 2 indexes are used in the INDEX definition.
- Different log datasets have to be supplied for each collect job. The log datasets collected by each collect job **must** contain only the CICS records produced by the MVS system that are to be inserted in a single partition. If this does not occur, the records for collection can be filtered through a condition in the COLLECT statement:

```
COLLECT SMF WHERE SMFFRTY=110 AND 1, condition
                SMFSID='JSYS'      2, condition
```

The 1<sup>st</sup> condition selects only CICS records. The 2<sup>nd</sup> condition selects only records with JSYS in the MVS system ID. Thus only CICS records having JSYS in the MVS\_SYSTEM\_ID (SMFSID) have to be collected. The records with different MVS system IDs, to be stored in different partitions, must be collected by separate jobs.

Another method to avoid the processing of data other than CICS data is to exclude tables belonging to components different from CICS partitioning, if installed. This can be obtained through the EXCLUDE clause (or INCLUDE on CICS table to fill in) in the COLLECT statement:

```
COLLECT SMF
WHERE SMFFRTY=110 AND
      SMFSID='JSYS'
EXCLUDE tables
INCLUDE tables
```

**Note:** These rules **must** be correctly maintained to avoid contention problems.

- A new parameter has been added in the COLLECT statement. This parameter **must** be specified when collecting on CICS partitioned components to avoid timeout problems due to contentions. It **must not** be specified when collecting on nonpartitioned components to avoid performance degradation.

An example of the COLLECT statement is:

```
COLLECT SMF
WHERE SMFSID='JSYS'
EXCLUDE tables
INCLUDE tables
REPROCESS
PARTITION
COMMIT AFTER BUFFER FULL BUFFER SIZE 500000;
```

- The MERGE clause cannot be used with the CICS Partitioning Feature.

## Customizing considerations

### About this task

All the data tables defined for CICS partitioning are defined using the parameters in the GENERATE\_PROFILES and GENERATE\_KEYS system tables. These tables are created and loaded from the DRLTKEYS definition file at the time the TDS system tables are created.

When the **TABLESPACE\_TYPE** parameter in the GENERATE\_PROFILES table for the definitions SMF with COMPONENT\_IDs of CICSMP, CICSSTAP, and CICSUOWP, are set to RANGE the CICS tables are created as range partitioned index.

The supplied default for CICS partitioning components is RANGE.

There are two exceptions to this, these are the CICS\_DICTIONARY system table and the EXCEPTION\_T user table. You will need to alter these tables to partitioned tables as shown in steps 4 and 5

The following steps have to be added to the normal installation of IBM Z Performance and Capacity Analytics:

### Procedure

1. 1. When you have created your system tables, review the parameter values in the GENERATE\_PROFILES and GENERATE\_KEYS system tables using the TDS table edit facility.
  - a) Change the PARTITION\_KEY values for the SMF definitions with COMPONENT\_IDs of CICS\_MOP, CICSSTAP, and CICSUOWP to suit your installation, ensuring the key values are the same for each of these definition sets.
  - b) Change the PARTITION\_KEY values for the SMF definition with TABLESPACE\_NAME of DRLSPEXC to match the PARTITION\_KEYS used for the CICS definitions.
  - c) If you require more (or less) than 4 partitions change the number entries for each definition set in the GENERATE\_KEYS table. Remember to alter the PART\_NUM value if you are adding additional partition definitions.
  - d) Review other parameters such as **PRIQTY** and **SECQTY**
2. Predefine the storage groups (as many as there are partitions) as follows:
  - a) If you are installing IBM Z Performance and Capacity Analytics for the first time, initialize the Db2 database by performing Step 3 of the installation procedure. See the *Administration Guide and Reference*. Run the DRLJDBIN job after running the DRLJDBIP job.
  - b) If you have already run DRLJDBIN job in another environment, you only need to run DRLJDBIP. This job contains the SQL statements that are needed to create the storage groups for the CICS Partitioning Feature (with as many partitions as needed; 4 as default):

```
CREATE STOGROUP STOGRx
  VOLUMES (VOLSTOGRx1, VOLSTOGRx, ...)
  VCAT CATALOG-NAME;
GRANT USE OF STOGROUP STOGRx TO DRL, DRLSYS WITH GRANT OPTION;
```

**Note:** If you need more (or less) than four partitions, you have to customize the **DRLJDBIP** job accordingly.

3. If you are migrating from a previous release environment, before installing the components, perform **UPDATE SYSTEM TABLES** from the **System Tables** window.  
If you are installing IBM Z Performance and Capacity Analytics for the first time, perform **CREATE SYSTEM TABLES**
4. Use the sample JCL DRLJDICT in SDRLCNTL to partition the table, CICS\_DICTIONARY.
  - a) If you are installing IBM Z Performance and Capacity Analytics for the first time, run the DRLJDICT job after creating the system tables.
  - b) If you are migrating from a previous release environment, run job DRLJDICT after the **UPDATE SYSTEM TABLES** is completed.
  - c) The sample JCL DRLJDICT contains the SQL statements that are needed to create a partitioned table space or the CICS\_DICTIONARY table, unload the data already present, create the new table and the Type 2 partitioned indexes, and reload the data.
5. 5. Use the sample JCL DRLJEXCP in SDRLCNTL to partition the table EXCEPTION\_T. :
  - a) If, when you are going to install the CICS Partitioning feature, you have already installed some components that include the EXCEPTION\_T table (that is, the EXCEPTION\_T table is already installed), run the DRLJEXCP job.
  - b) Before running the DRLJEXCP job check the GENERATE\_KEYS system table entries with PROFILE=SMF and TABLESPACE\_NAME=DRLSPEXC to ensure the PARTITION\_KEYS match the PARTITION\_KEYS used for the CICS Partitioned definitions.

- c) The sample contains the SQL statements that are needed to create a partitioned table space for the EXCEPTION\_T table, unload the data already present, create the new table and the Type 2 partitioned indexes, and reload the data.



---

## Chapter 5. Data flow and IBM Z Performance and Capacity Analytics objects

As described in Part I, "Guide", IBM Z Performance and Capacity Analytics loads objects into its system tables when a feature component is installed. These objects (for example, log and record definitions, record procedures, and update definitions) are needed for data collection. At the same time, IBM Z Performance and Capacity Analytics loads the predefined tables and reports associated with that feature component.

After you update the lookup tables, IBM Z Performance and Capacity Analytics and its features collect data from log records. This data is restricted to that required to meet users' needs. IBM Z Performance and Capacity Analytics combines this data with information that you provide for presentation in reports. For more details about updating lookup tables, see [Chapter 2, "Implementing the CICS Performance Feature,"](#) on page 7.

This chapter describes the flow of data from log record to report (or list record), showing IBM Z Performance and Capacity Analytics definitions. It also provides a simple explanation of the supported logs, their structure, and the common fields and conditions associated with each log. It shows how the CICS Performance Feature maps log data into tables.

---

### IBM Z Performance and Capacity Analytics data flow: an overview

Input for the IBM Z Performance and Capacity Analytics database consists of sequential log data sets, such as SMF and DCOLLECT system logs. IBM Z Performance and Capacity Analytics processes data collected from the input logs, summarizes and stores the data in the IBM Z Performance and Capacity Analytics database, and creates reports based on that data.

[Figure 30 on page 46](#) is an overview of the flow of data from the SMF log into IBM Z Performance and Capacity Analytics.

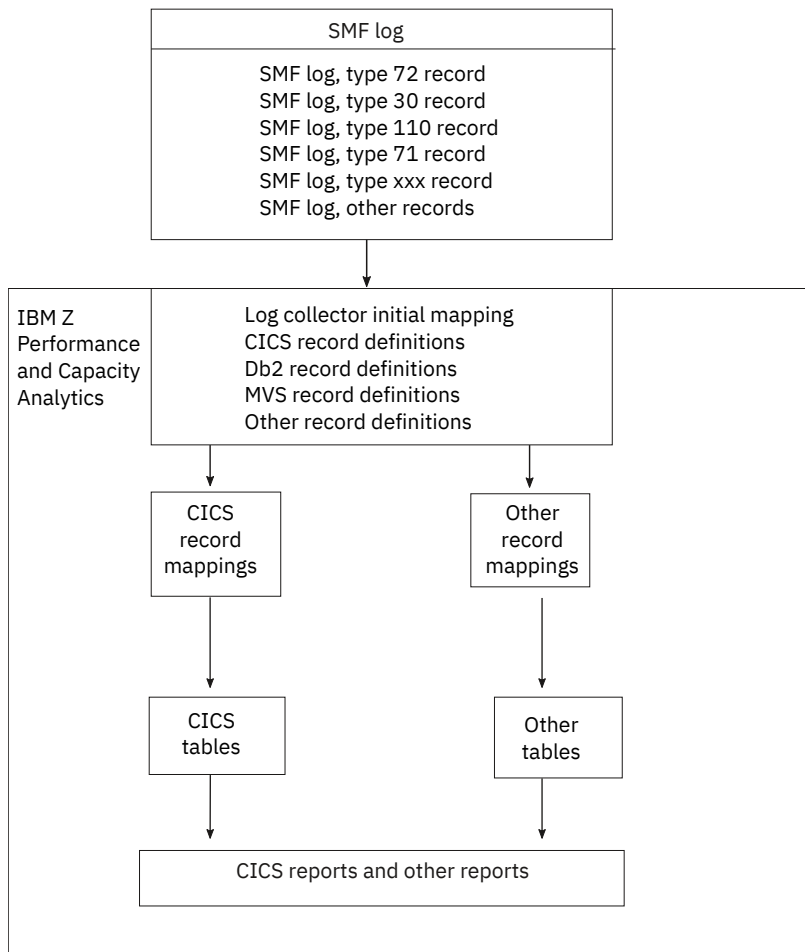


Figure 30. Overview of data flow from SMF log into IBM Z Performance and Capacity Analytics

The IBM Z Performance and Capacity Analytics data flow (see [Figure 31 on page 47](#)) follows these steps:

1. The operating system or licensed program writes data to sequential log data sets. These data sets are the input to IBM Z Performance and Capacity Analytics.
2. The COLLECT function reads data from the log data sets.
3. IBM Z Performance and Capacity Analytics uses record definitions to map the data from log data sets. Using record definitions, extracts only the data it needs from the log to create IBM Z Performance and Capacity Analytics-internal records.
4. In some cases, IBM Z Performance and Capacity Analytics uses a record procedure to reformat the data mapped by record definitions. Record procedures are used to add more data and to combine data from several records. Update definitions define which tables need data from the records.
5. When data is reformatted by a record procedure, IBM Z Performance and Capacity Analytics uses a second record definition to map the new data.
6. IBM Z Performance and Capacity Analytics stores the data in data tables. Update definitions instruct it where to store the data. At the same time, it uses lookup tables as input to data tables. The lookup tables contain user-defined information that defines an organization's operating environment. The lookup tables then convert data or add user-defined data to the tables. Some tables contain summarized information from another table. (For example, one table might contain hourly data summarized from weekly data in another table.) Update definitions also define the summarized tables.
7. IBM Z Performance and Capacity Analytics creates reports with the data from the data tables. In some cases, it uses additional data from lookup tables when creating the reports.



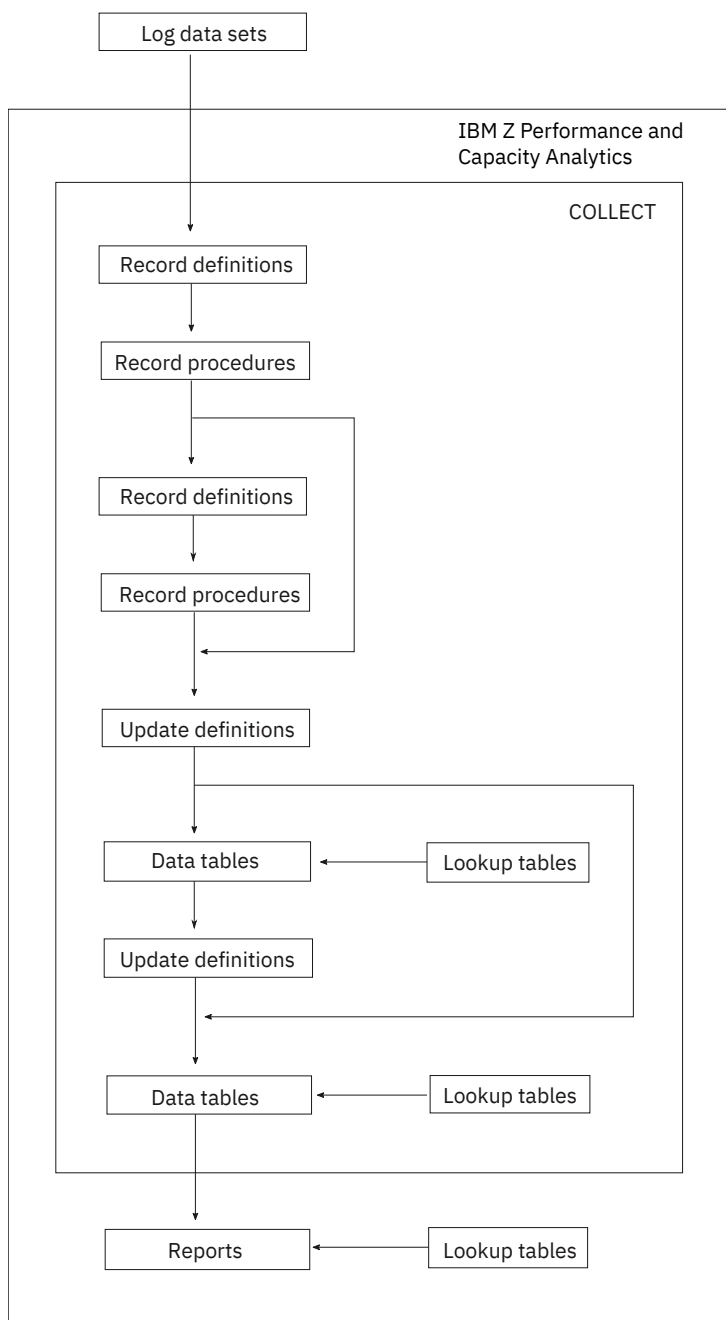


Figure 31. Overview of data flow within IBM Z Performance and Capacity Analytics

For more information about collecting data, refer to the *Administration Guide and Reference*.

## Record processing by the CICS Performance Feature

CICS records data in SMF type 110 records. These *data sections* follow the SMF header and descriptor. Each SMF type 110 record contains only data sections of the same CICS version, record subtype, and record class. For CICS/MVS, the record has another level of detail within a class: the *type* of record.

OMEGAMON XE for CICS appends information to the SMF type 110 (CICS Performance) record. The following is a list of all the OMEGAMON CICS sections, which can be appended to the SMF type 110 record:

- OMEGBSC (OMEGAMON Basic section, which can be split into multiple subsections)
- OMEGDB2 (Db2)

- OMEGDLI (DL/I)
- CANMQ (MQ)
- CANWLMSC (Workload Manager)
- CANUE1 (User Event)
- OMEGCICS (CICS Performance Analyser)

The OMEGAMON CICS Monitoring component collects data from the following OMEGAMON XE for CICS sections:

- OMEGBSC
- OMEGDB2
- OMEGDLI
- CANMQ
- CANUE1 (User Event)

OMEGAMON XE for CICS records data in SMF type 112 subtype 203 records. These records contain counts and elapsed times for each type of file or database command that a transaction issues.

The following is a list of all the possible file and database types in the SMF112 subtype 203 record:

- VSAM
- DL/I
- MQ
- ADABAS
- SUPRA
- DATACOM
- IDMS
- UE1 (user event)

The log collector initiates SMF record processing according to CICS record definitions. The log collector uses these record definitions to map data in the SMF log. It selects the appropriate definition according to the type of data recorded by CICS. [Table 2 on page 48](#) shows the record definitions used by the log collector.

| <i>Table 2. Record definitions for mapping data in the SMF log</i> |   |            |                    |
|--|---|------------|--------------------|
| Record definition  | Description   | Source     | Dictionary record? |
| SMF_110_1  | CICS/TS <3.2 record   | CMF        | Yes                |
| SMF_110_1_5  | CICS/TS transaction resource expanded record (built by DRL2COMP)    | Statistics | No                 |
| SMF_110_1_C  | CICS/TS 3.2+ record (may be compressed)                             | CMF        | Yes                |
| SMF_110_1_CO   | CICS/TS 3.2+ expanded record (built by DRL2COMP)                    | CMF        | Yes                |
| SMF_110_2  | CICS/ESA and CICS/TS statistics                                     | Statistics | No                 |
| SMF_110_3  | CICS/TS data sharing statistics                                     | Statistics | No                 |
| SMF_110_4  | CICS/TS coupling facility statistics                                | Statistics | No                 |
| SMF_110_5  | CICS/TS named counter sequence server statistics                    | Statistics | No                 |
| SMF_110_C  | CICS/TS 3.2+ Compressed record                                      | CMF        | Yes                |
| SMF_110_E  | CICS/ESA and CICS/TS exceptions expanded record (built by DRL2COMP) | CMF        | No                 |

Table 2. Record definitions for mapping data in the SMF log (continued)

| Record definition | Description                                      | Source                    | Dictionary record? |
|-------------------|--|---------------------------|--------------------|
| SMF_110_0_V2      | CICS/MVS accounting, performance, and exceptions | CMF                       | Yes                |
| SMF_112_203_C     | CICS file and data base usage compressed record  | OMEGAMON XE for CICS      | No                 |
| SMF_112_203       | CICS file and data base usage                    | Record procedure DRL2OMEG | No                 |

CICS/ESA generates a dictionary record only for its CMF-generated performance data; CICS/MVS generates a dictionary record for all of its CMF-generated data. CICS uses dictionary records to describe the format, length, and field titles in these CICS CMF-generated data records. The dictionary record will also indicate whether any of the OMEGAMON XE for CICS sections are added to the SMF type 110 performance record.

The CICS Performance Feature uses these record procedures:

#### **DRL2CICS**

This handles the CMF data that uses a dictionary for field mapping. It also processes and stores the dictionary records themselves. It writes records for which there is no dictionary to the DRLNDICT dataset, so you must include a DD statement for this dataset in the collect step. The input records are SMF\_110\_1, SMF\_110\_1\_CO and SMF\_110\_0\_V2, and the output records are SMF\_CICS\_T, SMF\_CICS\_A and SMF\_CICS\_E2.

#### **DRL4CICS**

This splits CMF class 5 records by transaction resource record, creating simpler output records that are mapped by further record definitions.

#### **DRL2CIST**

This splits the CICS/ESA and CICS/TS statistics records by ID, creating small output records that are mapped by further record definitions.

#### **DRL2COMP**

This handles Compressed SMF record data sections and expands them using the standard z/OS Compression/Expansion routine CSRCESTRV. The input record is SMF\_110\_C and the output record is SMF\_110\_CO.

#### **DRL2OMEG**

This handles compressed SMF type 112 subtype 203 records and expands them using the standard z/OS Compression/Expansion routine CSRCESTRV. The output record is SMF\_112\_203.

With the CICS Performance Feature installed, IBM Z Performance and Capacity Analytics has system table information that lets the log collector:

- Map the different subtypes and classes of SMF records through its record definitions
- Create intermediate records of various types through its record procedures
- Store data in tables through its update definitions

Figure 32 on page 50 shows an overview of the flow of data from CICS into IBM Z Performance and Capacity Analytics tables and reports.

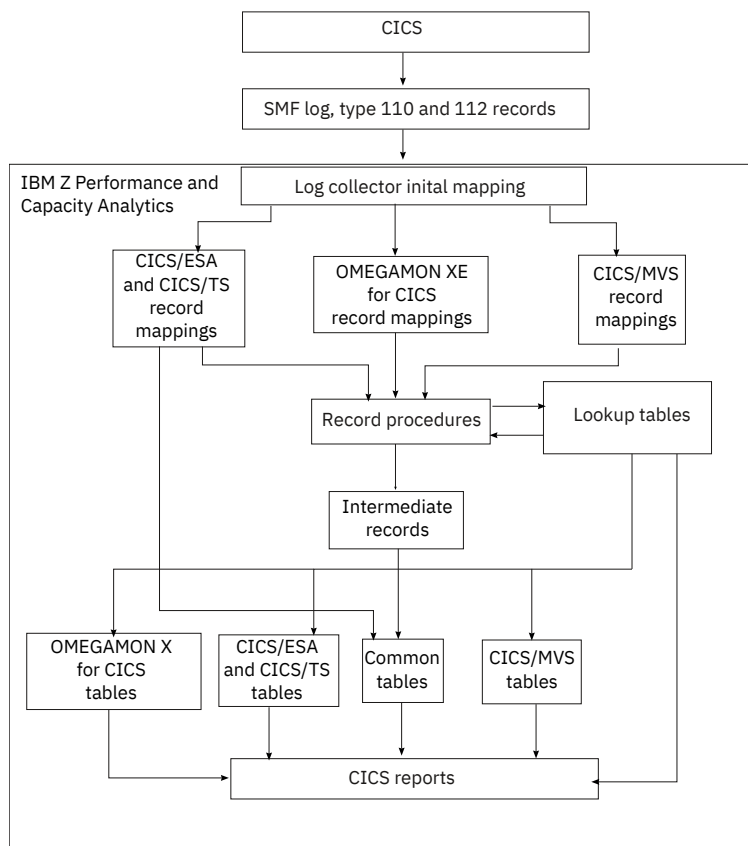


Figure 32. Data flow from CICS into IBM Z Performance and Capacity Analytics tables and reports

The log collector uses log and record definitions, record procedures, and update definitions to move data from SMF type 110 and 112 records into IBM Z Performance and Capacity Analytics tables. The log collector uses record definitions to identify SMF type 110 and 112 records and to map its data according to the CICS version that produced the record, the record subtype, and the record class.

When the log collector finds the SMF type 110 or 112 record, it uses CICS Performance Feature record definitions to map the data for further processing. Some record definitions cause the log collector to use record procedures that create intermediate records.

Record procedure DRL2OMEG expands compressed SMF type 112 subtype 203 records.

## How IBM Z Performance and Capacity Analytics processes CMF data

The data sections of the following CMF records consist of records of identical format that relate to one of these monitoring classes:

- Dictionary data (class 1)
- Accounting data (class 2) for CICS/MVS only
- Performance data (class 3)
- Exception data (class 4)

Dictionary data describes fields in CMF-generated performance data sections. CICS writes a new dictionary record whenever performance monitoring is activated. The DRL2CICS record procedure updates the CICS\_DICTIONARY table with any new dictionary records. As it processes a CMF record, IBM Z Performance and Capacity Analytics loads into memory SMF log dictionary records and any dictionary records stored in CICS\_DICTIONARY.

IBM Z Performance and Capacity Analytics uses the most recently generated dictionary section (that matches the MVS system ID, CICS system ID, and class values) to resolve field values in each

performance record. As shown in Figure 33 on page 51, DRL2CICS creates a common transaction performance record (SMF\_CICS\_T) from the CICS transaction performance records.

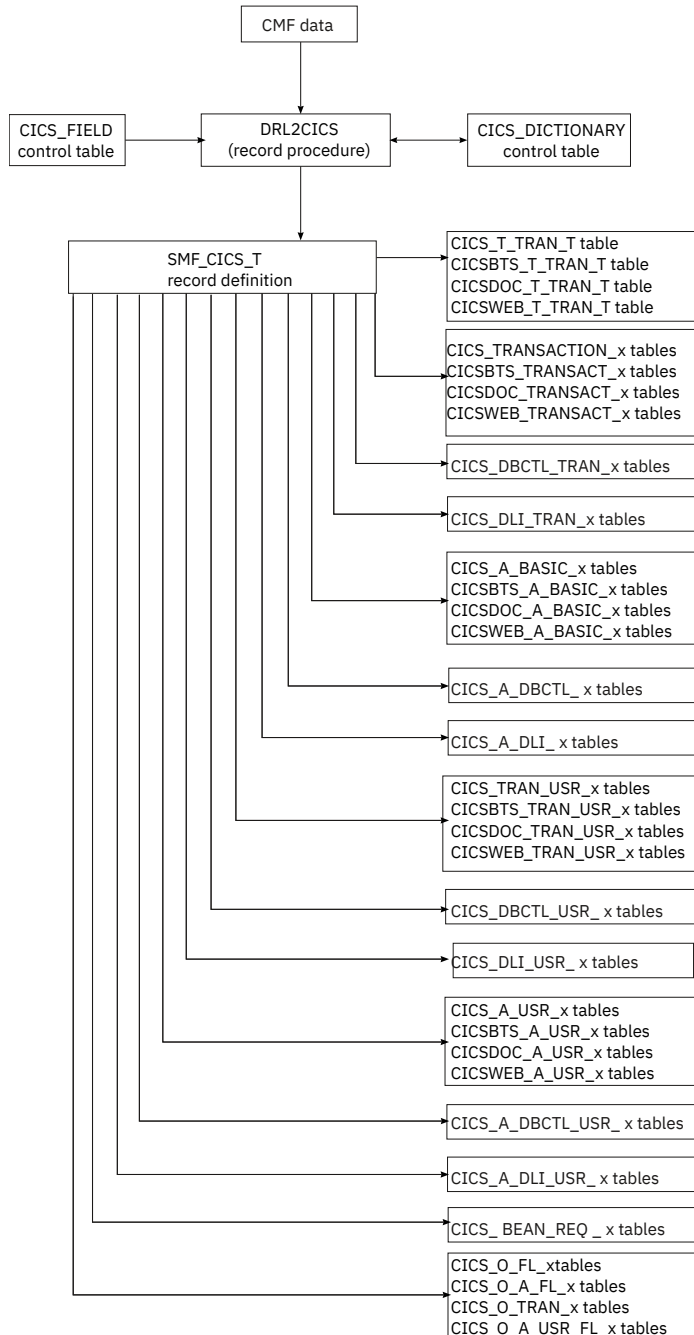


Figure 33. How CMF performance records are processed

The log collector uses the DRL2CICS record procedure to map field values for data in accounting, performance, and exception records to intermediate records mapped by these record definitions:

#### SMF\_CICS\_A

Maps accounting records that IBM Z Performance and Capacity Analytics generates from CICS/MVS accounting records

#### SMF\_CICS\_T

Maps transaction performance records that IBM Z Performance and Capacity Analytics generates from CICS/MVS, CICS/ESA, and CICS/TS performance records

### SMF\_CICS\_E2

Maps exception records that IBM Z Performance and Capacity Analytics generates from CICS/MVS exception records

The CICS/ESA or CICS/TS exception data section is a single, fixed-length record, mapped by the SMF\_110\_E record definition. Update definitions store exception data in the IBM Z Performance and Capacity Analytics common table EXCEPTION\_T, but some rows in this table are also created from exceptional conditions in CICS/ESA and CICS/TS statistics records.

IBM Z Performance and Capacity Analytics stores data in Db2 columns that correspond to most fields found in CICS performance data. If you need to add fields to CMF performance records, remember to update the IBM Z Performance and Capacity Analytics CICS\_FIELD control table with your fields, and add fields in the SMF\_CICS\_T record definition with the offset and length that you specify in CICS\_FIELD. The CICS\_FIELD table is loaded using the SQL statements in the DRLxxx.SDRLEDFS (DRLTCIFI) member. Use this member as a template for additional entries. The SMF\_CICS\_T record definition is in the DRLxxx.SDRLEDFS (DRLRS110) member. For more information about SMF records and data fields that CMF produces for CICS refer to the *CICS/ESA Customization Guide* or the *CICS/MVS Customization Guide*.

The log collector uses the DRL4CICS record procedure to map field values for data in transaction resource monitoring records (class 5). The output record to map these fields is SMF\_CICS\_TR.

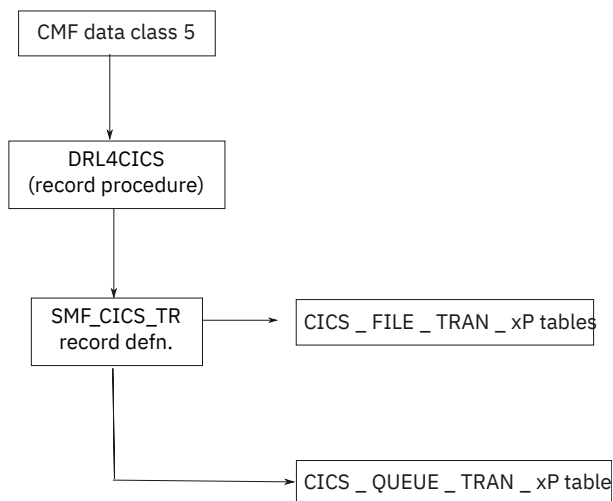


Figure 34. How CICS/TS transaction resource records are processed by the CICS Performance feature

## Processing dictionary data

### About this task

Any monitoring utility program that processes performance data, including IBM Z Performance and Capacity Analytics, needs the dictionary record that relates to the data being processed before it can analyze the data. Normally, this is not a problem, because IBM Z Performance and Capacity Analytics stores dictionary records in the database. Once IBM Z Performance and Capacity Analytics has read a valid dictionary record for a CICS system, it does not need another one until the CMF field mapping changes, which may be when you apply service to the CICS system.

If you have just applied service or migrated from an earlier release, IBM Z Performance and Capacity Analytics needs the new dictionary record before it can analyze the records. It will normally appear before any CMF records in the log, but if you are not collecting the first log for the changed CICS system, follow this procedure:

### Procedure

1. Make sure that there is a valid dictionary record somewhere in the log files, even if it is not at the beginning of the first log. CMF writes one when it is turned on, so you can force CMF to write one by turning off CMF logging, and then turning it on again. For CICS/ESA and CICS/TS only, you can run

DFHMNDUP, as described in [“Using the DFHMNDUP utility”](#) on page 53, to generate a dictionary record. For CICS/MVS, you can run DRL1CIEX to extract the dictionary, as described in [“Using the DRL1CIEX utility”](#) on page 53.

2. Make sure that the collect JCL has a DRLNDICT DD statement. Allocate a file with LRECL=32754, BLKSIZE=32760, and RECFM=VB. Concatenate your log files. Start with the output file from DFHMNDUP or DRL1CIEX, if any, and then the other log files starting with the oldest.
3. Collect the data. If the DRL2CICS record procedure encounters a CMF record for which there is no dictionary, it writes the record to the DRLNDICT data set. When it has read all the log records, it lists the CICS systems with missing dictionary records, and marks those systems where the dictionary record was found later in the log and stored.
4. Check the output messages (DRLOUT). The following messages are written to DRLOUT if IBM Z Performance and Capacity Analytics finds monitoring records without a valid dictionary; in either the logs or in the CICS\_DICTIONARY table:

```
DRL2111W 25 CICS monitoring records written to dataset
          DEGEER.CICSOUT because matching dictionaries
          could not initially be found:
DRL2112I MVS system | CICS applid |      Number | Found
DRL2113I -----|-----|-----|-----
DRL2114I ECHO       | VMCPC1    |          19 | Yes
DRL2114I S38X       | ECIC      |           3 | Yes
DRL2114I S38X       | FCIC      |           3 | Yes
DRL2113I -----|-----|-----|-----
DRL2115I Total      |           |          25 |
```

Found = Yes indicates that a matching dictionary record was found later in the log.

5. If you do not get these messages, IBM Z Performance and Capacity Analytics found the dictionaries that it needed. If you get these messages, and Found=Yes for some of the systems, rerun collect with the DRLNDICT data set as the new input log data set. This will collect the data for the systems that had Found=Yes. Provide a new output DRLNDICT data set for this collect job.

### Using the DFHMNDUP utility

CICS/ESA and CICS/TS provide a monitoring dictionary utility program (DFHMNDUP) that writes a dictionary record to a sequential data set, which is specified on a DD statement with a ddname of SYSUT4. You can then concatenate this data set ahead of your log data sets when you collect data with IBM Z Performance and Capacity Analytics. For the DFHMNDUP program to generate the correct dictionary record for the performance data you will process, use the JCL shown in [Figure 35 on page 53](#).

```
//SMFMNDUP JOB (accounting information),CLASS=A,
//          MSGCLASS=A,USER=userid,PASSWORD=password,NOTIFY=userid
//*****
//*      Create new dictionary record and output to SYSUT4      *
//*****
//MNDUP      EXEC PGM=DFHMNDUP
//STEPLIB DD DSN=CICS330.SDFHLOAD,DISP=SHR
//          DD DSN=mct.table.loadlib,DISP=SHR
//SYSUT4 DD DSN=CICS330.applid.MNDUPREC,DISP=(NEW,CATLG),
//          UNIT=SYSDA,SPACE=(TRK,(1,1))
//SYSPRINT DD SYSOUT=A
//SYSUDUMP DD SYSOUT=A
//SYSIN DD *
MCT=NO          (the suffix of your monitoring control table)
SYSID=MVSA      (your MVS system ID)
GAPPLID=DBDCCICS (your CICS generic VTAM APPLID)
```

Figure 35. Sample JCL to run the monitoring dictionary utility (DFHMNDUP)

For more detailed information on the DFHMNDUP program, refer to the *CICS Operations Guide*.

### Using the DRL1CIEX utility

#### About this task

For CICS/MVS, you can run DRL1CIEX to extract the dictionary from the log to a separate data set. You can then concatenate this data set ahead of your log data sets when you collect data with IBM Z

Performance and Capacity Analytics. Sample JCL for DRL1CIEX is in DRLxxx.SDRLCNTL (DRLJCIEX). The JCL comment statements contain more information about the utility.

## How IBM Z Performance and Capacity Analytics processes CICS data records

IBM Z Performance and Capacity Analytics stores data in Db2 columns that correspond to most fields found in CICS CMF-generated records. For more information about SMF records and fields that CICS produces, refer to the *CICS Customization Guide*.

IBM Z Performance and Capacity Analytics inserts data into tables by following update definitions that indicate where to store CICS/ESA-specific data, CICS/MVS-specific data, and common CICS data. For more information about the tables that the log collector updates, see [Chapter 6, “Data tables, lookup tables, and control tables,”](#) on page 55.

As IBM Z Performance and Capacity Analytics generates reports, it selects data from appropriate tables. It extracts data from CICS-specific tables. If you request information about transactions, tasks, applications, or users that might involve both CICS/ESA and CICS/MVS systems, the feature extracts data from those CICS-specific tables and from tables created from common performance records. For more information about the reports that the CICS Performance Feature provides, see [Chapter 7, “Reports,”](#) on page 293.

## How IBM Z Performance and Capacity Analytics processes CICS/ESA statistics

IBM Z Performance and Capacity Analytics uses the record definition SMF\_110\_2 to map CICS/ESA and CICS/TS statistics records, SMF\_110\_3 to map CICS/TS data sharing statistics records, SMF\_110\_4 to map CICS/TS coupling facility statistics, and SMF\_110\_5 to map counter sequence server statistics reports, in the SMF log. The DRL2CIST record procedure creates intermediate records according to the statistics ID. The log collector then uses update definitions to update tables that contain CICS/ESA statistics data.

IBM Z Performance and Capacity Analytics stores data in Db2 columns that correspond to most fields found in CICS/ESA statistics data. For more information about SMF records and data fields in CICS/ESA statistics, refer to the *CICS/ESA Performance Guide* and to the *CICS/ESA Customization Guide*.



## Chapter 6. Data tables, lookup tables, and control tables

The IBM Z Performance and Capacity Analytics database is a collection of Db2 tables, where each table contains a fixed number of columns. The number of rows in each table varies with time, due to rows added by the collect function and database maintenance.

The process of entering data into the tables consists of several stages. The data from the log is first summarized in one table. Then, the contents of that table are summarized into another table, and so on. An *update definition* specifies how data from one source (a record type or table) is entered into one target (always a table).

When the IBM Z Performance and Capacity Analytics collect function collects records from the various logs supported, it stores the data in tables. Each component uses several tables.

This chapter describes the data tables, lookup tables, and control tables used by the CICS Performance Feature. It includes an explanation of the naming standard used. For descriptions of common data tables used by the CICS Performance Feature and other IBM Z Performance and Capacity Analytics features, refer to the *Administration Guide and Reference*.

### Naming standard for CICS Performance tables

#### About this task

The names of CICS Performance Feature tables use this format:

**CICS\_prefix\_content\_suffix**

Where:

- **prefix** identifies the component or subcomponent type (for example, **S** for the statistics component and **A** for the Application Analysis subcomponents). Table names for subcomponent 1 and subcomponent 8, the basic subcomponents, do not contain prefixes; table names for the remaining 12 subcomponents do contain a prefix.
- **content** is a description (for example, CICS\_ **TRANSACTION** for subcomponent 1's CICS transaction statistics).
- **suffix** indicates the summarization level of the data in the table (for example, CICS\_TRANSACTION\_ **D** for CICS transaction statistics summarized by day). A table name can have these summarization-level suffixes:

**\_T**

The table holds nonsummarized data (**timestamped** data)

**\_H**

The table holds data summarized by **hour** (hourly data)

**\_D**

The table holds data summarized by **day** (daily data)

**\_W**

The table holds data summarized by **week** (weekly data)

**\_M**

The table holds data summarized by **month** (monthly)

Lookup tables and control tables do not have a suffix; control tables also do not have a prefix.

#### Notes:

1. The same tables referring to the non-partitioning feature can also be referred to the partitioning feature when a **P** is added to the end of the name of the table. For example, if you want to analyze the table CICS\_S\_AUTO\_TER\_TP, look at the table CICS\_S\_AUTO\_TERM\_T.
2. The CICS\_EXCEPTION\_T data table has the same name in the CICS Performance and CICS Partitioning feature.

## Table descriptions

---

Each table description includes information about the table, a description of each of the *key columns*, and a description of each of the *data columns*:

- Key columns are marked like this: K. They are sorted in the sequence they appear in the table.
- Data columns follow the last key column and are sorted in alphabetic order with the underscore ignored.

The descriptions of most key columns and data columns contain references to the fields from which they are derived in the SMF record (for example, "From SMFMNSID") or the CICS record (for example, "From DISPWTT"). For an explanation of such fields, refer to the applicable product documentation.

For each component and subcomponent, the tables appear in alphabetic order, with underscores and suffixes ignored.

Tables with similar contents (that is, tables with the same name but with different suffixes) are described under one heading. For example, the heading "CICS\_TRANSACTION\_D, \_W" covers two similar tables: CICS\_TRANSACTION\_D and CICS\_TRANSACTION\_W. Except for the DATE column, the contents of these tables are identical. Differences that exist in the contents of similar tables are explained in the column descriptions.

## Tables in the CICS Monitoring component

---

As described in “Evaluating the CICS Monitoring component” on page 10, the CICS Monitoring component contains subcomponents. This section groups data tables for the CICS Monitoring component by these subcomponents:

1. Basic subcomponent
2. DBCTL subcomponent
3. DL/I subcomponent
4. Basic Application Analysis subcomponent
5. DBCTL Application Analysis subcomponent
6. DL/I Application Analysis subcomponent
7. CICS/MVS subcomponent (global + accounting)
8. Basic Transaction subcomponent
9. DBCTL Transaction subcomponent
10. DL/I Transaction subcomponent
11. Basic Application User subcomponent
12. DBCTL Application User subcomponent
13. DL/I Application User subcomponent
14. CICS TS Transaction Resources subcomponent
15. CICS TS Enterprise Java Beans subcomponent
16. CICS Resource Manager Interface subcomponent

Subcomponents 1 and 4 are based on the transaction data, and the tables are almost the same, differing only in their key structure. In the table layouts that follow, the common fields are placed in a separate section.

## 1. Basic subcomponent data tables

The data tables described in this section are for the basic subcomponent, which summarizes (by transaction and user) basic data gathered by the CICS monitoring facility (CMF).

### CICS\_TRAN\_USR\_H, \_D, \_W

These tables provide CICS transaction data, grouped by user ID and transaction ID. They contain information from CICS performance class monitoring records from CICS/ESA and CICS/TS (SMF 110, subtype 1) and CICS/MVS (SMF 110, subtype 0).

The default retention periods for these tables are:

7 days for CICS\_TRAN\_USR\_H

30 days for CICS\_TRAN\_USR\_D

565 days for CICS\_TRAN\_USR\_W

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME    | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME           | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| TRANSACTION_ID | K   | CHAR(4)   | Transaction name. From TRAN.   |
| USER_ID        | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| BFDGST_COUNT   |     | FLOAT     | The total number of EXEC CICS BIF DIGEST commands issued by the user task. From BFDGSTCT.  |
| BFTOT_COUNT    |     | FLOAT     | The total number of EXEC CICS BIF DEEDIT and BIF DIGEST commands issued by the user task.  |
| ECEFOP_COUNT   |     | FLOAT     | The number of event filter operations performed by the user task. From ECEFOPCT.   |
| ECEVNT_COUNT   |     | FLOAT     | The number of events captured by user task. From ECEVNTCT.   |
| ECSIGE_COUNT   |     | FLOAT     | The total number of EXEC CICS SIGNAL EVENT commands issued by the user task. From ECSIGECT.  |
| EICTOT_COUNT   |     | FLOAT     | The total number of EXEC CICS commands issued by the user task. From EICTOTCT.   |
| JVMTHDWT_CLOCK |     | FLOAT     | The elapsed time that the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM server. From JVMTHDWT_CLOCK.                             |
| JVMTHDWT_COUNT |     | FLOAT     | The number of times when the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM. server. From JVMTHDWT_COUNT.                         |
| MAXTTDLY_CLOCK |     | FLOAT     | The elapsed time in which the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_CLOCK.  |

## Table descriptions

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| MAXTTDLY_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_COUNT. |
| TIASKT_COUNT     |     | FLOAT     | The number of EXEC CICS ASKTIME commands issued by the user task. From TIASKTCT.   |
| TITOT_COUNT      |     | FLOAT     | The total number of EXEC CICS ASKTIME, CONVERTTIME, and FORMATTIME commands issued by the user task. From TITOTCT.                                     |
| T8CPUT_CLOCK     |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_CLOCK.                   |
| T8CPUT_COUNT     |     | FLOAT     | The number of times when the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_COUNT.                          |
| XML_CPU_COUNT    |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSCTM_CT.   |
| XML_CPU_SEC      |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSCTM_TOD.  |
| Remaining fields |     |           | See <a href="#">“Common fields for subcomponents 1, 4, 8, and 11” on page 61.</a>  |

### CICSBTS\_TRAN\_USR\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions, grouped by user ID and transaction ID. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the business transaction service (BTS).

The default retention periods for these tables are:

7 days for CICSBTS\_TRAN\_USR\_H

30 days for CICSBTS\_TRAN\_USR\_D

565 days for CICSBTS\_TRAN\_USR\_W

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME    | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME           | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| TRANSACTION_ID | K   | CHAR(4)   | Transaction name. From TRAN.   |
| USER_ID        | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| RECORDS        |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See <a href="#">“Common fields for the business transaction service (BTS)”</a> on page 74.  |

### CICSCHN\_TRAN\_USR\_H, \_D, \_W

These tables provide hourly, daily and weekly statistics related to the use of channels and containers for data transfer between programs. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) grouped by user ID and transaction ID.

The default retention periods are:

7 days for CICSCHN\_TRAN\_USR\_H

30 days for CICSCHN\_TRAN\_USR\_D

365 days for CICSCHN\_TRAN\_USR\_W

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME             | K   | TIME      | Used only in CICSCHN_TRAN_USR_H. The hour when the performance records were initialised. From START. (For _H table only.)  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| TRANSACTION_ID   | K   | CHAR(4)   | Transaction name. From TRAN.   |
| USER_ID          | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| Remaining fields |     |           | See <a href="#">“Common fields for the Channel and Container usage for data transfer (CHN)”</a> on page 75.  |

### CICSDOC\_TRAN\_USR\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions, grouped by user ID and transaction ID. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the document handler.

The default retention periods for these tables are:

7 days for CICSDOC\_TRAN\_USR\_H

30 days for CICSDOC\_TRAN\_USR\_D

565 days for CICSDOC\_TRAN\_USR\_W

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |

## Table descriptions

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID    | K   | CHAR(4)   | Transaction name. From TRAN.  |
| USER_ID           | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.        |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See <a href="#">“Common fields for the document handler (DOC)” on page 76.</a>  |

### CICSWEB\_TRAN\_USR\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions, grouped by user ID and transaction ID. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the Web interface activity.

The default retention periods for these tables are:

7 days for CICSWEB\_TRAN\_USR\_H

30 days for CICSWEB\_TRAN\_USR\_D

565 days for CICSWEB\_TRAN\_USR\_W

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME    | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME           | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| TRANSACTION_ID | K   | CHAR(4)   | Transaction name. From TRAN.   |
| USER_ID        | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| ATOMSRVC_NAME  |     | CHAR(8)   | The name of the ATOMSERVICE resource definition used to process this task. From WBATMSNM.  |
| INV_SOAP_COUNT |     | FLOAT     | The total number of SOAP faults received in response to EXEC CICS INVOKE SERVICE and EXEC CICS INVOKE WEBSERVICE commands. From WBISSFCT.  |
| PIPELINE_NAME  |     | CHAR(8)   | The name of the PIPELINE resource definition used to provide information about message handlers acting on service request processed by this task. From WBPIPLNM.                                 |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PROGRAM_NAME      |     | CHAR(8)   | The name of the program from the URIMAP resource definition used to provide application-generated response to HTTP request processed by this task. From WBPROGNM.                                       |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| SOAPF_COUNT       |     | FLOAT     | The total number of EXEC CICS SOAPFAULT ADD, CREATE, and DELETE commands issued by the user task. From WBSFTOCT.  |
| SOAPFC_COUNT      |     | FLOAT     | The number of EXEC CICS SOAPFAULT CREATE commands issued by the user task. From WBSFCRCT.   |
| SOAP_REQ_LEN      |     | FLOAT     | For Web service applications, the SOAP request body length. From WBSREQBL.  |
| SOAP_RES_LEN      |     | FLOAT     | For Web service applications, the SOAP response body length. From WBSRSPBL.   |
| TOT_DOC_LEN       |     | FLOAT     | The total length of the documents parsed using zOS XML System Services parser. From MLXSSTDL.   |
| TRANDF_COUNT      |     | FLOAT     | The number of EXEC CICS TRANSFORM commands issued by user task. From MLXMLTCT.  |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| URIMAP_NAME       |     | CHAR(8)   | The name of the URIMAP resource definition that was mapped to the URI of the inbound request processed by this task. From WBURIMNM.   |
| WEBSRVC_NAME      |     | CHAR(32)  | The name of the WEBSERVICE resource definition used to process this task. From WBSVCENM.  |
| WEBSRVC_OPNAME    |     | CHAR(64)  | The first 64 bytes of the Web service operation name. From WBSVOPNM.  |
| WSACONTB_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT BUILD commands issued by the user task. From WSABLCT.  |
| WSACONTG_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT GET commands issued by the user task. From WSAGTCT.  |
| WSAEPRC_COUNT     |     | FLOAT     | The number of EXEC CICS WSAEPR CREATE commands issued by the user task. From WSAEPCCT.  |
| WSADDR_COUNT      |     | FLOAT     | The total number of EXEC CICS WS-Addressing commands issued by the user task. From WSATOTCT.  |
| XML_CPU_COUNT     |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSTM_CT.   |
| XML_CPU_SEC       |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSTM_TOD.  |
| Remaining fields  |     |           | See <a href="#">“Common fields for the Web interface (WEB)”</a> on page 76.   |

### Common fields for subcomponents 1, 4, 8, and 11

This table shows the fields that come after the key columns.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| Key columns | K   |           | See under the table heading.  |
| BMS_INPUTS  |     | FLOAT     | Number of BMS IN requests. This is the number of RECEIVE MAP requests that incurred a terminal I/O. This is the sum of BMSINCT. |

## Common fields for subcomponents 1, 4, 8, 11

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| BMS_MAP_REQUESTS   |     | FLOAT     | Number of BMS MAP requests. This is the number of RECEIVE MAP requests that did not incur a terminal I/O, added to the number of RECEIVE MAP FROM requests. This is the sum of BMSMAPCT. |
| BMS_OUTPUTS        |     | FLOAT     | Number of BMS OUT requests. This is the number of SEND MAP requests. This is the sum of BMSOUTCT.  |
| BMS_REQUESTS_TOTAL |     | FLOAT     | Total number of BMS requests. This is the sum of BMSTOTCT.   |
| BRIDGE_TRANS_ID    |     | FLOAT     | 3270 Bridge transaction identification. From BRDGRAN.  |
| CFDTPWAIT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for CF data table I/O. From CFDTPWAIT.  |
| CFDTPWAIT_COUNT    |     | FLOAT     | Number of times that the user task waited for CF data table I/O. From CFDTPWAIT.   |
| CHARS_IN_ALT_LU62  |     | FLOAT     | Number of characters received from the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCC62IN2.  |
| CHARS_INPUT_ALT    |     | FLOAT     | Number of characters received from the LUTYPE6.1 alternate terminal. This is the sum of TCCHRIN2.  |
| CHARS_INPUT_PRIME  |     | FLOAT     | Number of characters received from the principal terminal. This is the sum of TCCHRIN1.  |
| CHARS_OUT_ALT_LU62 |     | FLOAT     | Number of characters sent to the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCC62OU2.  |
| CHARS_OUTPUT_ALT   |     | FLOAT     | Number of characters sent to the LUTYPE6.1 alternate terminal. This is the sum of TCCHROU2.  |
| CHARS_OUTPUT_PRIME |     | FLOAT     | Number of characters sent to the principal terminal. This is the sum of TCCHROU1.  |
| CHARS_PRIME_TOTAL  |     | FLOAT     | Total number of characters to and from the principal terminal. This is the sum of TCCHRIN1 + TCCHROU1.   |
| CPU_MAX_SEC        |     | FLOAT     | Maximum CPU time used during one transaction, in seconds. This is the maximum of USRCPUT.  |
| CPU_MIN_SEC        |     | FLOAT     | Minimum CPU time used during one transaction, in seconds. This is the minimum of USRCPUT.  |
| CPU_SUM_SEC        |     | FLOAT     | CPU time, in seconds. This is the sum of USRCPUT.  |
| DB2_REQS_COUNT     |     | FLOAT     | Number of Db2 (EXEC SQL IFI) requests issued by the user task. From DB2REQCT.  |
| DB2CONWT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for a CICS Db2 subtask to become available. From DB2CONWT.  |
| DB2CONWT_COUNT     |     | FLOAT     | Number of times that the user task waited for a CICS Db2 subtask to become available. From DB2CONWT.   |
| DB2RDYQW_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for a Db2 thread to become available. From DB2RDYQW.  |
| DB2RDYQW_COUNT     |     | FLOAT     | Number of times that the user task waited for a Db2 thread to become available. From DB2RDYQW.   |
| DB2WAIT_CLOCK      |     | FLOAT     | Elapsed time that the user task waited for Db2 to service the Db2 EXEC SQL and IFI requests. From DB2WAIT.   |
| DB2WAIT_COUNT      |     | FLOAT     | Number of times that the user task waited for Db2 to service the Db2 EXEC SQL and IFI requests. From DB2WAIT.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DECRYPT_BYTES      |     | FLOAT     | Number of bytes decrypted by the secure sockets layer for the user task. From SOBYDECT.  |
| DISP_TCB_HWM       |     | FLOAT     | The peak number of CICS open TCBs (in TCB modes H8, J8, J9, L8, or S8) that have been allocated to the user task. From DSTCBHWM.   |
| DISPATCH_COUNT     |     | FLOAT     | Number of times that tasks were dispatched. This is the sum of USRDISPT.   |
| DISPATCH_DELAY_SEC |     | FLOAT     | Time waiting for the first dispatch, in seconds. This is a subset of SUSPEND_SEC. This is the sum of DSPDELAY.   |
| DISPATCH_SEC       |     | FLOAT     | Elapsed time that tasks were dispatched, in seconds. This is the sum of USRDISPT.  |
| DISPATCH_WAITS     |     | FLOAT     | Number of times that tasks were waiting for redispach. This is valid for CICS V3 and later. This is the sum of DISPWTT.  |
| DISPATCH_WAIT_SEC  |     | FLOAT     | Time that tasks were waiting for redispach, in seconds. This is valid for CICS V3 and later. This is the sum of DISPWTT.   |
| DSMMSC_CLOCK       |     | FLOAT     | The elapsed time which the user task spent waiting because no TCB was available, and none could be created due to MVS storage constraints. From DSMMSC_CLOCK.  |
| DSMMSC_COUNT       |     | FLOAT     | The number of times that the user task waited because no TCB was available, and none could be created due to MVS storage constraints. From DSMMSC_COUNT.   |
| DSTCBM_CLOCK       |     | FLOAT     | The elapsed time which the user task spent in TCB mismatch waits, that is, waiting because there was no available TCB matching the request, but there was at least one non-matching free TCB. From DSTCBM_CLOCK. |
| DSTCBM_COUNT       |     | FLOAT     | The number of times that the user task waited due to TCB mismatch, because there was no available TCB matching the request, but there was at least one non-matching free TCB. From DSTCBM_COUNT.                 |
| ENCRYPT_BYTES      |     | FLOAT     | Number of bytes encrypted by the secure sockets layer for the user task. From SOBYENCT.  |
| ENQ_WAITS          |     | FLOAT     | Number of CICS Task Control ENQ waits. This is the sum of ENQDELAY.  |
| ENQ_WAIT_SEC       |     | FLOAT     | Time waiting for CICS Task Control ENQ, in seconds. This is the sum of ENQDELAY.   |
| EXCEPTIONS         |     | FLOAT     | Number of exception conditions. This is valid for CICS V3 and later. This is the sum of EXWTTIME.  |
| EXCEPTION_WAIT_SEC |     | FLOAT     | Exception wait time, in seconds. This is valid for CICS V3 and later. This is the sum of EXWTTIME.   |
| FC_ACCESS_METHODS  |     | FLOAT     | Number of file control access method calls. Not incremented if the request is function shipped. This is the sum of FCAMCT.   |
| FC_ADD_REQUESTS    |     | FLOAT     | Number of file control ADD requests. Incremented even if the request is function shipped. This is the sum of FCADDCT.  |
| FC_BROWSE_REQUESTS |     | FLOAT     | Number of file control BROWSE requests. Incremented even if the request is function shipped. This is the sum of FCBRWCT.   |
| FC_DELETE_REQUESTS |     | FLOAT     | Number of file control DELETE requests. Incremented even if the request is function shipped. This is the sum of FCDELCT.   |
| FC_GET_REQUESTS    |     | FLOAT     | Number of file control GET requests. Incremented even if the request is function shipped. This is the sum of FCGETCT.  |
| FC_IO_WAITS        |     | FLOAT     | Number of file control I/O waits. This is the sum of FCIOWTT.  |

## Common fields for subcomponents 1, 4, 8, 11

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| FC_IO_WAIT_SEC     |     | FLOAT     | File control I/O wait time, in seconds. This is the sum of FCIOWTT.  |
| FC_PUT_REQUESTS    |     | FLOAT     | Number of file control PUT requests. Incremented even if the request is function shipped. This is the sum of FCPUTCT.  |
| FC_REQUESTS_TOTAL  |     | FLOAT     | Total number of file control requests. Incremented even if the request is function shipped. This is the sum of FCTOTCT.  |
| FE_ALLOC_COUNT     |     | FLOAT     | Number of conversations allocated by the user task. This number is incremented for each FEPI ALLOCATE POOL or FEPI CONVERSE POOL. This is the sum of SZALLOCT. |
| FE_ALLOC_TIMEOUT   |     | FLOAT     | Number of times the user task timed out while waiting to allocate a conversation. This is the sum of SZALLCTO.   |
| FE_CHARS_RECEIVED  |     | FLOAT     | Number of characters received through FEPI by the user task. This is the sum of SZCHRIN.   |
| FE_CHARS_SENT      |     | FLOAT     | Number of characters sent through FEPI by the user task. This is the sum of SZCHROUT.  |
| FE_RECEIVE_REQ     |     | FLOAT     | Number of FEPI RECEIVE requests made by the user task. This number is also incremented for each FEPI CONVERSE request. This is the sum of SZRCVCT.             |
| FE_RECEIVE_TIMEOUT |     | FLOAT     | Number of times the user task timed out while waiting to receive data. This is the sum of SZRCVTO.   |
| FE_REQUESTS_TOTAL  |     | FLOAT     | Total number of all FEPI API and SPI requests made by the user task. This is the sum of SZTOTCT.   |
| FE_SEND_REQUESTS   |     | FLOAT     | Number of FEPI SEND requests made by the user task. This number is also incremented for each FEPI CONVERSE request. This is the sum of SZSENDCT.               |
| FE_START_REQUESTS  |     | FLOAT     | Number of FEPI START requests made by the user task. This is the sum of SZSTRCT.   |
| FE_WAITS           |     | FLOAT     | Number of times that the user task waited for FEPI services. This is the sum of SZWAIT.  |
| FE_WAIT_SEC        |     | FLOAT     | Time that the user task waited for all FEPI services, in seconds. This is the sum of SZWAIT.   |
| GETMAINS_CDSA      |     | FLOAT     | Number of user-storage GETMAIN requests below the 16MB line, in the CDSA. This is the sum of SCCGETCT.   |
| GETMAINS_ECDSA     |     | FLOAT     | Number of user-storage GETMAIN requests above the 16MB line, in the ECDSA. This is the sum of SCCGETCTE.   |
| GETMAINS_EUDSA     |     | FLOAT     | Number of user-storage GETMAIN requests above the 16MB line, in the EUDSA. This is the sum of SCUGETCTE.   |
| GETMAINS_UDSA      |     | FLOAT     | Number of user-storage GETMAIN requests below the 16MB line, in the UDSA. This is the sum of SCUGETCT.   |
| GNQDELAY_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for a CICS task control global enqueue. From GNQDELAY.  |
| GNQDELAY_COUNT     |     | FLOAT     | Number of times that the user task waited for a CICS task control global enqueue. From GNQDELAY.   |
| GVUPWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited as the result of relinquishing control to another task. From GVUPWAIT.  |
| GVUPWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited as the result of relinquishing control to another task. From GVUPWAIT.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| ICDELAY_CLOCK      |     | FLOAT     | Elapsed time that the user task waited the result from EXEC CICS DELAY or RETRIEVE command. From ICDELAY.                            |
| ICDELAY_COUNT      |     | FLOAT     | Number of times that the user task waited the result from EXEC CICS DELAY or RETRIEVE command. From ICDELAYT.                        |
| IC_START_REQUESTS  |     | FLOAT     | Number of interval control START or INITIATE requests. This is the sum of ICPUINCT.  |
| ICTOT_REQS         |     | FLOAT     | Total number of Interval Control Start, Cancel, Delay and Retrieve requests issued by the user task. From ICTOTCT.                   |
| IMS_REQS_COUNT     |     | FLOAT     | Number of IMS (DBCTL) requests issued by the user task. From IMSREQCT.   |
| IMSWAIT_CLOCK      |     | FLOAT     | Elapsed time that the user task waited for DBCTL to service the IMS requests issued by the user task. From IMSWAIT.                  |
| IMSWAIT_COUNT      |     | FLOAT     | Number of times that the user task waited for DBCTL to service the IMS requests issued by the user task. From IMSWAIT.               |
| ISIWTT_CLOCK       |     |           | The elapsed time the user task waited for control at this end of an (IPIC) connection. From ISIWTT.                                  |
| ISIWTT_COUNT       |     |           | The number of times the user task waited for control at this end of an (IPIC) connection. From ISIWTT.                               |
| J8CPUT_CLOCK       |     | FLOAT     | Processor time that the user task was dispatched on each CICS J8 TCB. From J8CPUT.   |
| J8CPUT_COUNT       |     | FLOAT     | Number of times that the user task was dispatched on each CICS J8 TCB. From J8CPUT.  |
| J9CPUT_CLOCK       |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS J9 mode TCB. From J9CPUT_CLOCK. |
| J9CPUT_COUNT       |     | FLOAT     | The number of times that the user task was dispatched by the CICS dispatcher domain on a CICS J9 mode TCB. From J9CPUT_COUNT.        |
| JAVA_OO_REQS       |     | FLOAT     | Total number of CICS OO foundation class requests (JCICS) issued by the user task. From CFCAPICT.                                    |
| JC_IO_WAITS        |     | FLOAT     | Number of journal control I/O waits. This is the sum of JCIOWTT.   |
| JC_IO_WAIT_SEC     |     | FLOAT     | Journal control I/O wait time, in seconds. This is the sum of JCIOWTT.   |
| JC_OUTPUT_REQUESTS |     | FLOAT     | Number of journal control output requests. This is the sum of JCPUWRCT.  |
| JVMITI_CLOCK       |     | FLOAT     | JVM elapsed time, initialize - clock. From JVMITI_CLOCK.   |
| JVMITI_COUNT       |     | FLOAT     | JVM elapsed time, initialize - count. From JVMITI_COUNT.   |
| JVMRTI_CLOCK       |     | FLOAT     | JVM elapsed time, reset - clock. From JVMRTI_CLOCK.  |
| JVMRTI_COUNT       |     | FLOAT     | JVM elapsed time, reset - count. From JVMRTI_COUNT.  |
| JVMSUSP_CLOCK      |     | FLOAT     | Elapsed time that the task was suspended by the CICS dispatcher while running in the CICS JVM. From JVMSUSP.                         |
| JVMSUSP_COUNT      |     | FLOAT     | Number of times that the task was suspended by the CICS dispatcher while running in the CICS JVM. From JVMSUSP.                      |
| JVMTIME_CLOCK      |     | FLOAT     | Elapsed time that was spent in the CICS JVM by the user. From JVMTIME.   |
| JVMTIME_COUNT      |     | FLOAT     | Number of times that were spent in the CICS JVM by the user. From JVMTIME.   |

## Common fields for subcomponents 1, 4, 8, 11

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| KY8DIS_CLOCK       |     | FLOAT     | User task key 8 mode dispatch time - clock. From KY8DIS_CLOCK.  |
| KY8DIS_COUNT       |     | FLOAT     | User task key 8 mode dispatch time - count. From KY8DIS_COUNT.  |
| KY8CPU_CLOCK       |     | FLOAT     | User task key 8 mode CPU time - clock. From KY8CPU_CLOCK.   |
| KY8CPU_COUNT       |     | FLOAT     | User task key 8 mode CPU time - count. From KY8CPU_COUNT.   |
| KY9_COUNT          |     | FLOAT     | The number of times the user task was dispatched by the CICS dispatcher on a CICS key 9 mode TCB. From KY9_COUNT.   |
| KY9CPU_CLOCK       |     | FLOAT     | Processor time during which the user task was dispatched by the CICS dispatcher on a CICS key 9 mode TCB. From KY9CPU_CLOCK.  |
| KY9DIS_CLOCK       |     | FLOAT     | The total elapsed time during which the user task was dispatched by the CICS dispatcher on a CICS key 9 mode TCB. From KY9DIS_CLOCK.  |
| L8CPUT_CLOCK       |     | FLOAT     | Processor time that the user task was dispatched on each CICS L8 TCB. From L8CPUT.  |
| L8CPUT_COUNT       |     | FLOAT     | Number of times that the user task was dispatched on each CICS L8 TCB. From L8CPUT.   |
| L9CPUT_CLOCK       |     | FLOAT     | Processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS L9 mode TCB. When a transaction invokes an OPENAPI application program defined with EXECKEY= USER, it is allocated and uses a CICS L9 mode TCB. From L9CPUT. |
| L9CPUT_COUNT       |     | FLOAT     | Number of times the user task was dispatched by the CICS dispatcher domain on a CICS L9 mode TCB. This field is related to XPLink support. From L9CPUT.   |
| LINK_URM_REQS      |     | FLOAT     | Number of program LINK URM requests issued by the user task. This is the sum of PLCURMCT.   |
| LMDELAY_CLOCK      |     | FLOAT     | Elapsed time that the user task waited to acquire a lock on a resource. From LMDELAY.   |
| LMDELAY_COUNT      |     | FLOAT     | Number of times that the user task waited to acquire a lock on a resource. From LMDELAY.  |
| LOGGER_WRITE_COUNT |     | FLOAT     | Number of CICS logger write requests issued by the user task. This is the sum of LOGWRTCT.  |
| LU61_IO_WAITS      |     | FLOAT     | Number of waits for I/O on a LUTYPE6.1 connection or session. Includes waits for conversations across LUTYPE6.1 connections, but not waits due to LUTYPE6.1 syncpoint flows. This is the sum of LU61WTT.  |
| LU61_IO_WAIT_SEC   |     | FLOAT     | I/O wait time for a LUTYPE6.1 connection or session, in seconds. Includes wait time for conversations across LUTYPE6.1 connections, but not waits due to LUTYPE6.1 syncpoint flows. This is the sum of LU61WTT.   |
| LU62_IO_WAITS      |     | FLOAT     | Number of waits for I/O on a LUTYPE6.2 (APPC) connection or session. Includes waits for conversations across LUTYPE6.2 (APPC) connections, but not waits due to LUTYPE6.2 (APPC) syncpoint flows. This is the sum of LU62WTT.                                 |
| LU62_IO_WAIT_SEC   |     | FLOAT     | I/O wait time for a LUTYPE6.2 (APPC) connection or session, in seconds. Includes wait time for conversations across LUTYPE6.2 (APPC) connections, but not waits due to LUTYPE6.2 (APPC) syncpoint flows. This is the sum of LU62WTT.                          |
| MAXJTD_CLOCK       |     | FLOAT     | Max JVM TCB delay time - clock. From MAXJTD_CLOCK.  |
| MAXJTD_COUNT       |     | FLOAT     | Max JVM TCB delay time - count. From MAXJTD_COUNT.  |

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| MAXHTD_CLOCK     |     | FLOAT     | Max hot-pooling TCB delay time - clock. From MAXHTD_CLOCK.   |
| MAXHTD_COUNT     |     | FLOAT     | Max hot-pooling TCB delay time - count. From MAXHTD_COUNT.   |
| MAXOTDLY_CLOCK   |     | FLOAT     | Elapsed time that the user task waited to obtain a CICS open TCB, because the region had reached the limit set by MAXOPENTCBS parameter. From MAXOTDLY.    |
| MAXOTDLY_COUNT   |     | FLOAT     | Number of times that the user task waited to obtain a CICS open TCB, because the region had reached the limit set by MAXOPENTCBS parameter. From MAXOTDLY. |
| MAXSSLTCBS_COUNT |     | FLOAT     | Number of times the CICS system reached the limit set by the system initialization parameter MAXXPTCBS. From MAXXTDLY.                                     |
| MAXXPTCBS_COUNT  |     | FLOAT     | Number of times the CICS system reached the limit set by the system initialization parameter MAXSSLTCBS. From MAXSTDLY.                                    |
| MRO_WAITS        |     | FLOAT     | Number of times that tasks waited for control at this end of an MRO link. This is the sum of IRIOWTT.  |
| MRO_WAIT_SEC     |     | FLOAT     | Time that tasks waited for control at this end of an MRO link, in seconds. This is the sum of IRIOWTT.   |
| MSCPUT_CLOCK     |     | FLOAT     | Total processor time that the user task was dispatched on each CICS TCB. From MSDISPT.   |
| MSCPUT_COUNT     |     | FLOAT     | Number of times that the user task was dispatched on each CICS TCB. From MSDISPT.  |
| MSDISPT_CLOCK    |     | FLOAT     | Total elapsed time that the user task was dispatched on each CICS TCB. From MSDISPT.   |
| MSDISPT_COUNT    |     | FLOAT     | Number of times that the user task was dispatched on each CICS TCB. From MSDISPT.  |
| MSG_IN_ALT_LU62  |     | FLOAT     | Number of messages received from the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCM62IN2.              |
| MSG_INPUT_ALT    |     | FLOAT     | Number of messages received from the LUTYPE6.1 alternate terminal. This is the sum of TCM61IN2.  |
| MSG_INPUT_PRIME  |     | FLOAT     | Number of messages received from the principal terminal. This is the sum of TCM61IN1.  |
| MSG_OUT_ALT_LU62 |     | FLOAT     | Number of messages sent to the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCM62OU2.                    |
| MSG_OUTPUT_ALT   |     | FLOAT     | Number of messages sent to the LUTYPE6.1 alternate terminal. This is the sum of TCM61OU2.  |
| MSG_OUTPUT_PRIME |     | FLOAT     | Number of messages sent to the principal terminal. This is the sum of TCM61OU1.  |
| MXT_DELAY_SEC    |     | FLOAT     | Time waiting for the first dispatch caused by MXT limits being reached, in seconds. This is the sum of MXTDELAY.   |
| NET_ID           |     | CHAR(8)   | Network ID. From NETID.  |
| NO_CHAR_RCV      |     | FLOAT     | Number of characters received. From SOCHRIN.   |
| NO_CHAR_RCV_IN   |     | FLOAT     | Number of characters received inbound. From SOCHRIN1.  |
| NO_CHAR_SEND     |     | FLOAT     | Number of characters sent. From SOCHROUT.  |
| NO_CHAR_SND_IN   |     | FLOAT     | Number of characters sent inbound. From SOMSROU1.  |
| NO_CRT_P_SOCKET  |     | FLOAT     | Number of create persistent socket requests. From SOCNPSCT.  |

## Common fields for subcomponents 1, 4, 8, 11

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| NO_CRT_NP SOCK    |     | FLOAT     | Number of create non-persistent socket requests. From SOCP SCT   |
| NO_EXT_CERTIF     |     | FLOAT     | Number of extract TCP/IP and certificate requests. From SOEXTRCT.  |
| NO_IN_SOCKET      |     | FLOAT     | Number of inbound socket send requests. From SOMSGOU1.   |
| NO_INBO_RCV       |     | FLOAT     | Number of inbound socket receive requests. From SOMSGIN1.  |
| NON_PERS SOCK     |     | FLOAT     | Persistent socket hwm. From SONPSHWM.  |
| NO_SOCKET_RCV     |     | FLOAT     | Number of socket receive requests. From SORCVCT.   |
| NO_SOCKET_SND     |     | FLOAT     | Number of socket send requests. From SOSENDCT.   |
| OTSIND_CLOCK      |     | FLOAT     | OTS indoubt wait time - clock. From OTSIND_CLOCK.  |
| OTSIND_COUNT      |     | FLOAT     | OTS indoubt wait time - count. From OTSIND_COUNT.  |
| OTS_TRANS_ID      |     | CHAR(128) | OTS transaction ID. From OTSTID.   |
| PAGEINS           |     | FLOAT     | Number of virtual storage page-ins. For CICS V2 only. This is the sum of PAGINCT.                                    |
| PERF_REC_COUNT    |     | FLOAT     | Number of performance class record written by the CICS Monitoring Facility (CMF) for the user task. Sum of PERRECNT. |
| PERSISTE SOCK     |     | FLOAT     | Non-persistent socket hwm. From SOPSHWM.   |
| PGM_COMPRESS      |     | FLOAT     | Number of program compressions. For CICS V2 only. This is the sum of PCCMPRTM.                                       |
| PGM_COMPRESS_SEC  |     | FLOAT     | Time, in seconds, that the task spent in program compression. For CICS V2 only. This is the sum of PCCMPRTM.         |
| PGM_DTL_COUNT     |     | FLOAT     | Number of distributed program LINK requests issued by the user task. From PCDPLCT.                                   |
| PGM_LINK_REQUESTS |     | FLOAT     | Number of program LINK requests. This is the sum of PCLINKCT.  |
| PGM_LOAD_REQUESTS |     | FLOAT     | Number of program LOAD requests. This is the sum of PCLOADCT.  |
| PGM_LOADS         |     | FLOAT     | Number of program library fetches. This is the sum of PCLOADTM.  |
| PGM_LOAD_SEC      |     | FLOAT     | Time that tasks waited for program library (DFHRPL) fetches, in seconds. This is the sum of PCLOADTM.                |
| PGM_XCTL_REQUESTS |     | FLOAT     | Number of program XCTL (transfer control) requests. This is the sum of PCXCTLCT.                                     |
| PORT_NUMBER       |     | FLOAT     | Port number being used for this TCP/IP service. From PORTNUM.  |
| PTPWAI_CLOCK      |     | FLOAT     | Partner wait time - clock. From PTPWAI_CLOCK.  |
| PTPWAI_COUNT      |     | FLOAT     | Partner wait time - count. From PTPWAI_COUNT.  |
| QRCPUT_CLOCK      |     | FLOAT     | Processor time that the user task was dispatched on the CICS QR TCB. From QRCPUT.                                    |
| QRCPUT_COUNT      |     | FLOAT     | Number of times that the user task was dispatched on the CICS QR TCB. From QRCPUT.                                   |
| QRDISPT_CLOCK     |     | FLOAT     | Elapsed time that the user task was dispatched on the CICS QR TCB. From QRDISPT.                                     |
| QRDISPT_COUNT     |     | FLOAT     | Number of times that the user task was dispatched on the CICS QR TCB. From QRDISPT.                                  |
| QRMODDLY_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for a redispach on the CICS QR TCB. From QRMODDLY.                            |
| QRMODDLY_COUNT    |     | FLOAT     | Number of times that the user task waited for a redispach on the CICS QR TCB. From QRMODDLY.                         |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| RECORDS            |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| RECOVERY_MGR_UOW   |     | CHAR(8)   | Identifier of the logical unit of work (unit of recovery) for this task. Unit-of-recovery values are used to synchronize recovery operations among CICS and other resource managers, such as IMS and Db2. From RMUOWID.                                   |
| REDISPATC_COUNT    |     | FLOAT     | Number of times that the user task was re-dispatched after a CICS Dispatcher change TCB mode request. From DSCHMDLY.  |
| REDISPATC_WAIT_SEC |     | FLOAT     | The elapsed time, in seconds, the user task waited for re-dispatch after a CICS Dispatcher change-TCB mode request was issued by or on behalf of the user task. This field is related to Internet Security and is a subset of SUSPEND_SEC. From DSCHMDLY. |
| RESPONSE_MAX_SEC   |     | FLOAT     | Peak task response time, in seconds. This is the maximum of STOP - START.   |
| RESPONSE_MIN_SEC   |     | FLOAT     | Minimum task response time, in seconds. This is the minimum of STOP - START.  |
| RESPONSE_SUM_SEC   |     | FLOAT     | Total response time for all tasks, in seconds. This is the sum of STOP - START.   |
| RLS_MAX_SEC        |     |           | Maximum CPU time used during one transaction, in seconds. This is the maximum of RLSCPUT.   |
| RLS_MIN_SEC        |     |           | Minimum CPU time used during one transaction, in seconds. This is the the minimum of RLSCPUT.   |
| RLS_SUM_SEC        |     |           | CPU time, in seconds. This is the sum of RLSCPUT.   |
| RLSWAIT_CLOCK      |     | FLOAT     | Elapsed time during which the user task waited for RLS file I/O. This is from RLSWAIT.  |
| RLSWAIT_COUNT      |     | FLOAT     | Number of times that the user task was waiting for RLS file I/O. This is the sum of RLSWAIT.  |
| RLUNAME            |     | CHAR(8)   | VTAM logical unit name. From RLUNAME.   |
| RMI_COUNT          |     | FLOAT     | Number of times that the user task was in the Resource Manager Interface (RMI). This is the sum of RMITIME.   |
| RMI_SEC            |     | FLOAT     | Time spent in the Resource Manager Interface (RMI), in seconds. This is the sum of RMITIME.   |
| RMI_SUSPENDS       |     | FLOAT     | Number of times that the task was suspended while in the Resource Manager Interface (RMI). This is a subset of SUSPENDS and RMI_COUNT. This is the sum of RMISUSP.  |
| RMI_SUSPEND_SEC    |     | FLOAT     | Time the task was suspended by the dispatcher while in the Resource Manager Interface (RMI), in seconds. This is a subset of SUSPEND_SEC and RMI_SEC. This is the sum of RMISUSP.   |
| RODISP_CLOCK       |     | FLOAT     | User task RO mode dispatch time - clock. From RODISP_CLOCK.   |
| RODISP_COUNT       |     | FLOAT     | User task RO mode dispatch time - count. From RODISP_COUNT.   |
| ROCPUT_CLOCK       |     | FLOAT     | User task RO mode CPU time - clock. From ROCPUT_CLOCK.  |
| ROCPUT_COUNT       |     | FLOAT     | User task RO mode CPU time - count. From ROCPUT_COUNT.  |
| RQPWAI_CLOCK       |     | FLOAT     | Request processor wait time - clock. From RQPWAI_CLOCK.   |
| RQPWAI_COUNT       |     | FLOAT     | Request processor wait time - count. From RQPWAI_COUNT.   |
| RQRWAI_CLOCK       |     | FLOAT     | Request receiver wait time - clock. From RQRWAI_CLOCK.  |
| RQRWAI_COUNT       |     | FLOAT     | Request receiver wait time - count. From RQRWAI_COUNT.  |

## Common fields for subcomponents 1, 4, 8, 11

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| RRMSWAIT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited in doubt using resource recovery services for EXCI. From RRMSWAIT.   |
| RRMSWAIT_COUNT    |     | FLOAT     | Number of times that the user task waited in doubt using resource recovery services for EXCI. From RRMSWAIT.  |
| RUNTRWTT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for completion of a transaction that executed as the result of a CICS BTS run process or run activity. From RUNTRWTT.  |
| RUNTRWTT_COUNT    |     | FLOAT     | Number of times that the user task waited for completion of a transaction that executed as the result of a CICS BTS run process or run activity. From RUNTRWTT.   |
| S8CPUT_CLOCK      |     | FLOAT     | Processor time that the user task was dispatched on each CICS S8 TCB. From S8CPUT.  |
| S8CPUT_COUNT      |     | FLOAT     | Number of times that the user task was dispatched on each CICS S8 TCB. From S8CPUT.   |
| SHR24_BYTE_COUNT  |     | FLOAT     | Number of bytes of shared storage GETMAINED by the user task below the 16MB line, in the CDSA or SDSA. This is the sum of SC24GSHR.   |
| SHR24_FREEM_COUNT |     | FLOAT     | Number of bytes of shared storage FREEMAINED by the user task below the 16MB line, in the CDSA or SDSA. This is the sum of SC24FSHR.  |
| SHR24_GETM_COUNT  |     | FLOAT     | Number of storage GETMAIN requests issued by the user task for shared storage below the 16MB line, in the CDSA or SDSA. This is the sum of SC24SGCT.  |
| SHR31_BYTE_COUNT  |     | FLOAT     | Number of bytes of shared storage GETMAINED by the user task above the 16MB line, in the ECDSA or ESDSA. This is the sum of SC31GSHR.   |
| SHR31_FREEM_COUNT |     | FLOAT     | Number of bytes of shared storage FREEMAINED by the user task above the 16MB line, in the ECDSA or ESDSA. This is the sum of SC31FSHR.  |
| SHR31_GETM_COUNT  |     | FLOAT     | Number of storage GETMAIN requests issued by the user task for shared storage above the 16MB line, in the ECDSA or ESDSA. This is the sum of SC31SGCT.  |
| SOIOWTT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for SOCKETS I/O. From SOIOWTT.   |
| SOIOWTT_COUNT     |     | FLOAT     | Number of times that the user task waited for SOCKETS I/O. From SOIOWTT.  |
| SOOIOW_CLOCK      |     | FLOAT     | Outbound socket I/O wait time - clock. From SOOIOW_CLOCK.   |
| SOOIOW_COUNT      |     | FLOAT     | Outbound socket I/O wait time - count. From SOOIOW_COUNT.   |
| SRVSYWTT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for a CF data table to process syncpoint requests. From SRVSYWT.   |
| SRVSYWTT_COUNT    |     | FLOAT     | Number of times that the user task waited for a CF data table to process syncpoint requests. From SRVSYWT.  |
| SSLTCB_WAIT_SEC   |     | FLOAT     | The elapsed time, in seconds, in which the user task waited to obtain a CICS SSL TCB (S8 mode), because the CICS system had reached the limit set by the system initialization parameter MAXSSLTCBS. This field is related to Internet Security. From MAXSTDLY. |
| STORAGE_CDSA_MAX  |     | FLOAT     | Peak user storage allocated below the 16MB line in the CICS dynamic storage area (CDSA), in bytes. This is the maximum of SC24CHWM.   |



| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| STORAGE_ECDSA_MAX |     | FLOAT     | Peak user storage allocated above the 16MB line in the extended CICS dynamic storage area (ECDSA), in bytes. This is the maximum of SC31CHWM.   |
| STORAGE_EUDSA_MAX |     | FLOAT     | Peak user storage allocated above the 16MB line in the extended user dynamic storage area (EUDSA), in bytes. This is the maximum of SCUSRHWME.  |
| STORAGE_OCC_CDSA  |     | FLOAT     | Storage occupancy below the 16MB line in the CDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. This is the sum of SC24COCC.   |
| STORAGE_OCC_ECDSA |     | FLOAT     | Storage occupancy above the 16MB line in the ECDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. This is the sum of SC31COCC.  |
| STORAGE_OCC_EUDSA |     | FLOAT     | Storage occupancy above the 16MB line in the EUDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. This is the sum of SCUSRSTGE. |
| STORAGE_OCC_UDSA  |     | FLOAT     | Storage occupancy below the 16MB line in the UDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. This is the sum of SCUSRSTG.   |
| STORAGE_PGM_A16M  |     | FLOAT     | Peak program storage above the 16MB line, in bytes. This includes ECDSA, EUDSA, and ERDSA. This is the maximum of PC31AHWM.   |
| STORAGE_PGM_B16M  |     | FLOAT     | Peak program storage below the 16MB line, in bytes. This includes CDSA and UDSA. This is the maximum of PC24BHWL.   |
| STORAGE_PGM_CDSA  |     | FLOAT     | Peak program storage below the 16MB line in the CICS dynamic storage area (CDSA), in bytes. This is the maximum of PC24CHWM.  |
| STORAGE_PGM_ECDSA |     | FLOAT     | Peak program storage above the 16MB line in the extended CICS dynamic storage area (ECDSA), in bytes. This is the maximum of PC31CHWM.  |
| STORAGE_PGM_ERDSA |     | FLOAT     | Peak program storage above the 16MB line in the extended read-only dynamic storage area (ERDSA), in bytes. This is the maximum of PC31RHWM.   |
| STORAGE_PGM_ESDSA |     | FLOAT     | Peak program storage above the 16MB line in the extended shared dynamic storage area (ESDSA). This is a subset of STORAGE_PGM_A16M. This is the maximum of PC31SHWM.                  |
| STORAGE_PGM_EUDSA |     | FLOAT     | Peak program storage above the 16MB line in the extended user dynamic storage area (EUDSA), in bytes. This is the maximum of PC31UHWM.  |
| STORAGE_PGM_RDSA  |     | FLOAT     | Peak program storage below the 16MB line in the read-only dynamic storage area (RDSA). This is a subset of STORAGE_PGM_B16M. This is the maximum of PC24RHWM.                         |
| STORAGE_PGM_SDSA  |     | FLOAT     | Peak program storage below the 16MB line in the shared dynamic storage area (SDSA). This is a subset of STORAGE_PGM_B16M. This is the maximum of PC24SHWM.                            |
| STORAGE_PGM_TOTAL |     | FLOAT     | Peak program storage both above and below the 16MB line, in bytes. This is the maximum of PCSTGHWM.   |
| STORAGE_PGM_UDSA  |     | FLOAT     | Peak program storage below the 16MB line in the user dynamic storage area (UDSA), in bytes. This is the maximum of PC24UHWM.  |
| STORAGE_TIOA_MAX  |     | FLOAT     | Peak terminal storage allocated to the terminal for one transaction, in bytes. This is the maximum of TCSTG.  |
| STORAGE_TIOA_SUM  |     | FLOAT     | Terminal storage allocated to the terminal associated with this transaction, if applicable, in bytes. This is the sum of TCSTG.   |

## Common fields for subcomponents 1, 4, 8, 11

| Column name         | Key | Data type | Description   |
|---------------------|-----|-----------|---|
| STORAGE_UDSA_MAX    |     | FLOAT     | Peak user storage allocated below the 16MB line in the user dynamic storage area (UDSA), in bytes. This is the maximum of SCUSRHWM.   |
| SUSPENDS            |     | FLOAT     | Number of times tasks were suspended. This is the sum of SUSPTIME.  |
| SUSPEND_SEC         |     | FLOAT     | Total elapsed time, in seconds, that tasks were suspended by the dispatcher. This is the sum of SUSPTIME.   |
| SYNCDLY_CLOCK       |     | FLOAT     | Elapsed time that the user task waited for a SYNC request to be issued by its parent transaction. From SYNCDLY.   |
| SYNCDLY_COUNT       |     | FLOAT     | Number of times that the user task waited for a SYNC request to be issued by its parent transaction. From SYNCDLY.  |
| SYNCPPOINT_REQUESTS |     | FLOAT     | Number of SYNCPPOINT requests. This is the sum of SPSYNCT.  |
| SYNCTIME_CLOCK      |     | FLOAT     | Total elapsed time that the user task was dispatched and was processing Syncpoint requests. This is from SYNCTIME.  |
| SYNCTIME_COUNT      |     | FLOAT     | Number of times that the user task was dispatched and was processing Syncpoint requests. This is the sum of SYNCTIME.   |
| TC_ALLOCATE_REQ     |     | FLOAT     | Number of TCTTE ALLOCATE requests issued by tasks for APPC, LUTYPE6.1, and IRC sessions. This is the sum of TCALLOC.  |
| TC_IO_WAITS         |     | FLOAT     | Number of terminal control I/O waits. This includes LUTYPE6.1 communication waits for CICS V3 data. (See LU61_IO_WAITS for CICS V4 and later.) This is the sum of TCIOWTT.              |
| TC_IO_WAIT_SEC      |     | FLOAT     | Terminal control I/O wait time, in seconds. This includes LUTYPE6.1 communication wait time for CICS V3 data. (See LU61_IO_WAIT_SEC for CICS V4 and later.) This is the sum of TCIOWTT. |
| TCB_ATTACH_COUNT    |     | FLOAT     | Number of CICS TCBs attached by the user task. From TCBATTCT.   |
| TCB_CHANGE_MODES    |     | FLOAT     | The number of CICS change-TCB modes issued by the user task. From CHMODECT. This column is superseded by columns REDISPATC_COUNT and REDISPATC_WAIT_SEC from CTS 3.1+.                  |
| TCLNAME_DELAY_SEC   |     | FLOAT     | Time waiting for the first dispatch caused by transaction class limits being reached, in seconds. This is the sum of TCLDELAY.  |
| TCP_SERVICE         |     | CHAR(8)   | Name of the CP/IP service. From TCPSRVCE.   |
| TD_GET_REQUESTS     |     | FLOAT     | Number of transient data GET requests. This is the sum of TDGETCT.  |
| TD_IO_WAITS         |     | FLOAT     | Number of transient data I/O waits. This is valid for CICS V3 and later. This is the sum of TDIOWTT.  |
| TD_IO_WAIT_SEC      |     | FLOAT     | Transient data I/O wait time, in seconds. This is valid for CICS V3 and later. This is the sum of TDIOWTT.  |
| TD_PURGE_REQUESTS   |     | FLOAT     | Number of transient data PURGE requests. This is the sum of TDPURCT.  |
| TD_PUT_REQUESTS     |     | FLOAT     | Number of transient data PUT requests. This is the sum of TDPUTCT.  |
| TD_REQUESTS_TOTAL   |     | FLOAT     | Total number of transient data requests. This is the sum of TDTOTCT.  |
| TOT_NO_SOCKET       |     | FLOAT     | Total number of socket requests. From SOTOTCT.  |
| TRANSACTION_COUNT   |     | FLOAT     | Total number of performance class monitoring records with RTYPE = T indicating task termination. This is valid for CICS V3 and later. See RECORDS for earlier versions of CICS.         |
| TRANSACTION_FLAG    |     | CHAR(8)   | Transaction flags. A string of 64 bits used for signalling the transaction definition and status information. From TRANFLAG.  |
| TRANS_FACILITY_NAM  |     | CHAR(8)   | Transaction facility name. From FCTYNAME.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| TERM_CONNECT_NAME  |     | CHAR(4)   | Terminal session connection name. From TERMCNNM.  |
| TERM_INFO          |     | CHAR(4)   | Terminal or session information for this tasks principal facility as identified in the TERM field id 002. This field is null if the task is not associated with a terminal or session. From TERMINFO.   |
| TS_AUX_PUT_REQ     |     | FLOAT     | Number of auxiliary temporary storage PUT requests. This is the sum of TSPUTACT.  |
| TS_GET_REQUESTS    |     | FLOAT     | Number of temporary storage GET requests. This is the sum of TSGETCT.   |
| TS_IO_WAITS        |     | FLOAT     | Number of temporary storage I/O waits. This is the sum of TSIOWTT.  |
| TS_IO_WAIT_SEC     |     | FLOAT     | Temporary storage I/O wait time, in seconds. This is the sum of TSIOWTT.  |
| TS_MAIN_PUT_REQ    |     | FLOAT     | Number of main temporary storage PUT requests. This is the sum of TSPUTMCT.   |
| TS_REQUESTS_TOTAL  |     | FLOAT     | Total number of temporary storage requests. This is the sum of TSTOTCT.   |
| TSSHWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for the completion of an asynchronous shared temporary storage request to a temporary storage data server. From TSSHWAIT.  |
| TSSHWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for the completion of an asynchronous shared temporary storage request to a temporary storage data server. From TSSHWAIT.   |
| WMQGETWT_CLOCK     |     |           | The elapsed time the user task waited for WebSphere MQ to service the user tasks GETWAIT request. From WMQGETWT.  |
| WMQGETWT_COUNT     |     |           | The number of times the user task waited for WebSphere MQ to service the user tasks GETWAIT request. From WMQGETWT.   |
| WORKLOAD_REPCLASS  |     | CHAR(8)   | MVS Workload Manager (WLM) report class for this transaction. This field is null if the transaction was WLM-classified in another CICS region. From RPTCLASS.   |
| WORKLOAD_SERVCLASS |     | CHAR(8)   | MVS Workload Manager (WLM) service class for this transaction. This field is null if the transaction was WLM-classified in another CICS region. From SRVCLASS.  |
| WTCEWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for one or more Event Control Blocks (ECBs) or the completion of an event. From WTEXWAIT.  |
| WTCEWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for one or more ECBs or the completion of an event. From WTEXWAIT.  |
| WTEXWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for one or more ECBs, passed to CICS by the user task. From WTEXWAIT.  |
| WTEXWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for one or more ECBs, passed to CICS by the user task. From WTEXWAIT.   |
| X8CPUT_CLOCK       |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS X8 mode TCB. When a transaction invokes a C or C++ program that was compiled with the XPLINK option, and that is defined with EXECKEY= CICS, it is allocated and uses a CICS X8 mode TCB. From X8CPUT. |
| X8CPUT_COUNT       |     | FLOAT     | Number of times the user task was dispatched by the CICS dispatcher domain on a CICS X8 mode TCB. This field is related to XPLink support. From X8CPUT.   |

## Common fields for the business transaction service

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| X9CPUT_CLOCK    |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS X9 mode TCB. When a transaction invokes a C or C++ program that was compiled with the XPLINK option, and that is defined with EXECKEY= USER, it is allocated and uses a CICS X9 mode TCB. From X9CPUT. |
| X9CPUT_COUNT    |     | FLOAT     | Number of times the user task was dispatched by the CICS dispatcher domain on a CICS X9 mode TCB. This field is related to XPLink support. From X9CPUT.   |
| XPTCBS_WAIT_SEC |     | FLOAT     | The elapsed time, in seconds, in which the user task waited to obtain a CICS XP TCB (C8 or X9 mode), because the CICS system had reached the limit set by the system parameter MAXXPTCBS. From MAXXTDLY.  |

## Common fields for the business transaction service (BTS)

This table shows the fields that come after the key columns.

| Column name         | Key | Data type | Description   |
|---------------------|-----|-----------|---|
| Key columns         | K   |           | See under the table heading.  |
| BTS_ACQUIRE_REQS    |     | FLOAT     | Number of CICS BTS acquire process or acquire activity requests issued by the user task. From BAACQACT.   |
| BTS_DEFACT_COUNT    |     | FLOAT     | Number of CICS BTS define activity requests issued by the user task. From BADACTCT.   |
| BTS_DEFPRC_COUNT    |     | FLOAT     | Number of CICS BTS define process requests issued by the user task. From BADPROCT.  |
| BTS_DELETE_COUNT    |     | FLOAT     | Number of CICS BTS delete process or delete activity requests issued by the user task. From BADCPACT.   |
| BTS_DGPACT_CONTAI   |     | FLOAT     | Number of CICS BTS delete, get, or put container requests for activity data containers issued by the user task. From BAACDCCT.                        |
| BTS_DGPPROC_CONTAI  |     | FLOAT     | Number of CICS BTS delete, get, or put container requests for process data containers issued by the user task. From BAPRDCCT.                         |
| BTS_LINK_COUNT      |     | FLOAT     | Number of CICS BTS link process or link activity requests that the user task issued. From BALKPACT.   |
| BTS_RESET_COUNT     |     | FLOAT     | Number of CICS BTS reset process or reset activity requests issued by the user task. From BARSPACT.   |
| BTS_RESUME_COUNT    |     | FLOAT     | Number of CICS BTS resume process or resume activity requests issued by the user task. From BARMPACT.   |
| BTS_RETR_COUNT      |     | FLOAT     | Number of CICS BTS retrieve-reattach event requests issued by the user task. From BADFIECT.   |
| BTS_RUN_ASYNC_COUNT |     | FLOAT     | Number of CICS BTS run process or run activity requests that the user task made to execute a child process or activity asynchronously. From BARASYCT. |
| BTS_RUN_SYNC_COUNT  |     | FLOAT     | Number of CICS BTS run process or run activity requests that the user task made to execute a child process or activity synchronously. From BARSYNCT.  |
| BTS_SUSPEND_COUNT   |     | FLOAT     | Number of CICS BTS suspend process or suspend activity requests issued by the user task. From BASUPACT.   |
| BTS_TIMEREV_REQS    |     | FLOAT     | Number of CICS BTS timer-associated event requests issued by the user task. From BATIAECT.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| BTS_TOT_REQS      |     | FLOAT     | Number of CICS BTS acquire process and acquire activity requests issued by the user task. From BATOTACT.  |
| BTS_TOTACT_CONTAI |     | FLOAT     | Total number of CICS BTS process or activity container requests issued by the user task. From BATOTCCT.   |
| BTS_TOTEVENT_REQS |     | FLOAT     | Total number of CICS BTS event requests issued by the user task. From BATOTECT.   |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |

### Common fields for the Channel and Container usage for data transfer (CHN)

This table shows the fields that come after the key columns.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination.  |
| START_CHAN_LREQS  |     | FLOAT     | Total number of local interval control START requests, with the CHANNEL option, issued by the user task. From ICSTACCT.   |
| LREQS_BYTES       |     | FLOAT     | Total length, in bytes, of the data in the containers of all the locally-executed START CHANNEL requests issued by the user task. This total includes the length of any headers to the data. From ICSTACDL.                           |
| START_CHAN_RREQS  |     | FLOAT     | Total number of interval control START CHANNEL requests, to be executed on remote systems, issued by the user task. From ICSTRCCT.  |
| RREQS_BYTES       |     | FLOAT     | Total length, in bytes, of the data in the containers of all the remotely-executed START CHANNEL requests issued by the user task. This total includes the length of any headers to the data. From ICSTRCDL.                          |
| DPL_REQS_BYTES    |     | FLOAT     | Total length, in bytes, of the data in the containers of all the distributed program link (DPL) requests, with the CHANNEL option, issued by the user task. This total includes the length of any headers to the data. From PCDLCSDL. |
| DPLRET_REQS_BYTES |     | FLOAT     | Total length, in bytes, of the data in the containers of all DPL RETURN CHANNEL commands issued by the user task. This total includes the length of any headers to the data. From PCDLCRDL.   |
| LINK_CHAN_REQS    |     | FLOAT     | Number of local program LINK requests, with the CHANNEL option, issued by the user task. From PCLNKCCT.   |
| XCTL_CHAN_REQS    |     | FLOAT     | Number of program XCTL requests issued with the CHANNEL option by the user task. From PCXCLCCT.   |
| DPL_CHAN_REQS     |     | FLOAT     | Number of program distributed program link (DPL) requests issued with the CHANNEL option by the user task. From PCDPLCCT.   |
| RET_CHAN_REQS     |     | FLOAT     | Number of remote pseudoconversational RETURN requests, with the CHANNEL option, issued by the user task. From PCRTNCCT.   |

## Common fields for the document handler

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| RET_CHAN_BYTES     |     | FLOAT     | Total length, in bytes, of the data in the containers of all the remote pseudoconversational RETURN CHANNEL commands issued by the user task. This total includes the length of any headers to the data. From PCRTNCDL. |
| CHAN_CONTAIN_REQS  |     | FLOAT     | Number of CICS requests for channel containers issued by the user task. From PGTOTCCT.  |
| CHAN_BRWCONT_REQS  |     | FLOAT     | Number of CICS browse requests for channel containers issued by the user task. From PGBRWCCT.   |
| CHAN_GETCONT_REQS  |     | FLOAT     | Number of GET CONTAINER requests for channel containers issued by the user task. From PGGETCCT.   |
| CHAN_PUTCONT_REQS  |     | FLOAT     | Number of PUT CONTAINER requests for channel containers issued by the user task. From PGPUTCCT.   |
| CHAN_MOVCONT_REQS  |     | FLOAT     | Number of MOVE CONTAINER requests for channel containers issued by the user task. From PGMOVCCT.  |
| CHAN_GETCONT_BYTES |     | FLOAT     | The total length, in bytes, of the data in the containers of all the GET CONTAINER CHANNEL commands issued by the user task. From PGGETCDL.   |
| CHAN_PUTCONT_BYTES |     | FLOAT     | CHANNEL commands issued by the user task. From PGPUTCDL.  |
| CHAN_MOVEPUT_CONT  |     | FLOAT     | The number of containers created by MOVE and PUT CONTAINER requests for channel containers issued by the user task. From PGCRECCT.  |

## Common fields for the document handler (DOC)

This table shows the fields that come after the key columns.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| Key columns       | K   |           | See under the table heading.  |
| DOCHND_CRT_COUNT  |     | FLOAT     | Number of document handler CREATE requests issued by the user task. From DHCRECT.   |
| DOCHND_INS_COUNT  |     | FLOAT     | Number of document handler INSERT requests issued by the user task. From DHINSCT.   |
| DOCHND_RETR_COUNT |     | FLOAT     | Number of document handler RETRIEVE requests issued by the user task. From DHRETCT.   |
| DOCHND_SET_COUNT  |     | FLOAT     | Number of document handler SET requests issued by the user task. From DHSETCT.  |
| DOCHND_TOT_COUNT  |     | FLOAT     | Number of document handler requests issued by the user task. From DHTOTCT.  |
| DOCHND_TOTCREDOCL |     | FLOAT     | Number of all documents created by the user task. From DHTOTDCL.  |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |

## Common fields for the Web interface (WEB)

This table shows the fields that come after the key columns.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| Key columns        | K   |           | See under the table heading.  |
| BEANTOT_REQ_NUM    |     | FLOAT     | The total of beans occurred. From EJBTOTCT.   |
| NO_WEB_BROWSE      |     | FLOAT     | Number of WEB browse requests. From WBBRWCT.  |
| NO_WEB_EXTRACT     |     | FLOAT     | Number of WEB extract requests. From WBEXTRCT.  |
| NO_WEB_READ        |     | FLOAT     | Number of WEB read requests. From WBREADCT.   |
| NO_WEB_WRITE       |     | FLOAT     | Number of WEB write requests. From WBWRITCT.  |
| RECORDS            |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT  |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| WEB_CHARS_RECEIVED |     | FLOAT     | Number of characters received by the CICS Web interface RECEIVE requests issued by the user task. From WBCHRIN.   |
| WEB_CHARS_SENT     |     | FLOAT     | Number of characters sent by the CICS Web interface SEND requests issued by the user task. From WBRCHROUT.  |
| WEBH_BROWSE_REQS   |     | FLOAT     | Number of CICS Web support BROWSE HTTPHEADER requests (STARTBROWSE, READNEXT, and ENDBROWSE) issued by the user task when CICS is an HTTP client. From WBBRWCT.   |
| WEBH_BYTES_RECV    |     | FLOAT     | Number of bytes received by the RECEIVE and CONVERSE requests issued by the user task when CICS is an HTTP client. From WBCHRIN1.   |
| WEBH_BYTES_SENT    |     | FLOAT     | Number of bytes sent by the SEND and CONVERSE requests issued by the user task when CICS is an HTTP client. From WBCHROU1.  |
| WEBH_INVOKEWS_REQS |     | FLOAT     | Number of CICS INVOKE WEBSERVICE requests issued by the user task. From WBIWSCT.  |
| WEBH_PARSEURL_REQS |     | FLOAT     | Number of PARSE URL requests issued by the user task. From WBPARSCT.  |
| WEBH_READ_REQS     |     | FLOAT     | Number of WEB READ HTTPHEADER requests issued by the user task when CICS is an HTTP client. From WBREDOCT.  |
| WEBH_READTEM_BYTES |     | FLOAT     | Total length, in bytes, of the data read from the repository in temporary storage by the user task. From WBREPRDL.  |
| WEBH_RECV_REQS     |     | FLOAT     | Number of WEB RECEIVE and CONVERSE requests issued by the user task when CICS is an HTTP client. From WBRCVIN1.   |
| WEBH_SEND_REQS     |     | FLOAT     | Number of WEB SEND and CONVERSE requests issued by the user task when CICS is an HTTP client. From WBSNDU1.   |
| WEBH_WRITTEM_BYTES |     | FLOAT     | Total length, in bytes, of the data written to the repository in temporary storage by the user task. From WBREPWDL.   |
| WEBH_WRITE_REQS    |     | FLOAT     | Number of WEB WRITE HTTPHEADER requests issued by the user task when CICS is an HTTP client. From WBWRTCT.  |
| WEB_RECV_REQS      |     | FLOAT     | Number of CICS Web interface RECEIVE requests issued by the user task. From WBRCVCT.  |
| WEB_REPOREAD_REQS  |     | FLOAT     | Number of reads from repository in shared temporary storage issued by the user task. From WBREPRCT.   |
| WEB_REPOWRITE_REQS |     | FLOAT     | Number of writes in shared temporary storage issued by the user task. From WBREPWCT.  |

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| WEB_SEND_REQS |     | FLOAT     | Number of CICS Web interface SEND requests issued by the user task. From WBSSENDCT. |
| WEB_TOT_REQS  |     | FLOAT     | Number of CICS Web interface requests issued by the user task. From WBTOTCT.        |

## 2. DBCTL subcomponent

The data tables described in this section are for the database control (DBCTL) subcomponent, which summarizes (by transaction and user) DBCTL data gathered by the CICS Monitoring Facility (CMF). These tables contain the DBCTL monitoring fields.

### CICS\_DBCTL\_USR\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions. They contain information from the DBCTL fields in the performance class monitoring record.

The default retention periods for these tables are:

- 7 days for CICS\_DBCTL\_USR\_H
- 30 days for CICS\_DBCTL\_USR\_D
- 565 days for CICS\_DBCTL\_USR\_W

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME       | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.   |
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| USER_ID           | K   | CHAR(8)   | User ID. From USERID.   |
| TRANSACTION_ID    | K   | CHAR(8)   | Transaction identifier. From TRAN.  |
| PSB_NAME          | K   | CHAR(8)   | Name of the PSB. From DBCTL_NPSB.   |
| DEDB_CALL_CNT     |     | INTEGER   | Number of Data Entry Data Base (DEDB) calls. This is the sum of DBCTL_DECL.   |
| DEDB_READ_CNT     |     | INTEGER   | Number of Data Entry Data Base (DEDB) read requests. This is the sum of DBCTL_DERD.   |
| DLI_CALL_CNT      |     | INTEGER   | Number of DL/I requests. This is the sum of DBCTL_TOTC.   |
| DLI_DEL_CALL_CNT  |     | INTEGER   | Number of DL/I Delete requests. This is the sum of DBCTL_DLET.  |
| DLI_GHN_CALL_CNT  |     | INTEGER   | Number of DL/I Get Hold Next (GHN) requests. This is the sum of DBCTL_GHN.  |
| DLI_GHNP_CALL_CNT |     | INTEGER   | Number of DL/I Get Hold Next within Parent (GHNP) requests. This is the sum of DBCTL_GHNP.  |
| DLI_GHU_CALL_CNT  |     | INTEGER   | Number of DL/I Get Hold Unique (GHU) requests. This is the sum of DBCTL_GHU.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DLI_GN_CALL_CNT    |     | INTEGER   | Number of DL/I Get Next (GN) requests. This is the sum of DBCTL_GN.  |
| DLI_GNP_CALL_CNT   |     | INTEGER   | Number of DL/I Get Next within Parent (GNP) requests. This is the sum of DBCTL_GNP.  |
| DLI_GU_CALL_CNT    |     | INTEGER   | Number of DL/I Get Unique (GU) requests. This is the sum of DBCTL_GU1.   |
| DLI_INS_CALL_CNT   |     | INTEGER   | Number of DL/I Insert requests. This is the sum of DBCTL_ISRT.   |
| DLI_IO_CNT         |     | INTEGER   | DL/I I/O count. Accounting data from the PST (PSTACCT). This is the sum of DBCTL_DBIO.   |
| DLI_IO_TIME_USEC   |     | FLOAT     | DL/I I/O time, in microseconds. This is the sum of DBCTL_TMIO.   |
| DLI_REP_CALL_CNT   |     | INTEGER   | Number of DL/I Replace requests. This is the sum of DBCTL_REPL.  |
| EXL_DEQ_CNT        |     | INTEGER   | Number of exclusive dequeues. This is the sum of DBCTL_EXDQ.   |
| EXL_ENQ_CNT        |     | INTEGER   | Number of exclusive enqueues. This is the sum of DBCTL_EXEQ.   |
| FASTPATH_RESERV    |     | INTEGER   | Reserved for Fast Path.  |
| INTENCON_WAIT_USEC |     | FLOAT     | Wait time for intent conflict, in microseconds. In a PSB schedule, when an intent conflict is detected, the schedule request must wait. This is the sum of DBCTL_INTC.               |
| OVERFLOW_BUFF_CNT  |     | INTEGER   | Number of overflow buffers used. This is the sum of DBCTL_OVFN.  |
| PGM_ISO_LOCK_USEC  |     | FLOAT     | Time spent in Program Isolation (PI) locking, in microseconds. This is the sum of DBCTL_TLOC.  |
| POOLSPAC_WAIT_USEC |     | FLOAT     | Wait time for pool space, in microseconds. In a PSB schedule, when the pool space is insufficient for PSB/DMB blocks, the schedule request must wait. This is the sum of DBCTL_POOL. |
| RECORDS            |     | INTEGER   | Total number of performance class monitoring records. This is the number of log records summarized.  |
| SCHED_PROCESS_USEC |     | FLOAT     | Time to schedule the PSB, in microseconds. This is the sum of DBCTL_SCHT.  |
| TEST_DEQ_CNT       |     | INTEGER   | Number of test dequeues. This is the sum of DBCTL_TSDQ.  |
| TEST_ENQ_CNT       |     | INTEGER   | Number of test enqueues. This is the sum of DBCTL_TENQ.  |
| THREAD_CPU_SEC     |     | FLOAT     | Thread CPU time, in seconds.   |
| UNIT_WORK_CONT_CNT |     | INTEGER   | Number of unit-of-work contentions. Sum of DBCTL_UOWC.   |
| UPD_DEQ_CNT        |     | INTEGER   | Number of update dequeues. This is the sum of DBCTL_UPDQ.  |
| UPD_ENQ_CNT        |     | INTEGER   | Number of update enqueues. This is the sum of DBCTL_UENQ.  |
| WAIT_DEDB_BUFF_CNT |     | INTEGER   | Number of waits for a Data Entry Data Base (DEDB) buffer. This is the sum of DBCTL_BFWT.   |
| WAIT_EXL_ENQ_CNT   |     | INTEGER   | Number of waits for exclusive enqueues. This is the sum of DBCTL_WEXQ.   |
| WAIT_TEST_ENQ_CNT  |     | INTEGER   | Number of waits for test enqueues. This is the sum of DBCTL_WTEQ.  |
| WAIT_UPD_ENQ_CNT   |     | INTEGER   | Number of waits for update enqueues. This is the sum of DBCTL_WUEQ.  |

### 3. DL/I subcomponent

The data tables described in this section are for the Data Language/I (DL/I) subcomponent, which summarizes (by transaction and user) DL/I data gathered by the CICS Monitoring Facility (CMF). These tables contain the DL/I monitoring fields.

#### CICS\_DLI\_USR\_H, \_D, \_W

These tables provide statistics on CICS transactions, grouped by user ID. They contain information from the DL/I fields in the performance class monitoring record.

The default retention periods for these tables are:

- 7 days for CICS\_DLI\_USR\_H
- 30 days for CICS\_DLI\_USR\_D
- 565 days for CICS\_DLI\_USR\_W

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME        | K   | CHAR(8)   | Derived from fields SMFMNSID, SMFMNDTE and SMFSMNE using the PERIOD function.   |
| TIME               | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| USER_ID            | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.                  |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| CALL_CNT           |     | INTEGER   | Number of DL/I calls. This is the sum of DLI_CLK3_COUNT.  |
| CALL_ELAPS_SEC     |     | FLOAT     | Elapsed time for DL/I calls, in seconds. From DLI_CLK3_CLOCK.   |
| DELETE_CALL_CNT    |     | INTEGER   | Number of DELETE requests. This is the sum of DLI_DELETE.   |
| GET_HOLD_NEXT_CNT  |     | INTEGER   | Number of Get Hold Next (GHN) requests. This is the sum of DLI_GETHN.   |
| GET_HOLD_NEXTP_CNT |     | INTEGER   | Number of Get Hold Next within Parent (GHNP) requests. This is the sum of DLI_GETGHNP.  |
| GET_HOLD_UNIQ_CNT  |     | INTEGER   | Number of Get Hold Unique (GHU) requests. This is the sum of DLI_GETHU.   |
| GET_NEXT_PAR_CNT   |     | INTEGER   | Number of Get Next within Parent (GNP) requests. This is the sum of DLI_GETNP.  |
| GET_NEXT_REQ_CNT   |     | INTEGER   | Number of Get Next (GN) requests. This is the sum of DLI_GETN.  |
| GET_UNIQ_REQ_CNT   |     | INTEGER   | Number of Get Unique (GU) requests. This is the sum of DLI_GETU.  |
| INSERT_CALL_CNT    |     | INTEGER   | Number of Insert requests. This is the sum of DLI_INSERT.   |
| IO_WAIT_CNT        |     | INTEGER   | Number of DL/I I/O waits. This is the sum of DLI_CLK4_COUNT.  |
| IO_WAIT_TIME       |     | FLOAT     | DL/I I/O wait time, in seconds. From DLI_CLK4_CLOCK.  |
| PSB_SCHED_ACT_CNT  |     | INTEGER   | Number of PSB terminations. This is the sum of DLI_CLK2_COUNT.  |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| PSB_SCHED_ACT_SEC |     | FLOAT     | Time that a PSB was scheduled, in seconds. This is measured from completion of the schedule request to termination. From DLI_CLK2_CLOCK. |
| PSB_SCHED_REQ_CNT |     | INTEGER   | Number of PSB schedule requests. This is the sum of DLI_CLK1_COUNT.  |
| PSB_SCHED_REQ_SEC |     | FLOAT     | Time to service PSB schedule requests, in seconds. From DLI_CLK1_CLOCK.  |
| RECORDS           |     | INTEGER   | Number of performance class monitoring records. This is the number of log records summarized.  |
| REPLACE_CALL_CNT  |     | INTEGER   | Number of Replace requests. This is the sum of DLI_REPLACE.  |

#### 4. Basic Application Analysis subcomponent

The data tables described in this section are for the Basic Application Analysis subcomponent, which summarizes CMF-gathered transaction data by application.

