IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure

7.2 FP3

User's Guide

SC14-7487-02

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Note
Before using this information and the product it supports, read the information in "Notices" on page 257.

This edition applies to version 7.5 of IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure (product number 5724-L92) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Chapter 1. Overview of the agent

The IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure (product code VD) provides you with the capability to monitor Citrix XenApp and XenDesktop versions 7.0, 7.1, 7,5 and 7.6.

IBM® Tivoli® Monitoring is the base software for the Citrix Virtual Desktop Infrastructure agent. The Citrix Virtual Desktop Infrastructure agent monitors the following functions:

- Citrix XenDesktop component
- Event log and alerts
- Citrix XenDesktop services

Additionally, you can view the Load Index Summary metrics performance data for Citrix XenApp and XenDesktop. You can diagnose problematic login times by viewing the performance data for the login steps.

IBM Tivoli Monitoring

IBM Tivoli Monitoring provides a way to monitor the availability and performance of all the systems in your enterprise from one or several designated workstations. It also provides useful historical data that you can use to track trends and to troubleshoot system problems.

You can use IBM Tivoli Monitoring to achieve the following tasks:

- Monitor for alerts on the systems that you are managing by using predefined situations or custom situations.
- Establish your own performance thresholds.
- Trace the causes leading to an alert.
- Gather comprehensive data about system conditions.
- Use policies to take actions, schedule work, and automate manual tasks.

The Tivoli Enterprise Portal is the interface for IBM Tivoli Monitoring products. You can use the consolidated view of your environment as seen in the Tivoli Enterprise Portal to monitor and resolve performance issues throughout the enterprise.

See the IBM Tivoli Monitoring publications listed in “Prerequisite publications” on page 253 for complete information about IBM Tivoli Monitoring and the Tivoli Enterprise Portal.

Functions of the monitoring agent

Citrix XenDesktop component monitoring

Monitors the following components:

- Broker Controller
- Broker Machine
- Desktops
- Desktop Groups
- Broker (Desktop) User
- Broker Session
- Broker Applications
- License Metrics

Event log and alerts monitoring
Monitors the events for the Citrix XenDesktop services that are running on the Citrix XenDesktop controller (broker controller). In addition, the agent monitors the alerts that are reported by the hypervisor.

Citrix XenDesktop services monitoring
Monitors the Citrix XenDesktop services that are running on the Citrix XenDesktop controller. In addition, the agent monitors the status that indicates whether the Citrix XenDesktop services are connected to the database.

Situations
Provides appropriate situations for the following components:

- License Metrics
- Broker Machine
- Broker Session
- Broker Desktops

Actions
Provides Take Action commands for the following actions:

- Create, enable, disable, and remove the desktop group
- Add one or more machines to the desktop group
- Remove machines from the desktop group
- Stop and disconnect the desktop session
- Stop and disconnect the user session
- Disable the configuration settings of a desktop group

Components of the IBM Tivoli Monitoring environment

After you install and set up the Citrix Virtual Desktop Infrastructure agent, you have an environment that contains the client, server, and monitoring agent implementation for Tivoli Monitoring.

This Tivoli Monitoring environment contains the following components:

Tivoli Enterprise Portal client
The portal has a user interface based on Java™ for viewing and monitoring your enterprise.

Tivoli Enterprise Portal Server
The portal server is placed between the client and the Tivoli Enterprise Monitoring Server and enables retrieval, manipulation, and analysis of data from the monitoring agents. The Tivoli Enterprise Portal Server is the central repository for all user data.

Tivoli Enterprise Monitoring Server
The monitoring server acts as a collection and control point for alerts received from the monitoring agents, and collects their performance and availability data. The Tivoli Enterprise Monitoring Server is also a repository for historical data.

Tivoli Enterprise Monitoring Agent, Citrix Virtual Desktop Infrastructure agent
This monitoring agent collects data and distributes the data to the Tivoli Enterprise Monitoring Server, Tivoli Enterprise Portal Server, Tivoli Enterprise Portal, Tivoli Data Warehouse, and Tivoli Integrated Portal.

Multiple copies of this agent can run on the same system.

IBM Tivoli Netcool/OMNIbus
Tivoli Netcool/OMNIbus is an optional component and the recommended event management component. The Netcool/OMNIbus software is a service level management (SLM) system that delivers real-time, centralized monitoring of complex networks and IT domain events. Event information is tracked in a high-performance, in-memory database and presented to specific users

through individually configurable filters and views. The software includes automation functions that you can use to perform intelligent processing on managed events. You can use this software to forward events for Tivoli Monitoring situations to Tivoli Netcool/OMNIbus.

IBM Tivoli Enterprise Console®
The Tivoli Enterprise Console is an optional component that acts as a central collection point for events from various sources, including events from other Tivoli software applications, Tivoli partner applications, custom applications, network management platforms, and relational database systems. You can view these events through the Tivoli Enterprise Portal (by using the event viewer), and you can forward events from Tivoli Monitoring situations to the Tivoli Enterprise Console component. If you do not already use Tivoli Enterprise Console and need an event management component, you can choose to use IBM Tivoli Netcool/OMNIbus.

IBM Tivoli Common Reporting
Tivoli Common Reporting is a separately installable feature available to users of Tivoli software that provides a consistent approach to generating and customizing reports. Some individual products provide reports that are designed for use with Tivoli Common Reporting and have a consistent look and feel.

IBM Tivoli Application Dependency Discovery Manager (TADDM)
TADDM delivers automated discovery and configuration tracking capabilities to build application maps that provide real-time visibility into application complexity.

IBM Tivoli Business Service Manager
The Tivoli Business Service Manager component delivers real-time information to help you respond to alerts effectively based on business requirements. Optionally, you can use this component to meet service-level agreements (SLAs). Use the Tivoli Business Service Manager tools to help build a service model that you can integrate with Tivoli Netcool/OMNIbus alerts or optionally integrate with data from an SQL data source. Optional components provide access to data from other IBM Tivoli applications such as Tivoli Monitoring and TADDM.

IBM Dashboard Application Services Hub
The Dashboard Application Services Hub has a core set of components that provide such administrative essentials as network security and database management. This component replaces the Tivoli Integrated Portal component after version 2.2.

Tivoli Integrated Portal
Tivoli Integrated Portal helps the interaction and secure passing of data between Tivoli products through a common portal. You can launch from one application to another and within the same dashboard view research different aspects of your managed enterprise. This component is installed automatically with the first Tivoli product that uses the Tivoli Integrated Portal framework. Subsequent products can install updated versions of Tivoli Integrated Portal. After version 2.2, this component is replaced by the Dashboard Application Services Hub.

Agent Management Services

You can use IBM Tivoli Monitoring Agent Management Services to manage the Citrix Virtual Desktop Infrastructure agent.

Agent Management Services is available for the following IBM Tivoli Monitoring OS agents: Windows, Linux, and UNIX. The services are designed to keep the Citrix Virtual Desktop Infrastructure agent available, and to provide information about the status of the product to the Tivoli Enterprise Portal. IBM Tivoli Monitoring V6.2.2, Fix Pack 2 or later provides support for Agent Management Services. For more information about Agent Management Services, see *Agent Management Services* in the *IBM Tivoli Monitoring Administrator's Guide*.

User interface options

Installation of the base IBM Tivoli Monitoring software and other integrated applications provides various interfaces that you can use to work with your resources and data.

The following interfaces are available:

Tivoli Enterprise Portal user interface
You can run the Tivoli Enterprise Portal as a desktop application or a browser application. The client interface is a graphical user interface (GUI) based on Java on a Windows or Linux workstation. The browser application is automatically installed with the Tivoli Enterprise Portal Server. The desktop application is installed by using the Tivoli Monitoring installation media or with a Java Web Start application. To start the Tivoli Enterprise Portal browser client in your Internet browser, enter the URL for a specific Tivoli Enterprise Portal browser client installed on your Web server.

Command-line interface
You can use Tivoli Monitoring commands to manage the Tivoli Monitoring components and their configuration. You can also run commands at the Tivoli Enterprise Console event server or the Tivoli Netcool/OMNIbus ObjectServer to configure event synchronization for enterprise situations.

Manage Tivoli Enterprise Monitoring Services window
You can use the window for the Manage Tivoli Enterprise Monitoring Services utility to configure the agent and start Tivoli services not designated to start automatically.

IBM Tivoli Netcool/OMNIbus event list
You can use the Netcool/OMNIbus event list to monitor and manage events. An event is created when the Netcool/OMNIbus ObjectServer receives an event, alert, message, or data item. Each event is made up of columns (or fields) of information that are displayed in a row in the ObjectServer alerts.status table. The Tivoli Netcool/OMNIbus web GUI is also a web-based application that processes network events from one or more data sources and presents the event data in various graphical formats.

IBM Tivoli Enterprise Console
You can use the Tivoli Enterprise Console to help ensure the optimal availability of an IT service for an organization. The Tivoli Enterprise Console is an event management application that integrates system, network, database, and application management. If you do not already use Tivoli Enterprise Console and need an event management component, you can choose to use Tivoli Netcool/OMNIbus.

IBM Tivoli Common Reporting
Use the Tivoli Common Reporting web user interface for specifying report parameters and other report properties, generating formatted reports, scheduling reports, and viewing reports. This user interface is based on the Dashboard Application Services Hub for Tivoli Common Reporting 3.1 and on Tivoli Integrated Portal for earlier versions.

IBM Tivoli Application Dependency Discovery Manager
The Discovery Management Console is the TADDM client user interface for managing discoveries.

IBM Tivoli Business Service Manager
The Tivoli Business Service Manager console provides a graphical user interface that you can use to logically link services and business requirements within the service model. The service model provides an operator with a second-by-second view of how an enterprise is performing at any moment in time or how the enterprise performed over a time period.

IBM Dashboard Application Services Hub
The Dashboard Application Services Hub provides an administrative console for applications that use this framework. It is a web-based console that provides common task navigation for

products, aggregation of data from multiple products into a single view, and the passing of messages between views from different products. This interface replaces the Tivoli Integrated Portal component after version 2.2.

Tivoli Integrated Portal
Web-based products that are built on the Tivoli Integrated Portal framework share a common user interface where you can launch applications and share information. After version 2.2, this interface is replaced by the Dashboard Application Services Hub.

Data sources

Monitoring agents collect data from specific data sources.

The Citrix Virtual Desktop Infrastructure agent collects data from the following sources:

Log files
The agent uses the file system to monitor application log files or other data files to gather metrics.

Chapter 2. Agent installation and configuration

Agent installation and configuration requires the use of the *IBM Tivoli Monitoring Installation and Setup Guide* and agent-specific installation and configuration information.

To install and configure the Citrix Virtual Desktop Infrastructure agent, use the *Installing monitoring agents* procedures in the *IBM Tivoli Monitoring Installation and Setup Guide* along with the agent-specific installation and configuration information.

If you are installing silently by using a response file, see *Performing a silent installation of IBM Tivoli Monitoring* in the *IBM Tivoli Monitoring Installation and Setup Guide*.

With the self-describing agent capability, new or updated IBM Tivoli Monitoring agents using IBM Tivoli Monitoring V6.2.3 or later can become operational after installation without having to perform additional product support installation steps. To take advantage of this capability, see "Enabling self-describing agent capability at the hub monitoring server" in the *IBM Tivoli Monitoring Installation and Setup Guide*. Also, see "Self-describing monitoring agents" in the *IBM Tivoli Monitoring Administrator's Guide*.

Requirements

Before installing and configuring the agent, make sure your environment meets the requirements for the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure.

For information about system requirements, see the Software product compatibility reports (http://publib.boulder.ibm.com/infocenter/prodguid/v1r0/clarity/index.html). Search for the Tivoli Monitoring for Energy Management product.

Language pack installation

The steps for installing language packs depend on which operating system and mode of installation you are using.

To install a language pack for the agent support files on the Tivoli Enterprise Monitoring Server, the Tivoli Enterprise Monitoring Agent, and the Tivoli Enterprise Portal Server, make sure that you installed the product in the English language. Then use the steps for the operating system or mode of installation you are using:

- "Installing language packs on Windows systems"
- "Installing language packs on UNIX or Linux systems" on page 8
- "Silent installation of language packs on Windows, UNIX, or Linux systems" on page 8

Installing language packs on Windows systems

You can install the language packs on a Windows system.

Before you begin

First, make sure that you installed the product in the English language.

Procedure

1. On the language pack CD, double-click the `lpinstaller.bat` file to start the installation program.
2. Select the language of the installer and click **OK**.
3. In the Introduction panel, click **Next**

4. Click **Add/Update** and click **Next**.
5. Select the folder where the National Language Support package (`NLSPackage`) files are located. Typically, the NLSPackage files are located in the `nlspackage` folder where the installer executable file is located.
6. Select the language support for the agent of your choice and click **Next**. To make multiple selections, press Ctrl and select the language that you want.
7. Select the languages that you want to install and click **Next**.
8. Examine the installation summary page and click **Next** to begin installation.
9. After installation completes, click **Finish** to exit the installer.
10. Restart the Tivoli Enterprise Portal, Tivoli Enterprise Portal Server, and Eclipse Help Server if any of these components are installed.

Installing language packs on UNIX or Linux systems

You can install the language packs on a UNIX or Linux system.

Before you begin

First, make sure that you installed the product in the English language.

Procedure

1. Enter the `mkdir` command to create a temporary directory on the computer, for example, `mkdir` *`dir_name`*. Make sure that the full path of the directory does not contain any spaces.
2. Mount the language pack CD to the temporary directory that you created.
3. Enter the following command to start the installation program: `cd` *`dir_name`* `lpinstaller.sh -c` *`install_dir`* where *install_dir* is where you installed IBM Tivoli Monitoring. Typically, the directory name is `/opt/IBM/ITM` for UNIX and Linux systems.
4. Select the language of the installer and click **OK**.
5. In the Introduction panel, click **Next**.
6. Click **Add/Update** and click **Next**.
7. Select the folder where the National Language Support package (`NLSPackage`) files are located. Typically, the `NLSPackage` files are located in the `nlspackage` folder where the installer executable file is located.
8. Select the language support for the agent of your choice and click **Next**. To make multiple selections, press Ctrl and select the language that you want.
9. Select the languages that you want to install and click **Next**.
10. Examine the installation summary page and click **Next** to begin installation.
11. After installation completes, click **Finish** to exit the installer.
12. Restart the Tivoli Enterprise Portal, Tivoli Enterprise Portal Server, and Eclipse Help Server if any of these components are installed.

Silent installation of language packs on Windows, UNIX, or Linux systems

You can use the silent-mode installation method to install the language packs. In silent mode, the installation process obtains the installation settings from a predefined response file. It does not prompt you for any information.

Before you begin

First, make sure that you installed the product in the English language.

Procedure

1. Copy and paste the `ITM_Agent_LP_silent.rsp` response file template as shown in "Response file example."
2. Change the following parameter settings:

   NLS_PACKAGE_FOLDER
   Folder where the National Language Support package (NLSPackage) files are located. Typically, the NLSPackage files are located in the `nlspackage` folder, for example: `NLS_PACKAGE_FOLDER = //tmp//LP//nlspackage`.

   PROD_SELECTION_PKG
   Name of the language pack to install. Several product components can be included in one language package. You might want to install only some of the available components in a language pack.

   BASE_AGENT_FOUND_PKG_LIST
   Agent for which you are installing language support. This value is usually the same as *PROD_SELECTION_PKG*.

   LANG_SELECTION_LIST
   Language you want to install.
3. Enter the command to install the language pack with a response file (silent installation):
   - For Windows systems:
     `lpinstaller.bat -f path_to_response_file`
   - For UNIX or Linux systems:
     `lpinstaller.sh -c candle_home -f path_to_response_file`

     where *candle_home* is the IBM Tivoli Monitoring base directory.

Response file example

```
#     IBM Tivoli Monitoring Agent Language Pack Silent Installation Operation
#
#This is a sample response file for silent installation mode for the IBM Tivoli
#Monitoring Common Language Pack Installer.
#.
#This file uses the IBM Tivoli Monitoring Common Agent Language Pack with the
#install package as an example.
#Note:
#This response file is for the INSTALLATION of language packs only.
#This file does not support UNINSTALLATION of language packs in silent mode.
#-----------------------------------------------------------------------------
#-----------------------------------------------------------------------------
#To successfully complete a silent installation of the the example of Common Agent
#localization pack, complete the following steps:
#
#1.Copy ITM_Agent_LP_silent.rsp to the directory where lpinstaller.bat or
#lpinstaller.sh is located (IBM Tivoli Monitoring Agent Language Pack build
#location).
#
#2.Modify the response file so that it is customized correctly and completely for
#your site.
#  Complete all of the following steps in the response file.
#
#3.After customizing the response file, invoke the silent installation using the
#following command:
#For Windows:
#    lpinstaller.bat -f <path_to_response_file>
#For UNIX and Linux:
#    lpinstaller.sh -c <candle_home> -f <path_to_response_file>
#Note:<candle_home> is the IBM Tivoli Monitoring base directory.
#-----------------------------------------------------------------------------
```

```
#-------------------------------------------------------------------------------
#Force silent install mode.
#-------------------------------------------------------------------------------
INSTALLER_UI=silent
#-------------------------------------------------------------------------------
#Run add and update actions.
#-------------------------------------------------------------------------------
CHOSEN_INSTALL_SET=ADDUPD_SET
#-------------------------------------------------------------------------------
#NLS Package Folder, where the NLS Packages exist.
#For Windows:
#   Use the backslash-backslash(\\) as a file separator (for example,
#C:\\zosgmv\\LCD7-3583-01\\nlspackage).
#For UNIX and Linux:
#   Use the slash-slash (//) as a file separator (for example,
#//installtivoli//lpsilenttest//nlspackage).
#-------------------------------------------------------------------------------
#NLS_PACKAGE_FOLDER=C:\\zosgmv\\LCD7-3583-01\\nlspackage
NLS_PACKAGE_FOLDER=//tmp//LP//nlspackage
#-------------------------------------------------------------------------------
#List the packages to process; both variables are required.
#Each variable requires that full paths are specified.
#Separate multiple entries with a semicolon (;).
#For Windows:
#           Use the backslash-backslash(\\) as a file separator.
#For Unix and Linux:
#           Use the slash-slash (//) as a file separator.
#-------------------------------------------------------------------------------
#PROD_SELECTION_PKG=C:\\zosgmv\\LCD7-3583-01\\nlspackage\\KIP_NLS.nlspkg
#BASE_AGENT_FOUND_PKG_LIST=C:\\zosgmv\\LCD7-3583-01\\nlspackage\\KIP_NLS.nlspkg
PROD_SELECTION_PKG=//tmp//LP//nlspackage//kex_nls.nlspkg;//tmp//LP//nlspackage//
koq_nls.nlspkg
BASE_AGENT_FOUND_PKG_LIST=//tmp//LP//nlspackage//kex_nls.nlspkg;//
tmp//LP//nlspackage//koq_nls.nlspkg
#-------------------------------------------------------------------------------
#List the languages to process.
#Separate multiple entries with semicolons.
#-------------------------------------------------------------------------------
LANG_SELECTION_LIST=pt_BR;fr;de;it;ja;ko;zh_CN;es;zh_TW
```

Agent-specific installation and configuration

In addition to the installation and configuration information in the *IBM Tivoli Monitoring Installation and Setup Guide*, use this agent-specific installation and configuration information to install the Citrix Virtual Desktop Infrastructure agent.

Configuration values

For both local and remote configuration, you provide the configuration values for the agent to operate.

When you are configuring an agent, a panel is displayed so you can enter each value. When a default value exists, this value is pre-entered into the field. If a field represents a password, two entry fields are displayed. You must enter the same value in each field. The values that you type are not displayed to help maintain the security of these values.

The configuration for this agent is organized into the following groups:

XenDesktop Site Configuration (XDS)

The configuration that is required to monitor a XenDesktop site remotely. One instance is required for each XenDesktop site that you want to configure.

The configuration elements defined in this group are always present in the agent's configuration.

Use the information in this group to create additional subnodes.

Delivery Controller (KVD_XDS_DELIVERY_CONTROLLER)
Hostname or IP Address of the Delivery Controller.

The type is string.

This value is required.

Default value: None

Domain (KVD_XDS_ODATA_DOMAIN)
Domain that is used to authenticate with the OData API on the specified XenDesktop Delivery Controller.

The type is string.

This value is required.

Default value: None

Password (KVD_XDS_ODATA_PASSWORD)
Password that is used to authenticate with the OData API on the specified XenDesktop Delivery Controller.

The type is password.

This value is required.

Default value: None

User Name (KVD_XDS_ODATA_USERNAME)
Username that is used to authenticate with the OData API on the specified XenDesktop Delivery Controller.

The type is string.

This value is required.

Default value: None

Advanced (Advanced)
Allows the user to override values specified in previous sections.

The type is restricted - displays the configuation values that can be overridden.

This value is only used if it is necessary to override higher level values.

Default value: None

Xen Desktop Site Name (Xen Desktop Site Name)
Name of the XenDesktop site for collection of data.

The type is string.

This value is required.

Default value: None

Remote installation and configuration

You can install the monitoring agent remotely from the Tivoli Enterprise Portal or from the command line.

When installing the agent remotely, you must provide the configuration values for the agent to operate. See “Configuration values” on page 10.

To install from the portal, see the *IBM Tivoli Monitoring Installation and Setup Guide*.

To remotely install or configure an agent through the Tivoli Enterprise Portal, you must have installed the application support for that agent (Tivoli Enterprise Monitoring Server, Tivoli Enterprise Portal Server, and Tivoli Enterprise Portal). You must also have installed the agent bundle into the Remote Deploy Depot.

For information about displaying the configuration options that are available to use with the **configureSystem** or **addSystem** commands see "tacmd describeSystemType" in the *IBM Tivoli Monitoring Command Reference*.

If you are using the command line, the following command is an example of remote installation and configuration for Windows operating systems:

```
tacmd addSystem -t VD -n Primary:sample.node.name:NT
-p  XDS.KVD_XDS_DELIVERY_CONTROLLER=value
 XDS.KVD_XDS_ODATA_DOMAIN=value
 XDS.KVD_XDS_ODATA_PASSWORD=value
 XDS.KVD_XDS_ODATA_USERNAME=value
 Xen Desktop Site Connection Information.Advanced=None
 Xen Desktop Site Connection Information.Xen Desktop Site Name=None
INSTANCE="inst1"
```

Chapter 3. Workspaces reference

A workspace is the working area of the Tivoli Enterprise Portal application window. The Navigator tree contains a list of the workspaces provided by the agent.

About workspaces

Use the Navigator tree to select the workspace you want to see. As part of the application window, the status bar shows the Tivoli Enterprise Portal Server name and port number to which the displayed information applies and the ID of the current user.

When you select an item in the Navigator tree, a default workspace is displayed. When you right-click a Navigator item, a menu that includes a Workspace item is displayed. The Workspace item contains a list of workspaces for that Navigator item. Each workspace has at least one view. Some views have links to other workspaces. You can also use the Workspace Gallery tool as described in the *Tivoli Enterprise Portal User's Guide* to open workspaces.

The workspaces in the Navigator are displayed in a Physical view that shows your enterprise as a physical mapping or a dynamically populated logical view that is agent-specific. You can also create a Logical view. The Physical view is the default view.

This monitoring agent provides predefined workspaces. You cannot modify or delete the predefined workspaces, but you can create new workspaces by editing them and saving the changes with a different name.

The IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure provides various default workspaces. These workspaces are displayed in the Navigator tree under the following nodes and subnodes for this monitoring agent:

Citrix Virtual Desktop Infrastructure
Corresponds to a Citrix Virtual Desktop Infrastructure instance and contains agent instance-level workspaces.

XenDesktop Site
XenDesktop Site

When multiple instances of the monitoring agent are defined on a system, the top-level node becomes Citrix Virtual Desktop Infrastructure. The Citrix Virtual Desktop Infrastructure workspace is undefined at this node. A node for each instance is created called *Instance*::VD. A workspace that is called *Instance*::VD is associated with the instance node. This workspace is comparable to the Citrix Virtual Desktop Infrastructure workspace.

Workspace views can be any combination of query-based views, event views, and special purpose views.

Additional information about workspaces

For more information about creating, customizing, and working with workspaces, see "Using workspaces" in the *Tivoli Enterprise Portal User's Guide*.

For a list of the predefined workspaces for this monitoring agent and a description of each workspace, see Predefined workspaces and the information about each individual workspace.

Some attribute groups for this monitoring agent might not be represented in the predefined workspaces or views for this agent. For a full list of the attribute groups, see "Attribute groups for the monitoring agent" on page 21.

Predefined workspaces

The Citrix Virtual Desktop Infrastructure agent provides predefined workspaces, which are organized by Navigator item.

Agent-level navigator items

- Citrix Virtual Desktop Infrastructure Navigator item
  - Citrix Virtual Desktop Infrastructure workspace

XenDesktop Site (XDS) subnode

- XenDesktop Site Navigator item
  - XenDesktop Site workspace
  - Collector Performance workspace
- Application Navigator item
  - Application workspace
  - Application Counts workspace
- Catalog Navigator item
  - Catalog workspace
  - Catalog Counts workspace
- DDC Machine Navigator item
  - DDC Machine workspace
- Delivery Group Navigator item
  - Delivery Group workspace
  - Delivery Group Counts workspace
- Desktop Navigator item
  - Desktop workspace
  - Desktop Counts workspace
- Hypervisor Navigator item
  - Hypervisor workspace
  - Hypervisor Counts workspace
- Session Navigator item
  - Session workspace
- Site Navigator item
  - Site workspace
  - Site Counts workspace
- User Navigator item
  - User workspace
- VDA Machine Navigator item
  - VDA Machine workspace
  - VDA Machine Counts workspace

Workspace descriptions

Each workspace description provides information about the workspace such as the purpose and a list of views in the workspace.

Workspaces are listed under Navigator items. When the agent has subnodes, the Navigator items are listed under the subnode.

Citrix Virtual Desktop Infrastructure Navigator item

The workspace descriptions are organized by the Navigator item to which the workspaces are relevant.

Citrix Virtual Desktop Infrastructure workspace

The default, top-level workspace shows views to allow you to compare the performance of each site instance on the system.

This workspace contains the following views:

Site Average Load Index Summary

This view shows a summary of the average load indices for the site.

Site Connection Properties

This view shows all of the connection properties for each site connection.

Site Events

This view shows the events generated within the site.

XenDesktop Site subnode

The predefined workspace descriptions for the subnode are organized by the Navigator item to which the workspaces are relevant.

XenDesktop Site Navigator item

XenDesktop Site workspace

This workspace contains a summary of the Site Average Load Index values as well as a list of current events.

This workspace contains the following views:

Site Average Load Index Summary

This view shows a summary of the average Load Indices for the site.

Site Events

This view shows the events generated within the site.

Collector Performance workspace

This workspace contains information about the site and agent data collection performance.

This workspace contains the following views:

Site Configuration

This view shows the list of the properties for the site.

OData Performance

This view shows diagnostic information about the OData connection used to collect metrics from the XenDesktop site.

Application Navigator item

Application workspace

This workspace displays the metrics for the XenDesktop Applications within the site.

This workspace contains the following views:

Application Properties

This view shows the list of the properties for each application.

Application Average Instance Summary

This view shows a summary of application instances.

Application Connection Summary

This view shows a summary of the connections for each application.

Application Counts workspace

This workspace displays the summarized counts for sessions and connections for each XenDesktop application within the site.

This workspace contains the following views:

Application Session Count Summary
: This view shows the summarized counts for sessions running on each application.

Application Session Connection State Count Summary
: This view shows the summarized connection state counts for sessions running on each application.