##### CICS\_A\_BASIC\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by application name. They contain information from CICS performance class monitoring records from CICS/ESA and CICS/TS (SMF 110, subtype 1) and CICS/MVS (SMF 110, subtype 0).

The default retention periods for these tables are:

14 days for CICS\_A\_BASIC\_H

565 days for CICS\_A\_BASIC\_W

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| RESPONSE_OBJ_SEC |     | FLOAT     | Response-time objective for this application. This is from APPL_RESP_BND1_SEC in the CICS_LOOKUP_APPL lookup table.   |
| BFDGST_COUNT     |     | FLOAT     | The total number of EXEC CICS BIF DIGEST commands issued by the user task. From BFDGSTCT.   |
| BFTOT_COUNT      |     | FLOAT     | The total number of EXEC CICS BIF DEEDIT and BIF DIGEST commands issued by the user task.   |
| ECEFOP_COUNT     |     | FLOAT     | The number of event filter operations performed by the user task. From ECEFOPCT.  |
| ECEVNT_COUNT     |     | FLOAT     | The number of events captured by user task. From ECEVNTCT.  |
| ECSIGE_COUNT     |     | FLOAT     | The total number of EXEC CICS SIGNAL EVENT commands issued by the user task. From ECSIGECT.   |

## Basic application analysis subcomponent data tables

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| EICTOT_COUNT     |     | FLOAT     | The total number of EXEC CICS commands issued by the user task. From EICTOTCT.   |
| JVMTHDWT_CLOCK   |     | FLOAT     | The elapsed time that the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM server. From JVMTHDWT_CLOCK.     |
| JVMTHDWT_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM. server. From JVMTHDWT_COUNT. |
| MAXTTDLY_CLOCK   |     | FLOAT     | The elapsed time in which the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_CLOCK.                  |
| MAXTTDLY_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_COUNT.                   |
| T8CPUT_CLOCK     |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_CLOCK.                                     |
| T8CPUT_COUNT     |     | FLOAT     | The number of times when the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_COUNT.  |
| TIASKT_COUNT     |     | FLOAT     | The number of EXEC CICS ASKTIME commands issued by the user task. From TIASKTCT.   |
| TITOT_COUNT      |     | FLOAT     | The total number of EXEC CICS ASKTIME, CONVERTTIME, and FORMATTIME commands issued by the user task. From TITOTCT.   |
| XML_CPU_COUNT    |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSCTM_CT.  |
| XML_CPU_SEC      |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSCTM_TOD.   |
| Remaining fields |     |           | See <a href="#">“Common fields for subcomponents 1, 4, 8, and 11” on page 61.</a>  |

### CICSBTS\_A\_BASIC\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by application name. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the business transaction service (BTS).

The default retention periods for these tables are:

14 days for CICSBTS\_A\_BASIC\_H

565 days for CICSBTS\_A\_BASIC\_W

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME    | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME           | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| APPLICATION_NAME  | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See <a href="#">“Common fields for the business transaction service (BTS)” on page 74.</a>  |

**CICSCHN\_A\_BASIC\_H, \_W**

These tables provide hourly and weekly statistics related to the use of channels and containers for data transfer between programs. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) grouped by application name.

The default retention periods are:

14 days for CICSCHN\_A\_BASIC\_H  
365 days for CICSCHN\_A\_BASIC\_W

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME             | K   | TIME      | Used only in CICSCHN_A_BASIC_H. The hour when the performance records were initialised. From START. (For _H table only.)  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| Remaining fields |     |           | See <a href="#">“Common fields for the Channel and Container usage for data transfer (CHN)” on page 75.</a>   |

**CICSDOC\_A\_BASIC\_H, \_W**

These tables provide hourly and weekly statistics on CICS transactions, grouped by application name. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the document handler.

The default retention periods for these tables are:

14 days for CICSDOC\_A\_BASIC\_H  
565 days for CICSDOC\_A\_BASIC\_W

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| APPLICATION_NAME  | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See <a href="#">“Common fields for the document handler (DOC)”</a> on page 76.  |

### **CICSWEB\_A\_BASIC\_H, \_W**

These tables provide hourly and weekly statistics on CICS transactions, grouped by application name. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the Web interface activity.

The default retention periods for these tables are:

14 days for CICSWEB\_A\_BASIC\_H

565 days for CICSWEB\_A\_BASIC\_W

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| ATOMSRVC_NAME    |     | CHAR(8)   | The name of the ATOMSERVICE resource definition used to process this task. From WBATMSNM.   |
| INV_SOAP_COUNT   |     | FLOAT     | The total number of SOAP faults received in response to EXEC CICS INVOKE SERVICE and EXEC CICS INVOKE WEBSERVICE commands. From WBISSFCT.                                 |
| PIPELINE_NAME    |     | CHAR(8)   | The name of the PIPELINE resource definition used to provide information about message handlers acting on service request processed by this task. From WBPIPLNM.          |
| PROGRAM_NAME     |     | CHAR(8)   | The name of the program from the URIMAP resource definition used to provide application-generated response to HTTP request processed by this task. From WBPROGNM.         |
| RECORDS          |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| SOAPF_COUNT       |     | FLOAT     | The total number of EXEC CICS SOAPFAULT ADD, CREATE, and DELETE commands issued by the user task. From WBSFTOCT.  |
| SOAPFC_COUNT      |     | FLOAT     | The number of EXEC CICS SOAPFAULT CREATE commands issued by the user task. From WBSFCRCT.   |
| SOAP_REQ_LEN      |     | FLOAT     | For Web service applications, the SOAP request body length. From WBSREQBL.  |
| SOAP_RES_LEN      |     | FLOAT     | For Web service applications, the SOAP response body length. From WBSRSPBL.   |
| TOT_DOC_LEN       |     | FLOAT     | The total length of the documents parsed using zOS XML System Services parser. From MLXSSTD.  |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| TRANDF_COUNT      |     | FLOAT     | The number of EXEC CICS TRANSFORM commands issued by user task. From MLXMLTCT.  |
| URIMAP_NAME       |     | CHAR(8)   | The name of the URIMAP resource definition that was mapped to the URI of the inbound request processed by this task. From WBURIMNM.   |
| WEBSRVC_NAME      |     | CHAR(32)  | The name of the WEBSERVICE resource definition used to process this task. From WBSVCENM.  |
| WEBSRVC_OPNAME    |     | CHAR(64)  | The first 64 bytes of the Web service operation name. From WBSVOPNM.  |
| WSACONTB_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT BUILD commands issued by the user task. From WSABLCT.  |
| WSACONTG_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT GET commands issued by the user task. From WSAGTCT.  |
| WSAEPRC_COUNT     |     | FLOAT     | The number of EXEC CICS WSAEPR CREATE commands issued by the user task. From WSAEPCCT.  |
| WSADDR_COUNT      |     | FLOAT     | The total number of EXEC CICS WS-Addressing commands issued by the user task. From WSATOTCT.  |
| XML_CPU_COUNT     |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSTM_CT.   |
| XML_CPU_SEC       |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSTM_TOD.  |
| Remaining fields  |     |           | See <a href="#">“Common fields for the Web interface (WEB)” on page 76</a> .  |

## 5. DBCTL Application Analysis subcomponent

The data tables described in this section are for the DBCTL Application Analysis subcomponent, which summarizes CMF-gathered transaction data by application.

### CICS\_A\_DBCTL\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions. They contain information from the DBCTL fields in the performance class monitoring record.

The default retention periods for these tables are:

30 days for CICS\_A\_DBCTL\_H

565 days for CICS\_A\_DBCTL\_W

**DBCTL application analysis subcomponent data tables**

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME        | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.   |
| TIME               | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| APPLICATION_NAME   | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| PSB_NAME           | K   | CHAR(8)   | Name of the PSB. From DBCTL_NPSB.   |
| DEDB_CALL_CNT      |     | INTEGER   | Number of Data Entry Data Base (DEDB) calls. This is the sum of DBCTL_DECL.   |
| DEDB_READ_CNT      |     | INTEGER   | Number of Data Entry Data Base (DEDB) read requests. This is the sum of DBCTL_DERD.   |
| DLI_CALL_CNT       |     | INTEGER   | Number of DL/I requests. This is the sum of DBCTL_TOTC.   |
| DLI_DEL_CALL_CNT   |     | INTEGER   | Number of DL/I Delete requests. This is the sum of DBCTL_DLET.  |
| DLI_GHN_CALL_CNT   |     | INTEGER   | Number of DL/I Get Hold Next (GHN) requests. This is the sum of DBCTL_GHN.  |
| DLI_GHNP_CALL_CNT  |     | INTEGER   | Number of DL/I Get Hold Next within Parent (GHNP) requests. This is the sum of DBCTL_GHNP.  |
| DLI_GHU_CALL_CNT   |     | INTEGER   | Number of DL/I Get Hold Unique (GHU) requests. This is the sum of DBCTL_GHU.  |
| DLI_GN_CALL_CNT    |     | INTEGER   | Number of DL/I Get Next (GN) requests. This is the sum of DBCTL_GN.   |
| DLI_GNP_CALL_CNT   |     | INTEGER   | Number of DL/I Get Next within Parent (GNP) requests. This is the sum of DBCTL_GNP.   |
| DLI_GU_CALL_CNT    |     | INTEGER   | Number of DL/I Get Unique (GU) requests. This is the sum of DBCTL_GU1.  |
| DLI_INS_CALL_CNT   |     | INTEGER   | Number of DL/I Insert requests. This is the sum of DBCTL_ISRT.  |
| DLI_IO_CNT         |     | INTEGER   | DL/I I/O count. Accounting data from the PST (PSTACCT). This is the sum of DBCTL_DBIO.  |
| DLI_IO_TIME_USEC   |     | FLOAT     | DL/I I/O time, in microseconds. This is the sum of DBCTL_TMIO.  |
| DLI_REP_CALL_CNT   |     | INTEGER   | Number of DL/I Replace requests. This is the sum of DBCTL_REPL.   |
| EXL_DEQ_CNT        |     | INTEGER   | Number of exclusive dequeues. This is the sum of DBCTL_EXDQ.  |
| EXL_ENQ_CNT        |     | INTEGER   | Number of exclusive enqueues. This is the sum of DBCTL_EXEQ.  |
| FASTPATH_RESERV    |     | INTEGER   | Reserved for Fast Path.   |
| INTENCON_WAIT_USEC |     | FLOAT     | Wait time for intent conflict, in microseconds. In a PSB schedule, when an intent conflict is detected, the schedule request must wait. This is the sum of DBCTL_INTC.  |
| OVERFLOW_BUFF_CNT  |     | INTEGER   | Number of overflow buffers used. This is the sum of DBCTL_OVFN.   |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| PGM_ISO_LOCK_USEC  |     | FLOAT     | Time spent in Program Isolation (PI) locking, in microseconds. This is the sum of DBCTL_TLOC.  |
| POOLSPAC_WAIT_USEC |     | FLOAT     | Wait time for pool space, in microseconds. In a PSB schedule, when the pool space is insufficient for PSB/DMB blocks, the schedule request must wait. This is the sum of DBCTL_POOL. |
| RECORDS            |     | INTEGER   | Total number of performance class monitoring records. This is the number of log records summarized.  |
| SCHED_PROCESS_USEC |     | FLOAT     | Time to schedule the PSB, in microseconds. This is the sum of DBCTL_SCHT.  |
| TEST_DEQ_CNT       |     | INTEGER   | Number of test dequeues. This is the sum of DBCTL_TSDQ.  |
| TEST_ENQ_CNT       |     | INTEGER   | Number of test enqueues. This is the sum of DBCTL_TENQ.  |
| THREAD_CPU_SEC     |     | FLOAT     | Thread CPU time, in seconds. This is the sum of DBCTL_CTM1.  |
| UNIT_WORK_CONT_CNT |     | INTEGER   | Number of unit-of-work contentions. Sum of DBCTL_UOWC.   |
| UPD_DEQ_CNT        |     | INTEGER   | Number of update dequeues. This is the sum of DBCTL_UPDQ.  |
| UPD_ENQ_CNT        |     | INTEGER   | Number of update enqueues. This is the sum of DBCTL_UENQ.  |
| WAIT_DEDB_BUFF_CNT |     | INTEGER   | Number of waits for a Data Entry Data Base (DEDB) buffer. This is the sum of DBCTL_BFWT.   |
| WAIT_EXL_ENQ_CNT   |     | INTEGER   | Number of waits for exclusive enqueues. This is the sum of DBCTL_WEXQ.   |
| WAIT_TEST_ENQ_CNT  |     | INTEGER   | Number of waits for test enqueues. This is the sum of DBCTL_WTEQ.  |
| WAIT_UPD_ENQ_CNT   |     | INTEGER   | Number of waits for update enqueues. This is the sum of DBCTL_WUEQ.  |

## 6. DL/I Application Analysis subcomponent

The data tables described in this section are for the DL/I Application Analysis subcomponent, which summarizes CMF-gathered transaction data by application.

### CICS\_A\_DLI\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by application name. They contain information from the DL/I fields in the performance class monitoring record.

The default retention periods for these tables are:

30 days for CICS\_A\_DLI\_H  
565 days for CICS\_A\_DLI\_W

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME      | K   | CHAR(8)   | Derived from fields SMFMNSID, SMFMNDTE and SMFSMNME using the PERIOD function.  |
| TIME             | K   | TIME      | Time when the transaction was started. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. From the CICS_LOOKUP_APPL lookup table.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| CALL_CNT           |     | INTEGER   | Number of DL/I calls. This is the sum of DLI_CLK3_COUNT.   |
| CALL_ELAPS_SEC     |     | FLOAT     | Elapsed time for DL/I calls, in seconds. From DLI_CLK3_CLOCK.  |
| DELETE_CALL_CNT    |     | INTEGER   | Number of Delete requests. This is the sum of DLI_DELETE.  |
| GET_HOLD_NEXT_CNT  |     | INTEGER   | Number of Get Hold Next (GHN) requests. This is the sum of DLI_GETHN.  |
| GET_HOLD_NEXTP_CNT |     | INTEGER   | Number of Get Hold Next within Parent (GHNP) requests. This is the sum of DLI_GETGHNP.   |
| GET_HOLD_UNIQ_CNT  |     | INTEGER   | Number of Get Hold Unique (GHU) requests. This is the sum of DLI_GETHU.  |
| GET_NEXT_PAR_CNT   |     | INTEGER   | Number of Get Next within Parent (GNP) requests. This is the sum of DLI_GETNP.   |
| GET_NEXT_REQ_CNT   |     | INTEGER   | Number of Get Next (GN) requests. This is the sum of DLI_GETN.   |
| GET_UNIQ_REQ_CNT   |     | INTEGER   | Number of Get Unique (GU) requests. This is the sum of DLI_GETU.   |
| INSERT_CALL_CNT    |     | INTEGER   | Number of Insert requests. This is the sum of DLI_INSERT.  |
| IO_WAIT_CNT        |     | INTEGER   | Number of DL/I I/O waits. This is the sum of DLI_CLK4_COUNT.   |
| IO_WAIT_TIME       |     | FLOAT     | DL/I I/O wait time, in seconds. From DLI_CLK4_CLOCK.   |
| PSB_SCHED_ACT_CNT  |     | INTEGER   | Number of PSB terminations. This is the sum of DLI_CLK2_COUNT.   |
| PSB_SCHED_ACT_SEC  |     | FLOAT     | Time that a PSB was scheduled, in seconds. This is measured from completion of the schedule request to termination. From DLI_CLK2_CLOCK. |
| PSB_SCHED_REQ_CNT  |     | INTEGER   | Number of PSB schedule requests. This is the sum of DLI_CLK1_COUNT.  |
| PSB_SCHED_REQ_SEC  |     | FLOAT     | Time to service PSB schedule requests, in seconds. From DLI_CLK1_CLOCK.  |
| RECORDS            |     | INTEGER   | Number of performance class monitoring records. This is the number of log records summarized.  |
| REPLACE_CALL_CNT   |     | INTEGER   | Number of Replace requests. This is the sum of DLI_REPLACE.  |

## 7. CICS/MVS subcomponent (global + accounting)

The data tables described in this section are for the CICS/MVS subcomponent (global + accounting). These tables contain the IBM Z Performance and Capacity Analytics objects necessary to summarize global and accounting data only for CICS/MVS Version 2.

### CICS\_M\_ACCOUNT\_H, \_D, \_W, \_M

These tables provide accounting statistics on CICS transactions. They use data from accounting class monitoring records from CICS/MVS Version 2 (SMF 110, subtype 0).

The default retention periods for these tables are:

- 7 days for CICS\_M\_ACCOUNT\_H
- 30 days for CICS\_M\_ACCOUNT\_D
- 565 days for CICS\_M\_ACCOUNT\_W
- 565 days for CICS\_M\_ACCOUNT\_M

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| DATE        | K   | DATE      | Date when the transaction was started. From START. |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| PERIOD_NAME        | K   | CHAR(8)   | Derived from fields SMFMNSID, SMFMNDTE and SMFSMNME using the PERIOD function.  |
| TIME               | K   | SMALLINT  | Time when the transaction was started. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| TERMINAL_ID        | K   | CHAR(4)   | Terminal identifier. From TERM.   |
| TRANSACTION_TYPE   | K   | CHAR(4)   | Transaction type. From T.   |
| USER_ID            | K   | CHAR(8)   | User ID related to the transaction. From USERID.  |
| ABENDS             |     | INTEGER   | Number of transactions that abended. From ABENDS.   |
| END_TIME_LATEST    |     | TIMESTAMP | Most recent task-detach time. From STOP.  |
| MESSAGES_INPUT     |     | INTEGER   | Number of input messages. From MSGIN.   |
| RECORDS            |     | INTEGER   | Number of accounting class monitoring records. This is the number of log records summarized. From START.  |
| RESPONSE_MAX_SEC   |     | INTEGER   | Maximum task response time, in seconds. This is the maximum of STOP-START.  |
| RESPONSE_MIN_SEC   |     | INTEGER   | Minimum task response time, in seconds. This is the minimum of STOP-START.  |
| RESPONSE_SUM_SEC   |     | INTEGER   | Summarized task response time, in seconds. Calculated as STOP-START.  |
| START_TIME_EARLIES |     | TIMESTAMP | Earliest task-start time. From START.   |
| TRANSACTIONS       |     | INTEGER   | Number of transactions identified. From OCCURS.   |
| USERS              |     | INTEGER   | Number of users. From UCOUNT.   |

## 8. Basic Transaction subcomponent

The data tables described in this section are for the Basic Transaction subcomponent, which summarizes (by transaction) basic data by the CICS Monitoring Facility (CMF).

### CICS\_TRANSACTION\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions. They contain information from CICS performance class monitoring records from CICS/ESA and CICS/TS (SMF 110, subtype 1) and CICS/MVS (SMF 110, subtype 0).

The default retention periods for these tables are:

7 days for CICS\_TRANSACTION\_H

30 days for CICS\_TRANSACTION\_D

565 days for CICS\_TRANSACTION\_W

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START. |

## Basic transaction subcomponent data tables

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID   | K   | CHAR(4)   | Transaction name. From TRAN.  |
| BFDGST_COUNT     |     | FLOAT     | The total number of EXEC CICS BIF DIGEST commands issued by the user task. From BFDGSTCT.   |
| BFTOT_COUNT      |     | FLOAT     | The total number of EXEC CICS BIF DEEDIT and BIF DIGEST commands issued by the user task.   |
| ECEFOP_COUNT     |     | FLOAT     | The number of event filter operations performed by the user task. From ECEFOPCT.  |
| ECEVNT_COUNT     |     | FLOAT     | The number of events captured by user task. From ECEVNTCT.  |
| ECSIGE_COUNT     |     | FLOAT     | The total number of EXEC CICS SIGNAL EVENT commands issued by the user task. From ECSIGECT.   |
| EICTOT_COUNT     |     | FLOAT     | The total number of EXEC CICS commands issued by the user task. From EICTOTCT.  |
| JVMTHDWT_CLOCK   |     | FLOAT     | The elapsed time that the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM server. From JVMTHDWT_CLOCK.      |
| JVMTHDWT_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM. server. From JVMTHDWT_COUNT.  |
| MAXTTDLY_CLOCK   |     | FLOAT     | The elapsed time in which the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_CLOCK.                   |
| MAXTTDLY_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_COUNT.                    |
| T8CPUT_CLOCK     |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_CLOCK.                                      |
| T8CPUT_COUNT     |     | FLOAT     | The number of times when the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_COUNT.   |
| TIASKT_COUNT     |     | FLOAT     | The number of EXEC CICS ASKTIME commands issued by the user task. From TIASKTCT.  |
| TITOT_COUNT      |     | FLOAT     | The total number of EXEC CICS ASKTIME, CONVERTTIME, and FORMATTIME commands issued by the user task. From TITOTCT.  |
| XML_CPU_COUNT    |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSCTM_CT.  |
| XML_CPU_SEC      |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSCTM_TOD.   |
| Remaining fields |     |           | See <a href="#">“Common fields for subcomponents 1, 4, 8, and 11”</a> on page 61.   |

**CICSBTS\_TRANSACT\_H, \_D, \_W**

These tables provide hourly, daily, and weekly statistics on CICS transactions, grouped by transaction ID. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the business transaction service (BTS).

The default retention periods for these tables are:

7 days for CICSBTS\_TRANSACT\_H  
 30 days for CICSBTS\_TRANSACT\_D  
 565 days for CICSBTS\_TRANSACT\_W

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                               |
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID    | K   | CHAR(4)   | Transaction name. From TRAN.  |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See <a href="#">“Common fields for the business transaction service (BTS)” on page 74.</a>  |

**CICSCHN\_TRANSACT\_H, \_D, \_W**

These tables provide hourly, daily and weekly statistics related to the use of channels and containers for data transfer between programs. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) grouped by transaction ID.

The default retention periods are:

7 days for CICSCHN\_TRANSACT\_H  
 30 days for CICSCHN\_TRANSACT\_D  
 365 days for CICSCHN\_TRANSACT\_W

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| DATE          | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME   | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME          | K   | TIME      | Used only in CICSCHN_TRANSACT_H. The hour when the performance records were initialised. From START. (For _H table only.)   |
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |

## Basic transaction subcomponent data tables

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN. |
| TRANSACTION_ID   | K   | CHAR(4)   | Transaction name. From TRAN.  |
| Remaining fields |     |           | See “Common fields for the Channel and Container usage for data transfer (CHN)” on page 75.                                       |

### CICSDOC\_TRANSACT\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions, grouped by transaction ID. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the document handler.

The default retention periods for these tables are:

7 days for CICSDOC\_TRANSACT\_H

30 days for CICSDOC\_TRANSACT\_D

565 days for CICSDOC\_TRANSACT\_W

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                               |
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID    | K   | CHAR(4)   | Transaction name. From TRAN.  |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See “Common fields for the document handler (DOC)” on page 76.  |

### CICSWEB\_TRANSACT\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions, grouped by transaction ID. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the Web interface activity.

The default retention periods for these tables are:

7 days for CICSWEB\_TRANSACT\_H

30 days for CICSWEB\_TRANSACT\_D

565 days for CICSWEB\_TRANSACT\_W

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PERIOD_NAME       | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                               |
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID    | K   | CHAR(4)   | Transaction name. From TRAN.  |
| ATOMSRVC_NAME     |     | CHAR(8)   | The name of the ATOMSERVICE resource definition used to process this task. From WBATMSNM.   |
| INV_SOAP_COUNT    |     | FLOAT     | The total number of SOAP faults received in response to EXEC CICS INVOKE SERVICE and EXEC CICS INVOKE WEBSERVICE commands. From WBISSFCT.   |
| PIPELINE_NAME     |     | CHAR(8)   | The name of the PIPELINE resource definition used to provide information about message handlers acting on service request processed by this task. From WBPIPLNM.  |
| PROGRAM_NAME      |     | CHAR(8)   | The name of the program from the URIMAP resource definition used to provide application-generated response to HTTP request processed by this task. From WBPROGNM.                                       |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| SOAPF_COUNT       |     | FLOAT     | The total number of EXEC CICS SOAPFAULT ADD, CREATE, and DELETE commands issued by the user task. From WBSFTOCT.  |
| SOAPFC_COUNT      |     | FLOAT     | The number of EXEC CICS SOAPFAULT CREATE commands issued by the user task. From WBSFCRCT.   |
| SOAP_REQ_LEN      |     | FLOAT     | For Web service applications, the SOAP request body length. From WBSREQBL.  |
| SOAP_RES_LEN      |     | FLOAT     | For Web service applications, the SOAP response body length. From WBSRSPBL.   |
| TOT_DOC_LEN       |     | FLOAT     | The total length of the documents parsed using zOS XML System Services parser. From MLXSSTD.  |
| TRANDF_COUNT      |     | FLOAT     | The number of EXEC CICS TRANSFORM commands issued by user task. From MLXMLTCT.  |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| URIMAP_NAME       |     | CHAR(8)   | The name of the URIMAP resource definition that was mapped to the URI of the inbound request processed by this task. From WBURIMNM.   |
| WEBSRVC_NAME      |     | CHAR(32)  | The name of the WEBSERVICE resource definition used to process this task. From WBSVCENM.  |
| WEBSRVC_OPNAME    |     | CHAR(64)  | The first 64 bytes of the Web service operation name. From WBSVOPNM.  |
| WSACONTB_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT BUILD commands issued by the user task. From WSABLCT.  |
| WSACONTG_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT GET commands issued by the user task. From WSAGTCT.  |

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| WSAEPRC_COUNT    |     | FLOAT     | The number of EXEC CICS WSAEPR CREATE commands issued by the user task. From WSAEPCCT.               |
| WSADDR_COUNT     |     | FLOAT     | The total number of EXEC CICS WS-Addressing commands issued by the user task. From WSATOTCT.         |
| XML_CPU_COUNT    |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSTCM_CT. |
| XML_CPU_SEC      |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSTCM_TOD.    |
| Remaining fields |     |           | See “Common fields for the Web interface (WEB)” on page 76.  |

## 9. DBCTL Transaction subcomponent

The data tables described in this section are for the DBCTL Transaction subcomponent, which summarizes (by transaction) DBCTL data gathered by the CICS Monitoring Facility (CMF). These tables contain the DBCTL monitoring fields.

### CICS\_DBCTL\_TRAN\_H, \_D, \_W

These tables provide hourly, daily, and weekly statistics on CICS transactions. They contain information from the DBCTL fields in the performance class monitoring record.

The default retention periods for these tables are:

7 days for CICS\_DBCTL\_TRAN\_H

30 days for CICS\_DBCTL\_TRAN\_D

565 days for CICS\_DBCTL\_TRAN\_W

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.   |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| TRANSACTION_ID   | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| PSB_NAME         | K   | CHAR(8)   | Name of the PSB. From DBCTL_NPSB.   |
| DEDB_CALL_CNT    |     | INTEGER   | Number of Data Entry Data Base (DEDB) calls. This is the sum of DBCTL_DECL.   |
| DEDB_READ_CNT    |     | INTEGER   | Number of Data Entry Data Base (DEDB) read requests. This is the sum of DBCTL_DERD.   |
| DLI_CALL_CNT     |     | INTEGER   | Number of DL/I requests. This is the sum of DBCTL_TOTC.   |
| DLI_DEL_CALL_CNT |     | INTEGER   | Number of DL/I Delete requests. This is the sum of DBCTL_DLET.  |
| DLI_GHN_CALL_CNT |     | INTEGER   | Number of DL/I Get Hold Next (GHN) requests. This is the sum of DBCTL_GHN.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DLI_GHNP_CALL_CNT  |     | INTEGER   | Number of DL/I Get Hold Next within Parent (GHNP) requests. This is the sum of DBCTL_GHNP.   |
| DLI_GHU_CALL_CNT   |     | INTEGER   | Number of DL/I Get Hold Unique (GHU) requests. This is the sum of DBCTL_GHU.   |
| DLI_GN_CALL_CNT    |     | INTEGER   | Number of DL/I Get Next (GN) requests. This is the sum of DBCTL_GN.  |
| DLI_GNP_CALL_CNT   |     | INTEGER   | Number of DL/I Get Next within Parent (GNP) requests. This is the sum of DBCTL_GNP.  |
| DLI_GU_CALL_CNT    |     | INTEGER   | Number of DL/I Get Unique (GU) requests. This is the sum of DBCTL_GU1.   |
| DLI_INS_CALL_CNT   |     | INTEGER   | Number of DL/I Insert requests. This is the sum of DBCTL_ISRT.   |
| DLI_IO_CNT         |     | INTEGER   | DL/I I/O count. Accounting data from the PST (PSTACCT). This is the sum of DBCTL_DBIO.   |
| DLI_IO_TIME_USEC   |     | FLOAT     | DL/I I/O time, in microseconds. This is the sum of DBCTL_TMIO.   |
| DLI_REP_CALL_CNT   |     | INTEGER   | Number of DL/I Replace requests. This is the sum of DBCTL_REPL.  |
| EXL_DEQ_CNT        |     | INTEGER   | Number of exclusive dequeues. This is the sum of DBCTL_EXDQ.   |
| EXL_ENQ_CNT        |     | INTEGER   | Number of exclusive enqueues. This is the sum of DBCTL_EXEQ.   |
| FASTPATH_RESERV    |     | INTEGER   | Reserved for Fast Path.  |
| INTENCON_WAIT_USEC |     | FLOAT     | Wait time for intent conflict, in microseconds. In a PSB schedule, when an intent conflict is detected, the schedule request must wait. This is the sum of DBCTL_INTC.               |
| OVERFLOW_BUFF_CNT  |     | INTEGER   | Number of overflow buffers used. This is the sum of DBCTL_OVFN.  |
| PGM_ISO_LOCK_USEC  |     | FLOAT     | Time spent in Program Isolation (PI) locking, in microseconds. This is the sum of DBCTL_TLOC.  |
| POOLSPAC_WAIT_USEC |     | FLOAT     | Wait time for pool space, in microseconds. In a PSB schedule, when the pool space is insufficient for PSB/DMB blocks, the schedule request must wait. This is the sum of DBCTL_POOL. |
| RECORDS            |     | INTEGER   | Total number of performance class monitoring records. This is the number of log records summarized.  |
| SCHED_PROCESS_USEC |     | FLOAT     | Time to schedule the PSB, in microseconds. This is the sum of DBCTL_SCHT.  |
| TEST_DEQ_CNT       |     | INTEGER   | Number of test dequeues. This is the sum of DBCTL_TSDQ.  |
| TEST_ENQ_CNT       |     | INTEGER   | Number of test enqueues. This is the sum of DBCTL_TENQ.  |
| THREAD_CPU_SEC     |     | FLOAT     | Thread CPU time, in seconds.   |
| UNIT_WORK_CONT_CNT |     | INTEGER   | Number of unit-of-work contentions. Sum of DBCTL_UOWC.   |
| UPD_DEQ_CNT        |     | INTEGER   | Number of update dequeues. This is the sum of DBCTL_UPDQ.  |
| UPD_ENQ_CNT        |     | INTEGER   | Number of update enqueues. This is the sum of DBCTL_UENQ.  |
| WAIT_DEDB_BUFF_CNT |     | INTEGER   | Number of waits for a Data Entry Data Base (DEDB) buffer. This is the sum of DBCTL_BFWT.   |
| WAIT_EXL_ENQ_CNT   |     | INTEGER   | Number of waits for exclusive enqueues. This is the sum of DBCTL_WEXQ.   |
| WAIT_TEST_ENQ_CNT  |     | INTEGER   | Number of waits for test enqueues. This is the sum of DBCTL_WTEQ.  |
| WAIT_UPD_ENQ_CNT   |     | INTEGER   | Number of waits for update enqueues. This is the sum of DBCTL_WUEQ.  |

## 10. DL/I Transaction subcomponent

The data tables described in this section are for the DL/I Transaction subcomponent, which summarizes (by transaction) DL/I data gathered by the CICS Monitoring Facility (CMF). These tables contain the DL/I monitoring fields.

### CICS\_DLI\_TRAN\_H, \_D, \_W

This table provides hourly, daily and weekly statistics on CICS transactions. It contains information from the DL/I fields in the performance class monitoring record.

The default retention periods for these tables are:

7 days for CICS\_DLI\_TRAN\_H

30 days for CICS\_DLI\_TRAN\_D

565 days for CICS\_DLI\_TRAN\_W

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME        | K   | CHAR(8)   | Derived from fields SMFMNSID, SMFMNDTE and SMFSMNE using the PERIOD function.   |
| TIME               | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| CALL_CNT           |     | INTEGER   | Number of DL/I calls. This is the sum of DLI_CLK3_COUNT.  |
| CALL_ELAPS_SEC     |     | FLOAT     | Elapsed time for DL/I calls, in seconds. From DLI_CLK3_CLOCK.   |
| DELETE_CALL_CNT    |     | INTEGER   | Number of Delete requests. This is the sum of DLI_DELETE.   |
| GET_HOLD_NEXT_CNT  |     | INTEGER   | Number of Get Hold Next (GHN) requests. This is the sum of DLI_GETHN.   |
| GET_HOLD_NEXTP_CNT |     | INTEGER   | Number of Get Hold Next within Parent (GHNP) requests. This is the sum of DLI_GETGHNP.  |
| GET_HOLD_UNIQ_CNT  |     | INTEGER   | Number of Get Hold Unique (GHU) requests. This is the sum of DLI_GETHU.   |
| GET_NEXT_PAR_CNT   |     | INTEGER   | Number of Get Next within Parent (GNP) requests. This is the sum of DLI_GETNP.  |
| GET_NEXT_REQ_CNT   |     | INTEGER   | Number of Get Next (GN) requests. This is the sum of DLI_GETN.  |
| GET_UNIQ_REQ_CNT   |     | INTEGER   | Number of Get Unique (GU) requests. This is the sum of DLI_GETU.  |
| INSERT_CALL_CNT    |     | INTEGER   | Number of Insert requests. This is the sum of DLI_INSERT.   |
| IO_WAIT_CNT        |     | INTEGER   | Number of DL/I I/O waits. This is the sum of DLI_CLK4_COUNT.  |
| IO_WAIT_TIME       |     | FLOAT     | DL/I I/O wait time, in seconds. From DLI_CLK4_CLOCK.  |
| PSB_SCHED_ACT_CNT  |     | INTEGER   | Number of PSB terminations. This is the sum of DLI_CLK2_COUNT.  |
| PSB_SCHED_ACT_SEC  |     | FLOAT     | Time that a PSB was scheduled, in seconds. This is measured from completion of the schedule request to termination. From DLI_CLK2_CLOCK.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PSB_SCHED_REQ_CNT |     | INTEGER   | Number of PSB schedule requests. This is the sum of DLI_CLK1_COUNT.                           |
| PSB_SCHED_REQ_SEC |     | FLOAT     | Time to service PSB schedule requests, in seconds. From DLI_CLK1_CLOCK.                       |
| RECORDS           |     | INTEGER   | Number of performance class monitoring records. This is the number of log records summarized. |
| REPLACE_CALL_CNT  |     | INTEGER   | Number of Replace requests. This is the sum of DLI_REPLACE.                                   |

## 11. Basic Application User subcomponent

The data tables described in this section are for the Basic Application User subcomponent, which summarizes CMF-gathered transaction data by application and user.

### CICS\_A\_USR\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by user ID and application name. They contain information from CICS performance class monitoring records from CICS/ESA and CICS/TS (SMF 110, subtype 1) and CICS/MVS (SMF 110, subtype 0).

The default retention periods for these tables are:

14 days for CICS\_A\_USR\_H

565 days for CICS\_A\_USR\_W

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.   |
| USER_ID          | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| BFDGST_COUNT     |     | FLOAT     | The total number of EXEC CICS BIF DIGEST commands issued by the user task. From BFDGSTCT.  |
| BFTOT_COUNT      |     | FLOAT     | The total number of EXEC CICS BIF DEEDIT and BIF DIGEST commands issued by the user task.  |
| ECEFOP_COUNT     |     | FLOAT     | The number of event filter operations performed by the user task. From ECEFOPCT.   |
| ECEVNT_COUNT     |     | FLOAT     | The number of events captured by user task. From ECEVNTCT.   |
| ECSIGE_COUNT     |     | FLOAT     | The total number of EXEC CICS SIGNAL EVENT commands issued by the user task. From ECSIGECT.  |
| EICTOT_COUNT     |     | FLOAT     | The total number of EXEC CICS commands issued by the user task. From EICTOTCT.   |

## Basic application user subcomponent data tables

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| JVMTHDWT_CLOCK   |     | FLOAT     | The elapsed time that the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM server. From JVMTHDWT_CLOCK.     |
| JVMTHDWT_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM. server. From JVMTHDWT_COUNT. |
| MAXTTDLY_CLOCK   |     | FLOAT     | The elapsed time in which the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_CLOCK.                  |
| MAXTTDLY_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_COUNT.                   |
| T8CPUT_CLOCK     |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_CLOCK.                                     |
| T8CPUT_COUNT     |     | FLOAT     | The number of times when the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_COUNT.  |
| TIASKT_COUNT     |     | FLOAT     | The number of EXEC CICS ASKTIME commands issued by the user task. From TIASKTCT.   |
| TITOT_COUNT      |     | FLOAT     | The total number of EXEC CICS ASKTIME, CONVERTTIME, and FORMATTIME commands issued by the user task. From TITOTCT.   |
| XML_CPU_COUNT    |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSCTM_CT.   |
| XML_CPU_SEC      |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSCTM_TOD.  |
| Remaining fields |     |           | See <a href="#">“Common fields for subcomponents 1, 4, 8, and 11” on page 61.</a>  |

### CICSBTS\_A\_USR\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by user ID and application name. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the business transaction service (BTS).

The default retention periods for these tables are:

14 days for CICSBTS\_A\_USR\_H

565 days for CICSBTS\_A\_USR\_W

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| USER_ID           | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.        |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See “Common fields for the business transaction service (BTS)” on page 74.  |

**CICSCHN\_A\_USR\_H, \_W**

These tables provide hourly and weekly statistics related to the use of channels and containers for data transfer between programs. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) grouped by user ID and application name.

The default retention periods for these tables are:

14 days for CICSCHN\_A\_USR\_H

365 days for CICSCHN\_A\_USR\_W

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME             | K   | TIME      | Used only in CICSCHN_A_USR_H. The hour when the performance records were initialized. From START. (For _H table only.)   |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.   |
| USER_ID          | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| Remaining fields |     |           | See “Common fields for the Channel and Container usage for data transfer (CHN)” on page 75.  |

**CICSDOC\_A\_USR\_H, \_W**

These tables provide hourly and weekly statistics on CICS transactions, grouped by user ID and application name. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the document handler.

The default retention periods for these tables are:

14 days for CICSDOC\_A\_USR\_H

565 days for CICSDOC\_A\_USR\_W

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                               |
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| APPLICATION_NAME  | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| USER_ID           | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.        |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| Remaining fields  |     |           | See <a href="#">“Common fields for the document handler (DOC)”</a> on page 76.  |

### CICSWEB\_A\_USR\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by user ID and application name. They contain information from CICS performance class monitoring records from CICS/TS (SMF 110, subtype 1) related to the Web interface activity.

The default retention periods for these tables are:

14 days for CICSWEB\_A\_USR\_H  
565 days for CICSWEB\_A\_USR\_W

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.  |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME             | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.   |
| USER_ID          | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| ATOMSRVC_NAME    |     | CHAR(8)   | The name of the ATOMSERVICE resource definition used to process this task. From WBATMSNM.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| INV_SOAP_COUNT    |     | FLOAT     | The total number of SOAP faults received in response to EXEC CICS INVOKE SERVICE and EXEC CICS INVOKE WEBSERVICE commands. From WBISSFCT.   |
| PIPELINE_NAME     |     | CHAR(8)   | The name of the PIPELINE resource definition used to provide information about message handlers acting on service request processed by this task. From WBPIPLNM.  |
| PROGRAM_NAME      |     | CHAR(8)   | The name of the program from the URIMAP resource definition used to provide application-generated response to HTTP request processed by this task. From WBPROGNM  |
| RECORDS           |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| SOAPF_COUNT       |     | FLOAT     | The total number of EXEC CICS SOAPFAULT ADD, CREATE, and DELETE commands issued by the user task. From WBSFTOCT.  |
| SOAPFC_COUNT      |     | FLOAT     | The number of EXEC CICS SOAPFAULT CREATE commands issued by the user task. From WBSFCRCT.   |
| SOAP_REQ_LEN      |     | FLOAT     | For Web service applications, the SOAP request body length. From WBSREQBL.  |
| SOAP_RES_LEN      |     | FLOAT     | For Web service applications, the SOAP response body length. From WBSRSPBL.   |
| TOT_DOC_LEN       |     | FLOAT     | The total length of the documents parsed using zOS XML System Services parser. From MLXSSTD.  |
| TRANDF_COUNT      |     | FLOAT     | The number of EXEC CICS TRANSFORM commands issued by user task. From MLXMLTCT.  |
| TRANSACTION_COUNT |     | FLOAT     | Total number of performance class monitoring records with RTYPE=T indicating task termination. This is valid for CICS V3 and later. For earlier versions of CICS, see the column RECORDS in this table. |
| URIMAP_NAME       |     | CHAR(8)   | The name of the URIMAP resource definition that was mapped to the URI of the inbound request processed by this task. From WBURIMNM.   |
| WEBSRVC_NAME      |     | CHAR(32)  | The name of the WEBSERVICE resource definition used to process this task. From WBSVCENM.  |
| WEBSRVC_OPNAME    |     | CHAR(64)  | The first 64 bytes of the Web service operation name. From WBSVOPNM.  |
| WSACONTB_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT BUILD commands issued by the user task. From WSABLCT.  |
| WSACONTG_COUNT    |     | FLOAT     | The number of EXEC CICS WSACONTEXT GET commands issued by the user task. From WSAGTCT.  |
| WSAEPRC_COUNT     |     | FLOAT     | The number of EXEC CICS WSAEPR CREATE commands issued by the user task. From WSAEPCCT.  |
| WSADDR_COUNT      |     | FLOAT     | The total number of EXEC CICS WS-Addressing commands issued by the user task. From WSATOTCT.  |
| XML_CPU_COUNT     |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSTM_CT.   |
| XML_CPU_SEC       |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSTM_TOD.  |
| Remaining fields  |     |           | See <a href="#">“Common fields for the Web interface (WEB)”</a> on page 76.   |

## 12. DBCTL Application User subcomponent

The data tables described in this section are for the DBCTL application user subcomponent, which summarizes CMF-gathered transaction data by application and user.

### CICS\_A\_DBCTL\_USR\_H,\_W

These tables provide hourly and weekly statistics on CICS transactions. They contain information from the DBCTL fields in the performance class monitoring record.

The default retention periods for these tables are:

30 days for CICS\_A\_DBCTL\_USR\_H

565 days for CICS\_A\_DBCTL\_USR\_W

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME       | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.   |
| TIME              | K   | TIME      | The hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| USER_ID           | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.                  |
| APPLICATION_NAME  | K   | CHAR(18)  | Application name. From CICS_LOOKUP_APPL lookup table.   |
| PSB_NAME          | K   | CHAR(8)   | Name of the PSB. From DBCTL_NPSB.   |
| DEDB_CALL_CNT     |     | INTEGER   | Number of Data Entry Data Base (DEDB) calls. This is the sum of DBCTL_DECL.   |
| DEDB_READ_CNT     |     | INTEGER   | Number of Data Entry Data Base (DEDB) read requests. This is the sum of DBCTL_DERD.   |
| DLI_CALL_CNT      |     | INTEGER   | Number of DL/I requests. This is the sum of DBCTL_TOTC.   |
| DLI_DEL_CALL_CNT  |     | INTEGER   | Number of DL/I Delete requests. This is the sum of DBCTL_DLET.  |
| DLI_GHN_CALL_CNT  |     | INTEGER   | Number of DL/I Get Hold Next (GHN) requests. This is the sum of DBCTL_GHN.  |
| DLI_GHNP_CALL_CNT |     | INTEGER   | Number of DL/I Get Hold Next within Parent (GHNP) requests. This is the sum of DBCTL_GHNP.  |
| DLI_GHU_CALL_CNT  |     | INTEGER   | Number of DL/I Get Hold Unique (GHU) requests. This is the sum of DBCTL_GHU.  |
| DLI_GN_CALL_CNT   |     | INTEGER   | Number of DL/I Get Next (GN) requests. This is the sum of DBCTL_GN.   |
| DLI_GNP_CALL_CNT  |     | INTEGER   | Number of DL/I Get Next within Parent (GNP) requests. This is the sum of DBCTL_GNP.   |
| DLI_GU_CALL_CNT   |     | INTEGER   | Number of DL/I Get Unique (GU) requests. This is the sum of DBCTL_GU1.  |
| DLI_INS_CALL_CNT  |     | INTEGER   | Number of DL/I Insert requests. This is the sum of DBCTL_ISRT.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DLI_IO_CNT         |     | INTEGER   | DL/I I/O count. Accounting data from the PST (PSTACCT). This is the sum of DBCTL_DBIO.   |
| DLI_IO_TIME_USEC   |     | FLOAT     | DL/I I/O time, in microseconds. This is the sum of DBCTL_TMIO.   |
| DLI_REP_CALL_CNT   |     | INTEGER   | Number of DL/I Replace requests. This is the sum of DBCTL_REPL.  |
| EXL_DEQ_CNT        |     | INTEGER   | Number of exclusive dequeues. This is the sum of DBCTL_EXDQ.   |
| EXL_ENQ_CNT        |     | INTEGER   | Number of exclusive enqueues. This is the sum of DBCTL_EXEQ.   |
| FASTPATH_RESERV    |     | INTEGER   | Reserved for Fast Path.  |
| INTENCON_WAIT_USEC |     | FLOAT     | Wait time for intent conflict, in microseconds. In a PSB schedule, when an intent conflict is detected, the schedule request must wait. This is the sum of DBCTL_INTC.               |
| OVERFLOW_BUFF_CNT  |     | INTEGER   | Number of overflow buffers used. This is the sum of DBCTL_OVFN.  |
| PGM_ISO_LOCK_USEC  |     | FLOAT     | Time spent in Program Isolation (PI) locking, in microseconds. This is the sum of DBCTL_TLOC.  |
| POOLSPAC_WAIT_USEC |     | FLOAT     | Wait time for pool space, in microseconds. In a PSB schedule, when the pool space is insufficient for PSB/DMB blocks, the schedule request must wait. This is the sum of DBCTL_POOL. |
| RECORDS            |     | INTEGER   | Total number of performance class monitoring records. This is the number of log records summarized.  |
| SCHED_PROCESS_USEC |     | FLOAT     | Time to schedule the PSB, in microseconds. This is the sum of DBCTL_SCHT.  |
| TEST_DEQ_CNT       |     | INTEGER   | Number of test dequeues. This is the sum of DBCTL_TSDQ.  |
| TEST_ENQ_CNT       |     | INTEGER   | Number of test enqueues. This is the sum of DBCTL_TENQ.  |
| THREAD_CPU_SEC     |     | FLOAT     | Thread CPU time, in seconds. From DBCTL_CTM1.  |
| UNIT_WORK_CONT_CNT |     | INTEGER   | Number of unit-of-work contentions. Sum of DBCTL_UOWC.   |
| UPD_DEQ_CNT        |     | INTEGER   | Number of update dequeues. This is the sum of DBCTL_UPDQ.  |
| UPD_ENQ_CNT        |     | INTEGER   | Number of update enqueues. This is the sum of DBCTL_UENQ.  |
| WAIT_DEDB_BUFF_CNT |     | INTEGER   | Number of waits for a Data Entry Data Base (DEDB) buffer. This is the sum of DBCTL_BFWT.   |
| WAIT_EXL_ENQ_CNT   |     | INTEGER   | Number of waits for exclusive enqueues. This is the sum of DBCTL_WEXQ.   |
| WAIT_TEST_ENQ_CNT  |     | INTEGER   | Number of waits for test enqueues. This is the sum of DBCTL_WTEQ.  |
| WAIT_UPD_ENQ_CNT   |     | INTEGER   | Number of waits for update enqueues. This is the sum of DBCTL_WUEQ.  |

### 13. DL/I Application User subcomponent

The data tables described in this section are for the DL/I Application User subcomponent, which summarizes CMF-gathered transaction data by application and user.

#### CICS\_A\_DLI\_USR\_H, \_W

These tables provide hourly and weekly statistics on CICS transactions, grouped by application name and user ID. They contain information from the DL/I fields in the performance class monitoring record.

The default retention periods for these tables are:

- 30 days for CICS\_A\_DLI\_USR\_H
- 565 days for CICS\_A\_DLI\_USR\_W

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the transaction was started. From START.  |
| PERIOD_NAME        | K   | CHAR(8)   | Derived from fields SMFMNSID, SMFMNDTE and SMFSMNE using the PERIOD function.   |
| TIME               | K   | TIME      | Time when the transaction was started. It applies only to the _H table. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| USER_ID            | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.                  |
| APPLICATION_NAME   | K   | CHAR(18)  | Application name. From CICS_LOOKUP_APPL lookup table.   |
| CALL_CNT           |     | INTEGER   | Number of DL/I calls. This is the sum of DLI_CLK3_COUNT.  |
| CALL_ELAPS_SEC     |     | FLOAT     | Elapsed time for DL/I calls, in seconds. From DLI_CLK3_CLOCK.   |
| DELETE_CALL_CNT    |     | INTEGER   | Number of Delete requests. This is the sum of DLI_DELETE.   |
| GET_HOLD_NEXT_CNT  |     | INTEGER   | Number of Get Hold Next (GHN) requests. This is the sum of DLI_GETHN.   |
| GET_HOLD_NEXTP_CNT |     | INTEGER   | Number of Get Hold Next within Parent (GHNP) requests. This is the sum of DLI_GETGHNP.  |
| GET_HOLD_UNIQ_CNT  |     | INTEGER   | Number of Get Hold Unique (GHU) requests. This is the sum of DLI_GETHU.   |
| GET_NEXT_PAR_CNT   |     | INTEGER   | Number of Get Next within Parent (GNP) requests. This is the sum of DLI_GETNP.  |
| GET_NEXT_REQ_CNT   |     | INTEGER   | Number of Get Next (GN) requests. This is the sum of DLI_GETN.  |
| GET_UNIQ_REQ_CNT   |     | INTEGER   | Number of Get Unique (GU) requests. This is the sum of DLI_GETU.  |
| INSERT_CALL_CNT    |     | INTEGER   | Number of Insert requests. This is the sum of DLI_INSERT.   |
| IO_WAIT_CNT        |     | INTEGER   | Number of DL/I I/O waits. This is the sum of DLI_CLK4_COUNT.  |
| IO_WAIT_TIME       |     | FLOAT     | DL/I I/O wait time, in seconds. From DLI_CLK4_CLOCK.  |
| PSB_SCHED_ACT_CNT  |     | INTEGER   | Number of PSB terminations. This is the sum of DLI_CLK2_COUNT.  |
| PSB_SCHED_ACT_SEC  |     | FLOAT     | Time that a PSB was scheduled, in seconds. This is measured from completion of the schedule request to termination. From DLI_CLK2_CLOCK.  |
| PSB_SCHED_REQ_CNT  |     | INTEGER   | Number of PSB schedule requests. This is the sum of DLI_CLK1_COUNT.   |
| PSB_SCHED_REQ_SEC  |     | FLOAT     | Time to service PSB schedule requests, in seconds. From DLI_CLK1_CLOCK.   |
| RECORDS            |     | INTEGER   | Number of performance class monitoring records. This is the number of log records summarized.   |
| REPLACE_CALL_CNT   |     | INTEGER   | Number of Replace requests. This is the sum of DLI_REPLACE.   |

#### 14. CICS TS Transaction Resources subcomponent

The data tables described in this section provide transaction resource data coming from class 5 CMF records.

**CICS\_FILE\_TRAN\_H, \_D, \_W**

These tables provide file resource data grouped by transaction ID. The data is from the CICS transaction resource class monitoring records (SMF 110, subtype 1).

The default retention periods for these tables are:

7 days for CICS\_FILE\_TRAN\_H

30 days for CICS\_FILE\_TRAN\_D

565 days for CICS\_FILE\_TRAN\_W

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the record was written to SMF. From SMFMNDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFMNSID, SMFMNDTE, and SMFMNTME from the record as parameters in the PERIOD function.                                   |
| TIME               | K   | TIME      | Time when the record was written to SMF. It applies only to the _H table. From SMFMNTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction ID. From MNRTRAID.  |
| FILE_NAME          | K   | CHAR(8)   | File name. From MNRFLNME.   |
| CFDT_IOWAIT_CLOCK  |     | FLOAT     | The elapsed time in which the user task waited for a data table access request to the coupling facility data table server to complete for this file. From MNRCFDIT_CLOCK. |
| FILE_ACCMETH_COUNT |     | FLOAT     | The number of times that the user task invoked file access-method interfaces. From MNRFLAM_COUNT.   |
| FILE_ADD_CLOCK     |     | FLOAT     | The elapsed time that the user task waited for completion of ADD requests for this file. From MNRFLADD_CLOCK.   |
| FILE_ADD_COUNT     |     | FLOAT     | The number of ADD requests issued against this file. From MNRFLADD_COUNT.   |
| FILE_BRW_CLOCK     |     | FLOAT     | The elapsed time that the user task waited for completion of BROWSE requests for this file. From MNRFLBRW_CLOCK.  |
| FILE_BRW_COUNT     |     | FLOAT     | The number of BROWSE requests issued against this file. From MNRFLBRW_COUNT.  |
| FILE_DEL_CLOCK     |     | FLOAT     | The elapsed time that the user task waited for completion of DELETE requests for this file. From MNRFLDEL_CLOCK.  |
| FILE_DEL_COUNT     |     | FLOAT     | The number of DELETE requests issued against this file. From MNRFLDEL_COUNT.  |
| FILE_GET_CLOCK     |     | FLOAT     | The elapsed time that the user task waited for completion of GET requests for this file. From MNRFLGET_CLOCK.   |
| FILE_GET_COUNT     |     | FLOAT     | The number of GET requests issued against this file. From MNRFLGET_COUNT.   |
| FILE_IOWAIT_CLOCK  |     | FLOAT     | The total I/O wait time on this file. From MNRIOWTM_CLOCK.  |
| FILE_PUT_CLOCK     |     | FLOAT     | The elapsed time that the user task waited for completion of PUT requests for this file. From MNRFLPUT_CLOCK.   |
| FILE_PUT_COUNT     |     | FLOAT     | The number of PUT requests issued against this file. From MNRFLPUT_COUNT.   |

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| FILE_TOT_CLOCK   |     | FLOAT     | The elapsed time that the user task waited for completion of all requests for this file. From MNRFLTOT_CLOCK. |
| FILE_TOT_COUNT   |     | FLOAT     | The number of all requests issued against this file. From MNRFLTOT_COUNT.                                     |
| RLS_IOWAIT_CLOCK |     | FLOAT     | The elapsed time in which the user task waited for RLS file I/O on this file. From MNRRLSWT_CLOCK.            |

**CICS\_QUEUE\_TRAN\_H, \_D, \_W**

These tables provide temporary storage queue resource data grouped by transaction ID. They gather information from the CICS transaction resource class monitoring records (SMF 110, subtype 1).

The default retention periods for these tables are:

7 days for CICS\_QUEUE\_TRAN\_H

30 days for CICS\_QUEUE\_TRAN\_D

565 days for QUEUE\_FILE\_TRAN\_W

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the record was written to SMF. From SMFMNDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFMNSID, SMFMNDTE, and SMFMNTME from the record as parameters in the PERIOD function.                         |
| TIME               | K   | TIME      | Time when the record was written to SMF. It applies only to the _H table. From SMFMNTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.                               |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction ID. From MNRTRAID.  |
| TSQUEUE_NAME       | K   | CHAR(16)  | The name of the temporary storage queue. From MNRTSQNM.   |
| TSQUEUE_GET_CLOCK  |     | FLOAT     | The elapsed time that the user task waited for completion of GET requests for this temporary storage queue. From MNRTSQGT_CLOCK.                                |
| TSQUEUE_GET_COUNT  |     | FLOAT     | The number of GET requests issued against the temporary storage queue. From MNRTSQGT_COUNT.   |
| TSQUEUE_PUT_CLOCK  |     | FLOAT     | The elapsed time that the user task waited for completion of PUT requests to auxiliary temporary storage for this temporary storage queue. From MNRTSQPA_CLOCK. |
| TSQUEUE_PUT_COUNT  |     | FLOAT     | The number of PUT requests to auxiliary temporary storage issued against the temporary storage queue. From MNRTSQPA_COUNT.                                      |
| TSQUEUE_MAIN_CLOCK |     | FLOAT     | The elapsed time that the user task waited for completion of PUT requests to main temporary storage for this temporary storage queue. From MNRTSQPM_CLOCK.      |
| TSQUEUE_MAIN_COUNT |     | FLOAT     | The number of PUT requests to main temporary storage issued against the temporary storage queue. From MNRTSQPM_COUNT.   |
| TSQUEUE_TOT_CLOCK  |     | FLOAT     | The elapsed time that the user task waited for completion of all requests for this temporary storage queue. From MNRTSQTO_CLOCK.                                |
| TSQUEUE_TOT_COUNT  |     | FLOAT     | The number of all requests issued against the temporary storage queue. From MNRTSQTO_COUNT.   |
| TSQUEUE_GETIT_LEN  |     | FLOAT     | The total length of all items obtained from this temporary storage queue. From MNRGETIT.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TSQUEUE_PUTAX_LEN  |     | FLOAT     | The total length of all items written to the auxiliary temporary storage queue. From MNRPUTAX. |
| TSQUEUE_MAIN_LEN   |     | FLOAT     | The total length of all items written to the main temporary storage queue. From MNRPUTMN.      |
| TSQUEUE_IOWT_CLOCK |     | FLOAT     | The total I/O wait time on this temporary storage queue. From MNRIOWAT_CLOCK.                  |
| SHQUEUE_IOWT_CLOCK |     | FLOAT     | The total I/O wait time on the shared temporary storage queue. From MNRSHWAT_CLOCK.            |

## 15. CICS TS Enterprise Java Beans subcomponent

The data table described in this section provides enterprise bean-related data coming from class 3 CMF records. Data is summarized by CORBA server name.

### CICS\_BEAN\_REQ\_H, \_D, \_W

These tables provide enterprise bean-related data grouped by CORBA server. The data is from CICS performance class monitoring records (SMF 110, subtype 1).

The default retention periods for these tables are:

- 7 days for CICS\_BEAN\_REQ\_H
- 30 days for CICS\_BEAN\_REQ\_D
- 565 days for CICS\_BEAN\_REQ\_W

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| DATE            | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| PERIOD_NAME     | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME            | K   | TIME      | Hour when the performance records were initialized. It applies only to the _H table. From START.  |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| CORBASER_NAME   | K   | CHAR(4)   | The CorbaServer for which this request processor instance is handling requests. From CBSRVNM.   |
| BEANACT_REQ_NUM |     | FLOAT     | The number of bean activations that have occurred in this request processor. From EJBSACCT.   |
| BEANPAS_REQ_NUM |     | FLOAT     | The number of bean passivations that have occurred in this request processor. From EJBSFACT.  |
| BEANCRE_REQ_NUM |     | FLOAT     | The number of bean creation calls that have occurred in this request processor. From EJBCRECT.  |
| BEANREM_REQ_NUM |     | FLOAT     | The number of bean removal calls that have occurred in this request processor. From EJBREMCT.   |
| BEANMET_REQ_NUM |     | FLOAT     | The number of bean method calls that have occurred in this request processor. From EJBMTHTCT.   |
| BEANTOT_REQ_NUM |     | FLOAT     | Total beans that have occurred in this request processor. From EJBTOTCT.  |

## 16. CICS Resource Manager Interface subcomponent

The data table described in this section provides Resource Manager Interface (RMI) data coming from CICS performance class monitoring records, and is grouped by transaction ID.

The default retention periods are:

7 days for CICS\_RMI\_PERF\_T  
 7 days for CICS\_RMI\_PERF\_H  
 45 days for CICS\_RMI\_PERF\_D

### CICS\_RMI\_PERF\_T

| Column name     | Key | Data type | Description  |
|-----------------|-----|-----------|--|
| DATETIME        | K   | TIMESTAMP | Date and Time of the transaction   |
| PERIOD_NAME     | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.   |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| TRANSACTION_ID  | K   | CHAR(4)   | Transaction name. From TRAN  |
| USER_ID         | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| RMI_SEC         |     | FLOAT     | Time spent in the Resource Manager Interface (RMI), in seconds. This is the sum of RMITIME.  |
| RMI_COUNT       |     | FLOAT     | Number of times that the user task was in the Resource Manager Interface (RMI). This is the sum of RMITIME.  |
| RMI_SUSPEND_SEC |     | FLOAT     | Number of times that the task was suspended while in the Resource Manager Interface (RMI). This is a subset of SUSPENDS and RMI_COUNT. This is the sum of RMISUSP.                               |
| RMITOTAL_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS Resource Manager Interface  |
| RMITOTAL_COUNT  |     | FLOAT     | Count of RMI calls. From RMITOTAL.   |
| RMIOOTHER_CLOCK |     | FLOAT     | The total elapsed time spent in the CICS RMI for resource manager requests other than Db2, DBCTL, EXEC DLI, WebSphere® MQ, CICSplex® SM, and CICS TCP/IP socket requests.                        |
| RMIOOTHER_COUNT |     | FLOAT     | Count of other RMI calls. From RMIOOTHER   |
| RMIDB2_CLOCK    |     | FLOAT     | The total elapsed time spent in the CICS RMI for Db2 requests  |
| RMIDB2_COUNT    |     | FLOAT     | Count of Db2 RMI calls. From RMIDB2  |
| RMIDBCTL_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for DBCTL requests  |
| RMIDBCTL_COUNT  |     | FLOAT     | Count of DBCTL RMI calls. From RMIDBCTL  |
| RMIEXDLI_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for EXEC DLI requests   |
| RMIEXDLI_COUNT  |     | FLOAT     | Count of DLI RMI calls. From RMIDLI  |
| RMIMQM_CLOCK    |     | FLOAT     | The total elapsed time spent in the CICS RMI for WebSphere MQ requests   |
| RMIMQM_COUNT    |     | FLOAT     | Count of MQM RMI calls. From RMIMQM  |
| RMICPSM_CLOCK   |     | FLOAT     | The total elapsed time spent in the CICS RMI for CICSplex SM requests  |

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| RMICPSM_COUNT  |     | FLOAT     | Count of CPSM RMI calls. From RMICPSM  |
| RMITCPIP_CLOCK |     | FLOAT     | The total elapsed time spent in the CICS RMI for CICS TCP/IP socket requests |
| RMITCPIP_COUNT |     | FLOAT     | Count of TCPIP RMI calls. From RMITCPIP                                      |

**CICS\_RMI\_PERF\_H**

| Column name     | Key | Data type | Description  |
|-----------------|-----|-----------|--|
| DATE            | K   | DATE      | Date of the transaction  |
| TIME            | K   | TIME      | Hour of the transaction  |
| PERIOD_NAME     | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| TRANSACTION_ID  | K   | CHAR(4)   | Transaction name. From TRAN  |
| USER_ID         | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| RMI_SEC         |     | FLOAT     | Time spent in the Resource Manager Interface (RMI), in seconds. This is the sum of RMITIME.  |
| RMI_COUNT       |     | FLOAT     | Number of times that the user task was in the Resource Manager Interface (RMI). This is the sum of RMITIME.  |
| RMI_SUSPEND_SEC |     | FLOAT     | Number of times that the task was suspended while in the Resource Manager Interface (RMI). This is a subset of SUSPENDS and RMI_COUNT. This is the sum of RMISUSP.                               |
| RMITOTAL_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS Resource Manager Interface  |
| RMITOTAL_COUNT  |     | FLOAT     | Count of RMI calls. From RMITOTAL.   |
| RMIOOTHER_CLOCK |     | FLOAT     | The total elapsed time spent in the CICS RMI for resource manager requests other than Db2, DBCTL, EXEC DLI, WebSphere MQ, CICSplex SM, and CICS TCP/IP socket requests.                          |
| RMIOOTHER_COUNT |     | FLOAT     | Count of other RMI calls. From RMIOOTHER   |
| RMIDB2_CLOCK    |     | FLOAT     | The total elapsed time spent in the CICS RMI for Db2 requests  |
| RMIDB2_COUNT    |     | FLOAT     | Count of Db2 RMI calls. From RMIDB2  |
| RMIDBCTL_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for DBCTL requests  |
| RMIDBCTL_COUNT  |     | FLOAT     | Count of DBCTL RMI calls. From RMIDBCTL  |
| RMIEXDLI_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for EXEC DLI requests   |
| RMIEXDLI_COUNT  |     | FLOAT     | Count of DLI RMI calls. From RMIDLI  |
| RMIMQM_CLOCK    |     | FLOAT     | The total elapsed time spent in the CICS RMI for WebSphere MQ requests   |
| RMIMQM_COUNT    |     | FLOAT     | Count of MQM RMI calls. From RMIMQM  |
| RMICPSM_CLOCK   |     | FLOAT     | The total elapsed time spent in the CICS RMI for CICSplex SM requests  |
| RMICPSM_COUNT   |     | FLOAT     | Count of CPSM RMI calls. From RMICPSM  |

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| RMITCPIP_CLOCK |     | FLOAT     | The total elapsed time spent in the CICS RMI for CICS TCP/IP socket requests |
| RMITCPIP_COUNT |     | FLOAT     | Count of TCPIP RMI calls. From RMITCPIP                                      |

**CICS\_RMI\_PERF\_D**

| Column name     | Key | Data type | Description  |
|-----------------|-----|-----------|--|
| DATE            | K   | DATE      | Day of the transaction   |
| PERIOD_NAME     | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.  |
| TRANSACTION_ID  | K   | CHAR(4)   | Transaction name. From TRAN  |
| USER_ID         | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| RMI_SEC         |     | FLOAT     | Time spent in the Resource Manager Interface (RMI), in seconds. This is the sum of RMITIME   |
| RMI_COUNT       |     | FLOAT     | Number of times that the user task was in the Resource Manager Interface (RMI). This is the sum of RMITIME.  |
| RMI_SUSPEND_SEC |     | FLOAT     | Number of times that the task was suspended while in the Resource Manager Interface (RMI). This is a subset of SUSPENDS and RMI_COUNT. This is the sum of RMISUSP.                               |
| RMITOTAL_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS Resource Manager Interface  |
| RMITOTAL_COUNT  |     | FLOAT     | Count of RMI calls. From RMITOTAL.   |
| RMIOOTHER_CLOCK |     | FLOAT     | The total elapsed time spent in the CICS RMI for resource manager requests other than Db2, DBCTL, EXEC DLI, WebSphere MQ, CICSplex SM, and CICS TCP/IP socket requests.                          |
| RMIOOTHER_COUNT |     | FLOAT     | Count of other RMI calls. From RMIOOTHER   |
| RMIDB2_CLOCK    |     | FLOAT     | The total elapsed time spent in the CICS RMI for Db2 requests  |
| RMIDB2_COUNT    |     | FLOAT     | Count of Db2 RMI calls. From RMIDB2  |
| RMIDBCTL_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for DBCTL requests  |
| RMIDBCTL_COUNT  |     | FLOAT     | Count of DBCTL RMI calls. From RMIDBCTL  |
| RMIEXDLI_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for EXEC DLI requests   |
| RMIEXDLI_COUNT  |     | FLOAT     | Count of DLI RMI calls. From RMIDLI  |
| RMIMQM_CLOCK    |     | FLOAT     | The total elapsed time spent in the CICS RMI for WebSphere MQ requests   |
| RMIMQM_COUNT    |     | FLOAT     | Count of MQM RMI calls. From RMIMQM  |
| RMICPSM_CLOCK   |     | FLOAT     | The total elapsed time spent in the CICS RMI for CICSplex SM requests  |
| RMICPSM_COUNT   |     | FLOAT     | Count of CPSM RMI calls. From RMICPSM  |
| RMITCPIP_CLOCK  |     | FLOAT     | The total elapsed time spent in the CICS RMI for CICS TCP/IP socket requests   |



| Column name    | Key | Data type | Description                             |
|----------------|-----|-----------|---|
| RMITCPIP_COUNT |     | FLOAT     | Count of TCPIP RMI calls. From RMITCPIP |

## Tables in the CICS OMEGAMON Monitoring component

As described in “Evaluating the CICS OMEGAMON Monitoring component” on page 12, this component contains subcomponents. This section groups data tables for the CICS OMEGAMON Monitoring component by these subcomponents:

1. File and Database Subcomponent
2. File and Database Application Subcomponent
3. File and Database Transaction Subcomponent
4. File and Database Application User Subcomponent
5. File and Database Detailed Usage Subcomponent

Tables in subcomponents 1, 2, 3 and 4 contain the same information, differing only in their key structure.

### 1. File and Database subcomponent data tables

The data tables described in this section are for the file and database subcomponent, which summarizes basic file and database usage information, as appended by OMEGAMON XE for CICS to the SMF type 110 record. The data is summarized by transaction and user, similar to the tables of the Basic subcomponent of the CICS Monitoring component.

#### CICS\_O\_FL\_H, \_D, \_W

These tables provide file and database usage information from SMF type 110 subtype 1 records, as appended by OMEGAMON. The data is grouped by user and transaction.

The default retention periods for these tables are:

- 7 days for CICS\_O\_FL\_H
- 30 days for CICS\_O\_FL\_D
- 565 days for CICS\_O\_FL\_W

| Column name    | Key | Data type | Comment  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE(4)   | Date when the records were initialized. This is normally the task start date. From SMF110DTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME           | K   | TIME(4)   | The hour when the performance records were initialized. It applies only to the _H table. From SMF110TME.   |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMF110SID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMF110PRN.   |
| TRANSACTION_ID | K   | CHAR(4)   | Transaction name   |
| USER_ID        | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| FILE_DB_TYPE   | K   | CHAR(10)  | File or Database TYPE. Please refer to <a href="#">Table 3 on page 112</a> for possible values.  |
| FILE_DB_ACTION | K   | CHAR(3)   | File or Database Action. Please refer to <a href="#">Table 3 on page 112</a> for possible values.  |

| Column name | Key | Data type | Comment                                   |
|-------------|-----|-----------|---|
| CLOCK       |     | FLOAT(8)  | Elapsed Time for File or Database Action. |
| COUNT       |     | FLOAT(8)  | Number of file or database actions.       |

### *FILE\_DB\_TYPE and FILE\_DB\_ACTION combinations*

Table 3 on page 112 lists the possible combinations of FILE\_DB\_TYPE and FILE\_DB\_ACTION, as processed by IBM Z Performance and Capacity Analytics :

| <i>Table 3. FILE_DB_TYPE and FILE_DB_ACTION combinations</i> |                |                         |
|--|----------------|-------------------------|
| FILE_DB_TYPE   | FILE_DB_ACTION | Description             |
| DB2  | OPN            | OPEN CURSOR             |
|  | CLO            | CLOSE CURSOR            |
|  | FET            | FETCH                   |
|  | SEL            | SELECT                  |
|  | INS            | INSERT                  |
|  | UPD            | UPDATE                  |
|  | DEL            | DELETE                  |
|  | PRE            | PRERARE                 |
|  | DES            | DESCRIBE                |
|  | EXE            | EXECUTE                 |
|  | EXI            | EXECUTE IMMEDIATE       |
|  | MIS            | MISCELLANEOUS           |
| DATACOM  | TOT            | TOTAL                   |
| SUPRA  | TOT            | TOTAL                   |
| ADABAS   | TOT            | TOTAL                   |
| IDMS   | TOT            | TOTAL                   |
| VSAM   | TOT            | TOTAL                   |
| DLI  | SCH            | SCHEDULE THE PCB        |
|  | TER            | TERMINATE THE PCB       |
|  | GU             | GET UNIQUE              |
|  | GN             | GET NEXT                |
|  | GNP            | GET NEXT IN PARENT      |
|  | GHU            | GET HOLD UNIQUE         |
|  | GHN            | GET HOLD NEXT           |
|  | GHP            | GET HOLD NEXT IN PARENT |
|  | INS            | INSERT                  |
|  | DEL            | DELETE                  |
|  | REP            | REPLACE                 |

Table 3. FILE\_DB\_TYPE and FILE\_DB\_ACTION combinations (continued)

| FILE_DB_TYPE | FILE_DB_ACTION | Description |
|--------------|----------------|-------------|
| MQ           | TOT            | TOTAL       |
|              | F1             | FUNCTION1   |
|              | F2             | FUNCTION2   |
|              | F3             | FUNCTION3   |
|              | F4             | FUNCTION4   |
|              | F5             | FUNCTION5   |
|              | F6             | FUNCTION6   |
|              | F7             | FUNCTION7   |
|              | F8             | FUNCTION8   |
|              | F9             | FUNCTION9   |
|              | F10            | FUNCTION10  |

## 2. File and Database Application subcomponent data tables

The data tables described in this section are for the file and database application subcomponent, which summarizes basic file and database usage information, as appended by OMEGAMON XE for CICS to the SMF type 110 record. The data is summarized by application, similar to the data in the tables of the Basic Application analysis subcomponent of the CICS Monitoring component

### CICS\_O\_A\_FL\_H,\_D,\_W

These tables provide file and database usage information from SMF type 110 subtype 1 records, as appended by OMEGAMON. The data is grouped by application name.

The default retention periods for these tables are:

7 days for CICS\_O\_A\_FL\_H

30 days for CICS\_O\_A\_FL\_D

565 days for CICS\_O\_A\_FL\_W

| Column name      | Key | Data type | Comment   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE(4)   | Date when the records were initialized. This is normally the task start date. From SMF110DTE.   |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME             | K   | TIME(4)   | The hour when the performance records were initialized. It applies only to the _H table. From SMF110TME.  |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMF110SID.   |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMF110PRN.  |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.  |
| FILE_DB_TYPE     | K   | CHAR(10)  | File or Database TYPE. Please refer to <a href="#">Table 3 on page 112</a> for possible values.   |
| FILE_DB_ACTION   | K   | CHAR(3)   | File or Database Action. Please refer to <a href="#">Table 3 on page 112</a> for possible values.   |

| Column name | Key | Data type | Comment                                   |
|-------------|-----|-----------|---|
| CLOCK       |     | FLOAT(8)  | Elapsed Time for File or Database Action. |
| COUNT       |     | FLOAT(8)  | Number of file or database actions.       |

### 3. File and Database Transaction subcomponent data tables

The data tables described in this section are for the file and database transaction subcomponent, which summarizes basic file and database usage information, as appended by OMEGAMON XE for CICS to the SMF type 110 record. The data is summarized by transaction, similar to the data in the tables of the Basic Transaction subcomponent of the CICS Monitoring component.

#### CICS\_O\_TRAN\_FL\_H,\_D,\_W

These tables provide file and database usage information from SMF type 110 subtype 1 records, as appended by OMEGAMON. The data is grouped by transaction ID.

The default retention periods for these tables are:

7 days for CICS\_O\_TRAN\_FL\_H  
 30 days for CICS\_O\_TRAN\_FL\_D  
 565 days for CICS\_O\_TRAN\_FL\_W

| Column name    | Key | Data type | Comment   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE(4)   | Date when the records were initialized. This is normally the task start date. From SMF110DTE.   |
| PERIOD_NAME    | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME           | K   | TIME(4)   | The hour when the performance records were initialized. It applies only to the _H table. From SMF110TME.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMF110SID.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMF110PRN.  |
| TRANSACTION_ID | K   | CHAR(4)   | Transaction name.   |
| FILE_DB_TYPE   | K   | CHAR(10)  | File or Database TYPE. Please refer to <a href="#">Table 3 on page 112</a> for possible values.   |
| FILE_DB_ACTION | K   | CHAR(3)   | File or Database Action. Please refer to <a href="#">Table 3 on page 112</a> for possible values.   |
| CLOCK          |     | FLOAT(8)  | Elapsed Time for File or Database Action.   |
| COUNT          |     | FLOAT(8)  | Number of file or database actions.   |

### 4. File and Database Application User subcomponent data tables

The data tables described in this section are for the file and database application user subcomponent, which summarizes basic file and database usage information, as appended by OMEGAMON XE for CICS to the SMF type 110 record.

The data is summarized by application and user, similar to the data in the tables of the Basic Application User subcomponent of the CICS Monitoring component.

#### CICS\_O\_A\_USR\_FL\_H,\_D,\_W

These tables provide file and database usage information from SMF type 110 subtype 1 records, as appended by OMEGAMON. The data is grouped by application name and user ID.

The default retention periods for these tables are:

7 days for CICS\_O\_A\_USR\_FL\_ H  
 30 days for CICS\_O\_A\_USR\_FL\_ D  
 565 days for CICS\_O\_A\_USR\_FL\_ W

| Column name      | Key | Data type | Comment  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE(4)   | Date when the records were initialized. This is normally the task start date. From SMF110DTE.  |
| PERIOD_NAME      | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods.                        |
| TIME             | K   | TIME(4)   | The hour when the performance records were initialized. It applies only to the _H table. From SMF110TME.   |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMF110SID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMF110PRN.   |
| APPLICATION_NAME | K   | CHAR(18)  | Application name. This comes from the CICS_LOOKUP_APPL lookup table.   |
| USER_ID          | K   | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID. |
| FILE_DB_TYPE     | K   | CHAR(10)  | File or Database TYPE. Please refer to <a href="#">Table 3 on page 112</a> for possible values.  |
| FILE_DB_ACTION   | K   | CHAR(3)   | File or Database Action. Please refer to <a href="#">Table 3 on page 112</a> for possible values.  |
| CLOCK            |     | FLOAT(8)  | Elapsed Time for File or Database Action.  |
| COUNT            |     | FLOAT(8)  | Number of file or database actions.  |

## 5. File and Database Detailed Usage subcomponent data tables

The data tables described in this section are for the File and Database Detailed Usage subcomponent, which summarizes file and database usage information, from the SMF type 112 subtype 203 records, created by OMEGAMON XE for CICS. These tables contain counts and elapsed times for each type of file or database command that a transaction issues.

### CICS\_O\_FL\_DTL\_H, \_D, \_W

These tables provide detailed file and database usage information from the OMEGAMON CICS SMF records (type 112, subtype 203). The data is grouped by transaction ID.

The default retention periods for these tables are:

7 days for CICS\_O\_FL\_DTL\_ H  
 30 days for CICS\_ O\_FL\_DTL\_ D  
 565 days for CICS\_ O\_FL\_DTL\_ W

| Column name | Key | Data type | Comment   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE(4)   | Date when the records were initialized. This is normally the task start date. From SMF112DTE.   |
| PERIOD_NAME | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| TIME        | K   | TIME(4)   | The hour when the performance records were initialized. It applies only to the _H table. From SMF112TME.  |

| Column name      | Key | Data type | Comment   |
|------------------|-----|-----------|---|
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMF112SID.   |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. From SMF112GAPL.   |
| TRANSACTION_NAME | K   | CHAR(18)  | Transaction name. From TRAN.  |
| FILE_DB_TYPE     | K   | CHAR(10)  | File or Database TYPE. Please refer to <a href="#">Table 4 on page 116</a> for possible values.   |
| FILE_DB_SUBTYPE  | K   | CHAR(6)   | File or Database Subtype. Please refer to <a href="#">Table 4 on page 116</a> for possible values.  |
| FILE_DB_NAME     | K   | CHAR(48)  | File or Database Name. From D_FILE_NAME.  |
| FILE_DB_ACTION   | K   | CHAR(3)   | File or Database Action. This value is derived using the CICS_OMEG_FIELD lookup table. Please refer to <a href="#">Table 5 on page 117</a> for possible values. |
| CLOCK            |     | FLOAT(8)  | Elapsed Time for File or Database Action. Calculated as SUM(D_CLOCK/625E2).   |
| COUNT            |     | FLOAT(8)  | Number of file or database actions. Calculated as SUM(D_COUNT).   |

#### ***FILE\_DB\_TYPE and FILE\_DB\_SUBTYPE combinations***

Table 4 on page 116 lists the possible combinations of FILE\_DB\_TYPE and FILE\_DB\_SUBTYPE, as processed by IBM Z Performance and Capacity Analytics :

| <i>Table 4. FILE_DB_TYPE and FILE_DB_SUBTYPE combinations</i> |                 |
|---|-----------------|
| FILE_DB_TYPE  | FILE_DB_SUBTYPE |
| VSAM  | N/A             |
| DLI   | PSB             |
|   | DBD             |
| IDMS  | RECORD          |
|   | AREA            |
|   | SET             |
|   | NONAME          |
| ADABAS  | N/A             |
| SUPRA   | N/A             |
| DATAACOM  | N/A             |
| MQ  | N/A             |
| USEREVT   | N/A             |

#### ***FILE\_DB\_TYPE and FILE\_DB\_ACTION combinations***

Table 5 on page 117 lists the possible combinations of FILE\_DB\_TYPE and FILE\_DB\_ACTION, as processed by IBM Z Performance and Capacity Analytics :

Table 5. FILE\_DB\_TYPE and FILE\_DB\_ACTION combinations

| FILE_DB_TYPE | FILE_DB_ACTION | Description             |
|--------------|----------------|-------------------------|
| DLI          | SCH            | SCHEDULE THE PCB        |
|              | TER            | TERMINATE THE PCB       |
|              | GU             | GET UNIQUE              |
|              | GN             | GET NEXT                |
|              | GNP            | GET NEXT IN PARENT      |
|              | GHU            | GET HOLD UNIQUE         |
|              | GHN            | GET HOLD NEXT           |
|              | GHP            | GET HOLD NEXT IN PARENT |
|              | INS            | INSERT                  |
|              | DEL            | DELETE                  |
|              | REP            | REPLACE                 |
| ADABAS       | ISN            | PROCESS ISN             |
|              | SEA            | SEARCH                  |
|              | RRE            | READ RECORD             |
|              | RFI            | READ FIELD              |
|              | RDE            | READ DESCRIPTOR         |
|              | HOL            | HOLD                    |
|              | ADD            | ADD                     |
|              | UPD            | UPDATE                  |
|              | DEL            | DELETE                  |
|              | REL            | RELEASE                 |
| VSAM         | REA            | READ                    |
|              | WRI            | WRITE                   |
|              | UPD            | UPDATE                  |
|              | DEL            | DELETE                  |
|              | BRO            | BROWSE                  |
|              | MIS            | MISCELLANEOUS           |
| SUPRA        | ADD            | ADD                     |
|              | DEL            | DELETE                  |
|              | FIN            | FIND                    |
|              | REA            | READ                    |
|              | WRI            | WRITE                   |

| Table 5. FILE_DB_TYPE and FILE_DB_ACTION combinations (continued) |                |                    |
|---|----------------|--------------------|
| FILE_DB_TYPE  | FILE_DB_ACTION | Description        |
| DATACOM   | ADD            | ADD                |
|   | CNT            | COUNT              |
|   | DEL            | DELETE             |
|   | GN             | GET NEXT           |
|   | GS             | GET SET            |
|   | LSP            | LOCATE SPECIFIC    |
|   | REA            | READ               |
|   | REL            | RELEASE            |
|   | SEL            | SELECT             |
|   | SSE            | SELECT SET         |
|   | UPD            | UPDATE             |
| IDMS  | BIN            | BIND RECORD        |
|   | GFO            | GET/FIND/OBTAIN    |
|   | AR             | ACCEPT/RETURN      |
|   | KEE            | KEEP               |
|   | STO            | STORE RECORD       |
|   | MOD            | MODIFY             |
|   | ERP            | ERASE PERM         |
|   | ERS            | ERASE SELECT       |
|   | ERA            | ERASE ALL          |
|   | ERU            | ERASE UNQUAL       |
|   | CON            | CONNECT/DISCONNECT |
|   | REA            | READY AREA         |
|   | IFS            | IF SET             |
|   |                |                    |
| MQ  | OPN            | OPEN               |
|   | CLO            | CLOSE              |
|   | GET            | GET                |
|   | PUT            | PUT                |
|   | PU1            | PU1                |
|   | INQ            | INQUIRE            |
|   | SET            | SET                |
|   | MIS            | MISCELLANEOUS      |



Table 5. FILE\_DB\_TYPE and FILE\_DB\_ACTION combinations (continued)

| FILE_DB_TYPE | FILE_DB_ACTION | Description |
|--------------|----------------|-------------|
| USEREVT      | F1             | FUNCTION1   |
|              | F2             | FUNCTION2   |
|              | F3             | FUNCTION3   |
|              | F4             | FUNCTION4   |
|              | F5             | FUNCTION5   |
|              | F6             | FUNCTION6   |
|              | F7             | FUNCTION7   |
|              | F8             | FUNCTION8   |
|              | F9             | FUNCTION9   |
|              | F10            | FUNCTION10  |

## Tables in the CICS Statistics component

As described in “Evaluating the CICS Statistics component” on page 12, the CICS Performance Feature supports statistics only for CICS/ESA and CICS/TS. If you install the CICS statistics component, IBM Z Performance and Capacity Analytics loads into its system tables the data tables described in this section.

### CICS\_AVAIL\_T

This table provides detailed availability data about the CICS subsystem and CICS-Db2 Connection. The data comes from different CICS records. It is updated by the lookup table “CICS\_AVAIL\_RES” on page 285.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is from the SMFSTSID field in the SMF record.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | The CICS subsystem ID. This is from the SMFSTPRN field in the SMF record.                                       |
| RESOURCE_NAME  | K   | CHAR(18)  | Resource Name. This is from the RESOURCE_TARGET_NM or from RESOURCE_SOURCE_NM into CICS_AVAIL_RES lookup table. |
| RESOURCE_TYPE  | K   | CHAR(8)   | Resource Type. Possible values are: CICSSYS (CICS System), DB2CONN (CICS-Db2 Connection).                       |

## CICS statistics component data tables

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| INTERVAL_TYPE      | K   | CHAR(3)   | Interval type. Possible values are: <ul style="list-style-type: none"> <li>• ===</li> <li>• != =</li> <li>• = = !</li> <li>• = = = !</li> <li>• != !</li> <li>• XXX</li> <li>• !XX</li> <li>• XX!</li> <li>• !X!</li> </ul> where:<br>= Indicates that the resource is up<br><b>X</b> Indicates that the resource is down<br><b>!</b> Indicates an interval start or end<br><b>blank</b> Means that the status is unknown |
| START_TIME         | K   | TIMESTAMP | Start time of the interval.   |
| END_TIME           |     | TIMESTAMP | End time of the interval.   |
| QUIET_INTERVAL_SEC |     | INTEGER   | Number of seconds after the interval end that the resource is expected to remain in the same status. If another intervals with a start time within this range appears, the two interval are merged.   |

## CICS\_AVAIL\_D,\_W

These tables provide daily and weekly statistics on the availability of CICS subsystem CICS-Db2 Connection. They contain consolidated data from the CICS\_AVAIL\_T table.

The default retention periods for these tables are:

### CICS\_AVAIL\_D

45 days

### CICS\_AVAIL\_W

365 days

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date that the availability data applies to. For the _W table, this is the date of the first day of the week. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is from the MVS_SYSTEM_ID collect parameter.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | The CICS subsystem ID.   |
| RESOURCE_NAME  | K   | CHAR(18)  | Resource Name.   |
| RESOURCE_TYPE  | K   | CHAR(8)   | Resource Type. Possible values are: CICSSYS (CICS System), DB2CONN (CICS-Db2 Connection).                    |
| MEASURED_HOURS |     | FLOAT     | Number of hours measured.  |

| Column name        | Key | Data type     | Description   |
|--------------------|-----|---------------|---|
| AVAIL_OBJ_PCT      |     | DECIMAL(4, 1) | Availability objective for the resource, in percent. This is from the column AVAIL_OBJ_PCT in the CICS_AVAIL_RES lookup table. This value should be compared with the actual availability, which is calculated as: $100 * UP\_IN\_SCHEDULE / SCHEDULE\_HOURS$ . |
| SCHEDULE_HOURS     |     | FLOAT         | Number of hours the resource is scheduled to be up.   |
| STARTS             |     | SMALLINT      | Number of times the resource was started.   |
| STOPS              |     | SMALLINT      | Number of times the resource was stopped.   |
| STARTS_IN_SCHEDULE |     | SMALLINT      | Number of times the resource was started within the schedule.   |
| STOPS_IN_SCHEDULE  |     | SMALLINT      | Number of times the resource was stopped within the schedule.   |
| UP_HOURS           |     | FLOAT         | Number of hours the resource was up.  |
| UP_IN_SCHEDULE     |     | FLOAT         | Number of hours the resource was up within the schedule.  |

### CICS\_MVSTCB\_D

This table provides hourly MVS TCB Global statistics from CICS TS (SMF 110, subtype 2). This maps the CICS DFHDSTDS macro.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| DST_CT_CICSTCB     |     | INTEGER   | Current number of CICS TCBs. From DSTDS_CTCB_COUNT.  |
| DST_CPU_CICSTCB    |     | FLOAT     | So far for currently attach. From DSTDS_CTCB_CPU.  |
| DST_PRIV_BEL16M    |     | FLOAT     | Private stg below 16M. From DSTDS_CTCB_SB.   |
| DST_PRIV_OVA16M    |     | FLOAT     | Private stg above 16M. From DSTDS_CTCB_SA.   |
| DST_CT_NONCICSTCB  |     | INTEGER   | Curr number of non-CICS TCB. From DSTDS_NCTCB_COUNT.   |
| DST_CPU_NONCICSTCB |     | INTEGER   | So far for currently attach. From DSTDS_NCTCB_CPU.   |
| DST_NCTCB_BEL16M   |     | FLOAT     | Private stg below 16M. From DSTDS_NCTCB_SB.  |
| DST_NCTCB_OVA16M   |     | FLOAT     | Private stg above 16M. From DSTDS_NCTCB_SA.  |
| DST_CTCB_BEL_USE   |     | FLOAT     | <16M in use. From DSTDS_CTCB_SB_IN.  |
| DST_CTCB_OVA_USE   |     | FLOAT     | >16M in use. From DSTDS_CTCB_SA_IN.  |
| DST_NCTCB_BEL_USE  |     | FLOAT     | <16M in use. From DSTDS_NCTCB_SB_IN.   |
| DST_NCTCB_OVA_USE  |     | FLOAT     | >16M in use. From DSTDS_NCTCB_SA_IN.   |

### CICS\_MVSTCB\_H

This table provides hourly MVS TCB Global statistics from CICS TS (SMF 110, subtype 2). This maps the CICS DFHDSTDS macro.

The default retention period for this table is 7 days.

## CICS statistics component data tables

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| DST_CT_CICSTCB     |     | INTEGER   | Current number of CICS TCBs. From DSTDS_CTCB_COUNT.  |
| DST_CPU_CICSTCB    |     | FLOAT     | So far for currently attach. From DSTDS_CTCB_CPU.  |
| DST_PRIV_BEL16M    |     | FLOAT     | Private stg below 16M. From DSTDS_CTCB_SB.   |
| DST_PRIV_OVA16M    |     | FLOAT     | Private stg above 16M. From DSTDS_CTCB_SA.   |
| DST_CT_NONCICSTCB  |     | INTEGER   | Curr number of non-CICS TCB. From DSTDS_NCTCB_COUNT.   |
| DST_CPU_NONCICSTCB |     | INTEGER   | So far for currently attach. From DSTDS_NCTCB_CPU.   |
| DST_NCTCB_BEL16M   |     | FLOAT     | Private stg below 16M. From DSTDS_NCTCB_SB.  |
| DST_NCTCB_OVA16M   |     | FLOAT     | Private stg above 16M. From DSTDS_NCTCB_SA.  |
| DST_CTCB_BEL_USE   |     | FLOAT     | <16M in use. From DSTDS_CTCB_SB_IN.  |
| DST_CTCB_OVA_USE   |     | FLOAT     | >16M in use. From DSTDS_CTCB_SA_IN.  |
| DST_NCTCB_BEL_USE  |     | FLOAT     | <16M in use. From DSTDS_NCTCB_SB_IN.   |
| DST_NCTCB_OVA_USE  |     | FLOAT     | >16M in use. From DSTDS_NCTCB_SA_IN.   |

## CICS\_MVSTCB\_RES\_D

This table provides daily MVS TCB Resource statistics from CICS TS (SMF 110, subtype 2). This maps the CICS DFHDSRDS macro.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| DSR_TCB_NAME      | K   | CHAR(8)   | Initial prog or QR, RO etc. From DSRDS_TCB_NAME.   |
| DSR_TCB_ADDRESS   |     | CHAR(8)   | Address of MVS TCB. From DSRDS_TCB_ADDR.   |
| DSR_TCB_TYPE      |     | CHAR(1)   | "C" for CICS, "N" for non CICS. From DSRDS_TCB_TYPE  |
| DSR_TCB_CICS_TASK |     | INTEGER   | CICS task number or 0. From DSRDS_TCB_CICS_TSK.  |
| DSR_TCB_MOTHER    |     | CHAR(8)   | Address of mother TCB. From DSRDS_TCB_MOTHER.  |
| DSR_TCB_SISTER    |     | CHAR(8)   | Address of sister TCB. From DSRDS_TCB_SISTER.  |
| DSR_TCB_DAUGHTER  |     | CHAR(8)   | Address of daughter TCB. From DSRDS_TCB_DAUGHTER.  |

| Column name       | Key | Data type | Description                                   |
|-------------------|-----|-----------|---|
| DSR_TCB_CPU       |     | FLOAT     | Total CPU time so far. From DSRDS_TCB_CPU.    |
| DSR_TCB_STOR_B16M |     | FLOAT     | Private storage below 16M. From DSRDS_TCB_SB. |
| DSR_TCB_STOR_A16M |     | FLOAT     | Private storage above 16M. From DSRDS_TCB_SA. |
| DSR_TCB_INST_B16M |     | FLOAT     | Below 16M in use. From DSRDS_TCB_SB_IN.       |
| DSR_TCB_INST_A16M |     | FLOAT     | Above 16M in use. From DSRDS_TCB_SA_IN.       |

## CICS\_MVSTCB\_RES\_H

This table provides hourly MVS TCB Resource statistics from CICS TS (SMF 110, subtype 2). This maps the CICS DFHDSRDS macro.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| DSR_TCB_NAME      | K   | CHAR(8)   | Initial prog or QR, RO etc. From DSRDS_TCB_NAME.   |
| DSR_TCB_ADDRESS   |     | CHAR(8)   | Address of MVS TCB. From DSRDS_TCB_ADDR.   |
| DSR_TCB_TYPE      |     | CHAR(1)   | "C" for CICS, "N" for non CICS. From DSRDS_TCB_TYPE  |
| DSR_TCB_CICS_TASK |     | INTEGER   | CICS task number or 0. From DSRDS_TCB_CICS_TSK.  |
| DSR_TCB_MOTHER    |     | CHAR(8)   | Address of mother TCB. From DSRDS_TCB_MOTHER.  |
| DSR_TCB_SISTER    |     | CHAR(8)   | Address of sister TCB. From DSRDS_TCB_SISTER.  |
| DSR_TCB_DAUGHTER  |     | CHAR(8)   | Address of daughter TCB. From DSRDS_TCB_DAUGHTER.  |
| DSR_TCB_CPU       |     | FLOAT     | Total CPU time so far. From DSRDS_TCB_CPU.   |
| DSR_TCB_STOR_B16M |     | FLOAT     | Private storage below 16M. From DSRDS_TCB_SB.  |
| DSR_TCB_STOR_A16M |     | FLOAT     | Private storage above 16M. From DSRDS_TCB_SA.  |
| DSR_TCB_INST_B16M |     | FLOAT     | Below 16M in use. From DSRDS_TCB_SB_IN.  |
| DSR_TCB_INST_A16M |     | FLOAT     | Above 16M in use. From DSRDS_TCB_SA_IN.  |

## CICS\_PIPELINE\_T

This table It provides detailed statistics for PIPELINE. It contains data from CICS statistics records (SMF 110, subtype 2, std 105). For CICS/TS V3.1 and later, it takes information from the DFHPDRS CICS dsect.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE. |

## CICS statistics component data tables

| Column name        | Key | Data type    | Description   |
|--------------------|-----|--------------|---|
| PERIOD_NAME        | K   | CHAR(8)      | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME         | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| PIPELINE_NAME      | K   | CHAR(8)      | The name of the pipeline resource definition. From PIRPIPNM.  |
| CONFIG_FILE        |     | VARCHAR(254) | The name of the HFS file that provides information about the message handlers and their configuration. From PIRCONF.                    |
| SHELF_DIRECTORY    |     | VARCHAR(254) | The fully qualified name of the shelf directory for the pipeline definition. From PIRSHDIR.   |
| WSDIR_PICKUP_DIR   |     | VARCHAR(254) | The fully qualified name of the Web service binding directory (also known as the pickup directory). From PIRWSDIR.                      |
| PIPELINE_USE_COUNT |     | FLOAT        | The number of times this pipeline resource defs was used to install a Web service or to process a Web service request. From PIRUSECNT.  |
| PIPELINE_MODE      |     | CHAR(10)     | Pipeline Mode.  |

## CICS\_DOCT\_RES\_D

This is a new table. It provides daily DocTemplate resource statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHDHDDS macro.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| DT_DOCTEMPL_NAME  | K   | CHAR(8)   | Doctemplate name. From DHD_DOCT_NAME.  |
| DT_TEMPLATE_TYPE  |     | CHAR(10)  | Doctemplate type. From DHD_TEMPLATE_TYPE.  |
| DT_APPEND_CRLF    |     | CHAR(1)   | Doctemplate append crlf. From DHD_APPEND_CRLF.   |
| DT_TEMPLATE_CONT  |     | CHAR(6)   | Doctemplate contents. From DHD_TEMPLATE_CONT.  |
| DT_TEMPLATE_NAME  |     | CHAR(48)  | Doctemplate template name. From DHD_TEMPLATE_NAME.   |
| DT_TEMPL_EPROG    |     | CHAR(8)   | Template exit program name. From DHD_TEMPL_EPROG.  |
| DT_TEMPL_FILENME  |     | CHAR(8)   | Template file name. From DHD_TEMPL_FILENME.  |
| DT_TEMPL_PROGNME  |     | CHAR(8)   | Template program name. From DHD_TEMPL_PROGNME.   |
| DT_TEMPL_PDSMEM   |     | CHAR(8)   | Template PDS member. From DHD_TEMPL_PDSMEM.  |
| DT_TEMPL_PSDSDNME |     | CHAR(8)   | Template PDS ddname. From DHD_TEMPL_PSDSDNME.  |
| DT_TEMPL_PSDSNME  |     | CHAR(44)  | Template PDS dsname. From DHD_TEMPL_PSDSNME.   |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DT_TEMPL_TDQNAME  |     | CHAR(4)   | Template tdqueue name. From DHD_TEMPL_TDQNAME.     |
| DT_TEMPL_TSQNAME  |     | CHAR(16)  | Template tsqueue name. From DHD_TEMPL_TSQNAME.     |
| DT_TEMPL_HFSFILE  |     | CHAR(254) | Template hfsfile name. From DHD_TEMPL_HFSFILE.     |
| DT_TEMPL_CACHE_SZ |     | INTEGER   | Template cache size. From DHD_TEMPL_CACHE_SZ.      |
| DT_TEMPL_USE_CT   |     | INTEGER   | Template use count. From DHD_TEMPL_USE_CT.         |
| DT_TEMPL_NEWCOPY  |     | INTEGER   | Template newcopy count. From DHD_TEMPL_NEWCOPY.    |
| DT_TEMPL_READ_CT  |     | INTEGER   | Template read count. From DHD_TEMPL_READ_CT.       |
| DT_TEMPL_CACHEUSE |     | INTEGER   | Template cache copy used. From DHD_TEMPL_CACHEUSE. |
| DT_TEMPL_CACHEDEL |     | INTEGER   | Template cache deleted. From DHD_TEMPL_CACHEDEL.   |

## CICS\_DOCT\_RES\_H

This table provides hourly DocTemplate resource statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHDHDDS macro.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| DT_DOCTEMPL_NAME  | K   | CHAR(8)   | Doctemplate name. From DHD_DOCT_NAME.  |
| DT_TEMPLATE_TYPE  |     | CHAR(10)  | Doctemplate type. From DHD_TEMPLATE_TYPE.  |
| DT_APPEND_CRLF    |     | CHAR(1)   | Doctemplate append crlf. From DHD_APPEND_CRLF.   |
| DT_TEMPLATE_CONT  |     | CHAR(6)   | Doctemplate contents. From DHD_TEMPLATE_CONT.  |
| DT_TEMPLATE_NAME  |     | CHAR(48)  | Doctemplate template name. From DHD_TEMPLATE_NAME.   |
| DT_TEMPL_EPROG    |     | CHAR(8)   | Template exit program name. From DHD_TEMPL_EPROG.  |
| DT_TEMPL_FILENME  |     | CHAR(8)   | Template file name. From DHD_TEMPL_FILENME.  |
| DT_TEMPL_PROGNME  |     | CHAR(8)   | Template program name. From DHD_TEMPL_PROGNME.   |
| DT_TEMPL_PDSMEM   |     | CHAR(8)   | Template PDS member. From DHD_TEMPL_PDSMEM.  |
| DT_TEMPL_PDSDDNME |     | CHAR(8)   | Template PDS ddname. From DHD_TEMPL_PDSDDNME.  |
| DT_TEMPL_PSDSDNME |     | CHAR(44)  | Template PDS dsname. From DHD_TEMPL_PSDSDNME.  |
| DT_TEMPL_TDQNAME  |     | CHAR(4)   | Template tdqueue name. From DHD_TEMPL_TDQNAME.   |
| DT_TEMPL_TSQNAME  |     | CHAR(16)  | Template tsqueue name. From DHD_TEMPL_TSQNAME.   |
| DT_TEMPL_HFSFILE  |     | CHAR(254) | Template hfsfile name. From DHD_TEMPL_HFSFILE.   |
| DT_TEMPL_CACHE_SZ |     | INTEGER   | Template cache size. From DHD_TEMPL_CACHE_SZ.  |
| DT_TEMPL_USE_CT   |     | INTEGER   | Template use count. From DHD_TEMPL_USE_CT.   |

## CICS statistics component data tables

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DT_TEMPL_NEWCOPY  |     | INTEGER   | Template newcopy count. From DHD_TEMPL_NEWCOPY.    |
| DT_TEMPL_READ_CT  |     | INTEGER   | Template read count. From DHD_TEMPL_READ_CT.       |
| DT_TEMPL_CACHEUSE |     | INTEGER   | Template cache copy used. From DHD_TEMPL_CACHEUSE. |
| DT_TEMPL_CACHEDEL |     | INTEGER   | Template cache deleted. From DHD_TEMPL_CACHEDEL.   |

## CICS\_S\_AUTO\_TERM\_T

This table provides detailed statistics data on CICS systems. It contains data from CICS autoinstalled terminal records from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| AUTOINSTALL_ATT    |     | INTEGER   | Number of eligible autoinstall attempts made. From A04VADAT.   |
| DELETIONS          |     | INTEGER   | Number of deletions of terminal entries. From A04VADLO.  |
| IDLE_CUR_CNT       |     | INTEGER   | Current idle count. CICS V4 and later. From A04CIDCT.  |
| IDLE_CUR_TIME      |     | TIME      | Time (hh:mm:ss) that all current remote terminal definitions have been idle awaiting reuse. CICS V4 and later. From A04CIDLE.  |
| IDLE_CUR_TIME_MAX  |     | TIME      | Maximum time (hh:mm:ss) that a currently idle shipped terminal definition has been idle during the recording period. CICS V4 and later. From A04CMAXI.   |
| IDLE_MAX_TIME      |     | TIME      | Maximum time (hh:mm:ss) that a previously idle shipped terminal definition had been idle during the recording period. CICS V4 and later. From A04TMAXI.  |
| IDLE_TOTAL_CNT     |     | INTEGER   | Total number of times that all previously used remote terminal definitions had been idle awaiting reuse. Does not include remote terminal definitions currently idle awaiting reuse. CICS V4 and later. From A04TIDCT. |
| IDLE_TOTAL_TIME    |     | TIME      | Total time (hh:mm:ss) that all previously used remote terminal definitions had been idle awaiting reuse. Does not include remote terminal definitions currently idle awaiting reuse. CICS V4 and later. From A04TIDLE. |
| INTERVAL_EXP_CNT   |     | INTEGER   | Number of times the remote delete interval (REM_DEL_DELAY) expired since the start of the recording period. CICS V4 and later. From A04TIEXP.  |
| QUEUED_LOGONS      |     | INTEGER   | Number of attempts that waited for deletion. From A04VADQT.  |
| QUEUED_LOGONS_PEAK |     | INTEGER   | Highest number of logons that waited for deletion. From A04VADQK.  |
| QUEUED_PEAK_COUNT  |     | INTEGER   | Number of times the peak number of waiting logons was reached. From A04VADQX.  |



| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.  |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| REJECTED_ATTEMPTS |     | INTEGER   | Number of eligible autoinstall attempts rejected. From A04VADRJ.  |
| REM_DEL_DELAY     |     | TIME      | Time delay (hh:mm:ss) between invocations of the timeout delete transaction that removes redundant shipped terminal definitions. Set by the DSHIPINT SIT-parameter, or by a subsequent SET DELETSHIPED command. CICS V4 and later. From A04RDINT. |
| REM_DEL_DELETES   |     | INTEGER   | Number of shipped terminal definitions deleted from this region because of pre-CICS/ESA 4.1 remote delete instructions, since the start of the recording period. CICS V4 and later. From A04RDEDEL.   |
| REM_DEL_IDLE      |     | TIME      | Minimum time (hh:mm:ss) that an inactive shipped terminal definition must remain installed in this region, before it becomes eligible for removal by the CICS timeout delete transaction. CICS V4 and later. From A04RDIDL.                       |
| REM_DEL_ISSUED    |     | INTEGER   | Number of pre-CICS/ESA 4.1 remote delete instructions issued by this region since the start of the recording period. CICS V4 and later. From A04RDISS.  |
| REM_DEL_REC_CNT   |     | INTEGER   | Number of pre-CICS/ESA 4.1 remote delete instructions received by this region since the start of the recording period. CICS V4 and later. From A04RDREC.  |
| REM_TERM_BUILDS   |     | INTEGER   | Number of shipped remote terminal definitions installed at the start of the recording period, plus the number built during the recording period. CICS V4 and later. From A04SKBLT.  |
| REM_TERM_DELETES  |     | INTEGER   | Number of shipped remote terminal definitions deleted during the recording period by the TIMEOUT transaction. CICS V4 and later. From A04SKDEL.   |
| REM_TERM_INSTALLS |     | INTEGER   | Number of shipped remote terminal definitions currently installed in this region. CICS V4 and later. From A04SKINS.   |
| SETLOGON_HOLD     |     | INTEGER   | Number of times the SETLOGON HOLD command was issued. From A04VADSH.  |
| TERM_CREATE_PEAK  |     | INTEGER   | Peak number of attempts to create terminal entries. From A04VADPK.  |
| TERM_PEAK_COUNT   |     | INTEGER   | Number of peak attempts reached. From A04VADPX.   |

## CICS\_S\_AUTO\_TERM\_D

This table provides daily statistics on CICS autoinstalled terminals. It contains consolidated data from the CICS\_S\_AUTO\_TERM\_T table.

The default retention period for this table is 30 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |

## CICS statistics component data tables

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| AUTOINSTALL_ATT    |     | INTEGER   | Number of eligible autoinstall attempts made. From A04VADAT.   |
| DELETIONS          |     | INTEGER   | Number of deletions of terminal entries. From A04VADLO.  |
| IDLE_MAX_TIME      |     | TIME      | Maximum time (hh:mm:ss) that a previously idle shipped terminal definition had been idle during the recording period. CICS V4 and later. From A04TMAXI.  |
| IDLE_TOTAL_CNT     |     | INTEGER   | Total number of times that all previously used remote terminal definitions had been idle awaiting reuse. Does not include remote terminal definitions currently idle awaiting reuse. CICS V4 and later. From A04TIDCT. |
| INTERVAL_EXP_CNT   |     | INTEGER   | Number of times the remote delete interval (REM_DEL_DELAY) expired since the start of the recording period. CICS V4 and later. From A04TIEXP.  |
| QUEUED_LOGONS      |     | INTEGER   | Number of attempts that waited for deletion. From A04VADQT.  |
| QUEUED_LOGONS_PEAK |     | INTEGER   | Highest number of logons that waited for deletion. From A04VADQK.  |
| QUEUED_PEAK_COUNT  |     | INTEGER   | Number of times the peak number of waiting logons was reached. From A04VADQX.  |
| REJECTED_ATTEMPTS  |     | INTEGER   | Number of eligible autoinstall attempts rejected. From A04VADRJ.   |
| REM_DEL_DELETES    |     | INTEGER   | Number of shipped terminal definitions deleted from this region because of pre-CICS/ESA 4.1 remote delete instructions, since the start of the recording period. CICS V4 and later. From A04RDDEL.                     |
| REM_DEL_ISSUED     |     | INTEGER   | Number of pre-CICS/ESA 4.1 remote delete instructions issued by this region since the start of the recording period. CICS V4 and later. From A04RDISS.   |
| REM_DEL_REC_CNT    |     | INTEGER   | Number of pre-CICS/ESA 4.1 remote delete instructions received by this region since the start of the recording period. CICS V4 and later. From A04RDREC.   |
| REM_TERM_BUILDS    |     | INTEGER   | Number of shipped remote terminal definitions installed at the start of the recording period, plus the number built during the recording period. CICS V4 and later. From A04SKBLT.                                     |
| REM_TERM_DELETES   |     | INTEGER   | Number of shipped remote terminal definitions deleted during the recording period by the TIMEOUT transaction. CICS V4 and later. From A04SKDEL.  |
| SETLOGON_HOLD      |     | INTEGER   | Number of times the SETLOGON HOLD command was issued. From A04VADSH.   |
| TERM_CREATE_PEAK   |     | INTEGER   | Peak number of attempts to create terminal entries. From A04VADPK.   |
| TERM_PEAK_COUNT    |     | INTEGER   | Number of peak attempts reached. From A04VADPX.  |

## CICS\_S\_CFDT\_GREQ\_T

This table provides detailed Coupling Facility table server requests statistics. Total table control request statistics for all tables are supplied. For CICS/TS V1.3 and later, this maps the DFHCFS8K record.

The default retention period for this table is 7 days.

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| DATE            | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME     | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME            | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| CF_GBACKOUT_UOW |     | FLOAT     | Number of units of work backed out. From S8SPBACK.  |
| CF_GCOMMIT_UOW  |     | FLOAT     | Number of units of work committed. From S8SPCOMM.   |
| CF_GCLOSE_TAB   |     | FLOAT     | Number of successful CLOSE requests for the table. From S8OCCLoS.   |
| CF_GDEL_MULT    |     | FLOAT     | Number of multiple (generic) delete requests. From S8RQDELM.  |
| CF_GDELETE      |     | FLOAT     | Number of DELETE requests. From S8RQDELE.   |
| CF_GDELETE_TAB  |     | FLOAT     | Number of times a table was deleted. From S8OCDELE.   |
| CF_GEXTR_STATS  |     | FLOAT     | Number of extract table statistics. From S8OCSTAT.  |
| CF_GINQUIRE     |     | FLOAT     | Number of INQUIRE table requests. From S8IQINQU.  |
| CF_GINQUIRE_UOW |     | FLOAT     | Number of units of work INQUIRE requests. From S8SPINQU.  |
| CF_GLOAD        |     | FLOAT     | Number of records written by initial load requests. From S8RQLOAD.  |
| CF_GOPEN_TAB    |     | FLOAT     | Number of successful OPEN requests for the table. From S8SOCOPEN.   |
| CF_GPOINT       |     | FLOAT     | Number of POINT requests. From S8RQPOIN.  |
| CF_GPREPARE     |     | FLOAT     | Number of units of work prepared. From S8SPPREP.  |
| CF_GREAD        |     | FLOAT     | Number of READ requests (including those for update). From S8RQREAD.  |
| CF_GREAD_DEL    |     | FLOAT     | Number of combined READ and DELETE requests. From S8RQRDDL.   |
| CF_GRESTART_UOW |     | FLOAT     | Number of times that the connections were restarted. From S8SPREST.   |
| CF_GRETLOCK_UOW |     | FLOAT     | Number of units of work whose locks are retained. From S8PRETA.   |
| CF_GRETURN_HIGH |     | FLOAT     | Number of requests for current highest key. From S8RQHIG.   |
| CF_GREWRITES    |     | FLOAT     | Number of REWRITE requests. From S8RQREWR.  |
| CF_GSET_ATTR    |     | FLOAT     | Number of times new table status was set. From S8OCSET.   |
| CF_GUNLOCK      |     | FLOAT     | Number of UNLOCK requests. From S8RQUNLK.   |
| CF_GWRITES      |     | FLOAT     | Number of WRITE requests for new records. From S8RQWRIT.  |

### CICS\_S\_CFDT\_GREQ\_D

This table provides daily Coupling Facility table server requests statistics. Total table control request statistics for all tables are supplied. For CICS/TS V1.3 and later, this maps the DFHCFS8K record.

The default retention period for this table is 30 days.

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE. |

## CICS statistics component data tables

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| PERIOD_NAME     | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| CF_GBACKOUT_UOW |     | FLOAT     | Number of units of work backed out. From S8SPBACK.  |
| CF_GCOMMIT_UOW  |     | FLOAT     | Number of units of work committed. From S8SPCOMM.   |
| CF_GCLOSE_TAB   |     | FLOAT     | Number of successful CLOSE requests for the table. From S8OCCLOS.   |
| CF_GDEL_MULT    |     | FLOAT     | Number of multiple (generic) delete requests. From S8RQDELM.  |
| CF_GDELETE      |     | FLOAT     | Number of DELETE requests. From S8RQDELE.   |
| CF_GDELETE_TAB  |     | FLOAT     | Number of times a table was deleted. From S8OCDELE.   |
| CF_GEXTR_STATS  |     | FLOAT     | Number of extract table statistics. From S8OCSTAT.  |
| CF_GINQUIRE     |     | FLOAT     | Number of INQUIRE table requests. From S8IQINQU.  |
| CF_GINQUIRE_UOW |     | FLOAT     | Number of INQUIRE table requests. From S8SPINQU.  |
| CF_GLOAD        |     | FLOAT     | Number of records written by initial load requests. From S8RQLOAD.  |
| CF_GOPEN_TAB    |     | FLOAT     | Number of successful OPEN requests for the table. From S8SOCOPEN.   |
| CF_GPOINT       |     | FLOAT     | Number of POINT requests. From S8RQPOIN.  |
| CF_GPREPARE     |     | FLOAT     | Number of units of work prepared. From S8SPPREP.  |
| CF_GREAD        |     | FLOAT     | Number of READ requests (including those for update). From S8RQREAD.  |
| CF_GREAD_DEL    |     | FLOAT     | Number of combined READ and DELETE requests. From S8RQRDDL.   |
| CF_GRESTART_UOW |     | FLOAT     | Number of times that the connections were restarted. From S8SPREST.   |
| CF_GRETLOCK_UOW |     | FLOAT     | Number of units of work whose locks are retained. From S8PRETA.   |
| CF_GRETURN_HIGH |     | FLOAT     | Number of requests for current highest key. From S8RQHIGH.  |
| CF_GREWRITES    |     | FLOAT     | Number of REWRITE requests. From S8RQREWR.  |
| CF_GSET_ATTR    |     | FLOAT     | Number of times new table status was set. From S8OCSET.   |
| CF_GUNLOCK      |     | FLOAT     | Number of UNLOCK requests. From S8RQUNLK.   |
| CF_GWRITES      |     | FLOAT     | Number of WRITE requests for new records. From S8RQWRIT.  |

### CICS\_S\_CFDT\_SERV\_T

This table provides detailed Coupling Facility data tables list structure. For CICS/TS V1.3 and later, this maps the DFHCFS6K record.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                       |
| CF_LISTSTRUC_NAME | K   | CHAR(16)  | Full name of the list structure. From S6NAME.   |
| CF_CONNECT_NAME   | K   | CHAR(16)  | Name of the connection to the list structure. From S6CNNAME.  |
| CF_ALLOC_SIZE     |     | FLOAT     | Current allocated size of the list structure. From S6SIZE.  |
| CF_ALLOC_SIZE_MAX |     | FLOAT     | Maximum size to which the structure could be altered. From S6SIZEMX.  |
| CF_ASYNC_REQS     |     | FLOAT     | Number of requests completion was asynchronous. From S6ASYCT.   |
| CF_AUTH_MISMATCH  |     | FLOAT     | Number of times a list authority comparison failed, mismatch caused by table status update. From S6RSP5CT.                                      |
| CF_BUFF_SHORT     |     | FLOAT     | Number of times that entry data was larger than the input buffer length, which normally results in a retry with a larger buffer. From S6RSP2CT. |
| CF_CNTLIST_HEAD   |     | FLOAT     | Maximum number of list headers in the structure could be altered. From S6HDRSCT.  |
| CF_CREATE_LIST    |     | FLOAT     | Number of times a new data list was created. From S6CRLCT.  |
| CF_DATAEL_MAX     |     | FLOAT     | Maximum element size per entry (for 32 KB). From S6ELEMNL.  |
| CF_DATAEL_SIZE    |     | FLOAT     | Data element size as fullword. From S6ELEMNL.   |
| CF_DEL_APPL_ENTR  |     | FLOAT     | Number of delete APPLID entries. From S6DLACT.  |
| CF_DEL_UOW_ENTRY  |     | FLOAT     | Number of unit of work list deletes. From S6DLUCT.  |
| CF_DELETE_DATAIT  |     | FLOAT     | Number of data entry deletes. From S6DLDCCT.  |
| CF_DELETE_LIST    |     | FLOAT     | Number of times a data list was deleted for reuse. From S6DLLCT.  |
| CF_DELTBIX_ENTRY  |     | FLOAT     | Number of table index deletes. From S6DLICT.  |
| CF_ELEMFREE_MIN   |     | FLOAT     | Lowest number of free elements. From S6ELEMLO.  |
| CF_ELEMRET_MAX    |     | FLOAT     | Maximum elements returned by IXLCONN. From S6ELEMMX.  |
| CF_ELEMUSE_MAX    |     | FLOAT     | Highest number of elements in use. From S6ELEMHI.   |
| CF_ELSEID_ENTRY   |     | FLOAT     | Element side of entry element ratio. From S6ELEMPE.   |
| CF_ENT_APPLID_MAX |     | FLOAT     | Highest entries on APPLID list. From S6APPLHI.  |
| CF_ENT_FRELST_MAX |     | FLOAT     | Highest entries on the free list. From S6FREEHI.  |
| CF_ENT_TABIND_MAX |     | FLOAT     | Highest entries on the free list. From S6INDXHI.  |
| CF_ENT_UOWLST_MAX |     | FLOAT     | Highest entries in unit of work list. From S6UOWLST.  |
| CF_ENT_USELST_MAX |     | FLOAT     | Highest entries on used list. From S6USEDHI.  |
| CF_ENTRSIDE_ENTRY |     | FLOAT     | Entry side of entry element ratio. From S6ELEMPE.   |
| CF_ENTRYFREE_MIN  |     | FLOAT     | Lowest number of entries in use. From S6ENTRLO.   |
| CF_ENTRYRET_MAX   |     | FLOAT     | Maximum entries returned by IXLCONN. From S6ENTRMX.   |
| CF_ENTRYUSE_MAX   |     | FLOAT     | Highest number of entries in use. From S6ENTRHI.  |
| CF_INQR_DATAALST  |     | FLOAT     | Number of inquiries on data list. From S6INLCT.   |

## CICS statistics component data tables

| Column name         | Key | Data type | Description  |
|---------------------|-----|-----------|--|
| CF_LIST_HEAD_MAX    |     | FLOAT     | Headers used for Control List. From S6HDRS.  |
| CF_LIST_OUTSPACE    |     | FLOAT     | Number of times the list structure became full. From S6RSP7CT.   |
| CF_MAXLIST_REACH    |     | FLOAT     | Number of times a table reached the maximum number of items causing the relevant list to be marked as full. From S6RSP6CT.           |
| CF_MODIFY_LIST      |     | FLOAT     | Number of times that data list controls were modified. From S6MDLCT.   |
| CF_NOMATCH_FOUND    |     | FLOAT     | Number of entries not found (table or item). From S6RSP3CT.  |
| CF_NOMATCH_VERS     |     | FLOAT     | Number of times a version check failed for an entry being updated, indicating that another task had updated it first. From S6RSP4CT. |
| CF_NORMAL_RESP      |     | FLOAT     | Number of normal responses. From S6RSP1CT.   |
| CF_OTHER_ERROR      |     | FLOAT     | Number of times some other error codes were returned by IXLLIST.   |
| CF_READ_APPL_ENTR   |     | FLOAT     | Number of read APPLID entries. From S6RDACT.   |
| CF_READ_DATAIT      |     | FLOAT     | Number of data entry reads. From S6RDDCT.  |
| CF_READ_MSGQUEUE    |     | FLOAT     | Number of lock release messages read by this server. From S6RDMCT.   |
| CF_READ_UOW_ENTRY   |     | FLOAT     | Number of unit of work list reads. From S6WRDUCT.  |
| CF_READTBIX_ENTRY   |     | FLOAT     | Number of table index reads. From S6RDICT.   |
| CF_REREAD_FULL      |     | FLOAT     | Number of reread entries for full data length. From S6RRLCT.   |
| CF_REWRT_APPL_ENTR  |     | FLOAT     | Number of rewrite APPLID entries. From S6RWACT.  |
| CF_REWRT_DATAIT     |     | FLOAT     | Number of data entry rewrites. From S6RWDCT.   |
| CF_REWRT_UOW_ENTRY  |     | FLOAT     | Number of unit of work list rewrites. From S6RWUCT.  |
| CF_REWRITTBIX_ENTRY |     | FLOAT     | Number of table index writes to update table status. From S6RWICT.   |
| CF_SMR_STR_UNAVAIL  |     | FLOAT     | Structure temporarily unavailable, during system-managed rebuild. From S6RSP9CT  |
| CF_TBLDATA_HEAD     |     | FLOAT     | Headers available for table data. From S6HDRSCD.   |
| CF_WRITE_APPL_ENTR  |     | FLOAT     | Number of write APPLID entries. From S6WRACT.  |
| CF_WRITE_DATAIT     |     | FLOAT     | Number of data entry writes. From S6WRDCT.   |
| CF_WRITE_UOW_ENTRY  |     | FLOAT     | Number of unit of work list writes. From S6WRUCT.  |
| CF_WRITE_MSGQUEUE   |     | FLOAT     | Number of lock release messages sent by this server. From S6RDMCT.   |
| CF_WRITETBIX_ENTRY  |     | FLOAT     | Number of table index writes to create new tables. From S6WRICT.   |

### CICS\_S\_CFDT\_SERV\_D

This table provides daily Coupling Facility data tables list structure. For CICS/TS V1.3 and later, this maps the DFHCFS6K record.

The default retention period for this table is 30 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                       |
| CF_LISTSTRUC_NAME | K   | CHAR(16)  | Full name of the list structure. From S6NAME.   |
| CF_CONNECT_NAME   | K   | CHAR(16)  | Name of the connection to the list structure. From S6CNNAME.  |
| CF_ALLOC_SIZE     |     | FLOAT     | Current allocated size of the list structure. From S6SIZE.  |
| CF_ALLOC_SIZE_MAX |     | FLOAT     | Maximum size to which the structure could be altered. From S6SIZEMX.  |
| CF_ASYNC_REQS     |     | FLOAT     | Number of requests for which completion was asynchronous. From S6ASYCT.   |
| CF_AUTH_MISMATCH  |     | FLOAT     | Number of times a list authority comparison failed, mismatch caused by table status update. From S6RSP5CT.                                      |
| CF_BUFF_SHORT     |     | FLOAT     | Number of times that entry data was larger than the input buffer length, which normally results in a retry with a larger buffer. From S6RSP2CT. |
| CF_CNTLIST_HEAD   |     | FLOAT     | Maximum number of list headers in the structure could be altered. From S6HDRSCT.  |
| CF_CREATE_LIST    |     | FLOAT     | Number of times a new data list was created. From S6CRLCT.  |
| CF_DATAEL_MAX     |     | FLOAT     | Maximum elements per entry (for 32 KB). From S6ELEM LN.   |
| CF_DATAEL_SIZE    |     | FLOAT     | Data element size as fullword. From S6ELEM LN.  |
| CF_DEL_APPL_ENTR  |     | FLOAT     | Number of delete APPLID entries. From S6DLACT.  |
| CF_DEL_UOW_ENTRY  |     | FLOAT     | Number of unit of work list deletes. From S6DLUCT.  |
| CF_DELETE_DATAIT  |     | FLOAT     | Number of data entries deletes. From S6DL DCT.  |
| CF_DELETE_LIST    |     | FLOAT     | Number of times a data list was deleted for reuse. From S6DLLCT.  |
| CF_DELTBIX_ENTRY  |     | FLOAT     | Number of table index deletes. From S6DLICT.  |
| CF_ELEMFREE_MIN   |     | FLOAT     | Lowest number of free elements. From S6ELEM LO.   |
| CF_ELEMRET_MAX    |     | FLOAT     | Maximum elements returned by IXLCONN. From S6ELEM MX.   |
| CF_ELEMUSE_MAX    |     | FLOAT     | Highest number of elements in use. From S6ELEM HI.  |
| CF_ELSEID_ENTRY   |     | FLOAT     | Element side of entry element ratio. From S6ELEM PE.  |
| CF_ENT_APPLID_MAX |     | FLOAT     | Highest entries on APPLID list. From S6APPL HI.   |
| CF_ENT_FRELST_MAX |     | FLOAT     | Highest entries on free list. From S6FREE HI.   |
| CF_ENT_TABIND_MAX |     | FLOAT     | Highest entries on free list. From S6INDX HI.   |
| CF_ENT_UOWLST_MAX |     | FLOAT     | Highest entries in unit of work list. From S6UOWLST.  |
| CF_ENT_USELST_MAX |     | FLOAT     | Highest entries on used list. From S6USED HI.   |
| CF_ENTRSIDE_ENTRY |     | FLOAT     | Entry side of entry element ratio. From S6ELEM PE.  |
| CF_ENTRYFREE_MIN  |     | FLOAT     | Lowest number of entries in use. From S6ENTR LO.  |
| CF_ENTRYRET_MAX   |     | FLOAT     | Maximum entries returned by IXLCONN. From S6ENTR MX.  |
| CF_ENTRYUSE_MAX   |     | FLOAT     | Highest number of entries in use. From S6ENTR HI.   |
| CF_INQR_DATA LST  |     | FLOAT     | Number of inquiries on data list. From S6INLCT.   |
| CF_LIST_HEAD_MAX  |     | FLOAT     | Headers used for Control List. From S6HDRS.   |

## CICS statistics component data tables

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| CF_LIST_OUTSPACE   |     | FLOAT     | Number of times the list structure became full. From S6RSP7CT.   |
| CF_MAXLIST_REACH   |     | FLOAT     | Number of times a table reached the maximum number of items causing the relevant list to be marked as full. From S6RSP6CT.           |
| CF_MODIFY_LIST     |     | FLOAT     | Number of times that data list controls were modified. From S6MDLCT.   |
| CF_NOMATCH_FOUND   |     | FLOAT     | Number of entries not found (table or item). From S6RSP3CT.  |
| CF_NOMATCH_VERS    |     | FLOAT     | Number of times a version check failed for an entry being updated, indicating that another task had updated it first. From S6RSP4CT. |
| CF_NORMAL_RESP     |     | FLOAT     | Number of normal responses. From S6RSP1CT.   |
| CF_OTHER_ERROR     |     | FLOAT     | Number of times some other error codes were returned by IXLLIST.   |
| CF_READ_APPL_ENTR  |     | FLOAT     | Number of read APPLID entries. From S6RDACT.   |
| CF_READ_DATAIT     |     | FLOAT     | Number of data entry reads. From S6RDDCT.  |
| CF_READ_MSGQUEUE   |     | FLOAT     | Number of lock release messages read by this server. From S6RDMCT.   |
| CF_READ_UOW_ENTRY  |     | FLOAT     | Number of unit of work list reads. From S6WRDUCT.  |
| CF_READTBIX_ENTRY  |     | FLOAT     | Number of table index reads. From S6RDICT.   |
| CF_REREAD_FULL     |     | FLOAT     | Number of reread entries for full data length. From S6RRLCT.   |
| CF_REWRT_APPL_ENTR |     | FLOAT     | Number of rewrite APPLID entries. From S6RWACT.  |
| CF_REWRT_DATAIT    |     | FLOAT     | Number of data entry rewrites. From S6RWDCT.   |
| CF_REWRT_UOW_ENTRY |     | FLOAT     | Number of unit of work list rewrites. From S6RWUCT.  |
| CF_REWRTTBIX_ENTRY |     | FLOAT     | Number of table index writes to update table status. From S6RWICT.   |
| CF_SMR_STR_UNAVAIL |     | FLOAT     | Structure temporarily unavailable, during system-managed rebuild. From S6RSP9CT  |
| CF_TBLDATA_HEAD    |     | FLOAT     | Headers available for Table Data. From S6HDRSCD.   |
| CF_WRITE_APPL_ENTR |     | FLOAT     | Number of write APPLID entries. From S6WRACT.  |
| CF_WRITE_DATAIT    |     | FLOAT     | Number of data entry writes. From S6WRDCT.   |
| CF_WRITE_UOW_ENTRY |     | FLOAT     | Number of unit of work list writes. From S6WRUCT.  |
| CF_WRITE_MSGQUEUE  |     | FLOAT     | Number of lock release messages sent by this server. From S6RDMCT.   |
| CF_WRITETBIX_ENTRY |     | FLOAT     | Number of table index writes to create new tables. From S6WRICT.   |

## CICS\_S\_CFDT\_STOR\_T

This table provides detailed Coupling Facility data table storage statistics. For CICS/TS V1.3 and later, this maps the DFHCFS9K record.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME        | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |



| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN. |
| CF_STORPOOL     | K   | CHAR(8)   | Name of the storage pool AXMPGANY or AXMPGLOW. From S9ANYNAM or S9LOWNAM.   |
| CF_ADDRESS      |     | FLOAT     | Address of the storage pool area. From S9ANYPTR or S9LOWPTR.  |
| CF_COMPRESS     |     | FLOAT     | Number of compress (defragmentation) attempts. From S9ANYRQC or S9LOWRQC.   |
| CF_FREE_REQS    |     | FLOAT     | Number of storage FREE requests. From S9ANYRQS or S9LOWRQS.   |
| CF_FREEPAGE_LOW |     | FLOAT     | Lowest number of free pages (since reset). From S9ANYLO or S9LOWLO.   |
| CF_GET          |     | FLOAT     | Number of storage GET requests. From S9ANYRQG or S9LOWRQG.  |
| CF_GET_FAILED   |     | FLOAT     | Number of GET requests that failed to obtain storage. From S9ANYRQF or S9LOWRQF.  |
| CF_PAGES_FREE   |     | FLOAT     | Number of free pages in the storage pool. From S9ANYFR or S9LOWFR.  |
| CF_PAGES_TOT    |     | FLOAT     | Total number of pages in the storage pool. From S9ANYMX or S9LOWMX.   |
| CF_PAGES_USED   |     | FLOAT     | Number of used pages in the storage pool. From S9ANYUS or S9LOWUS.  |
| CF_SIZE         |     | FLOAT     | Size of the storage pool. From S9ANYSIZ or S9LOWSIZ.  |

### CICS\_S\_CFDT\_TBAC\_T

This table provides detailed Coupling Facility table accesses statistics. For CICS/TS V1.3 and later, this maps the DFHCFS7K record.

The default retention period for this table is 7 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME           | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| CF_TABLE_NAME  | K   | CHAR(16)  | Table name padded with spaces. From S7TABLE.  |
| CF_CLOSE_TAB   |     | FLOAT     | Number of successful CLOSE requests for the table. From S7OCCLOS.   |
| CF_DEL_MULT    |     | FLOAT     | Number of multiple (generic) DELETE requests. From S7RQDELM.  |
| CF_DELETE      |     | FLOAT     | Number of DELETE requests. From S7RQDELE.   |
| CF_DELETE_TAB  |     | FLOAT     | Number of times the table with the name specified was deleted. From S7OCDELE.   |
| CF_EXTR_STATS  |     | FLOAT     | Number of extract table statistics. From S7OCSTAT.  |

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| CF_LOAD        |     | FLOAT     | Number of records written by initial load requests. From S7RQLOAD.   |
| CF_OPEN_TAB    |     | FLOAT     | Number of extract table statistics. From S7OCOPEN.                   |
| CF_POINT       |     | FLOAT     | Number of POINT requests. From S7RQPOIN.                             |
| CF_READ        |     | FLOAT     | Number of combined READ and DELETE requests. From S7RQRDDL.          |
| CF_READ_DEL    |     | FLOAT     | Number of READ requests (including those for UPDATE). From S7RQREAD. |
| CF_RETURN_HIGH |     | FLOAT     | Number of requests for the current highest key. From S7RQHIG.        |
| CF_READ        |     | FLOAT     | Number of READ requests (including those for UPDATE). From S7RQREAD. |
| CF_REWRITES    |     | FLOAT     | Number of REWRITE requests. From S7RQREWR.                           |
| CF_UNLOCK      |     | FLOAT     | Number of UNLOCK requests. From S7RQUNLK.                            |
| CF_WRITES      |     | FLOAT     | Number of WRITE requests for new records. From S7RQWRIT.             |

### CICS\_S\_CFDT\_TBAC\_D

This table provides daily Coupling Facility table accesses statistics. For CICS/TS V1.3 and later, this maps the DFHCFS7K record.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| CF_TABLE_NAME  | K   | CHAR(16)  | Table name padded with spaces. From S7TABLE.  |
| CF_CLOSE_TAB   |     | FLOAT     | Number of successful CLOSE requests for the table. From S7OCCLOS.   |
| CF_DEL_MULT    |     | FLOAT     | Number of multiple (generic) DELETE requests. From S7RQDELM.  |
| CF_DELETE      |     | FLOAT     | Number of DELETE requests. From S7RQDELE.   |
| CF_DELETE_TAB  |     | FLOAT     | Number of times the table with the name specified was deleted. From S7OCDELE.   |
| CF_EXTR_STATS  |     | FLOAT     | Number of extract table statistics. From S7OCSTAT.  |
| CF_LOAD        |     | FLOAT     | Number of records written by initial load requests. From S7RQLOAD.  |
| CF_OPEN_TAB    |     | FLOAT     | Number of extract table statistics. From S7OCOPEN.  |
| CF_POINT       |     | FLOAT     | Number of POINT requests. From S7RQPOIN.  |
| CF_READ        |     | FLOAT     | Number of combined READ and DELETE requests. From S7RQRDDL.   |
| CF_READ_DEL    |     | FLOAT     | Number of READ requests (including those for UPDATE). From S7RQREAD.  |
| CF_RETURN_HIGH |     | FLOAT     | Number of requests for the current highest key. From S7RQHIG.   |
| CF_READ        |     | FLOAT     | Number of READ requests (including those for UPDATE). From S7RQREAD.  |

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| CF_REWRITES |     | FLOAT     | Number of REWRITE requests. From S7RQREWR.               |
| CF_UNLOCK   |     | FLOAT     | Number of UNLOCK requests. From S7RQUNLK.                |
| CF_WRITES   |     | FLOAT     | Number of WRITE requests for new records. From S7RQWRIT. |

## CICS\_S\_DB2CONN\_T

This table provides detailed CICS/Db2 global statistics. For CICS/TS V1.2 and later, this maps the DFHD2GDS record.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                            |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| DB2_CONN_NAME      | K   | CHAR(8)   | Name of the installed DB2CONN. From DB2CONNM.  |
| DB2_SYSID          | K   | CHAR(4)   | Name of the Db2 subsystem to which the CICS-Db2 attachment is connected or will connect. From DB2SYSID.  |
| DB2_RELEASE        | K   | CHAR(4)   | Version and release level of the Db2 subsystem to which CICS is currently connected. From DB2RLS.  |
| DB2_COMD_AUTHID    |     | CHAR(8)   | Static ID that is to be used for Db2 security checking of command threads. From DB2CMAUT.  |
| DB2_COMD_AUTHTYPE  |     | CHAR(8)   | Type of ID that is to be used for Db2 security checking of command threads. From DB2CMATT.   |
| DB2_COMD_CALLS     |     | FLOAT     | Number of Db2 commands that are issued using the DSNB transaction. From DB2CMDSN.  |
| DB2_COMD_SIGNONS   |     | FLOAT     | Number of signons that are performed for command threads. From DB2CMSIG.   |
| DB2_COMD_THR_CRT   |     | FLOAT     | The number of create thread requests made to Db2 for command threads. From DB2CMTHREDCRT.  |
| DB2_COMD_THR_CUR   |     | FLOAT     | Current number of active command threads. From DB2CMCTH.   |
| DB2_COMD_THR_HWM   |     | FLOAT     | Peak number of active command threads. From DB2CMHWM.  |
| DB2_COMD_THR_LIMIT |     | FLOAT     | Current maximum number of command threads that are allowed. From DB2CMMTH.   |
| DB2_COMD_THR_OVERF |     | FLOAT     | Number of times that a DSNB Db2 results in a pool thread being used because the number of active command threads exceeds the command threads limit. From DB2CMOVF. |
| DB2_COMD_THR_TERM  |     | FLOAT     | Number of terminate thread requests that are made to Db2 for command threads. From DB2CMTHT.   |
| DB2_GMT_CONN_TIME  |     | TIMESTAMP | GMT when CICS connected to Db2 (STCK). From DB2GCONN.  |
| DB2_GMT_DISC_TIME  |     | TIMESTAMP | GMT when CICS disconnected from Db2 (STCK). From DB2GDISC.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DB2_LOC_CONN_TIME  |     | TIMESTAMP | Local time when CICS connected to Db2. From DB2LCONN.   |
| DB2_LOC_DISC_TIME  |     | TIMESTAMP | Local time when CICS disconnected from Db2. From DB2LDISC.  |
| DB2_PART_SIGNON    |     | FLOAT     | Number of partial signons. From DB2POPSI.   |
| DB2_POOL_ABORTS    |     | FLOAT     | Number of UOWs (using pool threads) that were rolled back. From DB2POABO.   |
| DB2_POOL_ACCNTREC  |     | CHAR(4)   | Maximum frequency of Db2 accounting records that are to be used for transactions using pool threads. From DB2POACC.   |
| DB2_POOL_AUTHID    |     | CHAR(8)   | Static ID that is to be used for Db2 security checking of pool threads. If an Authtype is being used for pool threads, this field contains nulls. From DB2POAUI.                          |
| DB2_POOL_AUTHTYPE  |     | CHAR(8)   | Type of ID that is to be used for Db2 security checking of pool threads. If an Authtype is being used for pool threads, this field contains nulls. From DB2POAUT.                         |
| DB2_POOL_CALLS     |     | FLOAT     | Number of SQL calls that are made using pool threads. From DB2POCAL.  |
| DB2_POOL_COMMITS   |     | FLOAT     | Number of 2-phase commits that are performed for UOWs using pool threads. From DB2POCOM.  |
| DB2_POOL_PLAN_NAME |     | CHAR(8)   | Name of the plan being used for the pool. If a dynamic plan exit is being used for the pool, this field is null. From DB2POPNM.   |
| DB2_POOL_PLEX_NAME |     | CHAR(8)   | Name of the dynamic plan exit to be used for the pool. If a static plan is being used for the pool, this field contains nulls. From DB2POPEX.   |
| DB2_POOL_PRIORITY  |     | CHAR(8)   | Priority of the pool thread subtasks relative to the CICS main task. From DB2POPRI.   |
| DB2_POOL_RDQ_CUR   |     | FLOAT     | Current number of CICS tasks that are waiting for a pool thread to become available. From DB2POTRE.   |
| DB2_POOL_RDQ_HWM   |     | FLOAT     | Peak number of CICS tasks that waited for a pool thread to become available. From DB2POHRE.   |
| DB2_POOL_SIGNONS   |     | FLOAT     | Number of Db2 signons that are performed for pool threads. From DB2POSIG.   |
| DB2_POOL_SINGLE_PH |     | FLOAT     | Number of UOWs (using pool threads) that used single-phase commit, either because they were R/O UOWs or because Db2 was the only recoverable resource updated in the UOWs. From DB2POSPH. |
| DB2_POOL_TASK_CUR  |     | FLOAT     | Current number of CICS tasks that have used a pool thread. From DB2POTSK.   |
| DB2_POOL_TASK_HWM  |     | FLOAT     | Peak number of CICS tasks that have used a pool thread. From DB2POTSH.  |
| DB2_POOL_TASK_TOT  |     | FLOAT     | Total number of completed tasks that have used a pool thread. From DB2POTOT.  |
| DB2_POOL_THRWAIT   |     | CHAR(4)   | Specifies whether transactions should wait for a pool thread or should be abended if the number of active pool threads exceeds the pool thread limit. From DB2POTHW.                      |
| DB2_POOL_THR_CRT   |     | FLOAT     | The number of times CICS transactions using the pool create a Db2 thread. From DB2POTTHREADCRT.   |
| DB2_POOL_THR_CUR   |     | FLOAT     | Current number of active pool threads. From DB2POTHC.   |
| DB2_POOL_THR_HWM   |     | FLOAT     | Peak number of active pool threads. From DB2POTHH.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DB2_POOL_THR_LIMIT |     | FLOAT     | Current maximum number of pool threads that are allowed. From DB2POTHM.   |
| DB2_POOL_THR_REUSE |     | FLOAT     | Number of times that CICS transactions, using the pool, reused an existing Db2 thread. From DB2POTHR.   |
| DB2_POOL_THR_TERM  |     | FLOAT     | Number of terminate thread requests made to Db2 for pool threads. From DB2POTHT.  |
| DB2_POOL_THR_WAITS |     | FLOAT     | Number of times that all available threads in the pool were busy and a transaction had to wait for a thread to become available. From DB2POTHW. |
| DB2_TCB_CURRENT    |     | FLOAT     | Current number of subtask TCBs that are attached to service Db2 requests. From DB2CRTCB.  |
| DB2_TCB_FREE       |     | FLOAT     | Current number of subtask TCBs without a Db2 thread. From DB2FREET.   |
| DB2_TCB_HWM        |     | FLOAT     | Peak number of subtask TCBs that are attached to service Db2 requests. From DB2HWMTC.   |
| DB2_TCB_LIMIT      |     | FLOAT     | Maximum number of subtask TCBs that can be attached to service Db2 requests. From DB2MXTCB.   |
| DB2_TCB_READYQ_CUR |     | FLOAT     | Number of CICS tasks that are queued waiting for a Db2 subtask TCB to become available. From DB2QUTCB.  |
| DB2_TCB_READYQ_HWM |     | FLOAT     | Peak number of CICS tasks that are queued waiting for a Db2 subtask TCB to become available. From DB2RQUHW.                                     |

## CICS\_S\_DB2CONN\_D

This table provides daily CICS/Db2 global statistics. For CICS/TS V1.2 and later, this maps the DFHD2GDS record.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DB2_CONN_NAME     | K   | CHAR(8)   | Name of the installed DB2CONN. From DB2CONNM.   |
| DB2_SYSID         | K   | CHAR(4)   | Name of the Db2 subsystem to which the CICS-Db2 attachment is connected or will connect. From DB2SYSID.                                 |
| DB2_RELEASE       | K   | CHAR(4)   | Version and release level of the Db2 subsystem to which CICS is currently connected. From DB2RLS.                                       |
| DB2_COMD_AUTHID   |     | CHAR(8)   | Static ID that is to be used for Db2 security checking of command threads. From DB2CMAUT.   |
| DB2_COMD_AUTHTYPE |     | CHAR(8)   | Type of ID that is to be used for Db2 security checking of command threads. From DB2CMATT.  |
| DB2_COMD_CALLS    |     | FLOAT     | Number of Db2 commands that are issued using the DSNCT transaction. From DB2CMSDN.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DB2_COMD_THR_CRT   |     | FLOAT     | The number of create thread requests made to Db2 for command threads. From DB2CMTHREADCRT.   |
| DB2_COMD_THR_CUR   |     | FLOAT     | Current number of active command threads. From DB2CMCTH.   |
| DB2_COMD_THR_HWM   |     | FLOAT     | Peak number of active command threads. From DB2CMHWM.  |
| DB2_COMD_THR_LIMIT |     | FLOAT     | Current maximum number of command threads that are allowed. From DB2CMMTH.   |
| DB2_COMD_THR_OVERF |     | FLOAT     | Number of times that a DSNB Db2 results in a pool thread being used because the number of active command threads exceeds the command threads limit. From DB2CMOVF. |
| DB2_COMD_THR_TERM  |     | FLOAT     | Number of terminate thread requests that are made to Db2 for command threads. From DB2CMTHT.   |
| DB2_COMD_SIGNONS   |     | FLOAT     | Number of signons that are performed for command threads. From DB2CMSIG.   |
| DB2_GMT_CONN_TIME  |     | TIMESTAMP | GMT when CICS connected to Db2 (STCK). From DB2GCONN.  |
| DB2_GMT_DISC_TIME  |     | TIMESTAMP | GMT when CICS disconnected from Db2 (STCK). From DB2GDISC.   |
| DB2_LOC_CONN_TIME  |     | TIMESTAMP | Local time when CICS connected to Db2. From DB2LCONN.  |
| DB2_LOC_DISC_TIME  |     | TIMESTAMP | Local time when CICS disconnected from Db2. From DB2LDISC.   |
| DB2_PART_SIGNON    |     | FLOAT     | Number of partial signons. From DB2POPSI.  |
| DB2_POOL_ABORTS    |     | FLOAT     | Number of UOWs (using pool threads) that were rolled back. From DB2POABO.  |
| DB2_POOL_ACCNTREC  |     | CHAR(4)   | Maximum frequency of Db2 accounting records that are to be used for transactions using pool threads. From DB2POACC.  |
| DB2_POOL_AUTHID    |     | CHAR(8)   | Static ID that is to be used for Db2 security checking of pool threads. If an Authtype is being used for pool threads, this field contains nulls. From DB2POAUI.   |
| DB2_POOL_AUTHTYPE  |     | CHAR(8)   | Type of ID that is to be used for Db2 security checking of pool threads. If an Authtype is being used for pool threads, this field contains nulls. From DB2POAUT.  |
| DB2_POOL_CALLS     |     | FLOAT     | Number of SQL calls that are made using pool threads. From DB2POCAL.   |
| DB2_POOL_COMMITS   |     | FLOAT     | Number of 2-phase commits that are performed for UOWs using pool threads. From DB2POCOM.   |
| DB2_POOL_PLAN_NAME |     | CHAR(8)   | Name of the plan being used for the pool. If a dynamic plan exit is being used for the pool, this field will be null. From DB2POPNM.                               |
| DB2_POOL_PLEX_NAME |     | CHAR(8)   | Name of the dynamic plan exit to be used for the pool. If a static plan is being used for the pool, this field contains nulls. From DB2POPEX.                      |
| DB2_POOL_PRIORITY  |     | CHAR(8)   | Priority of the pool thread subtasks relative to the CICS main task. From DB2POPRI.  |
| DB2_POOL_RDQ_CUR   |     | FLOAT     | Current number of CICS tasks that are waiting for a pool thread to become available. From DB2POTRE.  |
| DB2_POOL_RDQ_HWM   |     | FLOAT     | Peak number of CICS tasks that waited for a pool thread to become available. From DB2POHRE.  |
| DB2_POOL_SIGNONS   |     | FLOAT     | Number of Db2 signons that are performed for pool threads. From DB2POSIG.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DB2_POOL_SINGLE_PH |     | FLOAT     | Number of UOWs (using pool threads) that used single-phase commit, either because they were R/O UOWs or because Db2 was the only recoverable resource updated in the UOWs. From DB2POSPH. |
| DB2_POOL_TASK_CUR  |     | FLOAT     | Current number of CICS tasks that have used a pool thread. From DB2POTSK.   |
| DB2_POOL_TASK_HWM  |     | FLOAT     | Peak number of CICS tasks that have used a pool thread. From DB2POTSH.  |
| DB2_POOL_TASK_TOT  |     | FLOAT     | Total number of completed tasks that have used a pool thread. From DB2POTOT.  |
| DB2_POOL_THRWAIT   |     | CHAR(4)   | Specifies whether transactions should wait for a pool thread or should be abended if the number of active pool threads exceeds the pool thread limit. From DB2POTHW.                      |
| DB2_POOL_THR_CRT   |     | FLOAT     | The number of times that CICS transactions using the pool create a Db2 thread. From DB2POTHEADCRT.  |
| DB2_POOL_THR_CUR   |     | FLOAT     | Current number of active pool threads. From DB2POTHC.   |
| DB2_POOL_THR_HWM   |     | FLOAT     | Peak number of active pool threads. From DB2POTHH.  |
| DB2_POOL_THR_LIMIT |     | FLOAT     | Current maximum number of pool threads that are allowed. From DB2POTHM.   |
| DB2_POOL_THR_REUSE |     | FLOAT     | Number of times that CICS transactions, using the pool, reused an existing Db2 thread. From DB2POTHR.   |
| DB2_POOL_THR_TERM  |     | FLOAT     | Number of terminate thread requests made to Db2 for pool threads. From DB2POTHT.  |
| DB2_POOL_THR_WAITS |     | FLOAT     | Number of times that all available threads in the pool were busy and a transaction had to wait for a thread to become available. From DB2POTHW.   |
| DB2_TCB_CURRENT    |     | FLOAT     | Current number of subtask TCBs that are attached to service Db2 requests. From DB2CRTCB.  |
| DB2_TCB_FREE       |     | FLOAT     | Current number of subtask TCBs without a Db2 thread. From DB2FREET.   |
| DB2_TCB_HWM        |     | FLOAT     | Peak number of subtask TCBs that are attached to service Db2 requests. From DB2HWMTC.   |
| DB2_TCB_LIMIT      |     | FLOAT     | Maximum number of subtask TCBs that can be attached to service Db2 requests. From DB2MXTCB.   |
| DB2_TCB_READYQ_CUR |     | FLOAT     | Number of CICS tasks that are queued waiting for a Db2 subtask TCB to become available. From DB2QUTCB.  |
| DB2_TCB_READYQ_HWM |     | FLOAT     | Peak number of CICS tasks that are queued waiting for a Db2 subtask TCB to become available. From DB2RQUHW.   |

## CICS\_S\_DB2ENTRY\_T

This table provides detailed CICS/Db2 resource statistics. The resource is a DB2ENTRY. For CICS/TS V1.2 and later, this maps the DFHD2RDS record.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| DB2_ENTRY_NAME    | K   | CHAR(8)   | Name of the installed DB2ENTRY. From DB2ENTNM.  |
| DB2_ABORTS        |     | FLOAT     | Number of UOWs (using this DB2ENTRY) that were rolled back. From DB2ABORT.  |
| DB2_ACCOUNTREC    |     | CHAR(4)   | Frequency of Db2 accounting records that are to be produced for transactions using this DB2ENTRY. From DB2ACCSE.  |
| DB2_AUTHID        |     | CHAR(8)   | Static ID that is to be used for Db2 security checking of this DB2ENTRY. If an Authtype is being used for the DB2ENTRY, this field is null. From DB2GSTAU.                                |
| DB2_AUTHTYPE      |     | CHAR(8)   | Type of ID that is to be used for Db2 security checking of this DB2ENTRY. If an Authtype is being used for the DB2ENTRY, this field is null. From DB2AUTTY.                               |
| DB2_CALLS         |     | FLOAT     | Number of SQL calls that are made using this DB2ENTRY. From DB2CALLS.   |
| DB2_COMMITS       |     | FLOAT     | Number of 2-phase commits that are performed for UOWs using this DB2ENTRY. From DB2COMMT.   |
| DB2_PART_SIGNON   |     | FLOAT     | Number of partial signons. From DB2POPSI.   |
| DB2_PLAN_NAME     |     | CHAR(8)   | Name of the plan being used for this DB2ENTRY. If a dynamic plan exit is being used for the DB2ENTRY, this field is null. From DB2PLNNM.  |
| DB2_PLANEXIT_NAME |     | CHAR(8)   | Name of the dynamic plan exit to be used for this DB2ENTRY. If a static plan is being used for the DB2ENTRY, this field is null. From DB2PLXNM.   |
| DB2_PRIORITY      |     | CHAR(8)   | Priority of the DB2ENTRY thread subtasks relative to the CICS main task. From DB2TRHPR.   |
| DB2_PTHREAD_CUR   |     | FLOAT     | Current number of protected threads for this DB2ENTRY. From DB2PTHCU.   |
| DB2_PTHREAD_HWM   |     | FLOAT     | Peak number of protected threads for this DB2ENTRY. From DB2PTHHW.  |
| DB2_PTHREAD_LIMIT |     | FLOAT     | Current maximum number of protected threads that are allowed for the DB2ENTRY. From DB2PTHMX.   |
| DB2_READYQ_CUR    |     | FLOAT     | Current number of CICS tasks that are waiting for a thread to become available on this DB2ENTRY. From DB2PASKR.   |
| DB2_READYQ_HWM    |     | FLOAT     | Peak number of CICS tasks that waited for a thread to become available on this DB2ENTRY. From DB2EHWMT.   |
| DB2_SIGNONS       |     | FLOAT     | Number of Db2 signons that are performed for this DB2ENTRY. From DB2SIGNO.  |
| DB2_SINGLE_PHASE  |     | FLOAT     | Number of UOWs (using the DB2ENTRY) that used single-phase commit, either because they were R/O UOWs or because Db2 was the only recoverable resource updated in the UOWs. From DB2SINPH. |



| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DB2_TASK_CUR       |     | FLOAT     | Current number of CICS tasks that are using this DB2ENTRY. From DB2PTASKC.  |
| DB2_TASK_HWM       |     | FLOAT     | Peak number of CICS tasks that have used this DB2ENTRY. From DB2PTASKH.   |
| DB2_TASK_TOT       |     | FLOAT     | Total number of completed tasks that have used this DB2ENTRY. From DB2PTASKT.   |
| DB2_THREAD_CRT     |     | FLOAT     | The number of create thread requests made to to Db2 for command threads. From DB2CMTHREADCRT.   |
| DB2_THREAD_CUR     |     | FLOAT     | Current number of active threads for this DB2ENTRY. From DB2THCUR.  |
| DB2_THREAD_HWM     |     | FLOAT     | Peak number of active threads for this DB2ENTRY. From DB2THHWM.   |
| DB2_THREAD_LIMIT   |     | FLOAT     | Current maximum number of threads that are allowed for the DB2ENTRY. From DB2THLIM.   |
| DB2_THREAD_REUSE   |     | FLOAT     | Number of times that CICS transactions, using the DB2ENTRY, were able to use an existing created Db2 thread. From DB2THRRE.   |
| DB2_THREAD_TERM    |     | FLOAT     | Number of terminate thread requests made to Db2 for threads of this DB2ENTRY. From DB2THRTE.  |
| DB2_THREAD_WAIT_OV |     | FLOAT     | Number of times that all available threads in the DB2ENTRY were busy and a transaction had to wait for a thread to become available or overflow to the pool and use a pool thread instead. From DB2THWOV. |
| DB2_THREADWAIT     |     | CHAR(4)   | Specifies whether transactions should wait for a thread abend or overflow to the pool if the number of active threads for this DB2ENTRY exceeds its thread limit. From DB2TRWSE.                          |

### CICS\_S\_DB2ENTRY\_D

This table provides daily CICS/Db2 resource statistics. The resource is a DB2ENTRY. For CICS/TS V1.2 and later, this maps the DFHD2RDS record.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                    |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                                  |
| DB2_ENTRY_NAME | K   | CHAR(8)   | Name of the installed DB2ENTRY. From DB2ENTNM.   |
| DB2_ABORTS     |     | FLOAT     | Number of UOWs (using this DB2ENTRY) that were totaled back. From DB2ABORT.  |
| DB2_ACCOUNTREC |     | CHAR(4)   | Frequency of Db2 accounting records that are to be produced for transactions using this DB2ENTRY. From DB2ACCSE.   |
| DB2_AUTHID     |     | CHAR(8)   | Static ID that is to be used for Db2 security checking of this DB2ENTRY. If an Authtype is being used for the DB2ENTRY, this field is null. From DB2GSTAU. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DB2_AUTHTYPE      |     | CHAR(8)   | Type of ID that is to be used for Db2 security checking of this DB2ENTRY. If an Authtype is being used for the DB2ENTRY, this field is null. From DB2AUTTY.                               |
| DB2_CALLS         |     | FLOAT     | Number of SQL calls that are made using this DB2ENTRY. From DB2CALLS.   |
| DB2_COMMITS       |     | FLOAT     | Number of 2-phase commits that are performed for UOWs using this DB2ENTRY. From DB2COMMT.   |
| DB2_PART_SIGNON   |     | FLOAT     | Number of partial signons. From DB2POPSI.   |
| DB2_PLAN_NAME     |     | CHAR(8)   | Name of the plan being used for this DB2ENTRY. If a dynamic plan exit is being used for the DB2ENTRY, this field is null. From DB2PLNNM.  |
| DB2_PLANEXIT_NAME |     | CHAR(8)   | Name of the dynamic plan exit to be used for this DB2ENTRY. If a static plan is being used for the DB2ENTRY, this field is null. From DB2PLXNM.   |
| DB2_PRIORITY      |     | CHAR(8)   | Priority of the DB2ENTRY thread subtasks relative to the CICS main task. From DB2TRHPR.   |
| DB2_PTHREAD_CUR   |     | FLOAT     | Current number of protected threads for this DB2ENTRY. From DB2PTHCU.   |
| DB2_PTHREAD_HWM   |     | FLOAT     | Peak number of protected threads for this DB2ENTRY. From DB2PTHHW.  |
| DB2_PTHREAD_LIMIT |     | FLOAT     | Current maximum number of protected threads that are allowed for the DB2ENTRY. From DB2PTMHX.   |
| DB2_SIGNONS       |     | FLOAT     | Number of Db2 signons that are performed for this DB2ENTRY. From DB2SIGNO.  |
| DB2_SINGLE_PHASE  |     | FLOAT     | Number of UOWs (using the DB2ENTRY) that used single-phase commit, either because they were R/O UOWs or because Db2 was the only recoverable resource updated in the UOWs. From DB2SINPH. |
| DB2_READYQ_CUR    |     | FLOAT     | Current number of CICS tasks that are waiting for a thread to become available on this DB2ENTRY. From DB2PASKR.   |
| DB2_READYQ_HWM    |     | FLOAT     | Peak number of CICS tasks that waited for a thread to become available on this DB2ENTRY. From DB2EHWMT.   |
| DB2_TASK_CUR      |     | FLOAT     | Current number of CICS tasks that are using this DB2ENTRY. From DB2PTASKC.  |
| DB2_TASK_TOT      |     | FLOAT     | Total number of completed tasks that have used this DB2ENTRY. From DB2PTASKT.   |
| DB2_TASK_HWM      |     | FLOAT     | Peak number of CICS tasks that have used this DB2ENTRY. From DB2PTASKH.   |
| DB2_THREAD_CRT    |     | FLOAT     | The number of create thread requests made to Db2 for threads of this DB2ENTRY. From D2RTHREADCRT.   |
| DB2_THREAD_CUR    |     | FLOAT     | Current number of active threads for this DB2ENTRY. From DB2THCUR.  |
| DB2_THREAD_HWM    |     | FLOAT     | Peak number of active threads for this DB2ENTRY. From DB2THHWM.   |
| DB2_THREAD_LIMIT  |     | FLOAT     | Current maximum number of threads that are allowed for the DB2ENTRY. From DB2THLIM.   |
| DB2_THREAD_REUSE  |     | FLOAT     | Number of times that CICS transactions, using the DB2ENTRY, were able to use an existing Db2 thread. From DB2THRE.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DB2_THREAD_TERM    |     | FLOAT     | Number of terminate thread requests made to Db2 for threads of this DB2ENTRY. From DB2THRTE.  |
| DB2_THREAD_WAIT_OV |     | FLOAT     | Number of times that all available threads in the DB2ENTRY were busy and a transaction had to wait for a thread to become available or overflow to the pool and use a pool thread instead. From DB2THWOV. |
| DB2_THREADWAIT     |     | CHAR(4)   | Specifies whether transactions should wait for a thread abend or overflow to the pool if the number of active threads for this DB2ENTRY exceeds its thread limit. From DB2TRWSE.                          |

## CICS\_S\_DBCTL\_T

This table provides detailed CICS DBCTL statistics. For CICS/ESA and CICS/TS, this maps the DFHDBUDS record.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DBCTL_ID           | K   | CHAR(4)   | Name of the DBCTL session. From STATDBID.   |
| SESSION_NUMBER     | K   | INTEGER   | Number of the CICS DBCTL session. It is incremented every time a user connects and disconnects. From STATSENO.                          |
| CONNECT_TIME       |     | TIMESTAMP | Time (GMT) when CICS connected to DBCTL. From STACTIME.   |
| CONNECT_TIME_L     |     | TIMESTAMP | Local time when CICS connected to DBCTL. CICS/ESA V4 and later. From STALCTIM.  |
| DBCTL_RSE_NAME     |     | CHAR(8)   | Name of the DBCTL recoverable service element (RSE). From STARSSEN.   |
| DISCONNECT_TIME    |     | TIMESTAMP | Time (GMT) when CICS disconnected from DBCTL. From STADTIME.  |
| DISCONNECT_TIME_L  |     | TIMESTAMP | Local time when CICS disconnected from DBCTL. CICS/ESA V4 and later. From STALDTIM.   |
| PSB_SCHEDULE_COUNT |     | INTEGER   | Number of times the DBCTL session successfully scheduled a PSB. From STAPBSU.   |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record. Example: 0330. From SMFSTRVN.  |
| THREADS_HIT_MAX    |     | INTEGER   | Number of times the CICS-DBCTL session used the maximum number of threads. From STANOMATHD.   |

## CICS statistics component data tables

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| THREADS_HIT_MIN  |     | INTEGER   | Number of times the CICS-DBCTL session used the minimum number of threads. From STANOMITHD. |
| THREADS_MAX      |     | INTEGER   | Maximum threads specified in the DRA startup parameter table. From STAMATHD.                |
| THREADS_MAX_TIME |     | FLOAT     | Elapsed time that the DBCTL session used the maximum number of threads. From STAELMAX.      |
| THREADS_MIN      |     | INTEGER   | Minimum threads specified in the DRA startup parameter table. From STAMITHD.                |
| THREADS_PEAK     |     | INTEGER   | Highest number of threads used. From STAHIWAT.  |

### CICS\_S\_DBCTL\_D

This table provides daily statistics on the DBCTL session in the CICS system. It contains summarized data from the CICS\_S\_DBCTL\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DBCTL_ID           | K   | CHAR(4)   | Name of the DBCTL session. From STATDBID.   |
| SESSION_NUMBER     | K   | INTEGER   | Number of the CICS DBCTL session. It is incremented every time a user connects and disconnects. From STATSENO.                          |
| PSB_SCHEDULE_COUNT |     | INTEGER   | Number of times the DBCTL session successfully scheduled a PSB. From STAPBSU.   |
| THREADS_HIT_MAX    |     | INTEGER   | Number of times the CICS-DBCTL session used the maximum number of threads. From STANOMATHD.   |
| THREADS_HIT_MIN    |     | INTEGER   | Number of times the CICS-DBCTL session used the minimum number of threads. From STANOMITHD.   |
| THREADS_MAX        |     | INTEGER   | Maximum threads specified in the DRA startup parameter table. From STAMATHD.  |
| THREADS_MIN        |     | INTEGER   | Minimum threads specified in the DRA startup parameter table. From STAMITHD.  |
| THREADS_PEAK       |     | INTEGER   | Highest number of threads used. From STAHIWAT.  |

### CICS\_S\_DISPATCH\_T

This table provides detailed data from the dispatcher domain statistics records. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE. |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| TCB_MODE           | K   | CHAR(8)   | This is the name of the CICS dispatcher TCB mode. It can be either QR, RO, CO, SZ, RP, FO, SL, SO, S8, D2, JM, L8, L9, J8, J9, X8, or X9 depending on the TCB. It contains MISSING for CICS 3.2.1, and GLOBAL for summary data. From DSGTCBNM. |
| AMAXTASK_COUNT     |     | INTEGER   | Current number of user tasks eligible for dispatching. From DSGAMXTC. This is valid for CICS TS Version 2.1 and later.   |
| AMAXTASK_LIMIT     |     | INTEGER   | AMXT value. From DSGAMXTL. This is valid for CICS TS Version 2.1 and later.  |
| AMAXTASK_PEAK      |     | INTEGER   | Peak value of the current number of user tasks eligible for dispatching. From DSGAMXTP. This is valid for CICS TS Version 2.1 and later.   |
| CPU_SEC            |     | FLOAT     | Accumulated processor time used by this TCB when executing the default dispatcher task, in seconds. From DSGTCT.   |
| DISPATCHER_START   |     | TIMESTAMP | Time (GMT) when the dispatcher started. It is the approximate time when CICS started. From DSGSTART.   |
| DISPATCHER_START_L |     | TIMESTAMP | Local time when the dispatcher started. It is the approximate time when CICS started. For CICS V4 and later. From DSGLSTRT.  |
| ELAPS_JSTEP_SEC    |     | REAL      | Total CPU time for all TCBs in this address space, accumulated during the interval. From DSGJEST.  |
| ICVR_MSEC          |     | INTEGER   | This is the current ICVR time. From DSGICVRT.  |
| ICVT_MSEC          |     | INTEGER   | ICV time, in milliseconds. From DSGICVT.   |
| ICVTSO_MSEC        |     | INTEGER   | ICVTSO time, in milliseconds. From DSGICVSD.   |
| LAST_RESET_TIME    |     | TIMESTAMP | Last time all resettable values in this table were reset to zero. From DSGLRT. This is valid for CICS TS Version 2.1 and later.  |
| MAX_WAITS          |     | REAL      | MAXOPENTCBs value specified in the SIT, or as an override, or changed dynamically. From DSGMAXOP. This is valid for CICS TS Version 2.1 and later.   |
| MAXTASK_LIMIT      |     | INTEGER   | MXT value. From DSGTL. This is valid for CICS TS Version 2.1 and later.  |
| MAXTASK_REACHED    |     | INTEGER   | Number of times the MXT value has been reached. From DSGTAMXT. This is valid for CICS TS Version 2.1 and later.  |
| MVS_DISPATCH_SEC   |     | FLOAT     | Time that this TCB was dispatched, in seconds. From DSGTDT.  |
| MVS_TCB_COUNT      |     | INTEGER   | Number of MVS TCBs under which the CICS dispatcher runs. From DSGASIZE.  |
| MVS_WAITS          |     | FLOAT     | Number of MVS waits on this TCB. From DSGSYSW.   |
| MVS_WAIT_SEC       |     | FLOAT     | Time that this TCB was in an MVS wait, in seconds. From DSGTWT.  |
| PEAK_NO_TCB_USED   |     | REAL      | Peak number of TCB used. From DSGTCBUP.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PEAK_TCB_ATTACHS  |     | REAL      | Peak value of the number of MVS TCBs attached in this CICS dispatcher TCB mode. From DSGTCBPA.  |
| PROCESSOR_USE_PCT |     | INTEGER   | Percentage use of the processor for this TCB since the start of CICS. From DSGPERCT. This is valid for CICS TS Version 2.1 and later. |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.        |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record. Example: 0330. From SMFSTRVN.  |
| SRB_CPU_SEC       |     | REAL      | Total CPU time for all service request blocks (SRB) executed in this address space, accumulated during the interval. From DSGSRBT.    |
| TASKS             |     | INTEGER   | Current number of tasks in the system. From DSGCNT.   |
| TASKS_PEAK        |     | INTEGER   | Peak value of the number of tasks in the system. From DSGPNT.   |
| TCB_ALL_TO_TASK   |     | REAL      | TCB allocates to task. From DSGTCBAL.   |
| TCB_ATTACHS       |     | REAL      | Current number of MVS TCBs attached in this CICS dispatcher TCB mode. From DSGTCBCA.  |
| TCB_CPU_SEC       |     | FLOAT     | Accumulated processor time for this TCB since CICS startup, in seconds. From DSGACT.  |
| TCB_DET_EXCESS    |     | REAL      | Number of detached TCB in excess. From DSGTCBDE.  |
| TCB_DETACHES      |     | REAL      | Current number of MVS TCBs detached in this CICS dispatcher TCB mode. From DSGTCBDS+DSGTCBDO+DSGTCBST.                                |
| TCB_MISMATCH      |     | REAL      | Number of TCB mismatches. From DSGNTCBM.  |
| TCB_STEALS        |     | REAL      | Current number of MVS TCBs that have been stolen from other TCBs. From DSGTCBST.  |
| TCB_USED_CUR      |     | REAL      | TCB used current. From DSGTCBUC.  |

## CICS\_S\_DISPATCH\_D

This table provides daily data from the dispatcher domain statistics records. The data is from CICS statistics records (SMF 110, subtype 2). It contains consolidated data from the CICS\_S\_DISPATCH\_T table.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| TCB_MODE       | K   | CHAR(8)   | This is the name of the CICS dispatcher TCB mode. It can be either QR, RO, CO, SZ, RP, FO, SL, SO, S8, D2, JM, L8, L9, J8, J9, X8, or X9 depending on the TCB. It contains MISSING for CICS 3.2.1. |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| AMAXTASK_LIMIT     |     | INTEGER   | AMXT value. From DSGAMXTL. This is valid for CICS TS Version 2.1 and later. This is valid for CICS TS Version 2.1 and later.                       |
| AMAXTASK_PEAK      |     | INTEGER   | Peak value of the current number of user tasks eligible for dispatching. From DSGAMXTP. This is valid for CICS TS Version 2.1 and later.           |
| CPU_SEC            |     | FLOAT     | Accumulated processor time used by this TCB when executing the default dispatcher task, in seconds. From DSGTCT.                                   |
| DISPATCHER_START   |     | TIMESTAMP | Time (GMT) when the dispatcher started. It is the approximate time when CICS started. From DSGSTART.   |
| DISPATCHER_START_L |     | TIMESTAMP | Local time when the dispatcher started. It is the approximate time when CICS started. For CICS V4 and later. From DSGLSTRT.                        |
| ELAPS_JSTEP_SEC    |     | REAL      | Total CPU time for all TCBs in this address space, accumulated during the interval. From DSGJEST.  |
| ICVR_MSEC          |     | INTEGER   | This is the current ICVR time. From DSGICVRT.  |
| LAST_RESET_TIME    |     | TIMESTAMP | Last time all resettable values in this table were reset to zero. From DSGLRT. This is valid for CICS TS Version 2.1 and later.                    |
| MAX_WAITS          |     | REAL      | MAXOPENTCBs value specified in the SIT, or as an override, or changed dynamically. From DSGMAXOP. This is valid for CICS TS Version 2.1 and later. |
| MAXTASK_LIMIT      |     | INTEGER   | MXT value. From DSGTL. This is valid for CICS TS Version 2.1 and later.  |
| MAXTASK_REACHED    |     | INTEGER   | Number of times the MXT value has been reached. From DSGTAMXT. This is valid for CICS TS Version 2.1 and later.                                    |
| MVS_DISPATCH_SEC   |     | FLOAT     | Time that this TCB was dispatched, in seconds. From DSGTDT.  |
| MVS_WAITS          |     | FLOAT     | Number of MVS waits on this TCB. From DSGSYSW.   |
| MVS_WAIT_SEC       |     | FLOAT     | Time that this TCB was in an MVS wait, in seconds. From DSGTWT.  |
| PEAK_NO_TCB_USED   |     | REAL      | Peak number of TCB used. From DSGTCBUP.  |
| PEAK_TCB_ATTACHS   |     | REAL      | Peak value of the number of MVS TCBs attached in this CICS dispatcher TCB mode. From DSGTCBPA.   |
| SRB_CPU_SEC        |     | REAL      | Total CPU time for all service request blocks (SRB) executed in this address space, accumulated during the interval. From DSGSRBT.                 |
| PROCESSOR_USE_PCT  |     | INTEGER   | Maximum percentage use of the processor for this TCB since the start of CICS. From DSGPERCT. This is valid for CICS TS Version 2.1 and later.      |
| TASKS_PEAK         |     | INTEGER   | Peak value of the number of tasks in the system. From DSGPNT.  |
| TCB_ALL_TO_TASK    |     | REAL      | TCB allocates to task. From DSGTCBAL.  |
| TCB_ATTACHS        |     | REAL      | Current number of MVS TCBs attached in this CICS dispatcher TCB mode. From DSGTCBCA.   |
| TCB_CPU_SEC        |     | FLOAT     | Accumulated processor time for this TCB since CICS startup, in seconds. From DSGACT.   |
| TCB_DET_EXCESS     |     | REAL      | Number of exceeding TCB detached. From DSGTCBDE.   |
| TCB_DETACHES       |     | REAL      | Current number of MVS TCBs detached in this CICS dispatcher TCB mode. From DSGTCBDS+DSGTCBDO+DSGTCBST.   |
| TCB_MISMATCH       |     | REAL      | Number of TCB mismatches. From DSGNTCBM.   |

| Column name  | Key | Data type | Description  |
|--------------|-----|-----------|--|
| TCB_STEALS   |     | REAL      | Current number of MVS TCBs that have been stolen from other TCBs. From DSGTCBST. |
| TCB_USED_CUR |     | REAL      | TCB used current. From DSGTCBUC.   |

## CICS\_S\_DLI\_T

This table provides detailed data for each DL/I database. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                              |
| DBD_NAME           | K   | CHAR(8)   | Database name. From A18FNAM if Resource Statistics (STID=70), GLOBAL if Global Statistics (STID=71).   |
| DBRC_REGISTRATION  |     | CHAR(4)   | DBRC registration indicator. From A18IODR. Value is YES if the database is registered, NO if not registered, and UNK if no PSB has yet been scheduled. |
| DELETE_REQ         |     | INTEGER   | Number of delete requests. From A18EDLT.   |
| ERRORS_GLOBAL      |     | INTEGER   | Number of EEQEs across all subsystems that use this database. Valid if DBRC_REGISTRATION = YES. From A18IOTG.  |
| ERRORS_LOCAL       |     | INTEGER   | Number of extended error queue elements (EEQEs) created for this database. From A18IOTL.   |
| ERRORS_LOCAL_READ  |     | INTEGER   | Number of read EEQEs created for this database. From A18IORL.  |
| GET_HOLD_NEXT_PAR  |     | INTEGER   | Number of get hold next in parent requests against the physical database. From A18EGHNP.   |
| GET_HOLD_NEXT_REQ  |     | INTEGER   | Number of get hold next requests processed against the physical database. From A18EGHN.  |
| GET_HOLD_UNIQUE_RQ |     | INTEGER   | Number of get hold unique requests processed against the physical database. From A18EGHU.  |
| GET_NEXT_PARENT_RQ |     | INTEGER   | Number of get next in parent requests processed against the physical database. From A18EGNP.   |
| GET_NEXT_REQ       |     | INTEGER   | Number of get next requests processed against the physical database. From A18EGN.  |
| GET_UNIQUE_REQ     |     | INTEGER   | Number of get unique requests processed against the physical database. From A18EGU.  |
| IMS_VERSION_FLAG   |     | CHAR(4)   | IMS version flag. From A18IMSVR.   |
| INSERT_REQ         |     | INTEGER   | Number of insert requests. From A18EISR.   |
| POOL_DMB_PEAK      |     | INTEGER   | Peak number of bytes used from the DMB pool. From A18DMBMU.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| POOL_DMB_SIZE_BYTE |     | INTEGER   | Maximum number of bytes in the DMB pool. From A18DMBMS.  |
| POOL_DMB_WAITS     |     | INTEGER   | Number of times a DMB pool request exceeded the number of bytes available in the pool. From A18DMBEX.                          |
| POOL_ENQ_PEAK      |     | INTEGER   | Peak number of bytes used from the ENQ pool during the entire CICS session. From A18ENQMU.                                     |
| POOL_ENQ_SIZE_BYTE |     | INTEGER   | Maximum number of bytes in the ENQ pool. From A18ENQMS.  |
| POOL_PSB_PEAK      |     | INTEGER   | Peak number of bytes used from the PSB pool. From A18PSBMU.  |
| POOL_PSB_SIZE_BYTE |     | INTEGER   | Maximum number of bytes in the PSB pool. From A18PSBMS.  |
| POOL_PSB_WAITS     |     | INTEGER   | Number of times a PSB pool request exceeded the number of bytes available in the pool. From A18PSBEX.                          |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT. |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| REPLACE_REQ        |     | INTEGER   | Number of replace requests. From A18EREP.  |
| REQUESTS           |     | INTEGER   | Number of calls on the database. From A18LTOT.   |
| THREADS            |     | INTEGER   | Maximum number of threads, specified in the DLTHRED SIT parameter. From A18THRDS.  |
| THREADS_IN_USE     |     | INTEGER   | Number of DL/I threads currently in use. From A18THRDA.  |
| THREADS_USED_PEAK  |     | INTEGER   | Peak number of DL/I threads used during the entire CICS session. From A18THRDM.  |
| THREADS_WAITS      |     | INTEGER   | Number of times a DL/I thread was waiting during the entire CICS session. From A18THRDW.                                       |

## CICS\_S\_DLI\_D

This table provides daily data for each DL/I database. It contains consolidated data from the CICS\_S\_DLI\_T table.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DBD_NAME       | K   | CHAR(8)   | Database name. From A18FNAM if Resource Statistics (STID=70), GLOBAL if Global Statistics (STID=71).                                    |
| DELETE_REQ     |     | INTEGER   | Number of delete requests. From A18EDLT.  |
| ERRORS_GLOBAL  |     | INTEGER   | Number of EEQEs across all subsystems that use this database. Valid if DBRC_REGISTRATION = YES. From A18IOTG.                           |

## CICS statistics component data tables

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| ERRORS_LOCAL       |     | INTEGER   | Number of extended error queue elements (EEQEs) created for this database. From A18IOTL.   |
| ERRORS_LOCAL_READ  |     | INTEGER   | Number of read EEQEs created for this database. From A18IORL.  |
| GET_HOLD_NEXT_PAR  |     | INTEGER   | Number of get hold next in parent requests against the physical database. From A18EGHNP.   |
| GET_HOLD_NEXT_REQ  |     | INTEGER   | Number of get hold next requests processed against the physical database. From A18EGHN.  |
| GET_HOLD_UNIQUE_RQ |     | INTEGER   | Number of get hold unique requests processed against the physical database. From A18EGHU.  |
| GET_NEXT_PARENT_RQ |     | INTEGER   | Number of get next in parent requests processed against the physical database. From A18EGNP.   |
| GET_NEXT_REQ       |     | INTEGER   | Number of get next requests processed against the physical database. From A18EGN.  |
| GET_UNIQUE_REQ     |     | INTEGER   | Number of get unique requests processed against the physical database. From A18EGU.  |
| INSERT_REQ         |     | INTEGER   | Number of insert requests. From A18EISR.   |
| POOL_DMB_PEAK      |     | INTEGER   | Peak number of bytes used from the DMB pool. From A18DMBMU.  |
| POOL_DMB_SIZE_BYTE |     | INTEGER   | Maximum number of bytes in the DMB pool. From A18DMBMS.  |
| POOL_DMB_WAITS     |     | INTEGER   | Number of times a DMB pool request exceeded the number of bytes available in the pool. From A18DMBEX.  |
| POOL_ENQ_PEAK      |     | INTEGER   | Peak number of bytes used from the ENQ pool during the entire CICS session. From A18ENQMU.   |
| POOL_ENQ_SIZE_BYTE |     | INTEGER   | Maximum number of bytes in the ENQ pool. From A18ENQMS.  |
| POOL_PSB_PEAK      |     | INTEGER   | Peak number of bytes used from the PSB pool. From A18PSBMU.  |
| POOL_PSB_SIZE_BYTE |     | INTEGER   | Maximum number of bytes in the PSB pool. From A18PSBMS.  |
| POOL_PSB_WAITS     |     | INTEGER   | Number of times a PSB pool request exceeded the number of bytes available in the pool. From A18PSBEX.  |
| RECORDS            |     | INTEGER   | Number of records with a valid value for the number of threads in use.   |
| REPLACE_REQ        |     | INTEGER   | Number of replace requests. From A18EREP.  |
| REQUESTS           |     | INTEGER   | Number of calls on the database. From A18LTOT.   |
| THREADS            |     | INTEGER   | Maximum number of threads, specified in the DLTHRED SIT parameter. From A18THRDS.  |
| THREADS_IN_USE     |     | INTEGER   | Total number of DL/I threads in use. This is a work field. Divide by RECORDS to get the average number of current threads in use. From A18THRDA. |
| THREADS_USED_PEAK  |     | INTEGER   | Peak number of DL/I threads used during the entire CICS session. From A18THRDM.  |
| THREADS_WAITS      |     | INTEGER   | Number of times a DL/I thread was waiting during the entire CICS session. From A18THRDW.   |

## CICS\_S\_DSPPOOL\_T

This table provides detailed data from the dispatcher TCB pool statistic section. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TCB_POOL_NUM       | K   | INTEGER   | TCB Pool Number. From DSGTPOON.   |
| CUR_MISM_WAIT      |     | REAL      | Current Mismatch Waits. From DSGCUMIW.  |
| CUR_NUM_TASK       |     | REAL      | Current num of task wait for a TCB. From DSGCURWA.  |
| CUR_TCB_ATTACH     |     | REAL      | Current TCBs attached. From DSGCURAT.   |
| CUR_TCB_IN_USE     |     | REAL      | Current TCBs in use. From DSGCURUS.   |
| CUR_WAIT_TIME      |     | CHAR(8)   | Current waiting time. From DSGCUWAT.  |
| DISPATCHER_START   |     | TIMESTAMP | Time (GMT) when the dispatcher started. It is the approximate time when CICS started. From DSGSTART.                                    |
| DISPATCHER_START_L |     | TIMESTAMP | Local time when the dispatcher started. It is the approximate time when CICS started. For CICS V4 and later. From DSGLSTRT.             |
| ELAPS_JSTEP_SEC    |     | REAL      | Total CPU time for all TCBs in this address space, accumulated during the interval. From DSGJEST.                                       |
| ICVT_MSEC          |     | INTEGER   | ICV time, in milliseconds. From DSGICVT.  |
| MAX_TCB_POOL_LIM   |     | REAL      | Max TCB Pool Limiter. From DSGMAXPT.  |
| MISM_WAIT_TIME     |     | CHAR(8)   | Mismatch Wait Time. From DSGPOMIT.  |
| MVS_REQS_TOT       |     | FLOAT     | The total number of MVS storage requests. From DSGTOTMW.  |
| MVS_REQS_TIME_TOT  |     | FLOAT     | The total time spent in MVS storage waits. From DSGTOTMT.   |
| NO_MAX_TCB_LIM     |     | REAL      | Number of times at Max TCB pool limit. From DSGTPOOL.   |
| NO_TCB_MISMATCH    |     | REAL      | Number of TCB Mismatch Waits. From DSGPOMIW.  |
| NUM_WAIT_TCB_LIM   |     | REAL      | Total number of waits Max TCB pool limit. From DSGTOTLI.  |
| PEAK_MISM_WAIT     |     | REAL      | The peak mismatch wait. From DSGPEMIW.  |
| PEAK_NUM_TASK      |     | REAL      | Peak number of task wait for a TCB. From DSGPEAWA.  |
| PEAK_TCB_ATTAC     |     | REAL      | Peak TCBs attached. From DSGPEAAT.  |
| PEAK_TCB_IN_USE    |     | REAL      | Peak TCBs in use. From DSGPEAUS.  |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record. Example: 0330. From SMFSTRVN.  |
| SRB_CPU_SEC        |     | REAL      | Total CPU time for all service request blocks (SRB) executed in this address space, accumulated during the interval. From DSGSRBT.      |

## CICS statistics component data tables

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| WAIT_MAX_TCB_LIM |     | CHAR(8)   | Total Wait time at Max TCB pool limit. From DSGTOWAL. |

### CICS\_S\_DSPPOOL\_D

This table provides daily user DRLFPROF data from the dispatcher TCB pool statistic section. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TCB_POOL_NUM       | K   | INTEGER   | TCB Pool Number. From DSGTPOON.   |
| CUR_MISM_WAIT      |     | REAL      | Current Mismatch Waits. From DSGCUMIW.  |
| CUR_MISM_WAIT_T    |     | CHAR(8)   | Current Mismatch Wait Time. From DSGCUMIT.  |
| CUR_NUM_TASK       |     | REAL      | Current number of task wait for a TCB. From DSGCURWA.   |
| CUR_TCB_ATTACH     |     | REAL      | Current TCBs attached. From DSGCURAT.   |
| CUR_TCB_IN_USE     |     | REAL      | Current TCBs in use. From DSGCURUS.   |
| CUR_WAIT_TIME      |     | CHAR(8)   | Current waiting time. From DSGCUWAT.  |
| DISPATCHER_START   |     | TIMESTAMP | Time (GMT) when the dispatcher started. It is the approximate time when CICS started. From DSGSTART.                                    |
| DISPATCHER_START_L |     | TIMESTAMP | Local time when the dispatcher started. It is the approximate time when CICS started. For CICS V4 and later. From DSGLSTRT.             |
| ELAPS_JSTEP_SEC    |     | REAL      | Total CPU time for all TCBs in this address space, accumulated during the interval. From DSGJEST.                                       |
| ICVR_MSEC          |     | INTEGER   | The current ICVR time. From DSGICVRT.   |
| ICVT_MSEC          |     | INTEGER   | ICV time, in milliseconds. From DSGICVT.  |
| MAX_TCB_POOL_LIM   |     | REAL      | Max TCB Pool Limiter. From DSGMAXPT.  |
| MISM_WAIT_TIME     |     | CHAR(8)   | Mismatch Wait Time. From DSGPOMIT.  |
| MVS_REQS_TOT       |     | REAL      | The total number of MVS storage requests. From DSGTOTMW.  |
| MVS_REQS_TIME_TOT  |     | REAL      | The total time spent in MVS storage waits. From DSGTOTMT.   |
| MVS_TCB_P_COUNT    |     | INTEGER   | The current number of TCB pools. From DSGTCPOS.   |
| NO_MAX_TCB_LIM     |     | REAL      | Number of times at Max TCB pool limit. From DSGTPOOL.   |
| NO_TCB_MISMATCH    |     | REAL      | Number of TCB Mismatch Waits. From DSGPOMIW.  |
| NUM_WAIT_TCB_LIM   |     | REAL      | Total number of waits Max TCB pool limit. From DSGTOTLI.  |
| PEAK_MISM_WAIT     |     | REAL      | This is the peak mismatch wait. From DSGPEMIW.  |
| PEAK_NUM_TASK      |     | REAL      | Peak number of task waits for a TCB. From DSGPEAWA.   |
| PEAK_TCB_ATTAC     |     | REAL      | Peak TCBs attached. From DSGPEAAT.  |

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| PEAK_TCB_IN_USE  |     | REAL      | Peak TCBs in use. From DSGPEAUS.   |
| SRB_CPU_SEC      |     | REAL      | Total CPU time for all service request blocks (SRB) executed in this address space, accumulated during the interval. From DSGSRBT. |
| WAIT_MAX_TCB_LIM |     | CHAR(8)   | Total Wait time at Max TCB pool limit. From DSGTOWAL.  |

## CICS\_S\_DUMP\_T

This table provides detailed CICS dump statistics. It maps the system and transaction dump statistics at the specific (not global) level. For CICS/ESA and CICS/TS, this maps the DFHSDGDS, DFHSDRDS, DFHTDGDS, and DFHTDRDS records.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From START.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| SYSTEM_OR_TRANSACT | K   | CHAR(8)   | System or transaction dump. It contains SYSTEM if STID=85 and TRANSACT if STID=88.  |
| DUMP_CODE          | K   | CHAR(8)   | Dump code. From SDRCODE if STID=85 and from TDRCODE if STID=88.   |
| DUMPS              |     | INTEGER   | Number of dumps. From TDRTTKN (for transaction dumps) or from SDRSTKN (for system dumps).   |
| DUMPS_DUE2T        |     | INTEGER   | Number of system dumps forced by transaction dumps. From TDRSTKN. This is always zero for system dumps.                                 |
| DUMPS_DUE2T_SUPPR  |     | INTEGER   | Number of suppressed system dumps that were forced by transaction dumps. From TDRSSUPR. This is always zero for system dumps.           |
| DUMPS_SUPPR        |     | INTEGER   | Number of dumps suppressed. From TDRTSUPR (for transaction dumps) or SDRSSUPR (for system dumps).                                       |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |

## CICS\_S\_DUMP\_D

This table provides daily CICS dump statistics. It maps the system and transaction dump statistics at the specific (not global) level. It contains summarized data from the CICS\_S\_DUMP\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From START.   |
| PERIOD_NAME        | K   | CHAR(8)   | Derived from fields SMFSTSID, SMFSTDTE and SMFSTTME using the PERIOD function   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                 |
| SYSTEM_OR_TRANSACT | K   | CHAR(8)   | System or transaction dump. It contains "SYSTEM" if STID=85 and "TRANSACT" if STID=88.  |
| DUMP_CODE          | K   | CHAR(8)   | Dump code. From SDRCODE if STID=85 and from TDRCODE if STID=88.   |
| DUMPS              |     | INTEGER   | Number of dumps. From TDRTTKN (for transaction dumps) or from SDRSTKN (for system dumps).                                     |
| DUMPS_DUE2T        |     | INTEGER   | Number of system dumps forced by transaction dumps. From TDRSTKN. This is always zero for system dumps.                       |
| DUMPS_DUE2T_SUPPR  |     | INTEGER   | Number of suppressed system dumps that were forced by transaction dumps. From TDRSSUPR. This is always zero for system dumps. |
| DUMPS_SUPPR        |     | INTEGER   | Number of dumps suppressed. From TDRTSUPR (for transaction dumps) or SDRSSUPR (for system dumps).                             |

### CICS\_S\_ENQUE\_MGR\_T

This table provides detailed CICS Enqueue Manager statistics. For CICS/TS V1.1 and later, this maps the DFHNQGDS record.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| ENQ_POOL_ID       | K   | CHAR(8)   | Enqueue pool ID. From NQGNPOOL for CICS/TS V1.1.  |
| ENQ_ISSUED        |     | FLOAT     | Total number of enqueue requests issued. From NQGTNQSI for CICS/TS V1.1.  |
| ENQ_RETN_TOT      |     | FLOAT     | Total number of enqueue requests that were retained due to the owning UOW being shunted. From NQGTNQSR for CICS/TS V1.1.                |
| ENQ_RETN_TOT_TIME |     | FLOAT     | Total retention time for the enqueue requests that were retained due to the owning UOW being shunted. From NQGTNQRT for CICS/TS V1.1.   |
| ENQ_RETN_CUR      |     | FLOAT     | Current number of enqueue requests that are retained. From NQGCNQSR for CICS/TS V1.1.   |
| ENQ_RETN_CUR_TIME |     | FLOAT     | Current enqueue retention time. From NQGCNQRT for CICS/TS V1.1.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| ENQ_SYS_WAITED     |     | FLOAT     | Total number of sysplex enqueue requests that had waited due to enqueues being held. From NQGGNQSW.  |
| ENQ_SYS_WAITED_TM  |     | FLOAT     | Total waiting time for the sysplex enqueue requests that waited (NQGGNQSW). From NQGGNQST.   |
| ENQ_SYS_WAITING    |     | FLOAT     | Current number of sysplex enqueues that are waiting. From NQGSNQSW.  |
| ENQ_SYS_WAITING_TM |     | FLOAT     | Total waiting time for the sysplex enqueues that are currently waiting (NQGSNQSW). From NQGSNQWT.  |
| ENQ_WAIT_REQ       |     | FLOAT     | Current number of enqueue requests that are waiting. From NQGCNQSW for CICS/TS V1.1.   |
| ENQ_WAIT_REQ_TIME  |     | FLOAT     | Total waiting time for the enqueue requests that are currently waiting due to the enqueue being held by another transaction. From NQGCNQWT for CICS/TS V1.1.   |
| ENQ_WAITED         |     | FLOAT     | Total number of enqueue requests that have waited due to the enqueues being held. This value is a subset of the total number of enqueue requests (NQGTNQSI). From NQGTNQSW for CICS/TS V1.1.   |
| ENQ_WAITED_TIME    |     | FLOAT     | Total waiting time for the enqueue requests that waited. From NQGTNQWT.  |
| TOT_REJECT_ENQBUSY |     | FLOAT     | Total number of enqueue requests that were immediately rejected due to the enqueue being busy (ENQBUSY response). This value is a subset of the total number of enqueue requests (NQGTNQSI). From NQGTIRJB for CICS/TS V1.1.           |
| TOT_REJECT_ENQRETN |     | FLOAT     | Total number of enqueue requests that were immediately rejected due to the enqueue being in a retained state. This value is a subset of the total number of enqueue requests (NQGTNQSI). From NQGTIRJR for CICS/TS V1.1.               |
| TOT_WAITREJ_RETAIN |     | FLOAT     | Total number of waiting enqueue requests that were rejected due to the required enqueue moving into a retained state. This value is a subset of the number of enqueue requests that waited (NQGTNQSW). From NQGTWRJR for CICS/TS V1.1. |
| TOT_WAITPURGE_OPER |     | FLOAT     | Total number of waiting enqueue requests that were rejected due to the operator purging the waiting transaction. This value is a subset of the number of enqueue requests that waited (NQGTNQSW). From NQGTWPOP for CICS/TS V1.1.      |
| TOT_WAITPURGE_TOUT |     | FLOAT     | Total number of waiting enqueue requests that were rejected due to the timeout value (DTIMEOUT) being exceeded. This value is a subset of the number of enqueue requests that waited (NQGTNQSW). From NQGTWPTO for CICS/TS V1.1.       |

## CICS\_S\_ENQUE\_MGR\_D

This table provides daily CICS Enqueue Manager statistics. For CICS/TS V1.1 and later, this maps the DFHNQGDS record.

The default retention period for this table is 30 days.

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| DATE          | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME   | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| ENQ_POOL_ID        | K   | CHAR(8)   | Enqueue pool ID. From NQGNPOOL for CICS/TS V1.1.   |
| ENQ_ISSUED         |     | FLOAT     | Total number of enqueue requests issued. From NQGTNQSI for CICS/TS V1.1.   |
| ENQ_RETN_TOT       |     | FLOAT     | Total number of enqueue requests that were retained due to the owning UOW being shunted. From NQGTNQSR for CICS/TS V1.1.   |
| ENQ_RETN_TOT_TIME  |     | FLOAT     | Total retention time for the enqueue requests that were retained due to the owning UOW being shunted. From NQGTNQRT for CICS/TS V1.1.  |
| ENQ_RETN_CUR       |     | FLOAT     | Current number of enqueue requests that are retained. From NQGCNQSR for CICS/TS V1.1.  |
| ENQ_RETN_CUR_TIME  |     | FLOAT     | Current enqueue retention time. From NQGCNQRT for CICS/TS V1.1.  |
| ENQ_SYS_WAITED     |     | FLOAT     | Total number of sysplex enqueue requests that had waited due to enqueues being held. From NQGGNQSW.  |
| ENQ_SYS_WAITED_TM  |     | FLOAT     | Total waiting time for the sysplex enqueue requests that waited (NQGGNQSW). From NQGGNQST.   |
| ENQ_SYS_WAITING    |     | FLOAT     | Current number of sysplex enqueues that are waiting. From NQGSNQSW.  |
| ENQ_SYS_WAITING_TM |     | FLOAT     | Total waiting time for the sysplex enqueues that are currently waiting (NQGSNQSW). From NQGSNQWT.  |
| ENQ_WAIT_REQ       |     | FLOAT     | Current number of enqueue requests that are waiting. From NQGCNQSW for CICS/TS V1.1.   |
| ENQ_WAIT_REQ_TIME  |     | FLOAT     | Total waiting time for the enqueue requests that are currently waiting due to the enqueue being held by another transaction. From NQGCNQWT for CICS/TS V1.1.   |
| ENQ_WAITED         |     | FLOAT     | Total number of enqueue requests that have waited due to the enqueues being held. This value is a subset of the total number of enqueue requests (NQGTNQSI). From NQGTNQSW for CICS/TS V1.1.   |
| ENQ_WAITED_TIME    |     | FLOAT     | Total waiting time for the enqueue requests that waited. From NQGTNQWT.  |
| TOT_REJECT_ENQBUSY |     | FLOAT     | Total number of enqueue requests that were immediately rejected due to the enqueue being busy (ENQBUSY response). This value is a subset of the total number of enqueue requests (NQGTNQSI). From NQGTIRJB for CICS/TS V1.1.           |
| TOT_REJECT_ENQRETN |     | FLOAT     | Total number of enqueue requests that were immediately rejected due to the enqueue being in a retained state. This value is a subset of the total number of enqueue requests (NQGTNQSI). From NQGTIRJR for CICS/TS V1.1.               |
| TOT_WAITREJ_RETAIN |     | FLOAT     | Total number of waiting enqueue requests that were rejected due to the required enqueue moving into a retained state. This value is a subset of the number of enqueue requests that waited (NQGTNQSW). From NQGTWRJR for CICS/TS V1.1. |
| TOT_WAITPURGE_OPER |     | FLOAT     | Total number of waiting enqueue requests that were rejected due to the operator purging the waiting transaction. This value is a subset of the number of enqueue requests that waited (NQGTNQSW). From NQGTWPOP for CICS/TS V1.1.      |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TOT_WAITPURGE_TOUT |     | FLOAT     | Total number of waiting enqueue requests that were rejected due to the timeout value (DTIMEOUT) being exceeded. This value is a subset of the number of enqueue requests that waited (NQGTNQSW). From NQGTWPTO for CICS/TS V1.1. |

## CICS\_S\_ENTBEANS\_T,\_D

This tables provides detailed data about resources used for each bean. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention periods for these tables are:

7 days for CICS\_S\_ENTBEANS\_T

30 days for CICS\_S\_ENTBEANS\_D

| Column name        | Key | Data type    | Description   |
|--------------------|-----|--------------|---|
| DATE               | K   | DATE         | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)      | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME         | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFSTPRN.       |
| EJB_CORBASERVER_NM | K   | CHAR(4)      | Name of the CorbaServer in which the bean is installed. From EJBCORBASVNM.  |
| EJB_BEAN_NM        | K   | VARCHAR(222) | Name of the bean. From EJBBEANNAME.   |
| EJB_ACT_COUNT      |     | FLOAT        | Number of times a bean of this type has been activated. From EJBACTINUM.  |
| EJB_CREATES_COUNT  |     | FLOAT        | Number of times a bean of this type has been created. From EJBCREATES.  |
| EJB_DJAR_NM        |     | CHAR(32)     | Name of the DJar from which this bean originated. From EJBDJARNAME.   |
| EJB_METCALLS_COUNT |     | FLOAT        | Number of times a remote method call has been invoked against a bean of this type. From EJBMETHODCAL.                                   |
| EJB_PASS_COUNT     |     | FLOAT        | Number of times a bean of this type has been passivated. From EJBPASSNUM.   |
| EJB_REMOVES_COUNT  |     | FLOAT        | Number of times a bean of this type has been removed. From EJBREMOVES.  |

## CICS\_S\_FEPI\_T

This table provides detailed statistics for the CICS Front End Programming Interface (FEPI). It contains data about the use of each FEPI pool, a target in any pool, and each connection. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| POOL_NAME          | K   | CHAR(8)   | FEPI pool name. From A22POOL, A23POOL or A24POOL.   |
| TARGET_NAME        | K   | CHAR(8)   | FEPI target pool name. From A23TARG or A24TARG.   |
| NODE_NAME          | K   | CHAR(8)   | FEPI node. From A23NODE.  |
| VTAM_APPL_ID       | K   | CHAR(8)   | This is the VTAM applid for the target. From A24APPL.   |
| ALLOC_COUNT        |     | INTEGER   | Number of conversations that have been allocated from this pool, or the number of conversations specifically allocated to this target in this pool. From A22ALLOC or A24ALLOC.                        |
| ALLOC_PEAK         |     | INTEGER   | Peak number of concurrent conversations allocated from this pool. From A22PKALL.  |
| ALLOC_TIMEOUT_CNT  |     | INTEGER   | Number of conversation allocates that timed out in this pool, or the number of conversation allocates to this target in this pool that timed out. From A22TIOUT or A24TIOUT.                          |
| ALLOC_WAIT_COUNT   |     | INTEGER   | Current number of conversations waiting to be allocated in this pool, or the number of current conversations waiting to be allocated to this target in this pool. From A22WAIT or A24WAIT.            |
| ALLOC_WAIT_PEAK    |     | INTEGER   | Peak number of conversations that had to wait to be allocated in this pool or the peak number of conversations that had to wait to be allocated to this target in this pool. From A22PKWT or A24PKWT. |
| ALLOC_WAIT_TOTAL   |     | INTEGER   | Number of conversations that had to wait to be allocated in this pool, or the number of conversations that had to wait to be allocated to this target in this pool. From A22TOTWT or A24TOTWT.        |
| CHARS_RECEIVED_CNT |     | INTEGER   | Number of characters of data received on this connection. From A23CHIN.   |
| CHARS_SENT_CNT     |     | INTEGER   | Number of characters of data sent on this connection. From A23CHOUT.  |
| CONN_ACQUIRE_CNT   |     | INTEGER   | Number of times the connection was acquired. From A23ACQ.   |
| CONN_CONV_USE_CNT  |     | INTEGER   | Number of conversations that have used this connection. From A23CNV.  |
| CONNECTION_COUNT   |     | INTEGER   | Number of connections in the pool. From A22CONCT.   |
| CONNECTION_PEAK    |     | INTEGER   | Peak number of connections in the pool. This column is needed because targets and nodes may be deleted between intervals. From A22CONPK.  |
| ERROR_COUNT        |     | INTEGER   | Number of VTAM error conditions raised for this connection. From A23ERROR.  |
| NODE_COUNT         |     | INTEGER   | Current number of nodes in the pool or number of nodes connected to this target. From A22NDCT or A24NDCT.   |
| RECEIVE_TO_CNT     |     | INTEGER   | Number of times a FEPI RECEIVE timed-out on this connection. From A23RTOUT.   |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT. |
| RECORD_VERSION    |     | CHAR(4)   | CICS version and release that wrote this record; for example, 0410. From SMFSTRVN.   |
| TARGET_COUNT      |     | INTEGER   | Current number of targets in the pool. From A22TRGCT.  |
| UNSOL_INPUT_CNT   |     | INTEGER   | Number of times unsolicited input was received on this connection. From A23USI.  |

## CICS\_S\_FEPI\_D

This table provides daily statistics for the CICS Front End Programming Interface (FEPI). It contains data about the use of each FEPI pool, a target in any pool, and each connection. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| POOL_NAME          | K   | CHAR(8)   | FEPI pool name. From A22POOL, A23POOL or A24POOL.  |
| TARGET_NAME        | K   | CHAR(8)   | FEPI target pool name. From A23TARG or A24TARG.  |
| NODE_NAME          | K   | CHAR(8)   | FEPI node. From A23NODE.   |
| VTAM_APPL_ID       | K   | CHAR(8)   | VTAM applid for the target. From A24APPL.  |
| ALLOC_COUNT        |     | INTEGER   | Number of conversations that have been allocated from this pool, or the number of conversations specifically allocated to this target in this pool. From A22ALLOC or A24ALLOC.                         |
| ALLOC_PEAK         |     | INTEGER   | Peak number of concurrent conversations allocated from this pool. From A22PKALL.   |
| ALLOC_TIMEOUT_CNT  |     | INTEGER   | Number of conversation allocates that timed out in this pool, or the number of conversation allocates to this target in this pool that timed out. From A22TIOUOT or A24TIOUOT.                         |
| ALLOC_WAIT_PEAK    |     | INTEGER   | Peak number of conversations that had to wait to be allocated in this pool, or the peak number of conversations that had to wait to be allocated to this target in this pool. From A22PKWT or A24PKWT. |
| ALLOC_WAIT_TOTAL   |     | INTEGER   | Number of conversations that had to wait to be allocated in this pool, or the number of conversations that had to wait to be allocated to this target in this pool. From A22TOTWT or A24TOTWT.         |
| CHARS_RECEIVED_CNT |     | INTEGER   | Number of characters of data received on this connection. From A23CHIN.  |
| CHARS_SENT_CNT     |     | INTEGER   | Number of characters of data sent on this connection. From A23CHOUT.   |

## CICS statistics component data tables

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| CONN_ACQUIRE_CNT  |     | INTEGER   | Number of times the connection was acquired. From A23ACQ.  |
| CONN_CONV_USE_CNT |     | INTEGER   | Number of conversations that have used this connection. From A23CNV.   |
| CONNECTION_PEAK   |     | INTEGER   | This is the peak number of connections in the pool. This column is needed because targets and nodes may be deleted between intervals. From A22CONPK. |
| ERROR_COUNT       |     | INTEGER   | Number of VTAM error conditions raised for this connection. From A23ERROR.   |
| RECEIVE_TO_CNT    |     | INTEGER   | Number of times a FEPI RECEIVE timed-out on this connection. From A23RTOUT.  |
| UNSOL_INPUT_CNT   |     | INTEGER   | Number of times unsolicited input was received on this connection. From A23USI.  |

## CICS\_S\_FILE\_T

This table provides detailed file statistics. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| EXCL_CNTL_CONF     |     | FLOAT     | Is the No. Exclusive Control conflicts. From A17FCXCC.  |
| FILE_NAME          | K   | CHAR(8)   | Name of the file. From A17FNAM.   |
| ADD_REQUESTS       |     | INTEGER   | Number of PUT requests issued. From A17DSWRA.   |
| BASE_DATASET_NAME  |     | CHAR(44)  | Base data set name for VSAM paths. For CICS V4 and later. From A17BDSNM.  |
| BROWSE_REQUESTS    |     | INTEGER   | Number of GETNEXT and GETPREV requests issued. From A17DSBR.  |
| BRWS_UPD_REQUESTS  |     | FLOAT     | Number of browse READNEXT and READPREV requests issued against this file. Note that this field is only applicable to RLS accessed files. For CICS/TS V1.1 and later. From A17DSBRU.     |
| CICS_SYSTEM_ID_REM |     | CHAR(4)   | When operating in an ISC or MRO environment, and the file is held by a remote system, this column specifies the system where the file is resident. For CICS V4 and later. From A17RSYS. |
| CFDT_POOL_NAME     |     | CHAR(8)   | Coupling facility data table (CFDT) pool name. From A17DTCFP.   |
| DATA_BUFF_CNT      |     | INTEGER   | Number of buffers to be used for data. For CICS V4 and later. From A17DSDNB.  |
| DATASET_NAME       |     | CHAR(44)  | 44-character data set name, or blank if no data set is allocated. From A17DSNAM.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATASET_TYPE       |     | CHAR(1)   | This is the data set type. B=BDAM, E=VSAM ESDS, K=VSAM KSDS, R=VSAM RRDS and P=VSAM PATH. For CICS V4 and later. From A17DSTYP.  |
| DELETE_REQ_LOCAL   |     | INTEGER   | Number of DELETE requests against this local file. From A17DSDEL.  |
| DELETE_REQ_REMOTE  |     | INTEGER   | Number of DELETE requests for a VSAM file in a remote system. From A17RMDEL.   |
| FILE_CLOSED_TIME   |     | TIME      | Local time when the file was closed. From A17CLOST.  |
| FILE_CLOSE_GMT     |     | TIME      | GMT time, in hh:mm:ss format, when this file was closed. Set to 00:00:00 if not closed. For CICS V4 and later. From A17GCLST.  |
| FILE_CLOSE_TIME    |     | TIME      | Local time, in hh:mm:ss format, when this file was closed. Set to 00:00:00 if not closed. For CICS V4 and later. From A17LCLST.  |
| FILE_NAME_REMOTE   |     | CHAR(8)   | Name by which this file is known in the system or region in which it is resident. For CICS V4 and later. From A17RNAME.  |
| FILE_OPENED_TIME   |     | TIME      | Local time when the file was opened. From A17OPENT.  |
| FILE_OPEN_GMT      |     | TIME      | GMT time, in hh:mm:ss format, when this file was opened. Set to 00:00:00 if not opened. For CICS V4 and later. From A17GOPNT.  |
| FILE_OPEN_TIME     |     | TIME      | Local time, in hh:mm:ss format, when this file was opened. Set to 00:00:00 if not opened. For CICS V4 and later. From A17LOPNT.  |
| GET_REQUESTS       |     | INTEGER   | Number of GET requests issued. From A17DSRD.   |
| GET_UPDATE_REQ     |     | INTEGER   | Number of GET UPDATE requests issued. From A17DSGU.  |
| INDX_BUFF_CNT      |     | INTEGER   | Number of buffers to be used for index. For CICS V4 and later. From A17DSINB.  |
| LOAD_RESPONSES     |     | FLOAT     | Number of times that a LOADING response was issued. From A17DTLDS.   |
| LOCK_WAITS         |     | FLOAT     | Number of times that it was necessary to WAIT for an already locked name. From A17DTCON.   |
| POOL_NUMBER        |     | INTEGER   | Identity of the local shared resource pool. This value is that specified by the LSRPOOLID operand of the resource definition online DEFINE FILE command. 'N' means that it is not defined in an LSR pool. For CICS V4 and later. From A17POOL. |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.   |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| REMOTE_OR_LOCAL    |     | CHAR(1)   | Set to R if this is a remote file. From A17FLOC.   |
| RLS_FILE_INDICATOR |     | CHAR(1)   | Indicator of whether the file is RLS or not. The value can be <b>R</b> (RLS accessed file) or a blank (non RLS file). For CICS/TS V1.1 and later. From A17DSRLS.   |
| RLS_REQ_TIMEOUTS   |     | FLOAT     | Number of RLS requests to this file that were not serviced in the specified time limit and as a result were terminated. For CICS/TS V1.1 and later. From A17RLSWT.   |
| STORAGE_ALLOC      |     | INTEGER   | Total storage allocated for the data table, in kilobytes. From A17DTALT.   |
| STORAGE_ALLOC_DATA |     | INTEGER   | Storage allocated for the record data. This is valid only if the shared data tables feature is used. From A17DTALD.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| STORAGE_ALLOC_ENT  |     | INTEGER   | Storage allocated for record entry blocks. This is valid only if the shared data tables feature is used. From A17DTALE.   |
| STORAGE_ALLOC_IND  |     | INTEGER   | Storage allocated for the index. This is valid only if the shared data tables feature is used. From A17DTALI.   |
| STORAGE_IN_USE     |     | INTEGER   | Total storage in use for the data table. This is valid only if the shared data tables feature is used. From A17DTUST.   |
| STORAGE_IN_USE_DTA |     | INTEGER   | Storage in use for the record data. This is valid only if the shared data tables feature is used. From A17DTUSD.  |
| STORAGE_IN_USE_ENT |     | INTEGER   | Storage in use for record entry blocks. This is valid only if the shared data tables feature is used. From A17DTUSE.  |
| STORAGE_IN_USE_IND |     | INTEGER   | Storage in use for the index. This is valid only if the shared data tables feature is used. From A17DTUSI.  |
| STRINGS            |     | INTEGER   | Maximum permissible number of concurrent updates. For CICS V4 and later. From A17STRNO.   |
| STRINGS_ACTIVE_CNT |     | INTEGER   | Current number of updates against the file. For CICS V4 and later. From A17DSASC.   |
| STRING_WAITS       |     | INTEGER   | Number of string waits. For CICS V4 and later. From A17DSASW.   |
| TAB_DELETES        |     | INTEGER   | Number of attempts to delete records from the table using DELETE requests. From A17DTDLS.   |
| TAB_FIELDS_PRESENT |     | CHAR(1)   | R-remote file with table read and source read data. S-there is data from an associated table. T-this is a data table. X-there is an associated CICS-maintained data table. From A17DT.                      |
| TAB_READ_REQUESTS  |     | INTEGER   | Number of attempts to retrieve records from the table. From A17DTRDS.   |
| TAB_READ_RETRIES   |     | INTEGER   | Read retries because a file-only region changed the table during the read. This is valid only if the shared data tables feature is used. From A17DTRRS.   |
| TAB_REC_NOT_FOUND  |     | INTEGER   | Number of times READ requests were directed to the source data set because the record was not found in the table. From A17DTRNF.  |
| TAB_RECORDS        |     | INTEGER   | Number of records in the data table. This is valid only if the shared data tables feature is used. From A17DTSIZ.   |
| TAB_RECORDS_PEAK   |     | INTEGER   | Peak number of records in the table. From A17DTSHI.   |
| TAB_REJECTS_EXIT   |     | INTEGER   | Number of records rejected by the global user exit. From A17DTARJ.  |
| TAB_REJECTS_FULL   |     | INTEGER   | Number of records that CICS attempted to add, but was unable to because the table already contained the specified maximum. From A17DTATF.   |
| TAB_REWRITES       |     | INTEGER   | Number of attempts to update records in the table using REWRITE requests. From A17DTRWS.  |
| TAB_STATUS         |     | CHAR(1)   | Unsolicited data only. C-a CICS-maintained table is closed. P-a file closed but table still open. S-a source data set for a user table is being closed. U-a user-maintained table is closed. From A17DTTYP. |
| TAB_WRITE_REQUESTS |     | INTEGER   | Number of attempts to add records to the table using WRITE requests. From A17DTADS.   |
| TAB_WRITES_BY_READ |     | INTEGER   | Number of writes caused by loading or READ requests while loading. From A17DTAVR.   |
| UPDATE_REQUESTS    |     | INTEGER   | Number of PUT UPDATE requests issued. From A17DSWRU.  |
| VSAM_EXCP_REQ_DATA |     | INTEGER   | Number of data I/O operations on this VSAM file. From A17DSXCP.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| VSAM_EXCP_REQ_INDX |     | INTEGER   | Number of index I/O operations on this VSAM file. From A17DSIXP.             |
| WAIT_ON_STRING     |     | INTEGER   | Number of requests queued because all the strings are in use. From A17DSTSW. |
| WAIT_ON_STRNG_PEAK |     | INTEGER   | Peak number of requests that were waiting for a string. From A17DSHSW.       |

## CICS\_S\_FILE\_D

This table provides daily CICS file statistics. It contains consolidated data from the CICS\_S\_FILE\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| FILE_NAME          | K   | CHAR(8)   | Name of the file. From A17FNAM.   |
| ADD_REQUESTS       |     | INTEGER   | Number of PUT requests issued. From A17DSWRA.   |
| BROWSE_REQUESTS    |     | INTEGER   | Number of GETNEXT and GETPREV requests issued. From A17DSBR.  |
| BRWS_UPD_REQUESTS  |     | FLOAT     | Number of browse READNEXT and READPREV requests issued against this file. Note that this field is only applicable to RLS accessed files. For CICS/TS V1.1 and later. From A17DSBRU. |
| CFDT_POOL_NAME     |     | CHAR(8)   | CFDT pool name. From A17DTCFP.  |
| DATA_BUFF_CNT      |     | INTEGER   | Number of buffers to be used for data. For CICS V4 and later. From A17DSDNB.  |
| DELETE_REQ_LOCAL   |     | INTEGER   | Number of DELETE requests against this local file. From A17DSDEL.   |
| DELETE_REQ_REMOTE  |     | INTEGER   | Number of DELETE requests for a VSAM file in a remote system. From A17RMDEL.  |
| EXCL_CNTL_CONF     |     | FLOAT     | Is the No. Exclusive Control conflicts. From A17FCXCC.  |
| GET_REQUESTS       |     | INTEGER   | Number of GET requests issued. From A17DSRD.  |
| GET_UPDATE_REQ     |     | INTEGER   | Number of GET UPDATE requests issued. From A17DSGU.   |
| INDX_BUFF_CNT      |     | INTEGER   | Number of buffers to be used for index. For CICS V4 and later. From A17DSINB.   |
| LOAD_RESPONSES     |     | FLOAT     | Number of times that a LOADING response was issued. From A17DTLDS.  |
| LOCK_WAITS         |     | FLOAT     | Number of times that it was necessary to WAIT for an already locked name. From A17DTCON.  |
| RLS_FILE_INDICATOR |     | CHAR(1)   | Indicator of whether the file is RLS or not. The value can be <b>R</b> (RLS accessed file) or a blank (non RLS file). For CICS/TS V1.1 and later. From A17DSRLS.                    |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| RLS_REQ_TIMEOUTS   |     | FLOAT     | Number of RLS requests to this file that were not serviced in the specified time limit and as a result were terminated. For CICS/TS V1.1 and later. From A17RLSWT. |
| STORAGE_ALLOC      |     | INTEGER   | Total storage allocated for the data table, in kilobytes. From A17DTALT.   |
| STORAGE_ALLOC_DATA |     | INTEGER   | Storage allocated for the record data. This is valid only if the shared data tables feature is used. From A17DTALD.  |
| STORAGE_ALLOC_ENT  |     | INTEGER   | Storage allocated for record entry blocks. This is valid only if the shared data tables feature is used. From A17DTALE.  |
| STORAGE_ALLOC_IND  |     | INTEGER   | Storage allocated for the index. This is valid only if the shared data tables feature is used. From A17DTALI.  |
| STORAGE_IN_USE     |     | INTEGER   | Total storage in use for the data table. This is valid only if the shared data tables feature is used. From A17DTUST.  |
| STORAGE_IN_USE_DTA |     | INTEGER   | Storage in use for the record data. This is valid only if the shared data tables feature is used. From A17DTUSD.   |
| STORAGE_IN_USE_ENT |     | INTEGER   | Storage in use for record entry blocks. This is valid only if the shared data tables feature is used. From A17DTUSE.   |
| STORAGE_IN_USE_ID  |     | INTEGER   | Storage in use for the index. This is valid only if the shared data tables feature is used. From A17DTUSI.   |
| STRINGS            |     | INTEGER   | Maximum permissible number of concurrent updates. For CICS V4 and later. From A17STRNO.  |
| TAB_DELETES        |     | INTEGER   | Number of attempts to delete records from the table using DELETE requests. From A17DTDLS.  |
| TAB_READ_REQUESTS  |     | INTEGER   | Number of attempts to retrieve records from the table. From A17DTRDS.  |
| TAB_READ_RETRIES   |     | INTEGER   | Read retries because a file-only region changed the table during the read. This is valid only if the shared data tables feature is used. From A17DTRRS.            |
| TAB_REC_NOT_FOUND  |     | INTEGER   | Number of times READ requests were directed to the source data set because the record was not found in the table. From A17DTRNF.                                   |
| TAB_RECORDS        |     | INTEGER   | Number of records in the data table. This is valid only if the shared data tables feature is used. From A17DTSIZ.  |
| TAB_RECORDS_PEAK   |     | INTEGER   | Peak number of records in the table. From A17DTSHI.  |
| TAB_REJECTS_EXIT   |     | INTEGER   | Number of records rejected by the global user exit. From A17DTARJ.   |
| TAB_REJECTS_FULL   |     | INTEGER   | Number of records that CICS attempted to add, but was unable to because the table already contained the specified maximum. From A17DTATF.                          |
| TAB_REWRITES       |     | INTEGER   | Number of attempts to update records in the table using REWRITE requests. From A17DTRWS.   |
| TAB_WRITE_REQUESTS |     | INTEGER   | Number of attempts to add records to the table using WRITE requests. From A17DTADS.  |
| TAB_WRITES_BY_READ |     | INTEGER   | Number of writes caused by loading or READ requests whilst loading. From A17DTAVR.   |
| UPDATE_REQUESTS    |     | INTEGER   | Number of PUT UPDATE requests issued. From A17DSWRU.   |
| VSAM_EXCP_REQ_DATA |     | INTEGER   | Number of data I/O operations on this VSAM file. From A17DSXCP.  |
| VSAM_EXCP_REQ_IND  |     | INTEGER   | Number of index I/O operations on this VSAM file. From A17DSIXP.   |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| WAIT_ON_STRING     |     | INTEGER   | Number of requests queued because all the strings are in use. From A17DSTSW. |
| WAIT_ON_STRNG_PEAK |     | INTEGER   | Peak number of requests that were waiting for a string. From A17DSHSW.       |

## CICS\_S\_GLB\_TCPIP\_T

This table provides detailed global statistics on TCP/IP. It contains data from CICS statistics records (SMF 110, subtype 2 std 107). For CICS/TS V3.1 and later, it takes information from the DFHSOGDS CICS dssect.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME. (For _T table only.)  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| SSLCACHE_SETTING   |     | CHAR(8)   | Indicates the setting for the SSLCACHE system initialization parameter, which specifies whether SSL is to use the local or sysplex caching of session ids. Possible values are 'CICS' or 'SYSPLEX'. From SOGSSLCA. |
| MAXSOCKETS         |     | FLOAT     | The maximum number of IP sockets that can be managed by the CICS sockets domain. From SOGMAXSO.  |
| MAXSOCKETS_REACHED |     | FLOAT     | The number of times the maximum number of IP sockets limit (MAXSOCKETS) was reached. From SOGTMXS.   |
| IN SOCK_CUR        |     | FLOAT     | The current number of inbound sockets. From SOGCINSO.  |
| IN SOCK_PEAK       |     | FLOAT     | The peak number of non-persistent outbound sockets. From SOGPOUSO.   |
| OUT SOCK_CUR       |     | FLOAT     | The current number of non-persistent outbound sockets. From SOGCOUSO.  |
| OUT SOCK_PEAK      |     | FLOAT     | The peak number of non-persistent outbound sockets. From SOGPOUSO.   |
| OUT_PSOCK_CUR      |     | FLOAT     | The current number of persistent outbound sockets. From SOGCPUSO.  |
| OUT_PSOCK_PEAK     |     | FLOAT     | The peak number of persistent outbound sockets. From SOGPPUSO.   |
| IN SOCK_CREATED    |     | FLOAT     | The total number of inbound sockets created. From SOGISCR.   |
| OUT SOCK_CREATED   |     | FLOAT     | The total number of outbound sockets created. From SOGOSCR.  |
| OUT SOCK_CLOSED    |     | FLOAT     | The total number of outbound sockets closed. From SOGOSCL.   |
| DLY_AT_MAXSOCKETS  |     | FLOAT     | The number of create socket requests that were delayed because the system had reached the MAXSOCKETS limit. From SOGDMXS.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| MAXSOCK_DLY_TIME   |     | TIME      | The total time that create socket requests were delayed because the system had reached the MAXSOCKETS limit. From SOGQTIMEMAXS.                   |
| TOUT_MAXSOCKETS    |     | FLOAT     | The number of create socket requests that were timed out whilst delayed because the system had reached the MAXSOCKETS limit. From SOGTOMAXS.      |
| TOUT_MAXSOCK_CUR   |     | FLOAT     | The current number of create socket requests delayed because the system is at the MAXSOCKETS limit. From SOGCDELAY.                               |
| TOUT_MAXSOCK_PEAK  |     | FLOAT     | The peak number of create socket requests delayed because the system had reached the MAXSOCKETS limit. From SOGPDELAY.                            |
| MAXSOCK_CURDLY_TIM |     | TIME      | The total delay time for the create socket requests that are currently delayed because the system is at the MAXSOCKETS limit. From SOGCQTIMEMAXS. |

### CICS\_S\_GLB\_TCPIP\_D

This table provides daily global statistics on TCP/IP. It contains data from CICS statistics records (SMF 110, subtype 2 std 107). For CICS/TS V3.1 and later, it takes information from the DFHSOGDS CICS dsect.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME. (For _T table only.)  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| SSLCACHE_SETTING   |     | CHAR(8)   | Indicates the setting for the SSLCACHE system initialization parameter, which specifies whether SSL is to use the local or sysplex caching of session ids. Possible values are 'CICS' or 'SYSPLEX'. From SOGSSLCA. |
| MAXSOCKETS         |     | FLOAT     | The maximum number of IP sockets that can be managed by the CICS sockets domain. From SOGMAXSO.  |
| MAXSOCKETS_REACHED |     | FLOAT     | The number of times the maximum number of IP sockets limit (MAXSOCKETS) was reached. From SOGTMAXS.  |
| IN SOCK_CUR        |     | FLOAT     | The current number of inbound sockets. From SOGCINSO.  |
| IN SOCK_PEAK       |     | FLOAT     | The peak number of non-persistent outbound sockets. From SOGPOUSO.   |
| OUT SOCK_CUR       |     | FLOAT     | The current number of non-persistent outbound sockets. From SOGCOUSO.  |
| OUT SOCK_PEAK      |     | FLOAT     | The peak number of non-persistent outbound sockets. From SOGPOUSO.   |
| OUT_PSOCK_CUR      |     | FLOAT     | The current number of persistent outbound sockets. From SOGCPPOUS.   |
| OUT_PSOCK_PEAK     |     | FLOAT     | The peak number of persistent outbound sockets. From SOGPPPOUS.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| IN SOCK_CREATED    |     | FLOAT     | The total number of inbound sockets created. From SOGISCR.  |
| OUT SOCK_CREATED   |     | FLOAT     | The total number of outbound sockets created. From SOGOSCR.   |
| OUT SOCK_CLOSED    |     | FLOAT     | The total number of outbound sockets closed. From SOGOSCL.  |
| DLY_AT_MAXSOCKETS  |     | FLOAT     | The number of create socket requests that were delayed because the system had reached the MAXSOCKETS limit. From SOGDMAXS.                        |
| MAXSOCK_DLY_TIME   |     | TIME      | The total time that create socket requests were delayed because the system had reached the MAXSOCKETS limit. From SOGQTIMEMAXS.                   |
| TOUT_MAXSOCKETS    |     | FLOAT     | The number of create socket requests that were timed out whilst delayed because the system had reached the MAXSOCKETS limit. From SOGTOMAXS.      |
| TOUT_MAXSOCK_CUR   |     | FLOAT     | The current number of create socket requests delayed because the system is at the MAXSOCKETS limit. From SOGCDELAY.                               |
| TOUT_MAXSOCK_PEAK  |     | FLOAT     | The peak number of create socket requests delayed because the system had reached the MAXSOCKETS limit. From SOGPDELAY.                            |
| MAXSOCK_CURDLY_TIM |     | TIME      | The total delay time for the create socket requests that are currently delayed because the system is at the MAXSOCKETS limit. From SOGCQTIMEMAXS. |

### CICS\_S\_GLBURIMAP\_T

This table provides detailed global statistics on URIMAP. It contains data from CICS statistics records (SMF 110, subtype 2 std 101). For CICS/TS V3.1 and later, it takes information from the DFHWBGDS CICS dsect.).