Application Connection Failure Count Summary
: This view shows the summarized failure counts for connections running on each application.

Application Events
: This view shows the events generated by each application.

Catalog Navigator item

Catalog workspace

This workspace displays the metrics for the XenDesktop catalogs within the site.

This workspace contains the following views:

Catalog Properties
: This view shows the list of the properties for each catalog.

Catalog Connection Summary
: This view shows a summary of the connections for each catalog.

Catalog Average Load Index Summary
: This view shows a summary of the averaged load indices for each catalog.

Catalog Average Effective Load Index
: This view shows a average effective load index for each catalog.

Catalog Counts workspace

This workspace displays the summarized counts for sessions and connections for each XenDesktop catalog within the site.

This workspace contains the following views:

Catalog Session Count Summary
: This view shows the summarized counts for sessions running on each catalog.

Catalog Session Connection State Count Summary
: This view shows the summarized connection state counts for sessions running on each catalog.

Catalog Connection Failure Count Summary
: This view shows the summarized failure counts for connections running on each catalog.

DDC Machine Navigator item

DDC Machine workspace

This workspace displays the properties and events for the XenDesktop DDC machines within the site.

This workspace contains the following views:

DDC Machine Properties
: This view shows the list of the properties for each DDC machine.

DDC Machine Events
: This view shows the events generated by each DDC machine.

Delivery Group Navigator item

Delivery Group workspace

This workspace displays the metrics for the XenDesktop delivery groups within the site.

This workspace contains the following views:

Delivery Group Properties
This view shows the list of the properties for each delivery group.
Delivery Group Connection Summary
This view shows a summary of the connections for each delivery group.
Delivery Group Average Load Index Summary
This view shows a summary of the averaged load indices for each delivery group.
Delivery Group Average Effective Load Index
This view shows a average effective load index for each delivery group.

Delivery Group Counts workspace
This workspace displays the summarized counts for sessions and connections for each XenDesktop delivery group within the site.

This workspace contains the following views:
Delivery Group Session Count Summary
This view shows the summarized counts for sessions running on each delivery group.
Delivery Group Session Connection State Count Summary
This view shows the summarized connection state counts for sessions running on each delivery group.
Delivery Group Connection Failure Count Summary
This view shows the summarized failure counts for connections running on each delivery group.

Desktop Navigator item

Desktop workspace
This workspace displays the metrics for the XenDesktop desktops within the site.

This workspace contains the following views:
Desktop Properties
This view shows the list of the properties for each desktop.
Desktop Average Instance Summary
This view shows a summary of desktop instances.
Desktop Connection Summary
This view shows a summary of the connections for each desktop.

Desktop Counts workspace
This workspace displays the summarized counts for sessions and connections for each XenDesktop Desktop within the site.

This workspace contains the following views:
Desktop Session Count Summary
This view shows the summarized counts for sessions running on each desktop.
Desktop Session Connection State Count Summary
This view shows the summarized connection state counts for sessions running on each desktop.
Desktop Connection Failure Count Summary
This view shows the summarized failure counts for connections running on each desktop.
Desktop Events
This view shows the events generated by each desktop.

Hypervisor Navigator item

Hypervisor workspace
This workspace displays the metrics for the XenDesktop hypervisors within the site.

This workspace contains the following views:
Hypervisor Properties
This view shows the list of the properties for each hypervisor.
Hypervisor Connection Summary
This view shows a summary of the connections for each hypervisor.

Hypervisor Average Load Index Summary
This view shows a summary of the averaged load indices for each hypervisor.
Hypervisor Average Effective Load Index
This view shows a average effective load index for each hypervisor.

Hypervisor Counts workspace
This workspace displays the summarized counts for sessions and connections for each XenDesktop Hypervisor within the site.

This workspace contains the following views:
Hypervisor Session Count Summary
This view shows the summarized counts for sessions running on each hypervisor.
Hypervisor Session Connection State Count Summary
This view shows the summarized connection state counts for sessions running on each hypervisor.
Hypervisor Connection Failure Count Summary
This view shows the summarized failure counts for connections running on each hypervisor.

Session Navigator item

Session workspace
This workspace shows data that relates to the active XenDesktop sessions within the site.

This workspace contains the following view:
Session Information
This view shows the list of sessions.

Site Navigator item

Site workspace
This workspace displays the metrics for the XenDesktop site.

This workspace contains the following views:
Site Properties
This view shows the list of the properties for the site.
Site Connection Summary
This view shows a summary of the connections for the site.
Site Average Load Index Summary
This view shows a summary of the averaged load indices for the site.
Site Average Effective Load Index
This view shows a average effective load index for the site.

Site Counts workspace
This workspace displays the summarized counts for sessions and connections for the XenDesktop site.

This workspace contains the following views:
Site Session Count Summary
This view shows the summarized counts for sessions running on the site.
Site Session Connection State Count Summary
This view shows the summarized connection state counts for sessions running on the site.
Site Connection Failure Count Summary
This view shows the summarized failure counts for connections running on the site.
Site Events
This view shows the events generated within the site.

User Navigator item

User workspace
This workspace shows data in relation to the active XenDesktop users within the site.

This workspace contains the following view:

User Information
This view shows the list of Users.

VDA Machine Navigator item

VDA Machine workspace
This workspace displays the metrics for the XenDesktop VDA machines within the site.

This workspace contains the following views:
VDA Machine Properties
This view shows the list of the properties for each VDA machine.
VDA Machine Connection Summary
This view shows a summary of the connections for each VDA machine.
VDA Machine Average Load Index Summary
This view shows a summary of the averaged load indices for each VDA machine.
VDA Machine Average Effective Load Index
This view shows an average effective load index for each VDA machine.

VDA Machine Counts workspace
This workspace displays the summarized counts for sessions and connections for each XenDesktop VDA machine within the site.

This workspace contains the following views:
VDA Machine Session Count Summary
This view shows the summarized counts for sessions running on each VDA machine.
VDA Machine Session Connection State Count Summary
This view shows the summarized connection state counts for sessions running on each VDA machine.
VDA Machine Connection Failure Count Summary
This view shows the summarized failure counts for connections running on each VDA machine.
VDA Machine Events
This view shows the events generated by each VDA machine.

Chapter 4. Attributes reference

Attributes are the application properties that are being measured and reported by the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure.

About attributes

Attributes are organized into attribute groups. Attributes in an attribute group relate to a single object such as an application, or to a single kind of data such as status information.

Attributes in a group can be used in queries, query-based views, situations, policy workflows, take action definitions, and launch application definitions. Chart or table views and situations are two examples of how attributes in a group can be used:

- Chart or table views

  Attributes are displayed in chart and table views. The chart and table views use queries to specify which attribute values to request from a monitoring agent. You use the Properties editor to apply filters and set styles to define the content and appearance of a view based on an existing query.
- Situations

  You use attributes to create situations that monitor the state of your operating system, database, or application. A situation describes a condition you want to test. When you start a situation, the values you assign to the situation attributes are compared with the values collected by the Citrix Virtual Desktop Infrastructure agent and registers an *event* if the condition is met. You are alerted to events by indicator icons that are displayed in the Navigator.

Additional information about attributes

For more information about using attributes and attribute groups, see the *Tivoli Enterprise Portal User's Guide*.

For a list of the attribute groups, a list of the attributes in each attribute group, and descriptions of the attributes for this monitoring agent, see "Attribute groups for the monitoring agent" and "Attributes in each attribute group" on page 25.

Attribute groups for the monitoring agent

The Citrix Virtual Desktop Infrastructure agent contains the following attribute groups. The table name depends on the maximum table name limits of the target database being used for the Tivoli Data Warehouse. If the maximum name is 30 characters, any warehouse table name longer than 30 characters is shortened to 30 characters.

- Attribute group name: Agent Data Provider Log
  - Table name: KVDKVDLOG1
- Attribute group name: Application Connection Failure Count Summary
  - Table name: KVDXDACF52
  - Warehouse table name: KVD_APPLICATION_CONNECTION_FAILURE_COUNT_SUMMARY or KVDXDACF52
- Attribute group name: Application Connection Summary
  - Table name: KVDXDACS51
  - Warehouse table name: KVD_APPLICATION_CONNECTION_SUMMARY or KVDXDACS51
- Attribute group name: Application Instance Summary

  - Table name: KVDAIS48
  - Warehouse table name: KVD_APPLICATION_INSTANCE_SUMMARY or KVDAIS48
- Attribute group name: Application Resource Information
  - Table name: KVDXDARI47
  - Warehouse table name: KVD_APPLICATION_RESOURCE_INFORMATION or KVDXDARI47
- Attribute group name: Application Sess Conn State Cnt Sum
  - Table name: KVDXDASC50
  - Warehouse table name: KVD_APPLICATION_SESS_CONN_STATE_CNT_SUM or KVDXDASC50
- Attribute group name: Application Session Count Summary
  - Table name: KVDXDASC49
  - Warehouse table name: KVD_APPLICATION_SESSION_COUNT_SUMMARY or KVDXDASC49
- Attribute group name: Catalog Average Load Index Summary
  - Table name: KVDXDCAL27
  - Warehouse table name: KVD_CATALOG_AVERAGE_LOAD_INDEX_SUMMARY or KVDXDCAL27
- Attribute group name: Catalog Connection Failure Count Summary
  - Table name: KVDXDCCF31
  - Warehouse table name: KVD_CATALOG_CONNECTION_FAILURE_COUNT_SUMMARY or KVDXDCCF31
- Attribute group name: Catalog Connection Summary
  - Table name: KVDXDCCS30
  - Warehouse table name: KVD_CATALOG_CONNECTION_SUMMARY or KVDXDCCS30
- Attribute group name: Catalog Resource Information
  - Table name: KVDXDCRI26
  - Warehouse table name: KVD_CATALOG_RESOURCE_INFORMATION or KVDXDCRI26
- Attribute group name: Catalog Sess Conn State Cnt Sum
  - Table name: KVDXDCSC29
  - Warehouse table name: KVD_CATALOG_SESS_CONN_STATE_CNT_SUM or KVDXDCSC29
- Attribute group name: Catalog Session Count Summary
  - Table name: KVDXDCSC28
  - Warehouse table name: KVD_CATALOG_SESSION_COUNT_SUMMARY or KVDXDCSC28
- Attribute group name: DDC Machine Events
  - Table name: KVDXDDME24
  - Warehouse table name: KVD_DDC_MACHINE_EVENTS or KVDXDDME24
- Attribute group name: DDC Machine Resource Information
  - Table name: KVDXDDMR23
  - Warehouse table name: KVD_DDC_MACHINE_RESOURCE_INFORMATION or KVDXDDMR23
- Attribute group name: Delivery Group Average Load Index Summary
  - Table name: KVDXDDGA34
  - Warehouse table name: KVD_DELIVERY_GROUP_AVERAGE_LOAD_INDEX_SUMMARY or KVDXDDGA34
- Attribute group name: Delivery Group Connection Failure Count Summary
  - Table name: KVDXDDGC38
  - Warehouse table name: KVD_DELIVERY_GROUP_CONNECTION_FAILURE_COUNT_SUMMARY or KVDXDDGC38
- Attribute group name: Delivery Group Connection Summary

  - Table name: KVDXDDGC37
  - Warehouse table name: KVD_DELIVERY_GROUP_CONNECTION_SUMMARY or KVDXDDGC37
- Attribute group name: Delivery Group Resource Information
  - Table name: KVDXDDGR33
  - Warehouse table name: KVD_DELIVERY_GROUP_RESOURCE_INFORMATION or KVDXDDGR33
- Attribute group name: Delivery Group Sess Conn State Cnt Sum
  - Table name: KVDXDDGS36
  - Warehouse table name: KVD_DELIVERY_GROUP_SESS_CONN_STATE_CNT_SUM or KVDXDDGS36
- Attribute group name: Delivery Group Session Count Summary
  - Table name: KVDXDDGS35
  - Warehouse table name: KVD_DELIVERY_GROUP_SESSION_COUNT_SUMMARY or KVDXDDGS35
- Attribute group name: Desktop Connection Failure Count Summary
  - Table name: KVDXDDCF60
  - Warehouse table name: KVD_DESKTOP_CONNECTION_FAILURE_COUNT_SUMMARY or KVDXDDCF60
- Attribute group name: Desktop Connection Summary
  - Table name: KVDXDDCS59
  - Warehouse table name: KVD_DESKTOP_CONNECTION_SUMMARY or KVDXDDCS59
- Attribute group name: Desktop Instance Summary
  - Table name: KVDDIS56
  - Warehouse table name: KVD_DESKTOP_INSTANCE_SUMMARY or KVDDIS56
- Attribute group name: Desktop Resource Information
  - Table name: KVDXDDRI55
  - Warehouse table name: KVD_DESKTOP_RESOURCE_INFORMATION or KVDXDDRI55
- Attribute group name: Desktop Sess Conn State Cnt Sum
  - Table name: KVDXDDSC58
  - Warehouse table name: KVD_DESKTOP_SESS_CONN_STATE_CNT_SUM or KVDXDDSC58
- Attribute group name: Desktop Session Count Summary
  - Table name: KVDXDDSC57
  - Warehouse table name: KVD_DESKTOP_SESSION_COUNT_SUMMARY or KVDXDDSC57
- Attribute group name: Hypervisor Average Load Index Summary
  - Table name: KVDXDHAL41
  - Warehouse table name: KVD_HYPERVISOR_AVERAGE_LOAD_INDEX_SUMMARY or KVDXDHAL41
- Attribute group name: Hypervisor Connection Failure Count Summary
  - Table name: KVDXDHCF45
  - Warehouse table name: KVD_HYPERVISOR_CONNECTION_FAILURE_COUNT_SUMMARY or KVDXDHCF45
- Attribute group name: Hypervisor Connection Summary
  - Table name: KVDXDHCS44
  - Warehouse table name: KVD_HYPERVISOR_CONNECTION_SUMMARY or KVDXDHCS44
- Attribute group name: Hypervisor Resource Information
  - Table name: KVDXDHRI40
  - Warehouse table name: KVD_HYPERVISOR_RESOURCE_INFORMATION or KVDXDHRI40
- Attribute group name: Hypervisor Sess Conn State Cnt Sum

  - Table name: KVDXDHSC43
  - Warehouse table name: KVD_HYPERVISOR_SESS_CONN_STATE_CNT_SUM or KVDXDHSC43
- Attribute group name: Hypervisor Session Count Summary
  - Table name: KVDXDHSC42
  - Warehouse table name: KVD_HYPERVISOR_SESSION_COUNT_SUMMARY or KVDXDHSC42
- Attribute group name: Performance Object Status
  - Table name: KVDPOBJST
  - Warehouse table name: KVD_PERFORMANCE_OBJECT_STATUS or KVDPOBJST
- Attribute group name: Resource Counts
  - Table name: KVDRC7
  - Warehouse table name: KVD_RESOURCE_COUNTS or KVDRC7
- Attribute group name: Session Connection Details
  - Table name: KVDXDSS03
  - Warehouse table name: KVD_SESSION_CONNECTION_DETAILS or KVDXDSS03
- Attribute group name: Session Resource Information
  - Table name: KVDXDSS02
  - Warehouse table name: KVD_SESSION_RESOURCE_INFORMATION or KVDXDSS02
- Attribute group name: Site Average Load Index Summary
  - Table name: KVDALIS8
  - Warehouse table name: KVD_SITE_AVERAGE_LOAD_INDEX_SUMMARY or KVDALIS8
- Attribute group name: Site Connection Failure Count Summary
  - Table name: KVDCFCS12
  - Warehouse table name: KVD_SITE_CONNECTION_FAILURE_COUNT_SUMMARY or KVDCFCS12
- Attribute group name: Site Connection Summary
  - Table name: KVDCS11
  - Warehouse table name: KVD_SITE_CONNECTION_SUMMARY or KVDCS11
- Attribute group name: Site Events
  - Table name: KVDXDSE13
  - Warehouse table name: KVD_SITE_EVENTS or KVDXDSE13
- Attribute group name: Site Resource Information
  - Table name: KVDRI6
  - Warehouse table name: KVD_SITE_RESOURCE_INFORMATION or KVDRI6
- Attribute group name: Site Sess Conn State Cnt Sum
  - Table name: KVDSCSCS10
  - Warehouse table name: KVD_SITE_SESS_CONN_STATE_CNT_SUM or KVDSCSCS10
- Attribute group name: Site Session Count Summary
  - Table name: KVDSCS9
  - Warehouse table name: KVD_SITE_SESSION_COUNT_SUMMARY or KVDSCS9
- Attribute group name: Take Action Status
  - Table name: KVDTACTST
  - Warehouse table name: KVD_TAKE_ACTION_STATUS or KVDTACTST
- Attribute group name: Thread Pool Status
  - Table name: KVDTHPLST
  - Warehouse table name: KVD_THREAD_POOL_STATUS or KVDTHPLST
- Attribute group name: User Resource Information

  - Table name: KVDXDUS02
  - Warehouse table name: KVD_USER_RESOURCE_INFORMATION or KVDXDUS02
- Attribute group name: VDA Machine Connection Failure Count Summary
  - Table name: KVDXDVMC20
  - Warehouse table name: KVD_VDA_MACHINE_CONNECTION_FAILURE_COUNT_SUMMARY or KVDXDVMC20
- Attribute group name: VDA Machine Connection Summary
  - Table name: KVDXDVMC19
  - Warehouse table name: KVD_VDA_MACHINE_CONNECTION_SUMMARY or KVDXDVMC19
- Attribute group name: VDA Machine Events
  - Table name: KVDXDVME21
  - Warehouse table name: KVD_VDA_MACHINE_EVENTS or KVDXDVME21
- Attribute group name: VDA Machine Load Index Summary
  - Table name: KVDLIS16
  - Warehouse table name: KVD_VDA_MACHINE_LOAD_INDEX_SUMMARY or KVDLIS16
- Attribute group name: VDA Machine Resource Information
  - Table name: KVDXDVMR15
  - Warehouse table name: KVD_VDA_MACHINE_RESOURCE_INFORMATION or KVDXDVMR15
- Attribute group name: VDA Machine Sess Conn State Cnt Sum
  - Table name: KVDXDVMS18
  - Warehouse table name: KVD_VDA_MACHINE_SESS_CONN_STATE_CNT_SUM or KVDXDVMS18
- Attribute group name: VDA Machine Session Count Summary
  - Table name: KVDXDVMS17
  - Warehouse table name: KVD_VDA_MACHINE_SESSION_COUNT_SUMMARY or KVDXDVMS17
- Attribute group name: XDS Performance Object Status
  - Table name: KVDXDSPOS
  - Warehouse table name: KVD_XDS_PERFORMANCE_OBJECT_STATUS or KVDXDSPOS
- Attribute group name: XenDesktop OData Performance
  - Table name: KVDODP3
  - Warehouse table name: KVD_XENDESKTOP_ODATA_PERFORMANCE or KVDODP3
- Attribute group name: XenDesktop Resource Properties
  - Table name: KVDRP2
  - Warehouse table name: KVD_XENDESKTOP_RESOURCE_PROPERTIES or KVDRP2
- Attribute group name: XenDesktopSite nodes
  - Table name: KVDXDSDS
  - Warehouse table name: KVD_XENDESKTOPSITE_NODES or KVDXDSDS

Attributes in each attribute group

Attributes in each Citrix Virtual Desktop Infrastructure agent attribute group collect data that the agent uses for monitoring.

The descriptions of the attribute groups contain the following information:

Historical group
Whether the attribute group is a historical type that you can roll off to a data warehouse.

Attribute descriptions

Information such as description, type, source, and warehouse name, as applicable, for each attribute in the attribute group.

Some attributes are designated as key attributes. A *key attribute* is an attribute that is used in warehouse aggregation to identify rows of data that represent the same object.

The Source information sometimes uses C programming code syntax for if-then-else clauses to describe how an attribute is derived, for example:

```
(CPU_Pct < 0 ) || (Memory_Pct < 0 )? 0 : 1
```

This example means that if the CPU_Pct attribute is less than 0 or if the Memory_Pct attribute is less than 0, then the attribute is set to 0. Otherwise, the attribute is set to 1.

Agent Data Provider Log attribute group

This attribute group contains information retrieved from the Citrix Virtual Desktop Infrastructure agent log file.

Historical group

This attribute group is not eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Agent Data Provider Log attribute group:

Class attribute

Description

The name of the class that generates the message.

Type

string

Source

The source for this attribute is Log File Data.

Date attribute

Description

The date associated with the message.

Type

string

Source

The source for this attribute is Log File Data.

Log File Name attribute **This attribute is a key attribute.**

Description

The name of the log file.

Type

string

Source

The source for this attribute is Log File Data.

Log Message attribute

Description

The text that relates to the log entry.

Type

string

Source

The source for this attribute is Log File Data.

Method attribute

Description

The name of the method that generates the message.

Type

string

Source
The source for this attribute is Log File Data.

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Server Name attribute

Description
The name of the server that generates the message.

Type
string

Source
The source for this attribute is Log File Data.

Severity attribute

Description
The severity of the message.

Type
string

Source
The source for this attribute is Log File Data.

Thread attribute

Description
The name of the thread that generates the message.

Type
string

Source
The source for this attribute is Log File Data.

Time attribute

Description
The time associated with the message.

Type
string

Source
The source for this attribute is Log File Data.

Timestamp attribute

Description
The time the event was generated.

Type
string

Source
The source for this attribute is the agent.

Application Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for an application.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Application Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute

Description
The total number of connections hosting an instance of the application with an Active Session Reconnect Disabled failure.

Type
integer (32-bit gauge)

Warehouse name
ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application attribute **This attribute is a key attribute.**

Description
The reference ID for an application.

Type
string

Warehouse name
APPLICATION_ID or A1

Application Disabled attribute

Description
The total number of connections hosting an instance of the application with an Application Disabled failure.

Type
integer (32-bit gauge)

Warehouse name
APPLICATION_DISABLED or AD12

Configuration Set Failure attribute

Description
The total number of connections hosting an instance of the application with a Configuration Set Failure failure.

Type
integer (32-bit gauge)

Warehouse name
CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute

Description
The total number of connections hosting an instance of the application with a Connection Timeout failure.

Type
integer (32-bit gauge)

Warehouse name
CONNECTION_TIMEOUT or CT6

Disallowed Protocol attribute

Description
The total number of connections hosting an instance of the application with a Disallowed Protocol failure.

Type
integer (32-bit gauge)

Warehouse name
DISALLOWED_PROTOCOL or DP16

General Fail attribute

Description
The total number of connections hosting an instance of the application with a General Fail failure.

Type
integer (32-bit gauge)

Warehouse name
GENERAL_FAIL or GF10

License Feature Refused attribute

Description
The total number of connections hosting an instance of the application with a License Feature Refused failure.
Type
integer (32-bit gauge)
Warehouse name
LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute
Description
The total number of connections hosting an instance of the application with a Licensing failure.
Type
integer (32-bit gauge)
Warehouse name
LICENSING or L7

Machine Not Functional attribute
Description
The total number of connections hosting an instance of the application with a Machine Not Functional failure.
Type
integer (32-bit gauge)
Warehouse name
MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute
Description
The total number of connections hosting an instance of the application with a Maintenance Mode failure.
Type
integer (32-bit gauge)
Warehouse name
MAINTENANCE_MODE or MM11

No Desktop Available attribute
Description
The total number of connections hosting an instance of the application with a No Desktop Available failure.
Type
integer (32-bit gauge)
Warehouse name
NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute
Description
The total number of connections hosting an instance of the application with a No Machine Available failure.
Type
integer (32-bit gauge)
Warehouse name
NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute
Description
The total number of connections hosting an instance of the application with a No Session To Reconnect failure.
Type
integer (32-bit gauge)
Warehouse name
NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

None attribute
Description
The total number of connections hosting an instance of the application without failure.
Type
integer (32-bit gauge)
Warehouse name
NONE or N3

Other attribute
Description
The total number of connections hosting an instance of the application with an Other failure.
Type
integer (32-bit gauge)
Warehouse name
OTHER or O9

Refused attribute
Description
The total number of connections hosting an instance of the application with a Refused failure.
Type
integer (32-bit gauge)
Warehouse name
REFUSED or R21

Registration Timeout attribute
Description
The total number of connections hosting an instance of the application with a Registration Timeout failure.
Type
integer (32-bit gauge)
Warehouse name
REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute
Description
The total number of connections hosting an instance of the application with a Resource Unavailable failure.
Type
integer (32-bit gauge)
Warehouse name
RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute
Description
The total number of connections hosting an instance of the application with a Session Limit Reached failure.
Type
integer (32-bit gauge)
Warehouse name
SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute

Description

The total number of connections hosting an instance of the application with a Session Preparation failure.

Type

integer (32-bit gauge)

Warehouse name

SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description

The total number of connections hosting an instance of the application with a Spin Up Failed failure.

Type

integer (32-bit gauge)

Warehouse name

SPIN_UP_FAILED or SUF20

Ticketing attribute

Description

The total number of connections hosting an instance of the application with a Ticketing failure.

Type

integer (32-bit gauge)

Warehouse name

TICKETING or T8

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Total attribute

Description

The total number of connections failures hosting an instance of the application.

Type

integer (32-bit gauge)

Warehouse name

TOTAL or T2

Unknown attribute

Description

The total number of connections hosting an instance of the application with an Unknown failure.

Type

integer (32-bit gauge)

Warehouse name

UNKNOWN or U25

Application Connection Summary attribute group

The attribute group returns the summary of the connections allowed for an application.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Application Connection Summary attribute group:

Active Connection Count attribute

Description

The total number of connections to an instance of the application.

Type

integer (32-bit gauge)

Warehouse name

CONNECTION_COUNT or ACC4

Application attribute This attribute is a key attribute.

Description

The reference ID for an Application

Type

string

Warehouse name

APPLICATION_ID or A1

Average Authentication Duration (ms) attribute

Description

The average authentication duration for all connections to an instance of the application.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute

Description

The average authentication duration for all connections to an instance of the application.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute

Description

The average brokering duration for all connections to an instance of the application.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute

Description

The average brokering duration for all connections to an instance of the application.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description
The average group policy duration for all connections to an instance of the application.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description
The average group policy duration for all connections to an instance of the application.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description
The average HDX duration for all connections to an instance of the application.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description
The average HDX duration for all connections to an instance of the application.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description
The average interactive duration for all connections to an instance of the application.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description
The average interactive duration for all connections to an instance of the application.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated

values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration for all connections to an instance of the application.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration for all connections to an instance of the application.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration for all connections to an instance of the application.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration for all connections to an instance of the application.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description

The average profile load duration for all connections to an instance of the application.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description

The average profile load duration for all connections to an instance of the application.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description

The average VM start duration for all connections to an instance of the application.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute

Description

The average VM start duration for all connections to an instance of the application.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

New Connection Count attribute

Description

The total number of new connections to an instance of the application.

Type

integer (32-bit gauge)

Warehouse name

NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Secure ICA Connection Count attribute

Description

The total number of secure ICA connections to an instance of the application.

Type

integer (32-bit gauge)

Warehouse name

SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Application Instance Summary attribute group

This attribute group contains high level summary data for all instances of an application.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Application Instance Summary attribute group:

Application attribute This attribute is a key attribute.
Description
The reference ID for an application.
Type
string
Warehouse name
APPLICATION_ID or A1

Average Instance Duration Minutes attribute
Description
The average duration for all instances of the application.
Type
integer (32-bit gauge)
Warehouse name
AVERAGE_INSTANCE_DURATION_MINUTES or AIDM2

Instance Count attribute
Description
The total number of instances of the application.
Type
integer (32-bit gauge)
Warehouse name
INSTANCE_COUNT or IC3

Node attribute This attribute is a key attribute.
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Application Resource Information attribute group

This attribute group contains high level summary data for an application.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Application Resource Information attribute group:

Admin Folder attribute

Description
The admin folder for the application.