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                     |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME. (For _T table only.)   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                                   |
| URIMAP_ATOMSERV   |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the request was handled by a Atom service. From WBGUATOMSRVREQS.           |
| URIMAP_REF_COUNT  |     | FLOAT     | The number of times a search for matching URIMAP definition was made. From WBGUREFCNT.  |
| URIMAP_DISABLED   |     | FLOAT     | The Number of times a URIMAP definition with a matching host and path was found, but the URIMAP definition was disabled. From WBGUMATDISAB.                 |
| HOST_PATH_NOMATCH |     | FLOAT     | The number of times a search for a matching URIMAP definition was made, but no URIMAP definition with a matching host and path was found. From WBGUNOMATCH. |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| HOST_PATH_MATCH   |     | FLOAT     | The number of times a search for a matching URIMAP definition was made, and a URIMAP definition with a matching host and path was found. From WBGUMATCH.                                 |
| URIMAP_REDIRECTED |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found and the request was redirected. From WBGUMATREDIR.   |
| ANALYZER_USED     |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and the analyzer program associated with the TCPIPService definition was called. From WBGUANCALL.       |
| STAT_CONT_DELIVER |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and static content (document template or HFS file) was delivered as a response. From WBGUSTATCONT.      |
| DYN_CONT_DELIVER  |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and dynamic content (produced by an application program) was delivered as a response. From WBGUDYNCONT. |
| PIPELINE_REQS     |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and the request was handled by a Web service. From WBGUPIPEREQ.   |
| SCHEME_HTTP_REQS  |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the scheme was HTTP. From WBGUSCHEMHTTP.  |
| SCHEME_HTTPS_REQS |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the scheme was HTTPS (HTTP with SSL). From WBGUSCHEMHTTPS.  |
| SCHEME_WMQ_REQS   |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the scheme was WMQ. From WBGUSCHEMWMQ.  |
| VHOST_DISABLED    |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, but the virtual host was disabled. From WBGUHOSTDISCNT.   |

### CICS\_S\_GLBURIMAP\_D

This table provides daily global statistics on URIMAP. It contains data from CICS statistics records (SMF 110, subtype 2 std 101). For CICS/TS V3.1 and later, it takes information from the DFHWBGDS CICS dsect.).

The default retention period for this table is 30 days.

| Column name     | Key | Data type | Description  |
|-----------------|-----|-----------|--|
| DATE            | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME     | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.            |
| TIME            | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME. (For _T table only.)  |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                          |
| URIMAP_ATOMSERV |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the request was handled by an Atom service. From WBGUATOMSRVREQS. |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| URIMAP_REF_COUNT  |     | FLOAT     | The number of times a search for matching URIMAP definition was made. From WBGUREFCNT.   |
| URIMAP_DISABLED   |     | FLOAT     | The Number of times a URIMAP definition with a matching host and path was found, but the URIMAP definition was disabled. From WBGUMATDISAB.  |
| HOST_PATH_NOMATCH |     | FLOAT     | The number of times a search for a matching URIMAP definition was made, but no URIMAP definition with a matching host and path was found. From WBGUNOMATCH.                              |
| HOST_PATH_MATCH   |     | FLOAT     | The number of times a search for a matching URIMAP definition was made, and a URIMAP definition with a matching host and path was found. From WBGUMATCH.                                 |
| URIMAP_REDIRECTED |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found and the request was redirected. From WBGUMATREDIR.   |
| ANALYZER_USED     |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and the analyzer program associated with the TCPIPService definition was called. From WBGUANCALL.       |
| STAT_CONT_DELIVER |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and static content (document template or HFS file) was delivered as a response. From WBGUSTATCONT.      |
| DYN_CONT_DELIVER  |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and dynamic content (produced by an application program) was delivered as a response. From WBGUDYNCONT. |
| PIPELINE_REQS     |     | FLOAT     | The number of times a URIMAP definition with a matching host and path was found, and the request was handled by a Web service. From WBGUPIPEREQ.   |
| SCHEME_HTTP_REQS  |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the scheme was HTTP. From WBGUSCHEMHTTP.  |
| SCHEME_HTTPS_REQS |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the scheme was HTTPS (HTTP with SSL). From WBGUSCHEMHTTPS.  |
| SCHEME_WMQ_REQS   |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, and the scheme was WMQ. From WBGUSCHEMWMQ.  |
| VHOST_DISABLED    |     | FLOAT     | Number of times a URIMAP definition with a matching host and path was found, but the virtual host was disabled. From WBGUHOSTDISCNT.   |

## CICS\_S\_GLOBAL\_T

This table provides detailed statistics data on a global level from six statistics areas:

- VTAM
- Temporary storage
- Interregion communication (IRC) batch
- Loader
- Dynamic transaction backout (DTB)
- Task control

The table contains data from CICS/ESA and CICS/TS (SMF 110, subtype 2).

The default retention period for this table is 7 days.

## CICS statistics component data tables

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| STATISTICS_AREA    | K   | CHAR(12)  | One of six strings derived from the CICS statistics record read: VTAM, TEMP_STORAGE, LOADER, DTB, TASK_CONTROL, or IRC_BATCH.   |
| ACCUMULATED_TASKS  |     | INTEGER   | Number of tasks that this CICS job has run. From A01KCTTA.  |
| DFHRPL_REOPENED    |     | INTEGER   | Number of times the loader received an end-of-extent condition. From LDGDREBS.  |
| DTB_OVERFLOWES     |     | INTEGER   | Number of times the dynamic transaction backout overflow mechanism was used. From A05DBSA.  |
| DTB_RECORDS_LOGGED |     | INTEGER   | Number of dynamic transaction backout records logged. From A05DBLA.   |
| JOBS_PEAK          |     | INTEGER   | Peak number of batch jobs sharing the database. From A19EMCTH.  |
| JOBS_SHARING_DB    |     | INTEGER   | Accumulated count of batch jobs that have shared the database. From A19ETOTH.   |
| LIBRARY_LOAD_REQ   |     | INTEGER   | Number of times the loader has issued an MVS LOAD request. From LDGLLR.   |
| LOAD_SEC           |     | FLOAT     | Time taken for all the library loads, in seconds. From LDGLLT.  |
| LOAD_SEC_AVG       |     | FLOAT     | Average time to load a program, in seconds. Calculated as LDGLLT/LDGLLR.  |
| LU_LOGGED_ON_CNT   |     | INTEGER   | Current number of LUs in session. These types of LUs are included: LU6.1 primaries and secondaries in session (bound), LU6.2 primaries and secondaries in session (bound) and VTAM terminals. For CICS V4 and later. From A03LUNUM.         |
| LU_LOGGED_ON_PEAK  |     | INTEGER   | Current highest number of LUs in session. These types of LUs are included: LU6.1 primaries and secondaries in session (bound), LU6.2 primaries and secondaries in session (bound) and VTAM terminals. For CICS V4 and later. From A03LUHWM. |
| NOT_USED_AVG_SEC   |     | FLOAT     | Average length of time a program is eligible for removal, in seconds. Calculated as LDGDPSC/ LDGDPSCR.  |
| NOT_USED_CDSA_KB   |     | INTEGER   | Current amount of CDSA storage which is occupied by not-in-use programs. From LDGCNIU.  |
| NOT_USED_DSA_KB    |     | INTEGER   | Current amount of DSA storage which is occupied by not-in-use programs. CICS 3.2.1 only. From LDGESNIU.   |
| NOT_USED_ECDSA_KB  |     | INTEGER   | Current amount of ECDSA storage which is occupied by not-in-use programs. From LDGECNIU.  |
| NOT_USED_EDSA_KB   |     | INTEGER   | Current amount of EDSA storage which is occupied by not-in-use programs. CICS 3.2.1 only. From LDGDSNIU.  |
| NOT_USED_ERDSA_KB  |     | INTEGER   | Current amount of ERDSA storage which is occupied by not-in-use programs. From LDGERNIU.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| NOT_USED_EUDSA_KB  |     | INTEGER   | Current amount of EUDSA storage which is occupied by not-in-use programs. From LDGEUNIU.                                       |
| NOT_USED_PROGRAMS  |     | INTEGER   | Number of programs in the not-in-use queue. From LDGPNIU.  |
| NOT_USED_RECLAIMS  |     | INTEGER   | Number of reclaims that CICS has made from the not-in-use queue. From LDGRNIU.   |
| NOT_USED_SEC       |     | FLOAT     | Time that all programs spend in the not-in-use queue, in seconds. From LDGDPST.  |
| NOT_USED_UDSA_KB   |     | INTEGER   | Current amount of UDSA storage which is occupied by not-in-use programs. From LDGUNIU.   |
| PROGRAMS_REMOVED   |     | INTEGER   | Number of program instances removed from storage. From LDGDPSCR.   |
| PROGRAM_USES       |     | INTEGER   | Number of uses of all programs by the CICS system. From LDGPUSES.  |
| PS_COUNT           |     | INTEGER   | Number of VTAM sessions that persisted. For CICS V4 and later. From A03PSNC.   |
| PS_ERROR_CNT       |     | INTEGER   | Number of persisting sessions that were already unbound when CICS tried to restore them. For CICS V4 and later. From A03PSEC.  |
| PS_INQUIRE_COUNT   |     | INTEGER   | Number of times CICS issued INQUIRE OPTCD=PERSESS. For CICS V4 and later. From A03PSIC.  |
| PS_RESTORED_CNT    |     | INTEGER   | Number of persisting sessions that were successfully restored. For CICS V4 and later. From A03PSOC.                            |
| PS_TERMINATED_CNT  |     | INTEGER   | Number of persisting sessions that were terminated. For CICS V4 and later. From A03PSUC.                                       |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT. |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| REQ_PEAK_WAIT      |     | INTEGER   | Peak number of tasks waiting for the loader. From LDGWLRHW.  |
| REQ_TIMES_AT_PEAK  |     | INTEGER   | Number of times the peak number of waiting tasks was reached. From LDGHWMT.  |
| REQ_WAITED         |     | INTEGER   | Number of loader domain requests that were forced to suspend. From LDGWTDLR.   |
| REQ_WAITING        |     | INTEGER   | Number of loader domain requests currently forced to suspend. From LDGWLR.   |
| RPL_PEAK_USED      |     | INTEGER   | Peak number of VTAM RPLs posted. From A03RPLX.   |
| RPL_TIMES_AT_PEAK  |     | INTEGER   | Number of times the peak number of posted VTAM RPLs was reached. From A03RPLXT.  |
| TRAN_CUR_ACTIVE    |     | INTEGER   | Current active user transactions. For CICS V4 and later. From XMGCAT.  |
| TRAN_CUR_QUEUED    |     | INTEGER   | Current queued user transactions. For CICS V4 and later. From XMGCQT.  |
| TRAN_CURRENT_Q_SEC |     | FLOAT     | Total time, in seconds, spent by transactions currently queued for MXT. From XMGCQTME.   |
| TRAN_MXT           |     | INTEGER   | Current MAXTASK value. For CICS V4 and later. From XMGMXT.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TRAN_PEAK_ACTIVE   |     | INTEGER   | Peak active user transactions. For CICS V4 and later. From XMGPAT.   |
| TRAN_PEAK_QUEUED   |     | INTEGER   | Peak queued user transactions. For CICS V4 and later. From XMGPQT.   |
| TRAN_TIMES_AT_MXT  |     | INTEGER   | Times at MAXTASK. For CICS V4 and later. From XMGTAMXT.  |
| TRAN_TOTAL_ACTIVE  |     | INTEGER   | Total active user transactions. For CICS V4 and later. From XMGTAT.  |
| TRAN_TOTAL_DELAYED |     | INTEGER   | Total delayed user transactions. This does not include those transactions currently queueing. For CICS V4 and later. From XMGTDT.                                      |
| TRAN_TOTAL_Q_SEC   |     | FLOAT     | Total time, in seconds, spent waiting by transactions that had to queue for MXT but not including transactions currently queued. For CICS V4 and later. From XMGTQTME. |
| TRAN_TOTAL_TASKS   |     | FLOAT     | Total number of transactions at the time of the last reset. For CICS V4 and later. From XMGTNUM.   |
| TS_AUX_CISIZE      |     | INTEGER   | Control interval size for the auxiliary temporary storage data set, in bytes. From A12CSZ.   |
| TS_AUX_GETS        |     | INTEGER   | Number of records that application programs have obtained from auxiliary temporary storage. From A12NAG.   |
| TS_AUX_LONGEST     |     | INTEGER   | Size of the longest record written, in bytes. From A12LAR.   |
| TS_AUX_NOSPACE_CNT |     | INTEGER   | Number of transaction suspensions because of a NOSPACE condition on the auxiliary temporary storage data set. From A12STA8F.   |
| TS_AUX_PUTS        |     | INTEGER   | Number of records that application programs have written to auxiliary temporary storage. From A12STA7F.  |
| TS_BFR_COMPRESSES  |     | INTEGER   | Number of times temporary storage buffers were compressed. From A12STA9F.  |
| TS_BFR_CUR_WAITING |     | INTEGER   | Current number of requests queued because no buffers are available. From A12BUWT.  |
| TS_BFR_PEAK_WAITS  |     | INTEGER   | Peak number of requests queued because no buffers were available. From A12BUWTH.   |
| TS_BFR_READS       |     | INTEGER   | Number of times a CI has to be read from disk. From A12TRDN.   |
| TS_BFRS_SPECIFIED  |     | INTEGER   | Number of temporary storage buffers. From A12NBCA.   |
| TS_BFR_WAITS       |     | INTEGER   | Number of times a request was queued because all buffers were allocated to other tasks. From A12BWTN.  |
| TS_BFR_WRITES_FRC  |     | INTEGER   | Number of writes to the temporary storage data set because of recovery. From A12TWTNR.   |
| TS_BFR_WRITES_TOT  |     | INTEGER   | Number of writes to the temporary storage data set. From A12TWTN.  |
| TS_CI_AVAILABLE    |     | INTEGER   | Number of control intervals in the auxiliary temporary storage data set. From A12NCI.  |
| TS_CI_AVAIL_BYTES  |     | INTEGER   | Number of bytes available for use in the auxiliary temporary storage control interval. From A12NAVB.   |
| TS_CI_IN_USE_CNT   |     | INTEGER   | Current number of control intervals in use. From A12NCIA.  |
| TS_CI_PEAK_USED    |     | INTEGER   | Peak number of control intervals in use. From A12NCIAH.  |
| TS_CI_SEG_BYTES    |     | INTEGER   | Number of bytes per segment. From A12BPSEG.  |
| TS_CI_SEGMENTS     |     | INTEGER   | Number of segments available in the auxiliary temporary storage control interval. From A12SPCI.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TS_CISIZE_EXCEEDED |     | INTEGER   | Number of writes of records whose length was greater than the control interval. From A12STABF.                         |
| TS_FORMAT_WRITES   |     | INTEGER   | Number of times a new CI was successfully written at the end of the data set. From A12TWTNF.                           |
| TS_IO_ERRORS       |     | INTEGER   | Number of IO errors which occurred on the temporary storage data set. From A12STA AF.                                  |
| TS_LONGEST_Q       |     | INTEGER   | Peak number of items in any one queue. From A12QINH.   |
| TS_MAIN_CURR_BYTES |     | FLOAT     | Current value, in bytes, of virtual storage used for temporary storage. From A12STA6A or TSGTSMUS(CTS 4.2+).           |
| TS_MAIN_GETS       |     | INTEGER   | Number of records that the application programs obtained from main temporary storage. From A12NMG.                     |
| TS_MAIN_PEAK_BYTES |     | FLOAT     | Peak value, in bytes, of virtual storage used for temporary storage. From A12STA6F or TSGTSMAX(CTS 4.2+).              |
| TS_MAIN_PUTS       |     | INTEGER   | Number of records that the application programs wrote to main temporary storage. From A12STA5F.                        |
| TS_MGSET_VALUE     |     | INTEGER   | Number of records held in a single temporary storage group identifier, TSGID. FROM TSMGSET SIT parameter and A12GIDNE. |
| TS_PEAK_Q_NAMES    |     | INTEGER   | Peak number of temporary storage queue names in use. From A12QNUMH.  |
| TS_Q_EXTENSIONS    |     | INTEGER   | Number of times it was necessary to create a TSGID extension. From A12STA4F.   |
| TS_Q_NAMES         |     | INTEGER   | Current number of temporary storage queue names in use. From A12QNUM.  |
| TS_QUEUES_CREATED  |     | INTEGER   | Number of times CICS created individual storage queues. From A12STA3F.   |
| TS_SHR_POOL_CONN   |     | INTEGER   | Number of shared TS pools currently connected in the TST. From TSGSHPCN.   |
| TS_SHR_POOL_DEF    |     | INTEGER   | Number of shared TS pools defined in the TST. From TSGSHPDF.   |
| TS_SHR_READ_REQS   |     | INTEGER   | Number of read requests to all shared TS pools. From TSGSHRDS.   |
| TS_SHR_WRITE_REQS  |     | INTEGER   | Number of write requests to all shared TS pools. From TSGSHWTS.  |
| TS_STRING_CUR_WAIT |     | INTEGER   | Current number of IO requests that are queued because all strings are in use. From A12VUWT.                            |
| TS_STRING_WAITS    |     | INTEGER   | Number of IO requests that were queued because no strings were available. From A12VWTN.                                |
| TS_STRNG_PEAK_USED |     | INTEGER   | Peak number of concurrent IO operations to the temporary storage data set. From A12NVCAH.                              |
| TS_STRNG_PEAK_WAIT |     | INTEGER   | Peak number of IO requests that were queued because all strings were in use. From A12VUWTH.                            |
| TS_STRNG_SPECIFIED |     | INTEGER   | Number of temporary storage strings. From A12NVCA.   |
| VTAM_ACB_DYN_OPENS |     | INTEGER   | Number of times the VTAM ACB was opened by the operator.   |
| VTAM_SOS_COUNT     |     | INTEGER   | Number of times VTAM was short on storage. From A03VTSOS.  |
| WAIT_TIME          |     | FLOAT     | Time spent waiting for the loader, in seconds. From LDGTTW.  |

## CICS\_S\_GLOBAL\_D

This table provides daily CICS statistics data on a global level from six statistics areas:

- VTAM
- Temporary storage
- Interregion communication (IRC) batch
- Loader
- Dynamic transaction backout (DTB)
- Task control

The table contains consolidated data from the CICS\_S\_GLOBAL\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| STATISTICS_AREA    | K   | CHAR(12)  | One of six strings derived from the CICS statistics record read: VTAM, TEMP_STORAGE, LOADER, DTB, TASK_CONTROL, or IRC_BATCH.   |
| ACCUMULATED_TASKS  |     | INTEGER   | Number of tasks that this CICS job has run. From A01KCTTA.  |
| DFHRPL_REOPENED    |     | INTEGER   | Number of times the loader received an end-of-extent condition. From LDGDREBS.  |
| DTB_OVERFLOWES     |     | INTEGER   | Number of times the dynamic transaction backout overflow mechanism was used. From A05DBSA.  |
| DTB_RECORDS_LOGGED |     | INTEGER   | Number of dynamic transaction backout records logged. From A05DBLA.   |
| JOBS_PEAK          |     | INTEGER   | Peak number of batch jobs sharing the database. From A19EMCTH.  |
| JOBS_SHARING_DB    |     | INTEGER   | Accumulated count of batch jobs that have shared the database. From A19ETOTH.   |
| LIBRARY_LOAD_REQ   |     | INTEGER   | Number of times the loader has issued an MVS LOAD request. From LDGLLR.   |
| LOAD_SEC           |     | FLOAT     | Time taken for all the library loads, in seconds. From LDGLLT.  |
| LOAD_SEC_AVG       |     | FLOAT     | Average time to load a program, in seconds. Calculated as LDGLLT/LDGLLR.  |
| LU_LOGGED_ON_PEAK  |     | INTEGER   | Current highest number of LUs in session. These types of LUs are included: LU6.1 primaries and secondaries in session (bound), LU6.2 primaries and secondaries in session (bound) and VTAM terminals. For CICS V4 and later. From A03LUHWM. |
| NOT_USED_AVG_SEC   |     | FLOAT     | Average length of time a program is eligible for removal, in seconds. Calculated as LDGDPSC/LDGDPSCR.   |
| NOT_USED_CDSA_KB   |     | INTEGER   | Current amount of CDSA storage which is occupied by not-in-use programs. From LDGCNIU.  |
| NOT_USED_DSA_KB    |     | INTEGER   | Current amount of DSA storage which is occupied by not-in-use programs. CICS 3.2.1 only. From LDGESNIU.   |
| NOT_USED_ECDSA_KB  |     | INTEGER   | Current amount of ECDSA storage which is occupied by not-in-use programs. From LDGECNIU.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| NOT_USED_EDSA_KB   |     | INTEGER   | Current amount of EDSA storage which is occupied by not-in-use programs. CICS 3.2.1 only. From LDGDSNIU.   |
| NOT_USED_ERDSA_KB  |     | INTEGER   | Current amount of ERDSA storage which is occupied by not-in-use programs. From LDGERNIU.   |
| NOT_USED_EUDSA_KB  |     | INTEGER   | Current amount of EUDSA storage which is occupied by not-in-use programs. From LDGEUNIU.   |
| NOT_USED_PROGRAMS  |     | INTEGER   | Number of programs in the not-in-use queue. From LDGPNIU.  |
| NOT_USED_RECLAIMS  |     | INTEGER   | Number of reclaims that CICS has made from the not-in-use queue. From LDGRNIU.   |
| NOT_USED_SEC       |     | FLOAT     | Time that all programs spend in the not-in-use queue, in seconds. From LDGDPSCCT.  |
| NOT_USED_UDSA_KB   |     | INTEGER   | Current amount of UDSA storage which is occupied by not-in-use programs. From LDGUNIU.   |
| PROGRAMS_REMOVED   |     | INTEGER   | Number of program instances removed from storage. From LDGDPSCR.   |
| PROGRAM_USES       |     | INTEGER   | Number of uses of all programs by the CICS system. From LDGPUSES.  |
| PS_COUNT           |     | INTEGER   | Number of VTAM sessions that persisted. For CICS V4 and later. From A03PSNC.   |
| PS_ERROR_CNT       |     | INTEGER   | Number of persisting sessions that were already unbound when CICS tried to restore them. For CICS V4 and later. From A03PSEC.  |
| PS_INQUIRE_COUNT   |     | INTEGER   | Number of times CICS issued INQUIRE OPTCD=PERSESS. For CICS V4 and later. From A03PSIC.  |
| PS_RESTORED_CNT    |     | INTEGER   | Number of persisting sessions that were successfully restored. For CICS V4 and later. From A03PSOC.  |
| PS_TERMINATED_CNT  |     | INTEGER   | Number of persisting sessions that were terminated. For CICS V4 and later. From A03PSUC.   |
| REQ_PEAK_WAIT      |     | INTEGER   | Peak number of tasks waiting for the loader. From LDGWLRHW.  |
| REQ_WAITED         |     | INTEGER   | Number of loader domain requests that were forced to suspend. From LDGWTDLR.   |
| REQ_WAITING        |     | INTEGER   | Number of loader domain requests currently forced to suspend. From LDGWLR.   |
| RPL_PEAK_USED      |     | INTEGER   | Peak number of VTAM RPLs posted. From A03RPLX.   |
| TRAN_MXT           |     | INTEGER   | Current MAXTASK value. For CICS V4 and later. From XMGMXT.   |
| TRAN_PEAK_ACTIVE   |     | INTEGER   | Peak active user transactions. For CICS V4 and later. From XMGPAT.   |
| TRAN_PEAK_QUEUED   |     | INTEGER   | Peak queued user transactions. For CICS V4 and later. From XMGPQT.   |
| TRAN_TIMES_AT_MXT  |     | INTEGER   | Times at MAXTASK. For CICS V4 and later. From XMGTAMXT.  |
| TRAN_TOTAL_ACTIVE  |     | INTEGER   | Total active user transactions. For CICS V4 and later. From XMGTAT.  |
| TRAN_TOTAL_DELAYED |     | INTEGER   | Total delayed user transactions. This does not include those transactions currently queueing. For CICS V4 and later. From XMGTDT.                                      |
| TRAN_TOTAL_Q_SEC   |     | FLOAT     | Total time, in seconds, spent waiting by transactions that had to queue for MXT but not including transactions currently queued. For CICS V4 and later. From XMGTQTME. |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TRAN_TOTAL_TASKS   |     | FLOAT     | Total number of transactions at the time of the last reset. For CICS V4 and later. From XMGTNUM.                             |
| TS_AUX_CISIZE      |     | INTEGER   | Control interval size for the auxiliary temporary storage data set, in bytes. From A12CSZ.                                   |
| TS_AUX_GETS        |     | INTEGER   | Number of records that application programs have obtained from auxiliary temporary storage. From A12NAG.                     |
| TS_AUX_LONGEST     |     | INTEGER   | Size of the longest record written, in bytes. From A12LAR.   |
| TS_AUX_NOSPACE_CNT |     | INTEGER   | Number of transaction suspensions because of a NOSPACE condition on the auxiliary temporary storage data set. From A12STA8F. |
| TS_AUX_PUTS        |     | INTEGER   | Number of records that application programs have written to auxiliary temporary storage. From A12STA7F.                      |
| TS_BFR_COMPRESSES  |     | INTEGER   | Number of times temporary storage buffers were compressed. From A12STA9F.  |
| TS_BFR_CUR_WAITING |     | INTEGER   | Current number of requests queued because no buffers are available. From A12BUWT.  |
| TS_BFR_PEAK_WAITS  |     | INTEGER   | Peak number of requests queued because no buffers were available. From A12BUWTH.   |
| TS_BFR_READS       |     | INTEGER   | Number of times a CI has to be read from disk. From A12TRDN.   |
| TS_BFRS_SPECIFIED  |     | INTEGER   | Number of temporary storage buffers. From A12NBCA.   |
| TS_BFR_WAITS       |     | INTEGER   | Number of times a request was queued because all buffers were allocated to other tasks. From A12BWTN.                        |
| TS_BFR_WRITES_FRC  |     | INTEGER   | Number of writes to the temporary storage data set because of recovery. From A12TWTNR.                                       |
| TS_BFR_WRITES_TOT  |     | INTEGER   | Number of writes to the temporary storage data set. From A12TWTN.  |
| TS_CI_AVAILABLE    |     | INTEGER   | Number of control intervals in the auxiliary temporary storage data set. From A12NCI.  |
| TS_CI_AVAIL_BYTES  |     | INTEGER   | Number of bytes available for use in the auxiliary temporary storage control interval. From A12NAVB.                         |
| TS_CI_IN_USE_CNT   |     | INTEGER   | Current number of control intervals in use. From A12NCIA.  |
| TS_CI_PEAK_USED    |     | INTEGER   | Peak number of control intervals in use. From A12NCIAH.  |
| TS_CI_SEG_BYTES    |     | INTEGER   | Number of bytes per segment. From A12BPSEG.  |
| TS_CI_SEGMENTS     |     | INTEGER   | Number of segments available in the auxiliary temporary storage control interval. From A12SPCI.                              |
| TS_CISIZE_EXCEEDED |     | INTEGER   | Number of writes of records whose length was greater than the control interval. From A12STABF.                               |
| TS_FORMAT_WRITES   |     | INTEGER   | Number of times a new CI was successfully written at the end of the data set. From A12TWTNF.                                 |
| TS_IO_ERRORS       |     | INTEGER   | Number of IO errors which occurred on the temporary storage data set. From A12STAAF.   |
| TS_LONGEST_Q       |     | INTEGER   | Peak number of items in any one queue. From A12QINH.   |
| TS_MAIN_CURR_BYTES |     | INTEGER   | Current value, in bytes, of virtual storage used for temporary storage. From A12STA6A or TSGTSMUS(CTS 4.2+).                 |
| TS_MAIN_GETS       |     | INTEGER   | Number of records that the application programs obtained from main temporary storage. From A12NMG.                           |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TS_MAIN_PEAK_BYTES |     | INTEGER   | Peak value, in bytes, of virtual storage used for temporary storage. From A12STA6F or TSGTSMAX(CTS 4.2+).              |
| TS_MAIN_PUTS       |     | INTEGER   | Number of records that the application programs wrote to main temporary storage. From A12STA5F.                        |
| TS_MGSET_VALUE     |     | INTEGER   | Number of records held in a single temporary storage group identifier, TSGID. FROM TSMGSET SIT parameter and A12GIDNE. |
| TS_PEAK_Q_NAMES    |     | INTEGER   | Peak number of temporary storage queue names in use. From A12QNUMH.  |
| TS_Q_EXTENSIONS    |     | INTEGER   | Number of times it was necessary to create a TSGID extension. From A12STA4F.   |
| TS_Q_NAMES         |     | INTEGER   | Current number of temporary storage queue names in use. From A12QNUM.  |
| TS_QUEUES_CREATED  |     | INTEGER   | Number of times CICS created individual storage queues. From A12STA3F.   |
| TS_SHR_POOL_CONN   |     | INTEGER   | Number of shared TS pools currently connected in the TST. From TSGSHPCN.   |
| TS_SHR_POOL_DEF    |     | INTEGER   | Number of shared TS pools defined in the TST. From TSGSHPDF.   |
| TS_SHR_READ_REQS   |     | INTEGER   | Number of read requests to all shared TS pools. From TSGSHRDS.   |
| TS_SHR_WRITE_REQS  |     | INTEGER   | Number of write requests to all shared TS pools. From TSGSHWTS.  |
| TS_STRING_CUR_WAIT |     | INTEGER   | Current number of IO requests that are queued because all strings are in use. From A12VUWT.                            |
| TS_STRING_WAITS    |     | INTEGER   | Number of IO requests that were queued because no strings were available. From A12VWTN.                                |
| TS_STRNG_PEAK_USED |     | INTEGER   | Peak number of concurrent IO operations to the temporary storage data set. From A12NVCAH.                              |
| TS_STRNG_PEAK_WAIT |     | INTEGER   | Peak number of IO requests that were queued because all strings were in use. From A12VUWTH.                            |
| TS_STRNG_SPECIFIED |     | INTEGER   | Number of temporary storage strings. From A12NVCA.   |
| VTAM_ACB_DYN_OPENS |     | INTEGER   | Number of times the VTAM ACB was opened by the operator.   |
| VTAM_SOS_COUNT     |     | INTEGER   | Number of times VTAM was short on storage. From A03VTSOS.  |
| WAIT_TIME          |     | FLOAT     | Time spent waiting for the loader, in seconds. From LDGTTW.  |

## CICS\_S\_INTERCOM\_T

This table provides detailed data with both system and mode entries and global statistics for:

- Interregion communication (IRC)
- Intersystem communication (ISC)
- Multiregion operation (MRO)

The table contains data from CICS/ESA and CICS/TS (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description  |
|-------------|-----|-----------|--|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE. |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| CONNECTION_NAME    | K   | CHAR(6)   | Connection name. From A14CNTN. Contains GLOBAL if STID=54.  |
| APPC_SYSTEM_NAME   | K   | CHAR(6)   | Name of the APPC connection. From A20SYSN. Contains GLOBAL if STID=54.  |
| MODE_NAME          | K   | CHAR(8)   | Mode group name. From A20MODE. Contains GLOBAL if STID=54.  |
| ACCESS_METHOD      |     | CHAR(2)   | Communication access method used for this connection. The values are: <ul style="list-style-type: none"> <li>• 01=A14VTAM</li> <li>• 02=A14IRC</li> <li>• 03=A14X</li> <li>• 04=A14XCF</li> </ul> This is from A14ACCM. |
| AIDS_IN_CHAIN      |     | INTEGER   | Number of requests queued for a specific session. From A14EALL.   |
| ALLOCATE_REQ_PEAK  |     | INTEGER   | Peak allocate requests queued for this system. From A14ESTAM.   |
| ALLOCATES          |     | INTEGER   | Number of times a program issued an ALLOCATE command, not including commands failing basic validation (SYSIDERR). From A14ESTAS.  |
| ALLOCATES_PEAK     |     | INTEGER   | Peak allocate requests queued for this LU 6.2 mode group. From A20ESTAM.  |
| ALLOCATES_QUEUED   |     | INTEGER   | Number of times a program issued an ALLOCATE command (without NOQUEUE) and there were no bound contention winners available. From A14ESTAQ.   |
| ALLOC_FAILED_LINK  |     | INTEGER   | Number of times a program issued an ALLOCATE command and got a link error, normally resulting in SESSIONERR. From A14ESTAF.   |
| ALLOC_FAILED_OTHER |     | INTEGER   | Number of times an ALLOCATE failed with SESSBUSY or SYSBUSY (normally when the connection is heavily used). From A14ESTAO.  |
| ALLOC_F1_SPEC_REQ  |     | INTEGER   | Number of times a program issued an ALLOCATE command and got a link error, normally resulting in SESSIONERR, for this APPC mode group. From A20ESTAF.   |
| ALLOC_F2_SPEC_REQ  |     | INTEGER   | Number of times an ALLOCATE failed with SESSBUSY or SYSBUSY (normally when the connection is heavily used) for this APPC mode group. From A20ESTAO.   |
| ALLOC_GEN_20       |     | INTEGER   | Number of times a generic allocate request was satisfied by this mode group. From A20ESTAG.   |
| ALLOC_PURGE_CNT    |     | INTEGER   | Total number of allocates purged due to the queue processing time exceeding the MAXQTIME_SEC value. For CICS V4 and later. From A14EMQPC.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| ALLOC_Q_PURGE_CNT  |     | INTEGER   | Total number of times an allocate queue has been purged due to the MAXQTIME value (A14EMXQT). A queue is purged when the total time it would take to process a queue exceeds the MAXQTIME value. For CICS V4 and later. From A14EQPCT. |
| ALLOC_Q_SPEC_REQ   |     | INTEGER   | Number of times a program issued a specific ALLOCATE command (without NOQUEUE) and there were no bound contention winners available for this mode group. From A20ESTAQ.  |
| ALLOC_REJECT_CNT   |     | INTEGER   | Total number of allocates rejected due to the QUEUELIMIT value (A14EALIM) being reached. For CICS V4 and later. From A14EALRJ.   |
| ALLOC_SPEC_REQ     |     | INTEGER   | Number of times a program issued a specific ALLOCATE command for this mode group, excluding commands failing basic validation (SYSIDERR). From A20ESTAS.   |
| ALLOC_SPEC_20      |     | INTEGER   | Number of times a specific allocate request for this mode group was satisfied. From A20ESTAP.  |
| ATI_LOSER_REQ      |     | INTEGER   | Number of times a contention loser APPC session was used. From A20ES1.   |
| ATI_REQ_LOSERS     |     | INTEGER   | Number of times a receive session was used (LU 6.1). From A14ES1.  |
| ATI_REQ_WINNERS    |     | INTEGER   | Number of times a send session was used (LU 6.1). From A14ES2.   |
| ATI_WINNER_REQ     |     | INTEGER   | Number of times a contention winner APPC session was used. From A20ES2.  |
| AUTINST_CONN_GTIME |     | TIMESTAMP | Time at which this connection was autoinstalled, in GMT. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14GACT.  |
| AUTINST_CONN_LTIME |     | TIMESTAMP | Time at which this connection was autoinstalled, in LOCAL time. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14AICT.   |
| BIDS_IN_PROGRESS   |     | INTEGER   | Number of bids in progress. From A14EBID. CICS must send a BID to use a bound contention loser session.  |
| BIDS_PEAK          |     | INTEGER   | Peak number of bids that were in progress at any one time. From A14EBHWM.  |
| BIDS_PEAK_20       |     | INTEGER   | Peak number of bids that were in progress at any one time for this APPC mode group. From A20EBHWM.   |
| BIDS_SENT          |     | INTEGER   | Number of times CICS sent a BID to use a contention loser session. From A14ESBID.  |
| BIDS_SENT_20       |     | INTEGER   | Number of times CICS sent a BID to use a contention loser session. From A20ESBID.  |
| BIDS_20            |     | INTEGER   | Number of bids in progress. From A20EBID. CICS must send a BID to use a bound contention loser session.  |
| COMMUNIC_PROTOCOL  |     | CHAR(2)   | Communication protocol used for this connection. The values are: <ul style="list-style-type: none"> <li>• 01=A14APPC</li> <li>• 02=A14LU61</li> <li>• 03=A14EXCI</li> </ul> This is from A14EFLGS.                                     |
| CONNECT_NETNAME    |     | CHAR(8)   | Name by which the remote system is known in the network that is, its applid. For CICS/TS V1.1 and later. This is from A14ESID.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| CONTENTION_LOSER   |     | INTEGER   | Number of contention loser sessions (primaries for LU6.1) that are currently in use. For CICS/TS V1.1 and later. This is the sum of A14E1RY.   |
| CONTENT_WIN_PEAK   |     | INTEGER   | Peak number of contention winner sessions for this APPC mode group. From A20E2HWM.   |
| CONTSSESS_MAX_DEF  |     | FLOAT     | Maximum number of sessions that the definition of the session group permits to be contention winners. For CICS/TS V1.1 and later. This is the max from A20EMCON.   |
| CONT_SESSION_LOSER |     | FLOAT     | Current number of contention loser sessions. For CICS/TS V1.1 and later. This is the max from A20E1RY.   |
| CONT_SESSION_WIN   |     | FLOAT     | Current number of contention winner sessions. For CICS/TS V1.1 and later. This is the max from A20E2RY.  |
| CURR_LOSER_CONTENT |     | FLOAT     | Number of contention loser sessions that are currently in use. For CICS/TS V1.1 and later. This is the max from A20ECONL.  |
| CURR_SESSION_NUM   |     | FLOAT     | Current number of sessions in the group. For CICS/TS V1.1 and later. This is the sum of A20EMAXS.  |
| CURR_WINN_CONTENT  |     | FLOAT     | Number of contention winner sessions that are currently in use. For CICS/TS V1.1 and later. This is the max from A20ECONW.   |
| DELETE_CONN_GTIME  |     | TIMESTAMP | Time at which this connection was deleted, in GMT. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14GADT.  |
| DELETE_CONN_LTIME  |     | TIMESTAMP | Time at which this connection was deleted, in LOCAL time. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14AIDT.   |
| ENTRIES_REUSED     |     | INTEGER   | Number of times user IDs were reused without referencing an external security manager. From A21_SNT_TOTAL_REUSES.  |
| ENTRIES_TIMED_OUT  |     | INTEGER   | Number of user IDs signed on to this remote system that were timed out. From A21_SNT_TOTAL_TIMEOUT.  |
| FUNC_SHIPSCHN_PC   |     | FLOAT     | The number of program control link requests, with channels, for function shipping. From A14PFRC.   |
| FUNC_SHIPSCHN_TS   |     | FLOAT     | The number of terminal-sharing channel requests for function shipping. From A14TSC.  |
| FUNC_SHIPSCHN_IC   |     | FLOAT     | The number of interval control START requests, with channels, for function shipping. From A14IFRC.   |
| FUNCTION_SHIPS_DLI |     | INTEGER   | DL/I function shipping requests. From A14ESTDL.  |
| FUNCTION_SHIPS_FC  |     | INTEGER   | File control function shipping requests. From A14ESTFC.  |
| FUNCTION_SHIPS_IC  |     | INTEGER   | Interval control function shipping requests. From A14ESTIC.  |
| FUNCTION_SHIPS_TD  |     | INTEGER   | Transient data function shipping requests. From A14ESTTD.  |
| FUNCTION_SHIPS_TS  |     | INTEGER   | Temporary storage function shipping requests. From A14ESTTS.   |
| GENERIC_AIDS       |     | INTEGER   | Number of requests waiting to use a non-specific session. From A14ESALL.   |
| LOSERS_PEAK        |     | INTEGER   | Peak number of contention losers sessions. From A14E1HWM.  |
| MAXQTIME_SEC       |     | INTEGER   | Maximum time allowed, in seconds, to process an allocate queue on this connection. If the allocate queue takes longer, the queue is purged. This only takes effect if the QUEUELIMIT value has been reached. For CICS V4 and later. From A14EMXQT. |



| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| PEAK_CONT_LOSER    |     | INTEGER   | Number of contention winner sessions (primaries for LU6.1) that are currently in use. For CICS/TS V1.1 and later. This is the sum of A14E2RY.                               |
| PERSISTENT_VER_TIM |     | INTEGER   | How long entries are allowed to remain unused in the persistent verification list for this system, in minutes. This is PVDELAY. From A21_SIT_LUIT_TIME.                     |
| PGM_CONTROL        |     | FLOAT     | Number of program control link requests for function shipping. For CICS/TS V1.3 and later. This is the sum of A14PCFR.  |
| QUEUELIMIT         |     | INTEGER   | QUEUELIMIT parameter specified on the CONNECTION definition. If this value is reached, allocates are rejected. For CICS V4 and later. From A14EALIM.                        |
| RECORD_GLOBAL_FLAG |     | INTEGER   | Set to 1 if a ICS/IRC GLOBAL record is processed.   |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_MODE_FLAG   |     | INTEGER   | Set to 1 if a ICS/IRC MODE record is processed.   |
| RECORD_SYSTEM_FLAG |     | INTEGER   | Set to 1 if a ICS/IRC SYSTEM record is processed.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.  |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| REC_SESS_COUNT     |     | INTEGER   | Number of RECEIVE sessions for this connection. This field applies to MRO and LU6.1 connections only. For CICS/TS V1.1 and later. This is the sum of A14EPRMN.              |
| REUSE_TIME_AVG     |     | INTEGER   | Average time between each reuse of user IDs signed on to this remote system, in seconds. From A21_SNT_AV_REUSE_TIME.  |
| SEND_SESS_COUNT    |     | INTEGER   | Number of SEND sessions for this connection. This field applies to MRO and LU6.1 connections only. For CICS/TS V1.1 and later. This is the sum of A14ESECN.                 |
| SESSION_NUM_MAX    |     | INTEGER   | Maximum number of sessions that the definition of the session group permits. For CICS/TS V1.1 and later. This is the max from A20ELMAX.                                     |
| SIGNON_REFRESH_TIM |     | INTEGER   | How long user IDs are allowed to remain signed on in this remote system (ISRDELAY), in minutes. From A21_SIT_SNT_TIME.  |
| SIGNON_REUSE       |     | INTEGER   | Number of times user IDs in the persistent verification list were used without referencing an external security manager. From A21_LUIT_TOTAL_REUSES.                        |
| SIGNON_REUSE_AVG   |     | INTEGER   | Average time between the reuse of entries in the persistent verification list of this remote system, in seconds. From A21_LUIT_AV_REUSE_TIME.                               |
| SIGNON_TIMEOUT     |     | INTEGER   | Number of entries in the persistent verification list of this remote system that were timed out. From A21_LUIT_TOTAL_TIMEOUT.   |
| TRANS_ROUTINGS     |     | INTEGER   | Transaction routing commands (where a transaction is defined as remote or is dynamically routed). Not valid for LU 6.1. This is incremented on both systems. From A14ESTTC. |
| WINNERS_PEAK       |     | INTEGER   | Peak number of contention winner sessions. From A14E2HWM.   |
| XZIQUE_ALLOC_PURGS |     | INTEGER   | Total number of allocates purged due to XZIQUE requesting that queues should be purged (see XZIQUE_PURGE_CNT) for this connection. For CICS V4 and later. From A14EZQPC.    |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| XZIQUE_PURGE_CNT  |     | INTEGER   | Total number of allocate queue purges that have occurred at XZIQUE request for this connection. For CICS V4 and later. From A14EZQPU. |
| XZIQUE_REJECT_CNT |     | INTEGER   | Total number of allocates rejected by the XZIQUE exit. For CICS V4 and later. From A14EZQRJ.  |
| PGM_CONTROL       |     | FLOAT     | Number of Program control, functions shipping requests. For CICS/TS V1.3 and later. This is the sum of A14PCFR.                       |

## CICS\_S\_INTERCOM\_D

This table provides daily data with both system and mode entries and global statistics for:

- Interregion communication (IRC)
- Intersystem communication (ISC)
- Multiregion operation (MRO)

The table contains consolidated data from the CICS\_S\_INTERCOM\_T table.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| CONNECTION_NAME   | K   | CHAR(6)   | Connection name. From A14CNTN. Contains GLOBAL if STID=54.   |
| APPC_SYSTEM_NAME  | K   | CHAR(6)   | Name of the APPC connection. From A20SYSN. Contains GLOBAL if STID=54.   |
| MODE_NAME         | K   | CHAR(8)   | Mode group name. From A20MODE. Contains GLOBAL if STID=54.   |
| ACCESS_METHOD     |     | CHAR(2)   | Communication access method used for this connection. The values are: <ul style="list-style-type: none"> <li>• X(01)=A14VTAM</li> <li>• X(02)=A14IRC</li> <li>• X(03)=A14XM</li> <li>• X(04)=A14XCF</li> </ul> For CICS/TS V1.1 and later. This is from A14ACCM. |
| AIDS_IN_CHAIN     |     | INTEGER   | Number of requests queued for a specific session. From A14EALL.  |
| ALLOCATE_REQ_PEAK |     | INTEGER   | Peak allocate requests queued for this system. From A14ESTAM.  |
| ALLOCATES         |     | INTEGER   | Number of times a program issued an ALLOCATE command, not including commands failing basic validation (SYSIDERR). From A14ESTAS.   |
| ALLOCATES_PEAK    |     | INTEGER   | Peak allocate requests queued for this LU 6.2 mode group. From A20ESTAM.   |
| ALLOCATES_QUEUED  |     | INTEGER   | Number of times a program issued an ALLOCATE command (without NOQUEUE) and there were no bound contention winners available. From A14ESTAQ.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| ALLOC_FAILED_LINK  |     | INTEGER   | Number of times a program issued an ALLOCATE command and got a link error, normally resulting in SESSIONERR. From A14ESTAF.  |
| ALLOC_FAILED_OTHER |     | INTEGER   | Number of times an ALLOCATE failed with SESSBUSY or SYSBUSY (normally when the connection is heavily used). From A14ESTAO.   |
| ALLOC_F1_SPEC_REQ  |     | INTEGER   | Number of times a program issued an ALLOCATE command and got a link error, normally resulting in SESSIONERR, for this APPC mode group. From A20ESTAF.  |
| ALLOC_F2_SPEC_REQ  |     | INTEGER   | Number of times an ALLOCATE failed with SESSBUSY or SYSBUSY (normally when the connection is heavily used) for this APPC mode group. From A20ESTAO.  |
| ALLOC_GEN_20       |     | INTEGER   | Number of times a generic allocate request was satisfied by this mode group. From A20ESTAG.  |
| ALLOC_PURGE_CNT    |     | INTEGER   | Total number of allocates purged due to the queue processing time exceeding the MAXQTIME_SEC value. For CICS V4 and later. From A14EMQPC.  |
| ALLOC_Q_PURGE_CNT  |     | INTEGER   | Total number of times an allocate queue has been purged due to the MAXQTIME value (A14EMXQT). A queue is purged when the total time it would take to process a queue exceeds the MAXQTIME value. For CICS V4 and later. From A14EQPCT. |
| ALLOC_Q_SPEC_REQ   |     | INTEGER   | Number of times a program issued a specific ALLOCATE command (without NOQUEUE) and there were no bound contention winners available for this mode group. From A20ESTAQ.  |
| ALLOC_REJECT_CNT   |     | INTEGER   | Total number of allocates rejected due to the QUEUELIMIT value (A14EALIM) being reached. For CICS V4 and later. From A14EALRJ.   |
| ALLOC_SPEC_REQ     |     | INTEGER   | Number of times a program issued a specific ALLOCATE command for this mode group, excluding commands failing basic validation (SYSIDERR). From A20ESTAS.   |
| ALLOC_SPEC_20      |     | INTEGER   | Number of times a specific allocate request for this mode group was satisfied. From A20ESTAP.  |
| ATI_LOSER_REQ      |     | INTEGER   | Number of times a contention loser APPC session was used. From A20ES1.   |
| ATI_REQ_LOSERS     |     | INTEGER   | Number of times a receive session was used (LU 6.1). From A14ES1.  |
| ATI_REQ_WINNERS    |     | INTEGER   | Number of times a send session was used (LU 6.1). From A14ES2.   |
| ATI_WINNER_REQ     |     | INTEGER   | Number of times a contention winner APPC session was used. From A20ES2.  |
| AUTINST_CONN_GTIME |     | TIMESTAMP | Time at which this connection was autoinstalled, in GMT. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14GACT.  |
| AUTINST_CONN_LTIME |     | TIMESTAMP | Time at which this connection was autoinstalled, in LOCAL time. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14AICT.   |
| BIDS_IN_PROGRESS   |     | INTEGER   | Number of bids in progress. From A14EBID. CICS must send a BID to use a bound contention loser session.  |
| BIDS_PEAK          |     | INTEGER   | Peak number of bids that were in progress at any one time. From A14EBHWM.  |
| BIDS_PEAK_20       |     | INTEGER   | Peak number of bids that were in progress at any one time for this APPC mode group. From A20EBHWM.   |
| BIDS_SENT          |     | INTEGER   | Number of times CICS sent a BID to use a contention loser session. From A14ESBID.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| BIDS_SENT_20       |     | INTEGER   | Number of times CICS sent a BID to use a contention loser session. From A20ESBID.   |
| BIDS_20            |     | INTEGER   | Number of bids in progress. From A20EBID. CICS must send a BID to use a bound contention loser session.   |
| COMMUNIC_PROTOCOL  |     | CHAR(2)   | Communication protocol used for this connection. The values are: <ul style="list-style-type: none"> <li>• X(01)=A14APPC</li> <li>• X(02)=A14LU61</li> <li>• X(03)=A14EXCI</li> </ul> For CICS/TS V1.1 and later. This is from A14EFLGS. |
| CONNECT_NETNAME    |     | CHAR(8)   | Name by which the remote system is known in the network that is, its applid. For CICS/TS V1.1 and later. This is from A14ESID.  |
| CONTENTION_LOSER   |     | INTEGER   | Number of contention loser sessions (primaries for LU6.1) that are currently in use. For CICS/TS V1.1 and later. This is the sum of A14E1RY.  |
| CONTENT_WIN_PEAK   |     | INTEGER   | Peak number of contention winner sessions for this APPC mode group. From A20E2HWM.  |
| CONTSESS_MAX_DEF   |     | FLOAT     | Maximum number of sessions that the definition of the session group permits to be contention winners. For CICS/TS V1.1 and later. This is the max from A20EMCON.  |
| CONT_SESSION_LOSER |     | FLOAT     | Current number of contention loser sessions. For CICS/TS V1.1 and later. This is the max from A20E1RY.  |
| CONT_SESSION_WIN   |     | FLOAT     | Current number of contention winner sessions. For CICS/TS V1.1 and later. This is the max from A20E2RY.   |
| CURR_LOSER_CONTENT |     | FLOAT     | Number of contention loser sessions that are currently in use. For CICS/TS V1.1 and later. This is the max from A20ECONL.   |
| CURR_SESSION_NUM   |     | FLOAT     | Current number of sessions in the group. For CICS/TS V1.1 and later. This is the sum of A20EMAXS.   |
| CURR_WINN_CONTENT  |     | FLOAT     | Number of contention winner sessions that are currently in use. For CICS/TS V1.1 and later. This is the max from A20ECONW.  |
| DELETE_CONN_GTIME  |     | TIMESTAMP | Time at which this connection was deleted, in GMT. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14GADT.   |
| DELETE_CONN_LTIME  |     | TIMESTAMP | Time at which this connection was deleted, in LOCAL time. The time is expressed as hours:minutes:seconds.decimals. For CICS/TS V1.1 and later. This is from A14AIDT.  |
| ENTRIES_REUSED     |     | INTEGER   | Number of times user IDs were reused without referencing an external security manager. From A21_SNT_TOTAL_REUSES.   |
| ENTRIES_TIMED_OUT  |     | INTEGER   | Number of user IDs signed on to this remote system that were timed out. From A21_SNT_TOTAL_TIMEOUT.   |
| FUNC_SHIPSCHN_PC   |     | FLOAT     | The number of program control link requests, with channels, for function shipping. From A14PFRC.  |
| FUNC_SHIPSCHN_TS   |     | FLOAT     | The number of terminal-sharing channel requests for function shipping. From A14TSC.   |
| FUNC_SHIPSCHN_IC   |     | FLOAT     | The number of interval control START requests, with channels, for function shipping. From A14IFRC.  |
| FUNCTION_SHIPS_DLI |     | INTEGER   | DL/I function shipping requests. From A14ESTDL.   |
| FUNCTION_SHIPS_FC  |     | INTEGER   | File control function shipping requests. From A14ESTFC.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| FUNCTION_SHIPS_IC  |     | INTEGER   | Interval control function shipping requests. From A14ESTIC.   |
| FUNCTION_SHIPS_TD  |     | INTEGER   | Transient data function shipping requests. From A14ESTTD.   |
| FUNCTION_SHIPS_TS  |     | INTEGER   | Temporary storage function shipping requests. From A14ESTTS.  |
| GENERIC_AIDS       |     | INTEGER   | Number of requests waiting to use a non-specific session. From A14ESALL.  |
| LOSERS_PEAK        |     | INTEGER   | Peak number of contention losers sessions. From A14E1HWM.   |
| PEAK_CONT_LOSER    |     | INTEGER   | Number of contention winner sessions (primaries for LU6.1) that are currently in use. For CICS/TS V1.1 and later. This is the sum of A14E2RY.   |
| PGM_CONTROL        |     | FLOAT     | Number of program control link requests for function shipping. For CICS/TS V1.3 and later. This is the sum of A14PCFR.  |
| RECORD_GLOBAL_CNT  |     | INTEGER   | Incremented if a ICS/IRC GLOBAL record is processed. This is the sum of RECORD_GLOBAL_FLAG.   |
| RECORD_MODE_CNT    |     | INTEGER   | Incremented if a ICS/IRC MODE record is processed. This is the sum of RECORD_MODE_FLAG.   |
| RECORD_SYSTEM_CNT  |     | INTEGER   | Incremented if a ICS/IRC SYSTEM record is processed. This is the sum of RECORD_SYSTEM_FLAG.   |
| REC_SESS_COUNT     |     | INTEGER   | Number of RECEIVE sessions for this connection. This field applies to MRO and LU6.1 connections only. For CICS/TS V1.1 and later. This is the sum of A14EPRMN.                              |
| REUSE_TIME_SEC     |     | INTEGER   | Total time between each reuse of user IDs signed on to this remote system, in seconds. Divide by RECORD_GLOBAL_CNT to get the average. From A21_SNT_AV_REUSE_TIME.                          |
| SEND_SESS_COUNT    |     | INTEGER   | Number of SEND sessions for this connection. This field applies to MRO and LU6.1 connections only. For CICS/TS V1.1 and later. This is the sum of A14ESECN.                                 |
| SESSION_NUM_MAX    |     | INTEGER   | Maximum number of sessions that the definition of the session group permits. For CICS/TS V1.1 and later. This is the max from A20ELMAX.   |
| SIGNON_REUSE       |     | INTEGER   | Number of times user IDs in the persistent verification list were used without referencing an external security manager. From A21_LUIT_TOTAL_REUSES.  |
| SIGNON_REUSE_SEC   |     | INTEGER   | Total time between the reuse of entries in the persistent verification list of this remote system, in seconds. Divide by RECORD_GLOBAL_CNT to get the average. From A21_LUIT_AV_REUSE_TIME. |
| SIGNON_TIMEOUT     |     | INTEGER   | Number of entries in the persistent verification list of this remote system that were timed out. From A21_LUIT_TOTAL_TIMEOUT.   |
| TRANS_ROUTINGS     |     | INTEGER   | Transaction routing commands (where a transaction is defined as remote or is dynamically routed). Not valid for LU 6.1. This is incremented on both systems. From A14ESTTC.                 |
| WINNERS_PEAK       |     | INTEGER   | Peak number of contention winner sessions. From A14E2HWM.   |
| XZIQUE_ALLOC_PURGS |     | INTEGER   | Total number of allocates purged due to XZIQUE requesting that queues should be purged (see XZIQUE_PURGE_CNT) for this connection. For CICS V4 and later. From A14EZQPC.                    |
| XZIQUE_PURGE_CNT   |     | INTEGER   | Total number of allocate queue purges that have occurred at XZIQUE request for this connection. For CICS V4 and later. From A14EZQPU.   |
| XZIQUE_REJECT_CNT  |     | INTEGER   | Total number of allocates rejected by the XZIQUE exit. For CICS V4 and later. From A14EZQRJ.  |

**CICS\_S\_JOURNAL\_T**

This table provides detailed CICS journal statistics. For CICS/ESA and CICS/TS, this maps the DFHA13DS record.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                     |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                                   |
| JOURNAL_ID         | K   | INTEGER   | Identifier of the journal as specified in the JCT JFILEID operand. From A13JFID.  |
| ARCHIVES_SUBMITTED |     | INTEGER   | Number of archives submitted. From A13ASUB.   |
| ARCHIVE_WAITS      |     | INTEGER   | Number of waits for archive completion. From A13WAC.  |
| BLOCKS_WRITTEN     |     | INTEGER   | Number of physical I/Os written to the journal. From A13PBC.  |
| BUFFER_FULL_COUNT  |     | INTEGER   | Number of times the receiving buffer was filled before the alternate buffer was written. From A13BFC.   |
| DATASETS_OPENED    |     | INTEGER   | Number of data sets opened (automatic archiving only). From A13JDO.   |
| JOURNAL_TYPE       |     | CHAR(5)   | This CICS V4 field shows which volume the journal has been written to (DISK1 or DISK2) or whether the journal was written to an SMF data set. From A13TYPE. |
| LAST_VOLSER_WRITE  |     | CHAR(6)   | Volume identifier of the most recently written volume (labeled tapes only). From A13LVW.  |
| OUTPUT_BLKSIZE_AVG |     | INTEGER   | Approximate average of the output block size, in bytes. From A13ABS.  |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORDS_WRITTEN    |     | INTEGER   | Number of records written to the journal. From A13LRC.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.                              |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| SCRATCH_TAPES_LEFT |     | INTEGER   | Number of scratch tapes left. From A13STL.  |
| TAPES_OPENED       |     | INTEGER   | Number of tapes opened for use. From A13VOOC.   |

**CICS\_S\_JOURNAL\_T2**

This table provides detailed CICS journal statistics. For CICS TS 1.1 and later, this maps the DFHLGRDS record.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| JOURNAL_NAME      | K   | INTEGER   | Identifier of the journal as specified in the JCT JFILEID operand. From LGRJNLNAME.  |
| RECORDS_WRITTEN   |     | FLOAT     | Total number of times that a journal record was written to the journal. From LGRWRITES.  |
| BYTES_WRITTEN     |     | FLOAT(53) | Total number of bytes written to the journal. From LGRBYTES.<br><b>Note:</b> A double-precision floating-point number is a System/370 long (64 bits) floating-point number. The range of magnitude is approximately 5.4E-79 to 7.2E+75. <b>FLOAT(integer):</b> for a floating-point number. If the integer is between 1 and 21 inclusive, the format is single-precision floating point. If the integer is between 22 and 53 inclusive, the format is double-precision floating point. |
| BUFFER_FLUSHES    |     | FLOAT     | Total number of times that a journal block was written to the logstream or in the SMF. From LGRBUFLUSH.  |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.   |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| JOURNAL_TYPE      |     | INTEGER   | Type of the journal. Can be MVS, SMF, or Dummy. From LGRJTYPE.   |
| LOGSTREAM_NAME    |     | CHAR(26)  | Logstream name. From LGRSTREAM.  |

## CICS\_S\_JOURNAL\_D

This table provides daily statistics on journals in the CICS system. It contains summarized data from the CICS\_S\_JOURNAL\_T table.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| JOURNAL_ID     | K   | INTEGER   | Identifier of the journal as specified in the JCT JFILEID operand. From A13JFID.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| ARCHIVES_SUBMITTED |     | INTEGER   | Number of archives submitted. From A13ASUB.   |
| ARCHIVE_WAITS      |     | INTEGER   | Number of waits for archive completion. From A13WAC.  |
| BLOCKS_WRITTEN     |     | INTEGER   | Number of physical I/Os written to the journal. From A13PBC.  |
| BUFFER_FULL_COUNT  |     | INTEGER   | Number of times the receiving buffer was filled before the alternate buffer was written. From A13BFC. |
| DATASETS_OPENED    |     | INTEGER   | Number of data sets opened (automatic archiving only). From A13JDO.                                   |
| LAST_VOLSER_WRITE  |     | CHAR(6)   | Volume identifier of the most recently written volume (labeled tapes only). From A13LVW.              |
| RECORDS_WRITTEN    |     | INTEGER   | Number of records written to the journal. From A13LRC.  |
| SCRATCH_TAPES_LEFT |     | INTEGER   | Number of scratch tapes left. From A13STL.  |
| TAPES_OPENED       |     | INTEGER   | Number of tapes opened for use. From A13VOOC.   |

## CICS\_S\_JOURNAL\_D2

This table provides daily CICS journal statistics. For CICS TS 1.1 and later, this maps the DFHLGRDS record.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| JOURNAL_NAME      | K   | INTEGER   | Identifier of the journal as specified in the JCT JFILEID operand. From LGRJNLNAME.   |
| RECORDS_WRITTEN   |     | FLOAT     | Total number of times that a journal record was written to the journal. From LGRWRITES.   |
| BYTES_WRITTEN     |     | FLOAT(53) | Total number of bytes written to the journal. From LGRWRITES.<br><b>Note:</b> A double-precision floating-point number is a System/370 long (64 bits) floating-point number. The range of magnitude is approximately 5.4E-79 to 7.2E+75. <b>FLOAT(integer):</b> for a floating-point number. If the integer is between 1 and 21 inclusive, the format is single-precision floating point. If the integer is between 22 and 53 inclusive, the format is double-precision floating point. |
| BUFFER_FLUSHES    |     | FLOAT     | Total number of times that a journal block was written to the logstream or in the SMF. From LGRBUFLUSH.   |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.  |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| JOURNAL_TYPE      |     | INTEGER   | Type of the journal. Can be MVS, SMF, or Dummy. From LGRJTYPE.  |



| Column name    | Key | Data type | Description                     |
|----------------|-----|-----------|---------------------------------|
| LOGSTREAM_NAME |     | CHAR(26)  | Logstream name. From LGRSTREAM. |

### CICS\_S\_JVM\_PROF\_T,D

This tables provide profile statistics data grouped by JVM profile and execution key. They gather information from the statistics record provided by the CICS statistics records (SMF 110, subtype 2).

The default retention periods for these tables are:

7 days for CICS\_S\_JVM\_PROF\_T

30 days for CICS\_S\_JVM\_PROF\_D

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                 |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFSTPRN.                       |
| PROF_NAME         | K   | CHAR(8)   | Name of this JVM profile. From SJR_PROFILE_NAME.  |
| STORAGE_KEY       | K   | CHAR(4)   | The execution key to which these statistics apply. Possible values are: User (the default), CICS. From SJRSTORKEY.                                      |
| CURR_PROF_USE     |     | FLOAT     | Number of JVMs with this execution key and profile that are currently in the JVM pool. From SJRCURRCOU.   |
| GARB_COLL_REQ     |     | FLOAT     | The number of times GC was requested.   |
| JVM_HEAP_HWM      |     | FLOAT     | The highest amount of nonsystem heap storage that was used by a JVM with this execution key and profile. From SJRHEAHWM.                                |
| JVMS_DESTR_SOS    |     | FLOAT     | Number of times that JVMs with this execution key and profile were destroyed due to a short-on-storage condition. From SJRDESSOS.                       |
| JVMS_UNRESETTABLE |     | FLOAT     | Number of new JVMs with this execution key and profile that could not be reset, and therefore could not be reused by another request. From SJRUNRESCOU. |
| LE_HEAP_HWM       |     | FLOAT     | The highest amount of Language Environment® heap storage that was used by a JVM with this execution key and profile. From SJRLEHWM.                     |
| MISMATCH_STEALER  |     | FLOAT     | Number of times that an application's request for a JVM with this execution key and profile resulted in a mismatch or a steal. From SJRMISSTEA.         |
| MISMATCH_VICTIM   |     | FLOAT     | Number of times that a free JVM with this profile was taken, destroyed and re-initialized. From SJRMISVIC.  |
| NEW_JVMS_CREATED  |     | FLOAT     | Number of new JVMs that were created with this execution key and profile. From SJRNEWCOU.   |
| PEAK_PROF_USE     |     | FLOAT     | Peak number of JVMs with this execution key and profile that the JVM pool has contained. From SJRPEAKCOU.   |

## CICS statistics component data tables

| Column name      | Key | Data type    | Description   |
|------------------|-----|--------------|---|
| PROF_CLASS_CACHE |     | CHAR(1)      | Shows whether JVMs with this JVM profile use the shared class cache. Possible values are Y (Yes), N (No). From SJRPROFCLCH.   |
| PROF_MODES       |     | INTEGER      | Shows the number of execution keys in which JVMs with this JVM profile can be created. From JVMPROFMODE.  |
| PROF_PATH_NAME   |     | VARCHAR(254) | The complete HFS path name for this JVM profile. From SJRPROFPANM.  |
| PROF_REQUESTS    |     | FLOAT        | Number of requests that applications have made to run a Java program in a JVM with this execution key and profile. From SJRREQCOUN.   |
| PROF_XMX_VALUE   |     | CHAR(8)      | The value of the Xmx parameter set in this JVM profile. The Xmx parameter specifies the maximum total size of the middleware and transient heaps in the JVM. From SJRXMXVA. |

### CICS\_S\_JVM\_PROG\_T,\_D

This tables provide statistics data about programs running in a JVM. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention periods for these tables are:

7 days for CICS\_S\_JVM\_PROG\_T

30 days for CICS\_S\_JVM\_PROG\_D

| Column name      | Key | Data type    | Description   |
|------------------|-----|--------------|---|
| DATE             | K   | DATE         | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME      | K   | CHAR(8)      | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME             | K   | TIME         | Time when the statistics record was written to SMF. It applies only to the _T table. From SMFSTTME.                                     |
| MVS_SYSTEM_ID    | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFSTPRN.       |
| JVMPROGRAM_NAME  | K   | CHAR(8)      | Name of the Java program. From PGRPROGNM.   |
| JVMPROG_EXEC_KEY |     | CHAR(4)      | The execution key that the program requires. Possible values are: USER (the default), CICS. From PGREXEKEY.                             |
| JVMPROG_JVMCLASS |     | VARCHAR(254) | The main class in the program. From PGRJVMCLA.  |
| JVMPROG_USECOUNT |     | FLOAT        | The number of times the program has been used. From PGRUSECOU.  |
| PGR_JVMPROG_PROF |     | CHAR(8)      | The JVM profile that the program requires. From PGRPROGPF (removed from CTS 5.1+).  |

### CICS\_S\_JVMPPOOL\_T,\_D

This tables provide detailed data about how many requests were for worker JVMs that use the shared class cache. The data is from CICS statistics records (SMF 110, subtype 2).

The default retention periods for these tables are:

7 days for CICS\_S\_JVMPPOOL\_T

30 days for CICS\_S\_JVMPPOOL\_D

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                               |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. It applies only to the _T table. From SMFSTTME.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFSTPRN.                                     |
| CURR_CACHE_JVMS    |     | FLOAT     | Number of JVMs currently in the JVM pool that use the shared class cache. From SJGCURRWJVM.   |
| JVM_PEAK           |     | FLOAT     | Peak number of JVMs. From SJGPEAKJVM.   |
| JVM_REQS_CACHE     |     | FLOAT     | Total number of Java programs that requested a JVM that used the shared class cache. From SJGJVMRECAS.  |
| JVM_REQS_INIT      |     | FLOAT     | Number of JVM program requests where the JVM was initialized. From SJGJVMREQIN.   |
| JVM_REQS_MISMATCH  |     | FLOAT     | Number of JVM program requests whose JVM profile specified resettable but for which there was no JVM already initialized with the same JVM profile. From SJGJVMREQMI. |
| JVM_REQS_REUSE     |     | FLOAT     | Number of requests to run a program in a continuous JVM. From SJGJVMREQRE.  |
| JVM_REQS_TERMINAT  |     | FLOAT     | Number of JVMs that have been terminated. From SJGJVMREQTE.   |
| JVM_REQS_TOT       |     | FLOAT     | Total number of JVM program requests. From SJGTOTPRREQ.   |
| JVMS_CURRENT       |     | FLOAT     | Current number of JVMs. From SJGCURRJVM.  |
| PEAK_CACHE_JVMS    |     | FLOAT     | Peak number of JVMs in the JVM pool that used the shared class cache. From SJGPEAHWJVM.   |
| SJG_JVM_REQS_RESET |     | FLOAT     | The number of requests to run a program in resettable JVM. From SJGJVMREQRS. This is no longer used from CICS TS 3.2.   |

**CICS\_S\_JVMSREV\_D**

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| DATE            | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME     | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFSTPRN.       |
| JVM_SERVER_NAME | K   | CHAR(8)   | Name of the JVM server. From SJS_JVM_NAME.  |
| USE_COUNT       |     | FLOAT     | Number of times the JVM server has been called. Calculated as the sum of SJS_JVM_USE_COUNT.   |
| THREAD_LIMIT    |     | INTEGER   | Maximum number of threads in the JVM server. Calculated as the maximum of SJS_JVM_LIMIT.  |
| CURRNT_THREADS  |     | FLOAT     | Current number of threads in the JVM server. Calculated as the average of SJS_JVM_CURRENT.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| PEAK_THREADS       |     | FLOAT     | Peak number of threads in the JVM server. Calculated as the average of SJS_JVM_HWM.  |
| THREAD_LWAIT_CNT   |     | FLOAT     | Number of tasks that waited for a free thread. Calculated as the sum of SJS_JVM_WAITS.   |
| THREAD_LWAIT_TIME  |     | FLOAT     | Amount of time in seconds that tasks waited for a free thread. Calculated as the sum of SJS_JVM_WAIT_TIME.                             |
| CURRNT_THREAD_WAIT |     | INTEGER   | Number of tasks that are currently waiting for a free thread. Calculated as the sum of SJS_JVM_WAIT_CUR.                               |
| PEAK_THREAD_WAIT   |     | FLOAT     | Peak number of tasks that waited for a free thread. Calculated as the average of SJS_JVM_WAIT_HWM.                                     |
| S_THREAD_USE_CNT   |     | FLOAT     | Number of times that the system thread has been used. Calculated as the sum of SJS_SYS_USE_COUNT.                                      |
| S_THREAD_WAIT_CNT  |     | FLOAT     | Number of CICS tasks that waited for a system thread. Calculated as the sum of SJS_SYS_WAITED.   |
| S_THREAD_WAIT_TIME |     | FLOAT     | Accumulated time in seconds that tasks spent waiting for a system thread. Calculated as the sum of SJS_SYS_WAIT_TIME.                  |
| CS_THREAD_WAIT_CNT |     | FLOAT     | Current number of tasks that are waiting for a system thread. Calculated as the average of SJS_SYS_WAIT_CUR.                           |
| PS_THREAD_WAIT_CNT |     | FLOAT     | Highest number of tasks that waited for a system thread. Calculated as the average of SJS_SYS_WAIT_HWM.                                |
| CURR_HEAP_SIZE     |     | FLOAT     | Size in bytes of the heap that is currently allocated to the JVM server. Calculated as the average of SJS_CURRENT_HEAP.                |
| INIT_HEAP_SIZE     |     | FLOAT     | Size in bytes of the initial heap that is currently allocated to the JVM server. From the last instance of SJS_INITIAL_HEAP.           |
| MAX_HEAP_SIZE      |     | FLOAT     | Size in bytes of the maximum heap that can be allocated to the JVM server. Calculated as the maximum of SJS_MAX_HEAP.                  |
| PEAK_HEAP_SIZE     |     | FLOAT     | Size in bytes of the largest heap that has been allocated to the JVM server. Calculated as the average of SJS_PEAK_HEAP.               |
| HEAP_OCCUPANCY     |     | FLOAT     | Size in bytes of the heap immediately after the last garbage collection (GC) occurred. Calculated as the average of SJS_OCCUPANCY.     |
| MJR_GC_EVT_CNT     |     | FLOAT     | Number of major garbage collection (GC) events that have occurred. Calculated as the sum of SJS_MJR_GC_EVENTS.                         |
| MJR_GC_ELPSD_TIME  |     | FLOAT     | Total elapsed time in milliseconds that was spent performing major garbage collection (GC). Calculated as the sum of SJS_MJR_GC_CPU.   |
| MJR_GC_MMRY_FREED  |     | FLOAT     | Total memory in bytes that was freed by performing major garbage collection (GC). Calculated as the sum of SJS_MJR_HEAP_FR.            |
| MIN_GC_EVT_CNT     |     | FLOAT     | Number of minimum garbage collection (GC) events that have occurred. Calculated as the sum of SJS_MIN_GC_EVENTS.                       |
| MIN_GC_ELPSD_TIME  |     | FLOAT     | Total elapsed time in milliseconds that was spent performing minimum garbage collection (GC). Calculated as the sum of SJS_MIN_GC_CPU. |
| MIN_GC_MMRY_FREED  |     | FLOAT     | Total memory in bytes that was freed by performing minimum garbage collection (GC). Calculated as the sum of SJS_MIN_HEAP_FR.          |
| INPUT_CNT          |     | INTEGER   | Number of SMF records collected to this interval.  |

**CICS\_S\_JVMSREV\_T**

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFSTPRN.       |
| JVM_SERVER_NAME    | K   | CHAR(8)   | Name of the JVM server. From SJS_JVM_NAME.  |
| PROFILE_NAME       |     | CHAR(8)   | Name of the JVM server. From SJS_JVM_JVMPROFILE.  |
| LE_RUNOPTIONS      |     | CHAR(8)   | Name of the Language Environment runtime options program that is specified on the JVMSERVER resource. From SJS_JVM_LE_RUNOPTS.          |
| USE_COUNT          |     | FLOAT     | Number of times the JVM server has been called. Calculated as the sum of SJS_JVM_USE_COUNT.   |
| STATUS             |     | CHAR(2)   | State of the JVM server resource. From the last instance of SJS_JVM_SRV_ST.   |
| THREAD_LIMIT       |     | INTEGER   | Maximum number of threads in the JVM server. Calculated as the maximum of SJS_JVM_LIMIT.  |
| CURRNT_THREADS     |     | FLOAT     | Current number of threads in the JVM server. Calculated as the average of SJS_JVM_CURRENT.  |
| PEAK_THREADS       |     | FLOAT     | Peak number of threads in the JVM server. Calculated as the average of SJS_JVM_HWM.   |
| THREAD_LWAIT_CNT   |     | FLOAT     | Number of tasks that waited for a free thread. Calculated as the sum of SJS_JVM_WAITS.  |
| THREAD_LWAIT_TIME  |     | FLOAT     | Amount of time in seconds that tasks waited for a free thread. Calculated as the sum of SJS_JVM_WAIT_TIME.                              |
| CURRNT_THREAD_WAIT |     | INTEGER   | Number of tasks that are currently waiting for a free thread. Calculated as the sum of SJS_JVM_WAIT_CUR.                                |
| PEAK_THREAD_WAIT   |     | FLOAT     | Peak number of tasks that waited for a free thread. Calculated as the average of SJS_JVM_WAIT_HWM.                                      |
| S_THREAD_USE_CNT   |     | FLOAT     | Number of times that the system thread has been used. Calculated as the sum of SJS_SYS_USE_COUNT.                                       |
| S_THREAD_WAIT_CNT  |     | FLOAT     | Number of CICS tasks that waited for a system thread. Calculated as the sum of SJS_SYS_WAITED.  |
| S_THREAD_WAIT_TIME |     | FLOAT     | Accumulated time in seconds that tasks spent waiting for a system thread. Calculated as the sum of SJS_SYS_WAIT_TIME.                   |
| CS_THREAD_WAIT_CNT |     | FLOAT     | Current number of tasks that are waiting for a system thread. Calculated as the average of SJS_SYS_WAIT_CUR.                            |
| PS_THREAD_WAIT_CNT |     | FLOAT     | Highest number of tasks that waited for a system thread. Calculated as the average of SJS_SYS_WAIT_HWM.                                 |
| CREATION_TIME      |     | TIME      | Timestamp (STCK) in local time when the JVM was created for the JVM server. From the last instance of SJS_JVM_CRTN_LCL.                 |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| CURR_HEAP_SIZE    |     | FLOAT     | Size in bytes of the heap that is currently allocated to the JVM server. Calculated as the average of SJS_CURRENT_HEAP.                |
| INIT_HEAP_SIZE    |     | FLOAT     | Size in bytes of the initial heap that is currently allocated to the JVM server. From the last instance of SJS_INITIAL_HEAP.           |
| MAX_HEAP_SIZE     |     | FLOAT     | Size in bytes of the maximum heap that can be allocated to the JVM server. Calculated as the maximum of SJS_MAX_HEAP.                  |
| PEAK_HEAP_SIZE    |     | FLOAT     | Size in bytes of the largest heap that has been allocated to the JVM server. Calculated as the average of SJS_PEAK_HEAP.               |
| HEAP_OCCUPANCY    |     | FLOAT     | Size in bytes of the heap immediately after the last garbage collection (GC) occurred. Calculated as the average of SJS_OCCUPANCY.     |
| GC_POLICY         |     | CHAR(32)  | Garbage collection (GC) policy used by the JVM. From the last instance of SJS_GC_POLICY.   |
| MJR_GC_EVT_CNT    |     | FLOAT     | Number of major garbage collection (GC) events that have occurred. Calculated as the sum of SJS_MJR_GC_EVENTS.                         |
| MJR_GC_ELPSD_TIME |     | FLOAT     | Total elapsed time in milliseconds that was spent performing major garbage collection (GC). Calculated as the sum of SJS_MJR_GC_CPU.   |
| MJR_GC_MMRY_FREED |     | FLOAT     | Total memory in bytes that was freed by performing major garbage collection (GC). Calculated as the sum of SJS_MJR_HEAP_FR.            |
| MIN_GC_EVT_CNT    |     | FLOAT     | Number of minimum garbage collection (GC) events that have occurred. Calculated as the sum of SJS_MIN_GC_EVENTS.                       |
| MIN_GC_ELPSD_TIME |     | FLOAT     | Total elapsed time in milliseconds that was spent performing minimum garbage collection (GC). Calculated as the sum of SJS_MIN_GC_CPU. |
| MIN_GC_MMRY_FREED |     | FLOAT     | Total memory in bytes that was freed by performing minimum garbage collection (GC). Calculated as the sum of SJS_MIN_HEAP_FR.          |
| INPUT_CNT         |     | INTEGER   | Number of SMF records collected to this interval.  |

## CICS\_S\_LOGSTREAM\_T

This table provides detailed CICS logstream statistics. For CICS/TS V1.1 and later, this maps the DFHLGSDS record.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| LOGSTREAM_NAME    | K   | CHAR(26)  | Logstream name. From LGSTRNAM.  |
| LOGSTREAM_WRT_REQ |     | FLOAT     | Number of logstream write requests. From LGRWRITES.   |
| BYTES_WRITTEN     |     | FLOAT(53) | Number of bytes written. From LGRBYTES.   |

| Column name        | Key | Data type            | Description  |
|--------------------|-----|----------------------|--|
| FORCE_WAITERS_CURR |     | FLOAT                | Current number of force waiters. From LGSCUFWTRS.      |
| FORCE_WAITERS_PEAK |     | FLOAT                | Peak number of force waiters. From LGSPKFWTRS.         |
| FORCE_WAITERS_TOT  |     | FLOAT                | Total number of force waits. From LGSTFCWAIT.          |
| WAITS_BUFFER_FULL  |     | FLOAT                | Number of waits due to buffer full. From LGSBUFWAIT.   |
| LOGS_BROWSE_START  |     | FLOAT                | Number of log browse starts. From LGSBRWSTRT.          |
| LOGS_DELETES_REQ   |     | FLOAT                | Number of log deletes. From LGSDELETES.                |
| LOGS_RETRT_ERRS    |     | FLOAT                | Number of errors that can be retried. From LGSRETRERR. |
| LOGS_BUF_APPEND    |     | FLOAT                | Number of buffer appends. From LGSBUFAPP.              |
| LOGS_SYSTEM_LOG    |     | CHAR(1) FOR BIT DATA | System log flag. From LGSSYSLG.                        |
| LOGS_DASD_ONLY     |     | CHAR(1) FOR BIT DATA | DASD only flag. From LGSDONLY.                         |
| LOGS_CF_STRUCTNAME |     | CHAR(16)             | Name of the CF structure. From LGSSTRUC.               |
| LOGS_MAX_BLOCK     |     | FLOAT                | Maximum block length. From LGSMAXBL.                   |
| LOGS_RET_PERIOD    |     | FLOAT                | Data retention period. From LGSRETPD.                  |
| LOGS_AUTO_DELETE   |     | CHAR(1) FOR BIT DATA | Data auto deletes flag. From LGSAUTOD.                 |

## CICS\_S\_LOGSTREAM\_D

This table provides daily CICS logstream statistics. For CICS/TS V1.1 and later, this maps the DFHLGSDS record.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| LOGSTREAM_NAME     | K   | CHAR(26)  | Logstream name. From LGSTRNAM.  |
| LOGSTREAM_WRT_REQ  |     | FLOAT     | Number of logstream write requests. From LGRWRITES.   |
| BYTES_WRITTEN      |     | FLOAT(53) | Number of bytes written. From LGRBYTES.   |
| FORCE_WAITERS_CURR |     | FLOAT     | Current number of force waiters. From LGSCUFWTRS.   |
| FORCE_WAITERS_PEAK |     | FLOAT     | Peak number of force waiters. From LGSPKFWTRS.  |
| FORCE_WAITERS_TOT  |     | FLOAT     | Total number of force waits. From LGSTFCWAIT.   |
| WAITS_BUFFER_FULL  |     | FLOAT     | Number of waits due to buffer full. From LGSBUFWAIT.  |
| LOGS_BROWSE_START  |     | FLOAT     | Number of log browse starts. From LGSBRWSTRT.   |
| LOGS_DELETES_REQ   |     | FLOAT     | Number of log deletes. From LGSDELETES.   |
| LOGS_RETRT_ERRS    |     | FLOAT     | Number of errors that can be retried. From LGSRETRERR.  |

| Column name        | Key | Data type            | Description                               |
|--------------------|-----|----------------------|---|
| LOGS_BUF_APPEND    |     | FLOAT                | Number of buffer appends. From LGSBUFAPP. |
| LOGS_SYSTEM_LOG    |     | CHAR(1) FOR BIT DATA | System log flag. From LGSSYSLG.           |
| LOGS_DASD_ONLY     |     | CHAR(1) FOR BIT DATA | DASD only flag. From LGSDONLY.            |
| LOGS_CF_STRUCTNAME |     | CHAR(16)             | Name of the CF structure. From LGSSTRUC.  |
| LOGS_MAX_BLOCK     |     | FLOAT                | Maximum block length. From LGSMAXBL.      |
| LOGS_RET_PERIOD    |     | FLOAT                | Data retention period. From LGSRETPD.     |
| LOGS_AUTO_DELETE   |     | CHAR(1) FOR BIT DATA | Data auto deletes flag. From LGSAUTOD.    |

### CICS\_S\_LSR\_POOL\_T

This table provides detailed data about the local shared resources (LSR) pool buffers and strings. The counters are never reset; except for the three string statistics, the counters contain totals accumulated since CICS started.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| POOL_NUMBER       | K   | INTEGER   | LSR pool identifier, from 1 to 8. From A08SRPID.  |
| BUFFER_SIZE       | K   | CHAR(6)   | LSR buffer size, in bytes. From A08BKBSZ.   |
| BUFFERS           |     | INTEGER   | Number of data buffers of this size. From A08BKBFN.   |
| DATA_BUFF_CNT     |     | INTEGER   | Number of buffers used by the pool. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOBFN_DATA.                                    |
| DATA_BUFF_LLA     |     | INTEGER   | Number of successful lookasides, where data was found, avoiding an IO. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOBFF_DATA. |
| DATA_BUFF_READ    |     | INTEGER   | Number of read I/Os to the buffers. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOFRD_DATA.                                    |
| DATA_BUFF_WRITE_N |     | INTEGER   | Number of non-user-initiated write I/Os. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TONUW_DATA.                               |
| DATA_BUFF_WRITE_U |     | INTEGER   | Number of user-initiated write I/Os. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOUIW_DATA.                                   |



| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATAH_BUFF_CNT     |     | INTEGER   | Number of hiperspace buffers. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOHBN_DATA.  |
| DATAH_BUFF_CREAD   |     | INTEGER   | Number of successful CREADs from hiperspace to data buffers. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOCRS_DATA.                                   |
| DATAH_BUFF_CREADF  |     | INTEGER   | Number of CREADs that failed. The data was read from DASD, because MVS had withdrawn the space. (Data buffers, if separate data and index pools, else total for data and index.) From A08TOCRF_DATA.          |
| DATAH_BUFF_CWRITE  |     | INTEGER   | Number of successful CWRITEs from data buffers to hiperspace. (Data buffers, if there are separate data and index pools, else total for data and index.) From A08TOWRS_DATA.                                  |
| DATAH_BUFF_CWRITEF |     | INTEGER   | Number of CWRITEs that failed. There was not enough hiperspace, and VSAM wrote to DASD instead. (Data buffers, if there are separate data and index pools, else total of data and index.) From A08TOCWF_DATA. |
| FLAGS              |     | CHAR(2)   | Set to X"80" if there are separate data and index pools, else X"00". From A08FLAGS.   |
| HIPER_INDEX_BUFFER |     | INTEGER   | Number of hiperspace index buffers. From A08HIXBF.  |
| HIPERSPACE_READ    |     | INTEGER   | Number of successful CREAD requests. From A08BKCRS.   |
| HIPERSPACE_WRITE   |     | INTEGER   | Number of successful CWRITE requests. From A08BKWRS.  |
| HS_FAILED_READ     |     | INTEGER   | Number of failed CREAD requests. MVS withdrew the space and VSAM had to read from DASD. From A08BKCRF.  |
| HS_FAILED_WRITE    |     | INTEGER   | Number of failed CWRITE requests, because of a lack of hiperspace. VSAM had to write to DASD. From A08BKCWF.  |
| INDEX_BUFFER_SIZE  |     | INTEGER   | Index buffer size. From A08IXBFS.   |
| INDEX_FAIL_CREADS  |     | INTEGER   | Number of index buffer reads that failed. From A08IXFCR.  |
| INDEX_FAIL_CWRITE  |     | INTEGER   | Number of index buffer writes that failed. From A08IXFCW.   |
| INDEX_SUXS_CREADS  |     | INTEGER   | Number of index buffer reads that were successful. From A08IXSCR.   |
| INDEX_SUXS_CWRITE  |     | INTEGER   | Number of index buffer writes that were successful. From A08IXSCW.  |
| INDX_BUFF_CNT      |     | INTEGER   | Number of index buffers for all buffer sizes. From A08TOBFN_IND.  |
| INDX_BUFF_LLA      |     | INTEGER   | Number of successful lookasides to index buffers, avoiding IO. From A08TOBFF_IND.   |
| INDX_BUFF_READ     |     | INTEGER   | Number of read I/Os to the index buffers. From A08TOFRD_IND.  |
| INDX_BUFF_WRITE_N  |     | INTEGER   | Number of non-user-initiated write I/Os from the index buffers. From A08TONIW_IND.  |
| INDX_BUFF_WRITE_U  |     | INTEGER   | Number of user-initiated write I/Os from the index buffers. From A08TOUIW_IND.  |
| INDXH_BUFF_CNT     |     | INTEGER   | Number of hiperspace index buffers. From A08TOHBN_IND.  |
| INDXH_BUFF_CREAD   |     | INTEGER   | Number of successful CREADs from hiperspace to index buffers. From A08TOCRS_IND.  |
| INDXH_BUFF_CREADF  |     | INTEGER   | Number of failed CREADs. MVS had withdrawn the space, and VSAM read from DASD. From A08TOCRF_IND.   |

## CICS statistics component data tables

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| INDXH_BUFF_CWRITE  |     | INTEGER   | Number of successful CWRITES from index buffers to hiperspace. From A08TOWRS_INDX.   |
| INDXH_BUFF_CWRITEF |     | INTEGER   | Number of failed CWRITES. There was not enough hiperspace, and VSAM wrote to DASD. From A08TOCWF_INDX.                           |
| INDEX_FAIL_CREADS  |     | INTEGER   | Number of failed CREADS. From A08IXFCR.  |
| INDEX_FAIL_CWRITE  |     | INTEGER   | Number of failed CWRITES. From A08IXFCW.   |
| INDEX_SUXS_CREADS  |     | INTEGER   | Number of successful CREADS. From A08IXSCR.  |
| INDEX_SUXS_CWRITE  |     | INTEGER   | Number of successful CWRITES. From A08IXSCW.   |
| IX_BUFFER_READS    |     | INTEGER   | Index buffer reads   |
| IX_SUXS_LOOK_ASID  |     | INTEGER   | Index success asides   |
| IX_BUFFER_READS    |     | INTEGER   | Number of buffer reads. From A08IXBFR.   |
| IX_SUXS_LOOK_ASID  |     | INTEGER   | Number of successful look asides. From A08IXSLA.   |
| LOOKASIDES         |     | INTEGER   | Number of read requests that VSAM could satisfy without I/O. From A08BKBFF.  |
| MAX_KEY_LENGTH     |     | INTEGER   | Maximum key length of any VSAM data using the pool, in bytes. From A08BKKYL.   |
| NONUSR_IX_BUF_WRI  |     | INTEGER   | Number of non-user initiated buffer writes. From A08NIXBW.   |
| NUM_INDEX_BUFFER   |     | INTEGER   | Number of index buffers of this size. From A08NIXBF.   |
| NUM_OF_HIPERSPACE  |     | INTEGER   | Number of hiperspace buffers specified for pool. From A08BKHBN.  |
| NUM_OF_NONUSR_WRIT |     | INTEGER   | Number of write I/Os caused by a shortage of buffers for read operations. From A08BKNUW.   |
| NUM_OF_USR_WRITES  |     | INTEGER   | Number of user-initiated I/O write operations. From A08BKUIW.  |
| POOL_CREATE_TIME   |     | TIME      | Local time when the LSR pool was created. From A08LBKCD A08BKCTD.  |
| POOL_DELETED_TIME  |     | TIME      | Local time when the LSR pool was deleted. From A08LBKDD A08BKDTD.  |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.   |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| STRING_PEAK_USED   |     | INTEGER   | Peak number of active strings. CICS does reset this to the current number of active strings. From A08BKHAS.                      |
| STRING_PEAK_WAIT   |     | INTEGER   | Peak number of requests that waited for a string. CICS does reset this to the current number of waiting requests. From A08BKHSW. |
| STRINGS            |     | INTEGER   | Number of strings. From A08BKSTN.  |
| STRING_WAITS       |     | INTEGER   | Number of requests that waited for a string. CICS does reset this to zero. From A08BKTSW.  |
| USR_IX_BUFFER_WRI  |     | INTEGER   | Number of user initiated buffer writes. From A08UIXBW.   |

**CICS\_S\_LSR\_POOL\_D**

This table provides daily data about the local shared resources (LSR) pool buffers and strings. The counters are never reset; except for the three string statistics, the counters contain the highest values from the CICS\_S\_LSR\_POOL\_T table. It contains consolidated data from the CICS\_S\_LSR\_POOL\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| POOL_NUMBER        | K   | INTEGER   | LSR pool identifier, from 1 to 8. From A08SRPID.  |
| BUFFER_SIZE        | K   | CHAR(6)   | LSR buffer size, in bytes. From A08BKBSZ.   |
| BUFFERS            |     | INTEGER   | Number of data buffers of this size. From A08BKBFN.   |
| DATA_BUFF_CNT      |     | INTEGER   | Number of buffers used by the pool. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOBFN_DATA.  |
| DATA_BUFF_LLA      |     | INTEGER   | Number of successful lookasides, where data was found, avoiding an IO. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOBFF_DATA.                         |
| DATA_BUFF_READ     |     | INTEGER   | Number of read I/Os to the buffers. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOFRD_DATA.  |
| DATA_BUFF_WRITE_N  |     | INTEGER   | Number of non-user-initiated write I/Os. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TONUW_DATA.   |
| DATA_BUFF_WRITE_U  |     | INTEGER   | Number of user-initiated write I/Os. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOUIW_DATA.   |
| DATAH_BUFF_CNT     |     | INTEGER   | Number of hiperspace buffers. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOHBN_DATA.  |
| DATAH_BUFF_CREAD   |     | INTEGER   | Number of successful CREADs from hiperspace to data buffers. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOCRS_DATA.                                   |
| DATAH_BUFF_CREADF  |     | INTEGER   | Number of CREADs that failed. The data was read from DASD, because MVS had withdrawn the space. (Data buffers, if separate data and index pools, else total for data and index). From A08TOCRF_DATA.          |
| DATAH_BUFF_CWRITE  |     | INTEGER   | Number of successful CWRITEs from data buffers to hiperspace. (Data buffers, if there are separate data and index pools, else total for data and index). From A08TOWRS_DATA.                                  |
| DATAH_BUFF_CWRITEF |     | INTEGER   | Number of CWRITEs that failed. There was not enough hiperspace, and VSAM wrote to DASD instead. (Data buffers, if there are separate data and index pools, else total of data and index). From A08TOCWF_DATA. |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| HIPERSPACE_READ    |     | INTEGER   | Number of successful CREAD requests. From A08BKCRS.   |
| HIPERSPACE_WRITE   |     | INTEGER   | Number of successful CWRITE requests. From A08BKWRS.  |
| HIPER_INDEX_BUFFER |     | INTEGER   | Number of hiperspace index buffers. From A08HIXBF.  |
| HS_FAILED_READ     |     | INTEGER   | Number of failed CREAD requests. MVS withdrew the space and VSAM had to read from DASD. From A08BKCRF.                  |
| HS_FAILED_WRITE    |     | INTEGER   | Number of failed CWRITE requests, because of a lack of hiperspace. VSAM had to write to DASD. From A08BKCWF.            |
| INDEX_BUFFER_SIZE  |     | INTEGER   | Index buffer size. From A08IXBFS.   |
| INDEX_FAIL_CREADS  |     | INTEGER   | Number of failed CREADs. From A08IXFCR.   |
| INDEX_FAIL_CWRITE  |     | INTEGER   | Number of failed CWRITEs. From A08IXFCW.  |
| INDEX_SUXS_CREADS  |     | INTEGER   | Number of successful CREADs. From A08IXSCR.   |
| INDEX_SUXS_CWRITE  |     | INTEGER   | Number of successful CWRITEs. From A08IXSCW.  |
| INDX_BUFF_CNT      |     | INTEGER   | Number of index buffers, for all buffer sizes. From A08TOBFN_INDEX.   |
| INDX_BUFF_LLA      |     | INTEGER   | Number of successful lookasides to index buffers, avoiding IO. From A08TOBFF_INDEX.                                     |
| INDX_BUFF_READ     |     | INTEGER   | Number of read I/Os to the index buffers. From A08TOFRD_INDEX.  |
| INDX_BUFF_WRITE_N  |     | INTEGER   | Number of non-user-initiated write I/Os from the index buffers. From A08TONIW_INDEX.                                    |
| INDX_BUFF_WRITE_U  |     | INTEGER   | Number of user-initiated write I/Os from the index buffers. From A08TOUIW_INDEX.  |
| INDXH_BUFF_CNT     |     | INTEGER   | Number of hiperspace index buffers. From A08TOHBN_INDEX.  |
| INDXH_BUFF_CREAD   |     | INTEGER   | Number of successful CREADs from hiperspace to index buffers. From A08TOCRS_INDEX.                                      |
| INDXH_BUFF_CREADF  |     | INTEGER   | Number of failed CREADs. MVS had withdrawn the space, and VSAM read from DASD. From A08TOCRF_INDEX.                     |
| INDXH_BUFF_CWRITE  |     | INTEGER   | Number of successful CWRITEs from index buffers to hiperspace. From A08TOWRS_INDEX.                                     |
| INDXH_BUFF_CWRITEF |     | INTEGER   | Number of failed CWRITEs. There was not enough hiperspace, and VSAM wrote to DASD. From A08TOCWF_INDEX.                 |
| IX_BUFFER_READS    |     | INTEGER   | Number of buffer reads. From A08IXBFR.  |
| IX_SUXS_LOOK_ASID  |     | INTEGER   | Number of successful look asides. From A08IXSLA.  |
| LOOKASIDES         |     | INTEGER   | Number of read requests that VSAM could satisfy without I/O. From A08BKBFF.   |
| MAX_KEY_LENGTH     |     | INTEGER   | Maximum key length of any VSAM data using the pool, in bytes. From A08BKKYL.  |
| NONUSR_IX_BUF_WRI  |     | INTEGER   | Number of non-user initiated buffer writes. From A08NIXBW.  |
| NUMBER_OF_IO_OPS   |     | INTEGER   | Number of I/O operations to the buffers, caused by failure to find the CI in a buffer on a READ request. From A08BKFRD. |
| NUM_INDEX_BUFFER   |     | INTEGER   | Number of index buffers of this size. From A08NIXBF.  |
| NUM_OF_HIPERSPACE  |     | INTEGER   | Number of hiperspace buffers specified for pool. From A08BKHBN.   |
| NUM_OF_NONUSR_WRIT |     | INTEGER   | Number of write I/Os caused by a shortage of buffers for read operations. From A08BKNUW.                                |
| NUM_OF_USR_WRITES  |     | INTEGER   | Number of user-initiated I/O write operations. From A08BKUIW.   |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| STRING_PEAK_USED  |     | INTEGER   | Peak number of active strings. CICS does reset this to the current number of active strings. From A08BKHAS.                      |
| STRING_PEAK_WAIT  |     | INTEGER   | Peak number of requests that waited for a string. CICS does reset this to the current number of waiting requests. From A08BKHSW. |
| STRINGS           |     | INTEGER   | Number of strings. From A08BKSTN.  |
| STRING_WAITS      |     | INTEGER   | Number of requests that waited for a string. CICS does reset this to zero. From A08BKTSW.  |
| USR_IX_BUFFER_WRI |     | INTEGER   | Number of user initiated buffer writes. From A08UIXBW.   |

## CICS\_S\_LSRP\_FILE\_T

This table provides summary LSR pool data for each file. It contains data from CICS statistics records.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From START.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| POOL_NUMBER       | K   | INTEGER   | LSR pool number, in the range 1 to 8. From A09SRPID.  |
| FILE_NAME         | K   | CHAR(8)   | CICS file name. From A09DSID.   |
| BUFFER_WAITS      |     | INTEGER   | Number of requests that had to wait because all buffers of the right size in the pool were in use. From A09TBW.                         |
| BUFFER_WAITS_PEAK |     | INTEGER   | Peak number of requests that had to wait because all buffers of the right size in the pool were in use. From A09HBW.                    |
| DATA_BUFFER_SIZE  |     | INTEGER   | Buffer size used for data records. This is the last non-zero value used for the data buffers. From A09DBN.                              |
| INDEX_BUFFER_SIZE |     | INTEGER   | Buffer size used for index records. This is the last non-zero value used for the index buffers. From A09IBN.                            |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |

## CICS\_S\_LSRP\_FILE\_D

This table provides daily LSR pool data for each file. It contains consolidated data from the CICS\_S\_LSRP\_FILE\_T table.

The default retention period for this table is 30 days.

## CICS statistics component data tables

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics records were written to SMF. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| POOL_NUMBER       | K   | INTEGER   | LSR pool number, in the range 1 to 8. From A09SRPID.  |
| FILE_NAME         | K   | CHAR(8)   | CICS file name. From A09DSID.   |
| BUFFER_WAITS      |     | INTEGER   | Number of requests that had to wait because all buffers of the right size in the pool were in use. From A09TBW.                         |
| BUFFER_WAITS_PEAK |     | INTEGER   | Peak number of requests that had to wait because all buffers of the right size in the pool were in use. From A09HBW.                    |
| DATA_BUFFER_SIZE  |     | INTEGER   | Buffer size used for data records. This is the last non-zero value used for the data buffers. From A09DBN.                              |
| INDEX_BUFFER_SIZE |     | INTEGER   | Buffer size used for index records. This is the last non-zero value used for the index buffers. From A09IBN.                            |

## CICS\_SMD\_SUBP\_D

This table provides daily Storage Domain subpool statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHSMDDS macro.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| SMD_SUBP_NAME  | K   | CHAR(8)   | Subpool name. From SMDSPN.   |
| SMD_DSA_NAME   |     | CHAR(8)   | DSA name. From SMDDSANAME.   |
| SMD_TYPE       |     | CHAR(1)   | Element type (fixed/var). From SMDETYPE.   |
| SMD_FIXED_LEN  |     | INTEGER   | Length (if fixed length). From SMDFLEN.  |
| SMD_ELEM_CHAIN |     | CHAR(1)   | Element chaining (yes/no?). From SMDELCHN.   |
| SMD_BOUNDARY   |     | INTEGER   | Boundary. From SMDBNDRY.   |
| SMD_LOCATION   |     | CHAR(10)  | Above/below/AboveBar. From SMDLOCN.  |
| SMD_ACCESS     |     | CHAR(10)  | CICS/User/ReadOnly. From SMDACCESS.  |
| SMD_DSA_INDEX  |     | CHAR(5)   | CDSA/SDSA/RDSA/<br>ECDSA/ESDSA/<br>ERDSA/GCDSA.<br><br>From SMDDSAINDEX.   |
| SMD_INIT_FREE  |     | INTEGER   | Initial free value. From SMDIFREE.   |

| Column name       | Key | Data type | Description                                 |
|-------------------|-----|-----------|---|
| SMD_GETMAIN_REQ   |     | FLOAT     | Number of Getmain reqs. From SMDGMREQ.      |
| SMD_FREEMAIN_REQ  |     | FLOAT     | Number of Freemain reqs. From SMDFMREQ.     |
| SMD_SUM_ELM_LEN   |     | FLOAT     | Sum of all element lengths. From SMDCES.    |
| SMD_CURR_PGE_STOR |     | FLOAT     | Current page storage. From SMDCPS.          |
| SMD_CURR_ELM      |     | FLOAT     | Current number of elements. From SMDCELEM.  |
| SMD_PAGE_HWM      |     | FLOAT     | High Water Mark Page Storage. From SMDHWMP. |

## CICS\_SMD\_SUBP\_H

This table provides hourly Storage Domain subpool statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHSMDDS macro.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| SMD_SUBP_NAME     | K   | CHAR(8)   | Subpool name. From SMDSPN.   |
| SMD_ACCESS        |     | CHAR(10)  | CICS/User/ReadOnly. From SMDACCESS.  |
| SMD_BOUNDARY      |     | INTEGER   | Boundary. From SMDBNDRY.   |
| SMD_CURR_ELM      |     | FLOAT     | Current number of elements. From SMDCELEM.   |
| SMD_CURR_PGE_STOR |     | FLOAT     | Current page storage. From SMDCPS.   |
| SMD_DSA_NAME      |     | CHAR(8)   | DSA name. From SMDDSANAME.   |
| SMD_DSA_INDEX     |     | CHAR(5)   | CDSA/SDSA/RDSA/<br>ECDSA/ESDSA/<br>ERDSA/GCDSA.<br><br>From SMDDSAINDEX.   |
| SMD_ELEM_CHAIN    |     | CHAR(1)   | Element chaining (yes/no?). From SMDELCHN.   |
| SMD_FIXED_LEN     |     | INTEGER   | Length (if fixed length). From SMDFLEN.  |
| SMD_FREEMAIN_REQ  |     | FLOAT     | Number of Freemain reqs. From SMDFMREQ.  |
| SMD_GETMAIN_REQ   |     | FLOAT     | Number of Getmain reqs. From SMDGMREQ.   |
| SMD_INIT_FREE     |     | INTEGER   | Initial free value. From SMDIFREE.   |
| SMD_LOCATION      |     | CHAR(10)  | Above/below/AboveBar. From SMDLOCN.  |
| SMD_PAGE_HWM      |     | FLOAT     | High Water Mark Page Storage. From SMDHWMP.  |
| SMD_SUM_ELM_LEN   |     | FLOAT     | Sum of all element lengths. From SMDCES.   |
| SMD_TYPE          |     | CHAR(1)   | Element type (fixed/var). From SMDETYPE.   |

**CICS\_S\_MONITOR\_T**

This table provides detailed data on the monitoring domain. It contains data from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From START.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DATA_COMPR_STAT   |     | CHAR(10)  | Data Compression Option.  |
| DPL_RESOURCE_LMT  |     | INTEGER   | The maximum number of distributed program links for which transaction resource monitoring is being performed. From MNGDPLRL.            |
| EXCEPT_RECORDS    |     | INTEGER   | Number of exception records written to SMF. From MNGER.   |
| EXCEPT_REC_SUPPR  |     | INTEGER   | Number of exception records suppressed by the global user exit XMNOUT. From MNGERS.   |
| FILE_RES_LIMIT    |     | FLOAT     | File Resource Limit.  |
| ID_RECS_COUNT     |     | FLOAT     | The number of identity class records scheduled for output to SMF. From MNGIR.   |
| ID_RECS_EXIT_CT   |     | FLOAT     | The number of identity class records suppressed by a global user exit program at exit point. From MNGIRS.                               |
| MAXAVG_COMP_REC   |     | INTEGER   | Max Avg Compressed record length.   |
| MAXAVG_UNCOMP_REC |     | INTEGER   | Max Avg Uncompressed record length.   |
| MINAVG_COMP_REC   |     | INTEGER   | Min Avg Compressed recordlength.  |
| MINAVG_UNCOMP_REC |     | INTEGER   | Min Avg Uncompressed record length.   |
| PERFORM_RECORDS   |     | INTEGER   | Number of performance records scheduled for output to SMF (both written and pending write). From MNGPR.                                 |
| PERFORM_REC_SUPPR |     | INTEGER   | Number of performance records suppressed by the global user exit XMNOUT. From MNGPRS.   |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| RES_RECS_COUNT    |     | FLOAT     | No. Resource records.   |
| RES_RECS_EXIT_CT  |     | FLOAT     | No. Resource records supp.by exit.  |
| SMF_ERRORS        |     | INTEGER   | Number of SMF write fails, for example when SMF is inactive. From MNGSMFE.  |
| SMF_RECORDS       |     | INTEGER   | Number of SMF records written to the SMF data set. From MNGSMFR.  |
| SMF_RECS_COMPRESS |     | FLOAT     | No. SMF records compressed  |



| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| SMF_RECS_NOT_COMP |     | FLOAT     | No. SMF records not compressed.  |
| SYSEVENT_ERRORS   |     | INTEGER   | Number of failed SYSEVENT writes. From MNGSYSEE.   |
| SYSEVENT_RECORDS  |     | INTEGER   | Number of SYSEVENT notification records written to the MVS SRM (for later processing by RMF). From MNGSYSER. |
| TSQ_RES_LIMIT     |     | FLOAT     | Tsqueue Resource Limit.  |
| WLM_ADDR_SERVER   |     | CHAR(10)  | WLM Address Space Serverstatus.  |
| WLM_CPU_CRIT      |     | CHAR(15)  | WLM CPU Critical.  |
| WLM_GOAL_IMPORT   |     | INTEGER   | WLM goal importance.   |
| WLM_GOAL_TYPE     |     | CHAR(15)  | WLM Goal type.   |
| WLM_GOAL_VALUE    |     | INTEGER   | WLM goal value.  |
| WLM_MODE          |     | CHAR(15)  | Workload Management Mode.  |
| WLM_OWN_WLOADNM   |     | CHAR(8)   | WLM Owing Workload Name.   |
| WLM_RES_GRPNM     |     | CHAR(8)   | WLM Resource Group name - if any.  |
| WLM_REP_CLSNM     |     | CHAR(8)   | WLM Report Class name - if any.  |
| WLM_SERV_CLASS    |     | CHAR(8)   | WLM Service Class name - if any.   |
| WLM_STORE_CRIT    |     | CHAR(15)  | WLM Storage Critical.  |

## CICS\_S\_MONITOR\_D

This table provides daily data on the monitoring domain. It contains consolidated data from the CICS\_S\_MONITOR\_T table.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics records were written to SMF. From START.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DPL_RESOURCE_LMT  |     | INTEGER   | The maximum number of distributed program links for which transaction resource monitoring is being performed. From MNGDPLRL.            |
| EXCEPT_RECORDS    |     | INTEGER   | Number of exception records written to SMF. From MNGER.   |
| EXCEPT_REC_SUPPR  |     | INTEGER   | Number of exception records suppressed by the global user exit XMNOUT. From MNGERS.   |
| FILE_RES_LIMIT    |     | FLOAT     | File Resource Limit.  |
| ID_RECS_COUNT     |     | FLOAT     | The number of identity class records scheduled for output to SMF. From MNGIR.   |
| ID_RECS_EXIT_CT   |     | FLOAT     | The number of identity class records suppressed by a global user exit program at exit point. From MNGIRS.                               |
| PERFORM_RECORDS   |     | INTEGER   | Number of performance records scheduled for output to SMF (both written and pending write). From MNGPR.                                 |
| PERFORM_REC_SUPPR |     | INTEGER   | Number of performance records suppressed by the global user exit XMNOUT. From MNGPRS.   |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| SMF_ERRORS        |     | INTEGER   | Number of SMF write fails, for example when SMF is inactive. From MNGSMFE.                                   |
| SMF_RECORDS       |     | INTEGER   | Number of SMF records written to the SMF data set. From MNGSMFR.   |
| SMF_RECS_COMPRESS |     | FLOAT     | No. SMF records compressed   |
| RES_RECS_COUNT    |     | FLOAT     | No. Resource records.  |
| RES_RECS_EXIT_CT  |     | FLOAT     | No. Resource records supp. by exit.  |
| SMF_RECS_NOT_COMP |     | FLOAT     | No. SMF records not compressed.  |
| SYSEVENT_ERRORS   |     | INTEGER   | Number of failed SYSEVENT writes. From MNGSYSEE.   |
| SYSEVENT_RECORDS  |     | INTEGER   | Number of SYSEVENT notification records written to the MVS SRM (for later processing by RMF). From MNGSYSER. |
| TSQ_RES_LIMIT     |     | FLOAT     | Tsqueue Resource Limit.  |

### CICS\_S\_NC\_LSTRUC\_T

This table provides detailed Named Counter server list structure usage and access statistics. For CICS/TS V1.3 and later, this maps the DFHNCS4K record.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| NC_LSTRUCT_NAME   | K   | CHAR(16)  | Complete name of the list structure. From S4NAME.   |
| NC_CONNECT_NAME   | K   | CHAR(16)  | Name for the connection to structure. From S4CNNAME.  |
| NC_ALLOC_SIZE_MAX |     | FLOAT     | Maximum size to which this structure could be altered. From S4SIZEMX.   |
| NC_ALLOCATED_SIZE |     | FLOAT     | Allocated size for the list structure. From S4SIZE.   |
| NC_ASYNC_RESP     |     | FLOAT     | Number of requests for which completion was asynchronous. From S4ASYCT.   |
| NC_BROWSE_REQS    |     | FLOAT     | Number of inquire KGE requests. From S4KGECT.   |
| NC_CREATE_REQS    |     | FLOAT     | Number of create requests. From S4CRECT.  |
| NC_DELETE_REQS    |     | FLOAT     | Number of delete requests. From S4DELCT.  |
| NC_GET_INCR_REQS  |     | FLOAT     | Number of get and increment requests. From S4GETCT.   |
| NC_INQUIRE_REQS   |     | FLOAT     | Number of inquire KEQ requests. From S4KEQCT.   |
| NC_IO_ERR         |     | FLOAT     | Number of times that some other error code was returned by IXLLIST. From S4SRP6CT.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| NC_LISTCHK_FAIL    |     | FLOAT     | Number of times that a list authority comparison failed, usually meaning that the table is in the process of being deleted. From S4SRP4CT. |
| NC_LISTSTR_FULL    |     | FLOAT     | Number of times that the list structure became full. From S4SRP5CT.  |
| NC_NORMAL_RESP     |     | FLOAT     | Number of normal responses. From S4SRP1CT.   |
| NC_NOTFOUND_RESP   |     | FLOAT     | Number of times that the specified entry (table or item) was not found. From S4SRP2CT.   |
| NC_SET_REQS        |     | FLOAT     | Number of set requests. From S4SETCT.  |
| NC_SMR_STR_UNAVAIL |     | FLOAT     | Structure temporarily unavailable, during system-managed rebuild. From S4RSP7CT  |
| NC_USED_ENTR_MAX   |     | FLOAT     | Maximum number of entries currently in use. From S4ENTRHI.   |
| NC_USED_ENTR_MIN   |     | FLOAT     | Minimum number of entries currently in use. From S4ENTRLO.   |
| NC_VERSCHK_FAIL    |     | FLOAT     | Number of times that a version check failed for an entry being updated, indicating that another task had updated it first. From S4SRP3CT.  |

### CICS\_S\_NC\_LSTRUC\_D

This table provides daily Named Counter server list structure usage and access statistics. For CICS/TS V1.3 and later, this maps the DFHNCS4K record.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| NC_LSTRUCT_NAME   | K   | CHAR(16)  | Complete name of the list structure. From S4NAME.   |
| NC_CONNECT_NAME   | K   | CHAR(16)  | Name for the connection to structure. From S4CNNAME.  |
| NC_ALLOC_SIZE_MAX |     | FLOAT     | Maximum size to which this structure could be altered. From S4SIZEMX.   |
| NC_ALLOCATED_SIZE |     | FLOAT     | Allocated size for the list structure. From S4SIZE.   |
| NC_ASYNC_RESP     |     | FLOAT     | Number of requests for which completion was asynchronous. From S4ASYCT.   |
| NC_BROWSE_REQS    |     | FLOAT     | Number of inquire KGE requests. From S4KGECT.   |
| NC_CREATE_REQS    |     | FLOAT     | Number of create requests. From S4CRECT.  |
| NC_DELETE_REQS    |     | FLOAT     | Number of delete requests. From S4DELCT.  |
| NC_GET_INCR_REQS  |     | FLOAT     | Number of get and Increment requests. From S4GETCT.   |
| NC_INQUIRE_REQS   |     | FLOAT     | Number of inquire KEQ requests. From S4KEQCT.   |
| NC_IO_ERR         |     | FLOAT     | Number of times that some other error code was returned by IXLLIST. From S4SRP6CT.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| NC_LISTCHK_FAIL    |     | FLOAT     | Number of times that a list authority comparison failed, usually meaning that the table is in the process of being deleted. From S4SRP4CT. |
| NC_LISTSTR_FULL    |     | FLOAT     | Number of times that the list structure became full. From S4SRP5CT.  |
| NC_NORMAL_RESP     |     | FLOAT     | Number of normal responses. From S4SRP1CT.   |
| NC_NOTFOUND_RESP   |     | FLOAT     | Number of times that the specified entry (table or item) was not found. From S4SRP2CT.   |
| NC_SET_REQS        |     | FLOAT     | Number of set requests. From S4SETCT.  |
| NC_SMR_STR_UNAVAIL |     | FLOAT     | Structure temporarily unavailable, during system-managed rebuild. From S4RSP7CT  |
| NC_USED_ENTR_MAX   |     | FLOAT     | Maximum number of entries currently in use. From S4ENTRHI.   |
| NC_USED_ENTR_MIN   |     | FLOAT     | Minimum number of entries currently in use. From S4ENTRLO.   |
| NC_VERSCHK_FAIL    |     | FLOAT     | Number of times that a version check failed for an entry being updated, indicating that another task had updated it first. From S4SRP3CT.  |

## CICS\_S\_NCS\_STOR\_T

This table provides detailed Named Counter server storage statistics. For CICS/TS V1.3 and later, this maps the DFHNCS5K record.