Type
string

Warehouse name
ADMIN_FOLDER or AF6

Application attribute **This attribute is a key attribute.**

Description
The reference ID for an application.

Type
string

Warehouse name
APPLICATION_ID or A1

Application Type attribute

Description
The type of the application.

Type
string

Warehouse name
APPLICATION_TYPE or AT4

Enabled attribute

Description
Specifies if the application is enabled.

Type
string

Warehouse name
ENABLED or E5

Lifecycle State attribute

Description
The lifecycle state of the application.

Type
string

Warehouse name
LIFECYCLE_STATE or LS7

Name For Administrator attribute

Description
The published name of the application.

Type
string

Warehouse name
NAME or NFA2

Name For User attribute

Description
The published name of the application.

Type
string

Warehouse name
PUBLISHED_NAME or NFU3

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Application Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions grouped by the state of the connection for components that make up the application.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Application Sess Conn State Cnt Sum attribute group:

Active attribute
Description
The total number of sessions hosting an instance of the application with the Active connection state.
Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_COUNT or A7

Application attribute **This attribute is a key attribute.**
Description
The reference ID for an Application
Type
string
Warehouse name
APPLICATION_ID or A1

Connected attribute
Description
The total number of sessions hosting an instance of the application with the Connected connection state.
Type
integer (32-bit gauge)
Warehouse name
CONNECTED_SESSION_COUNT or C3

Disconnected attribute
Description
The total number of sessions hosting an instance of the application with the Disconnected connection state.
Type
integer (32-bit gauge)
Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Non Brokered Session attribute

Description

The total number of sessions hosting an instance of the application with the Non-Brokered Session connection state.

Type

integer (32-bit gauge)

Warehouse name

NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute

Description

The total number of sessions hosting an instance of the application with the Other connection state.

Type

integer (32-bit gauge)

Warehouse name

OTHER_SESSION_COUNT or O10

Pending attribute

Description

The total number of sessions hosting an instance of the application with the Pending connection state.

Type

integer (32-bit gauge)

Warehouse name

PENDING_SESSION_COUNT or P11

Preparing Session attribute

Description

The total number of sessions hosting an instance of the application with the Preparing Session connection state.

Type

integer (32-bit gauge)

Warehouse name

PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute

Description

The total number of sessions hosting an instance of the application with the Reconnecting connection state.

Type

integer (32-bit gauge)

Warehouse name

RECONNECTING_SESSION_COUNT or R8

Terminated attribute

Description

The total number of sessions hosting an instance of the application with the Terminated connection state.

Type

integer (32-bit gauge)

Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Unknown attribute

Description
The total number of sessions hosting an instance of the application with the Unknown connection state.

Type
integer (32-bit gauge)

Warehouse name
UNKNOWN_SESSION_COUNT or U2

Application Session Count Summary attribute group

This attribute group returns the total counts for each of the components that make up the application.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Application Session Count Summary attribute group:

Anonymous Session Count attribute

Description
The total number of anonymous sessions hosting an instance of the application.

Type
integer (32-bit gauge)

Warehouse name
ANONYMOUS_SESSION_COUNT or ASC2

Application attribute This attribute is a key attribute.

Description
The reference ID for an Application

Type
string

Warehouse name
APPLICATION_ID or A1

Application Name attribute

Description
The name of the application

Type
string

Warehouse name
APPLICATION_NAME or AN9

Node attribute This attribute is a key attribute.

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Peak Concurrent Session Count attribute

Description
The greatest number of sessions hosting an instance of the application that existed during the last collection interval.

Type
integer (32-bit gauge)

Warehouse name
PEAK_CONCURRENT_SESSION_COUNT or PCSC3

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Catalog Average Load Index Summary attribute group

This attribute group returns the average load index that is calculated by averaging all the load index results for machines used by the catalog.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Catalog Average Load Index Summary attribute group:

Catalog attribute This attribute is a key attribute.

Description
The reference ID for a Catalog

Type
string

Warehouse name
CATALOG_ID or C1

CPU attribute

Description
The average CPU load index of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CPU or C3

CPU (%) attribute

Description
The average CPU load index as a percent of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CPU_AS_PERCENT or C9

Disk attribute

Description
The average disk load index of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
DISK or D5

Disk (%) attribute

Description
The average disk load index as a percent of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
DISK_AS_PERCENT or D11

Effective attribute

Description
The average effective load index of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
EFFECTIVE_LOAD_INDEX or E2

Effective (%) attribute

Description
The average effective load index as a percent of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
EFFECTIVE_LOAD_INDEX_AS_PERCENT or E8

Memory attribute

Description
The average memory load index of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY or M4

Memory (%) attribute

Description
The average memory load index as a percent of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY_AS_PERCENT or M10

Network attribute

Description
The average network load index of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK or N6

Network (%) attribute

Description
The average network load index as a percent of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK_AS_PERCENT or N12

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Session Capacity attribute

Description
The average session count load index of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT or SC7

Session Capacity (%) attribute

Description
The average session count load index as a percent of all VDA Machine resource types in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT_AS_PERCENT or SC13

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Catalog Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for a catalog.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Catalog Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute
Description
The total number of connections with a Active Session Reconnect Disabled failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application Disabled attribute
Description
The total number of connections with an Application Disabled failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_DISABLED or AD12

Catalog attribute **This attribute is a key attribute.**
Description
The reference ID for a Catalog
Type
string
Warehouse name
CATALOG_ID or C1

Configuration Set Failure attribute
Description
The total number of connections with a Configuration Set Failure failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute
Description
The total number of connections with a Connection Timeout failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_TIMEOUT or CT6

Disallowed Protocol attribute
Description
The total number of connections with a Disallowed Protocol failure in the catalog.

Type
integer (32-bit gauge)
Warehouse name
DISALLOWED_PROTOCOL or DP16

General Fail attribute
Description
The total number of connections with a General Fail failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
GENERAL_FAIL or GF10

License Feature Refused attribute
Description
The total number of connections with a License Feature Refused failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute
Description
The total number of connections with a Licensing failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
LICENSING or L7

Machine Not Functional attribute
Description
The total number of connections with a Machine Not Functional failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute
Description
The total number of connections with a Maintenance Mode failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
MAINTENANCE_MODE or MM11

No Desktop Available attribute
Description
The total number of connections with a No Desktop Available failure in the catalog.
Type
integer (32-bit gauge)
Warehouse name
NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute
Description
The total number of connections with a No Machine Available failure in the catalog.
Type
integer (32-bit gauge)

Warehouse name
NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute

Description
The total number of connections with a No Session To Reconnect failure in the catalog.

Type
integer (32-bit gauge)

Warehouse name
NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

None attribute

Description
The total number of connections without failure in the Catalog

Type
integer (32-bit gauge)

Warehouse name
NONE or N3

Other attribute

Description
The total number of connections with a Other failure in the catalog.

Type
integer (32-bit gauge)

Warehouse name
OTHER or O9

Refused attribute

Description
The total number of connections with a Refused failure in the catalog.

Type
integer (32-bit gauge)

Warehouse name
REFUSED or R21

Registration Timeout attribute

Description
The total number of connections with a Registration Timeout failure in the catalog.

Type
integer (32-bit gauge)

Warehouse name
REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute

Description
The total number of connections with a Resource Unavailable failure in the catalog.

Type
integer (32-bit gauge)

Warehouse name
RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute

Description

The total number of connections with a Session Limit Reached failure in the catalog.

Type

integer (32-bit gauge)

Warehouse name

SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute

Description

The total number of connections with a Session Preparation failure in the catalog.

Type

integer (32-bit gauge)

Warehouse name

SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description

The total number of connections with a Spin Up Failed failure in the catalog.

Type

integer (32-bit gauge)

Warehouse name

SPIN_UP_FAILED or SUF20

Ticketing attribute

Description

The total number of connections with a Ticketing failure in the catalog.

Type

integer (32-bit gauge)

Warehouse name

TICKETING or T8

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Total attribute

Description

The total number of connections failures in the Catalog

Type

integer (32-bit gauge)

Warehouse name

TOTAL or T2

Unknown attribute

Description

The total number of connections with an Unknown failure in the catalog.

Type

integer (32-bit gauge)

Warehouse name

UNKNOWN or U25

Catalog Connection Summary attribute group

The attribute group returns the summary of the connections allowed for a catalog.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Catalog Connection Summary attribute group:

Active Connection Count attribute

Description

The total number of connections in the catalog.

Type

integer (32-bit gauge)

Warehouse name

CONNECTION_COUNT or ACC4

Average Authentication Duration (ms) attribute

Description

The average authentication duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute

Description

The average authentication duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute

Description

The average brokering duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute

Description

The average brokering duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description

The average group policy duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description

The average group policy duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description

The average HDX duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description

The average HDX duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description

The average interactive duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description

The average interactive duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description

The average profile load duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description

The average profile load duration for all connections in the catalog.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description

The average VM start duration for all connections in the catalog.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute

Description
The average VM start duration for all connections in the catalog.
Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

Catalog attribute **This attribute is a key attribute.**
Description
The reference ID for a Catalog
Type
string
Warehouse name
CATALOG_ID or C1

New Connection Count attribute
Description
The total number of new connections in the catalog.
Type
integer (32-bit gauge)
Warehouse name
NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Secure ICA Connection Count attribute
Description
The total number of secure ICA connections in the catalog.
Type
integer (32-bit gauge)
Warehouse name
SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Catalog Resource Information attribute group

This attribute group contains high level summary data for a catalog.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Catalog Resource Information attribute group:

Allocation Type attribute

Description

The allocation type of the catalog.

Type

string

Warehouse name

ALLOCATION_TYPE or AT7

Catalog attribute This attribute is a key attribute.

Description

The reference ID for a catalog.

Type

string

Warehouse name

CATALOG_ID or C1

Is Machine Physical attribute

Description

Specifies if the catalog is a physical machine.

Type

string

Warehouse name

IS_MACHINE_PHYSICAL or IMP6

Lifecycle State attribute

Description

The lifecycle state of the catalog.

Type

string

Warehouse name

LIFECYCLE_STATE or LS3

Load Index Maximum Value attribute

Description

The maximum value of 10000 for the Load Index.

Type

integer (32-bit gauge)

Warehouse name

LOAD_INDEX_MAXIMUM_VALUE or LIMV11

Name attribute

Description

The Name of the catalog.

Type

string

Warehouse name

NAME or N2

Node attribute This attribute is a key attribute.

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Persistent User Changes attribute

Description

The persistent user changes of the catalog.

Type

string

Warehouse name
PERSISTENT_USER_CHANGES or PUC5

Provisioning Scheme attribute

Description
The provisioning scheme ID of the catalog.

Type
string

Warehouse name
PROVISIONING_SCHEME or PS9

Provisioning Type attribute

Description
The provisioning type of the catalog.

Type
string

Warehouse name
PROVISIONING_TYPE or PT4

Session Capacity attribute

Description
The maximum number of sessions allowed in the catalog according to the Load Evaluator policies on each VDA.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_CAPACITY or SC10

Session Support attribute

Description
The session support of the catalog.

Type
string

Warehouse name
SESSION_SUPPORT or SS8

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Catalog Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions grouped by the state of the connection for components in the catalog.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Catalog Sess Conn State Cnt Sum attribute group:

Active attribute

Description
The total number of sessions with the Active connection state that exist in the catalog.

Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_COUNT or A7

Catalog attribute **This attribute is a key attribute.**
Description
The reference ID for a Catalog
Type
string
Warehouse name
CATALOG_ID or C1

Connected attribute
Description
The total number of sessions with the Connected connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
CONNECTED_SESSION_COUNT or C3

Disconnected attribute
Description
The total number of sessions with the Disconnected connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Non Brokered Session attribute
Description
The total number of sessions with the Non-Brokered Session connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute
Description
The total number of sessions with the Other connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
OTHER_SESSION_COUNT or O10

Pending attribute
Description
The total number of sessions with the Pending connection state that exist in the catalog.

Type
integer (32-bit gauge)
Warehouse name
PENDING_SESSION_COUNT or P11

Preparing Session attribute
Description
The total number of sessions with the Preparing Session connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute
Description
The total number of sessions with the Reconnecting connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
RECONNECTING_SESSION_COUNT or R8

Terminated attribute
Description
The total number of sessions with the Terminated connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Unknown attribute
Description
The total number of sessions with the Unknown connection state that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN_SESSION_COUNT or U2

Catalog Session Count Summary attribute group

This attribute group returns the total counts for each of the components that make up the catalog.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Catalog Session Count Summary attribute group:

Anonymous Session Count attribute

Description
The total anonymous sessions that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
ANONYMOUS_SESSION_COUNT or ASC5

Application Session Count attribute
Description
The total application-type sessions that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_SESSION_COUNT or ASC4

Catalog attribute This attribute is a key attribute.
Description
The reference ID for a Catalog
Type
string
Warehouse name
CATALOG_ID or C1

Desktop Session Count attribute
Description
The total desktop-type sessions that exist in the catalog.
Type
integer (32-bit gauge)
Warehouse name
DESKTOP_SESSION_COUNT or DSC3

Node attribute This attribute is a key attribute.
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Peak Concurrent Session Count attribute
Description
The greatest number of sessions that existed during the last collection interval in the catalog.
Type
integer (32-bit gauge)
Warehouse name
PEAK_CONCURRENT_SESSION_COUNT or PCSC6

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Total Session Count attribute
Description
The total sessions that exist in the catalog.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
TOTAL_SESSION_COUNT or TSC2

DDC Machine Events attribute group

The event received directly from the XenDesktop API for the XenDesktop DDC machine.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the DDC Machine Events attribute group:

Event Reason attribute

Description
The code of event received from the XenDesktop API for the XenDesktop DDC machine.

Type
string

Warehouse name
EVENT_REASON or REASON

Event Severity attribute

Description
The severity of the event received from the XenDesktop API for the DDC machine.

Type
string

Warehouse name
EVENT_SEVERITY or SEVERITY

Event Timestamp attribute

Description
The time of the event received from the XenDesktop API for the XenDesktop DDC machine.

Type
timestamp

Warehouse name
EVENT_TIMESTAMP or TIME

Event Type attribute

Description
The type of event received from the XenDesktop API for the XenDesktop DDC machine.

Type
string

Warehouse name
EVENT_TYPE or TYPE

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Timestamp attribute

Description

The time the event was generated.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

DDC Machine Resource Information attribute group

This attribute group contains high level summary data for a DDC machine.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the DDC Machine Resource Information attribute group:

Dns Name attribute

Description

The DNS Name of the DDC machine.

Type

string

Warehouse name

DNS_NAME or DN2

Fault State attribute

Description

The Fault State of the DDC machine.

Type

string

Warehouse name

FAULT_STATE or FS4

Lifecycle State attribute

Description

The Lifecycle State of the DDC machine.

Type

string

Warehouse name

LIFECYCLE_STATE or LS3

Machine attribute This attribute is a key attribute.

Description

The reference ID for a DDC machine.

Type

string

Warehouse name

MACHINE_ID or M1

Machine Role attribute

Description

The Role of the DDC machine.

Type

string

Warehouse name

MACHINE_ROLE or MR6

Node attribute This attribute is a key attribute.

Description

The managed system name of the agent.

Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

OS Type attribute
Description
The OS Type of the DDC machine.
Type
string
Warehouse name
OS_TYPE or OT5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Delivery Group Average Load Index Summary attribute group

This attribute group returns the average load index that is calculated by averaging all the load index results for machines used by the delivery group.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Delivery Group Average Load Index Summary attribute group:

CPU attribute
Description
The average CPU load index of all VDA machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
CPU or C3

CPU (%) attribute
Description
The average CPU load index as a percent of all VDA machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
CPU_AS_PERCENT or C9

Delivery Group attribute **This attribute is a key attribute.**
Description
The reference ID for a delivery group.

Type
string
Warehouse name
DELIVERY_GROUP_ID or DG1

Disk attribute
Description
The average disk load index of all VDA machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
DISK or D5

Disk (%) attribute
Description
The average disk load index as a percent of all VDA machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
DISK_AS_PERCENT or D11

Effective attribute
Description
The average effective load index of all VDA machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
EFFECTIVE_LOAD_INDEX or E2

Effective (%) attribute
Description
The average effective load index as a percent of all VDA Machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
EFFECTIVE_LOAD_INDEX_AS_PERCENT or E8

Memory attribute
Description
The average memory load index of all VDA machine resource types in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
MEMORY or M4

Memory (%) attribute

Description
The average memory load index as a percent of all VDA machine resource types in the delivery group.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY_AS_PERCENT or M10

Network attribute

Description
The average network load index of all VDA machine resource types in the delivery group.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK or N6

Network (%) attribute

Description
The average network load index as a percent of all VDA machine resource types in the delivery group.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK_AS_PERCENT or N12

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Session Capacity attribute

Description
The average session count load index of all VDA machine resource types in the delivery group.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT or SC7

Session Capacity (%) attribute

Description
The average session count load index as a percent of all VDA machine resource types in the delivery group.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT_AS_PERCENT or SC13

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Delivery Group Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for a delivery group.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Delivery Group Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute

Description
The total number of connections with an Active Session Reconnect Disabled failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application Disabled attribute

Description
The total number of connections with a Application Disabled failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
APPLICATION_DISABLED or AD12

Configuration Set Failure attribute

Description
The total number of connections with a Configuration Set Failure failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute

Description
The total number of connections with a Connection Timeout failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
CONNECTION_TIMEOUT or CT6

Delivery Group attribute **This attribute is a key attribute.**

Description
The reference ID for a Delivery Group

Type

string

Warehouse name

DELIVERY_GROUP_ID or DG1

Disallowed Protocol attribute

Description

The total number of connections with a Disallowed Protocol failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

DISALLOWED_PROTOCOL or DP16

General Fail attribute

Description

The total number of connections with a General Fail failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

GENERAL_FAIL or GF10

License Feature Refused attribute

Description

The total number of connections with a License Feature Refused failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute

Description

The total number of connections with a Licensing failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

LICENSING or L7

Machine Not Functional attribute

Description

The total number of connections with a Machine Not Functional failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute

Description

The total number of connections with a Maintenance Mode failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

MAINTENANCE_MODE or MM11

No Desktop Available attribute

Description

The total number of connections with a No Desktop Available failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name
NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute

Description
The total number of connections with a No Machine Available failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute

Description
The total number of connections with a No Session To Reconnect failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

None attribute

Description
The total number of connections without failure in the Delivery Group

Type
integer (32-bit gauge)

Warehouse name
NONE or N3

Other attribute

Description
The total number of connections with a Other failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
OTHER or O9

Refused attribute

Description
The total number of connections with a Refused failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
REFUSED or R21

Registration Timeout attribute

Description
The total number of connections with a Registration Timeout failure in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute

Description

The total number of connections with a Resource Unavailable failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute

Description

The total number of connections with a Session Limit Reached failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute

Description

The total number of connections with a Session Preparation failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description

The total number of connections with a Spin Up Failed failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

SPIN_UP_FAILED or SUF20

Ticketing attribute

Description

The total number of connections with a Ticketing failure in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

TICKETING or T8

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Total attribute

Description

The total number of connections failures in the Delivery Group

Type

integer (32-bit gauge)

Warehouse name

TOTAL or T2

Unknown attribute

Description
The total number of connections with an Unknown failure in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN or U25

Delivery Group Connection Summary attribute group

The attribute group returns the summary of allow the connections for a delivery group.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Delivery Group Connection Summary attribute group:

Active Connection Count attribute
Description
The total number of connections in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_COUNT or ACC4

Average Authentication Duration (ms) attribute
Description
The average authentication duration for all connections in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute
Description
The average authentication duration for all connections in the delivery group.
Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute
Description
The average brokering duration for all connections in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute
Description
The average brokering duration for all connections in the delivery group.
Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description

The average group policy duration for all connections in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description

The average group policy duration for all connections in the delivery group.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description

The average HDX duration for all connections in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description

The average HDX duration for all connections in the delivery group.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description

The average interactive duration for all connections in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description

The average interactive duration for all connections in the delivery group.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration for all connections in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration for all connections in the delivery group.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration for all connections in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration for all connections in the delivery group.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description

The average profile load duration for all connections in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description

The average profile load duration for all connections in the delivery group.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description
The average VM start duration for all connections in the delivery group.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute
Description
The average VM start duration for all connections in the delivery group.
Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

Delivery Group attribute **This attribute is a key attribute.**
Description
The reference ID for a delivery group.
Type
string
Warehouse name
DELIVERY_GROUP_ID or DG1

New Connection Count attribute
Description
The total number of new connections in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Secure ICA Connection Count attribute
Description
The total number of secure ICA connections in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Delivery Group Resource Information attribute group

This attribute group contains high level summary data for a delivery group.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Delivery Group Resource Information attribute group:

Delivery Group attribute **This attribute is a key attribute.**

Description

The reference ID for a delivery group.

Type

string

Warehouse name

DELIVERY_GROUP_ID or DG1

Delivery Type attribute

Description

The type of the delivery group.

Type

string

Warehouse name

DELIVERY_TYPE or DT7

Desktop Type attribute

Description

The desktop type of the delivery group.

Type

string

Warehouse name

DESKTOP_KIND or DK4

Is Remote PC attribute

Description

Specifies if the delivery group is a remote computer.

Type

string

Warehouse name

IS_REMOTE_PC or IRP3

Lifecycle State attribute

Description

The lifecycle state of the delivery group.

Type

string

Warehouse name

LIFECYCLE_STATE or LS5

Load Index Maximum Value attribute

Description

The maximum value of 10000 for the load index.

Type

integer (32-bit gauge)

Warehouse name

LOAD_INDEX_MAXIMUM_VALUE or LIMV9

Name attribute

Description

The name of the delivery group.

Type

string

Warehouse name
NAME or N2

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Session Capacity attribute

Description
The maximum number of sessions allowed in the delivery group according to the Load Evaluator Policies on each VDA.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_CAPACITY or SC8

Session Support attribute

Description
The session support of the delivery group.

Type
string

Warehouse name
SESSION_SUPPORT or SS6

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Delivery Group Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions grouped by the state of the connection for components that are in the delivery group.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Delivery Group Sess Conn State Cnt Sum attribute group:

Active attribute

Description
The total number of sessions with the Active connection state that exist in the delivery group.

Type
integer (32-bit gauge)

Warehouse name
ACTIVE_SESSION_COUNT or A7

Connected attribute

Description
The total number of sessions with the Connected connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
CONNECTED_SESSION_COUNT or C3

Delivery Group attribute **This attribute is a key attribute.**
Description
The reference ID for a delivery group.
Type
string
Warehouse name
DELIVERY_GROUP_ID or DG1

Disconnected attribute
Description
The total number of sessions with the Disconnected connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Non Brokered Session attribute
Description
The total number of sessions with the Non-Brokered Session connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute
Description
The total number of sessions with the Other connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
OTHER_SESSION_COUNT or O10

Pending attribute
Description
The total number of sessions with the Pending connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
PENDING_SESSION_COUNT or P11

Preparing Session attribute

Description
The total number of sessions with the Preparing Session connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute
Description
The total number of sessions with the Reconnecting connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
RECONNECTING_SESSION_COUNT or R8

Terminated attribute
Description
The total number of sessions with the Terminated connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Unknown attribute
Description
The total number of sessions with the Unknown connection state that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN_SESSION_COUNT or U2

Delivery Group Session Count Summary attribute group

This attribute group returns the total counts for each of the components that are in the delivery group.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Delivery Group Session Count Summary attribute group:

Anonymous Session Count attribute
Description
The total anonymous sessions that exist in the delivery group.
Type
integer (32-bit gauge)
Warehouse name
ANONYMOUS_SESSION_COUNT or ASC5

Application Session Count attribute

Description

The total application-type sessions that exist in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

APPLICATION_SESSION_COUNT or ASC4

Delivery Group attribute **This attribute is a key attribute.**

Description

The reference ID for a delivery group.

Type

string

Warehouse name

DELIVERY_GROUP_ID or DG1

Desktop Session Count attribute

Description

The total desktop-type sessions that exist in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

DESKTOP_SESSION_COUNT or DSC3

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Peak Concurrent Session Count attribute

Description

The greatest number of sessions that existed last collection interval in the delivery group.

Type

integer (32-bit gauge)

Warehouse name

PEAK_CONCURRENT_SESSION_COUNT or PCSC6

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Total Session Count attribute

Description

The total sessions that exist in the delivery group.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

TOTAL_SESSION_COUNT or TSC2

Desktop Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for a desktop.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Desktop Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute

Description

The total number of connections hosting an instance of the desktop with an Active Session Reconnect Disabled failure.

Type

integer (32-bit gauge)

Warehouse name

ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application Disabled attribute

Description

The total number of connections hosting an instance of the desktop with an Application Disabled failure.

Type

integer (32-bit gauge)

Warehouse name

APPLICATION_DISABLED or AD12

Configuration Set Failure attribute

Description

The total number of connections hosting an instance of the desktop with a Configuration Set Failure failure.

Type

integer (32-bit gauge)

Warehouse name

CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute

Description

The total number of connections hosting an instance of the desktop with a Connection Timeout failure.

Type

integer (32-bit gauge)

Warehouse name

CONNECTION_TIMEOUT or CT6

Desktop attribute **This attribute is a key attribute.**

Description

The reference ID for a desktop.

Type

string

Warehouse name

DESKTOP_ID or D1

Disallowed Protocol attribute

Description

The total number of connections hosting an instance of the desktop with a Disallowed Protocol failure.

Type

integer (32-bit gauge)

Warehouse name

DISALLOWED_PROTOCOL or DP16

General Fail attribute

Description

The total number of connections hosting an instance of the desktop with a General Fail failure.

Type

integer (32-bit gauge)

Warehouse name

GENERAL_FAIL or GF10

License Feature Refused attribute

Description

The total number of connections hosting an instance of the desktop with a License Feature Refused failure.

Type

integer (32-bit gauge)

Warehouse name

LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute

Description

The total number of connections hosting an instance of the desktop with a Licensing failure.

Type

integer (32-bit gauge)

Warehouse name

LICENSING or L7

Machine Not Functional attribute

Description

The total number of connections hosting an instance of the desktop with a Machine Not Functional failure.

Type

integer (32-bit gauge)

Warehouse name

MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute

Description

The total number of connections hosting an instance of the desktop with a Maintenance Mode failure.

Type

integer (32-bit gauge)

Warehouse name

MAINTENANCE_MODE or MM11

No Desktop Available attribute

Description

The total number of connections hosting an instance of the desktop with a No Desktop Available failure.

Type

integer (32-bit gauge)

Warehouse name

NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute

Description

The total number of connections hosting an instance of the desktop with a No Machine Available failure.

Type

integer (32-bit gauge)

Warehouse name

NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute

Description

The total number of connections hosting an instance of the desktop with a No Session To Reconnect failure.

Type

integer (32-bit gauge)

Warehouse name

NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

None attribute

Description

The total number of connections hosting an instance of the desktop without failure.

Type

integer (32-bit gauge)

Warehouse name

NONE or N3

Other attribute

Description

The total number of connections hosting an instance of the desktop with an Other failure.

Type

integer (32-bit gauge)

Warehouse name

OTHER or O9

Refused attribute

Description

The total number of connections hosting an instance of the desktop with a Refused failure.

Type

integer (32-bit gauge)

Warehouse name

REFUSED or R21

Registration Timeout attribute

Description

The total number of connections hosting an instance of the desktop with a Registration Timeout failure.

Type

integer (32-bit gauge)

Warehouse name

REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute

Description

The total number of connections hosting an instance of the desktop with a Resource Unavailable failure.

Type

integer (32-bit gauge)

Warehouse name
RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute

Description
The total number of connections hosting an instance of the desktop with a Session Limit Reached failure.

Type
integer (32-bit gauge)

Warehouse name
SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute

Description
The total number of connections hosting an instance of the desktop with a Session Preparation failure.

Type
integer (32-bit gauge)

Warehouse name
SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description
The total number of connections hosting an instance of the desktop with a Spin Up Failed failure.

Type
integer (32-bit gauge)

Warehouse name
SPIN_UP_FAILED or SUF20

Ticketing attribute

Description
The total number of connections hosting an instance of the desktop with a Ticketing failure.

Type
integer (32-bit gauge)

Warehouse name
TICKETING or T8

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Total attribute

Description
The total number of connections failures hosting an instance of the desktop.

Type
integer (32-bit gauge)

Warehouse name
TOTAL or T2

Unknown attribute

Description
The total number of connections hosting an instance of the desktop with an Unknown failure.

Type
integer (32-bit gauge)

Warehouse name
UNKNOWN or U25

Desktop Connection Summary attribute group

The attribute group returns the summary of allow the connections for a desktop.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Desktop Connection Summary attribute group:

Active Connection Count attribute
Description
The total number of connections to an instance of the desktop.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_COUNT or ACC4

Average Authentication Duration (ms) attribute
Description
The average authentication duration for all connections to an instance of the desktop.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute
Description
The average authentication duration for all connections to an instance of the desktop.
Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute
Description
The average brokering duration for all connections to an instance of the desktop.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute
Description
The average brokering duration for all connections to an instance of the desktop.
Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description

The average group policy duration for all connections to an instance of the desktop.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description

The average group policy duration for all connections to an instance of the desktop.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description

The average HDX duration for all connections to an instance of the desktop.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description

The average HDX duration for all connections to an instance of the desktop.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description

The average interactive duration for all connections to an instance of the desktop.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description

The average interactive duration for all connections to an instance of the desktop.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration for all connections to an instance of the desktop.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration for all connections to an instance of the desktop.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration for all connections to an instance of the desktop.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration for all connections to an instance of the desktop.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description

The average profile load duration for all connections to an instance of the desktop.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description

The average profile load duration for all connections to an instance of the desktop.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description
The average VM start duration for all connections to an instance of the desktop.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute

Description
The average VM start duration for all connections to an instance of the desktop.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

Desktop attribute **This attribute is a key attribute.**

Description
The reference ID for a Desktop

Type
string

Warehouse name
DESKTOP_ID or D1

New Connection Count attribute

Description
The total number of new connections to an instance of the desktop.

Type
integer (32-bit gauge)

Warehouse name
NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Secure ICA Connection Count attribute

Description
The total number of secure ICA connections to an instance of the desktop.

Type
integer (32-bit gauge)

Warehouse name
SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Desktop Instance Summary attribute group

This attribute group contains high level summary data of all instances of a desktop.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Desktop Instance Summary attribute group:

Average Instance Duration Minutes attribute
Description
The average duration for all instances of the desktop.
Type
integer (32-bit gauge)
Warehouse name
AVERAGE_INSTANCE_DURATION_MINUTES or AIDM2

Desktop attribute **This attribute is a key attribute.**
Description
The reference ID for a desktop.
Type
string
Warehouse name
DESKTOP_ID or D1

Instance Count attribute
Description
The total number of instances of the desktop.
Type
integer (32-bit gauge)
Warehouse name
INSTANCE_COUNT or IC3

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Desktop Resource Information attribute group

This attribute group contains high level summary data for a desktop.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Desktop Resource Information attribute group:

Desktop attribute This attribute is a key attribute.

Description

The reference ID for a desktop.

Type

string

Warehouse name

DESKTOP_ID or D1

Name attribute

Description

The name of the desktop.

Type

string

Warehouse name

NAME or N2

Node attribute This attribute is a key attribute.

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Desktop Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions grouped by the state of the connection for components that are in the desktop.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Desktop Sess Conn State Cnt Sum attribute group:

Active attribute

Description

The total number of sessions hosting an instance of the desktop with the Active connection state.

Type

integer (32-bit gauge)

Warehouse name

ACTIVE_SESSION_COUNT or A7

Connected attribute

Description
The total number of sessions hosting an instance of the desktop with the Connected connection state.
Type
integer (32-bit gauge)
Warehouse name
CONNECTED_SESSION_COUNT or C3

Desktop attribute **This attribute is a key attribute.**
Description
The reference ID for a Desktop
Type
string
Warehouse name
DESKTOP_ID or D1

Disconnected attribute
Description
The total number of sessions hosting an instance of the desktop with the Disconnected connection state.
Type
integer (32-bit gauge)
Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Non Brokered Session attribute
Description
The total number of sessions hosting an instance of the desktop with the Non-Brokered Session connection state.
Type
integer (32-bit gauge)
Warehouse name
NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute
Description
The total number of sessions hosting an instance of the desktop with the Other connection state.
Type
integer (32-bit gauge)
Warehouse name
OTHER_SESSION_COUNT or O10

Pending attribute
Description
The total number of sessions hosting an instance of the desktop with the Pending connection state.
Type
integer (32-bit gauge)
Warehouse name
PENDING_SESSION_COUNT or P11

Preparing Session attribute

Description
The total number of sessions hosting an instance of the desktop with the Preparing Session connection state.
Type
integer (32-bit gauge)
Warehouse name
PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute
Description
The total number of sessions hosting an instance of the desktop with the Reconnecting connection state.
Type
integer (32-bit gauge)
Warehouse name
RECONNECTING_SESSION_COUNT or R8

Terminated attribute
Description
The total number of sessions hosting an instance of the desktop with the Terminated connection state.
Type
integer (32-bit gauge)
Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Unknown attribute
Description
The total number of sessions hosting an instance of the desktop with the Unknown connection state.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN_SESSION_COUNT or U2

Desktop Session Count Summary attribute group

This attribute group returns the total counts for each of the components in the desktop.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Desktop Session Count Summary attribute group:

Anonymous Session Count attribute
Description
The total number of anonymous sessions hosting an instance of the desktop.
Type
integer (32-bit gauge)
Warehouse name
ANONYMOUS_SESSION_COUNT or ASC2

Desktop attribute **This attribute is a key attribute.**

Description

The reference ID for a Desktop

Type

string

Warehouse name

DESKTOP_ID or D1

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Peak Concurrent Session Count attribute

Description

The greatest number of sessions hosting an instance of the desktop that existed during the last collection interval.

Type

integer (32-bit gauge)

Warehouse name

PEAK_CONCURRENT_SESSION_COUNT or PCSC3

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Hypervisor Average Load Index Summary attribute group

This attribute group returns the average load index that is calculated by averaging all the load index results for machines used by the hypervisor.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Hypervisor Average Load Index Summary attribute group:

CPU attribute

Description

The average CPU load index of all VDA machine resource types in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

CPU or C3

CPU (%) attribute

Description
The average CPU load index as a percent of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CPU_AS_PERCENT or C9

Disk attribute

Description
The average disk load index of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
DISK or D5

Disk (%) attribute

Description
The average disk load index as a percent of all VDA Machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
DISK_AS_PERCENT or D11

Effective attribute

Description
The average effective load index of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
EFFECTIVE_LOAD_INDEX or E2

Effective (%) attribute

Description
The average effective load index as a percent of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
EFFECTIVE_LOAD_INDEX_AS_PERCENT or E8

Hypervisor attribute **This attribute is a key attribute.**

Description
The reference ID for a hypervisor.

Type
string

Warehouse name
HYPERVISOR_ID or H1

Memory attribute

Description
The average memory load index of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY or M4

Memory (%) attribute

Description
The average memory load index as a percent of all VDA Machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY_AS_PERCENT or M10

Network attribute

Description
The average network load index of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK or N6

Network (%) attribute

Description
The average network load index as a percent of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK_AS_PERCENT or N12

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Session Capacity attribute

Description
The average session count load index of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT or SC7

Session Capacity (%) attribute

Description
The average session count load index as a percent of all VDA machine resource types in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT_AS_PERCENT or SC13

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Hypervisor Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for a hypervisor.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Hypervisor Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute

Description
The total number of connections with a Active Session Reconnect Disabled failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application Disabled attribute

Description
The total number of connections with a Application Disabled failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
APPLICATION_DISABLED or AD12

Configuration Set Failure attribute

Description
The total number of connections with a Configuration Set Failure failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute

Description
The total number of connections with a Connection Timeout failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_TIMEOUT or CT6

Disallowed Protocol attribute
Description
The total number of connections with a Disallowed Protocol failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
DISALLOWED_PROTOCOL or DP16

General Fail attribute
Description
The total number of connections with a General Fail failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
GENERAL_FAIL or GF10

Hypervisor attribute **This attribute is a key attribute.**
Description
The reference ID for a Hypervisor
Type
string
Warehouse name
HYPERVISOR_ID or H1

License Feature Refused attribute
Description
The total number of connections with a License Feature Refused failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute
Description
The total number of connections with a Licensing failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
LICENSING or L7

Machine Not Functional attribute
Description
The total number of connections with a Machine Not Functional failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute
Description
The total number of connections with a Maintenance Mode failure in the hypervisor.

Type
integer (32-bit gauge)
Warehouse name
MAINTENANCE_MODE or MM11

No Desktop Available attribute
Description
The total number of connections with a No Desktop Available failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute
Description
The total number of connections with a No Machine Available failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute
Description
The total number of connections with a No Session To Reconnect failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

None attribute
Description
The total number of connections without failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
NONE or N3

Other attribute
Description
The total number of connections with a Other failure in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
OTHER or O9

Refused attribute
Description
The total number of connections with a Refused failure in the hypervisor.
Type
integer (32-bit gauge)

Warehouse name
REFUSED or R21

Registration Timeout attribute

Description
The total number of connections with a Registration Timeout failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute

Description
The total number of connections with a Resource Unavailable failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute

Description
The total number of connections with a Session Limit Reached failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute

Description
The total number of connections with a Session Preparation failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description
The total number of connections with a Spin Up Failed failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
SPIN_UP_FAILED or SUF20

Ticketing attribute

Description
The total number of connections with a Ticketing failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
TICKETING or T8

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Total attribute

Description
The total number of connections failures in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
TOTAL or T2

Unknown attribute

Description
The total number of connections with an Unknown failure in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
UNKNOWN or U25

Hypervisor Connection Summary attribute group

The attribute group returns the summary of allow the connections for a hypervisor.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Hypervisor Connection Summary attribute group:

Active Connection Count attribute

Description
The total number of connections in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
CONNECTION_COUNT or ACC4

Average Authentication Duration (ms) attribute

Description
The average authentication duration for all connections in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute

Description
The average authentication duration for all connections in the hypervisor.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute

Description
The average brokering duration for all connections in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute

Description

The average brokering duration for all connections in the hypervisor.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description

The average group policy duration for all connections in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description

The average group policy duration for all connections in the hypervisor.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description

The average HDX duration for all connections in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description

The average HDX duration for all connections in the hypervisor.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description

The average interactive duration for all connections in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description

The average interactive duration for all connections in the hypervisor.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration for all connections in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration for all connections in the hypervisor.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration for all connections in the hypervisor.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration for all connections in the hypervisor.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description

The average profile load duration for all connections in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description
The average profile load duration for all connections in the hypervisor.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description
The average VM start duration for all connections in the hypervisor.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute

Description
The average VM start duration for all connections in the hypervisor.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

Hypervisor attribute **This attribute is a key attribute.**

Description
The reference ID for a hypervisor.

Type
string

Warehouse name
HYPERVISOR_ID or H1

New Connection Count attribute

Description
The total number of new connections in the hypervisor.

Type
integer (32-bit gauge)

Warehouse name
NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Secure ICA Connection Count attribute

Description

The total number of secure ICA connections in the hypervisor.

Type

integer (32-bit gauge)

Warehouse name

SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Hypervisor Resource Information attribute group

This attribute group contains high level summary data for a hypervisor.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Hypervisor Resource Information attribute group:

Hypervisor attribute This attribute is a key attribute.

Description

The reference ID for a hypervisor.

Type

string

Warehouse name

HYPERVISOR_ID or H1

Lifecycle State attribute

Description

The lifecycle state of the hypervisor.

Type

string

Warehouse name

LIFECYCLE_STATE or LS3

Load Index Maximum Value attribute

Description

The maximum value of 10000 for a Load Index.

Type

integer (32-bit gauge)

Warehouse name

LOAD_INDEX_MAXIMUM_VALUE or LIMV5

Name attribute

Description

The name of the hypervisor.

Type

string

Warehouse name

NAME or N2

Node attribute This attribute is a key attribute.

Description

The managed system name of the agent.

Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Session Capacity attribute
Description
The maximum number of sessions allowed in the hypervisor according to the Load Evaluator policies on each VDA.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
SESSION_CAPACITY or SC4

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Hypervisor Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions grouped by the state of the connection for components that are in the hypervisor.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Hypervisor Sess Conn State Cnt Sum attribute group:

Active attribute
Description
The total number of sessions with the Active connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_COUNT or A7

Connected attribute
Description
The total number of sessions with the Connected connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
CONNECTED_SESSION_COUNT or C3

Disconnected attribute
Description
The total number of sessions with the Disconnected connection state that exist in the hypervisor.

Type
integer (32-bit gauge)
Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Hypervisor attribute **This attribute is a key attribute.**
Description
The reference ID for a Hypervisor
Type
string
Warehouse name
HYPERVISOR_ID or H1

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Non Brokered Session attribute
Description
The total number of sessions with the Non-Brokered Session connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute
Description
The total number of sessions with the Other connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
OTHER_SESSION_COUNT or O10

Pending attribute
Description
The total number of sessions with the Pending connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
PENDING_SESSION_COUNT or P11

Preparing Session attribute
Description
The total number of sessions with the Preparing Session connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute
Description
The total number of sessions with the Reconnecting connection state that exist in the hypervisor.

Type
integer (32-bit gauge)
Warehouse name
RECONNECTING_SESSION_COUNT or R8

Terminated attribute
Description
The total number of sessions with the Terminated connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Unknown attribute
Description
The total number of sessions with the Unknown connection state that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN_SESSION_COUNT or U2

Hypervisor Session Count Summary attribute group

This attribute group returns the total counts for each of the components in the hypervisor.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Hypervisor Session Count Summary attribute group:

Anonymous Session Count attribute
Description
The total anonymous sessions that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
ANONYMOUS_SESSION_COUNT or ASC5

Application Session Count attribute
Description
The total application-type sessions that exist in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_SESSION_COUNT or ASC4

Desktop Session Count attribute
Description
The total desktop-type sessions that exist in the hypervisor.

Type
integer (32-bit gauge)
Warehouse name
DESKTOP_SESSION_COUNT or DSC3

Hypervisor attribute **This attribute is a key attribute.**
Description
The reference ID for a hypervisor.
Type
string
Warehouse name
HYPERVISOR_ID or H1

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Peak Concurrent Session Count attribute
Description
The greatest number of sessions that existed during the last collection interval in the hypervisor.
Type
integer (32-bit gauge)
Warehouse name
PEAK_CONCURRENT_SESSION_COUNT or PCSC6

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Total Session Count attribute
Description
The total sessions that exist in the hypervisor.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
TOTAL_SESSION_COUNT or TSC2

Performance Object Status attribute group

The Performance Object Status attribute group contains information that reflects the status of other attribute groups so you can see the status of all performance objects that make up this application all at once. Each of these other performance attribute groups is represented by a row in this table (or other type of view). The status for an attribute group reflects the result of the last attempt to collect data for that attribute group, so you can see whether the agent is collecting data correctly. Unlike other attribute

groups, the Performance Object Status attribute group does not reflect the state of the monitored application. This attribute group is most often used to determine why data is not available for one of the performance attribute groups.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Performance Object Status attribute group:

Average Collection Duration attribute

Description

The average duration of all data collections of this group in seconds.

Type

real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_COLLECTION_DURATION or COLAVGD

Cache Hit Percent attribute

Description

The percentage of external data requests for this group that were satisfied from the cache.

Type

real number (32-bit counter) with two decimal places of precision

Warehouse name

CACHE_HIT_PERCENT or CACHPCT

Cache Hits attribute

Description

The number of times an external data request for this group was satisfied from the cache.

Type

integer (32-bit counter)

Warehouse name

CACHE_HITS or CACHEHT

Cache Misses attribute

Description

The number of times an external data request for this group was not available in the cache.

Type

integer (32-bit counter)

Warehouse name

CACHE_MISSES or CACHEMS

Error Code attribute

Description

The error code associated with the query.

Type

integer with enumerated values. The following values are defined: NO ERROR (0), GENERAL ERROR (1), OBJECT NOT FOUND (2), COUNTER NOT FOUND (3), NAMESPACE ERROR (4), OBJECT CURRENTLY UNAVAILABLE (5), COM LIBRARY INIT FAILURE (6), SECURITY INIT FAILURE (7), PROXY SECURITY FAILURE (9), NO INSTANCES RETURNED (10), ASSOCIATOR QUERY FAILED (11), REFERENCE QUERY FAILED (12), NO RESPONSE RECEIVED (13), CANNOT FIND JOINED QUERY (14), CANNOT FIND JOIN ATTRIBUTE IN QUERY 1 RESULTS (15), CANNOT FIND JOIN ATTRIBUTE IN QUERY 2 RESULTS (16), QUERY 1 NOT A SINGLETON (17), QUERY 2 NOT A SINGLETON (18), NO INSTANCES RETURNED IN QUERY 1 (19), NO INSTANCES RETURNED IN QUERY 2 (20), CANNOT FIND ROLLUP QUERY

(21), CANNOT FIND ROLLUP ATTRIBUTE (22), FILE OFFLINE (23), NO HOSTNAME (24), MISSING LIBRARY (25), ATTRIBUTE COUNT MISMATCH (26), ATTRIBUTE NAME MISMATCH (27), COMMON DATA PROVIDER NOT STARTED (28), CALLBACK REGISTRATION ERROR (29), MDL LOAD ERROR (30), AUTHENTICATION FAILED (31), CANNOT RESOLVE HOST NAME (32), SUBNODE UNAVAILABLE (33), SUBNODE NOT FOUND IN CONFIG (34), ATTRIBUTE ERROR (35), CLASSPATH ERROR (36), CONNECTION FAILURE (37), FILTER SYNTAX ERROR (38), FILE NAME MISSING (39), SQL QUERY ERROR (40), SQL FILTER QUERY ERROR (41), SQL DB QUERY ERROR (42), SQL DB FILTER QUERY ERROR (43), PORT OPEN FAILED (44), ACCESS DENIED (45), TIMEOUT (46), NOT IMPLEMENTED (47), REQUESTED A BAD VALUE (48), RESPONSE TOO BIG (49), GENERAL RESPONSE ERROR (50), SCRIPT NONZERO RETURN (51), SCRIPT NOT FOUND (52), SCRIPT LAUNCH ERROR (53), CONF FILE DOES NOT EXIST (54), CONF FILE ACCESS DENIED (55), INVALID CONF FILE (56), EIF INITIALIZATION FAILED (57), CANNOT OPEN FORMAT FILE (58), FORMAT FILE SYNTAX ERROR (59), REMOTE HOST UNAVAILABLE (60), EVENT LOG DOES NOT EXIST (61), PING FILE DOES NOT EXIST (62), NO PING DEVICE FILES (63), PING DEVICE LIST FILE MISSING (64), SNMP MISSING PASSWORD (65), DISABLED (66), URLS FILE NOT FOUND (67), XML PARSE ERROR (68), NOT INITIALIZED (69), ICMP SOCKETS FAILED (70), DUPLICATE CONF FILE (71). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

ERROR_CODE or ERRCODE

Intervals Skipped attribute

Description

The number of times a background data collection for this group was skipped because the previous collection was still running when the next one was due to start.

Type

integer (32-bit counter)

Warehouse name

INTERVALS_SKIPPED or INTSKIP

Last Collection Duration attribute

Description

The duration of the most recently completed data collection of this group in seconds.

Type

real number (32-bit counter) with two decimal places of precision

Warehouse name

LAST_COLLECTION_DURATION or COLDURA

Last Collection Finished attribute

Description

The most recent time a data collection of this group finished.

Type

timestamp with enumerated values. The following values are defined: NOT COLLECTED (0691231190000000), NOT COLLECTED (0000000000000001). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LAST_COLLECTION_FINISHED or COLFINI

Last Collection Start attribute

Description

The most recent time a data collection of this group started.

Type

timestamp with enumerated values. The following values are defined: NOT

COLLECTED (0691231190000000), NOT COLLECTED (0000000000000001). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LAST_COLLECTION_START or COLSTRT

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Number of Collections attribute

Description

The number of data collections for this group since the agent started.

Type

integer (32-bit counter)

Warehouse name

NUMBER_OF_COLLECTIONS or NUMCOLL

Object Name attribute

Description

The name of the performance object.

Type

string

Warehouse name

OBJECT_NAME or OBJNAME

Object Status attribute

Description

The status of the performance object.

Type

integer with enumerated values. The following values are defined: ACTIVE (0), INACTIVE (1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

OBJECT_STATUS or OBJSTTS

Object Type attribute

Description

The type of the performance object.

Type

integer with enumerated values. The following values are defined: WMI (0), PERFMON (1), WMI ASSOCIATION GROUP (2), JMX (3), SNMP (4), SHELL COMMAND (5), JOINED GROUPS (6), CIMOM (7), CUSTOM (8), ROLLUP DATA (9), WMI REMOTE DATA (10), LOG FILE (11), JDBC (12), CONFIG DISCOVERY (13), NT EVENT LOG (14), FILTER (15), SNMP EVENT (16), PING (17), DIRECTOR DATA (18), DIRECTOR EVENT (19), SSH REMOTE SHELL COMMAND (20). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

OBJECT_TYPE or OBJTYPE

Query Name attribute **This attribute is a key attribute.**

Description

The name of the attribute group.

Type

string

Warehouse name
QUERY_NAME or ATTRGRP

Refresh Interval attribute

Description
The interval at which this group is refreshed in seconds.

Type
integer (32-bit counter)

Warehouse name
REFRESH_INTERVAL or REFRINT

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Resource Counts attribute group

This attribute group returns the total counts for each of the components that make up a XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Resource Counts attribute group:

Application Count attribute

Description
The number of Application resource types in the site.

Type
integer (32-bit gauge)

Warehouse name
APPLICATION_COUNT or AC9

Catalog Count attribute

Description
The number of Catalog resource types in the site.

Type
integer (32-bit gauge)

Warehouse name
CATALOG_COUNT or CC2

DDC Machine Count attribute

Description
The number of DDC Machine resource types in the site.

Type
integer (32-bit gauge)

Warehouse name
DDC_MACHINE_COUNT or DMC7

Delivery Group Count attribute

Description
The number of Delivery Group resource types in the site.

Type
integer (32-bit gauge)

Warehouse name
DELIVERY_GROUP_COUNT or DGC3

Desktop Count attribute

Description
The number of Desktop resource types in the site.
Type
integer (32-bit gauge)
Warehouse name
DESKTOP_COUNT or DC10

Dual Role Machine Count attribute
Description
The number of dual role (VDA/DDC) machines in the site.
Type
integer (32-bit gauge)
Warehouse name
BOTH_MACHINE_COUNT or DRMC8

Hypervisor Count attribute
Description
The number of Hypervisor resource types in the site.
Type
integer (32-bit gauge)
Warehouse name
HYPERVISOR_COUNT or HC4

Machine Count attribute
Description
The total number of machines in the site.
Type
integer (32-bit gauge)
Warehouse name
MACHINE_COUNT or MC5

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

VDA Machine Count attribute
Description
The number of VDA Machine resource types in the site.
Type
integer (32-bit gauge)
Warehouse name
VDA_MACHINE_COUNT or VMC6

Session Connection Details attribute group

This attribute group contains connection specific information for each session.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Session Connection Details attribute group:

Application Name attribute

Description

The name of the application.

Type

string

Warehouse name

APPLICATION_NAME or NFA3

Auth. Duration (ms) attribute

Description

The time in milliseconds for the authentication portion of the log on process to complete.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AUTHENTICATIONDURATIONMILLISECONDS or ADM1

Auth. Duration (sec) attribute

Description

The time in seconds for the authentication portion of the log on process to complete.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AUTHENTICATIONDURATIONSECONDS or ADS1

Brokering Duration (ms) attribute

Description

The time in milliseconds for the brokering portion of the log on process to complete.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

BROKERINGDURATIONMILLISECONDS or BDM1

Brokering Duration (sec) attribute

Description

The time in seconds for the brokering portion of the log on process to complete.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

BROKERINGDURATIONSECONDS or BDS1

Client Address attribute

Description

The client address of the current connection.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CLIENT_ADDRESS or CA1

Client Name attribute

Description
The name of the client associated with the session.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CLIENT_NAME or CN1

Client Version attribute

Description
The client version of the current connection.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CLIENT_VERSION or CV1

Connected Via Host Name attribute

Description
The host name of the current connection.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CONNECTED_VIA_HOST_NAME or CVHN1

Connected Via IP Address attribute

Description
The IP address of the current connection.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CONNECTED_VIA_IP_ADDRESS or CVIA1

Group Policy Duration (ms) attribute

Description
The time in milliseconds for the Group Policy portion of the log on process to complete.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
GROUPPOLICYDURATIONMILLISECONDS or GPM1

Group Policy Duration (sec) attribute

Description
The time in seconds for the Group Policy portion of the log on process to complete.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

GROUPPOLICYDURATIONSECONDS or GPS1

HDX Duration (ms) attribute

Description

The time in milliseconds for the HDX portion of the log on process to complete.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

HDXDURATIONMILLISECONDS or HDM1

HDX Duration (sec) attribute

Description

The time in seconds for the HDX portion of the log on process to complete.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

HDXDURATIONSECONDS or HDS1

Interactive Duration (ms) attribute

Description

The time in milliseconds for the interactive portion of the log on process to complete.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

INTERACTIVEDURATIONMILLISECONDS or IDM1

Interactive Duration (sec) attribute

Description

The time in seconds for the interactive portion of the log on process to complete.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

INTERACTIVEDURATIONSECONDS or IDS1

Is Anonymous attribute

Description

Confirmation whether or not the session is anonymous or it has a user associated with it.

Type

string

Warehouse name

IS_ANONYMOUS or IA2

Is Reconnect attribute

Description

A confirmation whether the active connection is new.

Type

string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

IS_RECONNECT or IR1

Is Secure ICA attribute

Description

A confirmation whether the active connection is secure.

Type

string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

IS_SECURE_ICA or ISI1

Launched Via Host Name attribute

Description

The host name that is used to start the session.

Type

string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LAUNCHED_VIA_HOST_NAME or LVHN1

Launched Via IP Address attribute

Description

The IP address that is used to start the session.