The default retention period for this table is 7 days.

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| DATE            | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME     | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME            | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| NC_STORPOOL     | K   | CHAR(8)   | Name of the storage pool AXMPGANY or AXMPGLOW. From S5ANYNAM or S5LOWNAM.   |
| NC_ADDRESS      |     | FLOAT     | Address of the storage pool area. From S5ANYPTR or S5LOWPTR.  |
| NC_COMPRESS     |     | FLOAT     | Number of compress (defragmentation) attempts. From S5ANYRQC or S5LOWRQC.   |
| NC_FREE_REQS    |     | FLOAT     | Number of storage free requests. From S5ANYRQS or S5LOWRQS.   |
| NC_FREEPAGE_LOW |     | FLOAT     | Lowest number of free pages (since reset). From S5ANYLO or S5LOWLO.   |
| NC_GET          |     | FLOAT     | Number of storage get requests. From S5ANYRQG or S5LOWRQG.  |
| NC_GET_FAILED   |     | FLOAT     | Number of get requests that failed to obtain storage. From S5ANYRQF or S5LOWRQF.  |
| NC_PAGES_FREE   |     | FLOAT     | Number of free pages in the storage pool. From S5ANYFR or S5LOWFR.  |

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| NC_PAGES_TOT  |     | FLOAT     | Total number of pages in the storage pool. From S5ANYMX or S5LOWMX. |
| NC_PAGES_USED |     | FLOAT     | Number of used pages in the storage pool. From S5ANYUS or S5LOWUS.  |
| NC_SIZE       |     | FLOAT     | Size of the storage pool. From S5ANYISZ or S5LOWISZ.                |

## CICS\_S\_PIPELINE\_T

This table provides details of various attribute settings of each PIPELINE definition. A total use count for all PIPELINE definitions is also available. It contains data from CICS statistics records (SMF 110, subtype 2 std 105). For CICS/TS V3.1 and later, it takes information from the DFHPIRDS CICS dsect.).

The default retention period for this table is 7 days.

| Column name        | Key | Data type    | Description  |
|--------------------|-----|--------------|--|
| DATE               | K   | DATE         | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)      | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.      |
| TIME               | K   | TIME         | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                    |
| PIPELINE_NAME      | K   | CHAR(8)      | The name of the PIPELINE resource definition. From PIRPIPNM.   |
| CONFIG_FILE        |     | VARCHAR(254) | The name of the HFS file that provides information about the message handlers and their configuration. From PIRCONF.                         |
| SHELF_DIRECTORY    |     | VARCHAR(254) | The fully qualified name of the shelf directory for the PIPELINE definition. From PIRSHDIR.  |
| WSDIR_PICKUP_DIR   |     | VARCHAR(254) | The fully qualified name of the Web service binding directory (also known as the pickup directory). From PIRWSDIR.                           |
| PIPELINE_USE_COUNT |     | FLOAT        | The number of times this PIPELINE resource definition was used to install a Web service or to process a Web service request. From PIRUSECNT. |

## CICS\_S\_PROGRAM\_T

This table provides detailed program statistics. It contains data from CICS statistics records (loader domain resource statistics). It maps the DFHLDRDS record.

The default retention period for this table is 7 days.

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| DATE          | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME   | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME          | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| PROGRAM_NAME      | K   | CHAR(8)   | Name of program. From LDRPNAME.   |
| AUTOINST_ATTEMPTS |     | INTEGER   | Number of times that a program autoinstall was attempted. For CICS V4 and later. From PGGATT.   |
| AUTOINST_FAIL_CNT |     | INTEGER   | Number of times that a program autoinstall failed due to reasons other than rejects. Examples: the URM program did not provide valid attributes, or the model name specified by the URM was not defined. For CICS V4 and later. From PGGFAIL. |
| AUTOINST_REJECTS  |     | INTEGER   | Number of times that a program autoinstall request was rejected by the program autoinstall URM program. For CICS V4 and later. From PGGREJ.   |
| DFHRPL_REOPENED   |     | INTEGER   | Number of times the loader received an end-of-extent condition during a LOAD, successfully closed and re-opened the DFHRPL library, and retried the LOAD. For CICS V4 and later. From LDGDREBS.   |
| FETCH_AVG_SEC     |     | FLOAT     | Average time taken to perform a fetch, in seconds. Calculated as $LDRFT/(LDRFC*62500)$ .  |
| FETCHES           |     | INTEGER   | Number of times the loader domain has issued an MVS LOAD request. From LDRFC.   |
| FETCH_SEC         |     | FLOAT     | Time taken to perform all fetches, in seconds. Calculated as $LDRFT/62500$ .  |
| LIB_DSNAME        |     | CHAR(44)  | Program library dsname. From LDRLBDNM.  |
| LIB_NAME          |     | CHAR(8)   | Program library name. From LDRLBNM.   |
| LIBRARY_LOAD_REQ  |     | INTEGER   | Number of times the loader has issued an MVS LOAD request to load programs from the DFHRPL library concatenation into CICS managed storage. Modules in the LPA are not included. For CICS V4 and later. From LDGLLR.                          |
| LIB_SRCH_ORD_UP_T |     | FLOAT     | Library search order update time. From LDGLSORT.  |
| LIB_SRCH_ORD_UP   |     | INTEGER   | Library search order updates. From LDGLBSOU.  |
| LOAD_REQUESTS     |     | INTEGER   | Number of times CICS tasks within the system have issued load requests to the loader domain. From LDRTU.  |
| LOAD_SEC          |     | FLOAT     | Time, in seconds, taken for the number of library loads indicated by LIBRARY_LOAD_REQ. For CICS V4 and later. From LDGLLT.  |
| LOAD_SEC_AVG      |     | FLOAT     | Average time, in seconds, to load a program. For CICS V4 and later. Calculated as $LDGLLT/LDGLLR$ .   |
| LOADW_SRCH_ORD_UP |     | INTEGER   | Load waits due to search order update. From LDGLWSOU.   |
| LOCATION          |     | CHAR(7)   | Location of the program in storage, if loaded. From LDRLOCN.  |
| NEW_COPIES        |     | INTEGER   | Number of times a NEWCOPY has been requested. From LDRTN.   |
| NOT_USED_AVG_SEC  |     | FLOAT     | Average time, in seconds, that a program is eligible for removal from storage by the DPSC mechanism. For CICS V4 and later. Calculated as $LDGDPST/LDGDPSR$ .   |
| NOT_USED_PROGRAMS |     | INTEGER   | Number of programs on the Not-In-Use (NIU) queue. For CICS V4 and later. From LDGPROGNIU.   |
| NOT_USED_RECLAIMS |     | INTEGER   | Number of reclaims made from the Not-In-Use (NIU) queue. Reclaims occur when a request is issued for programs currently in the Not-In-Use queue. For CICS V4 and later. From LDGRECNIU.   |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| NOT_USED_SEC      |     | FLOAT     | Time, in seconds, that all programs spent in the Not-In-Use (NIU) queue. For CICS V4 and later. From LDGDPSTCT.  |
| NOT_USED_STOR_KB  |     | INTEGER   | Current amount of storage, in kilobytes, that is occupied by Not-In-Use (NIU) programs. For CICS V4 and later. From LDGSTGNIU.   |
| PROGRAM_SIZE      |     | INTEGER   | Size of the program, in bytes. From LDRPSIZE.  |
| PROGRAMS_REMOVED  |     | INTEGER   | Number of program instances removed from storage by the Dynamic Program Storage Compression (DPSC) mechanism. For CICS V4 and later. From LDGDPSCR.  |
| PROGRAM_USES      |     | INTEGER   | Number of uses of any program by the CICS system. For CICS V4 and later. From LDGPUSES.  |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.   |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| REQ_PEAK_WAIT     |     | INTEGER   | Peak number of suspended tasks. For CICS V4 and later. From LDGWLRRHW.   |
| REQ_TIMES_AT_PEAK |     | INTEGER   | Number of times the peak indicated by REQ_PEAK_WAIT was reached. For CICS V4 and later. From LDGHWMT.  |
| REQ_WAITED        |     | INTEGER   | Number of loader domain requests forced to suspend due to operations like NEWCOPY requests, LPA search, or physical load in progress. This does not include currently waiting tasks. For CICS V4 and later. From LDGWTDLR. |
| REQ_WAITING       |     | INTEGER   | Number of loader domain requests currently forced to suspend due to other operations like: NEWCOPY requests, LPA search or physical load in progress. For CICS V4 and later. From LDGWLR.                                  |
| RPL_OFFSET        |     | INTEGER   | Offset into the DFHRPL DD concatenation. The first data set is offset 0. From LDRRPLO.   |
| TIMES_REMOVED     |     | INTEGER   | Number of times an instance of this program has been removed. From LDRRPC.   |
| WAIT_TIME         |     | FLOAT     | Time, in seconds, that the suspended requests counted by REQ_WAITED spent waiting. For CICS V4 and later. From LDGTTW.   |

## CICS\_S\_PROGRAM\_D

This table provides daily statistics on programs in the CICS system. It contains summarized data from the CICS\_S\_PROGRAM\_T table.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PROGRAM_NAME      | K   | CHAR(8)   | Name of program. From LDRPNAME.   |
| AUTOINST_ATTEMPTS |     | INTEGER   | Number of times that a program autoinstall was attempted. For CICS V4 and later. From PGGATT.   |
| AUTOINST_FAIL_CNT |     | INTEGER   | Number of times that a program autoinstall failed due to reasons other than rejects. Examples: the URM program did not provide valid attributes, or the model name specified by the URM was not defined. For CICS V4 and later. From PGGFAIL. |
| AUTOINST_REJECTS  |     | INTEGER   | Number of times that a program autoinstall request was rejected by the program autoinstall URM program. For CICS V4 and later. From PGGREJ.   |
| DFHRPL_REOPENED   |     | INTEGER   | Number of times the loader received an end-of-extent condition during a LOAD, successfully closed and re-opened the DFHRPL library, and retried the LOAD. For CICS V4 and later. From LDGDREBS.   |
| FETCH_AVG_SEC     |     | FLOAT     | Average time taken to perform a fetch, in seconds. Calculated as $LDRFT/(LDRFC*62500)$ .  |
| FETCHES           |     | INTEGER   | Number of times the loader domain has issued an MVS LOAD request. From LDRFC.   |
| FETCH_SEC         |     | FLOAT     | Time taken to perform all fetches, in seconds. Calculated as $LDRFT/62500$ .  |
| LIBRARY_LOAD_REQ  |     | INTEGER   | Number of times the loader has issued an MVS LOAD request to load programs from the DFHRPL library concatenation into CICS managed storage. Modules in the LPA are not included. For CICS V4 and later. From LDGLLR.                          |
| LIB_SRCH_ORD_UP_T |     | FLOAT     | Library search order update time. From LDGLSORT.  |
| LIB_SRCH_ORD_UP   |     | INTEGER   | Library search order updates. From LDGLBSOU.  |
| LOAD_REQUESTS     |     | INTEGER   | Number of times CICS tasks within the system have issued load requests to the loader domain. From LDRTU.  |
| LOAD_SEC          |     | FLOAT     | Time, in seconds, taken for the number of library loads indicated by LIBRARY_LOAD_REQ. For CICS V4 and later. From LDGLLT.  |
| LOADW_SRCH_ORD_UP |     | INTEGER   | Load waits due to search order update. From LDGLWSOU.   |
| NEW_COPIES        |     | INTEGER   | Number of times a NEWCOPY has been requested. From LDRTN.   |
| NOT_USED_RECLAIMS |     | INTEGER   | Number of reclaims made from the Not-In-Use (NIU) queue. Reclaims occur when a request is issued for programs currently in the Not-In-Use queue. For CICS V4 and later. From LDGRECNIU.   |
| NOT_USED_SEC      |     | FLOAT     | Time, in seconds, that all programs spent in the Not-In-Use (NIU) queue. For CICS V4 and later. From LDGDP SCT.   |
| PROGRAM_SIZE      |     | INTEGER   | Size of the program, in bytes. From LDRPSIZE.   |
| PROGRAMS_REMOVED  |     | INTEGER   | Number of program instances removed from storage by the Dynamic Program Storage Compression (DPSC) mechanism. For CICS V4 and later. From LDGDPSCR.   |
| REQ_PEAK_WAIT     |     | INTEGER   | Peak number of suspended tasks. For CICS V4 and later. From LDGWL RHW.  |
| REQ_TIMES_AT_PEAK |     | INTEGER   | Number of times the peak indicated by REQ_PEAK_WAIT was reached. For CICS V4 and later. From LDGHWMT.   |



| Column name   | Key | Data type | Description  |
|---------------|-----|-----------|--|
| REQ_WAITED    |     | INTEGER   | Number of loader domain requests forced to suspend due to operations like NEWCOPY requests, LPA search, or physical load in progress. This does not include currently waiting tasks. For CICS V4 and later. From LDGWTDLR. |
| TIMES_REMOVED |     | INTEGER   | Number of times an instance of this program has been removed. From LDRRPC.   |
| WAIT_TIME     |     | FLOAT     | Time, in seconds, that the suspended requests counted by REQ_WAITED spent waiting. For CICS V4 and later. From LDGTTW.   |

## CICS\_S\_RECOV\_MGR\_T

This table provides detailed CICS Recovery Manager statistics. For CICS/TS V1.1 and later, this maps the DFHRMGDS record.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                                 |
| SYNC_FORWARD_NUM   |     | FLOAT     | Number of syncpoints that were issued. From RMGSYFWD.   |
| SYNC_BACKWARD_NUM  |     | FLOAT     | Number of syncpoint rollbacks that were issued. From RMGSYBWD.  |
| RESYNC_NUM         |     | FLOAT     | Number of resyncs that were issued. From RMGRESYN.  |
| TOT_USH_INDFAIL    |     | FLOAT     | Total number of UOWs that were shunted for indoubt failure. From RMGTSHIN.  |
| TOT_USH_INDFAIL_TM |     | FLOAT     | Total time that UOWs were shunted for indoubt failure. From RMGTSHTI.   |
| CUR_USH_INDFAIL    |     | FLOAT     | Current number of UOWs that were shunted for indoubt failure. From RMGTSHIN.  |
| CUR_USH_INDFAIL_TM |     | FLOAT     | Total time that the current UOWs were shunted for indoubt failure. From RMGTSHTI.   |
| TOT_USH_COM_FAIL   |     | FLOAT     | Total number of UOWs that were shunted for commit/backout failure. From RMGTSHRO.   |
| TOT_USH_COM_FAI_TM |     | FLOAT     | Total time that UOWs were shunted for commit/backout failure. From RMGTSHTR.  |
| CUR_USH_COM_FAIL   |     | FLOAT     | Current number of UOWs that were shunted for commit/backout failure. From RMGTSHRO.   |
| CUR_USH_COM_FAI_TM |     | FLOAT     | Total time that the current UOWs were shunted for commit/backout failure. From RMGTSHTR.  |
| IN_ACT_FOR_TRANDEF |     | FLOAT     | Number of forced indoubt action resolutions that were due to the transaction definition specifying that it cannot support indoubt waiting. From RMGIAFTR. |

| Column name         | Key | Data type | Description   |
|---------------------|-----|-----------|---|
| IN_ACT_FOR_TIMEOUT  |     | FLOAT     | Number of forced indoubt action resolutions due to the indoubt waiting. From RMGIAFTL.  |
| IN_ACT_FOR_NOWAIT   |     | FLOAT     | Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting. From RMGIAFNW. |
| IN_ACT_FOR_OPERAT   |     | FLOAT     | Number of forced indoubt action resolutions due to the operator canceling the wait for indoubt resolution. From RMGIAFOP.   |
| IN_ACT_FOR_OTHERREV |     | FLOAT     | Number of forced indoubt action resolutions due to all other reasons other than those previously spelt out. From RMGIAFOT.  |
| IN_ACT_FOR_TDQUEUE  |     | FLOAT     | Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting. From RMGNWTD.  |
| IN_ACT_FOR_LU61CON  |     | FLOAT     | Number of UOW forces that occurred because the UOW uses an LU6.1 intersystem link, which cannot support indoubt waiting. From RMGNW61.                            |
| IN_ACT_FOR_MROCON   |     | FLOAT     | Number of UOW forces that occurred because the UOW uses an MRO intersystem link to a downlevel CICS region, which cannot support indoubt waiting. From RMGNMRO.   |
| IN_ACT_FOR_RMIEXIT  |     | FLOAT     | Number of UOW forces that occurred because the UOW uses an RMI that declared an interest in syncpoint but could not support indoubt waiting. From RMGNRMI.        |
| IN_ACT_FOR_OTHEREX  |     | FLOAT     | Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting. From RMGWOTH.  |
| IN_ACT_MISMATCHES   |     | FLOAT     | Number of forced indoubt action resolutions that a participating resource manager coordinator solved in a different manner from CICS. From RMGIAMIS.              |

## CICS\_S\_RECOV\_MGR\_D

This table provides daily CICS Recovery Manager statistics. For CICS/TS V1.1 and later, this maps the DFHRMGDS record.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| SYNC_FORWARD_NUM   |     | FLOAT     | Number of syncpoints that were issued. From RMGSYFWD.   |
| SYNC_BACKWARD_NUM  |     | FLOAT     | Number of syncpoint rollbacks that were issued. From RMGSYBWD.  |
| RESYNC_NUM         |     | FLOAT     | Number of resyncs that were issued. From RMGRESYN.  |
| TOT_USH_INDFAIL    |     | FLOAT     | Total number of UOWs that were shunted for indoubt failure. From RMGTSHIN.  |
| TOT_USH_INDFAIL_TM |     | FLOAT     | Total time that UOWs were shunted for indoubt failure. From RMGTSHTI.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| CUR_USH_INDFAIL    |     | FLOAT     | Current number of UOWs that were shunted for indoubt failure. From RMGTSHIN.  |
| CUR_USH_INDFAIL_TM |     | FLOAT     | Total time that the current UOWs were shunted for indoubt failure. From RMGTSHTI.   |
| TOT_USH_COM_FAIL   |     | FLOAT     | Total number of UOWs that were shunted for commit/backout failure. From RMGTSHRO.   |
| TOT_USH_COM_FAI_TM |     | FLOAT     | Total time that UOWs were shunted for commit/backout failure. From RMGTSHTR.  |
| CUR_USH_COM_FAIL   |     | FLOAT     | Current number of UOWs that were shunted for commit/backout failure. From RMGTSHRO.   |
| CUR_USH_COM_FAI_TM |     | FLOAT     | Total time that the current UOWs were shunted for commit/backout failure. From RMGTSHTR.  |
| IN_ACT_FOR_TRANDEF |     | FLOAT     | Number of forced indoubt action resolutions that were due to the transaction definition specifying that it cannot support indoubt waiting. From RMGIAFTR.         |
| IN_ACT_FOR_TIMEOUT |     | FLOAT     | Number of forced indoubt action resolutions due to the indoubt waiting. From RMGIAFTL.  |
| IN_ACT_FOR_NOWAIT  |     | FLOAT     | Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting. From RMGIAFNW. |
| IN_ACT_FOR_OPERAT  |     | FLOAT     | Number of forced indoubt action resolutions due to the operator canceling the wait for indoubt resolution. From RMGIAFOP.   |
| IN_ACT_FOR_OTHEREV |     | FLOAT     | Number of forced indoubt action resolutions due to all other reasons other than those previously spelt out. From RMGIAFOT.  |
| IN_ACT_FOR_TDQUEUE |     | FLOAT     | Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting. From RMGNWTD.  |
| IN_ACT_FOR_LU61CON |     | FLOAT     | Number of UOW forces that occurred because the UOW uses an LU6.1 intersystem link, which cannot support indoubt waiting. From RMGNW61.                            |
| IN_ACT_FOR_MROCON  |     | FLOAT     | Number of UOW forces that occurred because the UOW uses an MRO intersystem link to a downlevel CICS region, which cannot support indoubt waiting. From RMGNMRO.   |
| IN_ACT_FOR_RMIEXIT |     | FLOAT     | Number of UOW forces that occurred because the UOW uses an RMI that declared an interest in syncpoint but could not support indoubt waiting. From RMGNRMI.        |
| IN_ACT_FOR_OTHEREX |     | FLOAT     | Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting. From RMGWOTH.  |
| IN_ACT_MISMATCHES  |     | FLOAT     | Number of forced indoubt action resolutions that a participating resource manager coordinator solved in a different manner from CICS. From RMGIAMIS.              |

## CICS\_S\_STOR\_DOM\_T

This table provides detailed domain storage statistics. It maps the DFHSMDDS record.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From START. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From START.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| SUBPOOL_NAME      | K   | CHAR(8)   | Name of the domain subpool. From SMDSPN.  |
| CURRENT_ELEMENTS  |     | INTEGER   | Number of storage elements in the subpool. From SMDCELEM.   |
| DSA_IDENTIFIER    |     | CHAR(2)   | A unique identifier for the DSA. From SMDDSAINDEX.  |
| DSA_NAME          |     | CHAR(5)   | Name of the DSA that the domain subpool is allocated from. From SMDDSANAME.   |
| ELEMENT_BOUNDRY   |     | INTEGER   | Boundary on which each element is aligned. From SMDBNDRY.   |
| ELEMENT_CHAINING  |     | CHAR(2)   | Indicates whether SM maintains an element chain for the subpool with the addresses and length of each element. From SMDELCHN.           |
| ELEMENTS_LENGTH   |     | INTEGER   | Sum of lengths of all the elements in the subpool, in bytes. From SMDCES.   |
| ELEMENT_TYPE      |     | INTEGER   | Indicates whether the elements in the subpool are fixed or variable length. From SMDETYPE.  |
| FREEMAINS         |     | INTEGER   | Number of FREEMAIN requests. From SMDFMREQ.   |
| GETMAINS          |     | INTEGER   | Number of GETMAIN requests. From SMDGMREQ.  |
| INITIAL_FREE_BYTE |     | INTEGER   | Initial free area for the subpool, in bytes. From SMDIFREE.   |
| PAGE_STORAGE_BYTE |     | INTEGER   | Space taken by all pages allocated to the subpool, in bytes. From SMDPCS.   |
| PAGE_STORAGE_PEAK |     | INTEGER   | Peak page storage allocated to support storage requirements. From SMDHWMP.  |
| RECORD_INCOMPLETE |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE       |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION    |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| STORAGE_LOCATION  |     | CHAR(10)  | Storage location of this domain subpool. From SMDLOCN.  |
| SUBPOOL_ACCESS    |     | CHAR(4)   | Type of access of the subpool. From SMDACCESS.  |

### CICS\_S\_STOR\_DOM\_D

This table provides daily statistics on domain storage in the CICS system. It contains summarized data from the CICS\_S\_STOR\_DOM\_T table.

The default retention period for this table is 30 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics records were written to SMF. From START.   |
| PERIOD_NAME | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN. |
| SUBPOOL_NAME      | K   | CHAR(8)   | Name of domain subpool. From SMDSPN.  |
| DSA_IDENTIFIER    |     | CHAR(2)   | A unique identifier for the DSA. From SMDDSAINDEX.  |
| DSA_NAME          |     | CHAR(5)   | Name of the DSA that the domain subpool is allocated from. From SMDDSANAME.   |
| FREEMAINS         |     | INTEGER   | Number of FREEMAIN requests. From SMDFMREQ.   |
| GETMAINS          |     | INTEGER   | Number of GETMAIN requests. From SMDGMREQ.  |
| PAGE_STORAGE_PEAK |     | INTEGER   | Peak page storage allocated to support storage requirements. From SMDHWMP.  |

### CICS\_S\_STOR\_DSA\_T

This table provides detailed CICS/ESA and CICS/TS storage statistics. It maps the DFHMSDS record.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| PAGEPOOL_NAME      | K   | CHAR(5)   | CDSA, UDSA, ECDSA, EUDSA or ERDSA. For CICS 3.3 or later, from SMSDSANAME. For CICS 3.2, DSA or EDSA, based on SMSLOCN.                 |
| ACCESS_TYPE        |     | CHAR(2)   | Type of access of the page subpool. From SMSACCESS.   |
| ADD_SUBPOOL_REQ    |     | INTEGER   | Number of ADD SUBPOOL requests. From SMSASR.  |
| CICS_SOS_COUNT     |     | INTEGER   | Number of times CICS went short on storage in this pagepool. From SMSSOS.   |
| CURR_AS_ACTIVE     |     | FLOAT     | Current Address Space addressable. From SMSASACTIVE.  |
| CURR_GDSA_ACTIVE   |     | FLOAT     | Current GDSA active. From SMSGDSAACTIVE.  |
| CUSHION_BYTES      |     | INTEGER   | Size of the cushion, in bytes. From SMSCSIZE.   |
| CUSHION_RELEASES   |     | INTEGER   | Number of times the number of free pages went below the cushion. From SMSCREL.  |
| CUSH_LIMIT         |     | FLOAT     | Cushion limit. From SMSATBCUSHLIMIT. This column is retired as of CTS 4.2.  |
| CUSH_RELEASE       |     | FLOAT     | Allocates in cushion (releases). From SMSATBCUSHRELS. This column is retired as of CTS 4.2.   |
| DELETE_SUBPOOL_REQ |     | INTEGER   | Number of DELETE SUBPOOL requests. From SMSDSR.   |
| DSA_BYTES          |     | INTEGER   | Size of the CDSA, UDSA, ECDSA, EUDSA, or ERDSA, in bytes. From SMSDSASZ.  |

## CICS statistics component data tables

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DSA_BYTES_PEAK    |     | INTEGER   | Peak size of the CDSA, UDSA, SDSA, RDSA, ECDSA, EUDSA, ESDSA, or ERDSA, expressed in bytes, since the last time that statistics were recorded. For CICS V4 and later. From SSMHWMDASZ.   |
| DSA_CURRENT_TOT   |     | INTEGER   | Total amount of storage currently allocated to the DSAs below the line. This value may be smaller or larger than DSA_LIMIT. For CICS V4 or later. From SMSDSATOTAL.  |
| DSA_INDEX_CODE    |     | CHAR(2)   | Code representing the CDSA or DSA (01), UDSA (02), ECDSA or EDSA (03), EUDSA (04), or ERDSA (05); the pagepool that this subpool is allocated from. From SMSDSAINDEX, for CICS 3.3 or later, or derived from SMSLOCN for CICS 3.2. |
| DSA_LIMIT         |     | INTEGER   | Current DSA limit, in bytes. For CICS V4 and later. From SMSDSALIMIT.  |
| DSA_TOTAL_PEAK    |     | INTEGER   | Total amount of storage allocated to the DSAs below the line. This value may be smaller or larger than DSA_LIMIT. For CICS V4 or later. From SSMHWMDASATOTAL.  |
| EDSA_CURRENT_TOT  |     | INTEGER   | Total amount of storage currently allocated to the DSAs above the line. This value may be smaller or larger than EDSA_LIMIT. For CICS V4 or later. From SMSDSATOTAL.   |
| EDSA_LIMIT        |     | INTEGER   | Current EDSA limit, in bytes. For CICS V4 and later. From SMSEDSALIMIT.  |
| EDSA_TOTAL_PEAK   |     | INTEGER   | Total amount of storage allocated to the DSAs above the line. This value may be smaller or larger than EDSA_LIMIT. For CICS V4 or later. From SSMHWMEASATOTAL.   |
| EXTENTS_ADDED     |     | INTEGER   | Number of extents added to a dynamic storage area since the last time statistics were recorded. For CICS V4 and later. From SMSEXTSA.  |
| EXTENTS_COUNT     |     | INTEGER   | Number of extents currently allocated to a specified dynamic storage area. For CICS V4 and later. From SMSEXTS.  |
| EXTENTS_RELEASED  |     | INTEGER   | Number of extents that have been released from a dynamic storage area since the last time statistics were recorded. For CICS V4 and later. From SMSEXTSR.  |
| FREEMAINS         |     | INTEGER   | Number of FREEMAIN requests. From SMSFMREQ.  |
| FREE_STOR_BYTES   |     | INTEGER   | Amount of free storage in this pagepool, in bytes. From SMSFSTG.   |
| FREE_STOR_LOW     |     | INTEGER   | Smallest amount of free storage, in bytes, since the last time that statistics were recorded. For CICS V4 and later. From SMSLWMFSTG.  |
| FREE_STOR_PCT     |     | FLOAT     | Percentage of free storage. Calculated as (SMSFSTG/SMSDSASZ)*100.  |
| FREE_STOR_PEAK    |     | INTEGER   | Largest amount of free storage, in bytes, since the last time that statistics were recorded. For CICS V4 and later. From SSMHWMFSTG.   |
| GETMAINS          |     | INTEGER   | Number of GETMAIN requests. From SMSGMREQ.   |
| GETMAIN_SUSPENDS  |     | INTEGER   | Number of GETMAIN requests currently suspended for storage. From SMSCSS.   |
| GETMAIN_SUSP_NO   |     | INTEGER   | Number of failed GETMAIN requests with SUSPEND(NO). From SMSCRIS.  |
| GETMAIN_SUSP_PEAK |     | INTEGER   | Peak number of GETMAIN requests suspended. From SSMHWMSS.  |
| GETMAIN_SUSP_YES  |     | INTEGER   | Number of failed GETMAIN requests with SUSPEND(YES). From SMSUCSS.   |
| GETSTORE_SIZE     |     | FLOAT     | GETSTOR request size. From SMSGETSTORSIZE.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| HWM_AS_ACTIVE      |     | FLOAT     | HWM Address Space addressable. From SMSHWMASACTIVE.  |
| HWM_GDSA_ACTIVE    |     | FLOAT     | HWM GDSA active. From SMSHWMGDSAACTIVE.  |
| LARGEST_FREE_AREA  |     | INTEGER   | Length of the largest contiguous free area, in bytes. From SMSLFA.   |
| MEMLIMIT_SIZE      |     | FLOAT     | MEMLIMIT Size. From SMSMEMLIMIT  |
| MEMLIMIT_SOURCE    |     | CHAR(8)   | MEMLIMIT Source. MEMLIMIT is set by SMFPRMxx, JCL, JCL Region, or by IEFUSIExit. From SMSMEMLIMITSRC                                     |
| MVS_A16_REQS_TOT   |     | REAL      | The total number of MVS storage requests that have waited for MVS storage above 16 MB. From SMSMVSSTGREQWAITS.                           |
| MVS_A16_TIME_TOT   |     | REAL      | The total time that MVS storage requests have spent waiting for MVS storage above 16 MB, in seconds. From SMSTIMEWAITMVS.                |
| PAGE_POOL_COUNT    |     | INTEGER   | Number of pagepools in the CICS region. For CICS V4 and later. From SMSNPAGP.  |
| PAGE_STORAGE_PEAK  |     | INTEGER   | Peak page storage allocated, in bytes. From SMSHWMPS.  |
| PURGED_REQUESTS    |     | INTEGER   | Number of requests that were purged while suspended. From SMSPWWS.   |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.           |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record. Example: 0330. From SMFSTRVN.   |
| REENT_PGMS_PROTECT |     | CHAR(3)   | This column indicates if read-only programs reside in key-0 protected storage (YES) or not (NO). For CICS V4 and later. From SMSRENTPGM. |
| SOS_SEC            |     | INTEGER   | Time that CICS spent in SOS in this pagepool, in seconds. From SMSTSOS.  |
| STORAGE_LOCATION   |     | CHAR(2)   | Above (02) or below (01) the 16 MB line. From SMSLOCN.   |
| STORAGE_VIOLATIONS |     | INTEGER   | Number of storage violations recorded. From SMSSV.   |
| STOR_PROTECT_ACT   |     | CHAR(3)   | Indicates if CICS storage protection is active (YES) or inactive (NO). For CICS V4 and later. From SMSSTGPROT.                           |
| SUBPOOLS           |     | INTEGER   | Current number of subpools. From SMSCSUBP.   |
| SUBSP_COMMON_CUR   |     | INTEGER   | Number of tasks currently allocated to the common subspace. For CICS V4 and later. From SMSCSSCUR.                                       |
| SUBSP_COMMON_PEAK  |     | INTEGER   | Peak number of tasks concurrently allocated to the common subspace. For CICS V4 and later. From SMSCSSHWM.                               |
| SUBSP_COMMON_TOT   |     | INTEGER   | Total number of tasks allocated to the common subspace. For CICS V4 and later. From SMSCSSCUM.   |
| SUBSP_UNIQUE_CUR   |     | INTEGER   | Current number of unique subspace users. Number of tasks currently allocated a unique subspace. For CICS V4 or later. From SMSUSSCUR.    |
| SUBSP_UNIQUE_PEAK  |     | INTEGER   | Peak number of tasks concurrently allocated a unique subspace. For CICS V4 and later. From SMSUSSHWM.                                    |
| SUBSP_UNIQUE_TOT   |     | INTEGER   | Total number of tasks that have been allocated a unique subspace. For CICS V4 and later. From SMSUSSCUM.                                 |
| TRAN_ISOLAT_ACT    |     | CHAR(3)   | This column indicates if transaction isolation is active (YES) or not (NO). For CICS V4 and later. From SMSTRANISO.                      |

**CICS\_S\_STOR\_DSA\_D**

This table provides daily statistics on storage in the CICS system. It contains summarized data from the CICS\_S\_STOR\_DSA\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.   |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| PAGEPOOL_NAME      | K   | CHAR(5)   | CDSA, UDSA, ECDSA, EUDSA, or ERDSA. For CICS 3.3 or later, from SMSDSANAME. For CICS 3.2, DSA or EDSA, based on SMSLOCN.   |
| ADD_SUBPOOL_REQ    |     | INTEGER   | Number of ADD SUBPOOL requests. From SMSASR.   |
| CICS_SOS_COUNT     |     | INTEGER   | Number of times CICS went short on storage in this pagepool. From SMSSOS.  |
| CURR_AS_ACTIVE     |     | FLOAT     | Current Address Space addressable. From SMSASACTIVE  |
| CURR_GDSA_ACTIVE   |     | FLOAT     | Current GDSA active. From SMSGDSAACTIVE  |
| CUSHION_BYTES      |     | INTEGER   | Size of the cushion, in bytes. From SMSCSIZE.  |
| CUSHION_RELEASES   |     | INTEGER   | Number of times the number of free pages went below the cushion. From SMSCREL.   |
| CUSH_LIMIT         |     | FLOAT     | Cushion limit. From SMSATBCUSHLIMIT. This column is retired as of CTS 4.2.   |
| CUSH_RELEASE       |     | FLOAT     | Allocates in cushion(releases). From SMSATBCUSHRELS. This column is retired as of CTS 4.2.   |
| DELETE_SUBPOOL_REQ |     | INTEGER   | Number of DELETE SUBPOOL requests. From SMSDSR.  |
| DSA_BYTES          |     | INTEGER   | Size of the CDSA, UDSA, ECDSA, EUDSA or ERDSA, in bytes. From SMSDSASZ.  |
| DSA_BYTES_PEAK     |     | INTEGER   | Peak size of the CDSA, UDSA, SDSA, RDSA, ECDSA, EUDSA, ESDSA, or ERDSA, expressed in bytes, since the last time that statistics were recorded. For CICS V4 and later. From SSMHWMDASZ. |
| DSA_TOTAL_PEAK     |     | INTEGER   | Total amount of storage allocated to the DSAs below the line. This value may be smaller or larger than DSA_LIMIT. For CICS V4 or later. From SSMHWMDSATOTAL.                           |
| EDSA_TOTAL_PEAK    |     | INTEGER   | Total amount of storage allocated to the DSAs above the line. This value may be smaller or larger than EDSA_LIMIT. For CICS V4 or later. From SSMHWMESEDATOTAL.                        |
| EXTENTS_ADDED      |     | INTEGER   | Number of extents added to a dynamic storage area since the last time statistics were recorded. For CICS V4 and later. From SMSEXTSA.  |
| EXTENTS_RELEASED   |     | INTEGER   | Number of extents that have been released from a dynamic storage area since the last time statistics were recorded. For CICS V4 and later. From SMSEXTSR.                              |
| FREEMAINS          |     | INTEGER   | Number of FREEMAIN requests. From SMSFMREQ.  |
| FREE_STOR_BYTES    |     | INTEGER   | Amount of free storage in this pagepool, in bytes. From SMSFSTG.   |



| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| FREE_STOR_LOW      |     | INTEGER   | Smallest amount of free storage, in bytes, since the last time that statistics were recorded. For CICS V4 and later. From SMSLWMFSTG. |
| FREE_STOR_PCT      |     | FLOAT     | Percentage of free storage. Calculated as (SMSFSTG/SMSDSASZ)*100.   |
| FREE_STOR_PEAK     |     | INTEGER   | Largest amount of free storage, in bytes, since the last time that statistics were recorded. For CICS V4 and later. From SMSHWMFSTG.  |
| GETMAINS           |     | INTEGER   | Number of GETMAIN requests. From SMSGMREQ.  |
| GETMAIN_SUSP_NO    |     | INTEGER   | Number of failed GETMAIN requests with SUSPEND(NO). From SMSCRISS.  |
| GETMAIN_SUSP_PEAK  |     | INTEGER   | Peak number of GETMAIN requests suspended. From SMSHWMSS.   |
| GETMAIN_SUSP_YES   |     | INTEGER   | Number of failed GETMAIN requests with SUSPEND(YES). From SMSUCSS.  |
| GETSTORE_SIZE      |     | FLOAT     | GETSTOR request size. From SMSGETSTORSIZE   |
| HWM_AS_ACTIVE      |     | FLOAT     | HWM Address Space addressable. From SMSHWMASACTIVE  |
| HWM_GDSA_ACTIVE    |     | FLOAT     | HWM GDSA active. From SMSHWMGDSAACTIVE  |
| LARGEST_FREE_AREA  |     | INTEGER   | Length of the largest contiguous free area, in bytes. From SMSLFA.  |
| MEMLIMIT_SIZE      |     | FLOAT     | MEMLIMIT Size. From SMSMEMLIMIT   |
| MEMLIMIT_SOURCE    |     | CHAR(8)   | MEMLIMIT Source. MEMLIMIT is set by SMFPRMxx, JCL, JCL Region, or by IEFUSIExit. From SMSMEMLIMITSRC                                  |
| MVS_A16_REQS_TOT   |     | REAL      | The total number of MVS storage requests that have waited for MVS storage above 16 MB, in seconds. From SMSMVSSTGREQWAITS.            |
| MVS_A16_TIME_TOT   |     | REAL      | The total time that MVS storage requests have spent waiting for MVS storage above 16 MB. From SMSTIMEWAITMVS.                         |
| PURGED_REQUESTS    |     | INTEGER   | Number of requests that were purged while suspended. From SMSPWWS.  |
| SOS_SEC            |     | INTEGER   | Time that CICS spent in SOS in this pagepool, in seconds. From SMSTSOS.   |
| STORAGE_VIOLATIONS |     | INTEGER   | Number of storage violations recorded. From SMSSV.  |
| SUBPOOLS           |     | INTEGER   | Current number of subpools. From SMSCSUBP.  |
| SUBSP_COMMON_PEAK  |     | INTEGER   | Peak number of tasks concurrently allocated to the common subspace. For CICS V4 and later. From SMSCSSHWM.                            |
| SUBSP_COMMON_TOT   |     | INTEGER   | Total number of tasks allocated to the common subspace. For CICS V4 and later. From SMSCSSCUM.  |
| SUBSP_UNIQUE_PEAK  |     | INTEGER   | Peak number of tasks concurrently allocated a unique subspace. For CICS V4 and later. From SMSUSSHWM.                                 |
| SUBSP_UNIQUE_TOT   |     | INTEGER   | Total number of tasks that have been allocated a unique subspace. For CICS V4 and later. From SMSUSSCUM.                              |

## CICS\_S\_STOR\_TASK\_T

This table provides detailed CICS/ESA and CICS/TS task subpool statistics. It maps the DFHSMTDS record.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From START. |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| DSA_NAME           | K   | CHAR(5)   | CDSA, UDSA, ECDSA, or EUDSA. For CICS 3.3, from SMTDSANAME. For CICS 3.2, DSA or EDSA, based on SMTLOCN.  |
| DSA_IDENTIFIER     |     | CHAR(2)   | Code representing the CDSA or DSA (01), UDSA (02), ECDSA or EDSA (03), or EUDSA (04); the pagepool that this subpool is allocated from. From SMTDSAINDEX, for CICS 3.3, or derived from SMTLOCN for CICS 3.2. |
| ELEMENTS           |     | INTEGER   | Number of elements in all the task subpools in this DSA. From SMTCNE.   |
| ELEMENTS_BYTES     |     | INTEGER   | Sum of storage occupied by all elements, in bytes. From SMTCES.   |
| FREEMAINS          |     | INTEGER   | Number of task subpool FREEMAIN requests. From SMTFMREQ.  |
| GETMAINS           |     | INTEGER   | Number of task subpool GETMAIN requests. From SMTGMREQ.   |
| PAGEPOOL_LOCATION  |     | CHAR(2)   | Above (02) or below (01) the 16MB line. From SMTLOCN.   |
| PAGE_STORAGE_BYTES |     | INTEGER   | Sum of storage in all pages allocated to the task subpools in this DSA, in bytes. From SMTCPs.  |
| PAGE_STORAGE_PEAK  |     | INTEGER   | Peak page storage allocated to the task subpools in this DSA, in bytes. From SMTHWMPS.  |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.  |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record. Example: 0330. From SMFSTRVN.  |
| SUBPOOL_ACCESS     |     | CHAR(2)   | Type of access of the subpool. From SMTACCESS.  |

## CICS\_S\_STOR\_TASK\_D

This table provides daily statistics on task storage in the CICS system. It contains summarized data from the CICS\_S\_STOR\_TASK\_T table.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics records were written to SMF. From START.   |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DSA_NAME       | K   | CHAR(5)   | CDSA, UDSA, ECDSA, or EUDSA. For CICS 3.3, from SMTDSANAME. For CICS 3.2, DSA or EDSA, based on SMTLOCN.                                |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| ELEMENTS           |     | INTEGER   | Number of elements in all the task subpools in this DSA. From SMTCNE.                          |
| ELEMENTS_BYTES     |     | INTEGER   | Sum of storage occupied by all elements, in bytes. From SMTCES.                                |
| FREEMAINS          |     | INTEGER   | Number of task subpool FREEMAIN requests. From SMTFMREQ.                                       |
| GETMAINS           |     | INTEGER   | Number of task subpool GETMAIN requests. From SMTGMREQ.  |
| PAGE_STORAGE_BYTES |     | INTEGER   | Sum of storage in all pages allocated to the task subpools in this DSA, in bytes. From SMTCPs. |
| PAGE_STORAGE_PEAK  |     | INTEGER   | Peak page storage allocated to the task subpools in this DSA, in bytes. From SMTHWMPS.         |

## CICS\_S\_TCLASS\_T

This table provides detailed statistics on transaction classes. It contains data from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| TCLASS             | K   | INTEGER   | Transaction class. From A15KTCLS.   |
| TRAN_CLASS_NAME    | K   | CHAR(8)   | 8-character name of the transaction class. For CICS V4 and later. From XMCTCL.  |
| ACCEPT_AFTER_Q_CNT |     | INTEGER   | Number of transactions that became active in this transaction class but were queued first. For CICS V4 and later. From XMCAAQ.  |
| ACCEPT_IMMED_CNT   |     | INTEGER   | Number of transactions that did not have to queue to become active in this transaction class. They are accepted immediately. For CICS V4 and later. From XMCAI.                         |
| ACTIVE_CURRENT_CNT |     | INTEGER   | Number of transactions currently active in this transaction class. For CICS V4 and later. From XMCCAT.  |
| ATTACH_REQUESTS    |     | INTEGER   | Total number of attach requests made for transactions in this transaction class. For CICS V4 and later. From XMCTAT.  |
| PURGE_IMMED_CNT    |     | INTEGER   | Number of transactions that were purged immediately because the queue reached the purge threshold for this transaction class. For CICS V4 and later. From XMCPPI.                       |
| PURGE_TH_REACH_CNT |     | INTEGER   | Number of separate times that the purge threshold of the transaction class has been reached (times at purge threshold). For CICS V4 and later. From XMCTAPT.                            |
| PURGE_THRESHOLD    |     | INTEGER   | Limit at which transactions are purged instead of being added to the queue of transactions that are waiting for membership of the transaction class. For CICS V4 and later. From XMCTH. |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| PURGE_WHILE_Q_CNT  |     | INTEGER   | Number of transactions purged while queueing. This includes those transactions purged explicitly through CEMT, or implicitly through the purge threshold of the transaction class being lowered. For CICS V4 and later. From XMCPWQ. |
| QUEUED_CURRENT_CNT |     | INTEGER   | Number of transactions that are currently queueing in this transaction class. For CICS V4 and later. From XMCCQT.  |
| QUEUED_CURR_TIME   |     | TIME      | Maximum time, in hh:mm:ss format, spent waiting by those transactions in the class that were waiting at the end of a collection interval. For CICS V4 and later. From XMCCQTME.  |
| QUEUED_PREV_CNT    |     | INTEGER   | Number of transactions that had to queue but are no longer queued. This includes those that were purged and those that were finally accepted. For CICS V4 and later. From XMCTQ.   |
| QUEUED_PREV_TIME   |     | TIME      | Maximum time, in hh:mm:ss format, spent queueing by those transactions in the class that finished queueing in a collection interval. For CICS V4 and later. From XMCTQTME.   |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.   |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| TASKS              |     | INTEGER   | Number of tasks in this class in the system (executing and waiting). From A15MXTC.   |
| TASKS_PEAK         |     | INTEGER   | Peak tasks in the system (executing and waiting). From A15MXTR.  |
| TCLASS_LIMIT       |     | INTEGER   | Highest number of tasks in this class allowed to execute concurrently (CMXT). From A15MXT.   |
| TIMES_AT_LIMIT     |     | INTEGER   | Number of times the class limit (CMXT) was reached. From A15MXTM.  |
| TRAN_INSTALL_CNT   |     | INTEGER   | Number of installed transaction definitions that are defined to belong to this class. For CICS V4 and later. From XMCITD.  |
| TRAN_QUEUED_PEAK   |     | INTEGER   | Highest number of transactions queued waiting for admittance to the class. For CICS V4 and later. From XMCPQT.   |

## CICS\_S\_TCLASS\_D

This table provides daily statistics on CICS transaction classes. It contains consolidated data from the CICS\_S\_TCLASS\_T table.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TCLASS         | K   | INTEGER   | Transaction class. From A15KTCLS.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TRAN_CLASS_NAME    | K   | CHAR(8)   | 8-character name of the transaction class. For CICS V4 and later. From XMCTCL.   |
| ACCEPT_AFTER_Q_CNT |     | INTEGER   | Number of transactions that became active in this transaction class but were queued first. For CICS V4 and later. From XMCAAQ.   |
| ACCEPT_IMMED_CNT   |     | INTEGER   | Number of transactions that did not have to queue to become active in this transaction class. They are accepted immediately. For CICS V4 and later. From XMCAI.  |
| ATTACH_REQUESTS    |     | INTEGER   | Total number of attach requests made for transactions in this transaction class. For CICS V4 and later. From XMCTAT.   |
| PURGE_IMMED_CNT    |     | INTEGER   | Number of transactions that were purged immediately because the queue reached the purge threshold for this transaction class. For CICS V4 and later. From XMCPPI.  |
| PURGE_TH_REACH_CNT |     | INTEGER   | Number of separate times that the purge threshold of the transaction class has been reached (times at purge threshold). For CICS V4 and later. From XMCTAPT.   |
| PURGE_WHILE_Q_CNT  |     | INTEGER   | Number of transactions purged while queueing. This includes those transactions purged explicitly through CEMT, or implicitly through the purge threshold of the transaction class being lowered. For CICS V4 and later. From XMCPWQ. |
| QUEUED_CURR_TIME   |     | TIME      | Maximum time, in hh:mm:ss format, spent waiting by those transactions in the class that were waiting at the end of a collection interval. For CICS V4 and later. From XMCCQTME.  |
| QUEUED_PREV_CNT    |     | INTEGER   | Number of transactions that had to queue but are no longer queued. This includes those that were purged and those that were finally accepted. For CICS V4 and later. From XMCTQ.   |
| QUEUED_PREV_TIME   |     | TIME      | Maximum time, in hh:mm:ss format, spent queueing by those transactions in the class that finished queueing in a collection interval. For CICS V4 and later. From XMCTQTME.   |
| TASKS              |     | INTEGER   | Number of tasks in this class in the system (executing and waiting). From A15MXTC.   |
| TASKS_PEAK         |     | INTEGER   | Peak tasks in the system (executing and waiting). From A15MXTR.  |
| TIMES_AT_LIMIT     |     | INTEGER   | Number of times the class limit (CMXT) was reached. From A15MXTM.  |
| TRAN_INSTALL_CNT   |     | INTEGER   | Number of installed transaction definitions that are defined to belong to this class. For CICS V4 and later. From XMCITD.  |
| TRAN_QUEUED_PEAK   |     | INTEGER   | Highest number of transactions queued waiting for admittance to the class. For CICS V4 and later. From XMCPQT.   |

## CICS\_S\_TCPIP\_T

This table provides detailed TCP/IP services statistics. For CICS/TS V1.3 and later, this maps the DFHSORDS record.

The default retention period for this table is 7 days.

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |

| Column name        | Key | Data type    | Description   |
|--------------------|-----|--------------|---|
| TIME               | K   | TIME         | Time when the statistics record was written to SMF. From SMFSTDTE.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| ATTACH_SECURITY    |     | CHAR(6)      | The level of attach-time security, for internet security, required for this TCP/IP service. Possible values are: Local and Verify. From TCPATTCH.   |
| AUTHENTICATE       |     | CHAR(12)     | The authentication and identification scheme, for internet security, specified for this TCP/IP service. Possible values are: None, Basic, Certificate, Autoregister, Automatic, Kerberos, Asserted. From TCPAUTH. |
| HOSTNAME           |     | VARCHAR(116) | The hostname of or IPv4 or IPv6 address of the remote system. From TCP_HOSTNAME.  |
| MAXDATA            |     | FLOAT        | The maximum length of data that may be received on this TCP/IP service. This field is related to internet security. From TCPMAXDL.  |
| PRIVACY            |     | CHAR(12)     | The level of SSL encryption support, for internet security, that applies to this TCP/IP service. Possible values are: NotSupported, Supported, Required. From TCPPRIV.  |
| SERVICE_TRANID     |     | CHAR(4)      | The ID of the CICS transaction attached to process new requests received for this service. From TCP_TCPIPS_TRANID.  |
| SERVICE_URM        |     | CHAR(8)      | The name of a user-replaceable program to be called by this service. From TCP_TCPIPS_URM.   |
| TCPIP_BACKLOG      |     | FLOAT        | Port backlog for this TCP/IP service. From TCPBACK.   |
| TCPIP_BYTES_RECV   |     | FLOAT(53)    | Number of bytes received for this TCP/IP service. From TCPBYTER.  |
| TCPIP_BYTES_SENT   |     | FLOAT(53)    | Number of bytes sent for this TCP/IP service. From TCPBYTES.  |
| TCPIP_CONNECT_CUR  |     | FLOAT        | Current number of connections for the TCP/IP service. From TCPCURCN.  |
| TCPIP_CONNECT_PEAK |     | FLOAT        | Peak number of connections for the TCP/IP service. From TCPKCON.  |
| TCPIP_DNS_GROUP    |     | CHAR(18)     | DNS group identifier used for this TCP/IP service. From TCPIP_DNS_GROUP   |
| TCPIP_GMTCLO_DATE  |     | DATE         | Date (GMT) when this TCP/IP service was closed. From TCPCLGMT.  |
| TCPIP_GMTCLO_TIME  |     | TIME         | Time (GMT) when this TCP/IP service was closed. From TCPCLGMT.  |
| TCPIP_GMTOPE_DATE  |     | DATE         | Date (GMT) when this TCP/IP service was opened. From TCPOPGMT.  |
| TCPIP_GMTOPE_TIME  |     | TIME         | Time (GMT) when this TCP/IP service was opened. From TCPOPGMT.  |
| TCPIP_IPADDR       |     | CHAR(39)     | IP address defined for the TCP/IP stack used for this TCP/IP service. From TCPIPADDR.   |
| TCPIP_IPFAMILY     |     | CHAR(7)      | The IP family for this TCP/IP service.  |
| TCPIP_LOCCLO_DATE  |     | DATE         | LOCAL date when this TCP/IP service was closed. From TCPCLLOC.  |
| TCPIP_LOCCLO_TIME  |     | TIME         | LOCAL time when this TCP/IP service was closed. From TCPCLLOC.  |

| Column name         | Key | Data type | Description   |
|---------------------|-----|-----------|---|
| TCPIP_LOCOOPEN_DATE |     | DATE      | LOCAL date when this TCP/IP service was opened. From TCPOPLOC.  |
| TCPIP_LOCOOPEN_TIME |     | TIME      | LOCAL time when this TCP/IP service was opened. From TCPOPLOC.  |
| TCPIP_PORT_NUMBER   |     | INTEGER   | Port number being used for this TCP/IP service. From TCPPORTN.  |
| TSQUEUE_PREFIX      |     | CHAR(6)   | The name of the temporary storage queue prefix used to store inbound data and Web documents created by applications. This field is related to internet security. From TCPTSQPR. |
| TCPIP_PROTOCOL      |     | CHAR(8)   | Protocol identifier   |
| TCPIP_RECV_NUM      |     | FLOAT     | Number of send requests issued for this TCP/IP service. From TCPSSEND.  |
| TCPIP_SEND_NUM      |     | FLOAT     | Number of receive requests issued for this TCP/IP service. From TCPRECVS.   |
| TCPIP_SERVICE_NAME  | K   | CHAR(8)   | Name of the TCP/IP service. From TCPSERNM.  |
| TCPIP_SSL_SUPPORT   |     | INTEGER   | Level of SSL support defined for this TCP/IP service. From TCPSSL.  |
| TCPIP_TRANS_ATTACH  |     | FLOAT     | Number of attached transactions. From TCPATCTR.   |

## CICS\_S\_TCPIP\_D

This table provides daily TCP/IP services statistics. For CICS/TS V1.3 and later, this maps the DFHSORDS record.

The default retention period for this table is 30 days.

| Column name     | Key | Data type    | Description   |
|-----------------|-----|--------------|---|
| DATE            | K   | DATE         | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME     | K   | CHAR(8)      | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.   |
| MVS_SYSTEM_ID   | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| ATTACH_SECURITY |     | CHAR(6)      | The level of attach-time security, for internet security, required for this TCP/IP service. Possible values are: Local and Verify. From TCPATTCH.   |
| AUTHENTICATE    |     | CHAR(12)     | The authentication and identification scheme, for internet security, specified for this TCP/IP service. Possible values are: None, Basic, Certificate, Autoregister, Automatic, Kerberos, Asserted. From TCPAUTH. |
| HOSTNAME        |     | VARCHAR(116) | The hostname or IPv4 or IPv6 address of the remote system. From TCP_HOSTNAME.   |
| MAXDATA         |     | FLOAT        | The maximum length of data that may be received on this TCP/IP service. This field is related to internet security. From TCPMAXDL.  |
| PRIVACY         |     | CHAR(12)     | The level of SSL encryption support, for internet security, that applies to this TCP/IP service. Possible values are: NotSupported, Supported, Required. From TCPPRIV.  |
| SERVICE_TRANID  |     | CHAR(4)      | The ID of the CICS transaction attached to process new requests received for this service. From TCP_TCPIPS_TRANID.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| SERVICE_URM        |     | CHAR(8)   | The name of a user-replaceable program to be called by this service. From TCP_TCPIPS_URM.   |
| TCPIP_BACKLOG      |     | FLOAT     | Port backlog for this TCP/IP service. From TCPBACK.   |
| TCPIP_CONNECTIONS  |     | FLOAT     | Current number of connections for the TCP/IP service. From TCPCURCN.  |
| TCPIP_CONNECT_PEAK |     | FLOAT     | Peak number of connections for the TCP/IP service. From TCPKCON.  |
| TCPIP_BYTES_RECV   |     | FLOAT(53) | Number of bytes received for this TCP/IP service. From TCPBYTER.  |
| TCPIP_BYTES_SENT   |     | FLOAT(53) | Number of bytes sent for this TCP/IP service. From TCPBYTES.  |
| TCPIP_DNS_GROUP    |     | CHAR(18)  | DNS group identifier used for this TCP/IP service. From TCPIP_DNS_GROUP   |
| TCPIP_IPADDR       |     | CHAR(39)  | IP address defined for the TCP/IP stack used for this TCP/IP service. From TCPIPADDR.   |
| TCPIP_IPFAMILY     |     | CHAR(7)   | The IP family for this TCP/IP service.  |
| TCPIP_PORT_NUMBER  |     | INTEGER   | Port number being used for this TCP/IP service. From TCPPORTN.  |
| TSQUEUE_PREFIX     |     | CHAR(6)   | The name of the temporary storage queue prefix used to store inbound data and Web documents created by applications. This field is related to internet security. From TCPTSQPR. |
| TCPIP_PROTOCOL     |     | CHAR(8)   | Protocol identifier.  |
| TCPIP_RECV_NUM     |     | FLOAT     | Number of send requests issued for this TCP/IP service. From TCPSEND.   |
| TCPIP_SEND_NUM     |     | FLOAT     | Number of receive requests issued for this TCP/IP service. From TCPRECVS.   |
| TCPIP_SERVICE_NAME | K   | CHAR(8)   | Name of the TCP/IP service. From TCPSENM.   |
| TCPIP_SSL_SUPPORT  |     | INTEGER   | Level of SSL support defined for this TCP/IP service. From TCPSSL.  |
| TCPIP_TRANS_ATTACH |     | FLOAT     | Number of attached transactions. From TCPATCTR.   |

## CICS\_S\_TERMINAL\_T

This table provides detailed data for each terminal. It contains data from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME           | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TERMINAL_ID    | K   | CHAR(4)   | Terminal identifier. From A06TETI or AUSTETI.   |
| ACCESS_METHOD  |     | CHAR(2)   | Terminal access method as defined in the TCT. From A06EAMIB.  |



| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| INPUT_MSGS         |     | INTEGER   | Number of messages sent to CICS from the terminal. From A06TENI or AUSTENI.  |
| LINE_ID            |     | CHAR(4)   | Line number for TCAM and BSAM lines. From A06TETI.   |
| LOGOFF_GMT_TIME    |     | TIMESTAMP | GMT time, in timestamp format, when this terminal was logged off. For CICS V4 and later. From AUSGOFTM. From A06GOFTM for CICS/TS V1.1 and later.    |
| LOGOFF_LOCAL_TIME  |     | TIMESTAMP | Local time, in timestamp format, when this terminal was logged off. For CICS V4 and later. From AUSOFFTM. From A06OFFTM for CICS/TS V1.1. and later. |
| LOGON_GMT_TIME     |     | TIMESTAMP | GMT time, in timestamp format, when this terminal was autoinstalled. For CICS V4 and later. From AUSGONTM. From A06GONTM for CICS/TS V1.1 and later. |
| LOGON_LOCAL_TIME   |     | TIMESTAMP | Local time, in timestamp format, when this terminal was autoinstalled. For CICS V4 and later. From AUSONTM. From A06ONTM for CICS/TS V1.1 and later. |
| LU_NAME            |     | CHAR(8)   | LU name of this terminal. For CICS V4 and later. From AUSLUNAM.  |
| OUTPUT_MSGS        |     | INTEGER   | Number of messages sent to the terminal from CICS. From A06TEN0 or AUSTEN0.  |
| OWN_CONNECT_NAME   |     | CHAR(8)   | Owning connection name of this terminal or session. For CICS/TS V1.1 and later. From A06SYSID.   |
| PIPELINE_MSG       |     | INTEGER   | Total throwaway count (3600 terminals). From A06TCNT.  |
| PIPELINE_MSG_GROUP |     | INTEGER   | Number of consecutive throwaways (3600 terminals). From A06SCNT.   |
| PIPELINE_MSG_MAX   |     | INTEGER   | Maximum throwaway count (3600 terminals). From A06MCNT.  |
| POLLS              |     | INTEGER   | Number of polls that have been sent to the terminal. For TCAM and BSAM terminals only. From A06LENP.   |
| PRIORITY           |     | CHAR(1)   | Terminal priority for this terminal. For CICS V4 and later. From AUSPRTY.  |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.   |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.                       |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.   |
| STORAGE_VIOLATIONS |     | INTEGER   | Number of storage violations that occurred on this terminal. From A06CSVC.   |
| TERMINAL_TYPE      |     | CHAR(2)   | Terminal type as defined in the TCT. From A06TETT.   |
| TRANSACT_ERROR     |     | INTEGER   | Number of transactions not started because they were undefined or disabled, or the operator had insufficient security. From A06TEOE or AUSTEOE.      |
| TRANSACTIONS       |     | INTEGER   | Number of transactions. A conversational transaction can be many input and output messages, but is only one transaction. From A06TEOT or AUSTEOT.    |
| XMISSION_ERROR     |     | INTEGER   | Number of errors recorded for this terminal. From A06TETE or AUSTETE.  |

**CICS\_S\_TERMINAL\_D**

This table provides daily data for each terminal. The data is taken from the CICS\_S\_TERMINAL\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.           |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                         |
| TERMINAL_ID        | K   | CHAR(4)   | Terminal identifier. From A06TETI or AUSTETI.   |
| ACCESS_METHOD      |     | CHAR(2)   | Terminal access method as defined in the TCT. From A06EAMIB.  |
| INPUT_MSGS         |     | INTEGER   | Number of messages sent to CICS from the terminal. From A06TENI or AUSTENI.   |
| LU_NAME            |     | CHAR(8)   | LU name or this terminal. For CICS V4 and later. From AUSLUNAM.   |
| OUTPUT_MSGS        |     | INTEGER   | Number of messages sent to the terminal from CICS. From A06TEN0 or AUSTENO.   |
| PIPELINE_MSG       |     | INTEGER   | Total throwaway count (3600 terminals). From A06TCNT.   |
| PIPELINE_MSG_GROUP |     | INTEGER   | Number of consecutive throwaways (3600 terminals). From A06SCNT.  |
| PIPELINE_MSG_MAX   |     | INTEGER   | Maximum throwaway count (3600 terminals). From A06MCNT.   |
| POLLS              |     | INTEGER   | Number of polls that have been sent to the terminal. For TCAM and BSAM terminals only. From A06LENP.  |
| STORAGE_VIOLATIONS |     | INTEGER   | Number of storage violations that occurred on this terminal. From A06CSVC.  |
| TERMINAL_TYPE      |     | CHAR(2)   | Terminal type as defined in the TCT. From A06TETT.  |
| TRANSACT_ERROR     |     | INTEGER   | Number of transactions not started because they were undefined or disabled, or the operator had insufficient security. From A06TEOE or AUSTEOE.   |
| TRANSACTIONS       |     | INTEGER   | Number of transactions. A conversational transaction can be many input and output messages, but is only one transaction. From A06TEOT or AUSTEOT. |
| XMISSION_ERROR     |     | INTEGER   | Number of errors recorded for this terminal. From A06TETE or AUSTETE.   |

**CICS\_S\_TRAN\_T**

This table provides detailed transaction data. It contains data from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description                           |
|-------------------|-----|-----------|---------------------------------------|
| ACTION_FORCED_TRA |     | INTEGER   | Forced action by trandef for the task |
| ACTION_FORCED_TIM |     | INTEGER   | Forced action by timeout for the task |
| ACTION_FORCED_NOW |     | INTEGER   | Forced action by nowait for the task  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| ACTION_FORCED_OPE  |     | INTEGER   | Forced action by the operator for the task  |
| ACTION_FORCED_OTH  |     | INTEGER   | Forced action by other for the task   |
| ACTION_MISMATCHES  |     | INTEGER   | Action mismatches for the task  |
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From A02TI.   |
| PROGRAM_NAME       | K   | CHAR(8)   | Program name. From A02IPIA.   |
| ACTION_FORCED_NOW  |     | INTEGER   | Forced action by nowait for the task.   |
| ACTION_FORCED_OPE  |     | INTEGER   | Forced action by operator for the task.   |
| ACTION_FORCED_OTH  |     | INTEGER   | Forced action by other for the task.  |
| ACTION_FORCED_TIM  |     | INTEGER   | Forced action by timeout for the task.  |
| ACTION_FORCED_TRA  |     | INTEGER   | Forced action by transaction definition for the task.   |
| ACTION_MISMATCHES  |     | INTEGER   | Action mismatches for the task.   |
| DYNAMIC_INDICATOR  |     | CHAR(1)   | Indicates whether the transaction has been defined as DYNAMIC=YES (Y) or DYNAMIC=NO (N). For CICS V4 and later. From XMRDYN.            |
| DYNAMIC_ROUTING_L  |     | INTEGER   | Number of times the dynamic routing exit chose to run this transaction locally. From XMRDLC or A02TADL.                                 |
| DYNAMIC_ROUTING_R  |     | INTEGER   | Number of times the dynamic routing exit chose to run this transaction remotely. From XMRDRC or A02TADR.                                |
| INDOUBT_TIMEOUT_VA |     | INTEGER   | Timeout value of the task performed   |
| INDOUBT_WAIT_OPTIO |     | CHAR(1)   | Optional waiting time of the executed time  |
| INDOUBT_ACTION     |     | CHAR(1)   | Type of action of the task performed  |
| INDOUBTS_WAITS     |     | INTEGER   | Time waited   |
| INDOUBT_ACTION     |     | CHAR(1)   | Type of action for the executed task.   |
| INDOUBT_TIMEOUT_VA |     | INTEGER   | Timeout value for the executed task.  |
| INDOUBT_WAIT_OPTIO |     | CHAR(1)   | Optional wait for the executed task.  |
| INDOUBT_WAITS      |     | CHAR(1)   | The time waited.  |
| RECORD_INCOMPLETE  |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE        |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.          |
| RECORD_VERSION     |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |

## CICS statistics component data tables

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| REMOTE_START_COUNT |     | INTEGER   | Number of attempts to start this transaction on a remote system. This can be more than the number of successful starts. For CICS V4 and later. From XMRRSC. |
| RESTARTS           |     | INTEGER   | Number of times this transaction was automatically restarted after an abend. From XMRRRC or A02ATRCT.   |
| STORAGE_VIOLATIONS |     | INTEGER   | Number of storage violations for this transaction. From XMRSVC or A02SCSVC.   |
| SYSTEM_ID_R        |     | CHAR(4)   | Name of the remote system where the transaction resides. For CICS V4 and later. From XMRRSYS.   |
| TRAN_CLASS_NAME    |     | CHAR(8)   | Name of the transaction class in which the transaction is defined. For CICS V4 and later. From XMRTCL.  |
| TRANSACTION_ID_R   |     | CHAR(8)   | Name of the transaction on the remote system. For CICS V4 and later. From XMRRNAM.  |
| TRANSACTION_PRIO   |     | SMALLINT  | Priority of the transaction, from 0-255. For CICS V4 and later. From XMRPTY.  |
| TRANSACTIONS       |     | INTEGER   | Number of times the transaction has been used. From XMRAC or A02TTA.  |

## CICS\_S\_TRAN\_D, \_M

These tables provide summarized transaction data from the CICS\_S\_TRAN\_T table.

The default retention periods are 30 days for CICS\_S\_TRAN\_D, and 565 days for CICS\_S\_TRAN\_M.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                     |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                                   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From A02TI.   |
| PROGRAM_NAME       | K   | CHAR(8)   | Program name. From A02IPIA.   |
| DYNAMIC_ROUTING_L  |     | INTEGER   | Number of times the dynamic routing exit chose to run this transaction locally. From A02TADL.   |
| DYNAMIC_ROUTING_R  |     | INTEGER   | Number of times the dynamic routing exit chose to run this transaction remotely. From A02TADR.  |
| REMOTE_START_COUNT |     | INTEGER   | Number of attempts to start this transaction on a remote system. This can be more than the number of successful starts. For CICS V4 and later. From XMRRSC. |
| RESTARTS           |     | INTEGER   | Number of times this transaction was automatically restarted after an abend. From A02ATRCT.   |
| STORAGE_VIOLATIONS |     | INTEGER   | Number of storage violations for this transaction. From A02SCSVC.   |
| TRANSACTIONS       |     | INTEGER   | Number of times the transaction has been used. From A02TTA.   |

**CICS\_S\_TRANSIENT\_T**

This table provides detailed statistics for global and individual transient-data (TD) queues from TD statistics records. It contains data from CICS statistics records (SMF 110, subtype 2).

The default retention period for this table is 7 days.

| Column name          | Key | Data type | Description   |
|----------------------|-----|-----------|---|
| DATE                 | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME          | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.                                   |
| TIME                 | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID        | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID       | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.   |
| CONTROL_INTERVAL     |     | INTEGER   | Number of control intervals in the intrapartition data set DFHINTRA. From TQGANCIS.   |
| CONTROL_INTERV_INUSE |     | INTEGER   | Current number of control intervals in the intrapartition data set DFHINTRA. From TQGACTION.  |
| DEST_ID              | K   | CHAR(6)   | Destination identifier. This is set to GLOBAL for global statistics. From A10DEST.  |
| EXTRA_OUTPUTS        |     | INTEGER   | Number of outputs (write-only queue) or inputs (read-only queue). This is the sum of A10EO.   |
| INDIRECT_Q_NAME      |     | CHAR(4)   | Indirect destination queue name (for a TYPE=INDIRECT queue), as specified via the TYPE=INDIRECT, DESTID operand of the DFHDCT macro. For CICS V4 and later. From A10IDQN. |
| INDIRECT_REQUESTS    |     | INTEGER   | Number of reads from and writes to this indirect destination. This is the sum of A10IR.   |
| INTRA_OUTPUTS        |     | INTEGER   | Number of outputs to a local intrapartition queue. This is the sum of A10IO.  |
| Q_DESTINATION_TYPE   |     | CHAR(2)   | Destination type: extrapartition (01), intrapartition (02), indirect (03), or remote (04). From A10TYPE.  |
| RECORD_INCOMPLETE    |     | CHAR(3)   | Contains YES if the CICS statistics record is incomplete. From SMFSTICD.  |
| RECORD_TYPE          |     | CHAR(3)   | Type of CICS statistics record. Can be USS (Unsolicited), EOD (End of day), REQ (Requested), or INT (Interval). From SMFSTRQT.  |
| RECORD_VERSION       |     | CHAR(4)   | CICS Version and Release that wrote this record; for example, 0330. From SMFSTRVN.  |
| REMOTE_Q_NAME        |     | CHAR(4)   | Remote queue name (for a TYPE=REMOTE queue), as specified via the TYPE=REMOTE, RMTNAME operand of the DFHDCT macro. For CICS V4 and later. From A10RQID.                  |
| REMOTE_REQUESTS      |     | INTEGER   | Number of read and write requests to this remote destination. This is the sum of A10RR.   |
| REMOTE_SYS_NAME      |     | CHAR(4)   | Remote system name (for a TYPE=REMOTE queue), as specified via the TYPE=REMOTE, SYSIDNT operand of the DFHDCT macro. For CICS V4 and later. From A10RSID.                 |
| STRING_ACCESS_PEAK   |     | INTEGER   | Peak number of concurrent intrapartition I/Os. From A11SMXAL.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| STRINGS            |     | INTEGER   | Number of strings. This is the maximum number of concurrent I/O operations. From A11SNSTA.   |
| STRINGS_ACCESSED   |     | INTEGER   | Number of I/Os to and from the intrapartition data set. This is the sum of A11STNAL.   |
| STRINGS_CONC_WAIT  |     | INTEGER   | Current number of strings concurrently accessed in the system. From TQGACNWT.  |
| STRING_WAIT_PEAK   |     | INTEGER   | Peak number of tasks waiting for a intrapartition string. This is the maximum of A11SMXWT.   |
| STRING_WAITS       |     | INTEGER   | Number of times tasks had to wait for a intrapartition string. This is the sum of A11STNWT.  |
| TD_BFR_ACCESSES    |     | INTEGER   | Number of times a buffer was accessed for writing or reading an intrapartition record. This is the sum of A11ATNAL.  |
| TD_BFR_ACC_CONC    |     | INTEGER   | Current value of the number of concurrent intrapartition buffer accesses. From TQGACNAL.   |
| TD_BFR_ACC_PEAK    |     | INTEGER   | Peak number of concurrent intrapartition buffer accesses. This is the sum of A11AMXAL.   |
| TD_BFR_INTPAR_WAIT |     | INTEGER   | Current number of requests queued because no buffers were available. From TQGACNWT.  |
| TD_BFR_VALID_DATA  |     | INTEGER   | Current number of intrapartition buffers that contain valid data. From TQGACNIU.   |
| TD_BFRS_PEAK_USED  |     | INTEGER   | Peak number of buffers containing unread data. This is the maximum of A11AMXIU.  |
| TD_BFRS_SPECIFIED  |     | INTEGER   | Number of buffers specified in the SIT. CICS uses at most one buffer per queue. From A11ANBFA.   |
| TD_BFR_WAIT_PEAK   |     | INTEGER   | Peak number of intrapartition requests queued because all buffers were in use, or the required CI was in a locked buffer. This is the maximum of A11AMXWT.   |
| TD_BFR_WAITS       |     | INTEGER   | Number of times intrapartition requests were queued because all buffers were in use, or the required CI was in a locked buffer. This is the sum of A11ATNWT. |
| TD_INTRA_CI_ACTIVE |     | INTEGER   | Number of formatted control intervals. This is the maximum of A11ANCIS.  |
| TD_INTRA_CI_PEAK   |     | INTEGER   | Peak number of control intervals logically used (not necessarily written to disk). This is the maximum of A11AMXCI.  |
| TD_INTRA_CISIZE    |     | INTEGER   | Control interval (CI) size, in bytes. From A11ACISZ. The maximum usable space is the CI size minus 32 bytes.   |
| TD_INTRA_IO_ERRORS |     | INTEGER   | Number of errors on this data set. VSAM should have reported the details of each error in the message log. This is the sum of A11ACTIO.                      |
| TD_INTRA_NOSPACE   |     | INTEGER   | Number of times there was no space on the intrapartition data set. This is the sum of A11ANOSP.  |
| TD_INTRA_READS     |     | INTEGER   | Number of times a CI had to be read from DASD. Increasing the buffer allocation can decrease this. This is the sum of A11ACTGT.                              |
| TD_INTRA_WRITES    |     | INTEGER   | Number of writes to the intrapartition data set, both for recovery and because of a lack of buffer space. This is the sum of A11ACTPT.                       |
| TD_INTRA_WRITES_FO |     | INTEGER   | Number of times a new CI was written. It does not include the formatting of the first extent. This is the sum of A11ACTFT.                                   |

**CICS\_S\_TRANSIENT\_D**

This table provides daily statistics for global and individual transient-data (TD) queues from TD statistics records. The data is consolidated from the CICS\_S\_TRANSIENT\_T table.

The default retention period for this table is 30 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| DATE               | K   | DATE      | Date when the statistics records were written to SMF. From SMFSTDTE.  |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| DEST_ID            | K   | CHAR(6)   | Destination identifier. Is set to GLOBAL for global statistics. From A10DEST.   |
| CONTR_INTERV_INUSE |     | INTEGER   | Current number of control intervals in the intrapartition data set DFHINTRA. From TQGACTCI.   |
| CONTROL_INTERVAL   |     | INTEGER   | Number of control intervals in the intrapartition data set DFHINTRA. From TQGANCS.  |
| EXTRA_OUTPUTS      |     | INTEGER   | Number of outputs (write-only queue) or inputs (read-only queue). This is the sum of A10EO.   |
| INDIRECT_REQUESTS  |     | INTEGER   | Number of reads from and writes to this indirect destination. This is the sum of A10IR.   |
| INTRA_OUTPUTS      |     | INTEGER   | Number of outputs to a local intrapartition queue. This is the sum of A10IO.  |
| REMOTE_REQUESTS    |     | INTEGER   | Number of read and write requests to this remote destination. This is the sum of A10RR.   |
| STRING_ACCESS_PEAK |     | INTEGER   | Peak number of concurrent intrapartition I/Os. From A11SMXAL.   |
| STRINGS            |     | INTEGER   | Number of strings. This is the maximum number of concurrent I/O operations. From A11SNSTA.  |
| STRINGS_ACCESSED   |     | INTEGER   | Number of I/Os to and from the intrapartition data set. This is the sum of A11STNAL.  |
| STRINGS_CONC_ACC   |     | INTEGER   | Current number of strings concurrently accessed in the system. From TQGSCNAL.   |
| STRINGS_CONC_WAIT  |     | INTEGER   | Current number of concurrent string waits in the system. From TQGSCNWT.   |
| STRING_WAIT_PEAK   |     | INTEGER   | Peak number of tasks waiting for a intrapartition string. This is the maximum of A11SMXWT.  |
| STRING_WAITS       |     | INTEGER   | Number of times tasks had to wait for a intrapartition string. This is the sum of A11STNWT.   |
| TD_BFR_ACC_CONC    |     | INTEGER   | Current value of the number of concurrent intrapartition buffer accesses. From TQGACNAL.  |
| TD_BFR_ACCESSES    |     | INTEGER   | Number of times a buffer was accessed for writing or reading an intrapartition record. This is the sum of A11ATNAL.                     |
| TD_BFR_ACC_PEAK    |     | INTEGER   | Peak number of concurrent intrapartition buffer accesses.   |
| TD_BFR_INTPAR_WAIT |     | INTEGER   | Current number of requests queued because no buffers were available. From TQGACNWT. This is the maximum of A11AMXAL.                    |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TD_BFRS_PEAK_USED  |     | INTEGER   | Peak number of buffers containing unread data. This is the maximum of A11AMXIU.  |
| TD_BFRS_SPECIFIED  |     | INTEGER   | Number of buffers specified in the SIT. CICS uses at most one buffer per queue. From A11ANBFA.   |
| TD_BFR_VALID_DATA  |     | INTEGER   | Current number of intrapartition buffers that contain valid data. From TQGACNIU.   |
| TD_BFR_WAIT_PEAK   |     | INTEGER   | Peak number of intrapartition requests queued because all buffers were in use, or the required CI was in a locked buffer. This is the maximum of A11AMXWT.   |
| TD_BFR_WAITS       |     | INTEGER   | Number of times intrapartition requests were queued because all buffers were in use, or the required CI was in a locked buffer. This is the sum of A11ATNWT. |
| TD_INTRA_CI_ACTIVE |     | INTEGER   | Number of formatted control intervals. This is the maximum of A11ANCIS.  |
| TD_INTRA_CI_PEAK   |     | INTEGER   | Peak number of control intervals logically used (not necessarily written to disk). This is the maximum of A11AMXCI.  |
| TD_INTRA_CISIZE    |     | INTEGER   | Control interval (CI) size, in bytes. From A11ACISZ. The maximum usable space is the CI size minus 32 bytes.   |
| TD_INTRA_IO_ERRORS |     | INTEGER   | Number of errors on this data set. VSAM should have reported the details of each error in the message log. This is the sum of A11ACTIO.                      |
| TD_INTRA_NOSPACE   |     | INTEGER   | Number of times there was no space on the intrapartition data set. This is the sum of A11ANOSP.  |
| TD_INTRA_READS     |     | INTEGER   | Number of times a CI had to be read from DASD. Increasing the buffer allocation can decrease this. This is the sum of A11ACTGT.                              |
| TD_INTRA_WRITES    |     | INTEGER   | Number of writes to the intrapartition data set, both for recovery and because of a lack of buffer space. This is the sum of A11ACTPT.                       |
| TD_INTRA_WRITES_FO |     | INTEGER   | Number of times a new CI was written. It does not include the formatting of the first extent. This is the sum of A11ACTFT.                                   |

## CICS\_S\_TS\_BPOOL\_T

This table provides detailed statistics for the queue index BPOOL that is used to Read/Write entries and the associated data. For CICS/TS V1.2 and later, this maps the DFHXQS2D record.

The default retention period for this table is 7 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME           | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TS_BUF_TOT     |     | FLOAT     | Total number of defined buffers. From S2BFQTY.  |
| TS_BUF_USEMAX  |     | FLOAT     | Number of buffers already used. From S2BFENTH.  |



| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| TS_BUF_USECUR   |     | FLOAT     | Number of active buffers owned by tasks. From S2BFACTS.               |
| TS_BUF_REUSE    |     | FLOAT     | Number of valid buffers on the LRU chain. From S2BFLRUS.              |
| TS_BUF_EMPTY    |     | FLOAT     | Number of empty buffers on the free chain. From S2BFEMPS.             |
| TS_BUF_GETS     |     | FLOAT     | Number of GET requests. From S2BFGETS.                                |
| TS_BUF_PUTS     |     | FLOAT     | Number of PUT requests (put back buffer as valid). From S2BFPUTS.     |
| TS_BUF_KEEP     |     | FLOAT     | Number of KEEP requests (put back buffer as modified). From S2BFKEPS. |
| TS_BUF_FREE     |     | FLOAT     | Number of FREE requests (put back buffer as empty). From S2BFFRES.    |
| TS_BUF_PURGES   |     | FLOAT     | Number of PURGE requests (mark buffer as invalid). From S2BFPURS.     |
| TS_BUF_GOTHIT   |     | FLOAT     | Number of GET requests that found a valid buffer. From S2BFHITS.      |
| TS_BUF_GOTFREE  |     | FLOAT     | Number of GET requests that used a free buffer. From S2BFGFRS.        |
| TS_BUF_GOTNEW   |     | FLOAT     | Number of GET requests that used a new buffer. From S2BFGNWS.         |
| TS_BUF_GOTLRU   |     | FLOAT     | Number of GET requests that used the LRU buffer. From S2BFGRLS.       |
| TS_BUF_NOBUF    |     | FLOAT     | Number of GET requests that returned no buffer. From S2BFGNBS.        |
| TS_BUF_NOTFREED |     | FLOAT     | Number of FREE errors, buffer not owned. From S2BFFNOS.               |
| TS_BUF_NOPURGE  |     | FLOAT     | Number of PURGE requests with no matching buffer. From S2BFPNFS.      |
| TS_BUF_NOTOWNED |     | FLOAT     | Number of PURGE errors, buffer not owned. From S2BFPNOS.              |
| TS_BUF_POOLLOCK |     | FLOAT     | Number of waits on buffer pool lock. From S2BFPWTS.                   |
| TS_BUF_BUFLOCK  |     | FLOAT     | Number of GET waits on buffer lock. From S2BFLWTS.                    |

## CICS\_S\_TS\_BPOOL\_D

This table provides daily statistics for the queue index BPOOL that is used to Read/Write queue index entries and the associated data. For CICS/TS V1.2 and later, this maps the DFHXQS2D record.

The default retention period for this table is 30 days.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| DATE           | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME    | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TS_BUF_TOT     |     | FLOAT     | Total number of defined buffers. From S2BFQTY.  |
| TS_BUF_USEMAX  |     | FLOAT     | Number of buffers already used. From S2BFENTH.  |
| TS_BUF_USECUR  |     | FLOAT     | Number of active buffers owned by tasks. From S2BFACTS.   |
| TS_BUF_REUSE   |     | FLOAT     | Number of valid buffers on the LRU chain. From S2BFLRUS.  |
| TS_BUF_EMPTY   |     | FLOAT     | Number of empty buffers on the free chain. From S2BFEMPS.   |
| TS_BUF_GETS    |     | FLOAT     | Number of GET requests. From S2BFGETS.  |

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| TS_BUF_PUTS     |     | FLOAT     | Number of PUT requests (put back buffer as valid). From S2BFPUTS.     |
| TS_BUF_KEEP     |     | FLOAT     | Number of KEEP requests (put back buffer as modified). From S2BFKEPS. |
| TS_BUF_FREE     |     | FLOAT     | Number of FREE requests (put back buffer as empty). From S2BFFRES.    |
| TS_BUF_PURGES   |     | FLOAT     | Number of PURGE requests (mark buffer as invalid). From S2BFPURS.     |
| TS_BUF_GOTHIT   |     | FLOAT     | Number of GET requests that found a valid buffer. From S2BFHITS.      |
| TS_BUF_GOTFREE  |     | FLOAT     | Number of GET requests that used a free buffer. From S2BFGFRS.        |
| TS_BUF_GOTNEW   |     | FLOAT     | Number of GET requests that used a new buffer. From S2BFGNWS.         |
| TS_BUF_GOTLRU   |     | FLOAT     | Number of GET requests that used the LRU buffer. From S2BFGRLS.       |
| TS_BUF_NOBUF    |     | FLOAT     | Number of GET requests that returned no buffer. From S2BFGNBS.        |
| TS_BUF_NOTFREED |     | FLOAT     | Number of FREE errors, buffer not owned. From S2BFFNOS.               |
| TS_BUF_NOPURGE  |     | FLOAT     | Number of PURGE requests with no matching buffer. From S2BFPNFS.      |
| TS_BUF_NOTOWNED |     | FLOAT     | Number of PURGE errors, buffer not owned. From S2BFPNOS.              |
| TS_BUF_POOLLOCK |     | FLOAT     | Number of waits on buffer pool lock. From S2BFPWTS.                   |
| TS_BUF_BUFLOCK  |     | FLOAT     | Number of GET waits on buffer lock. From S2BFLWTS.                    |

## CICS\_S\_TS\_CF\_T

This table provides detailed Shared TS queue server CF statistics. For CICS/TS V1.2 and later, this maps the DFHXQS1D record.

The default retention period for this table is 7 days.

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| DATE            | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME     | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME            | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID  | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TS_CF_STR_PREF  | K   | CHAR(8)   | First part of the structure name. From S1PREF.  |
| TS_CF_POOL_NAME | K   | CHAR(8)   | Pool name part of the structure name. From S1POOL.  |
| TS_CF_CONN_PREF | K   | CHAR(8)   | Prefix for connection name. From S1CNPREF.  |
| TS_CF_MVS_SYSN  | K   | CHAR(8)   | Own MVS system name from CVTSNAME. From S1NSYSN.  |
| TS_CF_SIZE      |     | FLOAT     | Current allocated size of the list structure. From S1SIZE.  |
| TS_CF_MAX_SIZE  |     | FLOAT     | Maximum size to which this structure could be altered. From S1SIZEMX.   |
| TS_CF_LHEAD_MAX |     | FLOAT     | Maximum number of list headers. From S1HDRS.  |
| TS_CF_CHEAD     |     | FLOAT     | Headers used for control lists. From S1HDRSCT.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| TS_CF_QDATA_HEAD   |     | FLOAT     | Headers available for queue data row. From S1HDRSQD.  |
| TS_CF_ELEM_SIZE    |     | FLOAT     | Data element size of the list structure. From S1ELEM LN.  |
| TS_CF_DATAEL_SIZE  |     | FLOAT     | Data element size, to the power of 2, used for the structure. From S1ELEM PW.   |
| TS_CF_ENTREL_MAX   |     | FLOAT     | Maximum number of elements per entry (for 32 kilobytes) From S1ELEM PE.   |
| TS_CF_EMTRY_ELSZ   |     | FLOAT     | Element size of entry-to-element ratio. From S1ELEM RT.   |
| TS_CF_ENTRSZ_RATIO |     | FLOAT     | Entry size of entry-to-element ratio. From S1ENTR RT.   |
| TS_CF_ENTRUSE_CUR  |     | FLOAT     | Number of entries currently in use. From S1ENTR CT.   |
| TS_CF_ENTRUSE_MAX  |     | FLOAT     | Maximum number of entries in use (since last reset). From S1ENTR HI.  |
| TS_CF_ENTRFRE_MIN  |     | FLOAT     | Minimum number of free entries (since last reset). From S1ENTR LO.  |
| TS_CF_ENTRALL_TOT  |     | FLOAT     | Total number of data entries in the current allocated structure. From S1ENTR MX.  |
| TS_CF_ELUSE_CUR    |     | FLOAT     | Number of elements currently in use. From S1ELEM CT.  |
| TS_CF_ELUSE_MAX    |     | FLOAT     | Maximum number of elements in use. From S1ELEM HI.  |
| TS_CF_ELFREE_MIN   |     | FLOAT     | Lowest number of elements currently free (total - used). From S1ELEM LO.  |
| TS_CF_ELCUR_TOT    |     | FLOAT     | Maximum number of elements returned by IXLCONN. From S1ELEM MX.   |
| TS_CF_USLST_HEAD   |     | FLOAT     | Number of elements on used list. From S1USED CT.  |
| TS_CF_USED_MAX     |     | FLOAT     | Highest number of elements on used list. From S1USED HI.  |
| TS_CF_ENTR_FREE    |     | FLOAT     | Number of entries on free list. From S1FREE CT.   |
| TS_CF_ENTRFRE_MAX  |     | FLOAT     | Highest number of entries on free list. From S1FREE HI.   |
| TS_CF_QUEUE_NUM    |     | FLOAT     | Number of current existing queues. From S1INDX CT.  |
| TS_CF_QUEUE_MAX    |     | FLOAT     | Highest number of queues at any time (since last reset) From S1INDX HI.   |
| TS_CF_ENTRIX_QREAD |     | FLOAT     | Read queue index entry. From S1RDQ CT.  |
| TS_CF_ENTRIX_QWR   |     | FLOAT     | Write queue index entry. From S1WRQ CT.   |
| TS_CF_ENTRIX_QDEL  |     | FLOAT     | Delete queue index entry. From S1DLQ CT.  |
| TS_CF_DATA LIST    |     | FLOAT     | Number of times that a separate data list was created. From S1CRL CT.   |
| TS_CF_DELETE_LIST  |     | FLOAT     | Delete list (one for each overall delete). From S1DLL CT.   |
| TS_CF_DATA_QREAD   |     | FLOAT     | Number of queue index reads. From S1RDL CT.   |
| TS_CF_DATA_QWRITE  |     | FLOAT     | Number of queue writes (new or update) including data. From S1WRL CT.   |
| TS_CF_LISTEN_RREA  |     | FLOAT     | Rewrite list entry. From S1RWL CT.  |
| TS_CF_ENTRIX_QINQ  |     | FLOAT     | Inquire on queue index entry. From S1INQ CT.  |
| TS_CF_LISTEN_ENQY  |     | FLOAT     | Inquiry in list entry. From S1INL CT.   |
| TS_CF_ENTRIX_WRITE |     | FLOAT     | Number of index writes to update adjunct area only. This area contains the read cursor for small queues and the queues and the queue status, including last used data. From S1WRA CT. |

## CICS statistics component data tables

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TS_CF_ENTRFRE_RRD  |     | FLOAT     | Number of index data reads that had to be repeated because the data was larger than the default data transfer size. From S1RRQCT.                    |
| TS_CF_LISTDATA_RD  |     | FLOAT     | Number of list data reads that had to be repeated because the data was larger than the default data transfer size. From S1RRLLCT.                    |
| TS_CF_ASYNC_REQS   |     | FLOAT     | Number of asynchronous requests. From S1ASYCT.   |
| TS_CF_NORMAL_RESP  |     | FLOAT     | Number of normal responses. From S1RSP1CT.   |
| TS_CF_TIMEOUT_REQS |     | FLOAT     | Request timed out by the CF and should be restarted. From S1RSP2CT.  |
| TS_CF_ENTR_NOTFND  |     | FLOAT     | Specified entry (queue or item) was not found. From S1RSP3CT.  |
| TS_CF_FAIL_VRSCHK  |     | FLOAT     | A verification check failed for an entry being updated, indicating that another task had updated it first. From S1RSP4CT.                            |
| TS_CF_FAIL_LSTCHK  |     | FLOAT     | A list authority comparison failed, usually indicating that a large queue was deleted. From S1RSP5CT.  |
| TS_CF_FAIL_LSTFUL  |     | FLOAT     | Maximum list key reached, indicating that the maximum queue size or the maximum number of queues has been reached, depending on list. From S1RSP6CT. |
| TS_CF_FAIL_STRFUL  |     | FLOAT     | The list structure is out of space. From S1RSP7CT.   |
| TS_CF_FAIL_IOERR   |     | FLOAT     | An IXLIST RC occurred other than those previously described. From S1RSP8CT.  |

## CICS\_S\_TS\_CF\_D

This table provides daily Shared TS queue server CF statistics. For CICS/TS V1.2 and later, this maps the DFHXQS1D record.

The default retention period for this table is 30 days.

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| DATE             | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME      | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID   | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TS_CF_STR_PREF   | K   | CHAR(8)   | First part of the structure name. From S1PREF.  |
| TS_CF_POOL_NAME  | K   | CHAR(8)   | Pool name part of the structure name. From S1POOL.  |
| TS_CF_CONN_PREF  | K   | CHAR(8)   | Prefix for connection name. From S1CNPREF.  |
| TS_CF_MVS_SYSN   | K   | CHAR(8)   | Own MVS system name from CVTSNAME. From S1NSYSN.  |
| TS_CF_SIZE       |     | FLOAT     | Current allocated size of the list structure. From S1SIZE.  |
| TS_CF_MAX_SIZE   |     | FLOAT     | Maximum size to which this structure could be altered. From S1SIZEMX.   |
| TS_CF_LHEAD_MAX  |     | FLOAT     | Maximum number of list headers. From S1HDRS.  |
| TS_CF_CHEAD      |     | FLOAT     | Headers used for control lists. From S1HDRSCT.  |
| TS_CF_QDATA_HEAD |     | FLOAT     | Headers available for queue data row. From S1HDRSQD.  |
| TS_CF_ELEM_SIZE  |     | FLOAT     | Data element size of the list structure. From S1ELEMNLN.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TS_CF_DATAEL_SIZE  |     | FLOAT     | Data element size, to the power of 2, used for the structure. From S1ELEMPW.   |
| TS_CF_ENTREL_MAX   |     | FLOAT     | Maximum number of elements per entry (for 32 kilobytes) From S1ELEMPE.   |
| TS_CF_EMTRY_ELSZ   |     | FLOAT     | Element size of entry-to-element ratio. From S1ELEMRT.   |
| TS_CF_ENTRSZ_RATIO |     | FLOAT     | Entry size of entry-to-element ratio. From S1ENTRRT.   |
| TS_CF_ENTRUSE_CUR  |     | FLOAT     | Number of entries currently in use. From S1ENTRCT.   |
| TS_CF_ENTRUSE_MAX  |     | FLOAT     | Maximum number of entries in use (since last reset). From S1ENTRHI.  |
| TS_CF_ENTRFRE_MIN  |     | FLOAT     | Minimum number of free entries (since last reset). From S1ENTRLO.  |
| TS_CF_ENTRALL_TOT  |     | FLOAT     | Total number of data entries in the current allocated structure. From S1ENTRMX.  |
| TS_CF_ELUSE_CUR    |     | FLOAT     | Number of elements currently in use. From S1ELEMCT.  |
| TS_CF_ELUSE_MAX    |     | FLOAT     | Maximum number of elements in use. From S1ELEMHI.  |
| TS_CF_ELFREE_MIN   |     | FLOAT     | Lowest number of elements currently free (total - used). From S1ELEMLO.  |
| TS_CF_ELCUR_TOT    |     | FLOAT     | Maximum number of elements returned by IXLCONN. From S1ELEMMX.   |
| TS_CF_USLST_HEAD   |     | FLOAT     | Number of elements on used list. From S1USEDCT.  |
| TS_CF_USED_MAX     |     | FLOAT     | Highest number of elements on used list. From S1USEDHI.  |
| TS_CF_ENTR_FREE    |     | FLOAT     | Number of entries on free list. From S1FREECT.   |
| TS_CF_ENTRFRE_MAX  |     | FLOAT     | Highest number of entries on free list. From S1FREEHI.   |
| TS_CF_QUEUE_NUM    |     | FLOAT     | Number of current existing queues. From S1INDXCT.  |
| TS_CF_QUEUE_MAX    |     | FLOAT     | Highest number of queues at any time (since last reset) From S1INDXHI.   |
| TS_CF_ENTRIX_QREAD |     | FLOAT     | Read queue index entry. From S1RDQCT.  |
| TS_CF_ENTRIX_QWR   |     | FLOAT     | Write queue index entry. From S1WRQCT.   |
| TS_CF_ENTRIX_QDEL  |     | FLOAT     | Delete queue index entry. From S1DLQCT.  |
| TS_CF_DATA_LIST    |     | FLOAT     | Number of times that a separate data list was created. From S1CRLCT.   |
| TS_CF_DELETE_LIST  |     | FLOAT     | Delete list (one for each overall delete). From S1DLLCT.   |
| TS_CF_DATA_QREAD   |     | FLOAT     | Number of queue index reads. From S1RDLCT.   |
| TS_CF_DATA_QWRITE  |     | FLOAT     | Number of queue writes (new or update) including data. From S1WRLCT.   |
| TS_CF_LISTEN_RREA  |     | FLOAT     | Rewrite list entry. From S1RWLCT.  |
| TS_CF_ENTRIX_QINQ  |     | FLOAT     | Inquire on queue index entry. From S1INQCT.  |
| TS_CF_LISTEN_ENQY  |     | FLOAT     | Inquiry in list entry. From S1INLCT.   |
| TS_CF_ENTRIX_WRITE |     | FLOAT     | Number of index writes to update adjunct area only. This area contains the read cursor for small queues and the queues and the queue status, including last used data. From S1WRACT. |
| TS_CF_ENTRFRE_RRD  |     | FLOAT     | Number of index data reads that had to be repeated because the data was larger than the default data transfer size. From S1RRQCT.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TS_CF_LISTDATA_RD  |     | FLOAT     | Number of list data reads that had to be repeated because the data was larger than the default data transfer size. From S1RRLCT.                     |
| TS_CF_ASYNC_REQS   |     | FLOAT     | Number of asynchronous requests. From S1ASYCT.   |
| TS_CF_NORMAL_RESP  |     | FLOAT     | Number of normal responses. From S1RSP1CT.   |
| TS_CF_TIMEOUT_REQS |     | FLOAT     | Request timed out by the CF and should be restarted. From S1RSP2CT.  |
| TS_CF_ENTR_NOTFND  |     | FLOAT     | Specified entry (queue or item) was not found. From S1RSP3CT.  |
| TS_CF_FAIL_VRSCHK  |     | FLOAT     | A verification check failed for an entry being updated, indicating that another task had updated it first. From S1RSP4CT.                            |
| TS_CF_FAIL_LSTCHK  |     | FLOAT     | A list authority comparison failed, usually indicating that a large queue was deleted. From S1RSP5CT.  |
| TS_CF_FAIL_LSTFUL  |     | FLOAT     | Maximum list key reached, indicating that the maximum queue size or the maximum number of queues has been reached, depending on list. From S1RSP6CT. |
| TS_CF_FAIL_STRFUL  |     | FLOAT     | The list structure is out of space. From S1RSP7CT.   |
| TS_CF_FAIL_IOERR   |     | FLOAT     | An IXLLIST RC occurred other than those previously described. From S1RSP8CT.   |

## CICS\_S\_TS\_STOR\_T

This table provides detailed storage statistics. For CICS/TS V1.2 and later, this maps the DFHXQS3D record.

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TS_STOR_POOL      | K   | CHAR(8)   | Name of the storage pool. AXMPGANY (for LOC=ANY) or AXMPGLOW (for LOC=BELOW) From S3ANYNAM or S3MPFLOW.                                 |
| TS_STOR_PSIZE_TOT |     | FLOAT     | Size of the storage pool area. Calculated as <i>maximum</i> of S3ANYSIZ or S3LOWSIZ.  |
| TS_STOR_PADDR     |     | FLOAT     | Address of the storage pool area. From S3ANYPTR or S3LOWPTR.  |
| TS_STOR_PPAGE_TOT |     | FLOAT     | Total pages in the storage pool. Calculated as <i>maximum</i> of S3ANYMX or S3LOWMX.  |
| TS_STOR_USE_MAX   |     | FLOAT     | Number of used pages in the storage pool. Calculated as <i>maximum</i> of S3ANYUS or S3LOWUS.   |
| TS_STOR_FREE_MAX  |     | FLOAT     | Maximum number of free pages in the storage pool. Calculated as <i>maximum</i> of S3ANYFR or S3LOWFR.                                   |
| TS_STOR_FREE_MIN  |     | FLOAT     | Minimum number of free pages in the storage pool (since reset). Calculated as <i>minimum</i> of S3ANYLO or S3LOWLO.                     |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| TS_STOR_GETS      |     | FLOAT     | Number of storage GET requests. From S3ANYRQG or S3LOWRQG.                       |
| TS_STOR_REQ_FAILS |     | FLOAT     | Number of GET requests that failed to obtain storage. From S3ANYRQF or S3LOWRQF. |
| TS_STOR_FREES     |     | FLOAT     | Number of storage FREE requests. From S3ANYRQS or S3LOWRQS.                      |
| TS_STOR_RETRIES   |     | FLOAT     | Number of compression (defragmentation) attempts. From S3ANYRQC or S3LOWRQC.     |

## CICS\_S\_TS\_STOR\_D

This table provides daily storage statistics. For CICS/TS V1.2 and later, this maps the DFHXQS3D record.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function. |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.               |
| TS_STOR_POOL      | K   | CHAR(8)   | Name of the storage pool. AXMPGANY (for LOC=ANY storage pool) or AXMPGLOW (for LOC=BELOW storage pool). From S3ANYNAM or S3MPFLOW.      |
| TS_STOR_PSIZE_TOT |     | FLOAT     | Size of the storage pool area. Calculated as <i>maximum</i> of S3ANYISZ or S3LOWISZ.  |
| TS_STOR_PADDR     |     | FLOAT     | Address of the storage pool area. From S3ANYPTR or S3LOWPTR.  |
| TS_STOR_PPAGE_TOT |     | FLOAT     | Total pages in the storage pool. Calculated as <i>maximum</i> of S3ANYMX or S3LOWMX.  |
| TS_STOR_USE_MAX   |     | FLOAT     | Number of used pages in the storage pool. Calculated as <i>maximum</i> of S3ANYUS or S3LOWUS.   |
| TS_STOR_FREE_MAX  |     | FLOAT     | Maximum number of free pages in the storage pool. Calculated as <i>maximum</i> of S3ANYFR or S3LOWFR.                                   |
| TS_STOR_FREE_MIN  |     | FLOAT     | Minimum number of free pages in the storage pool (since reset). Calculated as <i>minimum</i> of S3ANYLO or S3LOWLO.                     |
| TS_STOR_GETS      |     | FLOAT     | Number of storage GET requests. From S3ANYRQG or S3LOWRQG.  |
| TS_STOR_REQ_FAILS |     | FLOAT     | Number of GET requests that failed to obtain storage. From S3ANYRQF or S3LOWRQF.  |
| TS_STOR_FREES     |     | FLOAT     | Number of storage FREE requests. From S3ANYRQS or S3LOWRQS.   |
| TS_STOR_RETRIES   |     | FLOAT     | Number of compress (defragmentation) attempts. From S3ANYRQC or S3LOWRQC.   |

## CICS\_S\_URIMAP\_T

This table provides detailed statistics for individual URIMAP. It contains data from CICS statistics records (SMF 110, subtype 2 std 104). For CICS/TS V3.1 and later, it takes information from the DFHWBRDS CICS dsect.