Type

string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LAUNCHED_VIA_IP_ADDRESS or LVIA1

Log On Duration (ms) attribute

Description

The time in milliseconds for log on process to complete.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LOGONDURATIONMILLISECONDS or LOM1

Log On Duration (sec) attribute

Description

The time in seconds for the log on process to complete.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LOGONDURATIONSECONDS or LOS1

Log On Scripts Duration (ms) attribute

Description

The time in milliseconds for the log on scripts portion of the log on process to complete.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
LOGONSCRIPTSDURATIONMILLISECONDS or LSM1

Log On Scripts Duration (sec) attribute

Description
The time in seconds for the log on scripts portion of the log on process to complete.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
LOGONSCRIPTSDURATIONSECONDS or LSS1

Machine Name attribute

Description
The name of the machine that hosts the session.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MACHINE_NAME or MN1

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Profile Load Duration (ms) attribute

Description
The time in milliseconds for the profile load portion of the log on process to complete.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
PROFILELOADDURATIONMILLISECONDS or PLM1

Profile Load Duration (sec) attribute

Description
The time in seconds for the profile load portion of the log on process to complete.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
PROFILELOADDURATIONSECONDS or PLS1

Protocol attribute

Description
The protocol used by the current connection.

Type
string with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
PROTOCOL or PROT1

Session Duration (sec) attribute

Description
The duration in seconds that the session is alive.

Type
integer (32-bit gauge)

Warehouse name
SESSION_DURATION_SECONDS or SDS1

Session Key attribute **This attribute is a key attribute.**

Description
The unique identifier of the session.

Type
string

Warehouse name
SESSION_KEY or SK1

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

User UPN attribute

Description
The UPN of the user.

Type
string

Warehouse name
USER_UPN or UPN2

VM Start Duration (ms) attribute

Description
The time in milliseconds for the VM start portion of the log on process to complete.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
VMSTARTDURATIONMILLISECONDS or VMM1

VM Start Duration (sec) attribute

Description
The time in seconds for the VM start portion of the log on process to complete.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
VMSTARTDURATIONSECONDS or VMS1

Session Resource Information attribute group

This attribute group contains high-level summary data for a session.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the Session Resource Information attribute group:

Connection State attribute

Description

The enumeration of the connection state associated with the session.

Type

string

Warehouse name

CONNECTION_STATE_ENUM or CSE1

Connection State Change Date attribute

Description

The date that the connection state associated with the session was last modified.

Type

timestamp with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

CONNECTION_STATE_CHANGE_DATE or CSCD1

Current Connection ID 1 attribute

Description

The current connection ID associated with the session.

Type

integer (32-bit gauge)

Warehouse name

CURRENT_CONNECTION_ID or CCI1

End Date attribute

Description

The end date of the session.

Type

timestamp with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

END_DATE or ED1

Exit Code Enumeration attribute

Description

The enumeration of the exit code associated with the session.

Type

string

Warehouse name

EXIT_CODE_ENUM or ECE1

Failure Date attribute

Description

The failure date of the session.

Type

timestamp with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

FAILURE_DATE or FD1

Is Anonymous attribute

Description

Confirmation whether or not the session is anonymous or it has a user associated with it.

Type

string

Warehouse name

IS_ANONYMOUS or IA1

Lifecycle State attribute

Description

The enumeration of the lifecycle state associated with the session.

Type

string

Warehouse name

LIFECYCLE_STATE_ENUM or LSE1

Log On Duration attribute

Description

The log on duration of the session.

Type

integer (32-bit gauge)

Warehouse name

LOG_ON_DURATION or LOD1

Machine ID attribute

Description

The ID of the machine hosting this session.

Type

string

Warehouse name

MACHINE_ID or MI1

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Session Key attribute **This attribute is a key attribute.**

Description

The unique identifier of the Session.

Type

string

Warehouse name

SESSION_KEY or SK1

Session Type attribute

Description

The enumeration of the session type.

Type

string

Warehouse name

SESSION_TYPE_ENUM or STE1

Start Date attribute

Description

The start date of the session.

Type
timestamp with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
START_DATE or SD1

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

User ID attribute

Description
The ID of the user currently associated with the session.

Type
integer (32-bit gauge)

Warehouse name
USER_ID or UI1

Site Average Load Index Summary attribute group

This attribute group returns the average load index that is calculated by averaging all the load index results for machines that are used by the XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Average Load Index Summary attribute group:

CPU attribute

Description
The average CPU load index of the site based on all VDA Machine resource types.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CPU or C3

CPU (%) attribute

Description
The average CPU load index as a percent of the site that is based on all VDA Machine resource types.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
CPU_AS_PERCENT or C9

Disk attribute

Description
The average disk load index of the site based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

DISK or D5

Disk (%) attribute

Description

The average disk load index as a percent of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

DISK_AS_PERCENT or D11

Effective attribute

Description

The average effective load index of the site based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

EFFECTIVE_LOAD_INDEX or E2

Effective (%) attribute

Description

The average effective load index as a percent of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

EFFECTIVE_LOAD_INDEX_AS_PERCENT or E8

Memory attribute

Description

The average memory load index of the site based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

MEMORY or M4

Memory (%) attribute

Description

The average memory load index as a percent of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

MEMORY_AS_PERCENT or M10

Network attribute

Description

The average network load index of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

NETWORK or N6

Network (%) attribute

Description

The average network load index as a percent of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

NETWORK_AS_PERCENT or N12

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Session Capacity attribute

Description

The average session count load index of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

SESSION_COUNT or SC7

Session Capacity (%) attribute

Description

The average session count load index as a string percent of the site that is based on all VDA Machine resource types.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

SESSION_COUNT_AS_PERCENT or SC13

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Site Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for a XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute
Description
The total number of connections with an Active Session Reconnect Disabled failure in the site.
Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application Disabled attribute
Description
The total number of connections with a Application Disabled failure in the site.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_DISABLED or AD12

Configuration Set Failure attribute
Description
The total number of connections with a Configuration Set Failure failure in the site.
Type
integer (32-bit gauge)
Warehouse name
CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute
Description
The total number of connections with a Connection Timeout failure in the site.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_TIMEOUT or CT6

Disallowed Protocol attribute
Description
The total number of connections with a Disallowed Protocol failure in the site.
Type
integer (32-bit gauge)
Warehouse name
DISALLOWED_PROTOCOL or DP16

General Fail attribute
Description
The total number of connections with a General Fail failure in the site.
Type
integer (32-bit gauge)
Warehouse name
GENERAL_FAIL or GF10

License Feature Refused attribute

Description

The total number of connections with a License Feature Refused failure in the site.

Type

integer (32-bit gauge)

Warehouse name

LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute

Description

The total number of connections with a Licensing failure in the site.

Type

integer (32-bit gauge)

Warehouse name

LICENSING or L7

Machine Not Functional attribute

Description

The total number of connections with a Machine Not Functional failure in the site.

Type

integer (32-bit gauge)

Warehouse name

MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute

Description

The total number of connections with a Maintenance Mode failure in the site.

Type

integer (32-bit gauge)

Warehouse name

MAINTENANCE_MODE or MM11

No Desktop Available attribute

Description

The total number of connections with a No Desktop Available failure in the site.

Type

integer (32-bit gauge)

Warehouse name

NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute

Description

The total number of connections with a No Machine Available failure in the site.

Type

integer (32-bit gauge)

Warehouse name

NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute

Description

The total number of connections with a No Session To Reconnect failure in the site.

Type

integer (32-bit gauge)

Warehouse name

NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

None attribute
Description
The total number of connections without failure in the Site
Type
integer (32-bit gauge)
Warehouse name
NONE or N3

Other attribute
Description
The total number of connections with an Other failure in the site.
Type
integer (32-bit gauge)
Warehouse name
OTHER or O9

Refused attribute
Description
The total number of connections with a Refused failure in the site.
Type
integer (32-bit gauge)
Warehouse name
REFUSED or R21

Registration Timeout attribute
Description
The total number of connections with a Registration Timeout failure in the site.
Type
integer (32-bit gauge)
Warehouse name
REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute
Description
The total number of connections with a Resource Unavailable failure in the site.
Type
integer (32-bit gauge)
Warehouse name
RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute
Description
The total number of connections with a Session Limit Reached failure in the site.
Type
integer (32-bit gauge)
Warehouse name
SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute
Description
The total number of connections with a Session Preparation failure in the site.
Type
integer (32-bit gauge)
Warehouse name
SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description
The total number of connections with a Spin Up Failed failure in the site.
Type
integer (32-bit gauge)
Warehouse name
SPIN_UP_FAILED or SUF20

Ticketing attribute
Description
The total number of connections with a Ticketing failure in the site.
Type
integer (32-bit gauge)
Warehouse name
TICKETING or T8

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Total attribute
Description
The total number of connections failures in the Site
Type
integer (32-bit gauge)
Warehouse name
TOTAL or T2

Unknown attribute
Description
The total number of connections with an Unknown failure in the site.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN or U25

Site Connection Summary attribute group

The attribute group returns the summary of the connections allowed for a XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Connection Summary attribute group:

Active Connection Count attribute
Description
The total number of connections in the site.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_COUNT or ACC4

Average Authentication Duration (ms) attribute
Description
The average authentication duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute

Description

The average authentication duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute

Description

The average brokering duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute

Description

The average brokering duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description

The average group policy duration in milliseconds for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description

The average group policy duration in seconds for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description

The average HDX duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description

The average High Definition user eXperience (HDX) duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description

The average interactive duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description

The average interactive duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration in milliseconds for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration in seconds for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description

The average profile load duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description

The average profile load duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description

The average VM start duration for all connections in the site.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute

Description

The average VM start duration for all connections in the site.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

New Connection Count attribute

Description

The total number of new connections in the site.

Type

integer (32-bit gauge)

Warehouse name
NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Secure ICA Connection Count attribute

Description
The total number of secure Independent Computing Architecture (ICA) connections in the site.

Type
integer (32-bit gauge)

Warehouse name
SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Site Events attribute group

The event received directly from the XenDesktop API for the XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Events attribute group:

Event Reason attribute

Description
The code of the event received from the XenDesktop API for the XenDesktop site.

Type
string

Warehouse name
EVENT_REASON or REASON

Event Severity attribute

Description
The severity of the event received from the XenDesktop API for the XenDesktop site.

Type
string

Warehouse name
EVENT_SEVERITY or SEVERITY

Event Timestamp attribute

Description
The time of the event received from the XenDesktop API for the XenDesktop site.

Type
timestamp

Warehouse name
EVENT_TIMESTAMP or TIME

Event Type attribute

Description
The type of event received from the XenDesktop API for the XenDesktop site.

Type
string

Warehouse name
EVENT_TYPE or TYPE

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Timestamp attribute

Description
The time the event was generated.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Site Resource Information attribute group

This attribute group contains high level summary data for a XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Resource Information attribute group:

Load Index Maximum Value attribute

Description
The maximum value of 10,000 for the Load Index.

Type
integer (32-bit gauge)

Warehouse name
LOAD_INDEX_MAXIMUM_VALUE or LIMV4

Name attribute

Description
The name of the site.

Type
string

Warehouse name
NAME or N2

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.
Warehouse name
NODE

Session Capacity attribute
Description
The maximum number of sessions allowed on the site according to the Load Evaluator Policies on each (VDA) Virtual Desktop Agent.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
SESSION_CAPACITY or SC3

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Site Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions that are grouped by the state of the connection for components in the XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Sess Conn State Cnt Sum attribute group:

Active attribute
Description
The total number of sessions with the Active connection state that exist in the site.
Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_COUNT or A7

Connected attribute
Description
The total number of sessions with the Connected connection state that exist in the site.
Type
integer (32-bit gauge)
Warehouse name
CONNECTED_SESSION_COUNT or C3

Disconnected attribute
Description
The total number of sessions with the Disconnected connection state that exist in the site.
Type
integer (32-bit gauge)

Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Non Brokered Session attribute

Description
The total number of sessions with the Non-Brokered Session connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute

Description
The total number of sessions with the Other connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
OTHER_SESSION_COUNT or O10

Pending attribute

Description
The total number of sessions with the Pending connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
PENDING_SESSION_COUNT or P11

Preparing Session attribute

Description
The total number of sessions with the Preparing Session connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute

Description
The total number of sessions with the Reconnecting connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
RECONNECTING_SESSION_COUNT or R8

Terminated attribute

Description
The total number of sessions with the Terminated connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Unknown attribute

Description
The total number of sessions with the Unknown connection state that exist in the site.

Type
integer (32-bit gauge)

Warehouse name
UNKNOWN_SESSION_COUNT or U2

Site Session Count Summary attribute group

This attribute group returns the total counts for each of the components in the XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Site Session Count Summary attribute group:

Anonymous Session Count attribute

Description
The total anonymous sessions that exist on the site.

Type
integer (32-bit gauge)

Warehouse name
ANONYMOUS_SESSION_COUNT or ASC5

Application Session Count attribute

Description
The total application-type sessions that exist on the site.

Type
integer (32-bit gauge)

Warehouse name
APPLICATION_SESSION_COUNT or ASC4

Desktop Session Count attribute

Description
The total desktop-type sessions that exist on the site.

Type
integer (32-bit gauge)

Warehouse name
DESKTOP_SESSION_COUNT or DSC3

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Peak Concurrent Session Count attribute

Description
The greatest number of sessions that existed during the last collection interval on the site.

Type
integer (32-bit gauge)

Warehouse name
PEAK_CONCURRENT_SESSION_COUNT or PCSC6

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Total Session Count attribute

Description
The total sessions that exist on the site.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
TOTAL_SESSION_COUNT or TSC2

Take Action Status attribute group

The Take Action Status data set contains information about the results of actions this agent ran.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Take Action Status attribute group:

Action App Return Code attribute

Description
The application return code of the action is the actual return code of the command run.

Type
integer (32-bit numeric property)

Warehouse name
ACTION_APP_RETURN_CODE or TSKAPRC

Action Command attribute

Description
The command that was run by the action.

Type
string

Warehouse name
ACTION_COMMAND or TSKCMND

Action ID attribute

Description
The id of the action.

Type
integer (32-bit numeric property)
Warehouse name
ACTION_ID or TSKID

Action Instance attribute
Description
The instance that is associated with the output produced by running the action.
Type
string
Warehouse name
ACTION_INSTANCE or TSKINST

Action Message attribute
Description
The message that is associated with the return code of the action.
Type
string
Warehouse name
ACTION_MESSAGE or TSKMSGE

Action Name attribute
Description
The name of the action that was run.
Type
string
Warehouse name
ACTION_NAME or TSKNAME

Action Node attribute
Description
The node where the action ran.
Type
string
Warehouse name
ACTION_NODE or TSKORGN

Action Owner attribute
Description
The name of the situation or user that initiated the action.
Type
string
Warehouse name
ACTION_OWNER or TSKOWNR

Action Results attribute
Description
The output that is produced by running the action.
Type
string
Warehouse name
ACTION_RESULTS or TSKOUTP

Action Status attribute
Description
The return code from the Action Status dialog, which is the return code category that is defined for the application return code.
Type
integer (32-bit numeric property) with enumerated values. The following values are defined: OK (0), NOT APPLICABLE (1), GENERAL ERROR (2), WARNING (3), NOT RUNNING (4), DEPENDENT NOT RUNNING (5), ALREADY RUNNING (6), PREREQ NOT RUNNING (7), TIMED OUT (8), DOESNT EXIST

(9), UNKNOWN (10), DEPENDENT STILL RUNNING (11), INSUFFICIENT USER AUTHORITY (12). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
ACTION_STATUS or TSKSTAT

Action Subnode attribute

Description
The subnode where the action ran.

Type
string

Warehouse name
ACTION_SUBNODE or TSKSBND

Action Type attribute

Description
The type of the action.

Type
integer (32-bit numeric property) with enumerated values. The following values are defined: UNKNOWN (0), AUTOMATION (1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
ACTION_TYPE or TSKTYPE

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Timestamp attribute

Description
The time the event was generated.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Thread Pool Status attribute group

The Thread Pool Status attribute group contains information that reflects the status of the internal thread pool used to collect data asynchronously.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the Thread Pool Status attribute group:

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Thread Pool Active Threads attribute

Description
The number of threads in the thread pool currently active doing work.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_ACTIVE_THREADS or TPACTTH

Thread Pool Avg Active Threads attribute

Description
The average number of threads in the thread pool simultaneously active doing work.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_AVG_ACTIVE_THREADS or TPAVGAT

Thread Pool Avg Job Wait attribute

Description
The average time a job spends waiting on the thread pool queue in seconds.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_AVG_JOB_WAIT or TPAVJBW

Thread Pool Avg Queue Length attribute

Description
The average length of the thread pool queue during this run.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_AVG_QUEUE_LENGTH or TPAVGQL

Thread Pool Max Active Threads attribute

Description
The peak number of threads in the thread pool that were simultaneously active doing work.

Type
integer (32-bit counter) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_MAX_ACTIVE_THREADS or TPMAXAT

Thread Pool Max Queue Length attribute

Description
The peak length the thread pool queue reached.

Type
integer (32-bit counter) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_MAX_QUEUE_LENGTH or TPMAXQL

Thread Pool Max Size attribute

Description
The maximum number of threads that are allowed to exist in the thread pool.

Type
integer (32-bit numeric property) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_MAX_SIZE or TPMAXSZ

Thread Pool Min Active Threads attribute

Description
The smallest number of threads in the thread pool that were simultaneously active doing work.

Type
integer (32-bit counter) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_MIN_ACTIVE_THREADS or TPMINAT

Thread Pool Min Queue Length attribute

Description
The minimum length the thread pool queue reached.

Type
integer (32-bit counter) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_MIN_QUEUE_LENGTH or TPMINQL

Thread Pool Queue Length attribute

Description
The number of jobs currently waiting in the thread pool queue.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_QUEUE_LENGTH or TPQLGTH

Thread Pool Size attribute

Description
The number of threads currently existing in the thread pool.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_SIZE or THPSIZE

Thread Pool Total Jobs attribute

Description
The number of jobs that are completed by all threads in the pool since agent start.

Type
integer (32-bit counter) with enumerated values. The following values are defined: NO DATA (-1), NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
THREAD_POOL_TOTAL_JOBS or TPTJOBS

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

User Resource Information attribute group

This attribute group contains high-level summary data for a user.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the User Resource Information attribute group:

Domain attribute

Description
The domain that relates to the user.

Type
string

Warehouse name
DOMAIN or DOM1

Full Name attribute

Description
The full name of the user.

Type
string

Warehouse name
FULL_NAME or FN1

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

SID attribute

Description
The SID of the user.

Type
string

Warehouse name
SID or SID1

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

UPN attribute
Description
The UPN of the user.
Type
string
Warehouse name
UPN or UPN1

User ID attribute **This attribute is a key attribute.**
Description
The unique identifier of the user.
Type
integer (32-bit gauge)
Warehouse name
USER_ID or UI2

User Name attribute
Description
The name of the user.
Type
string
Warehouse name
USER_NAME or UN1

VDA Machine Connection Failure Count Summary attribute group

This attribute group returns the number of connection failures grouped by the type of failure for a VDA machine.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the VDA Machine Connection Failure Count Summary attribute group:

Active Session Reconnect Disabled attribute
Description
The total number of connections with a Active Session Reconnect Disabled failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
ACTIVE_SESSION_RECONNECT_DISABLED or ASRD18

Application Disabled attribute
Description
The total number of connections with a Application Disabled failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_DISABLED or AD12

Configuration Set Failure attribute
Description
The total number of connections with a Configuration Set Failure failure in the VDA machine.

Type
integer (32-bit gauge)
Warehouse name
CONFIGURATION_SET_FAILURE or CSF22

Connection Timeout attribute
Description
The total number of connections with a Connection Timeout failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_TIMEOUT or CT6

Disallowed Protocol attribute
Description
The total number of connections with a Disallowed Protocol failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
DISALLOWED_PROTOCOL or DP16

General Fail attribute
Description
The total number of connections with a General Fail failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
GENERAL_FAIL or GF10

License Feature Refused attribute
Description
The total number of connections with a License Feature Refused failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
LICENSE_FEATURE_REFUSED or LFR13

Licensing attribute
Description
The total number of connections with a Licensing failure in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
LICENSING or L7

Machine attribute This attribute is a key attribute.
Description
The reference ID for a VDA Machine
Type
string
Warehouse name
MACHINE_ID or M1

Machine Not Functional attribute
Description
The total number of connections with a Machine Not Functional failure in the VDA machine.
Type
integer (32-bit gauge)

Warehouse name
MACHINE_NOT_FUNCTIONAL or MNF24

Maintenance Mode attribute

Description
The total number of connections with a Maintenance Mode failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
MAINTENANCE_MODE or MM11

No Desktop Available attribute

Description
The total number of connections with a No Desktop Available failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
NO_DESKTOP_AVAILABLE or NDA14

No Machine Available attribute

Description
The total number of connections with a No Machine Available failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
NO_MACHINE_AVAILABLE or NMA23

No Session To Reconnect attribute

Description
The total number of connections with a No Session To Reconnect failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
NO_SESSION_TO_RECONNECT or NSTR19

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

None attribute

Description
The total number of connections without failure in the VDA Machine

Type
integer (32-bit gauge)

Warehouse name
NONE or N3

Other attribute

Description
The total number of connections with a Other failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
OTHER or O9

Refused attribute

Description
The total number of connections with a Refused failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
REFUSED or R21

Registration Timeout attribute

Description
The total number of connections with a Registration Timeout failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
REGISTRATION_TIMEOUT or RT5

Resource Unavailable attribute

Description
The total number of connections with a Resource Unavailable failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
RESOURCE_UNAVAILABLE or RU17

Session Limit Reached attribute

Description
The total number of connections with a Session Limit Reached failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
SESSION_LIMIT_REACHED or SLR15

Session Preparation attribute

Description
The total number of connections with a Session Preparation failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
SESSION_PREPARATION or SP4

Spin Up Failed attribute

Description
The total number of connections with a Spin Up Failed failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
SPIN_UP_FAILED or SUF20

Ticketing attribute

Description
The total number of connections with a Ticketing failure in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
TICKETING or T8

Timestamp attribute

Description

The local time at the agent when the data was collected.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

TIMESTAMP

Total attribute

Description

The total number of connections failures on the VDA Machine

Type

integer (32-bit gauge)

Warehouse name

TOTAL or T2

Unknown attribute

Description

The total number of connections with a Unknown failure in the VDA machine.

Type

integer (32-bit gauge)

Warehouse name

UNKNOWN or U25

VDA Machine Connection Summary attribute group

The attribute group returns the summary of allow the connections for a VDA machine.

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the VDA Machine Connection Summary attribute group:

Active Connection Count attribute

Description

The total number of connections in the VDA machine.

Type

integer (32-bit gauge)

Warehouse name

CONNECTION_COUNT or ACC4

Average Authentication Duration (ms) attribute

Description

The average authentication duration for all connections in the VDA machine.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_AUTHENTICATION_DURATION_MILLISECONDS or AADM14

Average Authentication Duration (sec) attribute

Description

The average authentication duration for all connections in the VDA machine.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_AUTHENTICATION_DURATION_SECONDS or AADS13

Average Brokering Duration (ms) attribute

Description
The average brokering duration for all connections in the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_BROKERING_DURATION_MILLISECONDS or ABDM8

Average Brokering Duration (sec) attribute

Description
The average brokering duration for all connections in the VDA machine.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_BROKERING_DURATION_SECONDS or ABDS7

Average Group Policy Duration (ms) attribute

Description
The average group policy duration for all connections in the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_GROUP_POLICY_DURATION_MILLISECONDS or AGPDM16

Average Group Policy Duration (sec) attribute

Description
The average group policy duration for all connections in the VDA machine.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_GROUP_POLICY_DURATION_SECONDS or AGPDS15

Average Hdx Duration (ms) attribute

Description
The average HDX duration for all connections in the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_HDX_DURATION_MILLISECONDS or AHDM12

Average Hdx Duration (sec) attribute

Description
The average HDX duration for all connections in the VDA machine.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_HDX_DURATION_SECONDS or AHDS11

Average Interactive Duration (ms) attribute

Description

The average interactive duration for all connections in the VDA machine.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_MILLISECONDS or AIDM22

Average Interactive Duration (sec) attribute

Description

The average interactive duration for all connections in the VDA machine.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_INTERACTIVE_DURATION_SECONDS or AIDS21

Average Log On Duration (ms) attribute

Description

The average log on duration in milliseconds for all connections in the VDA machine.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_MILLISECONDS or ALODM6

Average Log On Duration (sec) attribute

Description

The average log on duration in seconds for all connections in the VDA machine.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_DURATION_SECONDS or ALODS5

Average Log On Scripts Duration (ms) attribute

Description

The average log on scripts duration for all connections in the VDA machine.

Type

integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_MILLISECONDS or ALOSD18

Average Log On Scripts Duration (sec) attribute

Description

The average log on scripts duration for all connections in the VDA machine.

Type

real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

AVERAGE_LOG_ON_SCRIPTS_DURATION_SECONDS or ALOSD17

Average Profile Load Duration (ms) attribute

Description
The average profile load duration for all connections in the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_PROFILE_LOAD_DURATION_MILLISECONDS or APLDM20

Average Profile Load Duration (sec) attribute

Description
The average profile load duration for all connections in the VDA machine.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_PROFILE_LOAD_DURATION_SECONDS or APLDS19

Average VM Start Duration (ms) attribute

Description
The average VM start duration for all connections in the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_VM_START_DURATION_MILLISECONDS or AVSDM10

Average VM Start Duration (sec) attribute

Description
The average VM start duration for all connections in the VDA machine.

Type
real number (32-bit gauge) with two decimal places of precision with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_VM_START_DURATION_SECONDS or AVSDS9

Machine attribute **This attribute is a key attribute.**

Description
The reference ID for a VDA Machine

Type
string

Warehouse name
MACHINE_ID or M1

New Connection Count attribute

Description
The total number of new connections in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
NEW_CONNECTION_COUNT or NCC2

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Secure ICA Connection Count attribute

Description
The total number of secure ICA connections in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
SECURE_ICA_CONNECTION_COUNT or SICC3

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

VDA Machine Events attribute group

Event received directly from XenDesktop API for the XenDesktop VDA machine.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the VDA Machine Events attribute group:

Event Reason attribute

Description
The code of event received from the XenDesktop API for the XenDesktop VDA machine

Type
string

Warehouse name
EVENT_REASON or REASON

Event Severity attribute

Description
The severity of the event received from the the XenDesktop API for the XenDesktop VDA machine

Type
string

Warehouse name
EVENT_SEVERITY or SEVERITY

Event Timestamp attribute

Description
The time of event received from the XenDesktop API for the XenDesktop VDA machine.

Type
timestamp

Warehouse name
EVENT_TIMESTAMP or TIME

Event Type attribute

Description
The type of event received from the XenDesktop API for the XenDesktop VDA machine

Type
string
Warehouse name
EVENT_TYPE or TYPE

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Timestamp attribute
Description
The time the event was generated.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

VDA Machine Load Index Summary attribute group

This attribute group returns the load index for the VDA Machine

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the VDA Machine Load Index Summary attribute group:

CPU attribute
Description
The CPU load index for the VDA machine.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
CPU or C3

CPU (%) attribute
Description
The CPU load index as a percent of the VDA machine.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
CPU_AS_PERCENT or C9

Disk attribute
Description
The disk load index for the VDA machine.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
DISK or D5

Disk (%) attribute

Description
The disk load index as a percent of the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
DISK_AS_PERCENT or D11

Effective attribute

Description
The effective load index for the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
EFFECTIVE_LOAD_INDEX or E2

Effective (%) attribute

Description
The effective load index as a percent of the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
EFFECTIVE_LOAD_INDEX_AS_PERCENT or E8

Machine attribute **This attribute is a key attribute.**

Description
The reference ID for a VDA machine.