The default retention period for this table is 7 days.

| Column name       | Key | Data type    | Description  |
|-------------------|-----|--------------|--|
| DATE              | K   | DATE         | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME       | K   | CHAR(8)      | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.  |
| TIME              | K   | TIME         | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)      | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID    | K   | CHAR(8)      | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.  |
| URIMAP_ATOM_SRV   |     | CHAR(8)      | The name of the ATOMSERVICE resource definition for the Atom document. From WBRUATOMSRV.   |
| URIMAP_AUTH       |     | CHAR(5)      | Whether credentials (authentication information) are sent for outbound Web requests. From WBRUAUTH.  |
| URIMAP_IP_ADDRESS |     | CHAR(39)     | The IPv4 or IPv6 address of the host. From WBRUIPAPPR.   |
| URIMAP_IP_FAMILY  |     | CHAR(7)      | The address format of the IP Resolved Address. From WBRUIPFAMILY.  |
| URIMAP_NAME       | K   | CHAR(8)      | The name of the URIMAP definition. From WBRUNAME.  |
| URIMAP_PORT       |     | INTEGER      | The port number used for the client connection or the communication. From WBRUPORT.  |
| URIMAP_USAGE      |     | CHAR(8)      | The intended use of this URIMAP. The possible values are: SERVER: the URIMAP definition is used to locate the resources for CICS to produce an HTTP response to the request identified by HOST and PATH. CLIENT: the URIMAP definition is used to specify information for making an HTTP request from CICS an HTTP client. PIPELINE: the URIMAP definition is used to locate the resources for CICS to produce an XML response to the request identified by HOST and PATH. From WBRUUSG. |
| URIMAP_SCHEME     |     | CHAR(8)      | The scheme for the HTTP request. The possible values are HTTP, HTTPS(HTTP with SSL) and WMQ. From WBRSCHEME.   |
| ANALYZER          |     | CHAR(1)      | Whether (Y) or not (N) the analyzer associated with the TCPIPService definition is called to process the request. From WBRUANUSE.  |
| REDIRECTION_TYPE  |     | CHAR(10)     | Whether or not matching requests should be redirected, on a temporary or permanent basis. From WBRUREDTYPE.  |
| URIMAP_HOST       |     | VARCHAR(116) | The host name of the URL to which the HTTP request is to be sent for USAGE (CLIENT). The host name on the incoming HTTP request that is used to select this URIMAP definition for any other USAGE. From WBRUHNAME.   |
| URIMAP_PATH       |     | VARCHAR(254) | The path of the target URL to which the HTTP request is to be sent for USAGE (CLIENT). The path on the incoming HTTP request that is used to select this URIMAP definition, for any other USAGE. The PATH may terminate in an asterisk, meaning that it is generic, and matches any path whose characters are the same up to but excluding the asterisk. From WBRUPATH.  |
| TEMPLATE_NAME     |     | VARCHAR(48)  | The name of a CICS document template whose contents are returned as the HTTP response. From WBRUTNAME.   |
| HFS_FILE          |     | VARCHAR(254) | The name of a file in the z/OS UNIX System Services Hierarchical File System (HFS), whose contents are returned as the HTTP response. From WBRUHFSFILE.  |



| Column name       | Key | Data type    | Description   |
|-------------------|-----|--------------|---|
| LOCATION_REDIRECT |     | VARCHAR(254) | An alternate URL to which the Web client will be redirected, if redirection is specified. From WBRULOC.   |
| TRANSACTION_ID    |     | CHAR(4)      | The name of the alias transaction that processes the incoming HTTP request. From WBRUTRANID.  |
| TCPSERVICE_NAME   |     | CHAR(8)      | The TCPIPSERVICE to which this URIMAP definition applies. Only requests received on this TCPIPSERVICE are matched to this URIMAP definition. If no TCPIPSERVICE is specified, the URIMAP definition applies to all incoming HTTP requests. From WBRUTCPSRV. |
| CONVERTER         |     | CHAR(8)      | The name of a converter program that is used to transform the HTTP request into a form suitable for the application program specified in PROGRAM. From WBRUCONVM.   |
| PROGRAM_NAME      |     | CHAR(8)      | The name of the application program that processes the incoming HTTP request. From WBRUPGMNM.   |
| WEBSERVICE_NAME   |     | VARCHAR(32)  | The name of the WEBSERVICE resource definition for the Web service that handles the incoming HTTP request. From WBRUWEBSE.  |
| PIPELINE_NAME     |     | CHAR(8)      | The name of the PIPELINE resource definition for the Web service that handles the incoming HTTP request. From WBRUPIPEL.  |
| URIMAP_REF_CNT    |     | FLOAT        | Number of times this URIMAP definition was referenced. From WBRUREFCNT.   |
| URIMAP_DISABLED   |     | FLOAT        | Number of times this host and path were matched, but the URIMAP definition was disabled. From WBRUMTCHDIS.  |
| URIMAP_REDIRECTED |     | FLOAT        | Number of times this host and path were matched and the request was redirected. From WBRUMTCHRED.   |

## CICS\_S\_WEBSERV\_T

This table provides details of various attribute settings of each WEBSERVICE resource definition. It contains data from CICS statistics records (SMF 110, subtype 2 std 106). For CICS/TS V3.1 and later, it takes information from the DFHPIWDS CICS dsct.).

The default retention period for this table is 7 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE.   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function.        |
| TIME              | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME.   |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID.   |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN.                      |
| WEBSERVICE_NAME   | K   | CHAR(8)   | The name of the WEBSERVICE resource definition. From PIWSENM.  |
| PROGRAM_INTERFACE |     | CHAR(8)   | For a service provider, indicates whether CICS passes data to the target application program in a COMMAREA or a CHANNEL or N/A. From PIWPGINT. |

| Column name       | Key | Data type    | Description  |
|-------------------|-----|--------------|--|
| VALIDATION        |     | CHAR(1)      | Indicates whether full validation of SOAP messages against the corresponding schema in the Web service description is specified. Possible values are N or Y. From PIWMSGVAL. |
| PIPELINE_NAME     |     | CHAR(8)      | The name of the PIPELINE resource definition used to provide information about message handlers acting on service request processed by this task. From WBPIPLNM.             |
| URIMAP_NAME       |     | CHAR(8)      | The name of a dynamically installed URIMAP resource definition, if there is one that is associated with this Web service. From PIWURINM.                                     |
| WSBIND_FILE       |     | VARCHAR(254) | The file name of the Web service binding file associated with the Web service resource. From PIWWSBFL.   |
| WSDL_FILE         |     | VARCHAR(254) | The file name of the Web service description (WSDL) file associated with the Web service resource. From PIWWSDLFL.   |
| WSDL_BIND         |     | VARCHAR(254) | The WSDL binding represented by the Web service. This binding is one of (potentially) many that appear in the WSDL file. From PIWWSDLBD.                                     |
| ENDPOINT_URI      |     | VARCHAR(254) | The URI specifying the location on the network (or endpoint) of the Web service, as defined in the Web service description. From PIWENDPURI.                                 |
| PROGRAM_NAME      |     | CHAR(8)      | The name of the target application program. From PIWPROGNM.  |
| CONTAINER_NAME    |     | VARCHAR(16)  | When CICS passes data to the target application program in a channel, indicates the name of the container that holds the top level data. From PIWCONTNM.                     |
| WEBSERVICE_USECNT |     | FLOAT        | The number of times this Web service was used to process a Web service request. From PIWWEBUSECNT.   |

## CICS\_TCPIP\_CONN\_D

This table provides daily TCP/IP connection statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHISRDS macro.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| IP_CONN_NAME      | K   | CHAR(8)   | IP Connection name. From ISR_IPCONN_NAME.  |
| FUNCS_IC_REQUESTS |     | INTEGER   | The number of interval control requests for function shipping on this connection. From ISR_FS_IC_REQUESTS.                             |
| IC_REQ_BYTES_RECV |     | FLOAT     | The number of bytes received by interval control requests. From ISR_FS_IC__BYT_RECV.   |
| IC_REQ_BYTES_SENT |     | FLOAT     | The number of bytes sent on interval control requests. From ISR_FS_IC_BYT_SENT.  |
| IP_ADDRESS        |     | CHAR(39)  | The IPv4 or IPv6 address of the host. From ISR_IP_ADDRESS.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| IP_ALLOC_FAIL_LNK  |     | INTEGER   | Failed allocates - Link. From ISR_ALLOC_FAIL_LNK.  |
| IP_ALLOC_FAIL_OTR  |     | INTEGER   | Failed allocates - Other. From ISR_ALLOC_FAIL_OTR.                                       |
| IP_ALLOCQ_LIMIT    |     | INTEGER   | Allocate queue limit. From ISR_ALLOCQ_LIMIT.   |
| IP_QLIM_ALLOC_REJ  |     | INTEGER   | Queue limit allocate rejects. From ISR_QLIM_ALLOC_REJ.                                   |
| IP_APPLID          |     | CHAR(8)   | IP Connection applid. From ISR_APPLID.   |
| IP_CON_GMT_CREATE  |     | TIMESTAMP | AI Ipconn create time - GMT. From ISR_CON_GMT_CTIME.                                     |
| IP_CON_GMT_DELETE  |     | TIMESTAMP | AI Ipconn delete time - GMT. From ISR_CON_GMT_DTIME.                                     |
| IP_CON_LOC_CREATE  |     | TIMESTAMP | AI Ipconn create time-Local. From ISR_CON_CTIME.   |
| IP_CON_LOC_DELETE  |     | TIMESTAMP | AI Ipconn delete time-Local. From ISR_CON_DTIME.   |
| IP_CUR_QD_ALLOC    |     | INTEGER   | Current queued allocates. From ISR_CURQ_ALLOC.   |
| IP_CUR_RECV_SESS   |     | INTEGER   | Current receive sessions. From ISR_CUR_RECV_SESS.  |
| IP_CUR_SEND_SESS   |     | INTEGER   | Current send sessions. From ISR_CUR_SEND_SESS.   |
| IP_FAMILY          |     | CHAR(7)   | The address format of the IP Resolved Address. From ISR_IP_FAMILY.                       |
| IP_FUNSHP_BYT_RECV |     | FLOAT     | FS Program reqs bytes received. From ISR_FS_PG_BYT_RECV.                                 |
| IP_FUNSHP_BYT_SENT |     | FLOAT     | FS Program reqs bytes sent. From ISR_FS_PG_BYT_SENT.                                     |
| IP_FUNSHP_PRG_REQ  |     | INTEGER   | Function Shipped Program requests. From ISR_FS_PG_REQUESTS.                              |
| IP_HOST_NAME       |     | CHAR(116) | IP Connection Host name. From ISR_HOST_NAME.   |
| IP_MAXQ_PURGED     |     | INTEGER   | Maxq time allocates purged. From ISR_MAXQ_ALLOC_PRG.                                     |
| IP_MAXQ_QPURGE     |     | INTEGER   | Maxq time allocate qpurges. From ISR_MAXQ_ALLOC_QP.                                      |
| IP_MAXQ_TIME       |     | INTEGER   | Max queue time. From ISR_MAX_QUEUE_TIME.   |
| IP_NETWORK_ID      |     | CHAR(8)   | IP Connection network id. From ISR_NETWORK_ID.   |
| IP_PEAK_QD_ALLOC   |     | INTEGER   | Peak queued allocates. From ISR_PEAKQ_ALLOC.   |
| IP_PEAK_RECV_SESS  |     | INTEGER   | Peak receive sessions. From ISR_PEAK_RECV_SESS.  |
| IP_PEAK_SEND_SESS  |     | INTEGER   | Peak send sessions. From ISR_PEAK_SEND_SESS.   |
| IP_PORT_NUMBER     |     | INTEGER   | IP Connection port number. From ISR_PORT_NUMBER.   |
| IP_RECV_SESS       |     | INTEGER   | Receive sessions. From ISR_RECV_SESS.  |
| IP_SEND_SESS       |     | INTEGER   | Send sessions. From ISR_SEND_SESS.   |
| IP_SSL_SUPPORT     |     | CHAR(1)   | IPCONN SSL Support - Y or N  |
| IP_TCPIP_SERVICE   |     | CHAR(8)   | IP Connection Tcpi service. From ISR_TCPIP_SERVICE.                                      |
| IP_TRANS_ATTACHED  |     | INTEGER   | No. transactions attached. From ISR_TRANS_ATTACHED.                                      |
| IP_TOT_ALLOC       |     | INTEGER   | IP Connection total allocates. From ISR_TOT_ALLOC.                                       |
| IP_USERAUTH        |     | CHAR(15)  | IPCONN Userauth. From ISR_USERAUTH.  |
| IP_XISQ_PURGE      |     | INTEGER   | Xisque allocates purged. From ISR_XISQ_ALLOC_PRG.  |
| IP_XISQ_QPURGE     |     | INTEGER   | Xisque allocate qpurges. From ISR_XISQ_ALLOC_QP.   |
| IP_XISQ_REJECT     |     | INTEGER   | Xisque allocate rejects. From ISR_XISQ_ALLOC_REJ.  |
| REM_TERM_START     |     | INTEGER   | The total number of START requests sent from a remote terminal. From ISR_REM_TERM_STRTS. |

## CICS statistics component data tables

| Column name     | Key | Data type | Description   |
|-----------------|-----|-----------|---|
| TRAN_BYTES_RECV |     | FLOAT     | The number of bytes received by transaction routing requests. From ISR_TR_BYTES_RECV. |
| TRAN_BYTES_SENT |     | FLOAT     | The number of bytes sent on transaction routing requests. From ISR_TR_BYTES_SENT.     |
| TRAN_ROUTE_REQ  |     | INTEGER   | The number of transaction routing requests on this connection. From ISR_TR_REQUESTS.  |

## CICS\_TCPIP\_CONN\_H

This table provides hourly TCP/IP connection statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHISRDS macro.

The default retention period for this table is 7 days.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| DATE               | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| TIME               | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME  |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN               |
| PERIOD_NAME        | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function |
| IP_CONN_NAME       | K   | CHAR(8)   | IP Connection name. From ISR_IPCONN_NAME.  |
| IC_REQ_BYTES_RECV  |     | FLOAT     | The number of bytes received by interval control requests. From ISR_FS_IC__BYT_RECV.   |
| IC_REQ_BYTES_SENT  |     | FLOAT     | The number of bytes sent on interval control requests. From ISR_FS_IC_BYT_SENT.  |
| IP_ADDRESS         |     | CHAR(39)  | The IPv4 or IPv6 address of the host. From ISR_IP_ADDRESS.   |
| IP_ALLOC_FAIL_LNK  |     | INTEGER   | Failed allocates - Link. From ISR_ALLOC_FAIL_LNK.  |
| IP_ALLOC_FAIL_OTR  |     | INTEGER   | Failed allocates - Other. From ISR_ALLOC_FAIL_OTR.   |
| IP_ALLOCQ_LIMIT    |     | INTEGER   | Allocate queue limit. From ISR_ALLOCQ_LIMIT.   |
| IP_APPLID          |     | CHAR(8)   | IP Connection applid. From ISR_APPLID.   |
| IP_CON_GMT_CREATE  |     | TIMESTAMP | AI Ipconn create time - GMT. From ISR_CON_GMT_CTIME.   |
| IP_CON_GMT_DELETE  |     | TIMESTAMP | AI Ipconn delete time - GMT. From ISR_CON_GMT_DTIME.   |
| IP_CON_LOC_CREATE  |     | TIMESTAMP | AI Ipconn create time-Local. From ISR_CON_CTIME.   |
| IP_CON_LOC_DELETE  |     | TIMESTAMP | AI Ipconn delete time-Local. From ISR_CON_DTIME.   |
| IP_CUR_QD_ALLOC    |     | INTEGER   | Current queued allocates. From ISR_CURQ_ALLOC.   |
| IP_CUR_RECV_SESS   |     | INTEGER   | Current receive sessions. From ISR_CUR_RECV_SESS.  |
| IP_CUR_SEND_SESS   |     | INTEGER   | Current send sessions. From ISR_CUR_SEND_SESS.   |
| IP_FAMILY          |     | CHAR(7)   | The address format of the IP Resolved Address. From ISR_IP_FAMILY.   |
| IP_FUNSHP_BYT_RECV |     | FLOAT     | FS Program reqs bytes received. From ISR_FS_PG_BYT_RECV.   |
| IP_FUNSHP_BYT_SENT |     | FLOAT     | FS Program reqs bytes sent. From ISR_FS_PG_BYT_SENT.   |
| IP_FUNSHP_PRG_REQ  |     | INTEGER   | Function Shipped Program requests. From ISR_FS_PG_REQUESTS.  |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| IP_HOST_NAME      |     | CHAR(116) | IP Connection Host name. From ISR_HOST_NAME.   |
| IP_NETWORK_ID     |     | CHAR(8)   | IP Connection network id. From ISR_NETWORK_ID.   |
| IP_MAXQ_PURGED    |     | INTEGER   | Maxqtime allocates purged. From ISR_MAXQ_ALLOC_PRG.  |
| IP_MAXQ_QPURGE    |     | INTEGER   | Maxqtime allocate qpurges. From ISR_MAXQ_ALLOC_QP.   |
| IP_MAXQ_TIME      |     | INTEGER   | Max queue time. From ISR_MAX_QUEUE_TIME.   |
| IP_PEAK_QD_ALLOC  |     | INTEGER   | Peak queued allocates. From ISR_PEAKQ_ALLOC.   |
| IP_PORT_NUMBER    |     | INTEGER   | IP Connection port number. From ISR_PORT_NUMBER.   |
| IP_PEAK_RECV_SESS |     | INTEGER   | Peak receive sessions. From ISR_PEAK_RECV_SESS.  |
| IP_PEAK_SEND_SESS |     | INTEGER   | Peak send sessions. From ISR_PEAK_SEND_SESS.   |
| IP_QLIM_ALLOC_REJ |     | INTEGER   | Queuelimit allocate rejects. From ISR_QLIM_ALLOC_REJ.  |
| IP_RECV_SESS      |     | INTEGER   | Receive sessions. From ISR_RECV_SESS.  |
| IP_SEND_SESS      |     | INTEGER   | Send sessions. From ISR_SEND_SESS.   |
| IP_SSL_SUPPORT    |     | CHAR(1)   | IPCONN SSL Support - Y or N  |
| IP_TCPIP_SERVICE  |     | CHAR(8)   | IP Connection Tcpi service. From ISR_TCPIP_SERVICE.  |
| IP_TOT_ALLOC      |     | INTEGER   | IP Connection total allocates. From ISR_TOT_ALLOC.   |
| IP_TRANS_ATTACHED |     | INTEGER   | No. transactions attached. From ISR_TRANS_ATTACHED.  |
| IP_USERAUTH       |     | CHAR(15)  | IPCONN Userauth. From ISR_USERAUTH.  |
| IP_XISQ_PURGE     |     | INTEGER   | Xisque allocates purged. From ISR_XISQ_ALLOC_PRG.  |
| IP_XISQ_QPURGE    |     | INTEGER   | Xisque allocate qpurges. From ISR_XISQ_ALLOC_QP.   |
| IP_XISQ_REJECT    |     | INTEGER   | Xisque allocate rejects. From ISR_XISQ_ALLOC_REJ.  |
| FUNCS_IC_REQUESTS |     | INTEGER   | The number of interval control requests for function shipping on this connection. From ISR_FS_IC_REQUESTS. |
| REM_TERM_START    |     | INTEGER   | The total number of START requests sent from a remote terminal. From ISR_REM_TERM_STRTS.                   |
| TRAN_BYTES_RECV   |     | FLOAT     | The number of bytes received by transaction routing requests. From ISR_TR_BYTES_RECV.                      |
| TRAN_BYTES_SENT   |     | INTEGER   | The number of bytes sent on transaction routing requests. From ISR_TR_BYTES_SENT.                          |
| TRAN_ROUTE_REQ    |     | INTEGER   | The number of transaction routing requests on this connection. From ISR_TR_REQUESTS.                       |

## Tables in the CICS Transaction and Unit-of-Work Analysis component

As described in “Evaluating the CICS Transaction and Unit-of-Work Analysis component” on page 13, if you install the CICS Transaction and Unit-of-Work Analysis component, IBM Z Performance and Capacity Analytics loads into its system tables the data table and view tables described in this section.

If you install this component, use a separate collection job for it. In the daily CICS collection job, exclude the data table provided with this component. Otherwise, data collection takes too much time to complete and results in a table that is too large to manage. For more information, see [“Optimizing data collection” on page 16](#).

**CICS\_T\_TRAN\_T**

This table provides statistics on CICS transactions. It contains information from CICS performance class monitoring records for CICS/ESA and CICS/TS (SMF 110, subtype 1) and CICS/MVS (SMF 110, subtype 0).

The default retention period for this table is 2 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| START_TIMESTAMP    | K   | TIMESTAMP | Date and time (timestamp) when the transaction was started. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. When XRF is used, the two systems have the same generic but different specific IDs. From SMFMNPRN. |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| ABEND_CODE_CURRENT |     | CHAR(4)   | Current abend code. From ABCODEC (CICS V3) or ABCODE (CICS V2).   |
| ABEND_CODE_ORIGIN  |     | CHAR(4)   | Original (first) abend code. From ABCODEO (CICS V3) or ABCODE (CICS V2).  |
| BFDGST_COUNT       |     | FLOAT     | The total number of EXEC CICS BIF DIGEST commands issued by the user task. From BFDGSTCT.   |
| BFTOT_COUNT        |     | FLOAT     | The total number of EXEC CICS BIF DEEDIT and BIF DIGEST commands issued by the user task.   |
| BMS_INPUTS         |     | INTEGER   | Number of BMS IN requests. This is the number of RECEIVE MAP requests that incurred a terminal I/O. From BMSINCT.   |
| BMS_MAP_REQUESTS   |     | INTEGER   | Number of BMS MAP requests. This is the number of RECEIVE MAP requests that did not incur a terminal I/O and the number of RECEIVE MAP FROM requests. From BMSMAPCT.  |
| BMS_OUTPUTS        |     | INTEGER   | Number of BMS OUT requests. This is the number of SEND MAP requests. From BMSOUTCT.   |
| BMS_REQUESTS_TOTAL |     | INTEGER   | Total number of BMS requests. From BMSTOTCT.  |
| BRIDGE_TRANS_ID    |     | FLOAT     | 3270 Bridge transaction identification. From BRDGTRAN.  |
| CFDTPWAIT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for CF data table I/O. From CFDTPWAIT.   |
| CFDTPWAIT_COUNT    |     | FLOAT     | Number of times that the user task waited for CF data table I/O. From CFDTPWAIT.  |
| CHARS_IN_ALT_LU62  |     | FLOAT     | Number of characters received from the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCC62IN2.   |
| CHARS_INPUT_ALT    |     | INTEGER   | Number of characters received from the LUTYPE6.1 alternate terminal facility. From TCCHRIN2.  |
| CHARS_INPUT_PRIME  |     | INTEGER   | Number of characters received from the principal terminal facility. From TCCHRIN1.  |
| CHARS_OUT_ALT_LU62 |     | FLOAT     | Number of characters sent to the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCC62OU2.   |
| CHARS_OUTPUT_ALT   |     | INTEGER   | Number of characters sent to the LUTYPE6.1 alternate terminal facility. From TCCHROU2.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| CHARS_OUTPUT_PRIME |     | INTEGER   | Number of characters sent to the principal terminal facility. From TCCHROU1.   |
| CPU_SEC            |     | FLOAT     | CPU time, in seconds. From USRCPUT.  |
| DB2_REQS_COUNT     |     | FLOAT     | Number of Db2 (EXEC SQL IFI) requests issued by the user task. From DB2REQCT.  |
| DB2CONWT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for a CICS Db2 subtask to become available. From DB2CONWT.  |
| DB2CONWT_COUNT     |     | FLOAT     | Number of times that the user task waited for a CICS Db2 subtask to become available. From DB2CONWT.   |
| DB2RDYQW_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for a Db2 thread to become available. From DB2RDYQW.  |
| DB2RDYQW_COUNT     |     | FLOAT     | Number of times that the user task waited for a Db2 thread to become available. From DB2RDYQW.   |
| DB2WAIT_CLOCK      |     | FLOAT     | Elapsed time that the user task waited for Db2 to service the DB2 EXEC SQL and IFI requests. From DB2WAIT.   |
| DB2WAIT_COUNT      |     | FLOAT     | Number of times that the user task waited for Db2 to service the DB2 EXEC SQL and IFI requests. From DB2WAIT.  |
| DECRYPT_BYTES      |     | FLOAT     | Number of bytes decrypted by the secure sockets layer for the user task. From SOBYDECT.  |
| DISP_TCB_HWM       |     | FLOAT     | The peak number of CICS open TCBs (in TCB modes H8, J8, J9, L8, or S8) that have been allocated to the user task. From DSTCBHWM.   |
| DISPATCH_COUNT     |     | INTEGER   | Total number of times that the transaction was dispatched. From USRDISPT.  |
| DISPATCH_DELAY_SEC |     | FLOAT     | Time waiting for the first dispatch, in seconds. This is a subset of SUSPEND_SEC. This is the sum of DSPDELAY.   |
| DISPATCH_SEC       |     | FLOAT     | Elapsed time that the transaction was dispatched, in seconds. From USRDISPT.   |
| DISPATCH_WAITS     |     | INTEGER   | Number of times that the transaction was waiting for redispach. This is valid for CICS V3 and later. From DISPWTT.   |
| DISPATCH_WAIT_SEC  |     | FLOAT     | Time that the transaction was waiting for redispach, in seconds. This is valid for CICS V3 and later. From DISPWTT.  |
| DSMMSC_CLOCK       |     | FLOAT     | The elapsed time which the user task spent waiting because no TCB was available, and none could be created due to MVS storage constraints. From DSMMSC_CLOCK.  |
| DSMMSC_COUNT       |     | FLOAT     | The number of times that the user task waited because no TCB was available, and none could be created due to MVS storage constraints. From DSMMSC_COUNT.   |
| DSTCBM_CLOCK       |     | FLOAT     | The elapsed time which the user task spent in TCB mismatch waits, that is, waiting because there was no available TCB matching the request, but there was at least one non-matching free TCB. From DSTCBM_CLOCK. |
| DSTCBM_COUNT       |     | FLOAT     | The number of times that the user task waited due to TCB mismatch, because there was no available TCB matching the request, but there was at least one non-matching free TCB. From DSTCBM_COUNT.                 |
| ECEFOP_COUNT       |     | FLOAT     | The number of event filter operations performed by the user task. From ECEFOPCT.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| ECEVNT_COUNT       |     | FLOAT     | The number of events captured by user task. From ECEVNTCT.  |
| ECSIGE_COUNT       |     | FLOAT     | The total number of EXEC CICS SIGNAL EVENT commands issued by the user task. From ECSIGECT.   |
| EICTOT_COUNT       |     | FLOAT     | The total number of EXEC CICS commands issued by the user task. From EICTOTCT.  |
| ENCRYPT_BYTES      |     | FLOAT     | Number of bytes encrypted by the secure sockets layer for the user task. From SOBYENCT.   |
| ENQ_WAITS          |     | FLOAT     | Number of CICS Task Control ENQ waits. This is the sum of ENQDELAY.   |
| ENQ_WAIT_SEC       |     | FLOAT     | Time waiting for CICS Task Control ENQ, in seconds. This is the sum of ENQDELAY.  |
| EXCEPTIONS         |     | INTEGER   | Number of exception conditions that have occurred for this task. Exception conditions are waits for storage, waits for a string, and waits for a file buffer. This is valid for CICS V3 and later. From EXWTTIME. |
| EXCEPTION_WAIT_SEC |     | FLOAT     | Exception wait time, in seconds. This is valid for CICS V3 and later. From EXWTTIME.  |
| FC_ACCESS_METHODS  |     | INTEGER   | Number of file control access method calls. Not incremented if the request is function shipped. From FCAMCT.  |
| FC_ADD_REQUESTS    |     | INTEGER   | Number of file control ADD requests. Incremented even if the request is function shipped. From FCADDCT.   |
| FC_BROWSE_REQUESTS |     | INTEGER   | Number of file control BROWSE requests. Incremented even if the request is function shipped. From FCBRWCT.  |
| FC_DELETE_REQUESTS |     | INTEGER   | Number of file control DELETE requests. Incremented even if the request is function shipped. From FCDELCT.  |
| FC_GET_REQUESTS    |     | INTEGER   | Number of file control GET requests. Incremented even if the request is function shipped. From FCGETCT.   |
| FC_IO_WAITS        |     | INTEGER   | Number of file control I/O waits. From FCIOWTT.   |
| FC_IO_WAIT_SEC     |     | FLOAT     | File control I/O wait time, in seconds. From FCIOWTT.   |
| FC_PUT_REQUESTS    |     | INTEGER   | Number of file control PUT requests. Incremented even if the request is function shipped. From FCPUTCT.   |
| FC_REQUESTS_TOTAL  |     | INTEGER   | Total number of file control requests. Incremented even if the request is function shipped. From FCTOTCT.   |
| FE_ALLOC_COUNT     |     | FLOAT     | Number of conversations allocated by the user task. This number is incremented for each FEPI ALLOCATE POOL or FEPI CONVERSE POOL. This is the sum of SZALLOC.   |
| FE_ALLOC_TIMEOUT   |     | FLOAT     | Number of times the user task timed out while waiting to allocate a conversation. This is the sum of SZALLCTO.  |
| FE_CHARS_RECEIVED  |     | FLOAT     | Number of characters received through FEPI by the user task. This is the sum of SZCHRIN.  |
| FE_CHARS_SENT      |     | FLOAT     | Number of characters sent through FEPI by the user task. This is the sum of SZCHROUT.   |
| FE_RECEIVE_REQ     |     | FLOAT     | Number of FEPI RECEIVE requests made by the user task. This number is also incremented for each FEPI CONVERSE request. This is the sum of SZRCVCT.  |
| FE_RECEIVE_TIMEOUT |     | FLOAT     | Number of times the user task timed out while waiting to receive data. This is the sum of SZRCVTO.  |



| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| FE_REQUESTS_TOTAL |     | FLOAT     | Total number of all FEPI API and SPI requests made by the user task. This is the sum of SZTOTCT.   |
| FE_SEND_REQUESTS  |     | FLOAT     | Number of FEPI SEND requests made by the user task. This number is also incremented for each FEPI CONVERSE request. This is the sum of SZSENDCT. |
| FE_START_REQUESTS |     | FLOAT     | Number of FEPI START requests made by the user task. This is the sum of SZSTRCT.   |
| FE_WAITS          |     | FLOAT     | Number of times that the user task waited for FEPI services. This is the sum of SZWAIT.  |
| FE_WAIT_SEC       |     | FLOAT     | Time that the user task waited for all FEPI services, in seconds. This is the sum of SZWAIT.   |
| GETMAINS_CDSA     |     | INTEGER   | Number of user_storage GETMAIN requests below the 16MB line, in the CDSA. From SCCGETCT.   |
| GETMAINS_ECDSA    |     | INTEGER   | Number of user_storage GETMAIN requests above the 16MB line, in the ECDSA. From SCCGETCTE.   |
| GETMAINS_EUDSA    |     | INTEGER   | Number of user_storage GETMAIN requests above the 16MB line, in the EUDSA. From SCUGETCTE.   |
| GETMAINS_UDSA     |     | INTEGER   | Number of user_storage GETMAIN requests below the 16MB line, in the UDSA. From SCUGETCT.   |
| GNQDELAY_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for a CICS task control global enqueue. From GNQDELAY.  |
| GNQDELAY_COUNT    |     | FLOAT     | Number of times that the user task waited for a CICS task control global enqueue. From GNQDELAY.   |
| GVUPWAIT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited as the result of relinquishing control to another task. From GVUPWAIT.                                    |
| GVUPWAIT_COUNT    |     | FLOAT     | Number of times that the user task waited as the result of relinquishing control to another task. From GVUPWAIT.                                 |
| IC_START_REQUESTS |     | INTEGER   | Number of interval control START or INITIATE requests. From ICPUINCT.  |
| ICDELAY_CLOCK     |     | FLOAT     | Elapsed time that the user task waited the result from EXEC CICS DELAY or RETRIEVE command. From ICDELAY.  |
| ICDELAY_COUNT     |     | FLOAT     | Number of times that the user task waited the result from EXEC CICS DELAY or RETRIEVE command. From ICDELAYT.                                    |
| ICTOT_REQS        |     | FLOAT     | Total number of Interval Control Start, Cancel, Delay and Retrieve requests issued by the user task. From ICTOTCT.                               |
| IMS_REQS_COUNT    |     | FLOAT     | Number of IMS (DBCTL) requests issued by the user task. From IMSREQCT.   |
| IMSWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for DBCTL to service the IMS requests issued by the user task. From IMSWAIT.                              |
| IMSWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for DBCTL to service the IMS requests issued by the user task. From IMSWAIT.                           |
| J8CPUT_CLOCK      |     | FLOAT     | Processor time that the user task was dispatched on each CICS J8 TCB. From J8CPUT.   |
| J8CPUT_COUNT      |     | FLOAT     | Number of times that the user task was dispatched on each CICS J8 TCB. From J8CPUT.  |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| J9CPUT_CLOCK       |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS J9 mode TCB. From J9CPUT_CLOCK.                                     |
| J9CPUT_COUNT       |     | FLOAT     | The number of times that the user task was dispatched by the CICS dispatcher domain on a CICS J9 mode TCB. From J9CPUT_COUNT.  |
| JAVA_OO_REQS       |     | FLOAT     | Total number of CICS OO foundation class requests (JCICS) issued by the user task. From CFCAPICT.  |
| JC_IO_WAITS        |     | INTEGER   | Number of journal control I/O waits. From JCIOWTT.   |
| JC_IO_WAIT_SEC     |     | FLOAT     | Journal control I/O wait time, in seconds. From JCIOWTT.   |
| JC_OUTPUT_REQUESTS |     | INTEGER   | Journal control output (PUT) requests. From JCPUWRCT.  |
| JVMITI_CLOCK       |     | FLOAT     | JVM elapsed time, initialize - clock. From JVMITI_CLOCK.   |
| JVMITI_COUNT       |     | FLOAT     | JVM elapsed time, initialize - count. From JVMITI_COUNT.   |
| JVMRTI_CLOCK       |     | FLOAT     | JVM elapsed time, reset - clock. From JVMRTI_CLOCK.  |
| JVMRTI_COUNT       |     | FLOAT     | JVM elapsed time, reset - count. From JVMRTI_COUNT.  |
| JVMSUSP_CLOCK      |     | FLOAT     | Elapsed time that the task was suspended by the CICS dispatcher while running in the CICS JVM. From JVMSUSP.   |
| JVMSUSP_COUNT      |     | FLOAT     | Number of times that the task was suspended by the CICS dispatcher while running in the CICS JVM. From JVMSUSP.  |
| JVMTHDWT_CLOCK     |     | FLOAT     | The elapsed time that the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM server. From JVMTHDWT_CLOCK.     |
| JVMTHDWT_COUNT     |     | FLOAT     | The number of times when the user task waited to obtain a JVM server thread because the CICS system had reached the thread limit for a JVM. server. From JVMTHDWT_COUNT. |
| JVMTIME_CLOCK      |     | FLOAT     | Elapsed time that was spent in the CICS JVM by the user. From JVMTIME.   |
| JVMTIME_COUNT      |     | FLOAT     | Number of times that were spent in the CICS JVM by the user. From JVMTIME.   |
| KY8DIS_CLOCK       |     | FLOAT     | User task key 8 mode dispatch time - clock. From KY8DIS_CLOCK.   |
| KY8DIS_COUNT       |     | FLOAT     | User task key 8 mode dispatch time - count. From KY8DIS_COUNT.   |
| KY8CPU_CLOCK       |     | FLOAT     | User task key 8 mode CPUtime - clock. From KY8CPU_CLOCK.   |
| KY8CPU_COUNT       |     | FLOAT     | User task key 8 mode CPU time - count. From KY8CPU_COUNT.  |
| KY9_COUNT          |     | FLOAT     | The number of times the user task was dispatched by the CICS dispatcher on a CICS key 9 mode TCB. From KY9_COUNT.  |
| KY9CPU_CLOCK       |     | FLOAT     | Processor time during which the user task was dispatched by the CICS dispatcher on a CICS key 9 mode TCB. From KY9CPU_CLOCK.   |
| KY9DIS_CLOCK       |     | FLOAT     | The total elapsed time during which the user task was dispatched by the CICS dispatcher on a CICS key 9 mode TCB. From KY9DIS_CLOCK.                                     |
| L8CPUT_CLOCK       |     | FLOAT     | Processor time that the user task was dispatched on each CICS L8 TCB. From L8CPUT.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| L8CPUT_COUNT       |     | FLOAT     | Number of times that the user task was dispatched on each CICS L8 TCB. From L8CPUT.   |
| L9CPUT_CLOCK       |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS L9 mode TCB. When a transaction invokes an OPENAPI application program defined with EXECKEY= USER, it is allocated and uses a CICS L9 mode TCB. From L9CPUT. |
| L9CPUT_COUNT       |     | FLOAT     | Number of times the user task was dispatched by the CICS dispatcher domain on a CICS L9 mode TCB. This field is related to XPLink support. From L9CPUT.   |
| LINK_URM_REQS      |     | FLOAT     | Number of program LINK URM requests issued by the user task. This is the sum of PLCURMCT.   |
| LMDELAY_CLOCK      |     | FLOAT     | Elapsed time that the user task waited to acquire a lock on a resource. From LMDELAY.   |
| LMDELAY_COUNT      |     | FLOAT     | Number of times that the user task waited to acquire a lock on a resource. From LMDELAY.  |
| LOGGER_WRITE_COUNT |     | FLOAT     | Number of CICS logger write requests issued by the user task. This is the sum of LOGWRTCT.  |
| LU_NAME            |     | CHAR(8)   | VTAM logical unit name (if available) of the terminal associated with this transaction. From LUNAME.  |
| LU61_IO_WAITS      |     | FLOAT     | Number of waits for I/O on a LUTYPE6.1 connection or session. Includes waits for conversations across LUTYPE6.1 connections, but not waits due to LUTYPE6.1 syncpoint flows. This is the sum of LU61WTT.  |
| LU61_IO_WAIT_SEC   |     | FLOAT     | I/O wait time for a LUTYPE6.1 connection or session, in seconds. Includes wait time for conversations across LUTYPE6.1 connections, but not waits due to LUTYPE6.1 syncpoint flows. This is the sum of LU61WTT.   |
| LU62_IO_WAITS      |     | FLOAT     | Number of waits for I/O on a LUTYPE6.2 (APPC) connection or session. Includes waits for conversations across LUTYPE6.2 (APPC) connections, but not waits due to LUTYPE6.2 (APPC) syncpoint flows. This is the sum of LU62WTT.                                     |
| LU62_IO_WAIT_SEC   |     | FLOAT     | I/O wait time for a LUTYPE6.2 (APPC) connection or session, in seconds. Includes wait time for conversations across LUTYPE6.2 (APPC) connections, but not waits due to LUTYPE6.2 (APPC) syncpoint flows. This is the sum of LU62WTT.                              |
| MAXHTD_CLOCK       |     | FLOAT     | Max hot-pooling TCB delay time - clock. From MAXHTD_CLOCK.  |
| MAXHTD_COUNT       |     | FLOAT     | Max hot-pooling TCB delay time - count. From MAXHTD_COUNT.  |
| MAXJTD_CLOCK       |     | FLOAT     | Max JVM TCB delay time - clock. From MAXJTD_CLOCK.  |
| MAXJTD_COUNT       |     | FLOAT     | Max JVM TCB delay time - count. From MAXJTD_COUNT.  |
| MAXOTDLY_CLOCK     |     | FLOAT     | Elapsed time that the user task waited to obtain a CICS open TCB, because the region had reached the limit set by MAXOPENTCBS parameter. From MAXOTDLY.   |
| MAXOTDLY_COUNT     |     | FLOAT     | Number of times that the user task waited to obtain a CICS open TCB, because the region had reached the limit set by MAXOPENTCBS parameter. From MAXOTDLY.  |

## CICS transaction and UOW analysis component data tables

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| MAXSSLTCBS_COUNT |     | FLOAT     | Number of times the CICS system reached the limit set by the system initialization parameter MAXSSLTCBS. From MAXSTDLY.                                 |
| MAXXPTCBS_COUNT  |     | FLOAT     | Number of times the CICS system reached the limit set by the system initialization parameter MAXXPTCBS. From MAXXTDLY.                                  |
| MAXTTDLY_CLOCK   |     | FLOAT     | The elapsed time in which the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_CLOCK. |
| MAXTTDLY_COUNT   |     | FLOAT     | The number of times when the user task waited to obtain a T8 TCB, because the CICS system reached the limit of available threads. From MAXTTDLY_COUNT.  |
| MRO_WAITS        |     | INTEGER   | Number of times the task waited for control at this end of an MRO link. From IRIOWTT.   |
| MRO_WAIT_SEC     |     | FLOAT     | Elapsed time, in seconds, that the task waited for control at this end of an MRO link. From IRIOWTT.  |
| MSCPUT_CLOCK     |     | FLOAT     | Total processor time that the user task was dispatched on each CICS TCB. From MSDISPT.  |
| MSCPUT_COUNT     |     | FLOAT     | Number of times that the user task was dispatched on each CICS TCB. From MSDISPT.   |
| MSDISPT_CLOCK    |     | FLOAT     | Total elapsed time that the user task was dispatched on each CICS TCB. From MSDISPT.  |
| MSDISPT_COUNT    |     | FLOAT     | Number of times that the user task was dispatched on each CICS TCB. From MSDISPT.   |
| MSG_IN_ALT_LU62  |     | FLOAT     | Number of messages received from the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCM62IN2.           |
| MSG_INPUT_ALT    |     | INTEGER   | Number of messages received from the LUTYPE6.1 alternate terminal facility. From TCMMSGIN2.   |
| MSG_INPUT_PRIME  |     | INTEGER   | Number of messages received from the principal terminal facility. From TCMMSGIN1.   |
| MSG_OUT_ALT_LU62 |     | FLOAT     | Number of messages sent to the alternate terminal facility by the user task for LUTYPE6.2 (APPC) sessions. This is the sum of TCM62OU2.                 |
| MSG_OUTPUT_ALT   |     | INTEGER   | Number of messages sent to the LUTYPE6.1 alternate terminal facility. From TCMMSGOU2.   |
| MSG_OUTPUT_PRIME |     | INTEGER   | Number of messages sent to the principal terminal facility. From TCMMSGOU1.   |
| MXT_DELAY_SEC    |     | FLOAT     | Time waiting for the first dispatch caused by MXT limits being reached, in seconds. This is the sum of MXTDELAY.  |
| NET_ID           |     | CHAR(8)   | Network ID. Form NETID  |
| NO_CHAR_RCV      |     | FLOAT     | Number of characters received. From SOCHRIN.  |
| NO_CHAR_RCV_IN   |     | FLOAT     | Number of characters received inbound. From SOCHRIN1.   |
| NO_CHAR_SEND     |     | FLOAT     | Number of characters sent. From SOCHROUT.   |
| NO_CHAR_SND_IN   |     | FLOAT     | Number of characters sent inbound. From SOMSROU1.   |
| NO_CRT_NP SOCK   |     | FLOAT     | Number of create non-persistent socket requests. From SOCPST.   |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| NO_CRT_P SOCK     |     | FLOAT     | Number of create persistent socket requests. From SOCNPSCT.   |
| NO_EXT_CERTIF     |     | FLOAT     | Number of extract TCP/IP and certificate requests. From SOEXTRCT.   |
| NO_INBO_RCV       |     | FLOAT     | Number of inbound socket receive requests. From SOMSGIN1.   |
| NO_IN_SOCKET      |     | FLOAT     | Number of inbound socket send requests. From SOMSGOU1.  |
| NO_SOCKET_RCV     |     | FLOAT     | Number of socket receive requests. From SORCVCT.  |
| NO_SOCKET_SND     |     | FLOAT     | Number of socket send requests. From SOSENDCT.  |
| NON_PERS_SOCKET   |     | FLOAT     | Persistent socket high-water-mark. From SONPSHWM.   |
| NET_NAME          |     | CHAR(20)  | Network name. This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NETNAME. |
| OPERATOR_ID       |     | CHAR(3)   | Operator identification at task creation. From OPR.   |
| OTSIND_CLOCK      |     | FLOAT     | OTS indoubt wait time - clock. From OTSIND_CLOCK.   |
| OTSIND_COUNT      |     | FLOAT     | OTS indoubt wait time - count. From OTSIND_COUNT.   |
| OTS_TRANS_ID      |     | CHAR(128) | OTS transaction ID. From OTSTID.  |
| PAGEINS           |     | INTEGER   | Number of virtual storage page-ins. For CICS V2 only. From PAGINCT.   |
| PERF_REC_COUNT    |     | FLOAT     | Number of performance class records written by the CICS Monitoring Facility (CMF) for the user task. From PERRECNT.   |
| PERSISTE_SOCKET   |     | FLOAT     | Non-persistent socket high-water-mark. From SOPSHWM.  |
| PGM_COMPRESS      |     | INTEGER   | Number of program compressions. For CICS V2 only. From PCCMPRTM.  |
| PGM_COMPRESS_SEC  |     | FLOAT     | Time, in seconds, that the task spent in program compression. For CICS V2 only. From PCCMPRTM.  |
| PGM_DTL_COUNT     |     | FLOAT     | Number of distributed program LINK requests issued by the user task. From PCDPLCT.  |
| PGM_LINK_REQUESTS |     | INTEGER   | Number of program LINK requests. From PCLINKCT.   |
| PGM_LOAD_REQUESTS |     | INTEGER   | Number of program LOAD requests. From PCLOADCT.   |
| PGM_LOADS         |     | INTEGER   | Number of program library fetches. From PCLOADTM.   |
| PGM_LOAD_SEC      |     | FLOAT     | Time, in seconds, that the task waited for program library (DFHRPL) fetches. From PCLOADTM.   |
| PGM_XCTL_REQUESTS |     | INTEGER   | Number of program XCTL (transfer control) requests. From PCXCTLCT.  |
| PORT_NUMBER       |     | FLOAT     | Port number being used for this TCP/IP service. From PORTNUM.   |
| PROGRAM_NAME      |     | CHAR(8)   | Name of the first program invoked at attach time. If the transaction is routed to another system, the name on this system is DFHCRP. From PGMNAME.  |
| PTPWAI_CLOCK      |     | FLOAT     | Partner wait time - clock. From PTPWAI_CLOCK.   |
| PTPWAI_COUNT      |     | FLOAT     | Partner wait time - count. From PTPWAI_COUNT.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| QRCPUT_CLOCK       |     | FLOAT     | Processor time that the user task was dispatched on the CICS QR TCB. From QRCPUT.   |
| QRCPUT_COUNT       |     | FLOAT     | Number of times that the user task was dispatched on the CICS QR TCB. From QRCPUT.  |
| QRDISPT_CLOCK      |     | FLOAT     | Elapsed time that the user task was dispatched on the CICS QR TCB. From QRDISPT.  |
| QRDISPT_COUNT      |     | FLOAT     | Number of times that the user task was dispatched on the CICS QR TCB. From QRDISPT.   |
| QRMODDLY_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for a redispach on the CICS QR TCB. From QRMODDLY.   |
| QRMODDLY_COUNT     |     | FLOAT     | Number of times that the user task waited for a redispach on the CICS QR TCB. From QRMODDLY.  |
| RECOVERY_MGR_UOW   |     | CHAR(8)   | Identifier of the logical unit of work (unit of recovery) for this task. Unit-of-recovery values are used to synchronize recovery operations among CICS and their resource managers, such as IMS and Db2. From RMUOWID.                                   |
| RECORD_TYPE        |     | CHAR(4)   | Record type: C for a terminal converse, D for user EMP DELIVER request, T for a task termination, MT for a semi-permanent mirror suspend (CICS V3 only), F for a long-running transaction and S for a syncpoint. From RTYPE.                              |
| REDISPATC_COUNT    |     | FLOAT     | Number of times that the user task was re-dispatched after a CICS Dispatcher change TCB mode request. From DSCHMDLY.  |
| REDISPATC_WAIT_SEC |     | FLOAT     | The elapsed time, in seconds, the user task waited for re-dispatch after a CICS Dispatcher change-TCB mode request was issued by or on behalf of the user task. This field is related to Internet Security and is a subset of SUSPEND_SEC. From DSCHMDLY. |
| RESPONSE_SEC       |     | FLOAT     | Transaction response time, in seconds. Calculated as STOP - START.  |
| RLSWAIT_CLOCK      |     | FLOAT     | Elapsed time during which the user task waited for RLS file I/O. This is from RLSWAIT.  |
| RLSWAIT_COUNT      |     | FLOAT     | Number of times that the user task was waiting for RLS file I/O. This is the sum of RLSWAIT.  |
| RLUNAME            |     | CHAR(8)   | VTAM logical unit name. From RLUNAME.   |
| RMI_COUNT          |     | FLOAT     | Number of times that the user task was in the Resource Manager Interface (RMI). This is the sum of RMITIME.   |
| RMI_SEC            |     | FLOAT     | Time spent in the Resource Manager Interface (RMI), in seconds. This is the sum of RMITIME.   |
| RMI_SUSPENDS       |     | FLOAT     | Number of times that the task was suspended while in the Resource Manager Interface (RMI). This is a subset of SUSPENDS and RMI_COUNT. This is the sum of RMISUSP.  |
| RMI_SUSPEND_SEC    |     | FLOAT     | Time the task was suspended by the dispatcher while in the Resource Manager Interface (RMI), in seconds. This is a subset of SUSPEND_SEC and RMI_SEC. This is the sum of RMISUSP.   |
| ROCPUT_CLOCK       |     | FLOAT     | User task RO mode CPU time - clock. From ROCPUT_CLOCK.  |
| ROCPUT_COUNT       |     | FLOAT     | User task RO mode CPU time - count. From ROCPUT_COUNT.  |
| RODISP_CLOCK       |     | FLOAT     | User task RO mode dispatch time - clock. From RODISP_CLOCK.   |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| RODISP_COUNT      |     | FLOAT     | User task RO mode dispatch time - count. From RODISP_COUNT.   |
| RQPWAI_CLOCK      |     | FLOAT     | Request processor wait time - clock. From RQPWAI_CLOCK.   |
| RQPWAI_COUNT      |     | FLOAT     | Request processor wait time - count. From RQPWAI_COUNT.   |
| RQRWAI_CLOCK      |     | FLOAT     | Request receiver wait time - clock. From RQPWAI_CLOCK.  |
| RQRWAI_COUNT      |     | FLOAT     | Request receiver wait time - count. From RQPWAI_COUNT.  |
| RRMSWAIT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited in doubt using resource recovery services for EXCI. From RRMSWAIT.   |
| RRMSWAIT_COUNT    |     | FLOAT     | Number of times that the user task waited in doubt using resource recovery services for EXCI. From RRMSWAIT.  |
| RUNTRWTT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for completion of a transaction that executed as the result of a CICS BTS run process or run activity. From RUNTRWTT.    |
| RUNTRWTT_COUNT    |     | FLOAT     | Number of times that the user task waited for completion of a transaction that executed as the result of a CICS BTS run process or run activity. From RUNTRWTT. |
| S8CPUT_CLOCK      |     | FLOAT     | Processor time that the user task was dispatched on each CICS S8 TCB. From S8CPUT.  |
| S8CPUT_COUNT      |     | FLOAT     | Number of times that the user task was dispatched on each CICS S8 TCB. From S8CPUT.   |
| SHR24_BYTE_COUNT  |     | FLOAT     | Number of bytes of shared storage GETMAINED by the user task below the 16MB line, in the CDSA or SDSA. This is the sum of SC24SGCT.                             |
| SHR24_FREEM_COUNT |     | FLOAT     | Number of bytes of shared storage FREEMAINED by the user task below the 16MB line, in the CDSA or SDSA. This is the sum of SC24SGCT.                            |
| SHR24_GETM_COUNT  |     | FLOAT     | Number of storage GETMAIN requests issued by the user task below the 16MB line, in the CDSA or SDSA. This is the sum of SC24FSHR.                               |
| SHR31_BYTE_COUNT  |     | FLOAT     | Number of bytes of shared storage GETMAINED by the user task above the 16MB line, in the ECDSA or ESDSA. This is the sum of SC31GSHR.                           |
| SHR31_FREEM_COUNT |     | FLOAT     | Number of bytes of shared storage FREEMAINED by the user task above the 16MB line, in the ECDSA or ESDSA. This is the sum of SC31FSHR.                          |
| SHR31_GETM_COUNT  |     | FLOAT     | Number of storage GETMAIN requests issued by the user task above the 16MB line, in the ECDSA or ESDSA. This is the sum of SC31SGCT.                             |
| SOIOWTT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for SOCKETS I/O. From SOIOWTT.   |
| SOIOWTT_COUNT     |     | FLOAT     | Number of times that the user task waited for SOCKETS I/O. From SOIOWTT.  |
| SOOIOW_CLOCK      |     | FLOAT     | Outbound socket I/O wait time - clock. From SOOIOW_CLOCK.   |
| SOOIOW_COUNT      |     | FLOAT     | Outbound socket I/O wait time - count. From SOOIOW_COUNT.   |
| SRVSYWTT_CLOCK    |     | FLOAT     | Elapsed time that the user task waited for a CF data table to process syncpoint requests. From SRVSYWT.   |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| SRVSYWTT_COUNT    |     | FLOAT     | Number of times that the user task waited for a CF data table to process syncpoint requests. From SRVSYWT.  |
| SSLTCB_WAIT_SEC   |     | FLOAT     | The elapsed time, in seconds, in which the user task waited to obtain a CICS SSL TCB (S8 mode), because the CICS system had reached the limit set by the system initialization parameter MAXSSLTCBS. This field is related to Internet Security. From MAXSTDLY. |
| STOP_TIMESTAMP    |     | TIMESTAMP | Date and time (timestamp) when the transaction finished. From STOP.   |
| STORAGE_CDSA_MAX  |     | INTEGER   | Peak user storage allocated below the 16MB line, in the CICS dynamic storage area (CDSA), in bytes. From SC24CHWM.  |
| STORAGE_ECDSA_MAX |     | INTEGER   | Peak user storage allocated above the 16MB line, in the extended CICS dynamic storage area (ECDSA), in bytes. From SC31CHWM.  |
| STORAGE_EUDSA_MAX |     | INTEGER   | Peak of user storage allocated above the 16MB line, in the extended user dynamic storage area (EUDSA), in bytes. From SCUSRHWME.  |
| STORAGE_OCC_CDSA  |     | FLOAT     | Storage occupancy below the 16MB line, in the CDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. From SC24COCC.  |
| STORAGE_OCC_ECDSA |     | FLOAT     | Storage occupancy above the 16MB line, in the ECDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. From SC31COCC.   |
| STORAGE_OCC_EUDSA |     | FLOAT     | Storage occupancy above the 16MB line, in the EUDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. From SCUSRSTGE.  |
| STORAGE_OCC_UDSA  |     | FLOAT     | Storage occupancy below the 16MB line, in the UDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. From SCUSRSTG.  |
| STORAGE_PGM_A16M  |     | INTEGER   | Peak program storage above the 16MB line, in bytes. This includes ECDSA, EUDSA and ERDSA. From PC31AHWM.  |
| STORAGE_PGM_B16M  |     | INTEGER   | Peak program storage below the 16MB line, in bytes. This includes CDSA and UDSA. From PC24BHWM.   |
| STORAGE_PGM_CDSA  |     | INTEGER   | Peak program storage below the 16MB line, in the CICS dynamic storage area (CDSA), in bytes. From PC24CHWM.   |
| STORAGE_PGM_ECDSA |     | INTEGER   | Peak program storage above the 16MB line, in the extended CICS dynamic storage area (ECDSA), in bytes. From PC31CHWM.   |
| STORAGE_PGM_ERDSA |     | INTEGER   | Peak program storage above the 16MB line, in the extended read-only dynamic storage area (ERDSA), in bytes. From PC31RHWM.  |
| STORAGE_PGM_ESDSA |     | FLOAT     | Peak program storage above the 16MB line in the extended shared dynamic storage area (ESDSA). This is a subset of STORAGE_PGM_A16M. This is the maximum of PC31SHWM.  |
| STORAGE_PGM_EUDSA |     | INTEGER   | Peak program storage above the 16MB line, in the extended user dynamic storage area (EUDSA), in bytes. From PC31UHWM.   |
| STORAGE_PGM_RDSA  |     | FLOAT     | Peak program storage below the 16MB line in the read-only dynamic storage area (RDSA). This is a subset of STORAGE_PGM_B16M. This is the maximum of PC24RHWM.   |



| Column name         | Key | Data type | Description  |
|---------------------|-----|-----------|--|
| STORAGE_PGM_SDSA    |     | FLOAT     | Peak program storage below the 16MB line in the shared dynamic storage area (SDSA). This is a subset of STORAGE_PGM_B16M. This is the maximum of PC24SHWM.   |
| STORAGE_PGM_TOTAL   |     | INTEGER   | Peak program storage both above and below the 16MB line, in bytes. From PCSTGHWM.  |
| STORAGE_PGM_UDSA    |     | INTEGER   | Peak program storage below the 16MB line, in the user dynamic storage area (UDSA), in bytes. From PC24UHWL.  |
| STORAGE_TIOA        |     | INTEGER   | Terminal storage allocated to the terminal associated with this task, if applicable, in bytes. From TCSTG.   |
| STORAGE_UDSA_MAX    |     | INTEGER   | Peak user storage allocated below the 16MB line, in the user dynamic storage area (UDSA), in bytes. From SCUSRHWM.   |
| SUSPENDS            |     | INTEGER   | Number of times the task was suspended because of waiting for dispatch or redispach. From SUSPTIME.  |
| SUSPEND_SEC         |     | FLOAT     | Total elapsed time, in seconds, that the task was suspended by the dispatcher. This includes time waiting for first dispatch, task suspend time and time waiting for redispach after a suspended task has been resumed. From SUSPTIME. |
| SYNCDLY_CLOCK       |     | FLOAT     | Elapsed time that the user task waited for a SYNC request to be issued by its parent transaction. From SYNCDLY.  |
| SYNCDLY_COUNT       |     | FLOAT     | Number of times that the user task waited for a SYNC request to be issued by its parent transaction. From SYNCDLY.   |
| SYNCPPOINT_REQUESTS |     | INTEGER   | Number of SYNCPPOINT requests. From SPSYNCT.   |
| SYNCTIME_CLOCK      |     | FLOAT     | Total elapsed time that the user task was dispatched and was processing Syncpoint requests. This is from SYNCTIME.   |
| SYNCTIME_COUNT      |     | FLOAT     | Number of times that the user task was dispatched and was processing Syncpoint requests. This is the sum of SYNCTIME.  |
| T8CPUT_CLOCK        |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_CLOCK.   |
| T8CPUT_COUNT        |     | FLOAT     | The number of times when the user task was dispatched by the CICS dispatcher domain on a CICS T8 mode TCB. From T8CPUT_COUNT.  |
| TASK_FLAG           |     | CHAR(4)   | Task error flags, a string of 31 bits used for signalling unusual conditions occurring during the transaction. From TASKFLAG.  |
| TC_ALLOCATE_REQ     |     | INTEGER   | Number of TCTTE ALLOCATE requests issued by the task for APPC, LUTYPE6.1, and IRC sessions. From TCALLOCT.   |
| TC_IO_WAITS         |     | INTEGER   | Number of terminal control I/O waits. This includes LUTYPE6.1 communication waits for CICS V3 data. (See LU61_IO_WAITS for CICS V4 and later.) This is the sum of TCIOWTT.   |
| TC_IO_WAIT_SEC      |     | FLOAT     | Terminal control I/O wait time, in seconds. This includes LUTYPE6.1 communication wait time for CICS V3 data. (See LU61_IO_WAIT_SEC for CICS V4 and later.) This is the sum of TCIOWTT.  |
| TCB_ATTACH_COUNT    |     | FLOAT     | Number of CICS TCBs attached by the user task. From TCBATTCT.  |
| TCB_CHANGE_MODES    |     | FLOAT     | The number of CICS change-TCB modes issued by the user task. From CHMODECT. This column is superseded by columns REDISPATC_COUNT and REDISPATC_WAIT_SEC from CTS 3.1+.   |

| Column name         | Key | Data type     | Description   |
|---------------------|-----|---------------|---|
| TCLSNNAME_DELAY_SEC |     | FLOAT         | Time waiting for the first dispatch caused by transaction class limits being reached, in seconds. This is the sum of TCLDELAY.  |
| TCP_SERVICE         |     | CHAR(8)       | Name of the CP/IP service. From TCPSRVCE.   |
| TD_GET_REQUESTS     |     | INTEGER       | Number of transient data GET requests. From TDGETCT.  |
| TD_IO_WAITS         |     | INTEGER       | Number of transient data I/O waits. This is valid for CICS V3 and later. From TDIOWTT.  |
| TD_IO_WAIT_SEC      |     | FLOAT         | Transient data I/O wait time, in seconds. This is valid only for CICS V3. From TDIOWTT.   |
| TD_PURGE_REQUESTS   |     | INTEGER       | Number of transient data PURGE requests. From TDPURCT.  |
| TD_PUT_REQUESTS     |     | INTEGER       | Number of transient data PUT requests. From TDPUTCT.  |
| TD_REQUESTS_TOTAL   |     | INTEGER       | Total number of transient data requests. From TDTOTCT.  |
| TERMINAL_ID         |     | CHAR(4)       | Terminal identifier. From TERM.   |
| TERM_CONNECT_NAME   |     | CHAR(4)       | Terminal session connection name. From TERMCNNM.  |
| TERM_INFO           |     | CHAR(4)       | Terminal or session information for this tasks principal facility as identified in the TERM field id 002. This field is null if the task is not associated with a terminal or session. From TERMINFO.   |
| TIASKT_COUNT        |     | FLOAT         | The number of EXEC CICS ASKTIME commands issued by the user task. From TIASKTCT.  |
| TITOT_COUNT         |     | FLOAT         | The total number of EXEC CICS ASKTIME, CONVERTTIME, and FORMATTIME commands issued by the user task. From TITOTCT.  |
| TOT_NO_SOCKET       |     | FLOAT         | Total number of socket requests. From SOTOTCT.  |
| TRAN_CLASS_NAME     |     | CHAR(8)       | Transaction class name at task creation. From TCLSNNAME.  |
| TRANSACTION_CLASS   |     | SMALLINT      | Transaction class at task creation. From TCLASS.  |
| TRANSACTION_FLAG    |     | CHAR(8)       | Transaction flags. A string of 64 bits used for signalling the transaction definition and status information. From TRANGLAG.  |
| TRANSACTION_NO      |     | DECIMAL(5, 0) | This column is replaced by TRANSACTION_NUM.   |
| TRANSACTION_NUM     |     | CHAR(5)       | Transaction identification number, normally a decimal number. However, some CICS system tasks are identified by: III for system initialization, JBS or Jnn for journal control (nn = journal number 01-99), and TCP for terminal control. From TRANNUM. |
| TRANSACTION_PRIO    |     | SMALLINT      | Transaction priority at task creation. From TRANPRI.  |
| TRANSACTION_TYPE    |     | CHAR(4)       | Transaction start type. From T.   |
| TRANS_FACILITY_NAM  |     | CHAR(8)       | Transaction facility name. From FCTYNAME.   |
| TS_AUX_PUT_REQ      |     | INTEGER       | Number of auxiliary temporary storage PUT requests. From TSPUTACT.  |
| TS_GET_REQUESTS     |     | INTEGER       | Number of temporary storage GET requests. From TSGETCT.   |
| TS_IO_WAITS         |     | INTEGER       | Number of temporary storage I/O waits. From TSIOWTT.  |
| TS_IO_WAIT_SEC      |     | FLOAT         | Temporary storage I/O wait time, in seconds. From TSIOWTT.  |
| TS_MAIN_PUT_REQ     |     | INTEGER       | Number of main temporary storage PUT requests. From TSPUTMCT.   |

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| TS_REQUESTS_TOTAL  |     | INTEGER   | Total number of temporary storage requests. From TSTOTCT.  |
| TSSHWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for the completion of an asynchronous shared temporary storage request to a temporary storage data server. From TSSHWAIT.   |
| TSSHWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for the completion of an asynchronous shared temporary storage request to a temporary storage data server. From TSSHWAIT.  |
| UNIT_OF_WORK_ID    |     | CHAR(12)  | Unit of work ID as known within the originating system. It is a binary value derived from the originating system clock or a character value (hhmmss), if the originating system is communicating through a DL/I batch session. From first 6 bytes of UOWID.  |
| UOW_PERIOD_COUNT   |     | SMALLINT  | Unit of work period count. It may change during the life of a task as a result of syncpoint activity. From the last two bytes of UOWID.  |
| USER_ID            |     | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.   |
| WORKLOAD_REPCLASS  |     | CHAR(8)   | MVS Workload Manager (WLM) report class for this transaction. This field is null if the transaction was WLM-classified in another CICS region. From RPTCLASS.  |
| WORKLOAD_SERVCLASS |     | CHAR(8)   | MVS Workload Manager (WLM) service class for this transaction. This field is null if the transaction was WLM-classified in another CICS region. From SRVCLASS.   |
| WTCEWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for one or more ECBs or the completion of an event. From WTEXWAIT.  |
| WTCEWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for one or more ECBs or the completion of an event. From WTEXWAIT.   |
| WTEXWAIT_CLOCK     |     | FLOAT     | Elapsed time that the user task waited for one or more ECBs, passed to CICS by the user task. From WTEXWAIT.   |
| WTEXWAIT_COUNT     |     | FLOAT     | Number of times that the user task waited for one or more ECBs, passed to CICS by the user task. From WTEXWAIT.  |
| X8CPUT_CLOCK       |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS X8 mode TCB. When a transaction invokes a C or C++ program that was compiled with the XPLINK option, and that is defined with EXECKEY=CICS, it is allocated and uses a CICS X8 mode TCB. From X8CPUT. |
| X8CPUT_COUNT       |     | FLOAT     | Number of times the user task was dispatched by the CICS dispatcher domain on a CICS X8 mode TCB. This field is related to XPLink support. From X8CPUT.  |
| X9CPUT_CLOCK       |     | FLOAT     | The processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS X9 mode TCB. When a transaction invokes a C or C++ program that was compiled with the XPLINK option, and that is defined with EXECKEY=USER, it is allocated and uses a CICS X9 mode TCB. From X9CPUT. |
| X9CPUT_COUNT       |     | FLOAT     | Number of times the user task was dispatched by the CICS dispatcher domain on a CICS X9 mode TCB. This field is related to XPLink support. From X9CPUT.  |

| Column name     | Key | Data type | Description  |
|-----------------|-----|-----------|--|
| XML_CPU_COUNT   |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSCTM_CT.   |
| XML_CPU_SEC     |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSCTM_TOD.  |
| XPTCBS_WAIT_SEC |     | FLOAT     | The elapsed time, in seconds, in which the user task waited to obtain a CICS XP TCB (C8 or X9 mode), because the CICS system had reached the limit set by the system parameter MAXXPTCBS. From MAXXTDLY. |

## CICSBTS\_T\_TRAN\_T

This table provides statistics on CICS transactions. It contains information from CICS performance class monitoring records for CICS/TS (SMF 110, subtype 1) related to the business transaction service (BTS).

The default retention period for this table is 2 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| START_TIMESTAMP    | K   | TIMESTAMP | Date and time (timestamp) when the transaction was started. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| ABEND_CODE_CURRENT |     | CHAR(4)   | Current abend code. From ABCODEC (CICS V3) or ABCODE (CICS V2).   |
| ABEND_CODE_ORIGIN  |     | CHAR(4)   | Original (first) abend code. From ABCODEO (CICS V3) or ABCODE (CICS V2).  |
| LU_NAME            |     | CHAR(8)   | VTAM logical unit name (if available) of the terminal associated with this transaction. From LUNAME.  |
| NET_NAME           |     | CHAR(20)  | Network name. This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NETNAME. |
| OPERATOR_ID        |     | CHAR(3)   | Operator identification at task creation. From OPR.   |
| PROGRAM_NAME       |     | CHAR(8)   | Name of the first program invoked at attach time. If the transaction is routed to another system, the name on this system is DFHCRP. From PGMNAME.  |
| RECORD_TYPE        |     | CHAR(4)   | Record type: C for a terminal converse, D for user EMP DELIVER request, T for a task termination, MT for a semi-permanent mirror suspend (CICS V3 only), F for a long-running transaction, and S for a syncpoint. From RTYPE.                       |
| STOP_TIMESTAMP     |     | TIMESTAMP | Date and time (timestamp) when the transaction finished. From STOP.   |
| TASK_FLAG          |     | CHAR(4)   | Task error flags, a string of 31 bits used for signalling unusual conditions occurring during the transaction. From TASKFLAG.   |
| TERMINAL_ID        |     | CHAR(4)   | Terminal identifier. From TERM.   |
| TRAN_CLASS_NAME    |     | CHAR(8)   | Transaction class name at task creation. From TCLSNAME.   |

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| TRANSACTION_NUM  |     | CHAR(5)   | Transaction identification number, normally a decimal number. However, some CICS system tasks are identified by: III for system initialization, JBS or Jnn for journal control (nn = journal number 01-99), and TCP for terminal control. From TRANNUM.        |
| TRANSACTION_PRIO |     | SMALLINT  | Transaction priority at task creation. From TRANPRI.   |
| TRANSACTION_TYPE |     | CHAR(4)   | Transaction start type. From T.  |
| UNIT_OF_WORK_ID  |     | CHAR(12)  | Unit of work ID as known within the originating system. This is a binary value derived from the originating system clock or, if the originating system is communicating through a DL/I batch session, a character value (hhmmss). From first 6 bytes of UOWID. |
| UOW_PERIOD_COUNT |     | SMALLINT  | Unit of work period count. This may change during the life of a task as a result of syncpoint activity. From the last two bytes of UOWID.  |
| USER_ID          |     | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.   |
| Remaining fields |     |           | See <a href="#">“Common fields for the business transaction service (BTS)” on page 74.</a>   |

## CICSCHN\_T\_TRAN\_T

This table provides statistics on CICS transactions. It contains information from CICS performance class monitoring records for CICS/TS (SMF 110, subtype 1) related to the use of channels and containers for data transfer between programs.

The default retention period for this table is 2 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| START_TIMESTAMP    | K   | TIMESTAMP | Date and time (timestamp) when the transaction was started. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| ABEND_CODE_CURRENT |     | CHAR(4)   | Current abend code. From ABCODEC.   |
| ABEND_CODE_ORIGIN  |     | CHAR(4)   | Original (first) abend ode. From ABCODEO.   |
| LU_NAME            |     | CHAR(8)   | VTAM logical unit name (if available) of the terminal associated with this transaction. From LUNAME.  |
| NET_NAME           |     | CHAR(20)  | Network name. This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NETNAME. |
| OPERATOR_ID        |     | CHAR(3)   | Operator identification at task creation. From OPR.   |
| PROGRAM_NAME       |     | CHAR(8)   | Name of the first program invoked at attach time. If the transaction is routed to another system, the name on this system is DFHCRP. From PGMNAME.  |

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| RECORD_TYPE       |     | CHAR(4)   | Record type: C for a terminal converse, D for user EMP DELIVER request, T for a task termination, MT for a semi-permanent mirror suspend (CICS V3 only), F for a long-running transaction and S for a syncpoint. From RTYPE.                                   |
| STOP_TIMESTAMP    |     | TIMESTAMP | Date and time (timestamp) when the transaction finished. From STOP.  |
| TASK_FLAG         |     | CHAR(4)   | Task error flags, a string of 31 bits used for signalling unusual conditions occurring during the transaction. From TASKFLAG.  |
| TERMINAL_ID       |     | CHAR(4)   | Terminal identifier. From TERM.  |
| TRAN_CLASS_NAME   |     | CHAR(8)   | Transaction class name at task creation. From TCLSNAME.  |
| TRANSACTION_NUM   |     | CHAR(5)   | Transaction identification number, normally a decimal number. However, some CICS system tasks are identified by: III for system initialisation, JBS or Jnn for journal control (nn = journal number 01-99), and TCP for terminal control. From TRANNUM.        |
| TRANSACTION_PRIO  |     | SMALLINT  | Transaction priority at task creation. From TRANPRI.   |
| TRANSACTION_TYPE  |     | CHAR(4)   | Transaction start type. From T.  |
| UNIT_OF_WORK_ID   |     | CHAR(12)  | Unit of work ID as known within the originating system. This is a binary value derived from the originating system clock or, if the originating system is communicating through a DL/I batch session, a character value (hhmmss). From first 6 bytes of UOWID. |
| UOW_PERIOD_COUNT  |     | SMALLINT  | Unit of work period count. It may change during the life of a task as a result of syncpoint activity. From the last two bytes of UOWID.  |
| USER_ID           |     | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.   |
| START_CHAN_LREQS  |     | FLOAT     | Total number of local interval control START requests, with the CHANNEL option, issued by the user task. From ICSTACCT.  |
| LREQS_BYTES       |     | FLOAT     | Total length, in bytes, of the data in the containers of all the locally-executed START CHANNEL requests issued by the user task. This total includes the length of any headers to the data. From ICSTACDL.  |
| START_CHAN_RREQS  |     | FLOAT     | Total number of interval control START CHANNEL requests, to be executed on remote systems, issued by the user task. From ICSTRCCT.   |
| RREQS_BYTES       |     | FLOAT     | Total length, in bytes, of the data in the containers of all the remotely-executed START CHANNEL requests issued by the user task. This total includes the length of any headers to the data. From ICSTRCDL.   |
| DPL_REQS_BYTES    |     | FLOAT     | Total length, in bytes, of the data in the containers of all the distributed program link (DPL) requests, with the CHANNEL option, issued by the user task. This total includes the length of any headers to the data. From PCDLCSDL.                          |
| DPLRET_REQS_BYTES |     | FLOAT     | Total length, in bytes, of the data in the containers of all DPL RETURN CHANNEL commands issued by the user task. This total includes the length of any headers to the data. From PCDLCRDL.  |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| LINK_CHAN_REQS     |     | FLOAT     | Number of local program LINK requests, with the CHANNEL option, issued by the user task. From PCLNKCCT.   |
| XCTL_CHAN_REQS     |     | FLOAT     | Number of program XCTL requests issued with the CHANNEL option by the user task. From PCXCLCCT.   |
| DPL_CHAN_REQS      |     | FLOAT     | Number of program distributed program link (DPL) requests issued with the CHANNEL option by the user task. From PCDPLCCT.   |
| RET_CHAN_REQS      |     | FLOAT     | Number of remote pseudoconversational RETURN requests, with the CHANNEL option, issued by the user task. From PCRTNCCT.   |
| RET_CHAN_BYTES     |     | FLOAT     | Total length, in bytes, of the data in the containers of all the remote pseudoconversational RETURN CHANNEL commands issued by the user task. This total includes the length of any headers to the data. From PCRTNCCL. |
| CHAN_CONTAIN_REQS  |     | FLOAT     | Number of CICS requests for channel containers issued by the user task. From PGTOTCCT.  |
| CHAN_BRWCONT_REQS  |     | FLOAT     | Number of CICS browse requests for channel containers issued by the user task. From PGBRWCCT.   |
| CHAN_GETCONT_REQS  |     | FLOAT     | Number of GET CONTAINER requests for channel containers issued by the user task. From PGGETCCT.   |
| CHAN_PUTCONT_REQS  |     | FLOAT     | Number of PUT CONTAINER requests for channel containers issued by the user task. From PGPUTCCT.   |
| CHAN_MOVCONT_REQS  |     | FLOAT     | Number of MOVE CONTAINER requests for channel containers issued by the user task. From PGMOVCCT.  |
| CHAN_GETCONT_BYTES |     | FLOAT     | The total length, in bytes, of the data in the containers of all the GET CONTAINER CHANNEL commands issued by the user task. From PGGETCDL.   |
| CHAN_PUTCONT_BYTES |     | FLOAT     | The total length, in bytes, of the data in the containers of all the PUT CONTAINER CHANNEL commands issued by the user task. From PGPUTCDL.   |
| CHAN_MOVEPUT_CONT  |     | FLOAT     | The number of containers created by MOVE and PUT CONTAINER requests for channel containers issued by the user task. From PGCRECCT.  |

## CICSDOC\_T\_TRAN\_T

This table provides statistics on CICS transactions. It contains information from CICS performance class monitoring records for CICS/TS (SMF 110, subtype 1) related to the document handler.

The default retention period for this table is 2 days.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| START_TIMESTAMP    | K   | TIMESTAMP | Date and time (timestamp) when the transaction was started. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN. |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| ABEND_CODE_CURRENT |     | CHAR(4)   | Current abend code. From ABCODEC (CICS V3) or ABCODE (CICS V2).   |

## CICS transaction and UOW analysis component data tables

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| ABEND_CODE_ORIGIN |     | CHAR(4)   | Original (first) abend code. From ABCODE0 (CICS V3) or ABCODE (CICS V2).   |
| LU_NAME           |     | CHAR(8)   | VTAM logical unit name (if available) of the terminal associated with this transaction. From LUNAME.   |
| NET_NAME          |     | CHAR(20)  | Network name. This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NETNAME.            |
| OPERATOR_ID       |     | CHAR(3)   | Operator identification at task creation. From OPR.  |
| PROGRAM_NAME      |     | CHAR(8)   | Name of the first program invoked at attach time. If the transaction is routed to another system, the name on this system is DFHCRP. From PGMNAME.   |
| RECORD_TYPE       |     | CHAR(4)   | Record type: C for a terminal converse, D for user EMP DELIVER request, T for a task termination, MT for a semi-permanent mirror suspend (CICS V3 only), F for a long-running transaction and S for a syncpoint. From RTYPE.                                   |
| STOP_TIMESTAMP    |     | TIMESTAMP | Date and time (timestamp) when the transaction finished. From STOP.  |
| TASK_FLAG         |     | CHAR(4)   | Task error flags, a string of 31 bits used for signalling unusual conditions occurring during the transaction. From TASKFLAG.  |
| TERMINAL_ID       |     | CHAR(4)   | Terminal identifier. From TERM.  |
| TRAN_CLASS_NAME   |     | CHAR(8)   | Transaction class name at task creation. From TCLSNAME.  |
| TRANSACTION_NUM   |     | CHAR(5)   | Transaction identification number, normally a decimal number. However, some CICS system tasks are identified by: III for system initialization, JBS or Jnn for journal control (nn = journal number 01-99), and TCP for terminal control. From TRANNUM.        |
| TRANSACTION_PRIO  |     | SMALLINT  | Transaction priority at task creation. From TRANPRI.   |
| TRANSACTION_TYPE  |     | CHAR(4)   | Transaction start type. From T.  |
| UNIT_OF_WORK_ID   |     | CHAR(12)  | Unit of work ID as known within the originating system. This is a binary value derived from the originating system clock or, if the originating system is communicating through a DL/I batch session, a character value (hhmmss). From first 6 bytes of UOWID. |
| UOW_PERIOD_COUNT  |     | SMALLINT  | Unit of work period count. This may change during the life of a task as a result of syncpoint activity. From the last two bytes of UOWID.  |
| USER_ID           |     | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.   |
| Remaining fields  |     |           | See <a href="#">“Common fields for the document handler (DOC)” on page 76.</a>   |

### CICSWEB\_T\_TRAN\_T

This table provides statistics on CICS transactions. It contains information from CICS performance class monitoring records for CICS/TS (SMF 110, subtype 1) related to the Web interface activity.

The default retention period for this table is 2 days.



| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| START_TIMESTAMP    | K   | TIMESTAMP | Date and time (timestamp) when the transaction was started. From START.   |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFMNSID.  |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction identifier. From TRAN.  |
| ABEND_CODE_CURRENT |     | CHAR(4)   | Current abend code. From ABCODEC (CICS V3) or ABCODE (CICS V2).   |
| ABEND_CODE_ORIGIN  |     | CHAR(4)   | Original (first) abend code. From ABCODEO (CICS V3) or ABCODE (CICS V2).  |
| ATOMSRVC_NAME      |     | CHAR(8)   | The name of the ATOMSERVICE resource definition used to process this task. From WBATMSNM.   |
| BEANTOT_REQ_NUM    |     | FLOAT     | The total of beans occurred. From EJBTOTCT.   |
| INV_SOAP_COUNT     |     | FLOAT     | The total number of SOAP faults received in response to EXEC CICS INVOKE SERVICE and EXEC CICS INVOKE WEBSERVICE commands. From WBISSFCT.   |
| LU_NAME            |     | CHAR(8)   | VTAM logical unit name (if available) of the terminal associated with this transaction. From LUNAME.  |
| NET_NAME           |     | CHAR(20)  | Network name. This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NETNAME. |
| OPERATOR_ID        |     | CHAR(3)   | Operator identification at task creation. From OPR.   |
| PIPELINE_NAME      |     | CHAR(8)   | The name of the PIPELINE resource definition used to provide information about message handlers acting on service request processed by this task. From WBPIPLNM.  |
| PROGRAM_NAME       |     | CHAR(8)   | The name of the program from the URIMAP resource definition used to provide application-generated response to HTTP request processed by this task. From WBPROGNM.   |
| RECORD_TYPE        |     | CHAR(4)   | Record type: C for a terminal converse, D for user EMP DELIVER request, T for a task termination, MT for a semi-permanent mirror suspend (CICS V3 only), F for a long-running transaction and S for a syncpoint. From RTYPE.                        |
| SOAPF_COUNT        |     | FLOAT     | The total number of EXEC CICS SOAPFAULT ADD, CREATE, and DELETE commands issued by the user task. From WBSFTOCT.  |
| SOAPFC_COUNT       |     | FLOAT     | The number of EXEC CICS SOAPFAULT CREATE commands issued by the user task. From WBSFCRCT.   |
| SOAP_REQ_LEN       |     | FLOAT     | For Web service applications, the SOAP request body length. From WBSREQBL.  |
| SOAP_RES_LEN       |     | FLOAT     | For Web service applications, the SOAP response body length. From WBSRSPBL.   |
| STOP_TIMESTAMP     |     | TIMESTAMP | Date and time (timestamp) when the transaction finished. From STOP.   |
| TASK_FLAG          |     | CHAR(4)   | Task error flags, a string of 31 bits used for signalling unusual conditions occurring during the transaction. From TASKFLAG.   |
| TERMINAL_ID        |     | CHAR(4)   | Terminal identifier. From TERM.   |

## CICS transaction and UOW analysis component data tables

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| TOT_DOC_LEN      |     | FLOAT     | The total length of the documents parsed using zOS XML System Services parser. From MLXSSTD.L.   |
| TRANDF_COUNT     |     | FLOAT     | The number of EXEC CICS TRANSFORM commands issued by user task. From MLXMLTCT.   |
| TRAN_CLASS_NAME  |     | CHAR(8)   | Transaction class name at task creation. From TCLSNAME.  |
| TRANSACTION_NUM  |     | CHAR(5)   | Transaction identification number, normally a decimal number. However, some CICS system tasks are identified by: III for system initialization, JBS or Jnn for journal control (nn = journal number 01-99), and TCP for terminal control. From TRANNUM.        |
| TRANSACTION_PRIO |     | SMALLINT  | Transaction priority at task creation. From TRANPRI.   |
| TRANSACTION_TYPE |     | CHAR(4)   | Transaction start type. From T.  |
| UNIT_OF_WORK_ID  |     | CHAR(12)  | Unit of work ID as known within the originating system. This is a binary value derived from the originating system clock or, if the originating system is communicating through a DL/I batch session, a character value (hhmmss). From first 6 bytes of UOWID. |
| UOW_PERIOD_COUNT |     | SMALLINT  | Unit of work period count. It may change during the life of a task as a result of syncpoint activity. From the last two bytes of UOWID.  |
| URIMAP_NAME      |     | CHAR(8)   | The name of the URIMAP resource definition that was mapped to the URI of the inbound request processed by this task. From WBURIMNM.  |
| USER_ID          |     | CHAR(8)   | User ID at task creation. This can also be the remote user ID for a task created as the result of receiving an ATTACH request across an MRO or APPC link with attach-time security. From USERID.   |
| WEBSRVC_NAME     |     | CHAR(32)  | The name of the WEBSERVICE resource definition used to process this task. From WBSVCENM.   |
| WEBSRVC_OPNAME   |     | CHAR(64)  | The first 64 bytes of the Web service operation name. From WBSVOPNM.   |
| WSACONTB_COUNT   |     | FLOAT     | The number of EXEC CICS WSACONTEXT BUILD commands issued by the user task. From WSABLCT.   |
| WSACONTG_COUNT   |     | FLOAT     | The number of EXEC CICS WSACONTEXT GET commands issued by the user task. From WSAGTCT.   |
| WSAEPRC_COUNT    |     | FLOAT     | The number of EXEC CICS WSAEPR CREATE commands issued by the user task. From WSAEPCCT.   |
| WSADDR_COUNT     |     | FLOAT     | The total number of EXEC CICS WS-Addressing commands issued by the user task. From WSATOTCT.   |
| XML_CPU_COUNT    |     | FLOAT     | The number of times a document was converted using zOS XML System Services parser. From MLXSSTCT.  |
| XML_CPU_SEC      |     | FLOAT     | The CPU time taken to convert a document using zOS XML System Services parser. From MLXSSTCT_TOD.  |
| Remaining fields |     |           | See <a href="#">“Common fields for the Web interface (WEB)”</a> on page 76.  |

### CICS\_T\_UOW\_TV1

This is a work view used by CICS Transaction and UOW Analysis Reports. It lists UOW response times by unit of work ID. It is based on the CICS\_T\_TRAN\_T table.

| Column name       | Key | Data type      | Description  |
|-------------------|-----|----------------|--|
| NET_NAME          |     | CHAR(20)       | This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NET_NAME.               |
| RESPONSE_TIME_SEC |     | DECIMAL(20, 6) | Response time, in seconds, for this unit of work. This includes time for long running mirror tasks thus making this response time unreliable. See RESPONSE_TIME_SEC for CICS_T_UOW_TV2. Calculated as MAX(STOP_TIMESTAMP) - MIN(START_TIMESTAMP).    |
| START_TIMESTAMP   |     | TIMESTAMP      | Date and time (timestamp) when this unit of work was started. This (erroneously) includes long running mirror tasks. See START_TIMESTAMP for CICS_T_UOW_TV2. From START_TIMESTAMP.   |
| TRAN_COUNT        |     | INTEGER        | Number of transactions in this unit of work. Calculated as number of rows in CICS_T_TRAN_T with identical UNIT_OF_WORK_ID.   |
| UNIT_OF_WORK_ID   |     | CHAR(12)       | Unit of work ID as known within the originating system. It is a binary value derived from the originating system clock or a character value (hhmmss), if the originating system is communicating through a DL/I batch session. From UNIT_OF_WORK_ID. |

## CICS\_T\_UOW\_TV2

This is a work view used by CICS Transaction and UOW Analysis Reports. It lists UOW response times by unit of work ID. Long running mirror tasks are excluded. It is based on the CICS\_T\_TRAN\_T table.

| Column name       | Key | Data type      | Description  |
|-------------------|-----|----------------|--|
| NET_NAME          |     | CHAR(20)       | This name has two parts, separated by a period. The first part is VTAMs name for the system services control point (SSCP). The second part is the task origin: either the terminal LU name or the generic CICS LU name. From NET_NAME.               |
| RESPONSE_TIME_SEC |     | DECIMAL(20, 6) | Response time, in seconds, for this unit of work. Calculated as MAX(STOP_TIMESTAMP) - MIN(START_TIMESTAMP). Long running mirror tasks (DFHMIR based transactions) are excluded.  |
| START_TIMESTAMP   |     | TIMESTAMP      | Date and time (timestamp) when this unit of work was started. Long running mirror tasks are excluded since they can corrupt the unit of work start time. From START_TIMESTAMP.   |
| TRAN_COUNT        |     | INTEGER        | Number of transactions in this unit of work. Calculated as number of rows in CICS_T_TRAN_T with identical UNIT_OF_WORK_ID.   |
| UNIT_OF_WORK_ID   |     | CHAR(12)       | Unit of work ID as known within the originating system. It is a binary value derived from the originating system clock or a character value (hhmmss), if the originating system is communicating through a DL/I batch session. From UNIT_OF_WORK_ID. |

## CICS\_WMQ\_CONN\_D

This table provides daily Websphere MQ connection statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHMQGD5 macro.

The default retention period for this table is 30 days.

| Column name       | Key | Data type | Description  |
|-------------------|-----|-----------|--|
| DATE              | K   | DATE      | Date when the statistics record was written to SMF. From SMFSTDTE  |
| MVS_SYSTEM_ID     | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID  |
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN   |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function                               |
| MQ_QMANAGER_NAME  | K   | CHAR(4)   | Queue manager name. From MQG_Qmgr_name.  |
| MQ_API_CALLS      |     | INTEGER   | Total number of calls. From MQG_TApi.  |
| MQ_API_CALLS_OK   |     | INTEGER   | Total number of calls compok. From MQG_TApiOk.   |
| MQ_BUFMH_CALLS    |     | INTEGER   | The number of MQBUFMH calls issued. From MQG_TBUFMH.   |
| MQ_CALL_REQ_IO    |     | INTEGER   | Total number of calls completed synchronously. From MQG_TCallIO.   |
| MQ_CALL_SWITCHED  |     | INTEGER   | Total number of calls switched. From MQG_TSubtaskd.  |
| MQ_CALL_SYNC_COMP |     | INTEGER   | Total number of calls compsync. From MQG_TCallSyncComp   |
| MQ_CB_CALLS       |     | INTEGER   | The number of MQG_TCB. From MQG_TCB.   |
| MQ_CONN_DT_TM     |     | TIMESTAMP | The date and time when the most recent connection between CICS and Websphere MQ was started. From MQG_CON_TME_LOC.   |
| MQ_CONN_NAME      |     | CHAR(8)   | The name of the installed MQCONN definition for the CICS region, which defines the attributes of the connection between CICS and WebSphere MQ. From MQG_MQCONN_NAME. |
| MQ_CONN_STAT      |     | CHAR(1)   | Connection status. C for Connected. N for Not connected.   |
| MQ_CRTMH_CALLS    |     | INTEGER   | The number of MQCRTMH calls issued. From MQG_TCRTMH.   |
| MQ_CTL_CALLS      |     | INTEGER   | The number of MQCTL calls issued. From MQG_TCTL.   |
| MQ_CURR_TASKS     |     | INTEGER   | Number of current tasks. From MQG_TTasks.  |
| MQ_DCONN_DT_TM    |     | TIMESTAMP | The date and time when the most recent connection between CICS and Websphere MQ ended. From MQG_DISCON_TME_LOC.  |
| MQ_DLTMH_CALLS    |     | INTEGER   | The number of MQDLTMH calls issued. From MQG_TDLTMH.   |
| MQ_DLTMP_CALLS    |     | INTEGER   | The number of MQDLTMP calls issued. From MQG_TDLTMP.   |
| MQ_FUTILE_ATT     |     | INTEGER   | Number of futile attempts. From MQG_TFutileAtt.  |
| MQ_INIT_QUEUE     |     | CHAR(48)  | Initiation queue name. From MQG_Init_queue.  |
| MQ_INDOUBT_UOW    |     | INTEGER   | Count of indoubt units of work. From MQG_IndoubtUOW.   |
| MQ_INQMP_CALLS    |     | INTEGER   | The number of MQINQMP calls issued. From MQG_TINQMP.   |
| MQ_MHBUF_CALLS    |     | INTEGER   | The number of MQMHBUF calls issued. From MQG_TMHBUFF.  |
| MQ_QUEUE_MGR      |     | CHAR(4)   | The name of the WebSphere MQ queue manager or queue-sharing group. From MQG_MQNAME.  |
| MQ_REAL_GETWAIT   |     | INTEGER   | Total number of real GETWAIT. From MQG_TWWaitMsg.  |
| MQ_RELEASE        |     | CHAR(4)   | Release of MQ vrrr. From MQG_MQ_Release.   |

| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| MQ_RES_COMMIT    |     | INTEGER   | Count of resolved committed UOWs. From MQG_ResolveComm.   |
| MQ_RES_BACKOUT   |     | INTEGER   | Count of resolved backout UOWs. From MQG_ResolveBack.   |
| MQ_RESYNC_MBR    |     | CHAR(1)   | The MQCONN definition for the CICS region which specifies resynchronization if there are indoubt units of work when CICS reconnects to Websphere MQ. Y or N. From MQG Resyncmember. |
| MQ_SETMP_CALLS   |     | INTEGER   | The number of MQSETMPH calls issued. From MQG_TSETMP.   |
| MQ_STAT_CALLS    |     | INTEGER   | The number of MQSTAT calls issued. From MQG_TSTAT.  |
| MQ_SUB_CALLS     |     | INTEGER   | The number of MQSUB calls issued. From MQG_TSUB.  |
| MQ_SUBRQ_CALLS   |     | INTEGER   | The number of MQSUBRQ calls issued. From MQG_TSUBRQ.  |
| MQ_TCONSUME      |     | INTEGER   | The number of messages passed to callback routines. From MQG TConsume.  |
| MQ_TOTAL_CLOSE   |     | INTEGER   | Total number of CLOSE. From MQG_TCLOSE.   |
| MQ_TOTAL_GET     |     | INTEGER   | Total number of GET. From MQG_TGET.   |
| MQ_TOTAL_GETWAIT |     | INTEGER   | Total number of GETWAIT. From MQG_TGETWAIT.   |
| MQ_TOTAL_INQ     |     | INTEGER   | Total number of INQ. From MQG_TINQ.   |
| MQ_TOTAL_OPEN    |     | INTEGER   | Total number of OPEN. From MQG_TOPEN.   |
| MQ_TOTAL_PUT     |     | INTEGER   | Total number of PUT. From MQG_TPUT.   |
| MQ_TOTAL_PUT1    |     | INTEGER   | Total number of PUT1. From MQG_TPUT1.   |
| MQ_TOTAL_SET     |     | INTEGER   | Total number of SET. From MQG_TSET.   |
| MQ_TOT_BACK_UOW  |     | INTEGER   | Total number of backout UOWs. From MQG_TBackUOW.  |
| MQ_TOT_COMM_UOW  |     | INTEGER   | Total number of committed UOWs. From MQG_TCommUOW.  |
| MQ_TOT_FLOWS     |     | INTEGER   | Total number of flows. From MQG_TCall.  |
| MQ_TOT_TASKS     |     | INTEGER   | Total number of tasks. From MQG_TTaskend.   |
| MQ_UNRES_UOW     |     | INTEGER   | Count of unresolved units of work. From MQG_UnResolvedUOW.  |
| MQ_1PHASE_COMM   |     | INTEGER   | Total number of Single Phase Commits. From MQG_TSPComm.   |
| MQ_2PHASE_COMM   |     | INTEGER   | Total number of 2 Phase Commits. From MQG_T2PComm.  |

## CICS\_WMQ\_CONN\_H

This table provides hourly Websphere MQ connection statistics from CICS TS 3.2 (SMF 110, subtype 2). This maps the CICS DFHMQGDS macro.

The default retention period for this table is 7 days.

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| DATE          | K   | DATE      | Date when the statistic record was written to SMF.rom SMFSTDTE    |
| TIME          | K   | TIME      | Time when the statistics record was written to SMF. From SMFSTTME |
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. This is the SMF system ID. From SMFSTSID           |

| Column name       | Key | Data type | Description   |
|-------------------|-----|-----------|---|
| CICS_SYSTEM_ID    | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID used when requesting a session with this CICS system. From SMFSTPRN  |
| PERIOD_NAME       | K   | CHAR(8)   | Name of the period. This is derived using fields SMFSTSID, SMFSTDTE, and SMFSTTME from the record as parameters in the PERIOD function  |
| MQ_QMANAGER_NAME  | K   | CHAR(4)   | Queue manager name. From MQG_Qmgr_name.   |
| MQ_INIT_QUEUE     |     | CHAR(48)  | Initiation queue name. From MQG_Init_queue.   |
| MQ_API_CALLS      |     | INTEGER   | Total number of calls. From MQG_TApi.   |
| MQ_API_CALLS_OK   |     | INTEGER   | Total number of calls compok. From MQG_TApiOk.  |
| MQ_CALL_REQ_IO    |     | INTEGER   | Total number of calls need I/O. From MQG_TCallIO.   |
| MQ_BUFMH_CALLS    |     | INTEGER   | The number of MQBUFMH calls issued. From MQG_TBUFMH.  |
| MQ_CALL_SWITCHED  |     | INTEGER   | Total number of calls switched. From MQG_TSubtaskd.   |
| MQ_CALL_SYNC_COMP |     | INTEGER   | Total number of calls compsync. From MQG_TCallSyncComp  |
| MQ_CB_CALLS       |     | INTEGER   | The number of MQG_TCB. From MQG_TCB.  |
| MQ_CONN_DT_TM     |     | TIMESTAMP | The date and time when the most recent connection between CICS and Websphere MQ was started. From MQG_CON_TME_LOC.  |
| MQ_CONN_NAME      |     | CHAR(8)   | The name of the installed MQCONN definition for the CICS region, which defines the attributes of the connection between CICS and WebSphere MQ. From MQG_MQCONN_NAME.                |
| MQ_CONN_STAT      |     | CHAR(1)   | Connection status. C for Connected. N for Not connected.  |
| MQ_CRTMH_CALLS    |     | INTEGER   | The number of MQCRTMH calls issued. From MQG_TCRTMH.  |
| MQ_CTL_CALLS      |     | INTEGER   | The number of MQCTL calls issued. From MQG_TCTL.  |
| MQ_CURR_TASKS     |     | INTEGER   | Number of current tasks. From MQG_TTasks.   |
| MQ_DCONN_DT_TM    |     | TIMESTAMP | The date and time when the most recent connection between CICS and Websphere MQ ended. From MQG_DISCON_TME_LOC.   |
| MQ_DLTMH_CALLS    |     | INTEGER   | The number of MQDLTMH calls issued. From MQG_TDLTMH.  |
| MQ_DLTMP_CALLS    |     | INTEGER   | The number of MQDLTMP calls issued. From MQG_TDLTMP.  |
| MQ_FUTILE_ATT     |     | INTEGER   | Number of futile attempts. From MQG_TFutileAtt.   |
| MQ_INDOUBT_UOW    |     | INTEGER   | Count of indoubt units of work. From MQG_IndoubtUOW.  |
| MQ_INQMP_CALLS    |     | INTEGER   | The number of MQINQMP calls issued. From MQG_TINQMP.  |
| MQ_MHBUF_CALLS    |     | INTEGER   | The number of MQMHBUFF calls issued. From MQG_TMHBUFF.  |
| MQ_QUEUE_MGR      |     | CHAR(4)   | The name of the WebSphere MQ queue manager or queue-sharing group. From MQG_MQNAME.   |
| MQ_RELEASE        |     | CHAR(4)   | Release of MQ vrrr. From MQG_MQ_Release.  |
| MQ_REAL_GETWAIT   |     | INTEGER   | Total number of real GETWAIT. From MQG_TWaitMsg.  |
| MQ_RESYNC_MBR     |     | CHAR(1)   | The MQCONN definition for the CICS region which specifies resynchronization if there are indoubt units of work when CICS reconnects to Websphere MQ. Y or N. From MQG Resyncmember. |
| MQ_RES_BACKOUT    |     | INTEGER   | Count of resolved backout UOWs. From MQG_ResolveBack.   |

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| MQ_RES_COMMIT    |     | INTEGER   | Count of resolved committed UOWs. From MQG_ResolveComm.                |
| MQ_SETMP_CALLS   |     | INTEGER   | The number of MQSETMPH calls issued. From MQG_TSETMP.                  |
| MQ_STAT_CALLS    |     | INTEGER   | The number of MQSTAT calls issued. From MQG_TSTAT.                     |
| MQ_SUB_CALLS     |     | INTEGER   | The number of MQSUB calls issued. From MQG_TSUB.                       |
| MQ_SUBRQ_CALLS   |     | INTEGER   | The number of MQSUBRQ calls issued. From MQG_TSUBRQ.                   |
| MQ_TCONSUME      |     | INTEGER   | The number of messages passed to callback routines. From MQG TConsume. |
| MQ_TOTAL_CLOSE   |     | INTEGER   | Total number of CLOSE. From MQG_TCLOSE.                                |
| MQ_TOTAL_GET     |     | INTEGER   | Total number of GET. From MQG_TGET.                                    |
| MQ_TOTAL_GETWAIT |     | INTEGER   | Total number of GETWAIT. From MQG_TGETWAIT.                            |
| MQ_TOTAL_INQ     |     | INTEGER   | Total number of INQ. From MQG_TINQ.                                    |
| MQ_TOTAL_OPEN    |     | INTEGER   | Total number of OPEN. From MQG_TOPEN.                                  |
| MQ_TOTAL_PUT     |     | INTEGER   | Total number of PUT. From MQG_TPUT.                                    |
| MQ_TOTAL_PUT1    |     | INTEGER   | Total number of PUT1. From MQG_TPUT1.                                  |
| MQ_TOTAL_SET     |     | INTEGER   | Total number of SET. From MQG_TSET.                                    |
| MQ_TOT_BACK_UOW  |     | INTEGER   | Total number of backout UOWs. From MQG_TBackUOW.                       |
| MQ_TOT_COMM_UOW  |     | INTEGER   | Total number of committed UOWs. From MQG_TCommUOW.                     |
| MQ_TOT_FLOWS     |     | INTEGER   | Total number of flows. From MQG_TCall.                                 |
| MQ_TOT_TASKS     |     | INTEGER   | Total number of tasks. From MQG_TTaskend.                              |
| MQ_UNRES_UOW     |     | INTEGER   | Count of unresolved units of work. From MQG_UnResolvedUOW.             |
| MQ_1PHASE_COMM   |     | INTEGER   | Total number of Single Phase Commits. From MQG_TSPComm.                |
| MQ_2PHASE_COMM   |     | INTEGER   | Total number of 2 Phase Commits. From MQG_T2PComm.                     |

## Tables in the CICS Transaction Gateway component

### CTG\_STATISTICS\_H,\_D,\_W

These tables provide hourly, daily, and weekly CICS Transaction Gateway statistics from the following SMF type 111 records Resource Group statistics:

- Connection Manager
- Gateway Daemon Statistics
- System Environment Statistics
- Worker Thread Statistics

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| DATE          | K   | DATE      | Date that the Gateway daemon requests that records for a statistics interval are cut. From CTG_COLDATE.                                   |
| TIME          | K   | TIME      | Time that the Gateway daemon requests that records for a statistics interval are cut. It applies only to the +-H table. From CTG_COLTIME. |
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. From SMFSID.   |

## Tables in the CICS Transaction Gateway component

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| CTG_APPL_ID   | K   | CHAR(8)   | The CICS Transaction Gateway APPLID. If the APPLID is not set, the Jobname is used. From SMFSPN.  |
| NUMBR_RECORDS |     | INTEGER   | The total number of resource group statistics records collected from the log. (Applies to table CTG_STATISTICS_H.) The number of rows aggregated from the hourly table. (Applies to table CTG_STATISTICS_D.) The number of rows aggregated from the daily table. (Applies to table CTG_STATISTICS_W.) |
| CM_CALLOC     |     | FLOAT     | The number of currently allocated connection managers. Calculated as the average of CM_CALLOC.  |
| CM_CCURR      |     | FLOAT     | The current number of connection managers. Calculated as the average of CM_CCURR.   |
| CM_CWAITING   |     | FLOAT     | The current of connection managers waiting. Calculated as the average of CM_CWAITING.   |
| CM_IALLOC     |     | FLOAT     | The total number of times a connection manager thread was allocated. Calculated as the sum of CM_IALLOC.  |
| CM_IALLOCHI   |     | FLOAT     | The peak number of allocated connection manager threads. Calculated as the maximum of CM_IALLOCHI.  |
| CM_ICREATED   |     | FLOAT     | The total number of connection manager threads created. Calculated as the sum of CM_ICREATED.   |
| CM_ETIMEOUTS  |     | FLOAT     | The total number of times connect timeout reached. Calculated as the sum of CM_ETIMEOUTS.   |
| GD_CHEALTH    |     | FLOAT     | The current Gateway daemon health. Calculated as the average of GD_CHEALTH.   |
| GD_IALLREQ    |     | FLOAT     | The total number of requests processed. Calculated as the sum of GD_IALLREQ.  |
| GD_IRUNTIME   |     | FLOAT     | The interval running time. Calculated as the sum of GD_IRUNTIME.  |
| GD_ILUWTXNC   |     | FLOAT     | The total number of Extended LUW transactions committed. Calculated as the sum of GD_ILUWTXNC.  |
| GD_CLUWTXN    |     | FLOAT     | The current number of extended LUW transactions. Calculated as the average of GD_CLUWTXN.   |
| GD_CSYNCTXN   |     | FLOAT     | The current number of SYNCONRETURN transactions. Calculated as the average of GD_CSYNCTXN.  |
| GD_CXATXN     |     | FLOAT     | The current number of XA transactions. Calculated as the average of GD_CXATXN.  |
| GD_IAVRESP    |     | FLOAT     | The average Gateway daemon response time in milliseconds. Calculated as the average of GD_IAVRESP.  |
| GD_IHAEXIT    |     | FLOAT     | The total number of times the CICS request exit was called. Calculated as the sum of GD_IHAEXIT.  |
| GD_ILUWTXNR   |     | FLOAT     | The total number of extended LUW-based transactions that were rolled back. Calculated as the sum of GD_ILUWTXNR.  |
| GD_IREQDATA   |     | FLOAT     | The total amount of request data in bytes received from client applications. Calculated as the sum of GD_IREQDATA.  |
| GD_IRESPPDATA |     | FLOAT     | The total amount of response data in bytes sent to client applications. Calculated as the sum of GD_IRESPPDATA.   |
| GD_ISYNCFAIL  |     | FLOAT     | The total number of SYNCONRETURN transactions that have failed. Calculated as the sum of GD_ISYNCFAIL.  |



| Column name      | Key | Data type | Description   |
|------------------|-----|-----------|---|
| GD_ISYNCTXN      |     | FLOAT     | The total number of successful SYNCONRETURN transactions. Calculated as the sum of GD_ISYNCTXN.   |
| GD_IXACOMP       |     | FLOAT     | The total number of completed XA transactions that were started by another Gateway daemon in the group. Calculated as the sum of GD_IXACOMP.            |
| GD_IXAREQ        |     | FLOAT     | The total number of XA requests processed for XA transactions. Calculated as the sum of GD_IXAREQ.  |
| GD_IXATXNC       |     | FLOAT     | The total number of XA commit requests that were successfully processed. Calculated as the sum of GD_IXATXNC.   |
| GD_IXATXNHI      |     | FLOAT     | The peak number of XA transactions that have been in flight at the same time. Calculated as the maximum of GD_IXATXNHI.                                 |
| GD_IXATXNR       |     | FLOAT     | The total number of XA rollback requests successfully processed. Calculated as the sum of GD_IXATXNR.   |
| NUMBR_RECORDS_CM |     | INTEGER   | The total number of connection manager statistics records collected from the log. (Applies to table CTG_STATISTICS_H.)                                  |
| NUMBR_RECORDS_GD |     | INTEGER   | The total number of Gateway daemon statistics records collected from the log. (Applies to table CTG_STATISTICS_H.)                                      |
| NUMBR_RECORDS_SE |     | INTEGER   | The total number of system environment statistics records collected from the log. (Applies to table CTG_STATISTICS_H.)                                  |
| NUMBR_RECORDS_WT |     | INTEGER   | The total number of worker thread statistics records collected from the log. (Applies to table CTG_STATISTICS_H.)                                       |
| SE_CELOAL        |     | FLOAT     | The amount of currently allocated extended user private storage (in bytes) in the Gateway daemon address space. Calculated as the average of SE_CELOAL. |
| SE_CHEAPGCMIN    |     | FLOAT     | The Gateway daemon JVM heap size (in bytes) after the last garbage collection (GC). Calculated as the average of SE_CHEAPGCMIN.                         |
| SE_IGCCOUNT      |     | FLOAT     | The total number of garbage collection (GC) events. Calculated as the sum of SE_IGCCOUNT.   |
| SE_IGCTIME       |     | FLOAT     | The total length of time (in milliseconds) taken by the JVM for garbage collection (GC). Calculated as the sum of SE_IGCTIME.                           |
| WT_CALLOC        |     | FLOAT     | The number of currently allocated worker threads. Calculated as the average of WT_CALLOC.   |
| WT_CCURR         |     | FLOAT     | The current number of worker threads. Calculated as the average of WT_CCURR.  |
| WT_IALLOCHI      |     | FLOAT     | The peak number of allocated worker threads. Calculated as the maximum of WT_IALLOCHI.  |
| WT_ITIMEOUTS     |     | FLOAT     | The total number of times worker timeout reached. Calculated as the sum of WT_ITIMEOUTS.  |
| KPMC_MON_TRAN_HV |     | FLOAT     | The average Gateway daemon response time plus I/O response in milliseconds. Calculated as the average of GD_IIVRESPIO.                                  |
| SE_C31MAX        |     | FLOAT     | A dynamic indication of the limit of the available 31-bit storage. Calculated as the minimum of SE_C31MAX.  |

**CTG\_CS\_H,\_D,\_W**

These tables provide hourly, daily, and weekly CICS Transaction Gateway statistics from the following SMF type 111 records Resource Group statistics:

- CICS Server (all) statistics

| Column name     | Key | Data type | Description  |
|-----------------|-----|-----------|--|
| DATE            | K   | DATE      | Date when the Gateway daemon requests that records for a statistics interval are cut. From CTG_COLDATE.  |
| TIME            | K   | TIME      | Time that the Gateway daemon requests that records for a statistics interval are cut. It applies only to the +-H table. From CTG_COLTIME.      |
| MVS_SYSTEM_ID   | K   | CHAR(4)   | MVS system ID. From SMFSID.  |
| CTG_APPL_ID     | K   | CHAR(8)   | The CICS Transaction Gateway APPLID. If the APPLID is not set, the Jobname is used. From SMFSPN.   |
| NUMBR_RECORDS   |     | INTEGER   | The number of resource group statistics collected from the log.  |
| CS_CALLOC       |     | FLOAT     | The current number of allocated EXCI pipes across all CICS servers. Calculated as the average of CS_CALLOC.                                    |
| CS_CSESSCURR    |     | FLOAT     | The number of IPIC sessions in use with CICS servers. Calculated as the average of CS_CSESSCURR.   |
| CS_CSESSMAX     |     | FLOAT     | The number of IPIC sessions negotiated with CICS servers. Calculated as the average of CS_CSESSMAX.  |
| CS_CWAITING     |     | FLOAT     | The current number of requests currently waiting for a response from a CICS server. Calculated as the average of CS_CWAITING.                  |
| CS_IALLOCFAIL   |     | FLOAT     | The total number of times the Gateway daemon has tried and failed to allocate a pipe to a CICS server. Calculated as the sum of CS_IALLOCFAIL. |
| CS_IALLREQ      |     | FLOAT     | The total number of requests to CICS servers processed. Calculated as the sum of CS_IALLREQ.   |
| CS_IAVRESP      |     | FLOAT     | The average CICS response time, in milliseconds. Calculated as the average of CS_IAVRESP.  |
| CS_ICOMMSFAIL   |     | FLOAT     | The total number of CICS communication failures. Calculated as the sum of CS_ICOMMSFAIL.   |
| CS_ICONNFAIL    |     | FLOAT     | The total number of connection failures. Calculated as the sum of CS_ICONNFAIL.  |
| CS_ICOUNT       |     | FLOAT     | The number of CICS servers to which the Gateway daemon has attempted to send a request. Calculated as the average of CS_ICOUNT.                |
| CS_IIDLETIMEOUT |     | FLOAT     | The total number of timed out connections. Calculated as the sum of CS_IIDLETIMEOUT.   |
| CS_ILOSTCONN    |     | FLOAT     | The total number of lost connections. Calculated as the sum of CS_ILOSTCON.  |
| CS_IREALLOC     |     | FLOAT     | The total number of EXCI pipe reallocations. Calculated as the sum of CS_IREALLOC.   |
| CS_IREQDATA     |     | FLOAT     | The total amount of request data (in bytes) sent to this CICS server. Calculated as the sum of CS_IREQDATA.                                    |
| CS_IRESPDATAP   |     | FLOAT     | The total amount of CICS response data (in bytes) received from this CICS server. Calculated as the sum of CS_IRESPDATA.                       |
| CS_ISESSFAIL    |     | FLOAT     | The total number of IPIC session failures. Calculated as the sum of CS_ISESSFAIL.  |

**CTG\_CSX\_EXCI\_H,\_D,\_W**

These tables provide hourly, daily, and weekly CICS Transaction Gateway statistics from the following SMF type 111 records Resource Group statistics:

- CICS Server (instance) statistics for EXCI

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE      | Date when the Gateway daemon requests that records for a statistics interval are cut. From CTG_COLDATE.                                  |
| TIME             | K   | TIME      | Time that the Gateway daemon requests that records for a statistics interval are cut. It applies only to the+-H table. From CTG_COLTIME. |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. From SMFSID.  |
| CTG_APPL_ID      | K   | CHAR(8)   | The CICS Transaction Gateway APPLID. If the APPLID is not set, the Jobname is used. From SMFSPN.   |
| CICS_SERVER_NAME | K   | CHAR(8)   | The name of the CICS server. From EXCI_SAPPLID.  |
| NUMBR_RECORDS    |     | INTEGER   | The number of resource group statistics collected from the log.  |
| CSX_CALLOC       |     | FLOAT     | The current number of EXCI pipes allocated. Calculated as the average of EXCI_CALLOC.  |
| CSX_IALLOCFAIL   |     | FLOAT     | The total number of EXCI pipe allocate failures. Calculated as the sum of EXCI_IALLOCFAIL.   |
| CSX_IALLREQ      |     | FLOAT     | The total number of requests processed. Calculated as the sum of EXCI_IALLREQ.   |
| CSX_IAVRESP      |     | FLOAT     | Average CICS response time, in milliseconds. Calculated as the average of EXCI_IAVRESP.  |
| CSX_IREQDATA     |     | FLOAT     | The total amount of request data (in bytes) sent to this CICS server. Calculated as the sum of EXCI_IREQDATA.                            |
| CSX_IRESPDATA    |     | FLOAT     | The total amount of CICS response data (in bytes) received from this CICS server. Calculated as the sum of EXCI_IRESPDATA.               |
| CSX_ICOMMSFAIL   |     | FLOAT     | The total number of CICS communication failures. Calculated as the sum of EXCI_ICOMMSFAIL.   |
| CSX_CWAITING     |     | FLOAT     | The current number of requests waiting on a response. Calculated as the average of EXCI_CWAITING.  |

**CTG\_CSX\_IPIC\_H,\_D,\_W**

These tables provide hourly, daily, and weekly CICS Transaction Gateway statistics from the following SMF type 111 records Resource Group statistics:

- CICS Server (instance) statistics for IPIC

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| DATE             | K   | DATE      | Date when the Gateway daemon requests that records for a statistics interval are cut. From CTG_COLDATE.                                  |
| TIME             | K   | TIME      | Time that the Gateway daemon requests that records for a statistics interval are cut. It applies only to the+-H table. From CTG_COLTIME. |
| MVS_SYSTEM_ID    | K   | CHAR(4)   | MVS system ID. From SMFSID.  |
| CTG_APPL_ID      | K   | CHAR(8)   | The CICS Transaction Gateway APPLID. If the APPLID is not set, the Jobname is used. From SMFSPN.   |
| CICS_SERVER_NAME | K   | CHAR(8)   | The name of the CICS server. From IPIC_SININAME.   |

## Tables in the Key Performance Metrics (KPM) CICS component

| Column name      | Key | Data type | Description  |
|------------------|-----|-----------|--|
| NUMBR_RECORDS    |     | INTEGER   | The number of resource group statistics collected from the log.  |
| CSX_IREQDATA     |     | FLOAT     | The total amount of request data (in bytes) sent to this CICS server. Calculated as the sum of IPIC_IREQDATA.              |
| CSX_IRESPDATA    |     | FLOAT     | The total amount of CICS response data (in bytes) received from this CICS server. Calculated as the sum of IPIC_IRESPDATA. |
| CSX_IALLREQ      |     | FLOAT     | The total number of requests processed. Calculated as the sum of IPIC_IALLREQ.   |
| CSX_ICONNFALL    |     | FLOAT     | The total number of connection failures. Calculated as the sum of IPIC_ICONNFALL.  |
| CSX_ILOSTCONN    |     | FLOAT     | The total number of requests processed. Calculated as the sum of IPIC_IALLREQ.   |
| CSX_IIDLETIMEOUT |     | FLOAT     | The total number of timed out connections. Calculated as the sum of IPIC_IIDLETIMEOUT.                                     |
| CSX_CSESSCURR    |     | FLOAT     | The current number of IPIC sessions in use. Calculated as the average of IPIC_CSESSCURR.                                   |
| CSX_CSESSMAX     |     | FLOAT     | The current number of negotiated IPIC sessions. Calculated as the average of IPIC_CSESSMAX.                                |
| CSX_ISESSFAIL    |     | FLOAT     | The total number of IPIC session failures. Calculated as the sum of IPIC_ISESSFAIL.  |
| CSX_ICOMMSFAIL   |     | FLOAT     | The total number of CICS communication failures. Calculated as the sum of IPIC_ICOMMSFAIL.                                 |
| CSX_CWAITING     |     | FLOAT     | The current number of requests waiting on a response. Calculated as the average of IPIC_CWAITING.                          |
| CSX_IAVRESP      |     | FLOAT     | Average CICS response time, in milliseconds. Calculated as the average of IPIC_IAVRESP.                                    |

## Tables in the Key Performance Metrics (KPM) CICS component

The data tables described in this section provide performance statistics from CICS monitoring records.

### KPMC\_MON\_TRAN\_H

This table provides hourly Key Performance Metrics on CICS transactions. It contains information from CICS performance monitoring records SMF type 110.

The default retention period for this table is 45 days.

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| DATE          | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START.   |
| TIME          | K   | TIME      | The hour when the performance records were initialized. From START.   |
| PERIOD_NAME   | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. This is the SMF system ID From SMFMNSID.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction name. From TRAN.  |
| RECORDS            |     | FLOAT     | Total number of performance class monitoring records. This is the number of log records summarized.   |
| TRANSACTION_COUNT  |     | FLOAT     | Total number of performance class monitoring records with RTYPE = T indicating task termination. This is valid for CICS V3 and later. See RECORDS for earlier versions of CICS. |
| TRANS_BELOW_SEC005 |     | FLOAT     | Number of transactions that completed in 0.5 seconds.   |
| TRANS_BELOW_SEC010 |     | FLOAT     | Number of transactions that completed in 1.0 seconds.   |
| TRANS_BELOW_SEC015 |     | FLOAT     | Number of transactions that completed in 1.5 seconds.   |
| TRANS_BELOW_SEC020 |     | FLOAT     | Number of transactions that completed in 2.0 seconds.   |
| TRANS_BELOW_SEC030 |     | FLOAT     | Number of transactions that completed in 3.0 seconds.   |
| TRANS_BELOW_SEC050 |     | FLOAT     | Number of transactions that completed in 5.0 seconds.   |
| TRANS_BELOW_SEC100 |     | FLOAT     | Number of transactions that completed in 10.0 seconds.  |
| CPU_SEC            |     | FLOAT     | CPU time, in seconds. This is the sum of USRCPUT.   |
| DISPATCH_SEC       |     | FLOAT     | Elapsed time for which tasks were dispatched, in seconds. This is the sum of USRDISPT.  |
| DISPATCH_WAIT_SEC  |     | FLOAT     | Time that tasks were waiting for redispach, in seconds. This is valid for CICS V3 and later. This is the sum of DISPWTT.  |
| RESPONSE_SEC       |     | FLOAT     | Total response time for all tasks, in seconds. This is the sum of STOP - START.   |
| SUSPEND_SEC        |     | FLOAT     | Total elapsed time, in seconds, for which tasks were suspended by the dispatcher. This is the sum of SUSPTIME.  |
| TD_REQUESTS_TOTAL  |     | FLOAT     | Total number of transient data requests. This is the sum of TDTOTCT.  |
| TS_REQUESTS_TOTAL  |     | FLOAT     | Total number of temporary storage requests. This is the sum of TSTOTCT.   |
| PGM_LINK_REQUESTS  |     | FLOAT     | Number of program LINK requests. This is the sum of PCLINKCT.   |
| PGM_XCTL_REQUESTS  |     | FLOAT     | Number of program XCTL (transfer control) requests. This is the sum of PCXCTLCT.  |
| PGM_LOAD_REQUESTS  |     | FLOAT     | Number of program LOAD requests. This is the sum of PCLOADCT.   |
| FC_IO_WAIT_SEC     |     | FLOAT     | File control I/O wait time, in seconds. This is the sum of FCIOWTT.   |
| FC_REQUESTS_TOTAL  |     | FLOAT     | Total number of file control requests. Incremented even if the request is function shipped. This is the sum of FCTOTCT.   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| FC_ACCESS_METHODS  |     | FLOAT     | Number of file control access method calls. Not incremented if the request is function shipped. This is the sum of FCAMCT.  |
| JC_IO_WAIT_SEC     |     | FLOAT     | Journal control I/O wait time, in seconds. This is the sum of JCIOWTT.  |
| EXCEPTION_WAIT_SEC |     | FLOAT     | Exception wait time, in seconds. This is the sum of EXWTTIME.   |
| CHARS_INPUT_PRIME  |     | FLOAT     | Number of characters received from the principal terminal. This is the sum of TCCHRIN1.   |
| CHARS_OUTPUT_PRIME |     | FLOAT     | Number of characters sent to the principal terminal. This is the sum of TCCHROU1.   |
| STORAGE_UDSA_MAX   |     | FLOAT     | Peak user storage allocated below the 16MB line in the user dynamic storage area (UDSA), in bytes. This is the maximum of SCUSRHWM.   |
| STORAGE_OCC_UDSA   |     | FLOAT     | Storage occupancy below the 16MB line in the UDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. This is the sum of SCUSRSTG.   |
| STORAGE_OCC_EUDSA  |     | FLOAT     | Storage occupancy above the 16MB line in the EUDSA, in kilobyte-seconds. This measures the area under the curve of storage in use against elapsed time. This is the sum of SCUSRSTGE. |
| STORAGE_PGM_TOTAL  |     | FLOAT     | Peak program storage both above and below the 16MB line, in bytes. This is the maximum of PCSTGHWM.   |
| STORAGE_PGM_B16M   |     | FLOAT     | Peak program storage below the 16MB line, in bytes. This includes CDSA and UDSA. This is the maximum of PC24BHWM.   |

## Views

The views described in this section provide performance statistics from CICS monitoring records together with statistical calculations.

### KPMC\_MON\_TRAN\_HV

This view provides hourly performance measurement data on CICS transactions. It contains information from CICS performance monitoring records SMF type 110.

**Note:** Aside from the calculated columns described here, this view also contains all the data columns described in [“KPMC\\_MON\\_TRAN\\_H” on page 282](#).

| Column name | Key | Data type | Description   |
|-------------|-----|-----------|---|
| DATE        | K   | DATE      | Date when the performance records were initialized. This is normally the task start date. From START. |
| TIME        | K   | TIME      | The hour when the performance records were initialized. From START.                                   |

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| PERIOD_NAME        | K   | CHAR(8)   | Time period. This is the name that you define in the PERIOD_PLAN table. Use it to group time intervals according to operator shift or to separate peak and other periods. |
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID From SMFMNSID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic APPLID. This is the VTAM application ID that is used when requesting a session with this CICS system. From SMFMNPRN.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction name. From TRAN.  |
| CPU_AVG_SEC        |     | FLOAT     | Average transaction processor time, in seconds. Calculated as CPU_SEC/RECORDS.  |
| RESPONSE_AVG_SEC   |     | FLOAT     | Average transaction response time, in seconds. Calculated as RESPONSE_AVG_SEC/RECORDS.  |
| DISPATCH_AVG_SEC   |     | FLOAT     | Average transaction dispatch time, in seconds. Calculated as DISPATCH_SEC/RECORDS.  |
| SUSPEND_AVG_SEC    |     | FLOAT     | Average time, in seconds, when tasks were suspended by the dispatcher. Calculated as SUSPEND_SEC/RECORDS.   |
| EXCEPTION_AVG_SEC  |     | FLOAT     | Average exception wait time, in seconds. Calculated as EXCEPTION_WAIT_SEC/RECORDS.  |
| JC_IO_WAIT_AVG_SEC |     | FLOAT     | Average journal control I/O wait time, in seconds. Calculated as JC_IO_WAIT_SEC/RECORDS.  |
| FC_IO_WAIT_AVG_SEC |     | FLOAT     | Average File control I/O wait time, in seconds. Calculated as FC_IO_WAIT_SEC/RECORDS.   |

## Lookup tables

This section describes the lookup tables specific to the CICS Performance Feature. For descriptions of common lookup tables used by the CICS Performance Feature and other IBM Z Performance and Capacity Analytics features, refer to the *Administration Guide and Reference*.

**Note:** To obtain local time, IBM Z Performance and Capacity Analytics uses the timestamp in the SMF header.

### CICS\_AVAIL\_RES

This lookup table defines which CICS resources are used for tracking availability. It also contains the schedule names and availability objectives to use for the different resources.

| Column name        | Key | Data type | Description  |
|--------------------|-----|-----------|--|
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID that the resource is associated with. It can contain global search characters.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | The CICS subsystem ID that the resource is associated with. It can contain global search characters.   |
| RESOURCE_SOURCE_NM | K   | CHAR(8)   | Resource Source Name. It specifies the resource you want to monitor. It can contain global search characters. When tracking the CICS subsystem itself, this field must be equal to the CICS_SYSTEM_ID. |

## Lookup tables

| Column name        | Key | Data type     | Description   |
|--------------------|-----|---------------|---|
| RESOURCE_TYPE      | K   | CHAR(8)       | Resource Type: CICSSYS (CICS system), DB2CONN (DB2CONN resource).   |
| AVAIL_OBJ_PCT      |     | DECIMAL(4, 1) | Availability objective for the resource, in percent.  |
| RESOURCE_TARGET_NM |     | CHAR(18)      | Resource Target Name. It is the final name that will be associated with the resource. If nothing is specified \$UNKNOWN is used as default. |
| RESOURCE_CHKPOINT  |     | INTEGER       | Resource checkpoint interval in seconds.  |
| SCHEDULE_NAME      |     | CHAR(8)       | Schedule name to use for the resource. If nothing is specified STANDARD is used as default.   |

The RESOURCE\_CHKPOINT corresponds to the STATSINTERVAL system initialization parameter in CICS which defines the interval for CICS statistics. Refer to *CICS System Definition Guide* and *CICS Customization Guide* for further details.

### Example of table contents

| MVS<br>SYSTEM<br>ID | CICS<br>SYSTEM<br>ID | RESOURCE<br>SOURCE<br>NM | RESOURCE<br>TYPE | RESOURCE<br>TARGET<br>NM | RESOURCE<br>CHKPOINT | SCHEDULE<br>NAME | AVAIL<br>OBJ<br>PCT |
|---------------------|----------------------|--------------------------|------------------|--------------------------|----------------------|------------------|---------------------|
| %                   | %                    | CICS3T8X                 | CICSSYS          | ---                      | 3600                 | STANDARD         | 95.0                |
| %                   | %                    | CICS3TTS                 | CICSSYS          | ---                      | 3600                 | STANDARD         | 95.0                |
| %                   | %                    | DB23T8X                  | DB2CONN          | MPP                      | 3600                 | STANDARD         | 95.0                |

## CICS\_LOOKUP\_APPL

This lookup table converts CICS transaction IDs to application names. It contains response-time boundaries for applications and transactions. The IBM Z Performance and Capacity Analytics administrator maintains this table through the administration dialog.

| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| MVS_SYSTEM_ID      | K   | CHAR(4)   | MVS system ID. This is the SMF system ID.   |
| CICS_SYSTEM_ID     | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system.  |
| APPLICATION_NAME   | K   | CHAR(18)  | Application name.   |
| TRANSACTION_ID     | K   | CHAR(4)   | Transaction ID.   |
| APPL_RESP_BND1_SEC |     | FLOAT     | First application response-time boundary, in seconds. The default is 1 second. This can be used for counting transactions in each response time range.    |
| APPL_RESP_BND2_SEC |     | FLOAT     | Second application response-time boundary, in seconds. The default is 2 seconds. This can be used for counting transactions in each response time range.  |
| APPL_RESP_BND3_SEC |     | FLOAT     | Third application response-time boundary, in seconds. The default is 5 seconds. This can be used for counting transactions in each response time range.   |
| APPL_RESP_BND4_SEC |     | FLOAT     | Fourth application response-time boundary, in seconds. The default is 10 seconds. This can be used for counting transactions in each response time range. |
| TRAN_RESP_BND1_SEC |     | FLOAT     | First transaction response-time boundary, in seconds. The default is 1 second. This can be used for counting transactions in each response time range.    |



| Column name        | Key | Data type | Description   |
|--------------------|-----|-----------|---|
| TRAN_RESP_BND2_SEC |     | FLOAT     | Second transaction response-time boundary, in seconds. The default is 2 seconds. This can be used for counting transactions in each response time range.  |
| TRAN_RESP_BND3_SEC |     | FLOAT     | Third transaction response-time boundary, in seconds. The default is 5 seconds. This can be used for counting transactions in each response time range.   |
| TRAN_RESP_BND4_SEC |     | FLOAT     | Fourth transaction response-time boundary, in seconds. The default is 10 seconds. This can be used for counting transactions in each response time range. |

## CICS\_LOOKUP\_SYSTEM

This lookup table converts the CICS generic application ID to a CICS group (CICSplex) name. The IBM Z Performance and Capacity Analytics administrator maintains this table through the administration dialog.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. This is the SMF system ID.   |
| CICSPLEX_ID    | K   | CHAR(18)  | CICS group name. This is your name for a group of related CICS regions. For example, you can call all the production terminal-owning and application-owning regions PRODCICS, even though they have different VTAM names. |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic ID. This is the VTAM application ID that is used when requesting a session with this CICS system.  |

## CICS\_OMEG\_FIELD

This lookup table is used in the File and Database Detailed Usage subcomponent. When this subcomponent collects data to its CICS\_O\_FL\_DTL\_\* tables, it uses this lookup table to determine the value of column FILE\_DB\_ACTION.

| Column name     | Key | Data type   | Description  |
|-----------------|-----|-------------|--|
| FILE_DB_TYPE    | K   | CHAR(10)    | File or Database Type.   |
| FILE_DB_SUBTYPE | K   | CHAR(6)     | File or database subtype.  |
| FILE_DTL_FLD_NO | K   | SMALLINT(4) | Occurrence of clock and count fields in SMF112 subtype 203 record. |
| FILE_DB_ACTION  |     | CHAR(3)     | File or database action in target table - CICS_O_FL_DTL_H.         |

When the File and Database Detailed Usage subcomponent is installed, the following rows are inserted into this lookup table:

| FILE_DB_TYPE | FILE_DB_SUBTYPE | FILE_DTL_FLD_NO | FILE_DB_ACTION |
|--------------|-----------------|-----------------|----------------|
| VSAM         | N/A             | 1               | REA            |
| VSAM         | N/A             | 2               | WRI            |
| VSAM         | N/A             | 3               | UPD            |
| VSAM         | N/A             | 4               | DEL            |
| VSAM         | N/A             | 5               | BRO            |
| VSAM         | N/A             | 6               | MIS            |
| DLI          | PSB             | 1               | SCH            |
| DLI          | PSB             | 2               | TER            |

## Lookup tables

| FILE_DB_TYPE | FILE_DB_SUBTYPE | FILE_DTL_FLD_NO | FILE_DB_ACTION |
|--------------|-----------------|-----------------|----------------|
| DLI          | PSB             | 3               | GU             |
| DLI          | PSB             | 4               | GN             |
| DLI          | PSB             | 5               | GNP            |
| DLI          | PSB             | 6               | GHU            |
| DLI          | PSB             | 7               | GHN            |
| DLI          | PSB             | 8               | GHP            |
| DLI          | PSB             | 9               | INS            |
| DLI          | PSB             | 10              | DEL            |
| DLI          | PSB             | 11              | REP            |
| DLI          | DBD             | 1               | SCH            |
| DLI          | DBD             | 2               | TER            |
| DLI          | DBD             | 3               | GU             |
| DLI          | DBD             | 4               | GN             |
| DLI          | DBD             | 5               | GNP            |
| DLI          | DBD             | 7               | GHN            |
| DLI          | DBD             | 8               | GHP            |
| DLI          | DBD             | 9               | INS            |
| DLI          | DBD             | 10              | DEL            |
| DLI          | DBD             | 11              | REP            |
| IDMS         | RECORD          | 1               | BIN            |
| IDMS         | RECORD          | 2               | GFO            |
| IDMS         | RECORD          | 3               | AR             |
| IDMS         | RECORD          | 4               | KEE            |
| IDMS         | RECORD          | 5               | STO            |
| IDMS         | RECORD          | 6               | MOD            |
| IDMS         | RECORD          | 7               | ERP            |
| IDMS         | RECORD          | 8               | ERS            |
| IDMS         | RECORD          | 9               | ERA            |
| IDMS         | RECORD          | 10              | ERU            |
| IDMS         | RECORD          | 11              | CON            |
| IDMS         | AREA            | 1               | GFO            |
| IDMS         | AREA            | 2               | AR             |
| IDMS         | AREA            | 3               | KEE            |
| IDMS         | AREA            | 4               | REA            |
| IDMS         | SET             | 1               | GFO            |
| IDMS         | SET             | 2               | AR             |
| IDMS         | SET             | 3               | KEE            |
| IDMS         | SET             | 4               | IFS            |

| FILE_DB_TYPE | FILE_DB_SUBTYPE | FILE_DTL_FLD_NO | FILE_DB_ACTION |
|--------------|-----------------|-----------------|----------------|
| IDMS         | NONAME          | 1               | GFO            |
| IDMS         | NONAME          | 2               | AR             |
| IDMS         | NONAME          | 3               | KEE            |
| ADABAS       | N/A             | 1               | ISN            |
| ADABAS       | N/A             | 2               | SEA            |
| ADABAS       | N/A             | 3               | RRE            |
| ADABAS       | N/A             | 4               | RFI            |
| ADABAS       | N/A             | 5               | RDE            |
| ADABAS       | N/A             | 6               | HOL            |
| ADABAS       | N/A             | 7               | ADD            |
| ADABAS       | N/A             | 8               | UPD            |
| ADABAS       | N/A             | 9               | DEL            |
| ADABAS       | N/A             | 10              | REL            |
| SUPRA        | N/A             | 1               | ADD            |
| SUPRA        | N/A             | 2               | DEL            |
| SUPRA        | N/A             | 3               | FIN            |
| SUPRA        | N/A             | 4               | REA            |
| SUPRA        | N/A             | 4               | WRI            |
| DATAKOM      | N/A             | 1               | ADD            |
| DATAKOM      | N/A             | 2               | CNT            |
| DATAKOM      | N/A             | 3               | DEL            |
| DATAKOM      | N/A             | 4               | GN             |
| DATAKOM      | N/A             | 5               | GS             |
| DATAKOM      | N/A             | 6               | LSP            |
| DATAKOM      | N/A             | 7               | REA            |
| DATAKOM      | N/A             | 8               | REL            |
| DATAKOM      | N/A             | 9               | SEL            |
| DATAKOM      | N/A             | 10              | SSE            |
| DATAKOM      | N/A             | 11              | UPD            |
| MQ           | N/A             | 1               | OPN            |
| MQ           | N/A             | 2               | CLO            |
| MQ           | N/A             | 3               | GET            |
| MQ           | N/A             | 4               | PUT            |
| MQ           | N/A             | 5               | PU1            |
| MQ           | N/A             | 6               | INQ            |
| MQ           | N/A             | 7               | SET            |
| MQ           | N/A             | 8               | MIS            |
| USEREVT      | N/A             | 1               | F1             |

## Control tables

| FILE_DB_TYPE | FILE_DB_SUBTYPE | FILE_DTL_FLD_NO | FILE_DB_ACTION |
|--------------|-----------------|-----------------|----------------|
| USEREVT      | N/A             | 2               | F2             |
| USEREVT      | N/A             | 3               | F3             |
| USEREVT      | N/A             | 4               | F4             |
| USEREVT      | N/A             | 5               | F5             |
| USEREVT      | N/A             | 6               | F6             |
| USEREVT      | N/A             | 7               | F7             |
| USEREVT      | N/A             | 8               | F8             |
| USEREVT      | N/A             | 9               | F9             |
| USEREVT      | N/A             | 10              | F10            |

## CICS\_TIMEZONES

This lookup table associates a relative number with each MVS\_SYSTEM\_ID. This number represents the minute difference (negative or positive) with respect to GMT. The IBM Z Performance and Capacity Analytics administrator maintains this table through the administration dialog.

| Column name   | Key | Data type | Description   |
|---------------|-----|-----------|---|
| MVS_SYSTEM_ID | K   | CHAR(4)   | MVS system ID. This is the SMF system ID.           |
| TIMEOFF       |     | INTEGER   | Local time offset, in minutes, with respect to GMT. |

## Control tables

IBM Z Performance and Capacity Analytics creates and loads control tables during its installation; these tables control the results returned by the log collector. This section describes the CICS control tables, CICS\_DICTIONARY and CICS\_FIELD, used by the DRL2CICS record procedure in its handling of CICS monitoring records.

## CICS\_DICTIONARY

The CICS\_DICTIONARY control table provides CICS dictionary records. As described in [Chapter 5, “Data flow and IBM Z Performance and Capacity Analytics objects,”](#) on page 45, the record procedure that handles CICS monitoring records (DRL2CICS) uses and maintains this table. It contains information about the last CICS dictionary record found for each combination of MVS\_SYSTEM\_ID, CICS\_SYSTEM\_ID, CLASS, and VERSION.

| Column name    | Key | Data type | Description   |
|----------------|-----|-----------|---|
| MVS_SYSTEM_ID  | K   | CHAR(4)   | MVS system ID. From SMFMNSID (V3) or SMFSID (V2).   |
| CICS_SYSTEM_ID | K   | CHAR(8)   | CICS generic ID. This is the VTAM application identifier for the CICS system that produced the dictionary. From SMFMNPRN (V3) or SMFPSPRN (V2).   |
| CICS_VER       | K   | CHAR(4)   | CICS Version and Release that created this dictionary (from the field SMFMNVRN). Ex.0410.   |
| CLASS          | K   | SMALLINT  | Monitoring class. This is 2 for accounting (CICS/MVS V2 only), 3 for performance data, and 4 for exception data (CICS/MVS V2 only). From SMFMNCL (V3) or MNSEGCL (V2).                      |
| VERSION        | K   | SMALLINT  | Version of the CICS system that produced the dictionary. This is 2 for CICS/MVS (V2), 3 for CICS/ESA Version 3, and so on. Set by DRL2CICS based on SMFMNSTY (V3 and later) or SMFSTY (V2). |

| Column name   | Key | Data type | Description  |
|---------------|-----|-----------|--|
| FIELD_NO      | K   | SMALLINT  | Assigned connector for this dictionary entry (CMODCONN). This is also the index to the dictionary entry array.   |
| CICS_VER      | K   | CHAR(4)   | CICS Version and release that created this dictionary. From SMFMNRVN. Ex. 0410   |
| DICT_ENTRY_ID |     | CHAR(12)  | Dictionary entry ID. It is made up of the CMODNAME, CMODTYPE and CMODIDNT fields in the dictionary entry. It is used to uniquely identify each dictionary entry. |
| OUTPUT_LENGTH |     | SMALLINT  | Field length for matching DICT_ENTRY_ID in CICS_FIELD. It is used for building the output record.  |
| OUTPUT_OFFSET |     | SMALLINT  | Field offset for matching DICT_ENTRY_ID in CICS_FIELD. It is used for building the output record.  |
| USED          |     | CHAR(8)   | A flag indicating (if=Y) that this dictionary entry has been updated with field length and offset data from a matching DICT_ENTRY_ID in CICS_FIELD.              |

## CICS\_FIELD

As described in Chapter 5, “Data flow and IBM Z Performance and Capacity Analytics objects,” on page 45, the CICS\_FIELD control table provides CICS dictionary fields. It updates the dictionary blocks in DRL2CICS with field length and field offset, which are used to build the output record.

| Column name    | Key | Data type | Description  |
|----------------|-----|-----------|--|
| CLASS          | K   | SMALLINT  | CMF record class. 2 for accounting (CICS/MVS V2 only), 3 for performance data (transaction and global (CICS/MVS V2 only)), and 4 for exception data (CICS/MVS V2 only).                    |
| DICT_ENTRY_ID  | K   | CHAR(12)  | Dictionary entry ID. It is made up of the CMODNAME, CMODTYPE and CMODIDNT fields in the dictionary entry. It is used to uniquely identify each dictionary entry.                           |
| FIRST_CICS_VER | K   | CHAR(4)   | This is first version of CICS that introduced this CMODTYPE and CMODIDNT with these attributes. This allows multiple versions of the same key as many fields were changed with CICS TS 3.2 |
| OUTPUT_LENGTH  |     | SMALLINT  | Field length that will be used to build the output record.   |
| OUTPUT_OFFSET  |     | INTEGER   | Field offset that will be used to build the output record. This offset should match the SMF_CICS_T, _G, _A, _E2 record definitions.  |



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## Chapter 7. Reports

The reporting function produces reports based on the data in the IBM Z Performance and Capacity Analytics database. Reports can show data from tables or from views. You can request reports online or by submitting batch jobs. Typically, you use online reporting for reports that you use once, and batch reporting for regularly required reports. This chapter contains examples of reports that accompany the CICS Performance Feature.

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### Report format and general description

IBM Z Performance and Capacity Analytics presents reports in tables, graphs, or charts. All reports have the same basic report layout. This section describes the elements that are common among IBM Z Performance and Capacity Analytics feature reports:

- Report ID
- Report group
- Source
- Attributes
- Variables

#### Report ID

IBM Z Performance and Capacity Analytics assigns each report a unique identifier. The CICS Performance Feature uses this format for report IDs:

**CICSyxx**

Where:

**y**

Can be one of the following:

**1-7**

The number of a CICS Monitoring subcomponent

**8**

The statistics component

**9**

The Transaction and Unit-of-Work Analysis component

**xx**

Is a sequential number given to the reports in a component or subcomponent.

Examples:

CICS404

CICS802

#### Report group

IBM Z Performance and Capacity Analytics uses several predefined report groups. Typically, each component has one group, but some components have several groups. Some groups are shared by many components (for example, management overview reports, performance reports, problem reports, and exception reports).

All reports supplied with the CICS Performance Feature are in the CICS report group.

### Source

Each report contains information from one or more source tables. The report descriptions in this chapter list source tables. Refer to these source tables if you are interested in learning where certain data originates.

### Attributes

Each report has certain attributes associated with it. Use these attributes as *keywords* to search for specific reports in the dialogs.

You can specify any number of attributes for a report, but these attributes are always present for predefined reports:

- The area to which the report belongs (for example, CICS/ESA)
- The task that the report supports:

#### **Performance**

Performance control task

#### **Service**

Service-level planning task

#### **Capacity**

Capacity planning task

#### **Security**

Security control task

#### **Configuration**

Configuration management discipline

#### **Operation**

Operations management discipline

#### **Change**

Change management discipline

#### **Problem**

Problem management discipline

You can also specify these attributes, when appropriate:

- Resource types, such as storage or CPU
- Performance issues, such as availability or response
- Presentation forms, such as detail, overview, or trend
- Time resolutions, such as hourly, daily, weekly, monthly, or yearly

### Variables

Each report has variables associated with it. You specify the values for these variables when you generate the report using the reporting dialog.

When you specify a date for a monthly report, specify the first day of the month. When you specify a date for weekly reports, specify the first day (Monday) of the week. Otherwise, there is no match in the data table.

For reports that specify a range of weeks, the data is taken from the summary records for all Mondays in the specified date range. For example, if you specify '2000-04-21' (a Friday) to '2000-04-28', one summary row is selected, the one for the week beginning '2000-04-24'. So the report shows summary data for the week '2000-04-24' to '2000-04-30' inclusive.

If a character variable happens to have only numeric characters, enclose it in single quote marks, otherwise it will not match the data. For example, if you have an MVS system ID (SMF ID) of 3090, specify it as '3090' on the Variables window.



## Reports in the CICS Monitoring component

As described in “Evaluating the CICS Monitoring component” on page 10, the CICS Monitoring Facility provides the performance data for the CICS monitoring component. It is the only CICS Performance Feature component that contains subcomponents. This section describes the reports for the CICS monitoring component and indicates which subcomponents must be installed to create them.

### CICS Transaction Performance, Detail

Supplied with the CICS basic subcomponent, this report shows details from CMF performance records.

For information on how to use this report, see “Monitoring volumes and throughput” on page 29.

This information identifies the report:

#### Report ID

CICS101 (CICS101P for CICS Partitioning Feature)

#### Report group

CICS Reports

#### Source

CICS\_TRANSACTION\_D (CICS\_TRANSACTION\_DP for CICS Partitioning Feature)

#### Attributes

CICS, Perform, Transaction, Daily, Detail

#### Variables

From date, To date, MVS system ID, CICS system ID

| CICS Transaction Performance, Detail                     |            |                     |                    |                      |                  |                |            |                             |                        |                        |
|--|------------|---------------------|--------------------|----------------------|------------------|----------------|------------|-----------------------------|------------------------|------------------------|
| MVS ID = 'IP02' CICS ID = 'CFGTV1'                       |            |                     |                    |                      |                  |                |            |                             |                        |                        |
| Date: '2000-03-19' to '2000-03-20'                       |            |                     |                    |                      |                  |                |            |                             |                        |                        |
| Tran ID  | Tran count | Avg resp time (sec) | Avg CPU time (sec) | Prog load reqs (avg) | Prog loads (avg) | FC calls (avg) | Exceptions | Program storage bytes (max) | Getmains < 16 MB (avg) | Getmains > 16 MB (avg) |
| QUIT   | 7916       | 0.085               | 0.017              | 0                    | 0                | 18             | 0          | 74344                       | 22                     | 0                      |
| CRTE   | 1760       | 4.847               | 0.004              | 0                    | 0                | 0              | 0          | 210176                      | 1                      | 0                      |
| AP00   | 1750       | 0.184               | 0.036              | 0                    | 0                | 8              | 0          | 309800                      | 66                     | 0                      |
| PM94   | 1369       | 0.086               | 0.012              | 0                    | 0                | 6              | 0          | 130096                      | 24                     | 0                      |
| VCS1   | 737        | 0.073               | 0.008              | 2                    | 0                | 7              | 0          | 81200                       | 14                     | 0                      |
| PM80   | 666        | 1.053               | 0.155              | 1                    | 0                | 62             | 0          | 104568                      | 583                    | 0                      |
| CESN   | 618        | 8.800               | 0.001              | 0                    | 0                | 0              | 0          | 41608                       | 0                      | 0                      |
| SU01   | 487        | 0.441               | 0.062              | 4                    | 0                | 126            | 0          | 177536                      | 38                     | 0                      |
| ...  |            |                     |                    |                      |                  |                |            |                             |                        |                        |
| GC11   | 1          | 0.341               | 0.014              | 1                    | 0                | 2              | 0          | 37048                       | 10                     | 0                      |
| DM08   | 1          | 0.028               | 0.002              | 0                    | 0                | 0              | 0          | 5040                        | 3                      | 0                      |
| =====  |            |                     |                    |                      |                  |                |            | =====                       |                        |                        |
|  | 20359      |                     |                    |                      |                  |                |            | 309800                      |                        |                        |
| IBM Z Performance and Capacity Analytics Report: CICS101 |            |                     |                    |                      |                  |                |            |                             |                        |                        |

Figure 36. Example of a CICS Transaction Performance, Detail report

The report contains this information:

#### Tran ID

Transaction ID.

#### Tran count

The SIT (system initialization table) parameter MNCONV=YES is important for this field, because setting MNCONV=YES causes CMF to write a monitoring record for each terminal I/O, not just at the end of the transaction. So, for a MNCONV=YES system, this is not the number of transactions, but the number of terminal interactions. From RECORDS.

#### Avg resp time (sec)

Internal response time, which does not include any network time. Calculated as RESPONSE\_SUM\_SEC/RECORDS.

### Avg CPU time (sec)

Processor time. Calculated as CPU\_SUM\_SEC/RECORDS.

### Prog load reqs (avg)

Average number of program load requests per transaction. Calculated as PGM\_LOAD\_REQUESTS/RECORDS.

### Prog loads (avg)

Average number of program library fetches per transaction. Calculated as PGM\_LOADS/RECORDS.

### FC calls (avg)

Average number of file control requests per transaction. Calculated as FC\_REQUESTS\_TOTAL/RECORDS.

### Exceptions

Total number of exceptions. If this is not zero, you can get more information in the CICS Exceptions report.

### Program storage bytes (max)

Peak amount of program storage both above and below the 16MB line, in bytes. This is the maximum of STORAGE\_PGM\_TOTAL.

### Getmains < 16 MB

Average number of user-storage GETMAIN requests below the 16MB line. Calculated as (GETMAINS\_UDSA + GETMAINS\_CDSA)/RECORDS.

### Getmains > 16 MB

Average number of user-storage GETMAIN requests above the 16MB line. Calculated as (GETMAINS\_EUDSA + GETMAINS\_ECDSA)/RECORDS.

## CICS Transaction Channel Performance, Detail

Supplied with CICS basic subcomponent, this report shows details from CMF performance records related to channel mechanism usage for data exchange between CICS programs.

This information identifies the report:

### Report ID

CICS102 (CICS102P for CICS Partitioning Feature)

### Report group

CICS Reports

### Source

CICSCHN\_TRANSACTION\_D, CICS\_TRANSACTION\_D (CICSCHN\_TRANSAC\_DP, CICS\_TRANSACTION\_DP for CICS Partitioning feature)

### Attributes

CICS, Perform, Channel, Containers, Transaction, Daily, Detail

### Variables

From date, To date, MVS system ID, CICS system ID, Tran ID

| CICS Transaction Channel Performance, Detail             |            |                     |                    |                                |                                 |                                 |                                  |
|--|------------|---------------------|--------------------|--------------------------------|---------------------------------|---------------------------------|----------------------------------|
| MVS System: 'MVS8' CICS system = 'FGAIZ'                 |            |                     |                    |                                |                                 |                                 |                                  |
| Date: '2005-05-01' to '2005-05-03'                       |            |                     |                    |                                |                                 |                                 |                                  |
| Tran ID  | Tran count | Avg resp time (sec) | Avg CPU time (sec) | Local Start Channel reqs (avg) | Remote Start Channel reqs (avg) | Local Start Channel bytes (avg) | Remote Start Channel bytes (avg) |
| QUIT   | 507        | 6.964               | 0.000              | 0.000                          | 0.000                           | 0.000                           | 0.000                            |
| CRTE   | 120        | 2.439               | 0.000              | 0.000                          | 0.000                           | 0.000                           | 0.000                            |
| =====  | 627        |                     |                    |                                |                                 |                                 |                                  |
| IBM Z Performance and Capacity Analytics Report: CICS102 |            |                     |                    |                                |                                 |                                 |                                  |

Figure 37. Example of a CICS Transaction Channel Performance, Detail report

The report contains this information:

**Tran ID**

Transaction ID.

**Tran count**

Number of transactions. The SIT (system initialization table) parameter MNCONV=YES is important for this field, because setting MNCONV=YES causes CMF to write a monitoring record for each terminal I/O, not just at the end of the transaction. So, for a MNCONV=YES system, this is not the number of transactions, but the number of terminal interactions. From RECORDS.

**Avg resp time (sec)**

Internal response time, which does not include any network time. Calculated as RESPONSE\_SUM\_SEC/RECORDS.

**Avg CPU time (sec)**

Processor time. Calculated as CPU\_SUM\_SEC/RECORDS.

**Local Start Channel reqs (avg)**

Average number of local interval control START requests, with CHANNEL option. Calculated as START\_CHAN\_LREQS/RECORDS.

**Remote Start Channel reqs (avg)**

Average number of interval control START CHANNEL requests, to be executed on remote systems. Calculated as START\_CHAN\_RREQS/RECORDS.

**Local Start Channel bytes (avg)**

Average length in bytes, of the data in the containers of all the locally-executed START CHANNEL requests issued by the user task. Calculated as LREQS\_BYTES/RECORDS.

**Remote Start Channel bytes (avg)**

Average length in bytes, of the data in the containers of all the remotely-executed START CHANNEL requests issued by the user task. Calculated as RREQS\_BYTES/RECORDS.

## CICS Application Channel Performance, Detail

Supplied with CICS Basic Application Analysis subcomponent, this report shows details on channel mechanism usage for data exchange between CICS programs for selected applications for one day. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table. The columns give the average value for each transaction, but the value is really the average for each performance record. RECORDS is the number of performance records collected, and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

This information identifies the report:

**Report ID**

CICS408 (CICS408P for CICS Partitioning feature)

**Report group**

CICS Reports

**Source**

CICSCHN\_A\_BASIC\_H, CICS\_A\_BASIC\_H (CICSCHN\_A\_BASIC\_HP, CICS\_A\_BASIC\_HP for CICS Partitioning feature)

**Attributes**

CICS, Perform, Channel, Containers, Transaction, Daily, Detail

**Variables**

From date, To date, MVS system ID, CICS system ID, Application name

| CICS Transaction Channel Performance, Detail |            |                     |                    |                        |                        |                             |                                 |                                |                                  |
|--|------------|---------------------|--------------------|------------------------|------------------------|-----------------------------|---------------------------------|--------------------------------|----------------------------------|
| MVS System: 'MVS8' CICS system = 'FGAIZ'     |            |                     |                    |                        |                        |                             |                                 |                                |                                  |
| Date: '2005-05-01' to '2005-05-03'           |            |                     |                    |                        |                        |                             |                                 |                                |                                  |
| Application name                             | Tran count | Avg resp time (sec) | Avg CPU time (sec) | PGM Link channel (avg) | PGM XCTL channel (avg) | Local PGM SPL channel (avg) | Remote Start Channel reqs (avg) | Local Start Channel reqs (avg) | Remote Start Channel bytes (avg) |
| OTHER  | 507        | 6.964               | 0.000              | 0.000                  | 0.000                  | 0.000                       | 0.000                           | 0.000                          | 0.000                            |
| SYSTEM                                       | 120        | 2.439               | 0.000              | 0.000                  | 0.000                  | 0.000                       | 0.000                           | 0.000                          | 0.000                            |
|  | =====      |                     |                    |                        |                        |                             |                                 |                                |                                  |
|  | 627        |                     |                    |                        |                        |                             |                                 |                                |                                  |

IBM Z Performance and Capacity Analytics Report: CICS408

Figure 38. Example of a CICS Application Channel Performance, Detail report

The report contains this information:

### Application name

Application name.

### Tran count

Number of transactions. The SIT (system initialization table) parameter MNCONV=YES is important for this field, because setting MNCONV=YES causes CMF to write a monitoring record for each terminal I/O, not just at the end of the transaction. So, for a MNCONV=YES system, this is not the number of transactions, but the number of terminal interactions. From RECORDS.

### Avg resp time (sec)

Internal response time, which does not include any network time. Calculated as RESPONSE\_SUM\_SEC/RECORDS.

### Avg CPU time (sec)

Processor time. Calculated as CPU\_SUM\_SEC/RECORDS.

### PGM link channel (avg)

Average number of local program LINK requests, with CHANNEL option. Calculated as LINK\_CHAN\_REQS/RECORDS.

### PGM XCTL channel (avg)

Average number of program XCTL requests issued with the CHANNEL option. Calculated as XCTL\_CHAN\_REQS/RECORDS.

### PGM DPL channel (avg)

Average number of program distributed program link (DPL) requests issued with the CHANNEL option. Calculated as DPL\_CHAN\_REQS/RECORDS.

### Local Start Channel bytes (avg)

Average length in bytes, of the data in the containers of all the locally-executed START CHANNEL requests issued by the user task. Calculated as LREQS\_BYTES/RECORDS.

### Remote Start Channel bytes (avg)

Average length in bytes, of the data in the containers of all the remotely-executed START CHANNEL requests issued by the user task. Calculated as RREQS\_BYTES/RECORDS.

## CICS Application Response Times, Overview

Supplied with the basic application analysis subcomponent, this report shows the average internal response time for selected applications over a specified time period. For information on how to use this report, see [“Monitoring response time” on page 24](#).

This information identifies the report:

### Report ID

CICS401 (CICS401P for CICS Partitioning Feature)

### Report group

CICS Reports

**Source**

CICS\_A\_BASIC\_H (CICS\_A\_BASIC\_HP for CICS Partitioning Feature)

**Attributes**

CICS, Perform, Resp, Application, Overview

**Variables**

From date, To tstem ID, CICS system ID, Period name, Appl name list

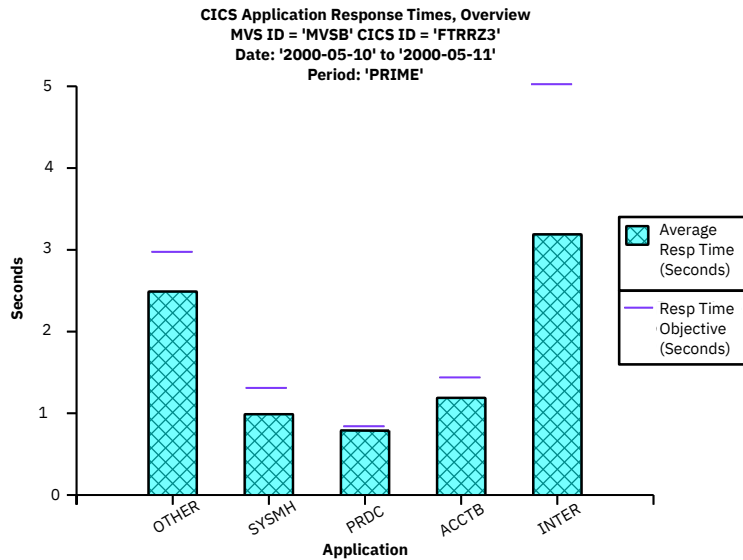


Figure 39. Example of a CICS Application Response Times, Overview report

The report contains this information:

**Application name**

Application name, as defined in the CICS\_LOOKUP\_APPL table.

**Resp time objective (seconds)**

Response time objective is from APPL\_RESP\_BND1\_SEC in the CICS\_LOOKUP\_APPL lookup table.

**Average resp time (seconds)**

Average internal response time, which does not include any network time. Calculated as  $\text{RESPONSE\_SUM\_SEC} / \text{RECORDS}$ . RECORDS is the number of performance records collected, and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

## CICS Application Response Times, Trend

Supplied with the basic application analysis subcomponent, this report shows the trend in internal response times for selected applications at weekly intervals. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table. For information on how to use this report, see [“Monitoring response time” on page 24](#).

This information identifies the report:

**Report ID**

CICS402 (CICS402P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_A\_BASIC\_W (CICS\_A\_BASIC\_WP for CICS Partitioning Feature)

**Attributes**

CICS, Perform, Resp, Application, Weekly, Trend

### Variables

From date, To date, MVS system ID, CICS system ID, Appl name list

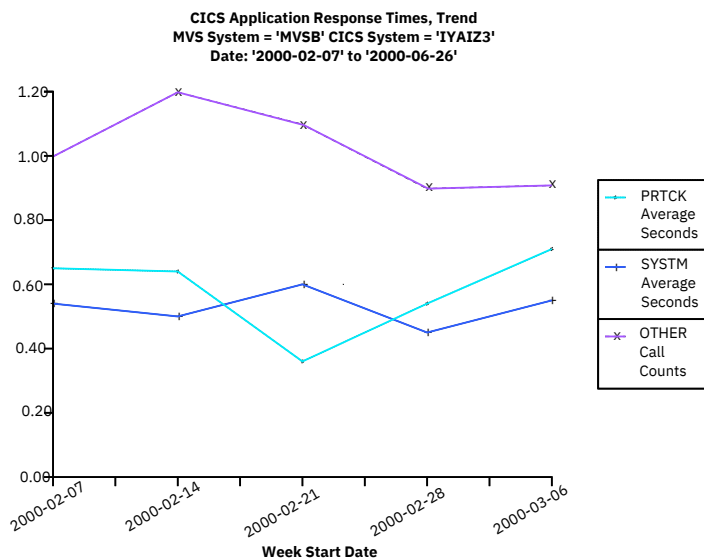


Figure 40. Example of a CICS Application Response Times, Trend report

The report contains this information:

#### Week start date

There is a bar for each week in the selected range of dates.

#### Application name

Application name, as defined in the CICS\_LOOKUP\_APPL table.

#### Average seconds

Average internal response time, which does not include any network time. Calculated as  $\text{RESPONSE\_SUM\_SEC} / \text{RECORDS}$ . RECORDS is the number of performance records collected, and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

## CICS Application Response Times, Detail

Supplied with the basic application analysis subcomponent, this report shows detailed CMF data for selected applications for one day. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table.

The columns give the average value for each transaction, but the value is really the average for each performance record. RECORDS is the number of performance records collected, and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

For information on how to use this report, see [“Monitoring response time” on page 24](#).

This information identifies the report:

#### Report ID

CICS403 (CICS403P for CICS Partitioning Feature)

#### Report group

CICS Reports

#### Source

CICS\_A\_BASIC\_H (CICS\_A\_BASIC\_HP for CICS Partitioning Feature)

#### Attributes

CICS, Perform, Resp, Application, Daily, Detail

**Variables**

Date, MVS system ID, CICS system ID

| CICS Application Response Times, Detail                  |                                     |                                   |                                   |                                   |                                   |                                     |                                     |                           |
|--|-------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|---------------------------|
| MVS system = 'MVS0' CICS system = 'FGAIZ'                |                                     |                                   |                                   |                                   |                                   |                                     |                                     |                           |
| Date: 2000-05-10   |                                     |                                   |                                   |                                   |                                   |                                     |                                     |                           |
| Application<br>name                                      | Tran<br>count                       | Average<br>elapsed<br>(sec)       | Average<br>CPU<br>(sec)           | Average<br>disp<br>(sec)          | Average<br>disp<br>wait<br>(sec)  | Average<br>re-disp<br>wait<br>(sec) | Average<br>SSL-TCB<br>wait<br>(sec) | XP-TCB<br>wait<br>(sec)   |
| -----  | -----                               | -----                             | -----                             | -----                             | -----                             | -----                               | -----                               | -----                     |
| OTHER  | 507                                 | 6.964                             | 0.000                             | 0.000                             | 0.064                             | 0.000                               | 0.000                               | 0.000                     |
| SYSTEM   | 120                                 | 2.439                             | 0.000                             | 0.000                             | 0.058                             | 0.000                               | 0.000                               | 0.000                     |
| =====  |                                     |                                   |                                   |                                   |                                   |                                     |                                     |                           |
|  | 627                                 |                                   |                                   |                                   |                                   |                                     |                                     |                           |
| Average<br>suspend<br>(sec)                              | Average<br>program<br>load<br>(sec) | Average<br>TD IO<br>wait<br>(sec) | Average<br>TS IO<br>wait<br>(sec) | Average<br>TC IO<br>wait<br>(sec) | Average<br>FC IO<br>wait<br>(sec) | Average<br>JC IO<br>wait<br>(sec)   | Average<br>MRO<br>wait<br>(sec)     | Average<br>except<br>wait |
| -----  | -----                               | -----                             | -----                             | -----                             | -----                             | -----                               | -----                               | -----                     |
| 0.307  | 0.025                               | 0.001                             | 0.023                             | 0.403                             | 0.000                             | 0.678                               | 0.069                               | 6.657                     |
| 0.201  | 0.077                               | 0.000                             | 0.011                             | 0.002                             | 0.000                             | 1.921                               | 0.001                               | 2.237                     |
| IBM Z Performance and Capacity Analytics Report: CICS403 |                                     |                                   |                                   |                                   |                                   |                                     |                                     |                           |

Figure 41. Example of a CICS Application Response Times, Detail report

The report contains this information:

**Application name**

Transactions are grouped by application name, according to the lookup table CICS\_LOOKUP\_APPL.

**Tran count**

Number of transactions. This is the sum of RECORDS.

**Average elapsed (sec)**

Average elapsed time per transaction, in seconds. Calculated as RESPONSE\_SUM\_SEC/RECORDS.

**Average CPU (sec)**

Average processor time per transaction, in seconds. Calculated as CPU\_SUM\_SEC/RECORDS.

**Average disp (sec)**

Average dispatch time per transaction, in seconds. Calculated as DISPATCH\_SEC/RECORDS.

**Average disp wait (sec)**

Average dispatch wait time per transaction, in seconds. Calculated as DISPATCH\_WAIT\_SEC/RECORDS.

**Average re-disp wait (sec)**

Average elapsed time the user task waited for re-dispatch after a CICS Dispatcher change-TCB mode request was issued by the user task.

**Average SSL-TCB wait (sec)**

Average elapsed time in which the user task waited to obtain a CICS SSL TCB (S8 mode) because the CICS system had reached the limit set by the system initialisation parameter MAXSSLTCBS.

**Average XP-TCB wait (sec)**

Average elapsed time in which the user task waited to obtain a CICS XP TCB (C8 or X9 mode), because the CICS system had reached the limit set by the system parameter MAXXPTCBS.

**Average suspend (sec)**

Average suspended time per transaction, in seconds. Calculated as SUSPEND\_SEC/RECORDS.

**Average program load (sec)**

Average program load time per transaction, in seconds. Calculated as PGM\_LOAD\_SEC/RECORDS.

**Average TD IO wait (sec)**

Average I/O wait time for the transient data intrapartition data set per transaction, in seconds. Calculated as TD\_IO\_WAIT\_SEC/RECORDS.

**Average TS IO wait (sec)**

Average I/O wait time for the auxiliary temporary storage data set per transaction, in seconds. Calculated as TS\_IO\_WAIT\_SEC/RECORDS.

**Average TC IO wait (sec)**

Average terminal I/O wait time per transaction, in seconds. Calculated as TC\_IO\_WAIT\_SEC/RECORDS.

**Average FC IO wait (sec)**

Average file I/O wait time per transaction, in seconds. Calculated as FC\_IO\_WAIT\_SEC/RECORDS.

**Average JC IO wait (sec)**

Average journal I/O wait time per transaction, in seconds. Calculated as JC\_IO\_WAIT\_SEC/RECORDS.

**Average MRO wait (sec)**

Average multiregion operation (MRO) wait time per transaction, in seconds. Calculated as MRO\_WAIT\_SEC/RECORDS.

**Average except wait (sec)**

Average exception wait time per transaction, in seconds. Calculated as EXCEPTION\_WAIT\_SEC/RECORDS.

## CICS Application CPU Utilization, Trend

Supplied with the Basic Application Analysis subcomponent, this report shows the trend in CPU utilization for selected applications for successive weeks. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table.

For information on how to use this report, see [“Monitoring processor use” on page 27](#).

This information identifies the report:

**Report ID**

CICS404 (CICS404P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_A\_BASIC\_W (CICS\_A\_BASIC\_WP for CICS Partitioning Feature)

**Attributes**

CICS, Perform, CPU, Application, Weekly, Trend

**Variables**

From date, To date, MVS system ID, CICS system ID, Appl name list



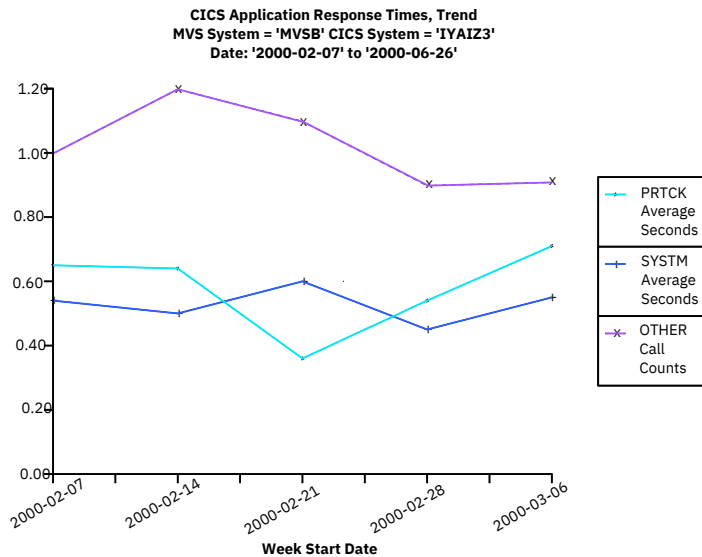


Figure 42. Example of a CICS Application Response Times, Trend report

The report contains this information:

**Week start date**

There is a bar for each week in the specified date range.

**Application name**

Application name, as defined in the CICS\_LOOKUP\_APPL table.

**CPU seconds**

Average processor time per transaction. Calculated as CPU\_SUM\_SEC/RECORDS.

The report gives the average value per transaction, but the value is really the average per performance record. RECORDS is the number of performance records collected, and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

## CICS Application I/O Wait Times, Detail

This report shows I/O wait times for selected applications for one day. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table.

The columns give the average value for each transaction, but the value is really the average for each performance record collected. RECORDS is the number of performance records collected and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

For information on how to use this report, see [“Monitoring response time” on page 24](#).

This information identifies the report:

**Report ID**

CICS405 (CICS405P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_A\_BASIC\_H (CICS\_A\_BASIC\_HP for CICS Partitioning Feature)

**Attributes**

CICS, Perform, IO, Wait, Application, Daily, Detail

### Variables

Date, MVS system ID, CICS system ID

The report contains this information:

### Application name

Transactions are grouped by application name, according to the CICS\_LOOKUP\_APPL table.

### Tran Count

Number of transactions. This is the sum of RECORDS.

### Average TC IO wait (sec)

Average elapsed time that the user task waited for input from the terminal operator, after issuing a RECEIVE request. Calculated as  $TC\_IO\_WAIT\_SEC/RECORDS$ .

### Average TS IO wait (sec)

Average elapsed time that the user task waited for input from the terminal operator, after issuing a RECEIVE request. Calculated as  $TC\_IO\_WAIT\_SEC/RECORDS$ .

### Average SHARED TS IO wait (sec)

Average elapsed time the user task waited for the completion of an asynchronous shared temporary storage request to a temporary storage data server. Calculated as  $TSSHWAIT\_CLOCK/RECORDS$ .

### Average TD IO wait (sec)

Average elapsed time that the user waited for VSAM transient data I/O. Calculated as  $TD\_IO\_WAIT\_SEC/RECORDS$ .

### Average JC IO wait (sec)

Average elapsed time that the user task waited for VSAM transient data I/O. Calculated as  $TD\_IO\_WAIT\_SEC/RECORDS$ .

### Average TD IO wait (sec)

Average elapsed time that the user task waited for journal I/O. Calculated as  $JC\_IO\_WAIT\_SEC/RECORDS$ .

### Average FC IO wait (sec)

Average elapsed time that the user waited for file I/O. Calculated as  $FC\_IO\_WAIT\_SEC/RECORDS$ .

### Average RLS IO wait (sec)

Average elapsed time that the user task waited for RLS file I/O. Calculated as  $RLSWAIT\_CLOCK/RECORDS$ .

### Average CFDT IO wait (sec)

Average elapsed time that the user task waited for a data table access request to the Coupling Facility Data Table server to complete. Calculated as  $CFDTWAIT\_CLOCK/RECORDS$ .

### Average SOCKET IO wait (sec)

Average elapsed time that the user waited for socket I/O. Calculated as  $SOIOWTT\_CLOCK/RECORDS$ .

### Average LU61 TC IO wait (sec)

Average elapsed time that the user task waited for I/O on a LUTYPE6.1 connection or session. This value includes the waits incurred for conversations across LUTYPE6.1 connections, but does not include the waits incurred due to LUTYPE6.1 syncpoint flows. Calculated as  $LU61\_IO\_WAIT\_SEC/RECORDS$ .

### Average LU62 TC IO wait (sec)

Average elapsed time that the user task waited for I/O on a LUTYPE6.2 (APPC) connection or session. This value includes the waits incurred for conversations across LUTYPE6.2 (APPC) connections, but does not include the waits incurred due to LUTYPE6.2 (APPC) syncpoint flows. Calculated as  $LU62\_IO\_WAIT\_SEC/RECORDS$ .

### Average MRO wait (sec)

Average elapsed time that the user task waited for control at the end of an MRO link. Calculated as  $MRO\_WAIT\_SEC/RECORDS$ .

### Average FEPI IO wait (sec)

Average elapsed time that the user task waited for all FEPI services. Calculated as  $FE\_WAIT\_SEC/RECORDS$ .

**Total IO wait time (sec)**

Total average I/O wait time. Calculated as (TC\_IO\_WAIT\_SEC+TS\_IO\_WAIT\_SEC+ TSSHWAIT\_CLOCK+TD\_IO\_WAIT\_SEC+JC\_IO\_WAIT\_SEC+ FC\_IO\_WAIT\_SEC+RLSWAIT\_CLOCK+CFDTPWAIT\_CLOCK+SOIOWTT\_CLOCK+MRO\_WAIT\_SEC+LU61\_IO\_WAIT\_SEC+ LU62\_IO\_WAIT\_SEC+FE\_WAIT\_SEC)/RECORDS.

**CICS Application Main Response Times, Detail**

This report shows main response times for selected applications for one day. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table.

The columns give the average value for each transaction, but the value is really the average for each performance record collected. RECORDS is the number of performance records collected and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

For information on how to use this report, see [“Monitoring response time” on page 24](#).

This information identifies the report:

**Report ID**

CICS406 (CICS406P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_A\_BASIC\_H (CICS\_A\_BASIC\_HP for CICS Partitioning Feature)

**Attributes**

CICS, Perform, Response, Application, Daily, Detail

**Variables**

Date, MVS system ID, CICS system ID

| CICS Application Main response Times, Detail |                                |                              |                               |                            |                            |                            |                            |                                 |  |
|--|--------------------------------|------------------------------|-------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------------|--|
| MVS System: 'MVS8' CICS system = 'FGAIZ'     |                                |                              |                               |                            |                            |                            |                            |                                 |  |
| Date: '2005-05-01'                           |                                |                              |                               |                            |                            |                            |                            |                                 |  |
| Application Name                             | Tran count                     | Average elapsed              | Average CPU (sec)             | Average DISP (sec)         | Average Program Load (sec) | Average RMI elapsed (sec)  | Average JVM wait (sec)     | Average syncpoint elapsed (sec) |  |
| OTHER  | 507                            | 6.964                        | 0.000                         | 0.000                      | 0.000                      | 0.000                      | 0.000                      | 0.000                           |  |
| SYSTEM                                       | 120                            | 2.439                        | 0.000                         | 0.000                      | 0.000                      | 0.000                      | 0.000                      | 0.000                           |  |
| Average QRMODDLY elapsed (sec)               | Average QORDISPT elapsed (sec) | Average QRCPUT elapsed (sec) | Average MSDISPT elapsed (sec) | Average MSCPUT proc. (sec) | Average J8CPUT proc. (sec) | Average S8CPUT proc. (sec) | Average X8CPUT proc. (sec) | Average X9CPUT proc. (sec)      |  |
| 0.000  | 0.000                          | 0.000                        | 0.000                         | 0.000                      | 0.000                      | 0.000                      | 0.000                      | 0.000                           |  |
| 0.000  | 0.000                          | 0.000                        | 0.000                         | 0.000                      | 0.000                      | 0.000                      | 0.000                      | 0.000                           |  |

IBM Z Performance and Capacity Analytics Report: CICS406

Figure 43. Example of a CICS Application Main Response Times, Detail report

The report contains this information:

**Application name**

Transactions are grouped by application name, according to the CICS\_LOOKUP\_APPL table.

**Tran Count**

Number of transactions. This is the sum of RECORDS.

**Average Elapsed (sec)**

Average elapsed time per transaction, in seconds. Calculated as RESPONSE\_SUM\_SEC/RECORDS.

### **Average CPU (sec)**

Average processor time per transaction, in seconds. Calculated as CPU\_SUM\_SEC/RECORDS.

### **Average DISP (sec)**

Average time dispatched per transaction, in seconds. Calculated as DISPATCH\_SEC/RECORDS.

### **Average Program Load (sec)**

Average program load time per transaction, in seconds. Calculated as PGM\_LOAD\_SEC/RECORDS.

### **Average RMI Elapsed (sec)**

Average amount of elapsed time spent in the Resource Manager Interface (RMI). Calculated as RMI\_SEC/RECORDS.

### **Average JVM wait (sec)**

Average elapsed time that was spent in the CICS JVM by the user task. Calculated as JVMTIME\_CLOCK/RECORDS.

### **Average syncpoint elapsed (sec)**

Average elapsed time that the user task was dispatched and was processing Syncpoint requests. Calculated as SYNCTIME\_CLOCK/RECORDS.

### **Average QRMODDLY elapsed (sec)**

Average elapsed time that the user task waited for redispach on the CICS QR TCB. This is the aggregate of the wait times between each event completion and user-task redispach. Calculated as QRMODDLY\_CLOCK/RECORDS.

### **Average QRDISPT elapsed (sec)**

Average elapsed time that the user task was dispatched on the CICS QR TCB. Calculated as QRDISPT\_CLOCK/RECORDS.

### **Average QRCPUT processor (sec)**

Average processor time that the user task was dispatched on the CICS QR TCB. Calculated as QRCPUT\_CLOCK/RECORDS.

### **Average MSDISPT elapsed (sec)**

Average elapsed time that the user task was dispatched on each CICS TCB (RO, CO, FO, SZ if FEPI is active, and RP if the ONC/RCP or CICS WEB Interface feature is installed and active). Calculated as MSDISPT\_CLOCK/RECORDS.

### **Average MSCPUT processor (sec)**

Average processor time that the user task was dispatched on each CICS TCB (RO, CO, FO, SZ if FEPI is active, and RP if the ONC/RCP or CICS WEB Interface feature is installed and active). Calculated as MSCPUT\_CLOCK/RECORDS.

### **Average J8CPUT processor (sec)**

Average processor time that the user task was dispatched on each CICS J8 TCB installed. Calculated as J8CPUT\_CLOCK/RECORDS.

### **Average S8CPUT processor (sec)**

Average processor time that the user task was dispatched on each CICS S8 TCB installed. Calculated as S8CPUT\_CLOCK/RECORDS.

### **Average X8CPUT processor (sec)**

Average processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS X8 mode TCB. When a transaction invokes a C or C++ program that was compiled with XPLINK option, and that is defined with EXECKEY=CICS, uses a CICS X8 mode TCB.

### **Average X9CPUT processor (sec)**

Average processor time during which the user task was dispatched by the CICS dispatcher domain on a CICS X9 mode TCB. When a transaction invokes a C or C++ program that was compiled with XPLINK option, and that is defined with EXECKEY=USER, uses a CICS X9 mode TCB.

## **CICS Application Wait Times, Detail**

This report shows wait (suspend) times for selected applications for one day. Before collecting the data for this report, you must first group transactions by application ID using the CICS\_LOOKUP\_APPL lookup table.

The columns give the average value for each transaction, but the value is really the average for each performance record collected. RECORDS is the number of performance records collected and can be higher than the number of transactions if MNCONV=YES is specified in the SIT, because a performance record is then written for each terminal interaction.

For information on how to use this report, see [“Monitoring response time”](#) on page 24.

This information identifies the report:

**Report ID**

CICS407 (CICS407P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_A\_BASIC\_H (CICS\_A\_BASIC\_HP for CICS Partitioning Feature)

**Attributes**

CICS, Perform, Wait, Application, Daily, Detail

**Variables**

Date, MVS system ID, CICS system ID

The report contains this information:

**Application name**

Transactions are grouped by application name, according to the CICS\_LOOKUP\_APPL table.

**Tran Count**

Number of transactions. This is the sum of RECORDS.

**Total IO wait time (sec)**

Total average I/O wait time. Calculated as  $(TC\_IO\_WAIT\_SEC + TS\_IO\_WAIT\_SEC + TSSHWAIT\_CLOCK + TD\_IO\_WAIT\_SEC + JC\_IO\_WAIT\_SEC + FC\_IO\_WAIT\_SEC + RLSWAIT\_CLOCK + CFDTWAIT\_CLOCK + SOIOWTT\_CLOCK + MRO\_WAIT\_SEC + LU61\_IO\_WAIT\_SEC + LU62\_IO\_WAIT\_SEC + FE\_WAIT\_SEC) / RECORDS$ .

**Total other wait time (sec)**

Total average I/O wait time. Calculated as  $(TC\_IO\_WAIT\_SEC + TS\_IO\_WAIT\_SEC + TSSHWAIT\_CLOCK + TD\_IO\_WAIT\_SEC + JC\_IO\_WAIT\_SEC + FC\_IO\_WAIT\_SEC + RLSWAIT\_CLOCK + CFDTWAIT\_CLOCK + SOIOWTT\_CLOCK + MRO\_WAIT\_SEC + LU61\_IO\_WAIT\_SEC + LU62\_IO\_WAIT\_SEC + FE\_WAIT\_SEC + REDISPATC\_WAIT\_SEC + SSLTCB\_WAIT\_SEC + XPTCBS\_WAIT\_SEC) / RECORDS$ .

**Suspend time (sec)**

Total average suspend time. Calculated as  $SUSPEND\_SEC / RECORDS$ .

## CICS Application DLI Call Utilization, Trend

This report consolidates data from the DBCTL application analysis subcomponent and the DL/I application analysis subcomponent. It shows the database call rate, by application.

**Note:** Although subcomponent 5 supplies this report, subcomponents 1, 2, 3, and 6 must also be installed to create it.

This information identifies the report:

**Report ID**

CICSA51 (CICSA51P for CICS Partitioning Feature)

**Report group**

CICS Reports

**Source**

CICS\_A\_DLI\_W, CICS\_A\_DBCTL\_W (CICS\_A\_DLI\_WP, CICS\_A\_DBCTL\_WP for CICS Partitioning Feature)

**Attributes**

CICS, DL/I, Application, Weekly, Trend

### Variables

MVS system ID, CICS system ID, Appl name list, From date, To date

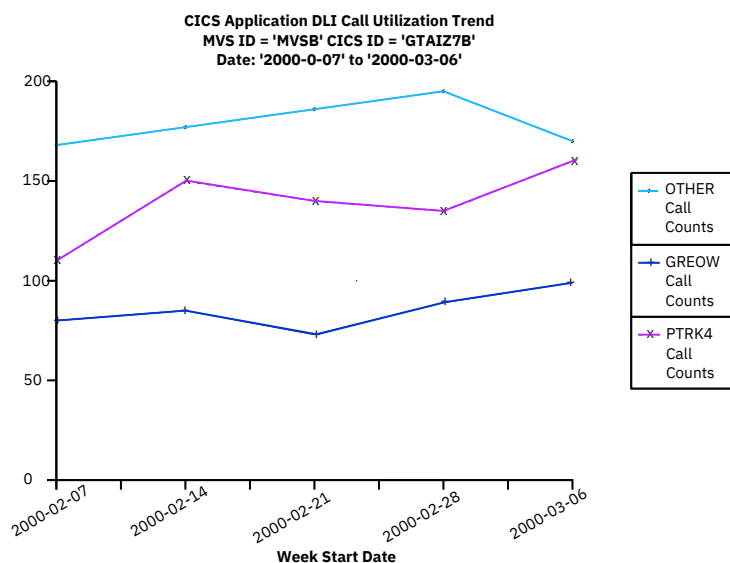


Figure 44. Example of a CICS Application DLI Call Utilization, Trend report

The report contains this information:

#### Date

There is one bar for each week in the specified date range. The dates are the first day (Monday) of each week.

#### Application name

Application name, as defined in the CICS\_LOOKUP\_APPL table.

#### Call counts

Number of database calls, the sum of CALL\_CNT from the CICS\_A\_DLI\_W table and DLI\_CALL\_CNT from the CICS\_A\_DBCTL\_W table.

## CICS/MVS CMF Transaction Statistics

Supplied with the CICS/MVS subcomponent (global + accounting), this report shows the most frequent transactions, using CMF accounting class data from a CICS Version 2 system.

The data is from a weekly table, so the total is calculated from the summary records for all Mondays in the specified date range. For example, if you specify '2000-04-21' (a Friday) to '2000-04-28', one summary row is selected: the one for the week beginning '2000-04-24'. So the report shows the total number of transactions run in the week '2000-04-24' to '2000-04-30' inclusive.

This information identifies the report:

#### Report ID

CICS701 (CICS701P for CICS Partitioning Feature)

#### Report group

CICS reports

#### Source

CICS\_M\_ACCOUNT\_W (CICS\_M\_ACCOUNT\_WP for CICS Partitioning Feature)

#### Attributes

CICS, Transactions, System, Daily, Statistics

#### Variables

MVS system ID, CICS system ID, From date, To date

| CICS/MVS CMF Transaction Statistics |              |
|-------------------------------------|--------------|
| MVS ID = 'IP02' CICS ID = 'CSRT5'   |              |
| Date: '2000-05-01' to '2000-06-01'  |              |
| 25 most frequent transactions       |              |
| Transaction ID                      | Transactions |
| QUIT                                | 7944         |
| AP00                                | 1754         |
| PM94                                | 1373         |
| CRTE                                | 819          |
| VCS1                                | 739          |
| PM80                                | 668          |
| SU01                                | 489          |
| ...                                 | ...          |
| PM23                                | 118          |
| VA02                                | 105          |
| VA23                                | 102          |
| GC08                                | 100          |
| IN24                                | 93           |
| DD01                                | 85           |

IBM Z Performance and Capacity Analytics Report: CICS701

Figure 45. Example of a CICS/MVS CMF Transaction Statistics report

The report contains this information:

**Transaction ID**

Transaction name.

**Transactions**

Sum of transactions performed in the selected weeks.

## CICS Transaction Processor Utilization, Daily

Supplied with the CICS/MVS subcomponent (global + accounting), this report shows the number of CICS transactions per processor second. The report provides information for CICS running on MVS working both in toleration and goal modes.

This information identifies the report:

**Report ID**

CICSA07 (CICSA07P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_M\_ACCOUNT\_D (CICS\_M\_ACCOUNT\_DP for CICS Partitioning Feature), MVS\_WORKLOAD\_D, MVS\_WORKLOAD2\_M

**Attributes**

CICS, Performance, Transaction, Daily, Detail

**Variables**

MVS system ID, CICS system ID, From date, To date

action Processor Utilization, DailyMVS ID = 'IP03' CICS ID = 'CFRTL6'Date: '2000-03-02' to '2000-03-08'

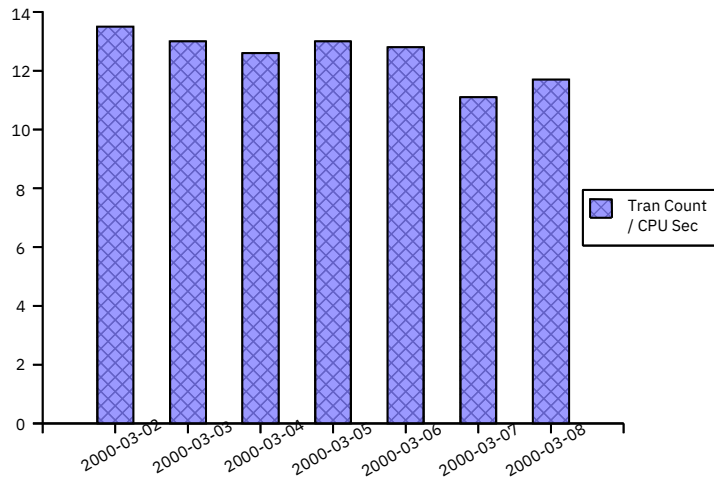


Figure 46. Example of a CICS Transaction Processor Utilization, Daily report

The report contains this information:

**Date**

There is one bar for each day in the specified date range.

**Tran count/CPU sec**

Number of transactions per processor second. The number of transactions is from the CICS/MVS CMF accounting records, and the processor time is the sum of TCB\_SECONDS and SRB\_SECONDS, from MVS.

### CICS Transaction Processor Utilization, Monthly

Supplied with the CICS/MVS subcomponent (global + accounting), this report shows the number of CICS transactions per processor second. The report provides information for CICS running on MVS working both in toleration and goal modes.

This information identifies the report:

**Report ID**

CICSA05 (CICSA05P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_M\_ACCOUNT\_M (CICS\_M\_ACCOUNT\_MP for CICS Partitioning Feature), MVS\_WORKLOAD\_M, MVS\_WORKLOAD2\_D

**Attributes**

CICS, Performance, Transaction, Monthly, Detail

**Variables**

MVS system ID, CICS system ID, From date, To date



Transaction Processor Utilization, Monthly MVS ID = '3000' CICS ID = 'CSFGT50' Date: '2000-01-01' to '2000-07-01'

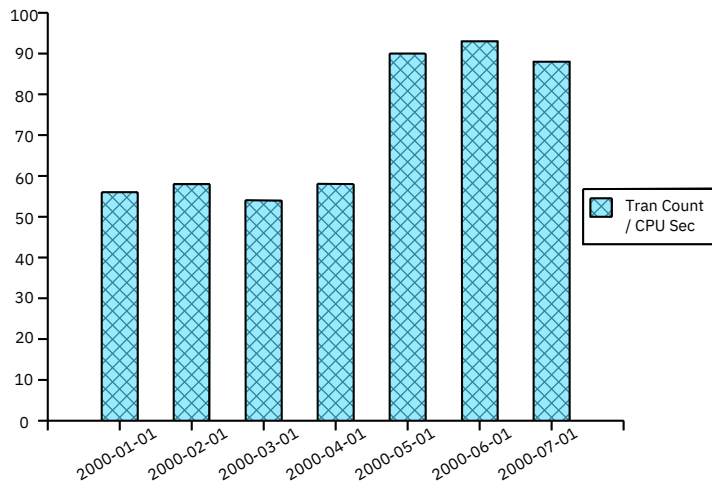


Figure 47. Example of a CICS Transaction Processor Utilization, Monthly report

The report contains this information:

#### Date

There is one bar for each month in the specified date range.

#### Tran count/CPU sec

Number of transactions per processor second. The number of transactions is from the CICS/MVS CMF accounting records, and the processor time is the sum of TCB\_SECONDS and SRB\_SECONDS, from MVS.

## CICS Transactions Resources Details, Daily

This report shows details about the files and TS queues used by each transaction.

This information identifies the report:

#### Report ID

CICST01 (CICST01P for CICS Partitioning feature)

#### Report group

CICS Reports

#### Source

CICS\_FILE\_TRAN\_D, CICS\_QUEUE\_TRAN\_D

#### Attributes

Monitoring, Transaction, Resources, Daily

#### Variables

From date, To date, Period name, MVS system ID, CICS system ID

| CICS Transactions Resources Details, Daily |         |                       |                            |                          |                               |
|--|---------|-----------------------|----------------------------|--------------------------|-------------------------------|
| MVS ID = 'IP02' CICS ID = 'CFGTV1'         |         |                       |                            |                          |                               |
| Date: '2004-03-02' to '2004-03-08'         |         |                       |                            |                          |                               |
| Date                                       | Tran ID | File Tot Time (Clock) | File I/O Wait Time (Clock) | TSQueue Tot Time (Clock) | TSQueue I/O Wait Time (Clock) |
| 2004-03-02                                 | QUIT    | 1.28160E-02           | 1.03200E-02                | 3.74720E-02              | 0.00000E+00                   |
| 2004-03-02                                 | CRTE    | 1.39200E-02           | 1.14000E-02                | 3.98720E-02              | 0.00000E+00                   |
| 2004-03-02                                 | QUIT    | 1.55130E-02           | 1.06600E-02                | 3.00520E-02              | 0.00000E+00                   |

IBM Z Performance and Capacity Analytics Report: CICST01

Figure 48. Example of a CICS Transactions Resources Details, Daily report

## Reports in the CICS monitoring component

The report contains this information:

**Date**

The date of the measurement. From Date.

**Tran ID**

The transaction identifier. From TRANSACTION\_ID.

**File Tot Time (Clock)**

The total elapsed time that the user task waited for the completion of all the requests issued by the user task for this file. From FILE\_TOT\_CLOCK.

**File I/O Wait Time (Clock)**

The total I/O wait time on this file. From FILE\_IOWAIT\_CLOCK.

**TSQueue Tot Time (Clock)**

The total elapsed time waited for completion of all requests for this temporary storage queue. From TSQUEUE\_TOT\_CLOCK.

**TSQueue I/O Wait Time (Clock)**

The total I/O wait time on this temporary storage queue. From TSQUEUE\_IOWAIT\_CLOCK.

## CICS Enterprise Java Beans Details, Daily

This report shows details about enterprise java beans data, by CORBA server name.

This information identifies the report:

**Report ID**

CICSJ01 (CICSJ01P for CICS Partitioning feature)

**Report group**

CICS Reports

**Source**

CICS\_BEAN\_REQ\_D

**Attributes**

Monitoring, EJB, CORBA, Daily

**Variables**

From date, To date, Period name, MVS system ID, CICS system ID

| CICS Enterprise Java Beans Details, Daily                |              |                  |                   |                     |                    |                   |                      |
|--|--------------|------------------|-------------------|---------------------|--------------------|-------------------|----------------------|
| MVS ID = 'IP02' CICS ID = 'CFGTV1'                       |              |                  |                   |                     |                    |                   |                      |
| Date: '2004-05-21' to '2004-05-27'                       |              |                  |                   |                     |                    |                   |                      |
| Date   | CORBA server | Bean activations | Bean passivations | Bean creation calls | Bean removal calls | Bean method calls | Total beans occurred |
| 2004-05-21   | CBS1         | 50.00            | 32.00             | 83.00               | 10.00              | 60.00             | 180.00               |
| IBM Z Performance and Capacity Analytics Report: CICSJ01 |              |                  |                   |                     |                    |                   |                      |

Figure 49. Example of a CICS Transactions Resources Details, Daily report

The report contains this information:

**Date**

The date of the measurement.

**CORBA server**

The CORBA server name. From CORBASER\_NAME.

**Bean activations**

The number of bean activations. From BEANACT\_REQ\_NUM.

**Bean passivations**

The number of bean passivations. From BEANPAS\_REQ\_NUM.

**Bean creation calls**

The number of bean creation calls. From BEANCRE\_REQ\_NUM.

**Bean removal calls**

The number of bean removal calls. From BEANREM\_REQ\_NUM.

**Bean method calls**

The number of bean method calls executed. From BEANMET\_REQ\_NUM.

**Bean method calls**

The total beans occurred. From BEANTOT\_REQ\_NUM.

## Reports in the CICS OMEGAMON Monitoring component

As described in “Evaluating the CICS OMEGAMON Monitoring component” on page 12, OMEGAMON XE for CICS provides the performance data for the CICS OMEGAMON Monitoring component. The CICS OMEGAMON Monitoring component contains subcomponents. This section describes the reports for the CICS monitoring component and indicates which subcomponents must be installed to create them.

### CICS OMEGAMON database/file total requests, hourly

This report shows the hourly total request count, per database/file type. The File and Database Detailed Usage Subcomponent needs to be installed to run this report.

This information identifies the report:

**Report ID**

CICSOMEG001

**Report Description**

OMEGAMON database/file total requests, hourly

**Report group**

CICS\_OMEG

**Source**

CICS\_O\_FL\_DTL\_H

**Attributes**

CICS, OMEGAMON, TOTAL, REQUESTS, HOURLY

**Variables**

From date, MVS system ID, CICS system ID, Period Name, File DB Type

| OMEGAMON database/file total requests, hourly                |        |         |       |       |       |       |
|--|--------|---------|-------|-------|-------|-------|
| MVS ID: 'SYS ' CICS ID: 'CICSXX64'                           |        |         |       |       |       |       |
| DATE: '2007-06-07'   |        |         |       |       |       |       |
| FILE/DATABASE TYPE: All                                      |        |         |       |       |       |       |
| HOUR   | TYPE   |         |       |       |       |       |
|  | ADABAS | DATACOM | IDMS  | MQ    | SUPRA | VSAM  |
| 20   | 72576  | 44352   | 16128 | 3879  | 30240 | 34272 |
| 21   |        |         |       | 2304  |       |       |
|  | =====  | =====   | ===== | ===== | ===== | ===== |
|  | 72576  | 44352   | 16128 | 6183  | 30240 | 34272 |
| IBM Z Performance and Capacity Analytics Report: CICSOMEG001 |        |         |       |       |       |       |

Figure 50. Example of a CICS OMEGAMON database/file total requests, hourly report

The report contains this information:

**Hour**

The time of the measurement.

**Type**

The file or database type.

**Total requests**

The total number of requests issued against the file or database type. Calculated as SUM(COUNT).

## CICS OMEGAMON database/file total commands, hourly

This report shows the hourly total command count, for the selected database/file type. The File and Database Detailed Usage Subcomponent needs to be installed to run this report.

This information identifies the report:

**Report ID**

CICSOMEG002

**Report Description**

OMEGAMON database/file total commands, hourly

**Report group**

CICS\_OMEG

**Source**

CICS\_O\_FL\_DTL\_H

**Attributes**

CICS, OMEGAMON, TOTAL, REQUESTS, HOURLY

**Variables**

From date, MVS system ID, CICS system ID, Period Name, File DB Type

| OMEGAMON database/file total commands, hourly                |             |             |             |             |             |
|--|-------------|-------------|-------------|-------------|-------------|
| MVS ID: 'SYS ' CICS ID: 'CICSXX64'                           |             |             |             |             |             |
| DATE: '2007-06-07'   |             |             |             |             |             |
| FILE/DATABASE TYPE: 'MQ '                                    |             |             |             |             |             |
| COMMAND  |             |             |             |             |             |
| HOURL  | ←-- CLO --→ | ←-- GET --→ | ←-- INQ --→ | ←-- OPN --→ | ←-- PUT --→ |
| 20   | 431         | 1891        | 246         | 431         | 4423        |
| 21   | 256         | 650         | 135         | 256         | 642         |
| =====  | =====       | =====       | =====       | =====       | =====       |
|  | 687         | 2541        | 381         | 687         | 5065        |
| IBM Z Performance and Capacity Analytics Report: CICSOMEG002 |             |             |             |             |             |

Figure 51. Example of a CICS OMEGAMON database/file total commands, hourly report

The report contains this information:

**Hour**

The time of the measurement.

**Command**

The command issued against the file or database type.

**Total requests**

The total number of requests issued against the file or database type. Calculated as SUM(COUNT).

## CICS OMEGAMON database/file avg request response, daily

This report shows the daily average response time, for the total commands, per file/database type. The File and Database Detailed Usage Subcomponent needs to be installed to run this report.

This information identifies the report:

**Report ID**

CICSOMEG003

**Report Description**

OMEGAMON database/file avg request response, daily

**Report group**

CICS\_OMEG

**Source**

CICS\_O\_FL\_DTL\_D

**Attributes**

CICS, OMEGAMON, AVERAGE, REQUEST, RESPONSE, DAILY

**Variables**

From date, To Date, MVS system ID, CICS system ID, Period Name, File DB Type

|  |            |             |            |           |             |
|--|------------|-------------|------------|-----------|-------------|
| OMEGAMON database/file avg request response, daily           |            |             |            |           |             |
| MVS ID: 'SYS ' CICS ID: 'CICSXX64'                           |            |             |            |           |             |
| FROM '2007-06-07' TO '2007-06-07'                            |            |             |            |           |             |
| FILE/DATABASE TYPE: All                                      |            |             |            |           |             |
| ----- TYPE -----   |            |             |            |           |             |
| DATE   | ◀ ADABAS ▶ | ◀ DATACOM ▶ | ◀ IDMS --▶ | ◀ MQ ---▶ | ◀ SUPRA --▶ |
| 2007-06-07   | 3.880E-05  | 7.986E-03   | 5.821E-03  | 5.387E-03 | 1.680E-02   |
|  | =====      | =====       | =====      | =====     | =====       |
|  | 3.880E-05  | 7.986E-03   | 5.821E-03  | 5.387E-03 | 1.680E-02   |
| IBM Z Performance and Capacity Analytics Report: CICSOMEG003 |            |             |            |           |             |

*Figure 52. Example of a CICS OMEGAMON database/file avg request response, daily report*

The report contains this information:

**Date**

The date of the measurement.

**Type**

The file or database type.

**Average response time**

The average response time for all requests issued against the file or database type. Calculated as SUM(CLOCK)/SUM(COUNT).

**CICS OMEGAMON database/file avg command response, daily**

This report shows the daily average response time, per command, for the selected file/database type. The File and Database Detailed Usage Subcomponent needs to be installed to run this report.

This information identifies the report:

**Report ID**

CICSOMEG004

**Report Description**

OMEGAMON database/file avg command response, daily

**Report group**

CICS\_OMEG

**Source**

CICS\_O\_FL\_DTL\_D

**Attributes**

CICS, OMEGAMON, AVERAGE, COMMAND, RESPONSE, DAILY

**Variables**

From date, To Date, MVS system ID, CICS system ID, Period Name, File DB Type

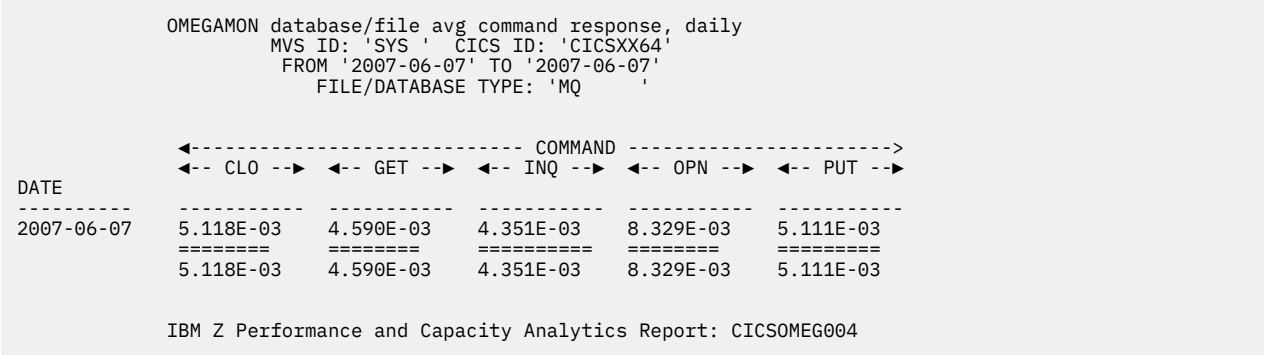


Figure 53. Example of a CICS OMEGAMON database/file avg command response, daily report

The report contains this information:

- Date**  
The date of the measurement.
- Command**  
The command issued against the file or database type.
- Average response time**  
The average response time for all requests issued against the file or database type. Calculated as SUM(CLOCK)/SUM(COUNT).

CICS OMEGAMON transaction database/file requests, daily

This report shows the daily total requests, per file/database type, per transaction. The File and Database Detailed Usage Subcomponent needs to be installed to run this report.

This information identifies the report:

- Report ID**  
CICSOMEG005
- Report Description**  
OMEGAMON transaction database/file requests, daily
- Report group**  
CICS\_OMEG
- Source**  
CICS\_O\_FL\_DTL\_D
- Attributes**  
CICS, OMEGAMON, TRANSACTION, REQUESTS, DAILY
- Variables**  
From date, To Date, MVS system ID, CICS system ID, Period Name, File DB Type

| OMEGAMON transaction database/file requests, daily           |       |       |       |       |
|--|-------|-------|-------|-------|
| MVS ID: 'SYS ' CICS ID: 'CICSXX64'                           |       |       |       |       |
| DATE: '2007-06-07'   |       |       |       |       |
| FILE/DATABASE TYPE: All                                      |       |       |       |       |
| ----- TYPE ----->  |       |       |       |       |
| <-- ADABAS --> <-- DATACOM --> <-- IDMS --> <-- MQ -->       |       |       |       |       |
| TRANSACTION ID   |       |       |       |       |
| -----  |       |       |       |       |
| ADA3   | 12096 |       |       |       |
| ADA4   | 60480 |       |       |       |
| AMG1   |       |       |       | 693   |
| AMG2   |       |       |       | 684   |
| AMG3   |       |       |       | 693   |
| AMG4   |       |       |       | 693   |
| AMG5   |       |       |       | 684   |
| AMG6   |       |       |       | 684   |
| AMG7   |       |       |       | 684   |
| AMG8   |       |       |       | 684   |
| AMG9   |       |       |       | 684   |
| DC01   |       | 44352 |       |       |
| IDM1   |       |       | 16128 |       |
| RSV1   |       |       |       |       |
| RSV2   |       |       |       |       |
| RSV5   |       |       |       |       |
|  | ===== | ===== | ===== | ===== |
|  | 72576 | 44352 | 16128 | 6183  |
| IBM Z Performance and Capacity Analytics Report: CICSOMEG005 |       |       |       |       |

Figure 54. Example of a CICS OMEGAMON transaction database/file requests, daily report

The report contains this information:

**Transaction ID**

The CICS Transaction ID.

**Type**

The file or database type.

**Total requests**

The total number of requests the transaction issued against the file or database type. Calculated as SUM(COUNT).

## CICS OMEGAMON transaction database/file commands, daily

This report shows the daily total requests, per file/database type, per transaction. The File and Database Detailed Usage Subcomponent needs to be installed to run this report.

This information identifies the report:

**Report ID**

CICSOMEG006

**Report Description**

OMEGAMON transaction database/file commands, daily

**Report group**

CICS\_OMEG

**Source**

CICS\_O\_FL\_DTL\_D

**Attributes**

CICS, OMEGAMON, TRANSACTION, COMMANDS, DAILY

**Variables**

From date, MVS system ID, CICS system ID, Period Name, File DB Type

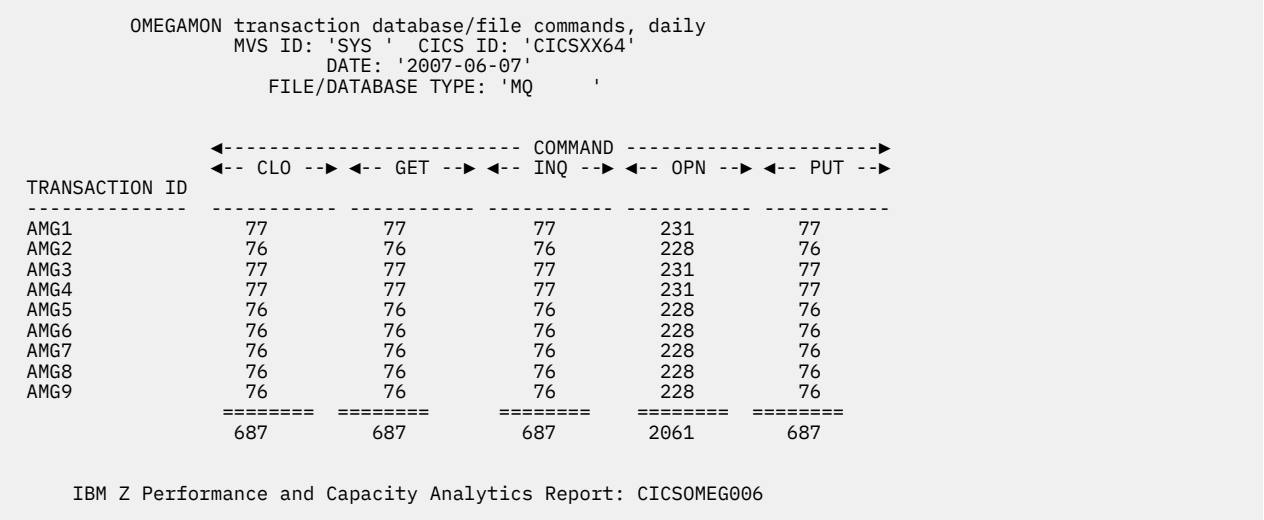


Figure 55. Example of a CICS OMEGAMON transaction database/file commands, daily report

The report contains this information:

- Transaction ID**  
 The CICS Transaction ID.
- Command**  
 The command the transaction issued against the file or database type.
- Total requests**  
 The total number of requests the transaction issued against the file or database type. Calculated as SUM(COUNT).

**CICS OMEGAMON transaction Db2 averages, hourly**

This report shows the hourly average Db2 information, per transaction. The File and Database subcomponent (CICS OMEGAMON Monitoring Component) and the Basic Transaction subcomponent (CICS Monitoring Component) need to be installed to run this report.

This information identifies the report:

- Report ID**  
 CICSOMEG007
- Report Description**  
 OMEGAMON transaction Db2 averages, hourly
- Report group**  
 CICS\_OMEG
- Source**  
 CICS\_O\_FL\_H, CICS\_TRANSACTION\_H
- Attributes**  
 CICS, OMEGAMON, TRANSACTION, Db2, AVERAGES, HOURLY
- Variables**  
 From date, MVS system ID, CICS system ID, Period Name



| OMEGAMON transaction Db2 averages, hourly                    |       |               |                       |                |               |       |
|--|-------|---------------|-----------------------|----------------|---------------|-------|
| MVS ID: 'SYS ' CICS ID: 'CICSXX64'                           |       |               |                       |                |               |       |
| DATE: '2007-06-07'   |       |               |                       |                |               |       |
| -----  | ----- | TRANSACTION   | -----                 | -----          | -----         | ----- |
| HOUR   | ID    | REQUEST COUNT | REQUEST RESPONSE TIME | Db2 WAIT COUNT | Db2 WAIT TIME |       |
| 20   | AMG1  | 1446          | 5.118E-03             | 684            | 3.136E-06     |       |
| IBM Z Performance and Capacity Analytics Report: CICSOMEG007 |       |               |                       |                |               |       |

Figure 56. Example of a CICS OMEGAMON transaction Db2 averages, hourly report

The report contains this information:

**Hour**

The time of the measurement.

**Transaction ID**

The CICS Transaction ID.

**Request count**

The average number of Db2 requests for this transaction. Calculated as  $\text{AVG}(\text{COUNT} / \text{TRANSACTION\_COUNT})$ .

**Request response time**

The average response time of the Db2 requests for this transaction. Calculated as  $\text{AVG}((\text{CLOCK} / \text{COUNT}) / \text{TRANSACTION\_COUNT})$ .

**Db2 wait count**

The average number of times this transaction waited for Db2 to service the request. Calculated as  $\text{AVG}(\text{DB2WAIT\_COUNT} / \text{TRANSACTION\_COUNT})$ .

**Db2 wait time**

The average Db2 wait time for this transaction. Calculated as  $\text{AVG}(\text{DB2WAIT\_CLOCK} / \text{TRANSACTION\_COUNT})$ .

## Reports in the CICS Statistics component

As described in “Evaluating the CICS Statistics component” on page 12, the CICS Performance Feature supports statistics only for CICS/ESA and CICS/TS. If you install the CICS statistics component, IBM Z Performance and Capacity Analytics provides the reports described in this section.

### CICS Global Loader

This report shows global CICS/ESA and CICS/TS statistics from the loader domain.

This information identifies the report:

**Report ID**

CICS801 (CICS801P for CICS Partitioning Feature)

**Report group**

CICS Reports

**Source**

CICS\_S\_GLOBAL\_D (CICS\_S\_GLOBAL\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, Global, Loader

**Variables**

MVS system ID, CICS system ID, From date, To date

| CICS Global Loader                                       |                           |                               |                             |                         |                     |
|--|---------------------------|-------------------------------|-----------------------------|-------------------------|---------------------|
| MVS ID = 'IP02'  |                           |                               | CICS ID = 'CSFGHT'          |                         |                     |
| Date: '2000-05-12'                                       |                           |                               | to '2000-05-13'             |                         |                     |
| Library<br>load<br>requests                              | Load<br>time<br>(seconds) | Average<br>time to<br>removal | Peak<br>requests<br>waiting | Average<br>wait<br>time | Programs<br>removed |
| 2022   | 21                        | 123                           | 0                           | 0                       | 138                 |
| IBM Z Performance and Capacity Analytics Report: CICS801 |                           |                               |                             |                         |                     |

Figure 57. Example of a CICS Global Loader report

The report contains this information:

### Library load requests

Application requests to load programs. This is the sum of LIBRARY\_LOAD\_REQ.

### Load time (seconds)

Time spent loading programs, in seconds. This is the sum of LOAD\_SEC.

### Average time to removal

Average time, in seconds, that a program is left in storage when not in use before being removed by dynamic program storage compression. A value of zero can indicate that no programs were removed by compression. This is calculated as NOT\_USED\_SEC/PROGRAMS\_REMOVED.

### Peak requests waiting

Maximum number of application load requests that are queued because the requested program is locked. If a task has to wait because the loader domain is busy (that is, the resource-owning subtask is busy), the wait is counted in dispatch wait time and this counter is not incremented. This is the maximum of REQ\_PEAK\_WAIT.

### Average wait time

Average time spent waiting for the loader, in seconds, each time a task had to wait. This is calculated as WAIT\_TIME/REQ\_WAITED.

### Programs removed

Number of programs removed by compression (removal of unused programs to save space). This is the sum of PROGRAMS\_REMOVED.

## CICS Global Temporary Storage

This report shows global CICS/ESA and CICS/TS temporary storage statistics.

This information identifies the report:

### Report ID

CICS802 (CICS802P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_GLOBAL\_D (CICS\_S\_GLOBAL\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, Global, Temporary, Storage

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Global Temporary Storage                            |                    |                             |                           |                       |                       |
|--|--------------------|-----------------------------|---------------------------|-----------------------|-----------------------|
| MVS ID = 'IP02'  |                    | CICS ID = 'CFGHY7'          |                           |                       |                       |
| Date: '2000-05-13' to '2000-05-14'                       |                    |                             |                           |                       |                       |
| TS<br>main<br>puts                                       | TS<br>main<br>gets | TS<br>main<br>peak<br>bytes | TS<br>peak<br>CIs<br>used | TS<br>buffer<br>waits | TS<br>string<br>waits |
| -----<br>123   | -----<br>3333      | -----<br>4304               | -----<br>270              | -----<br>2            | -----<br>0            |
| IBM Z Performance and Capacity Analytics Report: CICS802 |                    |                             |                           |                       |                       |

Figure 58. Example of a CICS Global Temporary Storage report

The report contains this information:

#### TS main puts

Number of PUT requests to main storage.

#### TS main gets

Number of GET requests from main storage.

#### TS main peak bytes

Peak main storage used, in bytes.

#### TS peak CIs used

Peak number of control intervals in which at least one segment is active (used). They have not necessarily been written to disk. When a queue is deleted, this figure is updated, although the disk records are not immediately updated. When a disk record containing deleted segments is next read from disk, CICS compresses the record by putting all the active segments together. An empty record (having no active segments) is never read from disk; CICS merely overwrites it (a PUT with no preceding Get-for-update).

#### TS buffer waits

Number of times application programs waited because no buffers were available for auxiliary temporary storage. The number is set using the TS= operand of the SIT.

#### TS string waits

Number of times that I/O to or from the auxiliary temporary storage data set had to wait for lack of a string. The number of strings is specified using the TS= operand of the SIT.

## CICS Global VTAM

This report shows global CICS/ESA and CICS/TS VTAM statistics.

This information identifies the report:

#### Report ID

CICS803 (CICS803P for CICS Partitioning Feature)

#### Report group

CICS reports

#### Source

CICS\_S\_GLOBAL\_D (CICS\_S\_GLOBAL\_DP for CICS Partitioning Feature)

#### Attributes

Statistics, CICS, Global, VTAM

#### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Global VTAM   |                      |                                 |
|--|----------------------|---------------------------------|
| MVS ID ='IP02'   | CICS ID ='CFGHT6'    |                                 |
| Date: '2000-04-04' to '2000-04-05'                       |                      |                                 |
| RPL<br>peak<br>used                                      | VTAM<br>SOS<br>count | VTAM<br>ACB<br>dynamic<br>opens |
| -----<br>1   | -----<br>0           | -----<br>0                      |
| IBM Z Performance and Capacity Analytics Report: CICS803 |                      |                                 |

Figure 59. Example of a CICS Global VTAM report

The report contains this information:

### RPL peak used

Peak number of VTAM RPLs found POSTed on one scan.

### VTAM SOS count

Number of times that VTAM rejected a CICS request due to a buffer shortage. The VTAM command D NET,BFRUSE gives information on the use of VTAM buffer pools. This is a serious error condition.

### VTAM ACB dynamic opens

Number of times the CICS operator has opened the CICS VTAM ACB after initialization (that is, issued a CEMT SET VTAM OPEN command).

## CICS Global DTB

This report shows global CICS/ESA and CICS/TS dynamic transaction backout statistics.

This information identifies the report:

### Report ID

CICS804 (CICS804P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_GLOBAL\_D (CICS\_S\_GLOBAL\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, Global, DTB, Backout

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Global DTB  |                   |
|--|-------------------|
| MVS ID ='IP01'   | CICS ID ='CFGHT4' |
| Date: '2000-06-05' to '2000-06-07'                       |                   |
| DTB<br>records<br>logged                                 | DTB<br>overflows  |
| -----<br>3410  | -----<br>0        |
| IBM Z Performance and Capacity Analytics Report: CICS804 |                   |

Figure 60. Example of a CICS Global DTB report

The report contains this information:

### DTB records logged

Number of records logged for the purpose of dynamic transaction backout. If the number seems high, check that RECOVERY has not been unnecessarily specified for your files. If you have migrated your PCT, remember that all your transactions now have DTB=YES specified. So if you had a PCT where many transactions had DTB=NO, you may get a large increase in DTB logging.

**DTB overflows**

Number of records for which there was no space in the dynamic log buffer. When there is no space, CICS puts the records either to auxiliary temporary storage (if DTB=AUX is specified in the SIT) or to a main storage chain. This degrades performance. CICS attempts to tune the buffer size for each transaction by initially allocating half the maximum and then monitoring the amount used, so that a more appropriate value is allocated the next time the transaction is invoked. For this reason, there may be spills when a transaction is first used, while CICS is finding the optimum value. If there are spills over long periods, increase the maximum size of the dynamic log buffer using the SIT DBUFSZ= operand. It is allocated in extended storage. It is possible that it is always the same transaction that causes spillage. If so, consider adding SYNCPOINT requests to the application code.

**CICS Global IRC Batch**

This report shows global CICS/ESA and CICS/TS statistics for batch jobs sharing a DL/I database.

This information identifies the report:

**Report ID**

CICS806 (CICS806P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_GLOBAL\_D (CICS\_S\_GLOBAL\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, Global, IRC, Batch

**Variables**

MVS system ID, CICS system ID, From date, To date

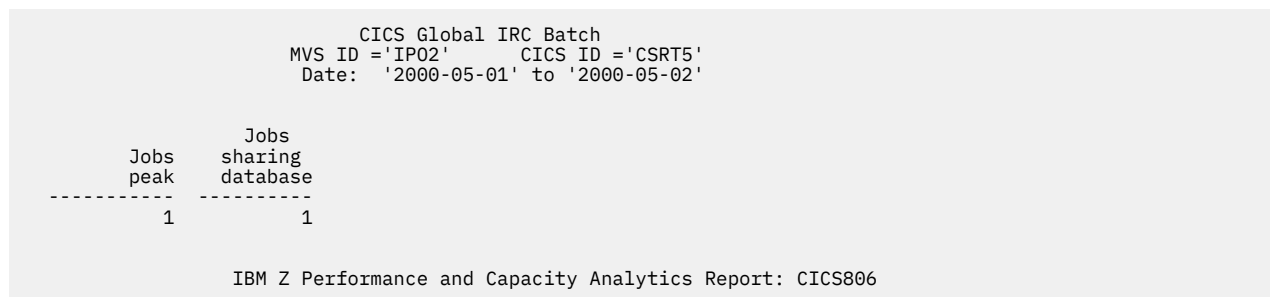


Figure 61. Example of a CICS Global IRC Batch report

The report contains this information:

**Jobs peak**

Peak number of batch DL/I jobs whose database accesses were routed through the CICS system.

**Jobs sharing database**

Number of batch jobs whose database accesses were routed through CICS.

**CICS Transaction Usage**

This report shows CICS/ESA and CICS/TS transaction statistics. For information on how to use this report, see [“Interpreting combined CICS and Db2 performance data” on page 30](#).

This information identifies the report:

**Report ID**

CICS807 (CICS807P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_TRAN\_D (CICS\_S\_TRAN\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, Transactions

**Variables**

MVS system ID, CICS system ID, From date, To date

| CICS Transaction Usage             |              |              |                       |                        |          |                    |
|------------------------------------|--------------|--------------|-----------------------|------------------------|----------|--------------------|
| MVS ID ='IP02' CICS ID ='CSRT5'    |              |              |                       |                        |          |                    |
| Date: '2000-05-01' to '2000-05-02' |              |              |                       |                        |          |                    |
| 25 most frequent transactions      |              |              |                       |                        |          |                    |
| Transaction ID                     | Program name | Transactions | Dynamic routing local | Dynamic routing remote | Restarts | Storage violations |
| CEMT                               | DFHEMTP      | 18           | 0                     | 0                      | 0        | 0                  |
| CEDA                               | DFHEDAP      | 5            | 0                     | 0                      | 0        | 0                  |
| FIST                               | FISTPROG     | 2            | 0                     | 0                      | 0        | 0                  |
| CXRE                               | DFHZXRE      | 1            | 0                     | 0                      | 0        | 0                  |
| CATA                               | DFHZATA      | 1            | 0                     | 0                      | 0        | 0                  |
| CATD                               | DFHZATD      | 1            | 0                     | 0                      | 0        | 0                  |
| CRSQ                               | DFHCRQ       | 1            | 0                     | 0                      | 0        | 0                  |
| CSFU                               | DFHFCU       | 1            | 0                     | 0                      | 0        | 0                  |
| CSGM                               | DFHGMM       | 1            | 0                     | 0                      | 0        | 0                  |
| CSNE                               | DFHZNAC      | 1            | 0                     | 0                      | 0        | 0                  |
| CATR                               | DFHZATR      | 1            | 0                     | 0                      | 0        | 0                  |
| CATS                               | DFHZATS      | 0            | 0                     | 0                      | 0        | 0                  |
| CBRC                               | DFHBRCP      | 0            | 0                     | 0                      | 0        | 0                  |
| CDBC                               | DFHDBME      | 0            | 0                     | 0                      | 0        | 0                  |
| CDBD                               | DFHDBDI      | 0            | 0                     | 0                      | 0        | 0                  |
| CDBI                               | DFHDBIQ      | 0            | 0                     | 0                      | 0        | 0                  |
| CDBN                               | DFHDBCON     | 0            | 0                     | 0                      | 0        | 0                  |
| CDBO                               | DFHDBCT      | 0            | 0                     | 0                      | 0        | 0                  |
| CECS                               | DFHECSP      | 0            | 0                     | 0                      | 0        | 0                  |
| CEDB                               | DFHEDAP      | 0            | 0                     | 0                      | 0        | 0                  |
| CEDC                               | DFHEDAP      | 0            | 0                     | 0                      | 0        | 0                  |
| CDBT                               | DFHDBDSC     | 0            | 0                     | 0                      | 0        | 0                  |
| CDTS                               | DFHZATS      | 0            | 0                     | 0                      | 0        | 0                  |
| CEBR                               | DFHEDFBR     | 0            | 0                     | 0                      | 0        | 0                  |
| CECI                               | DFHECIP      | 0            | 0                     | 0                      | 0        | 0                  |

IBM Z Performance and Capacity Analytics Report: CICS807

Figure 62. Example of a CICS Transaction Usage report

The report contains this information:

**Transaction ID**

Name of the transaction.

**Program name**

Program to which CICS passes control when the transaction starts.

**Transactions**

Number of executions of this transaction.