Type
string

Warehouse name
MACHINE_ID or M1

Memory attribute

Description
The memory load index for the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY or M4

Memory (%) attribute

Description
The memory load index as a percent of the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
MEMORY_AS_PERCENT or M10

Network attribute

Description
The network load index for the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK or N6

Network (%) attribute

Description
The network load index as a percent of the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
NETWORK_AS_PERCENT or N12

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Session Capacity attribute

Description
The session count load index for the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT or SC7

Session Capacity (%) attribute

Description
The session count load index as a percent of the VDA machine.

Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_COUNT_AS_PERCENT or SC13

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

VDA Machine Resource Information attribute group

This attribute group contains high level summary data for a (VDA) Virtual Desktop Agent Machine

Historical group

This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions

The following list contains information about each attribute in the VDA Machine Resource Information attribute group:

Agent Version attribute

Description

The agent version for the VDA machine

Type

string

Warehouse name

AGENT_VERSION or AV10

Controller Dns Name attribute

Description

The Controller DNS Name for the VDA machine

Type

string

Warehouse name

CONTROLLER_DNS_NAME or CDN15

Current Power State attribute

Description

The current power state for the VDA machine.

Type

string

Warehouse name

CURRENT_POWER_STATE or CPS13

Current Registration State attribute

Description

The current registration state for the VDA machine.

Type

string

Warehouse name

CURRENT_REGISTRATION_STATE or CRS11

Current Session Count attribute

Description

The current session count for the VDA machine.

Type

integer (32-bit gauge)

Warehouse name

CURRENT_SESSION_COUNT or CSC14

Dns Name attribute

Description

The DNS Name of the VDA Machine.

Type

string

Warehouse name

DNS_NAME or DN2

Failure Reason attribute

Description

The failure reason/last deregistered code for the VDA machine.

Type

string

Warehouse name
LAST_DEREGISTERED_CODE or FR12

Fault State attribute

Description
The fault state for the VDA machine.

Type
string

Warehouse name
FAULT_STATE or FS18

Functional Level attribute

Description
The functional level for the VDA machine.

Type
string

Warehouse name
FUNCTIONAL_LEVEL or FL16

Hosting Server Name attribute

Description
The hosting server name for the VDA machine.

Type
string

Warehouse name
HOSTING_SERVER_NAME or HSN5

IP Address attribute

Description
The IP Address of the VDA Machine.

Type
string

Warehouse name
IP_ADDRESS or IA4

Is Assigned attribute

Description
Specifies if the VDA machine is assigned, for example, the machine is associated with a machine catalog or delivery controller.

Type
string

Warehouse name
IS_ASSIGNED or IA6

Is In Maintenance Mode attribute

Description
Specifies if the VDA Machine is in maintenance mode.

Type
string

Warehouse name
IS_IN_MAINTENANCE_MODE or IIMM7

Is Pending Update attribute

Description
Specifies if the VDA Machine is pending an update.

Type
string

Warehouse name
IS_PENDING_UPDATE or IPU8

Is Preparing attribute

Description
Specifies if the VDA machine is preparing, for example, in a state where it can not handle user workloads.

Type
string
Warehouse name
IS_PREPARING or IP9

Lifecycle State attribute
Description
The Lifecycle State of the VDA machine.
Type
string
Warehouse name
LIFECYCLE_STATE or LS3

Load Index Maximum Value attribute
Description
The maximum value of 10,000 for the Load Index.
Type
integer (32-bit gauge)
Warehouse name
LOAD_INDEX_MAXIMUM_VALUE or LIMV22

Machine attribute **This attribute is a key attribute.**
Description
The reference ID for a VDA Machine.
Type
string
Warehouse name
MACHINE_ID or M1

Machine Role attribute
Description
The role for the VDA machine.
Type
string
Warehouse name
MACHINE_ROLE or MR20

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

OS Type attribute
Description
The OS Type for the VDA machine.
Type
string
Warehouse name
OS_TYPE or OT19

Session Capacity attribute
Description
The maximum number of sessions allowed on the VDA machine according to the Load Evaluator Policy.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
SESSION_CAPACITY or SC21

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Windows Connection Setting attribute

Description
The windows connection setting for the VDA machine.

Type
string

Warehouse name
WINDOWS_CONNECTION_SETTING or WCS17

VDA Machine Sess Conn State Cnt Sum attribute group

This attribute group returns the number of sessions that are grouped by the state of the connection for components of the VDA machine.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the VDA Machine Sess Conn State Cnt Sum attribute group:

Active attribute

Description
The total number of sessions with the Active connection state that exist in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
ACTIVE_SESSION_COUNT or A7

Connected attribute

Description
The total number of sessions with the Connected connection state that exist in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
CONNECTED_SESSION_COUNT or C3

Disconnected attribute

Description
The total number of sessions with the Disconnected connection state that exist in the VDA machine.

Type
integer (32-bit gauge)

Warehouse name
DISCONNECTED_SESSION_COUNT or D4

Machine attribute **This attribute is a key attribute.**

Description
The reference ID for a VDA Machine

Type
string
Warehouse name
MACHINE_ID or M1

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Non Brokered Session attribute
Description
The total number of sessions with the Non-Brokered Session connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
NON_BROKERED_SESSION_SESSION_COUNT or NBS9

Other attribute
Description
The total number of sessions with the Other connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
OTHER_SESSION_COUNT or O10

Pending attribute
Description
The total number of sessions with the Pending connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
PENDING_SESSION_COUNT or P11

Preparing Session attribute
Description
The total number of sessions with the Preparing Session connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
PREPARING_SESSION_SESSION_COUNT or PS6

Reconnecting attribute
Description
The total number of sessions with the Reconnecting connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
RECONNECTING_SESSION_COUNT or R8

Terminated attribute

Description
The total number of sessions with the Terminated connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
TERMINATED_SESSION_COUNT or T5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

Unknown attribute
Description
The total number of sessions with the Unknown connection state that exist in the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
UNKNOWN_SESSION_COUNT or U2

VDA Machine Session Count Summary attribute group

This attribute group returns the total counts for each of the components that make up the VDA machine.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the VDA Machine Session Count Summary attribute group:

Anonymous Session Count attribute
Description
The total anonymous sessions that exist on the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
ANONYMOUS_SESSION_COUNT or ASC4

Application Session Count attribute
Description
The total application-type sessions that exist on the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_SESSION_COUNT or ASC3

Desktop Session Count attribute
Description
The total desktop-type sessions that exist on the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
DESKTOP_SESSION_COUNT or DSC2

Machine attribute **This attribute is a key attribute.**

Description
The reference ID for a VDA machine.
Type
string
Warehouse name
MACHINE_ID or M1

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
NODE

Peak Concurrent Session Count attribute
Description
The greatest number of sessions that existed during the last collection interval on the VDA machine.
Type
integer (32-bit gauge)
Warehouse name
PEAK_CONCURRENT_SESSION_COUNT or PCSC5

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.
Warehouse name
TIMESTAMP

XDS Performance Object Status attribute group

The Performance Object Status attribute group contains information that reflects the status of other attribute groups so you can see the status of all performance objects that make up this application all at once. Each of these other performance attribute groups is represented by a row in this table (or other type of view). The status for an attribute group reflects the result of the last attempt to collect data for that attribute group, so you can see whether the agent is collecting data correctly. Unlike other attribute groups, the Performance Object Status attribute group does not reflect the state of the monitored application. This attribute group is most often used to determine why data is not available for one of the performance attribute groups.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the XDS Performance Object Status attribute group:

Average Collection Duration attribute
Description
The average duration of all data collections of this group in seconds.
Type
real number (32-bit counter) with two decimal places of precision with enumerated values. The following values are defined: NO DATA (-100). Any value that does not have a definition here is displayed in the User Interface

Warehouse name
AVERAGE_COLLECTION_DURATION or COLAVGD

Cache Hit Percent attribute

Description
The percentage of external data requests for this group that were satisfied from the cache.

Type
real number (32-bit counter) with two decimal places of precision

Warehouse name
CACHE_HIT_PERCENT or CACHPCT

Cache Hits attribute

Description
The number of times an external data request for this group was satisfied from the cache.

Type
integer (32-bit counter)

Warehouse name
CACHE_HITS or CACHEHT

Cache Misses attribute

Description
The number of times an external data request for this group was not available in the cache.

Type
integer (32-bit counter)

Warehouse name
CACHE_MISSES or CACHEMS

Error Code attribute

Description
The error code associated with the query.

Type
integer with enumerated values. The following values are defined: NO ERROR (0), GENERAL ERROR (1), OBJECT NOT FOUND (2), COUNTER NOT FOUND (3), NAMESPACE ERROR (4), OBJECT CURRENTLY UNAVAILABLE (5), COM LIBRARY INIT FAILURE (6), SECURITY INIT FAILURE (7), PROXY SECURITY FAILURE (9), NO INSTANCES RETURNED (10), ASSOCIATOR QUERY FAILED (11), REFERENCE QUERY FAILED (12), NO RESPONSE RECEIVED (13), CANNOT FIND JOINED QUERY (14), CANNOT FIND JOIN ATTRIBUTE IN QUERY 1 RESULTS (15), CANNOT FIND JOIN ATTRIBUTE IN QUERY 2 RESULTS (16), QUERY 1 NOT A SINGLETON (17), QUERY 2 NOT A SINGLETON (18), NO INSTANCES RETURNED IN QUERY 1 (19), NO INSTANCES RETURNED IN QUERY 2 (20), CANNOT FIND ROLLUP QUERY (21), CANNOT FIND ROLLUP ATTRIBUTE (22), FILE OFFLINE (23), NO HOSTNAME (24), MISSING LIBRARY (25), ATTRIBUTE COUNT MISMATCH (26), ATTRIBUTE NAME MISMATCH (27), COMMON DATA PROVIDER NOT STARTED (28), CALLBACK REGISTRATION ERROR (29), MDL LOAD ERROR (30), AUTHENTICATION FAILED (31), CANNOT RESOLVE HOST NAME (32), SUBNODE UNAVAILABLE (33), SUBNODE NOT FOUND IN CONFIG (34), ATTRIBUTE ERROR (35), CLASSPATH ERROR (36), CONNECTION FAILURE (37), FILTER SYNTAX ERROR (38), FILE NAME MISSING (39), SQL QUERY ERROR (40), SQL FILTER QUERY ERROR (41), SQL DB QUERY ERROR (42), SQL DB FILTER QUERY ERROR (43), PORT OPEN FAILED (44), ACCESS DENIED (45), TIMEOUT (46), NOT IMPLEMENTED (47), REQUESTED A BAD VALUE (48), RESPONSE TOO BIG (49), GENERAL RESPONSE ERROR (50), SCRIPT NONZERO RETURN (51), SCRIPT NOT FOUND (52), SCRIPT LAUNCH ERROR (53), CONF FILE DOES NOT EXIST (54), CONF FILE ACCESS DENIED (55), INVALID CONF FILE (56), EIF INITIALIZATION FAILED (57), CANNOT

OPEN FORMAT FILE (58), FORMAT FILE SYNTAX ERROR (59), REMOTE HOST UNAVAILABLE (60), EVENT LOG DOES NOT EXIST (61), PING FILE DOES NOT EXIST (62), NO PING DEVICE FILES (63), PING DEVICE LIST FILE MISSING (64), SNMP MISSING PASSWORD (65), DISABLED (66), URLS FILE NOT FOUND (67), XML PARSE ERROR (68), NOT INITIALIZED (69), ICMP SOCKETS FAILED (70), DUPLICATE CONF FILE (71). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

ERROR_CODE or ERRCODE

Intervals Skipped attribute

Description

The number of times a background data collection for this group was skipped because the previous collection was still running when the next one was due to start.

Type

integer (32-bit counter)

Warehouse name

INTERVALS_SKIPPED or INTSKIP

Last Collection Duration attribute

Description

The duration of the most recently completed data collection of this group in seconds.

Type

real number (32-bit counter) with two decimal places of precision

Warehouse name

LAST_COLLECTION_DURATION or COLDURA

Last Collection Finished attribute

Description

The most recent time a data collection of this group finished.

Type

timestamp with enumerated values. The following values are defined: NOT COLLECTED (0691231190000000), NOT COLLECTED (0000000000000001). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LAST_COLLECTION_FINISHED or COLFINI

Last Collection Start attribute

Description

The most recent time a data collection of this group started.

Type

timestamp with enumerated values. The following values are defined: NOT COLLECTED (0691231190000000), NOT COLLECTED (0000000000000001). Any value that does not have a definition here is displayed in the User Interface

Warehouse name

LAST_COLLECTION_START or COLSTRT

Node attribute **This attribute is a key attribute.**

Description

The managed system name of the agent.

Type

string

Source

The source for this attribute is the agent.

Warehouse name

NODE

Number of Collections attribute

Description

The number of data collections for this group since the agent started.

Type
integer (32-bit counter)
Warehouse name
NUMBER_OF_COLLECTIONS or NUMCOLL

Object Name attribute
Description
The name of the performance object.
Type
string
Warehouse name
OBJECT_NAME or OBJNAME

Object Status attribute
Description
The status of the performance object.
Type
integer with enumerated values. The following values are defined: ACTIVE (0), INACTIVE (1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
OBJECT_STATUS or OBJSTTS

Object Type attribute
Description
The type of the performance object.
Type
integer with enumerated values. The following values are defined: WMI (0), PERFMON (1), WMI ASSOCIATION GROUP (2), JMX (3), SNMP (4), SHELL COMMAND (5), JOINED GROUPS (6), CIMOM (7), CUSTOM (8), ROLLUP DATA (9), WMI REMOTE DATA (10), LOG FILE (11), JDBC (12), CONFIG DISCOVERY (13), NT EVENT LOG (14), FILTER (15), SNMP EVENT (16), PING (17), DIRECTOR DATA (18), DIRECTOR EVENT (19), SSH REMOTE SHELL COMMAND (20). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
OBJECT_TYPE or OBJTYPE

Query Name attribute **This attribute is a key attribute.**
Description
The name of the attribute group.
Type
string
Warehouse name
QUERY_NAME or ATTRGRP

Refresh Interval attribute
Description
The interval at which this group is refreshed in seconds.
Type
integer (32-bit counter)
Warehouse name
REFRESH_INTERVAL or REFRINT

Timestamp attribute
Description
The local time at the agent when the data was collected.
Type
string
Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

XenDesktop OData Performance attribute group

The attribute group contains detailed information about the performance of the connection that is used to gather information from the XenDesktop API interface.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the XenDesktop OData Performance attribute group:

Application Instance Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Application Instance data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_INSTANCE_ELAPSED_TIME_MS or AIRTE4

Application Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Application data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
APPLICATION_ELAPSED_TIME_MS or ARTEM3

Application To Delivery Group Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Application to Delivery Group data from the OData API.
Type
integer (32-bit gauge) with enumerated values. The following values are defined: Unavailable (-1). Any value that does not have a definition here is displayed in the User Interface
Warehouse name
APPLICATION_TO_DELIVERY_GROUP_ELAPSED_TIME_MS or ATDGR5

Catalog Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Catalog data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
CATALOG_ELAPSED_TIME_MS or CRTEM6

Connection Failure Log Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Connection Failure Log data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
CONNECTION_FAILURE_LOG_ELAPSED_TIME_MS or CFLRT8

Connection Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Connection data from the OData API.

Type
integer (32-bit gauge)
Warehouse name
CONNECTION_ELAPSED_TIME_MS or CRTEM7

Delivery Controller attribute **This attribute is a key attribute.**
Description
The name of the primary XenDesktop Delivery Controller.
Type
string
Warehouse name
DELIVERY_CONTROLLER or DC1

Delivery Group Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Delivery Group data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
DELIVERY_GROUP_ELAPSED_TIME_MS or DGRTE9

Hypervisor Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Hypervisor data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
HYPERVISOR_ELAPSED_TIME_MS or HRTEM10

Load Index Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Load Index data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
LOAD_INDEX_ELAPSED_TIME_MS or LIRTE11

Machine Failure Log Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Machine Failure Log data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
MACHINE_FAILURE_LOG_ELAPSED_TIME_MS or MFLRT12

Machine Retrieval Time Elapsed (ms) attribute
Description
The elapsed time in milliseconds to retrieve Machine data from the OData API.
Type
integer (32-bit gauge)
Warehouse name
MACHINE_ELAPSED_TIME_MS or MRTEM13

Node attribute **This attribute is a key attribute.**
Description
The managed system name of the agent.
Type
string
Source
The source for this attribute is the agent.

Warehouse name
NODE

Session Retrieval Time Elapsed (ms) attribute

Description
The elapsed time in milliseconds to retrieve Session data from the OData API.

Type
integer (32-bit gauge)

Warehouse name
SESSION_ELAPSED_TIME_MS or SRTEM14

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

User Retrieval Time Elapsed (ms) attribute

Description
The elapsed time in milliseconds to retrieve User data from the OData API.

Type
integer (32-bit gauge)

Warehouse name
USER_ELAPSED_TIME_MS or URTEM15

XenDesktop Resource Properties attribute group

This attribute group provides connection and performance metrics for the associated configuration that is specified for the XenDesktop site.

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the XenDesktop Resource Properties attribute group:

Active Delivery Controller attribute

Description
The active Delivery Controller that the management pack uses to query data.

Type
string

Warehouse name
ACTIVE_DELIVERY_CONTROLLER or ADC3

Delivery Controller attribute **This attribute is a key attribute.**

Description
The name of the Delivery Controller for the XenDesktop site.

Type
string

Warehouse name
DELIVERY_CONTROLLER or DC1

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Total Users attribute

Description
The total number of users in the monitored system.

Type
integer (32-bit gauge)

Warehouse name
TOTAL_USERS or TU4

XenDesktopSite nodes attribute group

XenDesktop Site

Historical group
This attribute group is eligible for use with Tivoli Data Warehouse.

Attribute descriptions
The following list contains information about each attribute in the XenDesktopSite nodes attribute group:

Node attribute **This attribute is a key attribute.**

Description
The managed system name of the agent.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
NODE

Subnode Affinity attribute

Description
The affinity of this subnode.

Type
string

Warehouse name
SUBNODE_AFFINITY or SN_AFFIN

Subnode MSN attribute **This attribute is a key attribute.**

Description
The Managed System Name of this subnode.

Type
string

Warehouse name
SUBNODE_MSN or SN_MSN

Subnode Resource Name attribute

Description
The resource name of this subnode.

Type
string

Warehouse name
SUBNODE_RESOURCE_NAME or SN_RES

Subnode Type attribute **This attribute is a key attribute.**

Description
The node type of this subnode.

Type
string

Warehouse name
SUBNODE_TYPE or SN_TYPE

Subnode Version attribute

Description
The version of this subnode.

Type
string

Warehouse name
SUBNODE_VERSION or SN_VER

Timestamp attribute

Description
The local time at the agent when the data was collected.

Type
string

Source
The source for this attribute is the agent.

Warehouse name
TIMESTAMP

Disk capacity planning for historical data

Disk capacity planning for a monitoring agent is a prediction of the amount of disk space to be consumed by the historical data in each attribute group that is collecting historical data. Required disk storage is an important factor when you are defining data collection rules and your strategy for historical data collection.

The Capacity planning for historical data table provides the following information, which is required to calculate disk space for this monitoring agent:

Table Table name as it is displayed in the warehouse database, if the attribute group is configured to be written to the warehouse. The table name listed here corresponds to the table name in "Attribute groups for the monitoring agent" on page 21.

Attribute group
Name of the attribute group that is used to create the table in the warehouse database if it is short enough to fit in the table naming constraints of the database that is being used for the warehouse. The attribute group name listed here corresponds to the Warehouse table name in "Attribute groups for the monitoring agent" on page 21.

Bytes per row (agent)
Estimate of the record length for each row or instance that is written to the agent disk for historical data collection. This estimate can be used for agent disk space planning purposes.

Database bytes per row (warehouse)
Estimate of the record length for detailed records that are written to the warehouse database, if the attribute group is configured to be written to the warehouse. Detailed records are records that have been uploaded from the agent for long-term historical data collection. This estimate can be used for warehouse disk-space planning purposes.

Aggregate bytes per row (warehouse)
Estimate of the record length for aggregate records that are written to the warehouse database, if

the attribute group is configured to be written to the warehouse. Aggregate records are created by the Summarization agent for attribute groups that have been configured for summarization. This estimate can be used for warehouse disk-space planning purposes.

In addition to the information in the tables, you must know the number of rows of data that you plan to collect. An attribute group can have single or multiple rows of data, depending on the application environment that is being monitored. For example, if your attribute group monitors each processor in your computer and you have a dual processor computer, the number of rows is two.

Table 1. Capacity planning for historical data logged by the Citrix Virtual Desktop Infrastructure agent

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehouse)	Aggregate bytes per row (warehouse)
KVDKVDLOG1	KVD_AGENT_DATA_PROVIDER_LOG	1646	1655	1692
KVDXDACF52	KVD_APPLICATION_CONNECTION_ FAILURE_COUNT_SUMMARY	372	393	1366
KVDXDACS51	KVD_APPLICATION_CONNECTION_ SUMMARY	360	486	1450
KVDAIS48	KVD_APPLICATION_INSTANCE_SUMMARY	284	283	398
KVDXDARI47	KVD_APPLICATION_RESOURCE_ INFORMATION	1476	1479	1516
KVDXDASC49	KVD_APPLICATION_SESSION_COUNT_ SUMMARY	484	484	599
KVDXDASC50	KVD_APPLICATION_SESS_CONN_STATE_ CNT_SUM	316	323	750
KVDXDCAL27	KVD_CATALOG_AVERAGE_LOAD_INDEX_ SUMMARY	324	333	838
KVDXDCCF31	KVD_CATALOG_CONNECTION_FAILURE_ COUNT_SUMMARY	372	393	1366
KVDXDCCS30	KVD_CATALOG_CONNECTION_SUMMARY	360	486	1450
KVDXDCRI26	KVD_CATALOG_RESOURCE_INFORMATION	1884	1891	2006
KVDXDCSC28	KVD_CATALOG_SESSION_COUNT_SUMMARY	296	298	530
KVDXDCSC29	KVD_CATALOG_SESS_CONN_STATE_CNT_ SUM	316	323	750
KVDXDDME24	KVD_DDC_MACHINE_EVENTS	392	392	429
KVDXDDMR23	KVD_DDC_MACHINE_RESOURCE_ INFORMATION	1276	1278	1315
KVDXDDGA34	KVD_DELIVERY_GROUP_AVERAGE_LOAD_ INDEX_SUMMARY	324	333	838
KVDXDDGC38	KVD_DELIVERY_GROUP_CONNECTION_ FAILURE_COUNT_SUMMARY	372	393	1366
KVDXDDGC37	KVD_DELIVERY_GROUP_CONNECTION_ SUMMARY	360	486	1450
KVDXDDGR33	KVD_DELIVERY_GROUP_RESOURCE_ INFORMATION	1484	1489	1604
KVDXDDGS35	KVD_DELIVERY_GROUP_SESSION_COUNT_ SUMMARY	296	298	530
KVDXDDGS36	KVD_DELIVERY_GROUP_SESS_CONN_ STATE_CNT_SUM	316	323	750

Table 1. Capacity planning for historical data logged by the Citrix Virtual Desktop Infrastructure agent (continued)

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehouse)	Aggregate bytes per row (warehouse)
KVDXDDCF60	KVD_DESKTOP_CONNECTION_FAILURE_ COUNT_SUMMARY	372	393	1366
KVDXDDCS59	KVD_DESKTOP_CONNECTION_SUMMARY	360	486	1450
KVDDIS56	KVD_DESKTOP_INSTANCE_SUMMARY	284	283	398
KVDXDDRI55	KVD_DESKTOP_RESOURCE_INFORMATION	476	474	511
KVDXDDSC57	KVD_DESKTOP_SESSION_COUNT_SUMMARY	284	283	398
KVDXDDSC58	KVD_DESKTOP_SESS_CONN_STATE_CNT_ SUM	316	323	750
KVDXDHAL41	KVD_HYPERVISOR_AVERAGE_LOAD_INDEX_ SUMMARY	324	333	838
KVDXDHCF45	KVD_HYPERVISOR_CONNECTION_FAILURE_ COUNT_SUMMARY	372	393	1366
KVDXDHCS44	KVD_HYPERVISOR_CONNECTION_SUMMARY	360	486	1450
KVDXDHRI40	KVD_HYPERVISOR_RESOURCE_ INFORMATION	684	685	800
KVDXDHSC42	KVD_HYPERVISOR_SESSION_COUNT_ SUMMARY	296	298	530
KVDXDHSC43	KVD_HYPERVISOR_SESS_CONN_STATE_ CNT_SUM	316	323	750
KVDPOBJST	KVD_PERFORMANCE_OBJECT_STATUS	352	399	664
KVDRC7	KVD_RESOURCE_COUNTS	112	117	505
KVDXDSS03	KVD_SESSION_CONNECTION_DETAILS	2957	3095	3981
KVDXDSS02	KVD_SESSION_RESOURCE_INFORMATION	1357	1367	1521
KVDALIS8	KVD_SITE_AVERAGE_LOAD_INDEX_ SUMMARY	124	132	637
KVDCFCS12	KVD_SITE_CONNECTION_FAILURE_COUNT_ SUMMARY	172	192	1165
KVDCS11	KVD_SITE_CONNECTION_SUMMARY	160	285	1249
KVDXDSE13	KVD_SITE_EVENTS	392	392	429
KVDRI6	KVD_SITE_RESOURCE_INFORMATION	284	283	398
KVDSCS9	KVD_SITE_SESSION_COUNT_SUMMARY	96	97	329
KVDSCSCS10	KVD_SITE_SESS_CONN_STATE_CNT_SUM	116	122	549
KVDTACTST	KVD_TAKE_ACTION_STATUS	3480	3512	3549
KVDTHPLST	KVD_THREAD_POOL_STATUS	124	168	550
KVDXDUS02	KVD_USER_RESOURCE_INFORMATION	1080	1082	1119
KVDXDVMC20	KVD_VDA_MACHINE_CONNECTION_ FAILURE_COUNT_SUMMARY	372	393	1366
KVDXDVMC19	KVD_VDA_MACHINE_CONNECTION_ SUMMARY	360	486	1450
KVDXDVME21	KVD_VDA_MACHINE_EVENTS	392	392	429

Table 1. Capacity planning for historical data logged by the Citrix Virtual Desktop Infrastructure agent (continued)

Table	Attribute group	Bytes per row (agent)	Database bytes per row (warehouse)	Aggregate bytes per row (warehouse)
KVDLIS16	KVD_VDA_MACHINE_LOAD_INDEX_ SUMMARY	324	333	838
KVDXDVMR15	KVD_VDA_MACHINE_RESOURCE_ INFORMATION	3888	3906	4060
KVDXDVMS17	KVD_VDA_MACHINE_SESSION_COUNT_ SUMMARY	292	293	486
KVDXDVMS18	KVD_VDA_MACHINE_SESS_CONN_STATE_ CNT_SUM	316	323	750
KVDXDSPOS	KVD_XDS_PERFORMANCE_OBJECT_STATUS	352	399	664
KVDXDSDS	KVD_XENDESKTOPSITE_NODES	197	198	235
KVDODP3	KVD_XENDESKTOP_ODATA_PERFORMANCE	328	338	882
KVDRP2	KVD_XENDESKTOP_RESOURCE_ PROPERTIES	480	479	555

For more information about historical data collection, see “Managing historical data” in the *IBM Tivoli Monitoring Administrator’s Guide*.

Chapter 5. Situations reference

A situation is a logical expression involving one or more system conditions. Situations are used to monitor the condition of systems in your network. You can manage situations from the Tivoli Enterprise Portal by using the Situation Editor or from the command-line interface using the tacmd commands for situations. You can manage private situations in the private configuration XML file.

About situations

The monitoring agents that you use to monitor your system environment include a set of predefined situations that you can use as-is. You can also create new situations to meet your requirements.

Predefined situations contain attributes that check for system conditions common to many enterprises. Using predefined situations can improve the speed with which you can begin using the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure. You can change the conditions or values being monitored by a predefined situation to the conditions or values best suited to your enterprise.

You can display predefined situations and create your own situations using the Situation editor. The Situation editor initially lists the situations associated with the Navigator item that you selected. When you click a situation name or create a situation, a panel opens with the following tabs:

Formula
Formula describing the condition being tested.

Distribution
List of managed systems (operating systems, subsystems, or applications) to which the situation can be distributed. All the Citrix Virtual Desktop Infrastructure agent managed systems are assigned by default.

Expert advice
Comments and instructions to be read in the event workspace.

Action
Command to be sent to the system.

EIF Customize forwarding of the event to an Event Integration Facility receiver. (Available when the Tivoli Enterprise Monitoring Server is configured to forward events.)

Until Options to close the event after a period of time, or when another situation becomes true.

Additional information about situations

The *Tivoli Enterprise Portal User's Guide* contains more information about predefined and custom situations and how to use them to respond to alerts.

For a list of the predefined situations and information about each individual situation for this monitoring agent, see "Predefined situations."

Predefined situations

The monitoring agent contains predefined situations, which are organized by Navigator item.

Agent level Navigator items

- Citrix Virtual Desktop Infrastructure
  - Not applicable

XenDesktop Site (XDS) subnode

- XenDesktop Site
  - Not applicable
- Application
  - Not applicable
- Catalog
  - Not applicable
- DDC Machine
  - KVD_ddc_machine_critical_event
  - KVD_ddc_machine_warning_event
- Delivery Group
  - Not applicable
- Desktop
  - Not applicable
- Hypervisor
  - Not applicable
- Session
  - Not applicable
- Site
  - KVD_Data_Collection_Not_Started
  - KVD_OData_Application_Fail
  - KVD_OData_App_Instance_Fail
  - KVD_OData_Catalog_Fail
  - KVD_OData_Connection_Fail
  - KVD_OData_Conn_Log_Fail
  - KVD_OData_Deliv_Group_Fail
  - KVD_OData_Hypervisor_Fail
  - KVD_OData_Load_Index_Fail
  - KVD_OData_Machine_Fail
  - KVD_OData_Machine_Log_Fail
  - KVD_OData_Session_Fail
  - KVD_OData_User_Fail
  - KVD_site_critical_event
  - KVD_site_warning_event
- User
  - Not applicable
- VDA Machine
  - KVD_vda_machine_critical_event
  - KVD_vda_machine_warning_event

Situation descriptions

Each situation description provides information about the situation that you can use to monitor the condition of systems in your network.

The situation descriptions provide the following information:

Description
Information about the conditions that the situation tests.

Formula
Syntax that contains one or more logical expressions that describe the conditions for the situation to monitor.

Distribution
Whether the situation is automatically distributed to instances of the agent or is available for manual distribution.

Run at startup
Whether the situation starts monitoring when the agent starts.

Sampling interval
Number of seconds that elapse between one sample of data that the monitoring agent collects for the server and the next sample.

Situation persistence
Whether the conditions specified in the situation evaluate to "true" for the defined number of occurrences in a row before the situation is raised. The default of one means that no persistence-checking takes place.

Severity
Severity of the predefined events: Warning, Informational, or Critical.

Clearing conditions
Controls when a true situation closes: after a period, when another situation is true, or whichever occurs first if both are selected.

Citrix Virtual Desktop Infrastructure Navigator item

No predefined situations are included for this Navigator item.

XenDesktop Site subnode

The situation descriptions are organized by the Navigator item to which the situations are relevant.

XenDesktop Site Navigator item

No predefined situations are included for this Navigator item.

Application Navigator item

No predefined situations are included for this Navigator item.

Catalog Navigator item

No predefined situations are included for this Navigator item.

DDC Machine Navigator item

KVD_ddc_machine_critical_event situation

Description

A critical event occurred on the XenDesktop DDC machine.

The situation is evaluated for each distinct value of event_reason.

Formula

```
*IF *SCAN KVD_DDC_MACHINE_EVENTS.event_severity *EQ 'Critical'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is available for distribution.
Run at startup
No
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Critical
Clearing conditions
The situation does not clear automatically.

KVD_ddc_machine_warning_event situation
Description
A warning event occurred on the XenDesktop DDC machine.

The situation is evaluated for each distinct value of event_reason.
Formula
```
*IF *SCAN KVD_DDC_MACHINE_EVENTS.event_severity *EQ 'Warning'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is available for distribution.
Run at startup
No
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

Delivery Group Navigator item

No predefined situations are included for this Navigator item.

Desktop Navigator item

No predefined situations are included for this Navigator item.

Hypervisor Navigator item

No predefined situations are included for this Navigator item.

Session Navigator item

No predefined situations are included for this Navigator item.

Site Navigator item

KVD_Data_Collection_Not_Started situation
Description
The request to start data collection against the XenDesktop system was unsuccessful.

The situation is evaluated for each distinct value of Message.

Formula

```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00014'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.

Run at startup
Yes

Sampling interval
None. Data is analyzed when it becomes available.

Situation persistence
Not Applicable

Error conditions
Critical

Clearing conditions
The situation does not clear automatically.

KVD_OData_Application_Fail situation

Description
The collection of Application data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.

Formula

```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00002'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.

Run at startup
Yes

Sampling interval
None. Data is analyzed when it becomes available.

Situation persistence
Not Applicable

Error conditions
Warning

Clearing conditions
The situation does not clear automatically.

KVD_OData_App_Instance_Fail situation

Description
The collection of Application Instance data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.

Formula

```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00001'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.

Run at startup
Yes

Sampling interval
None. Data is analyzed when it becomes available.

Situation persistence
Not Applicable

Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Catalog_Fail situation
Description
The collection of Catalog data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00003'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Connection_Fail situation
Description
The collection of Connection data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00005'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Conn_Log_Fail situation
Description
The collection of Connection Failure Log data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00004'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Deliv_Group_Fail situation
Description
The collection of Delivery Group data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00006'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Hypervisor_Fail situation
Description
The collection of Hypervisor data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00007'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Load_Index_Fail situation

Description
The collection of Load Index data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.

Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00008'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.

Run at startup
Yes

Sampling interval
None. Data is analyzed when it becomes available.

Situation persistence
Not Applicable

Error conditions
Warning

Clearing conditions
The situation does not clear automatically.

KVD_OData_Machine_Fail situation

Description
The collection of Machine data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.

Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00010'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.

Run at startup
Yes

Sampling interval
None. Data is analyzed when it becomes available.

Situation persistence
Not Applicable

Error conditions
Warning

Clearing conditions
The situation does not clear automatically.

KVD_OData_Machine_Log_Fail situation

Description
The collection of Machine Failure Log data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.

Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00009'
```

See “Attributes in each attribute group” on page 25 for descriptions of the attributes in this formula.

Distribution
This situation is automatically distributed to instances of this agent.

Run at startup
Yes

Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_Session_Fail situation
Description
The collection of Session data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00011'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_OData_User_Fail situation
Description
The collection of User data from the XenDesktop system does not return promptly.

The situation is evaluated for each distinct value of Message.
Formula
```
*IF *SCAN KVD_AGENT_DATA_PROVIDER_LOG.MESSAGE *EQ 'KVD00012'
```
See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is automatically distributed to instances of this agent.
Run at startup
Yes
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

KVD_site_critical_event situation
Description
A critical event occurred on the XenDesktop site.

The situation is evaluated for each distinct value of event_reason.

Formula

```
*IF *SCAN KVD_SITE_EVENTS.event_severity *EQ 'Critical'
```

See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.

Distribution

This situation is available for distribution.

Run at startup

No

Sampling interval

None. Data is analyzed when it becomes available.

Situation persistence

Not Applicable

Error conditions

Critical

Clearing conditions

The situation does not clear automatically.

KVD_site_warning_event situation

Description

A warning event occurred on the XenDesktop site.

The situation is evaluated for each distinct value of event_reason.

Formula

```
*IF *SCAN KVD_SITE_EVENTS.event_severity *EQ 'Warning'
```

See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.

Distribution

This situation is available for distribution.

Run at startup

No

Sampling interval

None. Data is analyzed when it becomes available.

Situation persistence

Not Applicable

Error conditions

Warning

Clearing conditions

The situation does not clear automatically.

User Navigator item

No predefined situations are included for this Navigator item.

VDA Machine Navigator item

KVD_vda_machine_critical_event situation

Description

A critical event occured on the XenDesktop VDA machine.

The situation is evaluated for each distinct value of event_reason.

Formula

```
*IF *SCAN KVD_VDA_MACHINE_EVENTS.event_severity *EQ 'Critical'
```

See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.

Distribution

This situation is available for distribution.

Run at startup
No
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Critical
Clearing conditions
The situation does not clear automatically.

KVD_vda_machine_warning_event situation
Description
A warning event occured on the XenDesktop VDA machine.

The situation is evaluated for each distinct value of event_reason.
Formula
```
*IF *SCAN KVD_VDA_MACHINE_EVENTS.event_severity *EQ 'Warning'
```

See "Attributes in each attribute group" on page 25 for descriptions of the attributes in this formula.
Distribution
This situation is available for distribution.
Run at startup
No
Sampling interval
None. Data is analyzed when it becomes available.
Situation persistence
Not Applicable
Error conditions
Warning
Clearing conditions
The situation does not clear automatically.

Chapter 6. Take Action commands reference

Take Action commands can be run from the portal client or included in a situation or a policy.

About Take Action commands

When included in a situation, the command runs when the situation becomes true. A Take Action command in a situation is also referred to as *reflex automation*. When you enable a Take Action command in a situation, you automate a response to system conditions. For example, you can use a Take Action command to send a command to restart a process on the managed system or to send a text message to a cell phone.

In advanced automation, policies are used to take actions, schedule work, and automate manual tasks. A policy comprises a series of automated steps called activities that are connected to create a workflow. After an activity is completed, the Tivoli Enterprise Portal receives return-code feedback, and advanced automation logic responds with subsequent activities that are prescribed by the feedback.

A basic Take Action command shows the return code of the operation in a message box that is displayed after the action is completed or in a log file. After you close this window, no further information is available for this action.

Additional information about Take Action commands

For more information about working with Take Action commands, see "Take Action commands" in the *Tivoli Enterprise Portal User's Guide*.

Predefined Take Action commands

Not all agents have predefined Take Action commands. But you can create Take Action commands for any agent.

Chapter 7. Policies reference

Policies are used as an advanced automation technique for implementing more complex workflow strategies than you can create through simple automation. All agents do not provide predefined policies, but you can create policies for any agent.

A *policy* is a set of automated system processes that can take actions, schedule work for users, or automate manual tasks. You use the Workflow Editor to design policies. You control the order in which the policy executes a series of automated steps, which are also called *activities*. Policies are connected to create a workflow. After an activity is completed, the Tivoli Enterprise Portal receives return-code feedback, and advanced automation logic responds with subsequent activities prescribed by the feedback.

For more information about working with policies, see "Automation with policies" in the *Tivoli Enterprise Portal User's Guide*.

For information about using the Workflow Editor, see the *IBM Tivoli Monitoring Administrator's Guide* or the Tivoli Enterprise Portal online help.

Predefined policies

Not all agents have predefined policies. But you can create policies for any agent.

The IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure does not provide predefined policies.

Chapter 8. Troubleshooting

Problems can be related to IBM Tivoli Monitoring or the specific agent that you are using.

For general troubleshooting information, see the *IBM Tivoli Monitoring Troubleshooting Guide*. For other problem-solving options, see "Support information" on page 209.

You can resolve some problems by ensuring that your system matches the system requirements listed in the Prerequisites topic for the agent in the information center, or in the Chapter 2, "Agent installation and configuration," on page 7 topic of the agent user's guide.

The following activities can help you find a solution to the problem you are having:

- "Gathering product information for IBM Software Support"
- "Using logging" on page 184
- "Consulting the lists of identified problems and workarounds" on page 184

Gathering product information for IBM Software Support

Before contacting IBM Software Support about a problem you are experiencing with this product, gather the information shown in Table 2.

Table 2. Information to gather before contacting IBM Software Support

Information type	Description
Log files	Collect trace log files from failing systems. Most logs are located in a logs subdirectory on the host computer. See "Principal trace log files" on page 185 for lists of all trace log files and their locations. For general information about the IBM Tivoli Monitoring environment, see the *Tivoli Enterprise Portal User's Guide*.
Citrix XenApp and XenDesktop information	Version number and patch level
Operating system	Operating system version number and patch level
Messages	Messages and other information displayed on the screen
Version numbers for IBM Tivoli Monitoring	Version number of the following members of the monitoring environment: • IBM Tivoli Monitoring. Also provide the patch level, if available. • IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure
Screen captures	Screen captures of incorrect output, if any
(UNIX systems only) Core dump files	If the system stops on UNIX systems, collect the core dump file from the *install_dir*/bin directory, where *install_dir* is the directory where you installed the monitoring agent.

You can use the pdcollect tool to collect the most commonly used information from a system. This tool gathers log files, configuration information, version information, and other data. For more information about using this tool, see "pdcollect tool" in the *IBM Tivoli Monitoring Troubleshooting Guide*.

For information about working with IBM Software Support, see IBM Support Portal Service Requests and PMRs (http://www.ibm.com/support/entry/portal/Open_service_request/Software/Software_support_(general)).

Using logging

Logging is the primary troubleshooting feature in the Citrix Virtual Desktop Infrastructure agent. *Logging* refers to the text messages and trace data that is generated by the Citrix Virtual Desktop Infrastructure agent. Messages and trace data are sent to a file.

Trace data captures transient information about the current operating environment when a component or application fails to operate as designed. IBM Software Support personnel use the captured trace information to determine the source of an error or unexpected condition. See "Trace logging" for more information.

Consulting the lists of identified problems and workarounds

Known problems are organized into types such as those in the following list to make them easier to locate:

- Installation and configuration
- General usage and operation
- Display of monitoring data
- Take Action commands

Information about symptoms and detailed workarounds for these types of problems is located in "Problems and workarounds" on page 194.

For general troubleshooting information, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Trace logging

Trace logs are used to capture information about the operating environment when component software fails to operate as designed.

The principal log type is the RAS (Reliability, Availability, and Serviceability) trace log. These logs are in the English language only. The RAS trace log mechanism is available for all components of IBM Tivoli Monitoring. Most logs are located in a logs subdirectory on the host computer. See the following information to learn how to configure and use trace logging:

- "Principal trace log files" on page 185
- "Examples: Using trace logs" on page 188
- "Setting RAS trace parameters by using the GUI" on page 189

Note: The documentation refers to the RAS facility in IBM Tivoli Monitoring as "RAS1."

IBM Software Support personnel use the information captured by trace logging to trace a problem to its source or to determine why an error occurred. All components in the IBM Tivoli Monitoring environment have a default tracing level. The tracing level can be changed on a per-component level to adjust the type of trace information collected, the degree of trace detail, the number of trace logs to be kept, and the amount of disk space used for tracing.

Overview of log file management

Knowing the naming conventions for log files helps you to find the files.

Agent log file naming conventions

Table 3 provides the names, locations, and descriptions of IBM Tivoli Monitoring general RAS1 log files. The log file names for the Citrix Virtual Desktop Infrastructure agent adhere to the following naming convention:

Windows systems
hostname_productcode_instance-name_program_HEXtimestamp-nn.log

Linux and UNIX systems
hostname_productcode_instance-name_program_HEXtimestamp-nn.log

Where:

hostname
Host name of the computer where the monitoring component is running.

productcode
Two-character product code. For IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure, the product code is vd.

instance-name
Instance name of the agent.

program
Name of the program being run.

HEXtimestamp
Hexadecimal time stamp representing the time at which the program started.

nn Rolling log suffix.

Principal trace log files

Trace log files are located on various systems.

Table 3 contains locations, file names, and descriptions of trace logs that can help determine the source of problems with agents.

Table 3. Trace log files for troubleshooting agents

System where log is located	File name and path	Description
On the Tivoli Enterprise Monitoring Server	• **Windows:** The IBM Tivoli Monitoring *timestamp*.log file in the *install_dir*\InstallITM path • **UNIX:** The candle_installation.log file in the *install_dir*/logs path • **Linux:** The candle_installation.log file in the *install_dir*/logs path	Provides details about products that are installed. **Note:** Trace logging is enabled by default. A configuration step is not required to enable this tracing.
On the Tivoli Enterprise Monitoring Server	The Warehouse_Configuration.log file is in the following location on Windows systems: *install_dir*\InstallITM	Provides details about the configuration of data warehousing for historical reporting.

Table 3. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description
On the Tivoli Enterprise Monitoring Server	The name of the RAS log file is as follows: • **Windows:** *install_dir*\logs\ *hostname*_ms_*timestamp-nn*.log • **UNIX:** *install_dir*/logs/ *hostname*_ms_*timestamp-nn*.log • **Linux:** *install_dir*/logs/ *hostname*_ms_*timestamp-nn*.log **Note:** File names for RAS1 logs include a hexadecimal time stamp. Also on UNIX systems, a log with a decimal time stamp is provided: *hostname_productcode_timestamp*.log and *hostname_productcode_ timestamp*.pid nnnnn in the *install_dir*/logs path, where *nnnnn* is the process ID number.	Traces activity on the monitoring server.
On the Tivoli Enterprise Portal Server	The name of the RAS log file is as follows: • **Windows:** *install_dir*\logs\ *hostname* _cq_HEXtimestamp-nn.log • **UNIX:** *install_dir* /logs/*hostname*_cq_HEXtimestamp-nn.log • **Linux:** *install_dir* /logs/*hostname*_cq_HEXtimestamp-nn.log **Note:** File names for RAS1 logs include a hexadecimal time stamp. Also on UNIX systems, a log with a decimal time stamp is provided: *hostname_productcode_timestamp* .log and *hostname_productcode_ timestamp*.pid*nnnnn* in the *install_dir*/logs path, where *nnnnn* is the process ID number.	Traces activity on the portal server.
On the Tivoli Enterprise Portal Server	The teps_odbc.log file is located in the following path: • **Windows:** *install_dir*\InstallITM • **UNIX:** *install_dir*/logs • **Linux:** *install_dir*/logs	When you enable historical reporting, this log file traces the status of the warehouse proxy agent.

Table 3. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description
On the computer that hosts the monitoring agent	The RAS1 log files are as follows: • **Windows:** *hostname*_vd_*instance_name*_kvdagent_HEXtimestamp-nn.log in the *install_dir*\tmaitm6\logs directory • **UNIX:** *hostname*_vd_*instance_name*_kvdagent_HEXtimestamp-nn.log in the *install_dir*/logs directory • **Linux:** *hostname*_vd_*instance_name*_kvdagent_HEXtimestamp-nn.log in the *install_dir*/logs directory These logs are in the following directories: • **Windows:** *install_dir*\tmaitm6\logs • **UNIX:** *install_dir*/logs • **Linux:** *install_dir*/logs On Linux systems, the following additional logs are provided: – *hostname*_vd_timestamp.log – *hostname*_vd_timestamp.pidnnnnn in the *install_dir*/logs path, where *nnnnn* is the process ID number	Traces activity of the monitoring agent.
On the computer that hosts the monitoring agent	The agent operations log files are as follows: *instance_hostname*VD.LG0 is the current log created when the agent was started. *instance_hostname*_VD.LG1 is the backup of the previous log. These logs are in the following directory depending on the operating system that you are using: • **Windows:** *install_dir*\tmaitm6\logs • **Linux:** *install_dir*/logs • **UNIX:** *install_dir*/logs	Shows whether the agent could connect to the monitoring server. Shows which situations are started and stopped, and shows other events while the agent is running. A new version of this file is generated every time the agent is restarted. IBM Tivoli Monitoring generates one backup copy of the *.LG0 file with the tag .LG1. View the .LG1 tag to learn the following details regarding the *previous* monitoring session: • Status of connectivity with the monitoring server • Situations that were running • The success or failure status of Take Action commands

Table 3. Trace log files for troubleshooting agents (continued)

System where log is located	File name and path	Description
Definitions of variables: • *timestamp* is a time stamp with a format that includes year (y), month (m), day (d), hour (h), and minute (m), as follows: **yyyymmdd hhmm** • *HEXtimestamp* is a hexadecimal representation of the time at which the process was started. • *install_dir* represents the directory path where you installed the IBM Tivoli Monitoring component. *install_dir* can represent a path on the computer that hosts the monitoring system, the monitoring agent, or the portal. • *instance* refers to the name of the database instance that you are monitoring. • *instance_name* refers to the name of the agent instance. • *hostname* refers to the name of the computer on which the IBM Tivoli Monitoringcomponent runs. • *nn* represents the circular sequence in which logs are rotated. this value includes a range from 1 - 5, by default. The first is always retained because it includes configuration parameters. • *productcode* specifies the product code, for example, um for Universal Agent or nt for Windows systems.		

For more information about the complete set of trace logs that are maintained on the monitoring server, see the *IBM Tivoli Monitoring Installation and Setup Guide*.

Examples: Using trace logs

You can open trace logs in a text editor to learn some basic facts about your IBM Tivoli Monitoring environment.

IBM Software Support applies specialized knowledge to analyze trace logs to determine the source of problems. The following examples are from the Tivoli Enterprise Monitoring Server log.

Example one

This excerpt shows the typical log for a failed connection between a monitoring agent and a monitoring server with the host name **server1a**:

```
(Thursday, August 11, 2005, 08:21:30-{94C}kdcl0cl.c,105,"KDCL0_ClientLookup") status=1c020006,
 "location server unavailable", ncs/KDC1_STC_SERVER_UNAVAILABLE
(Thursday, August 11, 2005, 08:21:35-{94C}kraarreg.cpp,1157,"LookupProxy") Unable to connect to
 broker at ip.pipe:: status=0, "success", ncs/KDC1_STC_OK
(Thursday, August 11, 2005, 08:21:35-{94C}kraarreg.cpp,1402,"FindProxyUsingLocalLookup") Unable
 to find running CMS on CT_CMSLIST <IP.PIPE:#server1a>
```

Example two

The following excerpts from the trace log *for the monitoring server* show the status of an agent, identified here as "Remote node." The name of the computer where the agent is running is **SERVER5B**:

```
(42C039F9.0000-6A4:kpxreqhb.cpp,649,"HeartbeatInserter") Remote node SERVER5B:VD is ON-LINE.
. . .
(42C3079B.0000-6A4:kpxreqhb.cpp,644,"HeartbeatInserter") Remote node SERVER5B:VD is OFF-LINE.
```

See the following key points about the preceding excerpts:

- The monitoring server appends the **VD** product code to the server name to form a unique name (SERVER5B:VD) for this instance of the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure. By using this unique name, you can distinguish multiple monitoring products that might be running on **SERVER5B**.
- The log shows when the agent started (ON-LINE) and later stopped (OFF-LINE) in the environment.
- For the sake of brevity, an ellipsis (...) represents the series of trace log entries that were generated while the agent was running.
- Between the ON-LINE and OFF-LINE log entries, the agent was communicating with the monitoring server.

- The ON-LINE and OFF-LINE log entries are always available in the trace log. All trace levels that are described in "Setting RAS trace parameters by using the GUI" provide these entries.

On Windows systems, you can use the following alternate method to view trace logs:

1. In the Windows **Start** menu, click **Program Files** > **IBM Tivoli Monitoring** > **Manage Tivoli Enterprise Monitoring Services**. The Manage Tivoli Enterprise Monitoring Services window is displayed.
2. Right-click a component and click **Advanced** > **View Trace Log** in the menu. For example, if you want to view the trace log of the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure, right-click the name of that agent in the window. You can also use the viewer to access remote logs.

   Note: The viewer converts time stamps in the logs to a format that is easier to read.

RAS trace parameters

Pinpoint a problem by setting detailed tracing of individual components of the monitoring agent and modules

See "Overview of log file management" on page 184 to ensure that you understand log rolling and can reference the correct log files when you manage log file generation.

Setting RAS trace parameters by using the GUI

On Windows systems, you can use the graphical user interface to set trace options.

About this task

The IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure uses RAS1 tracing and generates the logs described in Table 3 on page 185. The default RAS1 trace level is ERROR.

Procedure

1. Open the Manage Tivoli Enterprise Monitoring Services window.
2. Select **Advanced** > **Edit Trace Parms**. The Tivoli Enterprise Monitoring Server Trace Parameters window is displayed.
3. Select a new trace setting in the pull-down menu in the **Enter RAS1 Filters** field or type a valid string.
   - General error tracing. KBB_RAS1=ERROR
   - Intensive error tracing. KBB_RAS1=ERROR (UNIT:kvd ALL)
   - Maximum error tracing. KBB_RAS1=ERROR (UNIT:kvd ALL) (UNIT:kra ALL)

   Note: As this example shows, you can set multiple RAS tracing options in a single statement.
4. Modify the value for Maximum Log Size Per File (MB) to change the log file size (changes LIMIT value).
5. Modify the value for Maximum Number of Log Files Per Session to change the number of log files per startup of a program (changes COUNT value).
6. Modify the value for Maximum Number of Log Files Total to change the number of log files for all startups of a program (changes MAXFILES value).
7. Optional: Click Y (Yes) in the **KDC_DEBUG Setting** menu to log information that can help you diagnose communications and connectivity problems between the monitoring agent and the monitoring server. The **KDC_DEBUG** setting and the **Maximum error tracing** setting can generate a large amount of trace logging. Use these settings only temporarily, while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

8. Click **OK**. You see a message reporting a restart of the monitoring agent so that your changes take effect.

What to do next

Monitor the size of the `logs` directory. Default behavior can generate a total of 45 - 60 MB for each agent that is running on a computer. For example, each database instance that you monitor can generate 45 - 60 MB of log data. See the "Procedure" section to learn how to adjust file size and numbers of log files to prevent logging activity from occupying too much disk space.

Regularly prune log files other than the RAS1 log files in the `logs` directory. Unlike the RAS1 log files that are pruned automatically, other log types can grow indefinitely, for example, the logs in Table 3 on page 185 that include a process ID number (PID).

Use collector trace logs as an additional source of troubleshooting information.

Note: The **KDC_DEBUG** setting and the **Maximum error tracing** setting can generate a large amount of trace logging. Use these settings only temporarily while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

Manually setting RAS trace parameters

You can manually edit the RAS1 trace logging parameters.

About this task

The Citrix Virtual Desktop Infrastructure agent uses RAS1 tracing and generates the logs described in Table 3 on page 185. The default RAS1 trace level is ERROR.

Procedure

1. Open the trace options file:
   - **Windows systems:**
     install_dir\tmaitm6\KVDENV_*instance name*
   - **UNIX systems:**
     install_dir /config/vd_*instance name*.config
2. Edit the line that begins with **KBB_RAS1=** to set trace logging preferences. For example, if you want detailed trace logging, set the **Maximum Tracing** option: `KBB_RAS1=ERROR (UNIT:kvd ALL) (UNIT:kra ALL)`
3. Edit the line that begins with **KBB_RAS1_LOG=** to manage the generation of log files:
   - **MAXFILES**: The total number of files that are to be kept for all startups of a specific program. When this value is exceeded, the oldest log files are discarded. The default value is 9.
   - **LIMIT**: The maximum size, in megabytes (MB) of a RAS1 log file. The default value is 5.
   - IBM Software Support might guide you to modify the following parameters:
     – **COUNT**: The number of log files to keep in the rolling cycle of one program startup. The default is 3.
     – **PRESERVE**: The number of files that are not to be reused in the rolling cycle of one program startup. The default value is 1.