**Dynamic routing local**

Number of times that this transaction, if it is capable of being routed (having the Dynamic=YES CEDA parameter), was run locally.

**Dynamic routing remote**

Number of times that this transaction, if it is capable of being routed (having the Dynamic=YES CEDA parameter), was run remotely.

**Restarts**

Restarts can occur for transactions that have RESTART=YES specified. This is affected by any user code in the retry program DFHRTY.

**Storage violations**

If this is not zero, there is a serious problem, which not only threatens performance but also the integrity of your data. Force CICS to take a dump when this occurs by putting SVD=YES in the SIT. Violations are often detected by comparing the eight-byte storage accounting areas at each end of a

storage accounting area when the storage is being released. If the two areas are not identical, one has been overwritten. The violation is logged against the transaction that owns the storage being released, but it is not certain that this transaction is the cause of the violation.

## CICS Program Usage

This report shows CICS/ESA and CICS/TS program statistics. It shows how much time MVS spends loading programs. You should see that the most frequently used programs are loaded only once, because CICS chooses the least recently used programs when it removes programs from the program subpools. If frequently used programs are being frequently loaded and removed, this suggests that virtual storage is insufficient for the program subpools.

This information identifies the report:

### Report ID

CICS808 (CICS808P for CICS Partitioning Feature)

### Report group

CICS Reports

### Source

CICS\_S\_PROGRAM\_D (CICS\_S\_PROGRAM\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, Programs

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Program Usage                 |            |                    |                      |                      |               |               |
|------------------------------------|------------|--------------------|----------------------|----------------------|---------------|---------------|
| MVS ID = 'IP02'                    |            | CICS ID = 'CSRT5'  |                      |                      |               |               |
| Date: '2000-05-01' to '2000-05-02' |            | Most used programs |                      |                      |               |               |
| Program name                       | Times used | Fetch count        | Fetch time (seconds) | Avg fetch time (sec) | Newcopy count | Times removed |
| DFHDMP                             | 2311       | 1                  | 0.03                 | 0.03                 | 0             | 0             |
| DFHAMP                             | 2146       | 1                  | 0.08                 | 0.08                 | 0             | 0             |
| DFHPUP                             | 1416       | 1                  | 0.03                 | 0.03                 | 0             | 0             |
| DFHEITMT                           | 18         | 1                  | 0.01                 | 0.01                 | 0             | 0             |
| DFHEMTD                            | 18         | 1                  | 0.05                 | 0.05                 | 0             | 0             |
| DFHEMTP                            | 18         | 1                  | 0.01                 | 0.01                 | 0             | 0             |
| DFHZCQ                             | 9          | 1                  | 0.13                 | 0.13                 | 0             | 0             |
| ...                                |            |                    |                      |                      |               |               |
| DFHCXCU                            | 0          | 0                  | 0.00                 | 0.00                 | 0             | 0             |
| DFHDBAT                            | 0          | 0                  | 0.00                 | 0.00                 | 0             | 0             |
| DFHDBCON                           | 0          | 0                  | 0.00                 | 0.00                 | 0             | 0             |
| =====                              | =====      | =====              | =====                | =====                | =====         | =====         |
|                                    | 6316       | 251                | 4.34                 | 0.01                 | 0             | 0             |

IBM Z Performance and Capacity Analytics Report: CICS808

Figure 63. Example of a CICS Program Usage report

The report contains this information:

### Program name

Name of the program.

### Times used

CICS does not know about branches to a loaded program. This counter is incremented when the program is LINKed to, XCTLed to, or LOAded, and when the program is the first program for a transaction. This is the sum of LOAD\_REQUESTS.

### Fetch count

Number of times the program is loaded. This is the sum of FETCHES.

### Fetch time (seconds)

Total time spent loading this program. This is the sum of FETCH\_SEC.

### Avg fetch time (sec)

Average time spent loading this program. This is calculated as FETCH\_SEC/FETCHES.

### Newcopy count

Number of times a new copy of the program was loaded by operator request. This is the sum of NEW\_COPIES.

### Times removed

Number of times CICS removed this program when not in use, to reclaim space in the subpool.

## CICS Dynamic Storage (DSA) Usage

This report shows CICS/ESA and CICS/TS dynamic storage area statistics. For information on how to use this report, see [“Monitoring storage use”](#) on page 28.

This information identifies the report:

### Report ID

CICS809 (CICS809P for CICS Partitioning Feature)

### Report group

CICS Reports

### Source

CICS\_S\_STOR\_DSA\_D (CICS\_S\_STOR\_DSA\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Dynamic Storage (DSA) Usage                         |                |                    |                            |                          |                         |          |           |
|--|----------------|--------------------|----------------------------|--------------------------|-------------------------|----------|-----------|
| MVS ID = 'IP02'  |                |                    |                            | CICS ID = 'CSRT5'        |                         |          |           |
| Date: '2000-05-01' to '2000-05-02'                       |                |                    |                            |                          |                         |          |           |
| Pagepool<br>name   | DSA<br>(bytes) | Cushion<br>(bytes) | Free<br>storage<br>(bytes) | Free<br>storage<br>(pct) | Largest<br>free<br>area | Getmains | Freemains |
| CDSA   | 1048576        | 65536              | 802816                     | 76                       | 765952                  | 3695     | 3620      |
| ECDSA  | 8388608        | 262144             | 7667712                    | 91                       | 7667712                 | 8946     | 7252      |
| ERDSA  | 3145728        | 262144             | 1302528                    | 41                       | 1290240                 | 204      | 3         |
| EUDSA  | 8388608        | 262144             | 8388608                    | 100                      | 8388608                 | 1        | 1         |
| UDSA   | 4194304        | 65536              | 4186112                    | 99                       | 4182016                 | 6        | 4         |
| IBM Z Performance and Capacity Analytics Report: CICS809 |                |                    |                            |                          |                         |          |           |

Figure 64. Example of a CICS Dynamic Storage (DSA) Usage report

The report contains this information:

### Pagepool name

Name of the pagepool.

### DSA (bytes)

Maximum number of bytes in the subpool. This is the maximum of DSA\_BYTES.

### Cushion (bytes)

Size of the storage cushion. This is the maximum of CUSHION\_BYTES.

### Free storage (bytes)

Smallest amount of free storage, in bytes. This is the minimum of FREE\_STOR\_BYTES.

### Free storage (pct)

Lowest percentage of free storage. This is the minimum of FREE\_STOR\_PCT.

### Largest free area

Minimum largest free area in the subpool, in bytes. This is the minimum of LARGEST\_FREE\_AREA.

### Getmains

Number of GETMAIN requests for this subpool.



**Freemains**

Number of FREEMAIN requests for this subpool.

**CICS File Statistics**

This report shows CICS/ESA and CICS/TS file statistics.

This information identifies the report:

**Report ID**

CICS810 (CICS810P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_FILE\_D (CICS\_S\_FILE\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, File

**Variables**

MVS system ID, CICS system ID, From date, To date

| CICS File Statistics                                     |                 |                    |                 |                    |                        |                         |               |
|--|-----------------|--------------------|-----------------|--------------------|------------------------|-------------------------|---------------|
| MVS ID ='IP02'   |                 | CICS ID ='CSRT5'   |                 |                    |                        |                         |               |
| Date: '2000-05-01' to '2000-05-02'                       |                 |                    |                 |                    |                        |                         |               |
| File<br>name   | Get<br>requests | Browse<br>requests | Add<br>requests | Update<br>requests | Delete<br>req<br>local | Delete<br>req<br>remote | VSAM<br>EXCPs |
| -----  | -----           | -----              | -----           | -----              | -----                  | -----                   | -----         |
| GHTIPO   | 18              | 5486               | 0               | 0                  | 0                      | 0                       | 22            |
| GTSTFILE   | 0               | 4                  | 2000            | 0                  | 0                      | 0                       | 2061          |
| =====  | =====           | =====              | =====           | =====              | =====                  | =====                   | =====         |
|  | 18              | 5490               | 2000            | 0                  | 0                      | 0                       | 2083          |
| IBM Z Performance and Capacity Analytics Report: CICS810 |                 |                    |                 |                    |                        |                         |               |

Figure 65. Example of a CICS File Statistics report

The report contains this information:

**File name**

Name of the file.

**Get requests**

Number of GET requests that were passed from the application interface to file control. Invalid requests filtered out by the command interface are not included. This is generally true for all counts of applications requests to CICS.

**Browse requests**

Number of BROWSE requests.

**Add requests**

Number of ADD requests.

**Update requests**

Number of UPDATE requests.

**Delete req local**

Number of DELETE requests for a file on this system.

**Delete req remote**

Number of function-shipped DELETE requests.

**VSAM EXCPs**

Number of VSAM EXCPs issued, from VSAM\_EXCP\_REQ\_DATA.

## CICS ISC/IRC Function Shipping by Connection

This report shows CICS TS inter-region and intersystem statistics related to function-shipping with and without channel option.

This information identifies the report:

### Report ID

CICS833 (CICS833P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_INTERCOM\_D (CICS\_S\_INTERCOM\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, IRC, ISC, Function, Shipping, Channel

### Variables

Date, MVS system ID, CICS system ID, Connection name

| CICS ISC/IRC Function Shipping by Connection |                            |                            |                            |                            |                            |                            |                            |                            |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| MVS ID = 'MV2C' CICS ID 'DFHXQ'              |                            |                            |                            |                            |                            |                            |                            |                            |
| Date: '2005-05-01'                           |                            |                            |                            |                            |                            |                            |                            |                            |
| Connection<br>name                           | Function<br>Shipping<br>FC | Function<br>Shipping<br>IC | Function<br>Shipping<br>TD | Function<br>Shipping<br>TS | Function<br>Shipping<br>PC | ◀-----CHANNEL-----▶        |                            |                            |
|  | Function<br>Shipping<br>IC | Function<br>Shipping<br>TS | Function<br>Shipping<br>PC | Function<br>Shipping<br>IC | Function<br>Shipping<br>TS | Function<br>Shipping<br>PC | Function<br>Shipping<br>IC | Function<br>Shipping<br>TS |
| GHT00001                                     | 0                          | 0                          | 0                          | 0                          | 0                          | 0                          | 0                          | 0                          |

IBM Z Performance and Capacity Analytics Report: CICS833

Figure 66. Example of a CICS ISC/IRC Function Shipping by Connection report

The report contains this information:

### Connection name

Connection name. From CONNECTION\_NAME.

### Function Shipping FC

Number of file control requests for function shipping. From FUNCTION\_SHIPS\_FC.

### Function Shipping IC

Number of interval control requests for function shipping. From FUNCTION\_SHIPS\_IC.

### Function Shipping TD

Number of transient data requests for function shipping. From FUNCTION\_SHIPS\_TD.

### Function Shipping TS

Number of temporary storage requests for function shipping. From FUNCTION\_SHIPS\_TS.

### Function Shipping PC

Number of program control link requests for function shipping. From PGM\_CONTROL.

### Channel

#### Function Shipping IC

Number of interval control requests for function shipping. From FUNC\_SHIPSCHN\_IC.

#### Function Shipping TS

Number of temporary storage channel requests for function shipping. From FUNC\_SHIPSCHN\_TS.

#### Function Shipping PC

Number of program control LINK requests, with channels, for function shipping. From FUNC\_SHIPCHN\_PC.

## CICS ISC/IRC Global

This report shows global CICS/ESA and CICS/TS interregion and intersystem statistics. CICS has mechanisms to improve the efficiency of authorizing remote user access, and this report shows how much this mechanism is being used. The first three columns help in tuning the ISRDELAY parameter of the SIT, and the last three columns help in the tuning of the PVDELAY parameter.

This information identifies the report:

### Report ID

CICS811 (CICS811P for CICS Partitioning Feature)

### Report group

CICS Reports

### Source

CICS\_S\_INTERCOM\_D (CICS\_S\_INTERCOM\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, IRC, ISC, Global

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS ISC/IRC Global                                      |                         |                               |                   |                        |                                 |
|--|-------------------------|-------------------------------|-------------------|------------------------|---------------------------------|
| MVS ID = 'IP02'  |                         |                               | CICS ID = 'CSRT5' |                        |                                 |
| Date: '2000-05-01' to '2000-05-02'                       |                         |                               |                   |                        |                                 |
| Entries<br>reused  | Entries<br>timed<br>out | Reuse<br>time<br>avg<br>(sec) | Signon<br>reuse   | Signon<br>timed<br>out | Signon<br>reuse<br>avg<br>(sec) |
| -----<br>0   | -----<br>0              | -----<br>0.0                  | -----<br>0        | -----<br>0             | -----<br>0.0                    |
| IBM Z Performance and Capacity Analytics Report: CICS811 |                         |                               |                   |                        |                                 |

Figure 67. Example of a CICS ISC/IRC Global report

The report contains this information:

### Entries reused

Number of times user IDs were reused without referring an external security manager.

### Entries timed out

Number of times that user IDs signed on to this remote system were timed out.

### Reuse time avg (sec)

Average time between each reuse of user IDs signed on to this remote system, in seconds. This is calculated as REUSE\_TIME\_SEC/RECORD\_GLOBAL\_CNT.

### Signon reuse

Number of times user IDs in the persistent verification list were used without referencing an external security manager.

### Signon timed out

Number of entries in the persistent verification list of this remote system that were timed out.

### Signon reuse avg (sec)

Average time between the reuse of entries in the persistent verification list of this remote system. This is calculated as SIGNON\_REUSE\_SEC/RECORD\_GLOBAL\_CNT.

## CICS ISC/IRC Mode Entries

This report shows CICS/ESA and CICS/TS statistics for APPC (LU 6.2) connections.

A program issues an ALLOCATE command to establish an LU6.2 session. When the program specifies the system and log-mode group, the ALLOCATE is specific; otherwise, the program can leave it to CICS to find one that is suitable.

When allocating a session, it is more efficient to use a contention winner (or receive) session, if possible. If a contention loser (or send) session must be used, CICS sends a BID to the session partner and waits for a positive response to the BID before letting the application continue. But if a contention winner session becomes available while CICS waits for the BID response, CICS discontinues its attempt to use the contention loser session and uses the newly available contention winner session instead.

| CICS ISC/IRC Mode Entries          |              |                             |                              |                             |                             |                          |                           |
|------------------------------------|--------------|-----------------------------|------------------------------|-----------------------------|-----------------------------|--------------------------|---------------------------|
| MVS ID = 'IP02'                    |              | CICS ID = 'CSRT5'           |                              |                             |                             |                          |                           |
| Date: '2000-05-01' to '2000-05-02' |              |                             |                              |                             |                             |                          |                           |
| APPC<br>system<br>name             | Mode<br>name | Alloc<br>requests<br>(peak) | Alloc<br>requests<br>(total) | Queued<br>alloc<br>requests | Failed<br>alloc<br>requests | Loser<br>ATI<br>requests | Winner<br>ATI<br>requests |
| TR45                               | TYRI0004     | 0                           | 0                            | 0                           | 0                           | 0                        | 0                         |

IBM Z Performance and Capacity Analytics Report: CICS812

Figure 68. Example of a CICS ISC/IRC Mode Entries report

This information identifies the report:

### Report ID

CICS812 (CICS812P for CICS Partitioning Feature)

### Report group

CICS Reports

### Source

CICS\_S\_INTERCOM\_D (CICS\_S\_INTERCOM\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, IRC, ISC, Mode

### Variables

MVS system ID, CICS system ID, From date, To date

The report contains this information:

### APPC system name

Connection name, from APPC\_SYSTEM\_NAME.

### Mode name

Logmode name, from MODE\_NAME.

### Alloc requests (peak)

Peak allocate requests queued for this mode group, from ALLOCATES\_PEAK.

### Alloc requests (total)

Number of times a program issued a specific ALLOCATE command for this mode group, excluding commands failing basic validation (SYSIDERR). This is the sum of ALLOC\_SPEC\_REQ.

### Queued alloc requests

Maximum number of times a program issued a specific ALLOCATE command (without NOQUEUE) and there were no bound contention winners available for this mode group. This is the maximum of ALLOC\_Q\_SPEC\_REQ.

### Failed alloc requests

Number of times a program issued a specific ALLOCATE command for this mode group, and got an error. This is the sum of ALLOC\_F1\_SPEC\_REQ and ALLOC\_F2\_SPEC\_REQ.

### Loser ATI requests

Number of times a contention-loser APPC session was used. This is the sum of ATI\_LOSER\_REQ.

### Winner ATI requests

Number of times a contention-winner APPC session was used. This is the sum of ATI\_WINNER\_REQ.

## CICS ISC/IRC System Entries by Connection

This report shows CICS/ESA and CICS/TS interregion and intersystem statistics. It differs from “CICS ISC/IRC Mode Entries” on page 329 in that it is for non-LU6.2 sessions, which are identified only by connection name (not by a combination of connection name and log-mode group). This is multiregion operation (MRO) using interregion communication (IRC) and LU6.1 intersystem communication (ISC).

This information identifies the report:

### Report ID

CICS813 (CICS813P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_INTERCOM\_D (CICS\_S\_INTERCOM\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, IRC, ISC, System

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS ISC/IRC System Entries by Connection                |                         |                          |                   |           |                   |                |                 |
|--|-------------------------|--------------------------|-------------------|-----------|-------------------|----------------|-----------------|
| MVS ID = 'IP02'  |                         |                          | CICS ID = 'CSRT5' |           |                   |                |                 |
| Date: '2000-05-01' to '2000-05-02'                       |                         |                          |                   |           |                   |                |                 |
| Connection<br>name                                       | ATI<br>loser<br>request | ATI<br>winner<br>request | Bids<br>sent      | Allocates | Trans<br>routings | Losers<br>peak | Winners<br>peak |
| GHT00001   | 0                       | 0                        | 0                 | 0         | 0                 | 0              | 0               |
| IBM Z Performance and Capacity Analytics Report: CICS813 |                         |                          |                   |           |                   |                |                 |

Figure 69. Example of a CICS ISC/IRC System Entries by Connection report

The report contains this information:

### Connection name

Connection name, from CONNECTION\_NAME.

### ATI loser requests

Number of times a receive session was used. This is the sum of ATI\_REQ\_LOSERS.

### ATI winner requests

Number of times a send session was used. This is the sum of ATI\_REQ\_WINNERS.

### Bids sent

Number of times CICS sent a BID to use a contention loser session. This is the sum of BIDS\_SENT.

### Allocates

Number of times a program issued an ALLOCATE command, not including commands failing basic validation (SYSIDERR). This is the sum of ALLOCATES.

### Trans routings

Number of transaction routing commands (where a transaction is defined as remote or is dynamically routed). This is not valid for LU 6.1. This counter is incremented on both systems (sending and receiving). This is the sum of TRANS\_ROUTINGS. Note that START commands are not counted here, but in FUNCTION\_SHIPS\_IC, which is not shown on this report. Trans routings is a count of all other types of transaction routing, for example, where a transaction is defined as being remote or is dynamically routed.

### Losers peak

Peak number of contention loser sessions, from LOSERS\_PEAK.

### Winners peak

Peak number of contention winner sessions, from WINNERS\_PEAK.

## CICS TS Recovery Manager

This report shows CICS TS recovery manager statistics that detail the syncpoint activity of all the transactions in the system. From this statistics report, you can assess the impact of shunted UOWs. Shunted UOWs are units of work that have suffered an indoubt failure and that are waiting for resynchronization with their recovery coordinator or for the problem with the resources to be resolved. Shunted UOWs still hold locks and enqueues until they are resolved.

This information identifies the report:

### Report ID

CICS814 (CICS814P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_RECOV\_MGR\_D (CICS\_S\_RECO\_MGR\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, TS, Recovery, Manager

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS TS Recovery Manager                                 |                        |         |                               |                                      |  |  |                                       |   |   |   |  |   |                                 |
|--|------------------------|---------|-------------------------------|--------------------------------------|--|--|---------------------------------------|---|---|---|--|---|---------------------------------|
| MVS ID = 'VSG1'  |                        |         | CICS ID = 'A6POCM01'          |                                      |  |  |                                       |   |   |   |  |   |                                 |
| Date: '2000-02-08' to '2000-02-08'                       |                        |         |                               |                                      |  |  |                                       |   |   |   |  |   |                                 |
| Syncpoints<br>forward                                    | Syncpoints<br>backward | Resyncs | Time                          |                                      |  |  |                                       |   |   |   |  |   |                                 |
|  |                        |         | shunted<br>indoubt<br>failure | shunted<br>commit<br>back<br>failure | Indoubt<br>action<br>forced<br>trandef | Indoubt<br>action<br>forced<br>timeout | Indoubt<br>action<br>forced<br>nowait | Indoubt<br>action<br>forced<br>operator | Indoubt<br>action<br>forced<br>tdqueues | Indoubt<br>action<br>forced<br>LU61conn | Indoubt<br>action<br>forced<br>MROconn | Indoubt<br>action<br>forced<br>RMIexits | Indoubt<br>action<br>mismatches |
| 1.020E+04  | 1.410E+02              | 0.000   | 0.000                         | 0.000                                | 0.000                                  | 0.000                                  | 0.000                                 | 0.000                                   | 0.000                                   | 0.000                                   | 0.000                                  | 0.000                                   | 0.000                           |
| IBM Z Performance and Capacity Analytics Report: CICS814 |                        |         |                               |                                      |  |  |                                       |   |   |   |  |   |                                 |

IBM Z Performance and Capacity Analytics Report: CICS814

Figure 70. Example of a CICS TS Recovery Manager report

The report contains this information:

### Syncpoints forward

Number of syncpoints that were issued.

### Syncpoints backward

Number of syncpoint rollbacks that were issued.

### Resyncs

Number of resynchronizations that were issued.

### Time shunted indoubt failure

Total time that UOWs were shunted for indoubt failure.

### Time shunted commit back failure

Total time that current UOWs were shunted for commit/backout failure.

### Indoubt action forced trandef

Number of forced indoubt action resolutions due to the transaction definition specifying that it cannot support indoubt waiting.

### Indoubt action forced timeout

Number of forced indoubt action resolutions due to the indoubt waits timing.

### Indoubt action forced nowait

Number of forced indoubt action resolutions due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting.

### Indoubt action forced operator

Number of forced indoubt action resolutions due to the operator canceling the wait for indoubt resolution.

**Indoubt action forced tdqueues**

Number of resolutions due to an attribute WAIT=NO in the definition of the recoverable transient data queue.

**Indoubt action forced LU61conn**

Number of forced indoubt action resolutions (for LU61 connections) due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting.

**Indoubt action forced MROconn**

Number of forced indoubt action resolutions (for MRO connections) due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting.

**Indoubt action forced RMIexits**

Number of forced indoubt action resolutions (for RMI exits) due to a recoverable resource or resource manager coordinator being unable to support indoubt waiting.

**Indoubt action mismatches**

Number of forced indoubt action resolutions that a participating resource manager coordinator solved in a different manner from CICS.

**CICS TS Enqueue Manager**

This report shows CICS TS statistics on the enqueue activity for each enqueue pool ID.

This information identifies the report:

**Report ID**

CICS815 (CICS815P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_ENQUE\_MGR\_D (CICS\_S\_ENQU\_MGR\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TS, Enqueue, Manager

**Variables**

MVS system ID, CICS system ID, From date, To date

| CICS TS Enqueue Manager              |                |                |                       |                      |                            |                       |                                 |                          |                           |                                    |                                  |                                 |
|--------------------------------------|----------------|----------------|-----------------------|----------------------|----------------------------|-----------------------|---------------------------------|--------------------------|---------------------------|------------------------------------|----------------------------------|---------------------------------|
| MVS ID = 'VSG1' CICS ID = 'A6P00A11' |                |                |                       |                      |                            |                       |                                 |                          |                           |                                    |                                  |                                 |
| Date: '1999-02-08' to '2000-02-08'   |                |                |                       |                      |                            |                       |                                 |                          |                           |                                    |                                  |                                 |
| Enqueue poolname                     | Enqueue issued | Enqueue waited | Avg enqueue wait time | Tot enqueue retained | Avg enqueue retention time | Curr enqueue retained | Curr avg enqueue retention time | Enqueue rejected enqbusy | Enqueue rejected retained | Waiting enqueues rejected retained | Waiting enqueues purged operator | Waiting enqueues purged timeout |
| EXECADDR                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| EXECSTRN                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| FCDSSEWR                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| FCDSLDMO                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| FCDSRECD                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| FCDSRNGE                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| FCFLRECD                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| FCFLUMTL                             | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| JOURNALS                             | 1.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| KCADDR                               | 3.260E+02      | 1.200E+01      | 1.033                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| KCSTRING                             | 4.410E+02      | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| LOGSTRM                              | 1.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| TDNQ                                 | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |
| TSNQ                                 | 0.000          | 0.000          | 0.000                 | 0.000                | 0.000                      | 0.000                 | 0.000                           | 0.000                    | 0.000                     | 0.000                              | 0.000                            | 0.000                           |

IBM Z Performance and Capacity Analytics Report: CICS815

Figure 71. Example of a CICS TS Enqueue Manager report

The report contains this information:

**Enqueue poolname**

Enqueue pool name.

**Enqueue issued**

Number of enqueue requests that were issued.

**Enqueue waited**

Number of enqueue requests that have waited.

**Avg enqueue wait time**

Average enqueue wait time. Calculated as  $\text{Sum}(\text{Enq\_Waited\_Time}) \div \text{Sum}(\text{Enq\_Waited})$ .

**Tot enqueue retained**

Total number of enqueue requests that were retained.

**Avg enqueue retention time**

Average enqueue retention time. Calculated as  $\text{Sum}(\text{Enq\_Retn\_Tot\_Time}) \div \text{Sum}(\text{Enq\_Retn\_Tot})$ .

**Curr enqueue retained**

Current number of enqueue requests that were retained.

**Curr avg enqueue retention time**

Current average enqueue retention time. Calculated as  $\text{Sum}(\text{Enq\_Retn\_Cur\_Time}) \div \text{Sum}(\text{Enq\_Retn\_Cur})$ .

**Enqueue rejected enqbusy**

Number of enqueue requests that were immediately rejected (ENQBUSY response).

**Enqueue rejected retained**

Number of retained enqueue requests that were immediately rejected.

**Waiting enqueues rejected retained**

Number of retained enqueue requests that are awaiting rejection.

**Waiting enqueues purged operator**

Number of enqueue requests that are awaiting rejection because of operator intervention.

**Waiting enqueues purged timeout**

Number of enqueue requests that are awaiting rejection because of timeout.

## CICS TS Logstreams

This report shows CICS TS statistics on the data written to each logstream that can be used to analyze the activity of a single region. Logstream statistics contain data about the use of each logstream including the following:

- The number of write requests to the logstream
- The number of bytes written to the logstream
- The number of logstream buffer waits
- The number of logstream browse and delete requests

This information identifies the report:

**Report ID**

CICS816 (CICS816P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_LOGSTREAM\_D (CICS\_S\_LOGSTREA\_DP)

**Attributes**

Statistics, CICS, TS, Logstreams

**Variables**

MVS system ID, CICS system ID, From date, To date



| CICS TS Logstreams                                       |                   |                  |                     |                         |                   |                 |                |                 |                  |                 |                   |
|--|-------------------|------------------|---------------------|-------------------------|-------------------|-----------------|----------------|-----------------|------------------|-----------------|-------------------|
| MVS ID ='VSG1'   |                   |                  | CICS ID ='A6P00A11' |                         |                   |                 |                |                 |                  |                 |                   |
| Date: '1999-02-08' to '2000-02-08'                       |                   |                  |                     |                         |                   |                 |                |                 |                  |                 |                   |
| Logstream<br>name  | Write<br>requests | Bytes<br>written | Average<br>bytes    | Buffer<br>full<br>waits | Buffer<br>appends | Retry<br>errors | Force<br>waits | Peak<br>waiters | Browse<br>starts | Browse<br>reads | Stream<br>deletes |
| TEAM0.A6P00A11.DFHLOG                                    | 1.105E+05         | 3.308E+07        | 2.994E+0200         | 0.000                   | 1.116E+05         | 0.000           | 3.500E+01      | 1.103E+0        | 2.610E+02        | 1.600E+02       | 2.700E+01         |
| TEAM0.A6P00A11.DFHSHUNT                                  | 0.000             | 0.000            | 0.00000             | 0.000                   | 0.000             | 0.000           | 0.000          | 0.000           | 0.000            | 0.000           | 0.000             |
| TEAM0.DFHJ02   | 3.936E+03         | 1.123E+06        | 2.854E+0200         | 0.000                   | 7.604E+03         | 0.000           | 0.000          | 0.000           | 0.000            | 0.000           | 0.000             |
| IBM Z Performance and Capacity Analytics Report: CICS816 |                   |                  |                     |                         |                   |                 |                |                 |                  |                 |                   |

Figure 72. Example of a CICS TS Logstream report

The report contains this information:

**Logstream name**

Name of the logstream.

**Write requests**

Number of ISXGWRITE requests issued to this logstream.

**Bytes written**

Number of bytes written to this logstream.

**Average bytes**

Average number of bytes written to this logstream for each request. Calculated as  
Sum(Bytes\_Written) ÷ Sum(Logstream\_Wrt\_Req).

**Buffer full waits**

Number of times that buffer full has occurred for this logstream.

**Buffer appends**

Number of times that a journal record was successfully appended to the current logstream buffer.

**Retry errors**

When a block of data was being written to the logstream, the number of times that MVS system logger errors occurred that can be retried.

**Force waits**

Total number of force waits for this logstream.

**Peak waiters**

Peak number of force waiters for this logstream.

**Browse starts**

Number of browse start requests issued for this logstream.

**Browse reads**

Number of browse read requests issued for this logstream.

**Stream deletes**

Number of delete (IXGDELET) requests issued for this logstream.

## CICS Db2 Connection: TCB Statistics

This report shows CICS TS statistics on TCB activity related to Db2 connection.

This information identifies the report:

**Report ID**

CICS817 (CICS817P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_DB2CONN\_D (CICS\_S\_DB2CONN\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, TS, Db2, Connection, TCB

### Variables

MVS system ID, CICS system ID, From date, To date

|  |              |                               |              |             |                                   |
|--|--------------|-------------------------------|--------------|-------------|-----------------------------------|
| CICS Db2 Connection: TCB Statistics                      |              |                               |              |             |                                   |
| MVS ID = 'MV26'  |              | CICS ID = 'IYCQCTS6'          |              |             |                                   |
| Date: '2003-02-08' to '2004-02-08'                       |              |                               |              |             |                                   |
| Db2<br>conn<br>name                                      | Db2<br>SYSID | Tot Db2<br>connection<br>time | TCB<br>limit | TCB<br>peak | Peak<br>tasks<br>on<br>TCB readyq |
| -----  | -----        | -----                         | -----        | -----       | -----                             |
| JRBJRB   | DC26         | 2                             | 5.000E+01    | 0.000       | 0.000                             |
| IBM Z Performance and Capacity Analytics Report: CICS817 |              |                               |              |             |                                   |

Figure 73. Example of a CICS Db2 Connection: TCB Statistics report

The report contains this information:

#### Db2 conn name

Name of the installed DB2CONN.

#### Db2 SYSID

The Db2 system ID specified in this DB2CONN. If the system ID has changed, it is the last setting of SYSID.

#### Tot Db2 connection time

Total amount of time (in hours) that CICS was connected to the Db2 subsystem specified in this DB2CONN. Calculated as (DB2\_GMT\_DISC\_TIME - DB2\_GMT\_CONN\_TIME), if greater than 0. Otherwise, calculated as (DB2\_LOC\_DISC\_TIME - DB2\_LOC\_CONN\_TIME), if greater than 0. If none of the fields are meaningful, the value will be set to 0.

#### TCB limit

The TCBLIMIT value that was set in the DB2CONN. If the TCBLIMIT has changed, it is the last setting of TCBLIMIT.

#### TCB peak

Peak number of subtask TCBs that are attached to service Db2 requests.

#### Peak tasks on TCB readyq

Peak number of CICS tasks that are queued waiting for a Db2 subtask TCB to become available.

## CICS Db2 Connection: Buffer Pool Statistics

This report shows CICS TS statistics on Buffer Pool activity related to Db2 connection.

This information identifies the report:

#### Report ID

CICS818 (CICS818P for CICS Partitioning Feature)

#### Report group

CICS reports

#### Source

CICS\_S\_DB2CONN\_D (CICS\_S\_DB2CONN\_DP for CICS Partitioning Feature)

#### Attributes

Statistics, CICS, TS, Db2, Connection, Buffer, Pool

#### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Db2 Connection: BUFFER POOL Statistics |               |                                 |                             |                             |   |                                    |                              |                             |                                       |                            |                                 |                                |
|---|---------------|---------------------------------|-----------------------------|-----------------------------|---|------------------------------------|------------------------------|-----------------------------|---------------------------------------|----------------------------|---------------------------------|--------------------------------|
| MVS ID ='VSG1' CICS ID ='A6P00A11'          |               |                                 |                             |                             |   |                                    |                              |                             |                                       |                            |                                 |                                |
| Date: '2003-02-08' to '2004-02-08'          |               |                                 |                             |                             |   |                                    |                              |                             |                                       |                            |                                 |                                |
| Db2<br>conn<br>name                         | Db2<br>SYSID  | Db2<br>Release                  | Db2<br>pool<br>plan<br>name | Db2<br>pool<br>plex<br>name | Tot<br>calls<br>using<br>pool<br>thread | Tot<br>poolthread<br>signons       | Tot<br>poolthread<br>commits | Tot<br>poolthread<br>aborts | Tot<br>poolthread<br>single<br>phases | Tot<br>poolthread<br>reuse | Tot<br>poolthread<br>terminates | Tot<br>pool<br>thread<br>waits |
| Db2   | DB1C          | 0510                            | *****                       | DSNCUEXT                    | 6.369E+05                               | 8.000                              | 0.000                        | 8.000E+01                   | 1.496E+04                             | 1.200E+01                  | 1.502E+04                       | 1.200E+01                      |
| thread                                      | Pool<br>limit | Peak<br>pool<br>thread<br>inuse | pool                        | Peak<br>tasks               | Tot<br>pool<br>tasks                    | Peak<br>tasks<br>on pool<br>readyq |                              |                             |                                       |                            |                                 |                                |
| 8.000                                       |               | 8.000                           |                             | 2.000E+01                   | 1.504E+04                               | 1.200E+01                          |                              |                             |                                       |                            |                                 |                                |

IBM Z Performance and Capacity Analytics Report: CICS818

Figure 74. Example of a CICS Db2 Connection: Buffer Pool Statistics report

The report contains this information:

**Db2 conn name**

Name of the installed DB2CONN.

**Db2 SYSID**

The Db2 system ID specified in this DB2CONN. If the system ID has changed, it is the last setting of SYSID.

**Db2 release**

The Db2 version and release for this DB2CONN. (It can be blank if not present in the table.)

**Db2 pool plan name**

Name of the plan being used for the pool. If a dynamic plan exit is being used for the pool, this field is null.

**Db2 pool plex name**

Name of the dynamic plan exit to be used for the pool. If a static plan is being used for the pool, this field contains nulls.

**Tot calls using pool thread**

Total number of SQL calls made using pool threads.

**Tot poolthread signons**

Total number of Db2 signons performed for pool threads.

**Tot poolthread commits**

Number of 2-phase commits that are performed for UOWs using pool threads.

**Tot poolthread aborts**

Total number of UOWs (using pool threads) that were rolled back.

**Tot poolthread single phases**

Total number of UOWs (using pool threads) that used single-phase commit, either because they were R/O UOWs or because Db2 was the only recoverable resource updated in the UOWs.

**Tot poolthread reuse**

Total number of times that CICS transactions using the pool were able to reuse a created Db2 thread. This count includes transactions that overflow to the pool so as to acquire a thread and reuse an existing thread.

**Tot poolthread terminates**

Total number of terminate thread requests that were made to Db2 for pool threads. This count includes pool threads used by transactions that overflow to the pool.

**Tot poolthread waits**

Total number of times that all available threads in the pool were busy and a transaction had to wait for a thread to become available. This count includes transactions that overflow to the pool to acquire a thread and that have to wait for a pool thread.

**Pool thread limit**

Thread limit value for the pool. If the pool thread limit has changed, it is the last setting of the pool thread limit.

### Peak pool thread inuse

Peak number of active pool threads.

### Peak pool tasks

Peak number of CICS tasks that have used a pool thread.

### Tot pool tasks

Total number of completed tasks that have used a pool thread.

### Peak tasks on pool readyq

Peak number of CICS tasks that waited for a pool thread to become available.

## CICS Db2 Connection: Command Statistics

This report shows CICS TS statistics on Command activity related to Db2 connection.

This information identifies the report:

### Report ID

CICS819 (CICS819P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_DB2CONN\_D (CICS\_S\_DB2CONN\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, TS, Db2, Connection, Command

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Db2 Connection: COMMAND Statistics |              |                |                       |                         |                                      |                              |                                  |                                 |                            |                            |
|---|--------------|----------------|-----------------------|-------------------------|--------------------------------------|------------------------------|----------------------------------|---------------------------------|----------------------------|----------------------------|
| MVS ID ='VSG1'                          |              |                |                       |                         | CICS ID ='A6P00A12'                  |                              |                                  |                                 |                            |                            |
| Date: '2003-02-21' to '2004-02-21'      |              |                |                       |                         |                                      |                              |                                  |                                 |                            |                            |
| Db2<br>conn<br>name                     | Db2<br>SYSID | Db2<br>release | Db2<br>comd<br>authid | Db2<br>comd<br>authtype | Calls<br>using<br>command<br>threads | Command<br>thread<br>signons | Command<br>threads<br>terminated | Command<br>threads<br>overflows | Command<br>thread<br>limit | Peak<br>command<br>threads |
| Db2                                     | DB1C         | """"           | """"""""              | USERID                  | 0.000                                | 0.000                        | 0.000                            | 1.000                           | 0.000                      | 0.000                      |
| Db2                                     | DB1C         | 0510           | """"""""              | USERID                  | 0.000                                | 0.000                        | 0.000                            | 1.000                           | 0.000                      | 0.000                      |

IBM Z Performance and Capacity Analytics Report: CICS819

Figure 75. Example of a CICS Db2 Connection: Command Statistics report

The report contains this information:

### Db2 conn name

Name of the installed DB2CONN.

### Db2 SYSID

The Db2 system ID specified in this DB2CONN. If the system ID has changed, it is the last setting of SYSID.

### Db2 release

The Db2 version and release for this DB2CONN. (It can be blank if not present in the table.)

### Db2 comd authid

Static ID to be used for Db2 security checking of command threads. If an Authtype is being used for command threads, this field contains nulls.

### Db2 comd authtype

Type of ID to be used for Db2 security checking of command threads. If an Authid is being used for command threads, this field contains nulls.

**Calls using command threads**

Total number of Db2 commands that are issued using the DSNB transaction.

**Command thread signons**

Total number of Db2 signons performed for command threads.

**Command threads terminated**

Total number of terminate thread requests made to Db2 for command threads.

**Command threads overflows**

Number of times that a DSNB DB2 resulted in a pool thread being used because the number of active command threads exceeded the command threads limit.

**Command thread limit**

Maximum number of command threads that are allowed.

**Peak command threads**

Peak number of active command threads.

**CICS Db2 Entries: Resource Info**

This report shows CICS TS statistics on Resource information related to Db2 entries.

This information identifies the report:

**Report ID**

CICS820 (CICS820P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_DB2ENTRY\_D (CICS\_S\_DB2ENTRY\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TS, Db2, Entries, Resource

**Variables**

MVS system ID, CICS system ID, From date, To date

The report ( [Figure 76 on page 340](#)) contains this information:

**Db2 entry name**

Name of the installed DB2ENTRY.

**Db2 plan name**

Name of the plan being used for this DB2ENTRY. If a dynamic plan exit is being used for the DB2ENTRY, this field is null.

**Db2 planexit name**

Name of the dynamic plan exit to be used for this DB2ENTRY. If a static plan is being used for the DB2ENTRY, this field is null.

**Db2 authid**

Static ID that is to be used for Db2 security checking of this DB2ENTRY.

**Db2 authtype**

Type of ID that is to be used for Db2 security checking of this DB2ENTRY.

**Db2 accountr**

Frequency of Db2 accounting records that are to be produced for transactions using this DB2ENTRY.

**Db2 threadwa**

Specifies whether transactions should wait for a thread abend or overflow to the pool if the number of active threads for this DB2ENTRY exceeds its thread limit.

**Db2 priority**

Priority of the DB2ENTRY thread subtasks relative to the CICS main task.

| CICS Db2 Entries: Resource Info    |                     |                         |               |                 |                  |                 |                 |
|------------------------------------|---------------------|-------------------------|---------------|-----------------|------------------|-----------------|-----------------|
| MVS ID ='MV26' CICS ID ='IYCQCTS6' |                     |                         |               |                 |                  |                 |                 |
| Date: '2003-03-21' to '2003-12-03' |                     |                         |               |                 |                  |                 |                 |
| Db2<br>entry<br>name               | Db2<br>plan<br>name | Db2<br>planexit<br>name | Db2<br>authid | Db2<br>authtype | Db2<br>accountnr | Db2<br>threadwa | Db2<br>priority |
| A2000                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2001                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2002                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2003                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2004                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2005                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2006                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2007                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2008                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2009                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2010                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2011                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2012                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2013                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2014                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2015                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2016                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2017                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2018                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2019                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2020                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2021                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2022                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2023                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2024                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2025                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2026                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2027                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2028                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2029                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2030                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2031                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2032                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2033                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2034                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2035                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2036                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2037                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2038                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2039                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2040                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2041                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2042                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2043                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2044                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2045                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2046                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2047                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2048                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2049                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |
| A2050                              | RDORCT05            | *****                   | *****         | USERID          | NONE             | POOL            | HIGH            |

IBM Z Performance and Capacity Analytics Report: CICS820

Figure 76. Example of a CICS Db2 Entries: Resource Info report

## CICS Db2 Entries: Request Statistics

This report shows CICS TS statistics on Requests related to Db2 entries.

This information identifies the report:

### Report ID

CICS821 (CICS821P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_DB2ENTRY\_D (CICS\_S\_DB2ENTRY\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, TS, Db2, Entries, Requests

**Variables**

MVS system ID, CICS system ID, From date, To date

|  |                            |                     |                     |                    |                             |                             |                            |                              |
|--|----------------------------|---------------------|---------------------|--------------------|-----------------------------|-----------------------------|----------------------------|------------------------------|
| CICS Db2 Entries: Requests Statistics                    |                            |                     |                     |                    |                             |                             |                            |                              |
| MVS ID ='MV2C'   |                            |                     | CICS ID ='IYK2Z1V2' |                    |                             |                             |                            |                              |
| Date: '2003-03-21' to '2003-12-03'                       |                            |                     |                     |                    |                             |                             |                            |                              |
| Db2<br>entry<br>name                                     | Calls<br>using<br>Db2entry | Db2entry<br>signons | Db2entry<br>commits | Db2entry<br>aborts | Db2entry<br>single<br>phase | Db2entry<br>thread<br>reuse | Db2entry<br>thread<br>term | thread<br>waits<br>overflows |
| SAMPLE   | 0.000                      | 0.000               | 0.000               | 0.000              | 0.000                       | 0.000                       | 0.000                      | 0.000                        |
| SAMPLE2  | 0.000                      | 0.000               | 0.000               | 0.000              | 0.000                       | 0.000                       | 0.000                      | 0.000                        |
| IBM Z Performance and Capacity Analytics Report: CICS821 |                            |                     |                     |                    |                             |                             |                            |                              |

*Figure 77. Example of a CICS Db2 Entries: Request Statistics report*

The report contains this information:

**Db2 entry name**

Name of the installed DB2ENTRY.

**Calls using Db2entry**

Number of Db2 calls that are made using a thread from this DB2ENTRY.

**Db2entry signons**

Number of Db2 signons that are performed for threads of this DB2ENTRY.

**Db2entry commits**

Number of 2-phase commits that are performed for UOWs using threads from this DB2ENTRY.

**Db2entry aborts**

Number of UOWs (using this DB2ENTRY) that were rolled back.

**Db2entry single phase**

Number of UOWs (using the DB2ENTRY) that used single-phase commit, either because they were R/O UOWs or because Db2 was the only recoverable resource updated in the UOWs.

**Db2entry thread reuse**

Number of times that CICS transactions, using the DB2ENTRY, were able to use an existing created Db2 thread.

**Db2entry thread term**

Number of terminate thread requests made to Db2 for threads of this DB2ENTRY.

**Db2entry thread waits overflows**

Number of times that all available threads in the DB2ENTRY were busy and a transaction had to wait for a thread to become available or overflow to the pool and use a pool thread instead.

**CICS Db2 Entries: Performance Statistics**

This report shows CICS TS Performance statistics related to Db2 entries.

This information identifies the report:

**Report ID**

CICS822 (CICS822P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_DB2ENTRY\_D (CICS\_S\_DB2ENTRY\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TS, Db2, Entries, Performance

**Variables**

MVS system ID, CICS system ID, From date, To date

| CICS Db2 Entries: Performance Statistics |                             |                           |                            |                                   |                                 |                                  |                          |                         |                                   |                                    |
|--|-----------------------------|---------------------------|----------------------------|-----------------------------------|---------------------------------|----------------------------------|--------------------------|-------------------------|-----------------------------------|------------------------------------|
| MVS ID ='MV2C' CICS ID ='IYK2Z1V2'       |                             |                           |                            |                                   |                                 |                                  |                          |                         |                                   |                                    |
| Date: '2003-03-21' to '2003-12-03'       |                             |                           |                            |                                   |                                 |                                  |                          |                         |                                   |                                    |
| Db2<br>entry<br>name                     | Db2entry<br>thread<br>limit | Db2entry<br>thread<br>cur | Db2entry<br>thread<br>peak | Db2entry<br>protected<br>thrlimit | Db2entry<br>protected<br>thrcur | Db2entry<br>protected<br>thipeak | Db2entry<br>task<br>peak | Db2entry<br>task<br>tot | Db2entry<br>curtasks<br>on readyq | Db2entry<br>peaktasks<br>on readyq |
| SAMPLE                                   | 0.000                       | 0.000                     | 0.000                      | 0.000                             | 0.000                           | 0.000                            | 0.000                    | 0.000                   | 0.000                             | 0.000                              |
| SAMPLE2                                  | 0.000                       | 0.000                     | 0.000                      | 0.000                             | 0.000                           | 0.000                            | 0.000                    | 0.000                   | 0.000                             | 0.000                              |

IBM Z Performance and Capacity Analytics Report: CICS822

Figure 78. Example of a CICS Db2 Entries: Performance Statistics report

The report contains this information:

### Db2 entry name

Name of the installed DB2ENTRY.

### Db2entry thread limit

Maximum number of threads that are allowed for the DB2ENTRY.

### Db2entry thread cur

Current number of active threads that are using this DB2ENTRY.

### Db2entry thread peak

Peak number of active threads for this DB2ENTRY.

### Db2entry protected thrlimit

Maximum number of protected threads that are allowed for this DB2ENTRY.

### Db2entry protected thrcur

Current number of protected inactive threads for this DB2ENTRY.

### Db2entry protected thripeak

Peak number of protected inactive threads for this DB2ENTRY.

### Db2entry task peak

Peak number of CICS tasks that are using this DB2ENTRY.

### Db2entry task tot

Current total number of tasks that have used this DB2ENTRY.

### Db2entry curtasks on readyq

Current number of CICS tasks that are waiting for a thread to become available on this DB2ENTRY.

### Db2entry peaktasks on readyq

Peak number of CICS tasks that waited for a thread to become available on this DB2ENTRY.

## CICS Shared TS queue server: Buffer Pool Statistics

This report shows CICS Shared TS queue server statistics related to buffer pool. These statistics are for the queue index pool that is used to read and write queue index entries and associated data, if the total queue size is not greater than 32 kilobytes. This report describes the state of the buffer pool.

This information identifies the report:

### Report ID

CICS823 (CICS823P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_TS\_BPOOL\_D (CICS\_S\_TS\_BPOOL\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, TS, Queue, Server, Bufferpool

### Variables

MVS system ID, CICS system ID, From date, To date



| CICS Shared TS queue server: BP00L Statistics            |                  |                   |                  |                 |                         |              |               |           |           |         |         |
|--|------------------|-------------------|------------------|-----------------|-------------------------|--------------|---------------|-----------|-----------|---------|---------|
| MVS ID = 'MV2C'      CICS ID = 'DFHXQ'                   |                  |                   |                  |                 |                         |              |               |           |           |         |         |
| Date: '2000-03-21' to '2000-03-25'                       |                  |                   |                  |                 |                         |              |               |           |           |         |         |
| Pool buffers   | Max buffers used | Buffers reused    | Get buffers      | Put buffers     | Keep buffers            | Free buffers | Purge buffers | Got hit   | Got free  | Got new | Got LRU |
| 1.200E+03  | 3.000            | 0.000             | 4.780E+02        | 4.380E+02       | 0.000                   | 4.000E+01    | 0.000         | 4.380E+02 | 3.200E+01 | 8.000   | 0.000   |
| No buffer  | Not freed buffer | Not purged buffer | Not owned buffer | pool lock waits | Get waiting buffer lock |              |               |           |           |         |         |
| 0.000  | 0.000            | 0.000             | 0.000            | 0.000           | 2.000                   |              |               |           |           |         |         |
| IBM Z Performance and Capacity Analytics Report: CICS823 |                  |                   |                  |                 |                         |              |               |           |           |         |         |

Figure 79. Example of a CICS Shared TS queue server: Buffer Pool Statistics report

The report contains this information:

**Pool buffers**

Number of buffers in the pool.

**Max buffers used**

Maximum number of buffers already used (not affected by reset).

**Buffers reused**

Number of valid buffers on LRU chain to allow reuse.

**Get buffers**

Number of requests to get a buffer.

**Put buffers**

Number of requests to put back buffer with valid contents.

**Keep buffers**

Number of keep requests (put back buffer as modified).

**Free buffers**

Number of requests to put back a buffer as empty.

**Purge buffers**

Number of requests to discard contents of a previously valid buffer.

**Got hit**

Number of requests to put back a buffer with valid contents.

**Got free**

Number of requests to put back a buffer with modified contents. (Currently this function is not used by the queue server.)

**Got new**

Number of requests that obtained a previously unused buffer.

**Got LRU**

Number of requests that caused a discard and reuse of the oldest valid buffer.

**No buffer**

Number of GET requests that returned no buffer.

**Not freed buffer**

Number of errors caused by requests that attempted to release a buffer they did not own. (This can occur during error recovery.)

**Not purged buffer**

Number of errors caused by purge requests that did not find a matching buffer.

**Not owned buffer**

Number of errors caused by purge requests that found a buffer owned by another task.

**Pool lock waits**

Number of waits on buffer pool lock.

### Get waiting buffer lock

Number of GET waits on buffer lock.

## CICS Shared TS queue server: Storage Statistics

This report shows CICS Shared TS queue server statistics related to storage. These statistics are for the named storage page pool (in the AXMPGANY and AXMPGLOW) produced since the most recent statistics. Each of the storage statistics is shown in kilobytes and as a percentage of the total size.

This information identifies the report:

### Report ID

CICS824 (CICS824P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_TS\_STOR\_D (CICS\_S\_TS\_STOR\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, TS, Queue, Server, Storage

### Variables

MVS system ID, CICS system ID, From date, To date

| CICS Shared TS queue server: Storage Statistics          |                   |                         |                   |                   |                      |                   |                      |                     |
|--|-------------------|-------------------------|-------------------|-------------------|----------------------|-------------------|----------------------|---------------------|
| MVS ID = 'MV2C'  |                   |                         | CICS ID = 'DFHX0' |                   |                      |                   |                      |                     |
| Date: '2000-03-21' to '2000-03-25'                       |                   |                         |                   |                   |                      |                   |                      |                     |
| Storage pool name  | Storage pool size | Totpage in storage pool | Storage get reqs  | Storage get fails | Storage release reqs | Storage get fails | Storage release reqs | Storage get retries |
| AXMPGANY   | 3.165E+07         | 7.726E+03               | 8.690E+02         | 5.170E+02         | 0.000                | 5.170E+0          | 0.000                | 0.000               |
| AXMPGLOW   | 4.506E+05         | 1.100E+02               | 9.000             | 0.000             | 0.000                | 0.000             | 0.000                | 0.000               |
| IBM Z Performance and Capacity Analytics Report: CICS824 |                   |                         |                   |                   |                      |                   |                      |                     |

Figure 80. Example of a CICS Shared TS queue server: Storage Statistics report

The report contains this information:

### Storage pool name

Name of the storage pool. AXMPGANY (for LOC=ANY storage pool) or AXMPGLOW (for LOC=BELOW storage pool).

### Storage pool size

Total size of the storage pool.

### Totpage in storage pool

Total pages in the storage pool.

### Storage get requests

Number of storage GET requests.

### Storage get fails

Number of times that a storage request was unable to obtain the requested amount of storage even after a retry.

### Storage release reqs

Number of requests to release storage within the pool.

### Storage get retries

Number of times that a storage request initially failed and was retried after merging any adjacent small free areas to form larger areas.

## CICS TCP/IP Global statistics

This report shows CICS TCP/IP Global statistics.

This information identifies the report:

**Report ID**

CICS832 (CICS832P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_GLB\_TCPIP\_D (CICS\_S\_GLB\_TCP\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TCPIP, Global

**Variables**

Date, MVS system ID, CICS system ID

| CICS TCP/IP Global Statistics                            |                    |                     |                                   |                     |                       |                                |                              |                                   |
|--|--------------------|---------------------|-----------------------------------|---------------------|-----------------------|--------------------------------|------------------------------|-----------------------------------|
| MVS ID = 'MV2C'  |                    |                     | CICS ID = 'DFHXQ'                 |                     |                       |                                |                              |                                   |
| Date: '2005-05-01'                                       |                    |                     |                                   |                     |                       |                                |                              |                                   |
| SSLCACHE<br>setting                                      | Inbound<br>sockets | Outbound<br>sockets | Persistent<br>Outbound<br>sockets | MAXSOCKETS<br>limit | MAXSOCKETS<br>reached | Create<br>sockets<br>timed out | Create<br>sockets<br>delayed | MAXSOCKETS<br>delay<br>time (sec) |
| CICS   | 28                 | 0                   | 0                                 | 24                  | 8                     | 0                              | 0                            | 0                                 |
| IBM Z Performance and Capacity Analytics Report: CICS832 |                    |                     |                                   |                     |                       |                                |                              |                                   |

Figure 81. Example of a CICS Global Statistics report

The report contains this information:

**SSLCACHE setting**

Reports whether SSL caching is taking place locally within a CICS region, or across a sysplex. From SSLCACHE\_SETTING.

**Inbound sockets**

Current number of inbound sockets. Calculated as maximum of IN SOCK\_CUR.

**Outbound sockets**

Number of non-persistent inbound sockets. Calculated as maximum of OUT SOCK\_CUR.

**Persistent Outbound sockets**

Number of persistent inbound sockets. Calculated as maximum of OUT\_PSOCK\_CUR.

**MAXSOCKETS limit**

The maximum number of IP sockets that can be managed by the CICS sockets domain. From MAXSOCKETS.

**MAXSOCKETS reached**

Number of times the MAXSOCKETS value was reached. From MAXSOCKETS\_REACHED.

**Create Socket timed out**

Number of create socket requests that were timed out whilst delayed because the system had reached the MAXSOCKETS limit. From TOUT\_MAXSOCKETS.

**Create Socket delayed**

Number of create socket requests delayed because the system was at the MAXSOCKETS limit. From DLY\_AT\_MAXSOCKETS.

**MAXSOCKETS delay time (sec)**

Time that create socket requests were delayed because the system had reached the MAXSOCKETS limit. From MAXSOCK\_DLY\_TIME.

## CICS TCP/IP Service Statistics

This report shows CICS TCP/IP Service statistics.

This information identifies the report:

**Report ID**

CICS825 (CICS825P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_TCPIP\_T (CICS\_S\_TCPIP\_TP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TCPIP

**Variables**

Date, MVS system ID, CICS system ID

The report contains this information:

**TCPIP service name**

Name of the TCP/IP service installed.

**Port number**

Number of the port on which CICS is listening on behalf of this service.

**IP address**

The TCP/IP address defined for the TCP/IP stack used for this TCP/IP service.

**SSL type**

Level of secure sockets being used for the service.

**SSL encryption**

The level of SSL encryption support that applies to the TCP/IP service. From PRIVACY.

**Authentication Scheme**

The authentication and identification scheme specified for the TCP/IP service. From AUTHENTICATE.

**Backlog**

Port backlog for the TCP/IP service.

**Local open date**

Date when the TCP/IP was opened. If this field is null, the status of the connection is CLOSED.

**Local open time**

Time when the TCP/IP was opened. If this field is null, the status of the connection is CLOSED.

**Maxdata**

Indicates the setting for the maximum length of data that may be received by CICS as an HTTP server. From MAXDATA.

**Status**

Status of the connection. It is OPEN when TCPIP\_LOCOPE\_DATE and TCPIP\_LOCOPE\_TIME are not null. It is CLOSED when TCPIP\_LOCOPE\_DATE and TCPIP\_LOCOPE\_TIME are null.

## CICS TCP/IP Service Requests Statistics

This report shows CICS TCP/IP service requests statistics.

This information identifies the report:

**Report ID**

CICS826 (CICS826P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_TCPIP\_T (CICS\_S\_TCPIP\_TP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TCPIP, Requests, Daily

**Variables**

Date, MVS system ID, CICS system ID

The report contains this information:

**TCPIP service name**

Name of the TCP/IP service installed.

**Port number**

Number of the port on which CICS is listening on behalf of this service.

**IP address**

TCP/IP address defined for the TCP/IP stack used for this TCP/IP service.

**Current connections**

Number of connections for the TCP/IP service.

**Peak connections**

Peak number of connections for the TCP/IP service. Calculated as maximum of TCPIP\_CONNECT\_PEAK.

**Attached transactions**

Number of transactions attached.

**Send requests**

Number of send requests issued for the TCP/IP service.

**Average bytes sent**

Average number of bytes sent. Calculated as sum of TCPIP\_BYTES\_SENT/TCPIP\_SEND\_NUM.

**Receive requests**

Number of receive requests issued for the TCP/IP service.

**Average bytes received**

Average number of bytes received. Calculated as sum of TCPIP\_BYTES\_RECV/TCPIP\_RECV\_NUM.

## CICS TCP/IP Service Requests: Daily Trend

This report shows a daily trend for CICS TCP/IP service requests statistics.

This information identifies the report:

**Report ID**

CICS827 (CICS827P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_TCPIP\_T (CICS\_S\_TCPIP\_TP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, TCPIP, Requests, Daily

**Variables**

Date, MVS system ID, CICS system ID

The report contains this information:

**TCPIP service name**

Name of the TCP/IP service installed.

**Port number**

Number of the port on which CICS is listening on behalf of this service.

**IP address**

TCP/IP address defined for the TCP/IP stack used for this TCP/IP service.

**Current connections**

Number of connections for the TCP/IP service.

**Peak connections**

Peak number of connections for the TCP/IP service. Calculated as maximum of TCPIP\_CONNECT\_PEAK.

### Attached transactions

Number of transactions attached.

### Send requests

Number of send requests issued for the TCP/IP service.

### Average bytes sent

Average number of bytes sent. Calculated as sum of TCPIP\_BYTES\_SENT/TCPIP\_SEND\_NUM.

### Receive requests

Number of receive requests issued for the TCP/IP service.

### Average bytes received

Average number of bytes received. Calculated as sum of TCPIP\_BYTES\_RECV/TCPIP\_RECV\_NUM.

## CICS CFDT Server Statistics

This report shows CFDT server statistics on the CF structure and the data tables that the CFDT server supports.

This information identifies the report:

### Report ID

CICS828 (CICS828P for CICS Partitioning Feature)

### Report group

CICS reports

### Source

CICS\_S\_CFDT\_SERV\_D (CICS\_S\_CFDT\_SER\_DP for CICS Partitioning Feature)

### Attributes

Statistics, CICS, CFDT, Server, Daily

### Variables

Date, MVS system ID, CICS system ID

The report contains this information:

### Structure name

Name of the list structure.

### Connection name

Name of the connection to the structure.

### Structure max size allocated

Maximum size allocated for the list structure.

### Structure max size allowed

Maximum size to which the list structure can be altered.

### Structure element size

Maximum element size used for the list structure.

### Lists max total

Maximum number of list headers in the structure.

### Lists max for control

Maximum number of headers used for the control list.

### Lists max for data

Maximum number of headers available for table data.

### Lists max used

Maximum number of entries on the used list.

### Entries max total

Maximum number of entries in the currently allocated structure.

### Entries max used

Maximum number of entries in use.

**Entries min free**

Minimum number of free entries.

**Elements max total**

Maximum number of elements in the structure.

**Elements max used**

Maximum number of elements in use.

**Elements min free**

Minimum number of free elements.

**CICS CFDT Storage Statistics**

This report shows CFDT storage statistics.

This information identifies the report:

**Report ID**

CICS829 (CICS829P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_CFD\_T (CICS\_S\_CFD\_T for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, CFDT, Storage

**Variables**

From date, To date, MVS system ID, CICS system ID

The report contains this information:

**CF storage page pool**

CF storage pool names (AXMPGANY or AXMPGLOW).

**Date**

Date to which the statistics refer.

**Maximum size**

Maximum size of the storage pool area.

**Maximum total pages**

Maximum number of pages in the storage pool.

**Maximum used pages**

Maximum number of used pages in the storage pool.

**Maximum free pages**

Maximum number of free pages in the storage pool.

**Minimum free pages**

Lowest number of free pages in the storage pool.

**Gets**

Number of storage GET requests.

**Fail gets**

Number of GET requests that failed to obtain storage.

**Free**

Number of storage FREE requests.

**Compress**

Number of compress (defragmentation) attempts.

**CICS NC Storage Statistics**

This report shows NC storage statistics.

## Reports in the CICS statistics component

This information identifies the report:

**Report ID**

CICS830 (CICS830P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_CFDI\_STOR\_T (CICS\_S\_CFDI\_STO\_TP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, NC, Storage

**Variables**

From date, To date, MVS system ID, CICS system ID

The report contains this information:

**NC storage page pool**

NC storage pool names (AXMPGANY or AXMPGLOW).

**Date**

Date to which the statistics refer.

**Maximum size**

Maximum size of the storage pool area.

**Maximum total pages**

Maximum number of pages in the storage pool.

**Maximum used pages**

Maximum number of used pages in the storage pool.

**Maximum free pages**

Maximum number of free pages in the storage pool.

**Minimum free pages**

Lowest number of free pages in the storage pool.

**Gets**

Number of storage GET requests.

**Fail gets**

Number of GET requests that failed to obtain storage.

**Free**

Number of storage FREE requests.

**Compress**

Number of compress (defragmentation) attempts.

## CICS URIMAP Global Statistics

This report shows summary global statistics about CICS TS URIMAP definitions.

This information identifies the report:

**Report ID**

CICS834 (CICS834P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_GLBURIMAP\_D (CICS\_S\_GLBURIMA\_DP for CICS Partitioning Feature)

**Attributes**

Statistics, CICS, URIMAP, Global

**Variables**

Date, MVS system ID, CICS system ID



| CICS URIMAP Global Statistics                            |          |            |                       |                    |                      |                  |                   |                   |
|--|----------|------------|-----------------------|--------------------|----------------------|------------------|-------------------|-------------------|
| MVS ID = 'MV2C' CICS ID 'DFHXQ'                          |          |            |                       |                    |                      |                  |                   |                   |
| Date: '2005-05-01' to: '2005-05-05'                      |          |            |                       |                    |                      |                  |                   |                   |
| Reference<br>count                                       | Disabled | Redirected | Host/Path<br>no match | Host/Path<br>match | Pipeline<br>requests | HTTP<br>requests | HTTPS<br>requests | VHost<br>disabled |
| 0  | 0        | 0          | 0                     | 0                  | 0                    | 0                | 0                 | 0                 |
| IBM Z Performance and Capacity Analytics Report: CICS834 |          |            |                       |                    |                      |                  |                   |                   |

Figure 82. Example of a CICS URIMAP Global statistics report

The report contains this information:

#### Reference count

Number of times a search for a matching URIMAP definition was made. From URIMAP\_REF\_COUNT.

#### Disabled

Number of times a URIMAP definition with a matching host and path was found, but the URIMAP definition was disabled. From URIMAP\_DISABLED.

#### Redirected

Number of times a URIMAP definition with a matching host and path was found, and the request was redirected. From URIMAP\_REDIRECTED.

#### Host/Path no match

Number of times a search for a matching URIMAP definition was made, but no URIMAP definition with a matching host and path was found. From HOST\_PATH\_NOMATCH.

#### Host/Path match

Number of times a search for a matching URIMAP definition was made, and a URIMAP definition with a matching host and path was found. From HOST\_PATH\_MATCH.

#### Pipeline requests

Number of times a URIMAP definition with a matching host and path was found, and the request was handled by a Web service. From PIPELINE\_REQS.

#### HTTP requests

Number of times a URIMAP definition with a matching host and path was found, and the scheme was HTTP. From SCHEME\_HTTP\_REQS.

#### HTTPS requests

Number of times a URIMAP definition with a matching host and path was found, and the scheme was HTTPS (HTTP with SSL). From SCHEME\_HTTPS\_REQS.

#### VHost disabled

Number of times a URIMAP definition with a matching host and path was found, but the virtual host was disabled. From VHOST\_DISABLED.

## CICS URIMAP Resource Statistics

This report shows gives details of various attribute settings of each URIMAP definition.

This information identifies the report:

#### Report ID

CICS835 (CICS835P for CICS Partitioning Feature)

#### Report group

CICS reports

#### Source

CICS\_S\_URIMAP\_T (CICS\_S\_URIMAP\_TP for CICS Partitioning Feature)

#### Attributes

Statistics, CICS, URIMAP, Resource, Details

#### Variables

Date, MVS system ID, CICS system ID, Urimap name

| CICS URIMAP Resource Statistics |              |               |                     |             |                 |                 |               |              |                 |          |            |  |
|---------------------------------|--------------|---------------|---------------------|-------------|-----------------|-----------------|---------------|--------------|-----------------|----------|------------|--|
| MVS ID = 'MV2C' CICS ID 'DFHXQ' |              |               |                     |             |                 |                 |               |              |                 |          |            |  |
| Date: '2005-05-01'              |              |               |                     |             |                 |                 |               |              |                 |          |            |  |
| Urimap name                     | Urimap usage | Urimap scheme | Urimap host         | Urimap path | Tcpservice name | WebService name | Pipeline name | Program name | Reference count | Disabled | Redirected |  |
| SAMPLE                          | SERVER       | HTTP          | www.hursley.ibm.com | /wsibusp    | CHRIS           | JavaExProvider  | BOBPIPE       | DFH0STAT     | 0               | 0        | 0          |  |

IBM Z Performance and Capacity Analytics Report: CICS834

Figure 83. Example of a CICS URIMAP Resource Statistics report

The report contains this information:

### Urimap name

The name of the installed URIMAP definition. From URIMAP\_NAME.

### Urimap usage

The intended use of this URIMAP:

#### SERVER

The URIMAP definition is used to locate the resources for CICS to produce an HTTP response to the request identified by HOST and PATH.

#### CLIENT

The URIMAP definition is used to specify information for making an HTTP request from CICS as an HTTP client.

#### PIPELINE

The URIMAP definition is used to locate the resources for CICS to produce an XML response to the request identified by HOST and PATH. From URIMAP\_USAGE.

### Urimap scheme

The scheme for the HTTP request, HTTP with SSL(HTTPS) or without (HTTP). From URIMAP\_SCHEME.

### Urimap host

For USAGE (CLIENT), the host name of the target URL to which the HTTP request is to be sent. For any other USAGE, the host name on the incoming HTTP request that is used to select this URIMAP definition. From URIMAP\_HOST.

### Urimap path

For USAGE(CLIENT), the path of the target URL to which the HTTP request is to be sent. For any other USAGE, the path on the incoming HTTP request that is used to select this URIMAP definition. From URIMAP\_PATH.

### TCPIPSERVICE name

The TCPIPSERVICE to which this URIMAP definition applies. From TCPSERVICE\_NAME.

### WEBSERVICE name

The name of the WEBSERVICE resource definition for the Web service that handles the incoming HTTP request. From WEBSERVICE\_NAME.

### PIPELINE name

The name of the PIPELINE resource definition for the Web service that handles the incoming HTTP request. From PIPELINE\_NAME.

### PROGRAM name

The name of the application program that processes the incoming HTTP request. From PROGRAM\_NAME.

### Reference count

Number of times this URIMAP definition was referenced. From URIMAP\_REF\_CNT.

### Disabled

The Number of times this URIMAP host and path were matched, but the URIMAP definition was disabled. From URIMAP\_DISABLED.

### Redirected

Number of times this URIMAP host and path were matched, and the request was redirected. From URIMAP\_REDIRECTED.

## CICS JVM Profile Statistics, Daily

This report shows details about statistics for each JVM profile in each execution key.

This information identifies the report:

### Report ID

CICS831 (CICS831P for CICS Partitioning feature)

### Report group

CICS Reports

### Source

CICS\_S\_JVM\_PROF\_D

### Attributes

Statistics, CICS, Profile, Daily

### Variables

From date, To date, MVS System ID, CICS System ID

| CICS JVM Profile Statistics, Daily                       |             |                   |                          |                     |          |
|--|-------------|-------------------|--------------------------|---------------------|----------|
| MVS ID ='IP02'   |             | CICS ID ='CFGTV1' |                          |                     |          |
| Date: '2004-03-01'                                       |             | to '2004-03-08'   |                          |                     |          |
| Profile Name   | Storage Key | Profile Requests  | Current JVMs in JVM Pool | Peak Number of JVMs | New JVMs |
| PM23   | User        | 2000              | 45                       | 70                  | 0        |
| DD01   | User        | 0                 | 12                       | 32                  | 4        |
| VA02   | CICS        | 18                | 34                       | 78                  | 10       |
| PM97   | User        | 257               | 78                       | 25                  | 6        |
| RST7   | CICS        | 3700              | 23                       | 10                  | 28       |
| IBM Z Performance and Capacity Analytics Report: CICS831 |             |                   |                          |                     |          |

Figure 84. Example of a CICS JVM Profile Statistics, Daily report

The report contains this information:

### Profile Name

The name of the JVM profile. From PROF\_NAME.

### Storage Key

The execution key to which these statistics apply. From STORAGE\_KEY.

### Profile Requests

The number of requests that applications have made to run a Java program in a JVM with this execution key and profile. From PROF\_REQUESTS.

### Current JVMs in JVM Pool

The number of JVMs with this execution key and profile that are currently in the JVM pool. From CURR\_PROF\_USE.

### Peak Number of JVMs

The peak number of JVMs with this execution key and profile that the JVM pool has contained. From PEAK\_PROF\_USE.

### New JVMs

The number of new JVMs that were created with this execution key and profile. From NEW\_JVM\_CREATED.

## CICS Transaction Processor Utilization, Daily

This report shows the average number of transactions in a CICS/ESA or CICS/TS system per MVS processor second. The number of transactions is measured by CICS, and the processor usage (TCB and SRB) is measured by MVS. For information on how to use this report, see [“Monitoring processor use” on page 27](#). The report provides information for CICS running on MVS working both in toleration and goal modes.

This information identifies the report:

**Report ID**

CICSA06 (CICSA06P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_TRAN\_D (CICS\_S\_TRAN\_DP for CICS Partitioning Feature), MVS\_WORKLOAD\_D,  
MVS\_WORKLOAD2\_M

**Attributes**

CICS, Performance, Transaction, Daily, Detail

**Variables**

MVS system ID, CICS system ID, From date, To date

Transaction Processor Utilization, Daily MVS ID = 'IP03' CICS ID = 'CFRTL6' Date: '2000-03-02' to '2000-

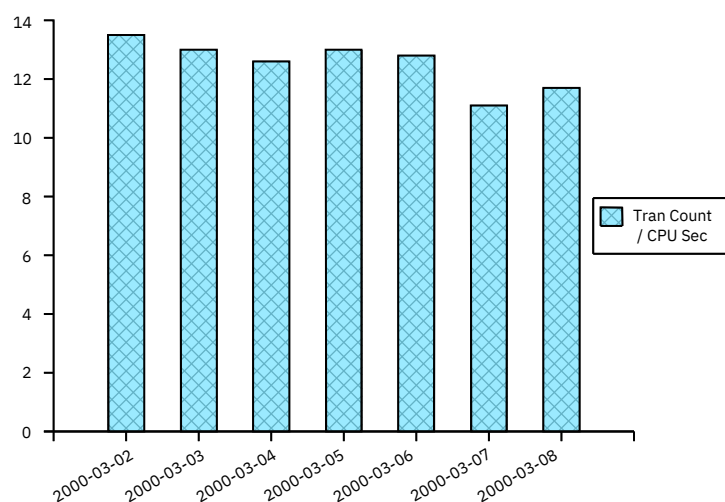


Figure 85. Example of a CICS Transaction Processor Utilization, Daily report

The report contains this information:

**Date**

There is one bar for each day in the specified range.

**Tran count/CPU sec**

Number of transactions per processor second. The processor time is the sum of TCB\_SECONDS and SRB\_SECONDS. The transaction count is from CICS/ESA or CICS/TS transaction statistics.

### CICS Transaction Processor Utilization, Monthly

This report shows the average number of transactions in a CICS/ESA or CICS/TS system per MVS processor second. The number of transactions is measured by CICS, and the processor usage (TCB and SRB) is measured by MVS. For information on how to use this report, see [“Monitoring processor use” on page 27](#). The report provides information for CICS running on MVS working both in toleration and goal modes.

This information identifies the report:

**Report ID**

CICSA04 (CICSA04P for CICS Partitioning Feature)

**Report group**

CICS reports

**Source**

CICS\_S\_TRAN\_M (CICS\_S\_TRAN\_MP for CICS Partitioning Feature), MVS\_WORKLOAD\_M  
MVS\_WORKLOAD2\_M

**Attributes**

CICS, Performance, Transaction, Monthly, Detail

**Variables**

MVS system ID, CICS system ID, From date, To date

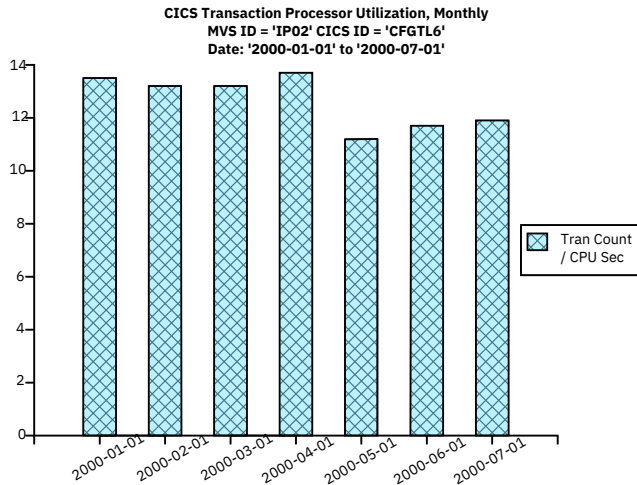


Figure 86. Example of a CICS Transaction Processor Utilization, Monthly report

The report contains this information:

**Date**

There is one bar for each month in the specified range.

**Tran count/CPU sec**

Number of transactions per processor second. The processor time is the sum of TCB\_SECONDS and SRB\_SECONDS. The transaction count is from CICS/ESA or CICS/TS transaction statistics.

## CICS Availability Reports

CICS availability reports show you the availability of the CICS subsystem and CICS-Db2 Connection over a specific time period.

### CICS\_Db2 Connection Availability, Daily Overview report

This report gives you a daily overview of the availability of the CICS-Db2 Connection (DB2CONN resource) in a CICS subsystem.

This information identifies the report:

**Report ID**

CICSA08 (CICSA08P for CICS Partitioning feature)

**Report group**

CICS Reports

**Source**

CICS\_AVAIL\_D (CICS\_AVAIL\_DP)

**Attributes**

CICS, Availability, Daily, Overview

**Variables**

CICS\_System\_ID, Date

| CICS Db2 Connection Availability, Daily Overview        |             |                            |                        |                |
|---|-------------|----------------------------|------------------------|----------------|
| Date: 2002-09-27  |             |                            |                        |                |
| CICS System: 'CICS3T87'                                 |             |                            |                        |                |
| Db2CONN<br>Name   | Up<br>Hours | Up In<br>Schedule<br>Hours | Up In<br>Schedule<br>% | Objective<br>% |
| -----   | -----       | -----                      | -----                  | -----          |
| DB23T8X   | 12          | 9                          | 100.00                 | 95.00          |
| IBM Z Performance and Capacity Analytics Report: CSQA02 |             |                            |                        |                |

Figure 87. Example of a CICS-Db2 Connection Availability, Daily Overview report

The report contains this information:

### Date

The date of the day for the measurement.

### CICS System ID

The name of the CICS subsystem.

### DB2CONN Name

The name of the DB2CON resource.

### Up Hours

The total time, in hours, when the CICS-Db2 Connection was available.

### Up In Schedule (Hours)

The time within the schedule, in hours, when the CICS-Db2 Connection was available running. The CICS\_AVAIL\_RES is used to specify the schedule name.

### Up In Schedule (%)

The time within the schedule, in percent of scheduled hours, when the CICS-Db2 Connection was available. The CICS\_AVAIL\_RES is used to specify the schedule name.

### Objective (%)

Availability objective for this resource in the scheduled hours.

## CICS Subsystem Availability, Daily Trend report

This report shows availability for one CICS subsystem in a daily trend between the FROM\_DATE and TO\_DATE specified.

This information identifies the report:

### Report ID

CICSA09 (CICSA09P for CICS Partitioning feature)

### Report group

CICS Reports

### Source

CICS\_AVAIL\_D (CICS\_AVAIL\_DP)

### Attributes

CICS, Availability, Daily, Trend

### Variables

CICS System ID, From Date, To Date

| CICS Subsystem Availability, Daily Trend |          |                |                  |                   |
|--|----------|----------------|------------------|-------------------|
| Date: '2002-09-27' to '2002-09-30'       |          |                |                  |                   |
| CICS System: 'CICS3T87'                  |          |                |                  |                   |
| Date                                     | Up Hours | Schedule Hours | Up In Schedule % | Up In Objective % |
| 2002-09-27                               | 12       | 9              | 100.00           | 95.00             |
| 2002-09-28                               | 24       | 9              | 100.00           | 95.00             |
| 2002-09-29                               | 24       | 9              | 100.00           | 95.00             |
| 2002-09-30                               | 3        | 3              | 33.33            | 95.00             |

IBM Z Performance and Capacity Analytics Report: CICS831

Figure 88. Example of an CICS Subsystem Availability, Daily Trend report

The report contains this information:

**Date**

The date of the day for the measurement.

**CICS System ID**

The name of the CICS subsystem.

**Up Hours**

The total time, in hours, when the CICS subsystem was up and running.

**Up In Schedule (Hours)**

The time within the schedule, in hours, when the CICS subsystem was up and running. The CICS\_Avail\_RES is used to specify the schedule name.

**Up In Schedule (%)**

The time within the schedule, in percent of scheduled hours, when the CICS subsystem was up and running. The CICS\_Avail\_RES is used to specify the schedule name.

**Objective (%)**

Availability objective for this resource in the scheduled hours.

## Reports in the CICS Transaction and Unit-of-Work Analysis component

If you install the CICS Transaction and Unit-of-Work Analysis component, IBM Z Performance and Capacity Analytics provides the reports described in this section. See [“Evaluating the CICS Transaction and Unit-of-Work Analysis component” on page 13](#), for more information.

### CICS UOW Response Times

This report shows a response-time analysis for transactions that run on several CICS systems. The data from each CICS system is consolidated using the unit-of-work ID as a key. Do not specify too great a time interval for this report, because it can generate many lines of output. The response times are adjusted by removing the long-running CICS mirror tasks. For information on how to use this report, see [“Understanding CICS unit-of-work reporting” on page 32](#).

This information identifies the report:

**Report ID**

CICS902 (CICS902P for CICS Partitioning Feature)

**Report group**

CICS Reports

**Source**

CICS\_T\_TRAN\_T, CICS\_T\_UOW\_TV1, CICS\_T\_UOW\_TV2 (CICS\_T\_TRAN\_TP, CICS\_T\_UOW\_TV1P, CICS\_T\_UOW\_TV2P for CICS Partitioning Feature)

**Attributes**

CICS, UOW, Response, Transaction, Tran

### Variables

Date, From time, To time, Exclude program add list

| CICS UOW Response Times          |                              |  |                                      |                      |                           |
|----------------------------------|------------------------------|--|--------------------------------------|----------------------|---------------------------|
| Time: '09.59.25' to '10.00.00'   |                              |  |                                      |                      |                           |
| Date: 2000-03-10                 |                              |  |                                      |                      |                           |
| Adjusted<br>UOW<br>start<br>time | Tran<br>ID                   | CICS<br>ID                                   | Program<br>name                      | UOW<br>tran<br>count | Response<br>time<br>(sec) |
| 09.59.25                         | OP22<br>OP22                 | CICSPROD<br>CICSPRDC                         | DFHCRP<br>OEPCPI22                   | 2                    | 0.436                     |
| 09.59.26                         | AP63<br>AP63                 | CICSPRDE<br>CICSPROD                         | APPM00<br>DFHCRP                     | 2                    | 0.045                     |
| 09.59.26                         | ARUS<br>CSM5<br>ARUS         | CICSPROD<br>CICSPRDB<br>CICSPRDC             | DFHCRP<br>DFHMIR<br>AR49000          | 3                    | 0.158                     |
| 09.59.26                         | CSM5<br>GCS6                 | CICSPRDB<br>CICSPROD                         | DFHMIR<br>GCSCPS20                   | 2                    | 0.068                     |
| 09.59.27                         | CSM5<br>CSM5<br>MQ01<br>MQ01 | CICSPRDB<br>CICSPRDB<br>CICSPROD<br>CICSPRDD | DFHMIR<br>DFHMIR<br>DFHCRP<br>CMQ001 | 4                    | 0.639                     |
| ...                              |                              |  |                                      |                      |                           |

IBM Z Performance and Capacity Analytics Report: CICS902

Figure 89. Example of a CICS UOW Response Times report

The report contains this information:

#### Adjusted UOW start time

Start time of the first transaction, excluding long-running mirror transactions. This is from START\_TIMESTAMP in CICS\_T\_UOW\_TV2 (CICS\_T\_UOW\_TV2P for CICS Partitioning Feature).

#### Tran ID

Transaction name. This is from TRANSACTION\_ID in CICS\_T\_TRAN\_T (CICS\_T\_TRAN\_TP for CICS Partitioning Feature).

#### CICS ID

The CICS system name. This is from CICS\_SYSTEM\_ID in CICS\_T\_TRAN\_T (CICS\_T\_TRAN\_TP for CICS Partitioning Feature).

#### Program name

Program name. This is from PROGRAM\_NAME in CICS\_T\_TRAN\_T. (CICS\_T\_TRAN\_TP for CICS Partitioning Feature).

#### UOW tran count

Number of tasks involved, including long-running tasks. This is from TRAN\_COUNT in CICS\_T\_UOW\_TV1P.

#### Response time (sec)

Response time, excluding long-running mirror tasks. This is from RESPONSE\_TIME\_SEC in CICS\_T\_UOW\_TV2P.

## Reports in the Key Performance Metrics (KPM) CICS component

The CICS Performance Feature of IBM Z Performance and Capacity Analytics provides the Key Performance Metrics (KPM) CICS reports described in this section.

### KPMCICS Transaction Performance, Hourly

Supplied with the CICS Monitoring Statistics subcomponent, this report shows transaction performance information. All transactions are displayed, listed in alphabetical order.

This information identifies the report:



**Report ID**

KPMCMT01

**Report group**

Key Performance Metrics Reports - CICS

**Source**

KPMC\_MON\_TRAN\_HV

**Attributes**

KPM, CICS, TRANSACTION, PERFORMANCE, HOURLY

**Variables**

DATE, PERIOD\_NAME, MVS\_SYSTEM\_ID, CICS\_SYSTEM\_ID

| KPM CICS Transaction Performance, Hourly                  |      |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |  |
|---|------|-------|-------------------|------------------------|------------------------|-----------------------|-------------------------|--------------------------|--------------------------|----------------------|-----------------------|--|
| Date: 01.11.2015      System ID: SYS1                     |      |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |  |
| CICS System ID: 'CICS1'                                   |      |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |  |
| Time  | Tran | Count | CPU<br>Avg<br>Sec | Response<br>Avg<br>Sec | Dispatch<br>Avg<br>Sec | Suspend<br>Avg<br>Sec | Exception<br>Avg<br>Sec | JC IO<br>Wait Avg<br>Sec | FC IO<br>Wait Avg<br>Sec | Prog<br>Loads<br>Avg | FC<br>Requests<br>Avg |  |
| 11:00   | ATMX | 1     | 0.002             | 12237.459              | 0.007                  | 12237.452             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | CKIM | 1     | 0.002             | 12237.760              | 0.012                  | 12237.748             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | AFOT | 1     | 0.000             | 12248.481              | 0.000                  | 12248.481             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | CFQS | 1     | 0.003             | 12248.481              | 0.009                  | 12248.472             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | CISE | 1     | 0.002             | 12240.743              | 0.004                  | 12240.739             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | ATSR | 1     | 0.002             | 12240.743              | 0.010                  | 12240.734             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | ADAM | 1     | 0.005             | 12229.153              | 0.031                  | 12229.122             | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | CGTQ | 1     | 0.017             | 12229.414              | 0.101                  | 12229.313             | 0.000                   | 0.000                    | 0.000                    | 0                    | 205                   |  |
| 12:00   | ABRW | 22    | 0.000             | 0.001                  | 0.000                  | 0.000                 | 0.000                   | 0.000                    | 0.000                    | 2                    | 5                     |  |
|   | CATA | 5     | 0.001             | 0.004                  | 0.002                  | 0.002                 | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | PIDA | 4     | 0.025             | 50.257                 | 0.136                  | 50.122                | 0.000                   | 0.000                    | 0.025                    | 2                    | 26                    |  |
|   | MTDF | 22    | 0.001             | 21.683                 | 0.005                  | 21.678                | 0.000                   | 0.000                    | 0.000                    | 3                    | 0                     |  |
|   | HNMT | 4     | 0.011             | 899.355                | 1.018                  | 898.336               | 0.000                   | 0.000                    | 0.000                    | 2                    | 0                     |  |
|   | EHMX | 1     | 0.002             | 2226.141               | 0.020                  | 2226.121              | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | YWPM | 1     | 0.002             | 2226.397               | 0.009                  | 2226.388              | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   | CEKM | 1     | 0.001             | 0.005                  | 0.001                  | 0.004                 | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |  |
|   |      |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |  |
| IBM Z Performance and Capacity Analytics Report: KPMCMT01 |      |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |  |

Figure 90. Example of a KPM CICS Transaction Performance, Hourly report

The report contains this information:

**Time**

Time of the measurement.

**Tran**

Transaction name.

**Count**

Total number of performance class monitoring records with RTYPE = T indicating task termination.

**CPU Avg Sec**

Average transaction processor time, in seconds.

**Response Avg Sec**

Average transaction response time, in seconds.

**Dispatch Avg Sec**

Average transaction dispatch time, in seconds.

**Suspend Avg Sec**

Average time, in seconds, when tasks were suspended by the dispatcher.

**Exception Avg Sec**

Average exception wait time, in seconds.

**JC IO Wait Avg Sec**

Average journal controls I/O wait time, in seconds.

**FC IO Wait Avg Sec**

Average File control I/O wait time, in seconds.

**Prog Loads Avg**

Average number of transaction program LOAD requests.

**FC Requests Avg**

Average number of transaction file control requests.

## KPMICS Transaction Max Response Time, Daily

Supplied with the CICS Monitoring Statistics subcomponent, this report shows response information of the highest response time transactions during a specified day, in descending order of response time. The number of rows listed on the report can be controlled with the input parameter MAXROWS.

This information identifies the report:

**Report ID**

KPMCMT02

**Report group**

Key Performance Metrics Reports - CICS

**Source**

KPMC\_MON\_TRAN\_HV

**Attributes**

KPM, CICS, RESPONSE, TRANSACTION, DAILY

**Variables**

DATE, PERIOD\_NAME, MVS\_SYSTEM\_ID, CICS\_SYSTEM\_ID, MAXROWS

| KPMICS Transaction Max Response Time, Daily |       |                        |                   |                         |                          |                          |                          |                          |                          |                           |
|---|-------|------------------------|-------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|
| Date: 01.11.2015 System ID: SYS1            |       |                        |                   |                         |                          |                          |                          |                          |                          |                           |
| CICS System ID: 'CICS1'                     |       |                        |                   |                         |                          |                          |                          |                          |                          |                           |
| Tran  | Count | Response<br>Avg<br>Sec | CPU<br>Avg<br>Sec | Trans<br>Below<br>5 Sec | Trans<br>Below<br>10 Sec | Trans<br>Below<br>15 Sec | Trans<br>Below<br>20 Sec | Trans<br>Below<br>30 Sec | Trans<br>Below<br>50 Sec | Trans<br>Below<br>100 Sec |
| FK1X  | 2     | 415.769                | 0.005             | 0                       | 0                        | 0                        | 0                        | 0                        | 0                        | 0                         |
| CINF  | 33    | 46.120                 | 0.001             | 4                       | 11                       | 18                       | 18                       | 20                       | 20                       | 20                        |
| CKDA  | 6     | 31.789                 | 0.023             | 0                       | 1                        | 1                        | 2                        | 2                        | 2                        | 3                         |
| QKLT  | 1     | 7.823                  | 0.018             | 0                       | 0                        | 0                        | 0                        | 0                        | 0                        | 1                         |
| LMFU  | 1     | 0.768                  | 0.058             | 0                       | 1                        | 1                        | 1                        | 1                        | 1                        | 1                         |
| CFE1  | 1     | 0.134                  | 0.006             | 1                       | 1                        | 1                        | 1                        | 1                        | 1                        | 1                         |
| CGWC  | 1     | 0.117                  | 0.002             | 1                       | 1                        | 1                        | 1                        | 1                        | 1                        | 1                         |
| CPCC  | 11    | 0.107                  | 0.004             | 11                      | 11                       | 11                       | 11                       | 11                       | 11                       | 11                        |

IBM Z Performance and Capacity Analytics Report: KPMCMT02

Figure 91. Example of a KPMICS Transaction Max Response Time, Daily report

The report contains this information:

**Tran**

Transaction name.

**Count**

Total number of performance class monitoring records with RTYPE = T indicating task termination.

**Response Avg Sec**

Average transaction response time, in seconds.

**CPU Avg Sec**

Average transaction processor time, in seconds.

**Trans Below 0.5 Sec**

Number of transactions that completed in half a second.

**Trans Below 1 Sec**

Number of transactions that completed in 1 second.

**Trans Below 1.5 Sec**

Number of transactions that completed in 1.5 seconds.

**Trans Below 2 Sec**

Number of transactions that completed in 2 seconds.

**Trans Below 3 Sec**

Number of transactions that completed in 3 seconds.

**Trans Below 5 Sec**

Number of transactions that completed in 5 seconds.

**Trans Below 10 Sec**

Number of transactions that completed in 10 seconds.

**KPMCICS Transaction Max CPU Time, Daily**

Supplied with the CICS Monitoring Statistics subcomponent, this report shows performance information of the highest CPU consuming transactions during a specified day, in descending order of CPU usage. The number of rows listed on the report can be controlled with the input parameter MAXROWS.

This information identifies the report:

**Report ID**

KPMCMT03

**Report group**

Key Performance Metrics Reports - CICS

**Source**

KPMC\_MON\_TRAN\_HV

**Attributes**

KPM, CICS, CPU, TRANSACTION, DAILY

**Variables**

DATE, PERIOD\_NAME, MVS\_SYSTEM\_ID, CICS\_SYSTEM\_ID, MAXROWS

| KPMCICS Transaction Max CPU Time, Daily |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |
|---|-------|-------------------|------------------------|------------------------|-----------------------|-------------------------|--------------------------|--------------------------|----------------------|-----------------------|
| Date: 01.11.2015 System ID: SYS1        |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |
| CICS System ID: 'CICS1'                 |       |                   |                        |                        |                       |                         |                          |                          |                      |                       |
| Tran                                    | Count | CPU<br>Avg<br>Sec | Response<br>Avg<br>Sec | Dispatch<br>Avg<br>Sec | Suspend<br>Avg<br>Sec | Exception<br>Avg<br>Sec | JC IO<br>Wait Avg<br>Sec | FC IO<br>Wait Avg<br>Sec | Prog<br>Loads<br>Avg | FC<br>Requests<br>Avg |
| STAX                                    | 2     | 0.116             | 1368.702               | 0.205                  | 1368.497              | 0.000                   | 0.000                    | 0.000                    | 19                   | 0                     |
| CSFU                                    | 1     | 0.058             | 0.768                  | 0.680                  | 0.089                 | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |
| C113                                    | 2     | 0.042             | 7245.603               | 0.024                  | 7245.579              | 0.000                   | 0.000                    | 0.000                    | 0                    | 0                     |
| C1XF                                    | 14    | 0.028             | 5434.753               | 0.121                  | 5434.632              | 0.000                   | 0.000                    | 0.056                    | 3                    | 264                   |
| KMHA                                    | 6     | 0.023             | 31.789                 | 0.153                  | 31.636                | 0.000                   | 0.000                    | 0.072                    | 2                    | 27                    |
| MB1T                                    | 1     | 0.018             | 7.823                  | 0.117                  | 7.706                 | 0.000                   | 0.000                    | 0.000                    | 1                    | 0                     |
| MZMT                                    | 5     | 0.018             | 466.258                | 1.848                  | 464.410               | 0.000                   | 0.000                    | 0.000                    | 3                    | 0                     |
| H1HQ                                    | 2     | 0.014             | 7223.904               | 0.099                  | 7223.805              | 0.000                   | 0.000                    | 0.000                    | 0                    | 122                   |
| UTTL                                    | 1     | 0.006             | 0.134                  | 0.027                  | 0.107                 | 0.000                   | 0.000                    | 0.008                    | 0                    | 4                     |

IBM Z Performance and Capacity Analytics Report: KPMCMT03

Figure 92. Example of a KPMCICS Transaction Max CPU Time, Daily report

The report contains this information:

**Tran**

Transaction name.

**Count**

Total number of performance class monitoring records with RTYPE = T indicating task termination.

**CPU Avg Sec**

Average transaction processor time, in seconds.

**Response Avg Sec**

Average transaction response time, in seconds.

**Dispatch Avg Sec**

Average transaction dispatch time, in seconds.

**Suspend Avg Sec**

Average time, in seconds, when tasks were suspended by the dispatcher.

**Exception Avg Sec**

Average exception wait time, in seconds.

**JC IO Wait Avg Sec**

Average journal controls I/O wait time, in seconds.

**FC IO Wait Avg Sec**

Average File control I/O wait time, in seconds.

## Reports common to all components

### Prog Loads Avg

Average number of transaction program LOAD requests.

### FC Requests Avg

Average number of transaction file control requests.

## Reports common to all components

The following reports are common to all components:

- “CICS Exceptions” on page 362
- “CICS Incidents” on page 363

## CICS Exceptions

This report shows CICS exceptions that have been logged to the common EXCEPTION\_T table.

This information identifies the report:

### Report ID

CICS001

### Report group

CICS Reports

### Source

EXCEPTION\_T

### Attributes

CICS, Exception, Problem

### Variables

From date, To date, CICS system list

| 1 15   |          | CICS Exceptions                    |                    |                      |          |                    |     |
|--|----------|------------------------------------|--------------------|----------------------|----------|--------------------|-----|
|  |          | DATE: '2000-03-17' to '2000-06-17' |                    |                      |          |                    |     |
| Date   | Time     | Exception description              |                    | Terminal operator ID | User ID  | Exception ID       | Sev |
| 2000-03-17   | 17.12.13 | BUFFER FULL 12                     | TIMES ON JOURNAL 1 | SYSTEM               |          | JOURNAL_BUFFERFULL | 04  |
| 2000-03-17   | 17.12.13 | THE MXT VALUE 50                   | WAS REACHED 2      | SYSTEM               |          | MXT_REACHED        | 04  |
| 2000-03-17   | 17.37.28 | BUFFER FULL 12                     | TIMES ON JOURNAL 1 | SYSTEM               |          | JOURNAL_BUFFERFULL | 04  |
| 2000-03-17   | 17.37.28 | THE MXT VALUE 50                   | WAS REACHED 6      | SYSTEM               |          | MXT_REACHED        | 04  |
| 2000-06-10   | 16.59.16 | WAIT FOR TEMP                      | STORAGE 19         | T0D2                 | CICSUSER | CMF_TSTORAGE_WAIT  | 04  |
| 2000-06-10   | 17.03.26 | DTB OVERFLOWED 2                   | TIMES              | SYSTEM               |          | DTB_OVERFLOW       | 04  |
| 2000-06-10   | 17.03.26 | BUFFER FULL 12                     | TIMES ON JOURNAL 1 | SYSTEM               |          | JOURNAL_BUFFERFULL | 04  |
| 2000-06-10   | 17.03.26 | CICS TRANSACTION ABEND             | DHTC               | SYSTEM               |          | TRANSACTION_ABEND  | 03  |
| IBM Z Performance and Capacity Analytics Report: CICS001 |          |                                    |                    |                      |          |                    |     |

Figure 93. Example of a CICS Exceptions report

The report contains this information:

### Date

Date when the exception occurred.

### Time

Time when the exception occurred.

### Exception description

A description of the exception, including the ABEND code in case of CICS transaction abend.

### Terminal operator ID

When the exception comes from CMF records, this is the 4-byte terminal ID and the 4-byte operator ID, stored in the 8-byte field RESOURCE\_NAME1. Otherwise, this field is set to 'SYSTEM'.

### User ID

When the exception comes from CMF records, this is the 8-byte user ID, stored in the 8-byte field RESOURCE\_NAME2. Otherwise, this field is blank.

**Exception ID**

Exception ID, from EXCEPTION\_ID.

**Sev**

Severity of the exception. CICS exceptions are classified from 1 (highest) to 4 (lowest).

**CICS Incidents**

This report shows records from the EXCEPTION\_T table that have a severity of 3 or higher.

This information identifies the report:

**Report ID**

CICS002

**Report group**

CICS Reports

**Source**

EXCEPTION\_T

**Attributes**

CICS, Incident, Problem

**Variables**

From date, To date, CICS system list

| CICS Incidents                     |            |          |                      |         |                   |                             |
|------------------------------------|------------|----------|----------------------|---------|-------------------|-----------------------------|
| DATE: '2000-02-01' to '2000-02-02' |            |          |                      |         |                   |                             |
| Sev                                | Date       | Time     | Terminal operator ID | User ID | Exception ID      | Exception description       |
| 03                                 | 2000-02-01 | 15.42.03 | SYSTEM               |         | TRANSACTION_ABEND | CICS TRANSACTION ABEND AZTS |
| 03                                 | 2000-02-02 | 00.00.00 | SYSTEM               |         | TRANSACTION_ABEND | CICS TRANSACTION ABEND APCT |
| 03                                 | 2000-02-02 | 17.37.28 | SYSTEM               |         | SHORT_OF_STORAGE  | CICS SOS IN PAGEPOOL        |
| 03                                 | 2000-02-02 | 17.12.03 | SYSTEM               |         | SHORT_OF_STORAGE  | CICS SOS IN PAGEPOOL        |

IBM Z Performance and Capacity Analytics Report: CICS002

*Figure 94. Example of a CICS Incidents report*

The report contains this information:

**Sev**

Severity of the exception. CICS exceptions are classified from 1 (highest) to 4 (lowest). See the CICS Exceptions report for severity 4 exceptions.

**Date**

Date when the exception occurred.

**Time**

Time when the exception occurred.

**Terminal operator ID**

When the exception comes from CMF records, this is the 4-byte terminal ID and the 4-byte operator ID, stored in the 8-byte field RESOURCE\_NAME1. Otherwise, this field is set to 'SYSTEM'.

**User ID**

When the exception comes from CMF records, this is the 8-byte user ID, stored in the 8-byte field RESOURCE\_NAME2. Otherwise, this field is blank.

**Exception ID**

Exception ID, from EXCEPTION\_ID.

**Exception description**

A description of the exception.



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## Appendix A. Support information

If you have a problem with your IBM software, you want to resolve it quickly. IBM provides a number of ways for you to obtain the support you need.

- Searching knowledge bases: You can search across a large collection of known problems and workarounds, Technotes, and other information.
- Obtaining fixes: You can locate the latest fixes that are already available for your product.
- Contacting IBM Software Support: If you still cannot solve your problem, and you need to work with someone from IBM, you can use a variety of ways to contact IBM Support.

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### Contacting IBM Support

This section describes how to contact IBM Support if you have been unable to resolve a problem with IBM Z Performance and Capacity Analytics.

Before contacting IBM Support, your company must have an active IBM software maintenance contract, and you must be authorized to submit problems to IBM. The type of software maintenance contract that you need depends on the type of product you have. For more information, refer to the IBM Support website at the following links:

#### IBM Support

<https://www.ibm.com/mysupport/s/>

#### IBM Z Support

<https://www.ibm.com/support/pages/ibm-enterprise-support-and-preferred-care-options-ibm-z>

To contact IBM Support to report a problem (*open a case*), follow these steps:

1. Determine the business impact.
2. Describe the problem and gather information.
3. Submit the problem report.

#### Determining the business impact

When you report a problem to IBM, you are asked to supply a severity level. Therefore, you need to understand and assess the business impact of the problem that you are reporting. Use the following criteria:

##### Severity 1

The problem has a *critical* business impact. You are unable to use the program, resulting in a critical impact on operations. This condition requires an immediate solution.

##### Severity 2

The problem has a *significant* business impact. The program is usable, but it is severely limited.

##### Severity 3

The problem has *some* business impact. The program is usable, but less significant features (not critical to operations) are unavailable.

##### Severity 4

The problem has *minimal* business impact. The problem causes little impact on operations, or a reasonable circumvention to the problem was implemented.

#### Describing the problem and gathering information

When describing a problem to IBM, be as specific as possible. Include all relevant background information so that IBM Support specialists can help you solve the problem efficiently. To save time, know the answers to the following questions:

- What software versions were you running when the problem occurred?
- Do you have logs, traces, and messages that are related to the problem symptoms? IBM Support is likely to ask for this information.
- Can you re-create the problem? If so, what steps were performed to re-create the problem?
- Did you make any changes to the system? For example, did you make changes to the hardware, operating system, networking software, product-specific customization, and so on.
- Are you currently using a workaround for the problem? If so, be prepared to explain the workaround when you report the problem.

### Submitting the problem

You can submit your problem to IBM Support in either of the following ways:

#### Online

Go to <https://www.ibm.com/mysupport/s/>, click on **Open a case**, and enter the relevant details into the online form.

#### By email or phone

For the contact details in your country, go to the IBM Support website at <https://www.ibm.com/support/>. Look for the tab on the right and click **Contact and feedback > Directory of worldwide contacts** for a list of countries by geographic region. Select your country to find the contact details for general inquiries, technical support, and customer support.

If the problem you submit is for a software defect or for missing or inaccurate documentation, IBM Support creates an Authorized Program Analysis Report (APAR). The APAR describes the problem in detail. Whenever possible, IBM Support provides a workaround that you can implement until the APAR is resolved and a fix is delivered. IBM publishes resolved APARs on the IBM Support website, so that other users who experience the same problem can benefit from the same resolution.



## Notices

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# Bibliography

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## IBM Z Performance and Capacity Analytics publications

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The IBM Z Performance and Capacity Analytics library contains the following publications and related documents.

The publications are available online in the IBM Knowledge Center at the following link, from where you can also download the associated PDF:

[https://www.ibm.com/support/knowledgecenter/SSPNK7\\_3.1.0](https://www.ibm.com/support/knowledgecenter/SSPNK7_3.1.0)

- *Administration Guide and Reference*, SC28-3211

Provides information about initializing the IBM Z Performance and Capacity Analytics database and customizing and administering IBM Z Performance and Capacity Analytics.

- *Capacity Planning Guide and Reference*, SC28-3213

Provides information about the capacity planning, forecasting, and modeling feature of IBM Z Performance and Capacity Analytics, intended for those who are responsible for monitoring system capacity and key performance metrics to help ensure that sufficient resources are available to run the business and meet expected service levels.

- *CICS Performance Feature Guide and Reference*, SC28-3214

Provides information for administrators and users about collecting and reporting performance data generated by Customer Information Control System (CICS®).

- *Distributed Systems Performance Feature Guide and Reference*, SC28-3215

Provides information for administrators and users about collecting and reporting performance data generated by operating systems and applications running on a workstation.

- *Guide to Reporting*, SC28-3216

Provides information for users who display existing reports, for users who create and modify reports, and for administrators who control reporting dialog default functions and capabilities.

- *IBM i System Performance Feature Guide and Reference*, SC28-3212

Provides information for administrators and users about collecting and reporting performance data generated by IBM i systems.

- *IMS Performance Feature Guide and Reference*, SC28-3217

Provides information for administrators and users about collecting and reporting performance data generated by Information Management System (IMS).

- *Language Guide and Reference*, SC28-3218

Provides information for administrators, performance analysts, and programmers who are responsible for maintaining system log data and reports.

- *Messages and Problem Determination*, GC28-3219

Provides information to help operators and system programmers understand, interpret, and respond to IBM Z Performance and Capacity Analytics messages and codes.

- *Network Performance Feature Installation and Administration*, SC28-3221

Provides information for network analysts or programmers who are responsible for setting up the network reporting environment.

- *Network Performance Feature Reference*, SC28-3222

Provides reference information for network analysts or programmers who use the Network Performance Feature.

- *Network Performance Feature Reports*, SC28-3223

Provides information for network analysts or programmers who use the Network Performance Feature reports.

- *Resource Accounting for z/OS*, SC28-3224

Provides information for users who want to use IBM Z Performance and Capacity Analytics to collect and report performance data generated by Resource Accounting.

- *System Performance Feature Guide*, SC28-3225

Provides information for performance analysts and system programmers who are responsible for meeting the service-level objectives established in your organization.

- *System Performance Feature Reference Volume I*, SC28-3226

Provides information for administrators and users with a variety of backgrounds who want to use IBM Z Performance and Capacity Analytics to analyze z/OS, z/VM®, zLinux, and their subsystems, performance data.

- *System Performance Feature Reference Volume II*, SC28-3227

Provides information for administrators and users with a variety of backgrounds who want to use IBM Z Performance and Capacity Analytics to analyze z/OS, z/VM, zLinux, and their subsystems, performance data.

- *Usage and Accounting Collector User Guide*, SC28-3228

Provides information about the functions and features of the Usage and Accounting Collector.

# Glossary

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**COLLECT**

A process used by IBM Z Performance and Capacity Analytics to read data from input log data sets, interpret records in the data set, and store the data in Db2 tables in the IBM Z Performance and Capacity Analytics database.

**component**

An optionally installable part of a IBM Z Performance and Capacity Analytics feature. Specifically in IBM Z Performance and Capacity Analytics , a component refers to a logical group of objects used to collect log data from a specific source, to update the IBM Z Performance and Capacity Analytics database using that data, and to create reports from data in the database.

**control table**

A predefined IBM Z Performance and Capacity Analytics table that controls results returned by certain log collector functions.

**data table**

A IBM Z Performance and Capacity Analytics table that contains performance data used to create reports.

**distributed transaction processing**

The distribution of processing among transactions that communicate synchronously with each other over intersystem or interregion links.

**dynamic transaction backout (DTB)**

The process of canceling changes made to stored data by a transaction following the failure of the transaction.

**environment information**

Information that is added to the log data to create reports. This includes data such as performance groups, shift periods, installation definitions, and so on.

**function request shipping**

The process, transparent to the application program, by which CICS accesses resources when those resources are actually held on another CICS system.

**IBM Z Performance and Capacity Analytics database**

A set of Db2 tables that includes data tables, lookup tables, system tables, and control tables.

**intersystem communication (ISC)**

Communication between separate systems by means of SNA facilities or by means of the application-to-application facilities of an SNA access method.

**Java virtual machine**

A software implementation of a central processing unit that runs compiled Java code (applets and applications).

**key columns**

The columns of a database table that together constitute the key.

**key value**

Value used to sort records into groups.

**local shared resources (LSR)**

A VSAM facility that provides users with the capability of sharing buffers and strings of VSAM data sets.

**log**

Any sequential data set used as input to IBM Z Performance and Capacity Analytics.

**log collector**

A IBM Z Performance and Capacity Analytics program that processes log data sets and provides other IBM Z Performance and Capacity Analytics services.

**log collector language**

IBM Z Performance and Capacity Analytics statements used to supply definitions to and invoke services of the log collector.

**log data set**

Any sequential data set used as input to IBM Z Performance and Capacity Analytics.

**log definition**

The description of a log data set processed by the log collector.

**log procedure**

A program module that is used to process all record types in certain log data sets.

**logical unit (LU)**

A port through which a user gains access to the services of a network.

**lookup expression**

An expression that specifies how a value is obtained from a lookup table.

**lookup table**

A IBM Z Performance and Capacity Analytics Db2 table that contains grouping, translation, or substitution information.

**multiregion operation (MRO)**

Communication between CICS systems in the same processor without the use of SNA networking facilities.

**object**

An integral part of a feature component needed for data collection (for example, record definitions, record procedures, and update definitions).

**purge condition**

Instruction for removing unneeded data from the IBM Z Performance and Capacity Analytics database.

**record definition**

The description of a record type contained in the log data sets used by IBM Z Performance and Capacity Analytics, including detailed record layout and data formats.

**record procedure**

A program module that is called to process certain types of log records.

**record type**

The classification of records in a log data set.

**region**

A section of the dynamic area that is allocated to a job step or system task. In the CICS product library, the term also includes partitions and address spaces.

**report definition language**

IBM Z Performance and Capacity Analytics statements used to define reports and report groups.

**report group**

A collection of IBM Z Performance and Capacity Analytics reports that can be referred to by a single name.

**reporting dialog**

A set of host or workstation windows used to request reports.

**resource**

Any facility of the computing system or operating system required by a job or task, including central storage, input/output devices, the processing unit, data sets, and control or processing programs.

**resource group**

A collection of resources identified as belonging to a particular department or division. Resources are organized into groups to reflect the structure of an organization.

**resource information**

Information that describes the elements in a system (for example, a network).

**section**

A structure within a record that contains one or more fields and may contain other sections.

**source**

In an update definition, the record or Db2 table that contains the data used to update a IBM Z Performance and Capacity Analytics Db2 table.

**subcomponent**

An optionally installable part of a IBM Z Performance and Capacity Analytics feature component.

**sysplex**

A set of systems communicating and cooperating with each other, through certain multisystem hardware components and software services, in order to process customer workloads.

**system table**

A Db2 table that stores information for controlling log collector processing, IBM Z Performance and Capacity Analytics dialogs, and reporting.

**target**

In an update definition, the Db2 table in which IBM Z Performance and Capacity Analytics stores data from the source record or table.

**threshold**

In IBM Z Performance and Capacity Analytics, the maximum or minimum acceptable level of usage. Usage measurements are compared with threshold levels.

**update definition**

Instructions for entering data into Db2 tables from records of different types or from other Db2 tables.

**updates**

Instructions in IBM Z Performance and Capacity Analytics on how to process data from log data sets to Db2 tables.

**view**

An alternative representation of data from one or more tables. A view can include all or some of the columns contained in the table on which it is defined.





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