     Note: The **KBB_RAS1_LOG** parameter also provides for the specification of the log file directory, log file name, and the inventory control file directory and name. Do not modify these values or log information can be lost.
4. Restart the monitoring agent so that your changes take effect.

What to do next

Monitor the size of the `logs` directory. Default behavior can generate a total of 45 - 60 MB for each agent that is running on a computer. For example, each database instance that you monitor can generate 45 - 60 MB of log data. See the "Procedure" section to learn how to adjust file size and numbers of log files to prevent logging activity from occupying too much disk space.

Regularly prune log files other than the RAS1 log files in the `logs` directory. Unlike the RAS1 log files that are pruned automatically, other log types can grow indefinitely, for example, the logs in Table 3 on page 185 that include a process ID number (PID).

Use collector trace logs as an additional source of troubleshooting information.

Note: The **KDC_DEBUG** setting and the **Maximum error tracing** setting can generate a large amount of trace logging. Use these settings only temporarily while you are troubleshooting problems. Otherwise, the logs can occupy excessive amounts of hard disk space.

Dynamic modification of trace settings

You can dynamically modify the trace settings for an IBM Tivoli Monitoring component, such as, Tivoli Enterprise Monitoring Server, Tivoli Enterprise Portal Server, most monitoring agents, and other components. You can access these components, except for a few monitoring agents, from the tracing utility.

Dynamic modification of the trace settings is the most efficient method, because you can do it without restarting the component. Settings take effect immediately. Modifications by this method are not persistent.

Note: When the component is restarted, the trace settings are read again from the `.env` file. Dynamically modifying these settings does not change the settings in the `.env` files. To modify these trace settings permanently, modify them in the `.env` files.

ras1

Run this command to modify the trace settings for a Tivoli Monitoring component.

The syntax is as follows:

```
ras1 set|list (UNIT|COMP: class_name ANY|ALL|Detail|ERROR|Flow|INPUT|Metrics|OUTPUT|STATE)
{(UNIT|COMP: class_name ANY|ALL|Detail|ERROR|Flow|INPUT|Metrics|OUTPUT|STATE)}
```

You can specify more than one component class to which to apply the trace settings.

Command options

set
: Turns on or off tracing depending upon the value of its parameters. If the parameter is **ANY**, it turns it off. All other parameters turn on tracing based on the specified type or level.

list
: Displays the default level and type of tracing that is set by default.

Parameters

The parameters that determine the component classes to which to apply the trace settings are as follows:

COMP: *class_name*
: Modifies the trace setting for the name of the component class, as specified by *class_name* , for example, `COMP:KDH`. The output contains trace for the specified class.

UNIT: *class_name*
Modifies the trace setting for any unit that starts with the specified *class_name* value, for example, `UNIT: kra`. The output contains trace for any unit that begins with the specified filter pattern.

The parameters that determine the trace level and type are as follows:

ALL
Displays all trace levels, including every trace point defined for the component. This setting might result in a large amount of trace, so specify other parameters to exclude unwanted trace. You might require the **ALL** parameter to isolate a problem, which is the equivalent to setting `"Error Detail Flow State Input Output Metrics"`.

ANY
Turns off tracing.

Detail
Displays detailed information about each function.

When entered with the `list` option, the trace is tagged with `Det`.

ERROR
Logs internal error conditions.

When entered with the `list` option, the trace is tagged with `ER`. The output can also be tagged with `EVERYE+EVERYU+ER`.

Flow
Displays control flow data for each function entry and exit.

When entered with the `list` option, the trace is tagged with `Fl`.

INPUT
Displays input data for each function.

When entered with the `list` option, the trace is tagged with `IN`.

Metrics
Displays metrics on each function.

When entered with the `list` option, the trace is tagged with `ME`.

OUTPUT
Displays output data for each function.

When entered with the `list` option, the trace is tagged with `OUT`.

State
Displays the status for each function.

When entered with the `list` option, the trace is tagged with `St`.

Example

If you enter `ras1 set (COMP:KDH ALL) (COMP:ACF1 ALL) (COMP:KDE ALL)`, the trace utility turns on all levels of tracing for all the files and functions for which `KDH`, `ACF1`, and `KDE` are the classes.

```
kbbcre1.c, 400, May 29 2007, 12:54:43, 1.1, *
kbbcrn1.c, 400, May 29 2007, 12:54:42, 1.1, *
kdhb1de.c, 400, May 29 2007, 12:59:34, 1.1, KDH
kdh0med.c, 400, May 29 2007, 12:59:24, 1.1, KDH
kdhsrej.c, 400, May 29 2007, 13:00:06, 1.5, KDH
kdhb1fh.c, 400, May 29 2007, 12:59:33, 1.1, KDH
kdhb1oe.c, 400, May 29 2007, 12:59:38, 1.2, KDH
kdhs1ns.c, 400, May 29 2007, 13:00:08, 1.3, KDH
kbbacdl.c, 400, May 29 2007, 12:54:27, 1.2, ACF1
kbbaclc.c, 400, May 29 2007, 12:54:27, 1.4, ACF1
```

```
kbbac1i.c, 400, May 29 2007, 12:54:28, 1.11, ACF1
vkdhsfcn.c, 400, May 29 2007, 13:00:11, 1.1, KDH
kdhserq.c, 400, May 29 2007, 12:59:53, 1.1, KDH
kdhb1pr.c, 400, May 29 2007, 12:59:39, 1.1, KDH
kdhsgnh.c, 400, May 29 2007, 12:59:49, 1.1, KDH
kdh0uts.c, 400, May 29 2007, 12:59:23, 1.1, KDH
kdhsrsp.c, 400, May 29 2007, 13:00:13, 1.2, KDH
kdhs1rp.c, 400, May 29 2007, 13:00:12, 1.1, KDH
kdhscsv.c, 400, May 29 2007, 12:59:58, 1.9, KDH
kdebbac.c, 400, May 29 2007, 12:56:50, 1.10, KDE
...
```

Turning on tracing

To use the tracing utility, you must use a local logon credential for the computer. This tracing method uses the IBM Tivoli Monitoring Service Console. Access the Service Console by using a web browser.

About this task

When you start the Service Console, information is displayed about the components that are currently running on that computer. For example, these components are listed as follows:

- Tivoli Enterprise Portal Server: `cnp`
- Monitoring Agent for Windows OS: `nt`
- Tivoli Enterprise Monitoring Server: `ms`

After you log on, you can type a question mark (?) to display a list of the supported commands. Use the **ras1** command to modify trace settings. If you type this command in the field provided in the Service Console window and click **Submit**, the help for this command is displayed.

Procedure

1. Open a web browser and enter the URL to access the Service Console.

   `http://`*`hostname`*`:1920`

   where *hostname* is the IP address or host name of the computer on which the IBM Tivoli Monitoring component is running.
2. Click the hyperlink associated with the component for which you want to modify its trace settings.

   Note: In the previous view, if you want to modify tracing for the Tivoli Enterprise Monitoring Server, select **IBM Tivoli Monitoring Service Console** under **Service Point: system.*your host name*_ms**.
3. Enter a user ID and password to access the system. This ID is any valid user that has access to the system.
4. Enter the command to turn on the required level of trace for the specified component classes or units.

   ```
   ras1 set (UNIT|COMP: class_name ALL|Flow|ERROR|Detail|INPUT|Metrics|OUTPUT|STATE)
   {(UNIT|COMP: class_name ALL|Flow|ERROR|Detail|INPUT|Metrics|OUTPUT|STATE)}
   ```

   For example, to turn on the control flow trace for the KDE, the command is:

   ```
   ras1 (COMP:KDE Flow)
   ```

Turning off tracing

You can use the IBM Tivoli Monitoring Service Console to run the **ras1** command and dynamically turn off tracing.

Procedure

1. Open a web browser and enter the URL to access the Service Console.

   `http://`*`hostname`*`:1920`

where *hostname* is the IP address or host name of the computer on which the IBM Tivoli Monitoring component is running.

2. Click the hyperlink associated with the component for which you want to modify its trace settings.
3. Enter a user ID and password to access the system. This ID is any valid user that has access to the system.
4. Enter the command to turn off the required level of trace for the specified component classes or units.

   ```
   ras1 set (UNIT|COMP: class_name ANY)
   {(UNIT|COMP: class_name ANY)}
   ```

   For example, to turn off tracing for the `kbbcrcd` class of the Windows OS agent, the command is:

   ```
   ras1 set (UNIT:kbbcrcd ANY)
   ```

Setting trace parameters for the Tivoli Enterprise Console server

In addition to the trace information captured by IBM Tivoli Monitoring, you can also collect additional trace information for the Tivoli Enterprise Console components that gather event server metrics.

About this task

To collect this information, modify the `.tec_diag_config` file on the Tivoli Enterprise Console event server. Use the steps in the following procedure to modify the event server trace parameters.

Procedure

1. Open the `$BINDIR/TME/TEC/.tec_diag_config` file in an ASCII editor.
2. Locate the entries that configure trace logging for the agent components on the event server. Two entries are included, one for `tec_reception` and one for `tec_rule`:

   ```
   # to debug Agent Utils
   tec_reception Agent_Utils  error   /tmp/tec_reception
   SP
   # to debug Agent Utils
   tec_rule Agent_Utils   error   /tmp/tec_rule
   ```

3. To gather additional trace information, modify these entries to specify a trace level of `trace2`:

   ```
   # to debug Agent Utils
   tec_reception Agent_Utils   trace2  /tmp/tec_reception
   SP
   # to debug Agent Utils
   tec_rule Agent_Utils       trace2  /tmp/tec_rule
   ```

4. In addition, modify the `Highest_level` entries for `tec_rule` and `tec_reception`:

   ```
   tec_reception Highest_level  trace2
   SP
   tec_rule Highest_level trace2
   ```

Problems and workarounds

The known problems and workarounds are organized into types of problems that might occur with the Citrix Virtual Desktop Infrastructure agent, for example installation and configuration problems and workspace problems.

Note: You can resolve some problems by ensuring that your system matches the system requirements listed in the Prerequisites topic for the agent in the IBM Tivoli Monitoring for Virtual Environments Information Center.

Note: You can resolve some problems by ensuring that your system matches the system requirements listed in Chapter 2, “Agent installation and configuration,” on page 7.

For general troubleshooting information, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Installation and configuration troubleshooting

Problems can occur during installation, configuration, and uninstallation of the agent.

The problems and solutions in Table 4 can occur during installation, configuration, and uninstallation of the agent.

Table 4. Problems and solutions for installation and configuration

Problem	Solution
(*UNIX only*) During a command-line installation, you choose to install a component that is currently installed, and you see the following warning: `WARNING - you are about to install the SAME version of "component_name"` where *component_name* is the name of the component that you are attempting to install. **Note:** This problem affects UNIX command-line installations. If you monitor only Windows environments, you see this problem if you choose to install a product component (for example, a monitoring server) on a UNIX system.	You must exit and restart the installation process. You cannot return to the list where you selected components to install. When you run the installer again, do not attempt to install any component that is currently installed.
Diagnosing problems with product browse settings (Windows systems only).	When you have problems with browse settings, complete the following steps: 1. Click **Start** > **Programs** > **IBM Tivoli Monitoring** > **Manage Tivoli Enterprise Monitoring Services**. The Manage Tivoli Enterprise Monitoring Services window is displayed. 2. Right-click the Windows agent and select **Browse Settings**. A text window is displayed. 3. Click **Save As** and save the information in the text file. If requested, you can forward this file to IBM Software Support for analysis.
A message similar to `"Unable to find running CMS on CT_CMSLIST"` in the log file is displayed.	If a message similar to `"Unable to find running CMS on CT_CMSLIST"` is displayed in the log file, the agent cannot connect to the monitoring server. Confirm the following points: • Do multiple network interface cards (NICs) exist on the system? • If multiple NICs exist on the system, find out which one is configured for the monitoring server. Ensure that you specify the correct host name and port settings for communication in the IBM Tivoli Monitoring environment.

Table 4. Problems and solutions for installation and configuration (continued)

Problem	Solution
The system is experiencing high CPU usage.	**Agent process:** View the memory usage of the KVDCMA process. If CPU usage seems to be excessive, restart the monitoring agent. **Network cards:** The network card configurations can decrease the performance of a system. Each stream of packets that a network card receives (assuming that it is a broadcast or destined for the under-performing system) must generate a CPU interrupt and transfer the data through the I/O bus. If the network card in question is a bus-mastering card, work can be offloaded and a data transfer between memory and the network card can continue without using CPU processing power. Bus-mastering cards are 32-bit and are based on PCI or EISA bus architectures.
The configuration panel is blank on 64-bit Windows systems where the Tivoli Enterprise Monitoring Agent Framework (component GL) is version 06.23.00.00 or 06.23.01.00.	Check the GL component version by running kincinfo -t GL from a Windows command line. Example: `%CANDLE_HOME%\InstallITM\kincinfo -t GL` If the GL component version is 06.23.00.00 or 06.23.01.00, take one of the following actions: • **Preferred action:** Upgrade the Windows OS Agent to Version 6.2.3 Fix Pack 2. • **Alternate action:** Install the Agent Compatibility (AC) component from the IBM Tivoli Monitoring V6.2.3 Fix Pack 1 media. See Installing the Agent Compatibility (AC) component (http://pic.dhe.ibm.com/infocenter/tivihelp/v15r1/topic/com.ibm.itm.doc_6.2.3fp1/itm623FP1_install199.htm#acpinstall).

Table 5. General problems and solutions for uninstallation

Problem	Solution
On Windows systems, uninstallation of IBM Tivoli Monitoring fails to uninstall the entire environment.	Be sure that you follow the general uninstallation process described in the *IBM Tivoli Monitoring Installation and Setup Guide*: 1. Remove Tivoli Enterprise Monitoring Server Application support by completing the following steps: a. Use Manage Tivoli Enterprise Monitoring Services. b. Select **Tivoli Enterprise Monitoring Server**. c. Right-click and select **Advanced**. d. Select **Remove TEMS application support**. e. Select the agent to remove its application support. 2. Uninstall the monitoring agents first, as in the following examples: • Uninstall a single monitoring agent for a specific database. -OR- • Uninstall all instances of a monitoring product, such as IBM Tivoli Monitoring for Databases. 3. Uninstall IBM Tivoli Monitoring.

Table 5. General problems and solutions for uninstallation (continued)

Problem	Solution
The way to remove inactive managed systems (systems whose status is OFFLINE) from the Navigator tree in the portal is not obvious.	Use the following steps to remove, but not uninstall, an offline managed system from the Navigator tree: 1. Click the **Enterprise** icon in the Navigator tree. 2. Right-click, and then click **Workspace** > **Managed System Status**. 3. Right-click the offline managed system, and select **Clear offline entry**. To uninstall the monitoring agent, use the procedure described in the *IBM Tivoli Monitoring Installation and Setup Guide*.
IBM Tivoli Monitoring might not be able to generate a unique name for monitoring components because of the truncation of names that the product automatically generates.	If the agent supports multiple instances, IBM Tivoli Monitoring automatically creates a name for each monitoring component by concatenating the subsystem name, host name, and product code separated by colons (*subsystem_name*:*hostname*:KVD). **Note:** When you monitor a multinode system, such as a database, IBM Tivoli Monitoring adds a subsystem name to the concatenated name, typically a database instance name. The length of the name that IBM Tivoli Monitoring generates is limited to 32 characters. Truncation can result in multiple components having the same 32-character name. If this problem happens, shorten the *hostname* portion of the name as follows: 1. Open the configuration file for the monitoring agent, which is located in the following path: • **On Windows:** *install_dir*\tmaitm6\K*product_code*CMA.INI. For example, the product code for the Monitoring Agent for Windows OS is NT. The file name is `KNTCMA.INI`. • **On UNIX and Linux:** `itm_home/config/product_code.ini` and `product_code.config`. For example, the file names for the Monitoring Agent for UNIX OS is `ux.ini` and `ux.config`. 2. Find the line that begins with `CTIRA_HOSTNAME=`. 3. Type a new name for host name that is a unique, shorter name for the host computer. The final concatenated name including the subsystem name, new host name, and KVD, cannot be longer than 32 characters. **Note:** You must ensure that the resulting name is unique with respect to any existing monitoring component that was previously registered with the Tivoli Enterprise Monitoring Server. 4. Save the file. 5. Restart the agent.
The software inventory tag for the agent on UNIX and Linux systems is not removed during uninstallation of the agent.	After uninstalling the agent, manually remove the file named `full name of agent.cmptag` from the `$CANDLEHOME/properties/version/` directory.

Table 5. General problems and solutions for uninstallation (continued)

Problem	Solution
When the agent is installed using group deployment, deploygroup was run multiple times. The group deployment starts and completes successfully, but there were multiple entries in the Deploy Status Summary workspace on the Tivoli Enterprise Portal. When the command tried to install multiple times, the additional installations were queued and then were in failed state though the agent was deployed successfully. **Note:** • When the bundle group contains a single bundle and the deployment group contains more than one member (managed system of the same type as AIX or Linux), the deployment is successful on both systems. • When the bundle group contains more than one bundle and the deploy group contains single or multiple members, the deployment will be executed on each group member (managed system) depending on the members present in the bundle group and deploy group. • The command creates a transaction for each XX bundle for each target system; the bundle matching the operating system for the deployment member is processed successfully; and remaining transactions were in a queued or failed state.	There is no solution at this time.

Remote deployment troubleshooting

Problems can occur with remote deployment and removal of agent software using the Agent Remote Deploy process.

Table 6 contains problems and solutions related to remote deployment.

Table 6. Remote deployment problems and solutions

Problem	Solution
While you are using the remote deployment feature to install the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure, an empty command window is displayed on the target computer. This problem occurs when the target of remote deployment is a Windows computer. (For more information about the remote deployment feature, see the *IBM Tivoli Monitoring Installation and Setup Guide*.)	Do not close or modify this window. It is part of the installation process and is dismissed automatically.
The removal of a monitoring agent fails when you use the remote removal process in the Tivoli Enterprise Portal desktop or browser.	This problem might occur when you attempt the remote removal process immediately after you restart the Tivoli Enterprise Monitoring Server. You must allow time for the monitoring agent to refresh its connection with the Tivoli Enterprise Monitoring Server before you begin the remote removal process.

Agent troubleshooting

A problem can occur with the agent after it has been installed.

Table 7 on page 199 contains problems and solutions that can occur with the agent after it is installed.

Table 7. Agent problems and solutions

Problem	Solution
Log data accumulates too rapidly.	Check the RAS trace option settings, which are described in "Setting RAS trace parameters by using the GUI" on page 189. The trace option settings that you can set on the `KBB_RAS1=` and `KDC_DEBUG=` lines potentially generate large amounts of data.
When using the **itmcmd agent** commands to start or stop this monitoring agent, you receive the following error message: `MKCIIN0201E Specified product is not configured.`	Include the command option **-o** to specify the instance to start or stop. The instance name must match the name used for configuring the agent. For example: `./itmcmd agent -o Test1 start vd` For more information about using the itmcmd commands, see the *IBM Tivoli Monitoring Command Reference*.

Table 7. Agent problems and solutions (continued)

Problem	Solution
A configured and running instance of the monitoring agent is not displayed in the Tivoli Enterprise Portal, but other instances of the monitoring agent on the same system are displayed in the portal.	IBM Tivoli Monitoring products use Remote Procedure Call (RPC) to define and control product behavior. RPC is the mechanism that a client process uses to make a subroutine call (such as GetTimeOfDay or ShutdownServer) to a server process somewhere in the network. Tivoli processes can be configured to use TCP/UDP, TCP/IP, SNA, and SSL as the protocol (or delivery mechanism) for RPCs that you want. IP.PIPE is the name given to Tivoli TCP/IP protocol for RPCs. The RPCs are socket-based operations that use TCP/IP ports to form socket addresses. IP.PIPE implements virtual sockets and multiplexes all virtual socket traffic across a single physical TCP/IP port (visible from the **netstat** command). A Tivoli process derives the physical port for IP.PIPE communications based on the configured, well-known port for the hub Tivoli Enterprise Monitoring Server. (This well-known port or BASE_PORT is configured by using the 'PORT:' keyword on the **KDC_FAMILIES / KDE_TRANSPORT** environment variable and defaults to '1918'.) The physical port allocation method is defined as (BASE_PORT + 4096*N), where N=0 for a Tivoli Enterprise Monitoring Server process and N={1, 2, ..., 15} for another type of monitoring server process. Two architectural limits result as a consequence of the physical port allocation method: • No more than one Tivoli Enterprise Monitoring Server reporting to a specific Tivoli Enterprise Monitoring Server hub can be active on a system image. • No more than 15 IP.PIPE processes can be active on a single system image. A single system image can support any number of Tivoli Enterprise Monitoring Server processes (address spaces) if each Tivoli Enterprise Monitoring Server on that image reports to a different hub. By definition, one Tivoli Enterprise Monitoring Server hub is available per monitoring enterprise, so this architecture limit has been reduced to one Tivoli Enterprise Monitoring Server per system image. No more than 15 IP.PIPE processes or address spaces can be active on a single system image. With the first limit expressed earlier, this second limitation refers specifically to Tivoli Enterprise Monitoring Agent processes: no more than 15 agents per system image. Continued on next row.

Table 7. Agent problems and solutions (continued)

Problem	Solution
Continued from previous row.	This limitation can be circumvented (at current maintenance levels, IBM Tivoli Monitoring V6.1, Fix Pack 4 and later) if the Tivoli Enterprise Monitoring Agent process is configured to use the EPHEMERAL IP.PIPE process. (This process is IP.PIPE configured with the 'EPHEMERAL:Y' keyword in the **KDC_FAMILIES / KDE_TRANSPORT** environment variable). The number of ephemeral IP.PIPE connections per system image has no limitation. If ephemeral endpoints are used, the Warehouse Proxy agent is accessible from the Tivoli Enterprise Monitoring Server associated with the agents using ephemeral connections either by running the Warehouse Proxy agent on the same computer or by using the Firewall Gateway feature. (The Firewall Gateway feature relays the Warehouse Proxy agent connection from the Tivoli Enterprise Monitoring Server computer to the Warehouse Proxy agent computer if the Warehouse Proxy agent cannot coexist on the same computer.)
I cannot find my queries.	Agents that include subnodes display their queries within the element in the Query Editor list that represents the location of the attribute group. The queries are most often found under the name of the subnode, not the name of the agent.

Workspace troubleshooting

Problems can occur with general workspaces and agent-specific workspaces.

Table 8 on page 202 contains problems and solutions related to workspaces.

Table 8. Workspace problems and solutions

Problem	Solution
The process application components are available, but the Availability status shows PROCESS_DATA_NOT_ AVAILABLE.	This problem occurs because the PerfProc performance object is disabled. When this condition exists, IBM Tivoli Monitoring cannot collect performance data for this process. Use the following steps to confirm that this problem exists and to resolve it: 1. In the Windows **Start** menu, click **Run**. 2. Type `perfmon.exe` in the **Open** field of the Run window. The Performance window is displayed. 3. Click the plus sign (+) in the toolbar. The Add Counters window is displayed. 4. Look for **Process** in the **Performance object** menu. 5. Complete one of the following actions: • If you see **Process** in the menu, the PerfProc performance object is enabled and the problem is coming from a different source. You might need to contact IBM Software Support. • If you do not see **Process** in the menu, use the Microsoft utility from the Microsoft.com Operations website to enable the PerfProc performance object. The **Process** performance object becomes visible in the **Performance object** menu of the Add Counters windows, and IBM Tivoli Monitoring is able to detect Availability data. 6. Restart the monitoring agent.
The name of the attribute does not display in a bar chart or graph view.	When a chart or graph view that includes the attribute is scaled to a small size, a blank space is displayed instead of a truncated name. To see the name of the attribute, expand the view of the chart until sufficient space is available to display all characters of the attribute name.
At the end of each view, you see the following Historical workspace KFWITM220E error: `Request failed during execution`.	Ensure that you configure all groups that supply data to the view. In the Historical Configuration view, ensure that data collection is started for all groups that supply data to the view.

Table 8. Workspace problems and solutions (continued)

Problem	Solution
You start collection of historical data but the data cannot be seen.	Use the following managing options for historical data collection: • Basic historical data collection populates the Warehouse with raw data. This type of data collection is turned off by default. For information about managing this feature including how to set the interval at which data is collected, see "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide*. By setting a more frequent interval for data collection, you reduce the load on the system incurred every time data is uploaded. • Use the Summarization and Pruning agent to collect specific amounts and types of historical data. Historical data is not displayed until the Summarization and Pruning monitoring agent begins collecting the data. By default, this agent begins collection at 2 a.m. daily. At that point, data is visible in the workspace view. For information about how to modify the default collection settings, see "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide*.
Historical data collection is unavailable because of incorrect queries in the Tivoli Enterprise Portal.	The Sort By, Group By, and First/Last functions column are not compatible with the historical data collection feature. Use of these advanced functions makes a query ineligible for historical data collection. Even if data collection has started, you cannot use the time span feature if the query for the chart or table includes column functions or advanced query options (Sort By, Group By, First / Last). To ensure support of historical data collection, do not use the Sort By, Group By, or First/Last functions in your queries. For information about the historical data collection function, See "Managing historical data" in the *IBM Tivoli Monitoring Administrator's Guide* or the Tivoli Enterprise Portal online help .
When you use a long process name in the situation, the process name is truncated.	Truncation of process or service names for situations in the Availability table in the portal display is the expected behavior. The maximum name length is 100 bytes.
Regular (non-historical) monitoring data fails to be displayed.	Check the formation of the queries you use to gather data. For example, look for invalid SQL statements.
Navigator items and workspace titles are labeled with internal names such as `Kxx:KXX0000` instead of the correct names (such as Disk), where XX and xx represent the two-character agent code.	Ensure that application support has been added on the monitoring server, portal server, and portal client. For more information about installing application support, see "Installing and enabling application support" in the *IBM Tivoli Monitoring Installation and Setup Guide*.

Situation troubleshooting

Problems can occur with situations and situation configuration.

Table 9 contains problems and solutions for situations.

Table 9. Situation problems and solutions

Problem	Solution
Monitoring activity requires too much disk space.	Check the RAS trace logging settings that are described in "Setting RAS trace parameters by using the GUI" on page 189. For example, trace logs grow rapidly when you apply the `ALL` logging option.
Monitoring activity requires too many system resources.	"Disk capacity planning for historical data" on page 163 describes the performance impact of specific attribute groups. If possible, decrease your use of the attribute groups that require greater system resources.
A formula that uses mathematical operators appears to be incorrect. For example, if you were monitoring a Linux system, the formula that calculates when **Free Memory** falls under 10 percent of **Total Memory** does not work: `LT #'Linux_VM_Stats.Total_Memory' / 10`	This formula is incorrect because situation predicates support only logical operators. Your formulas cannot have mathematical operators. **Note:** The Situation Editor provides alternatives to math operators. In the example, you can select the **% Memory Free** attribute and avoid the need for math operators.
You want to change the appearance of situations when they are displayed in the navigation tree.	1. Right-click an item in the navigation tree. 2. Click **Situations** in the menu. The Situation Editor window is displayed. 3. Select the situation that you want to modify. 4. Use the **State** menu to set the status and appearance of the Situation when it triggers. **Note:** The **State** setting is not related to severity settings in the Tivoli Enterprise Console.
When a situation is triggered in the Event Log attribute group, it remains in the Situation Event Console as long as the event ID entry is present in the Event Log workspace. When this event ID entry is removed from the Event Log workspace on the Tivoli Enterprise Portal, the situation is also cleared even if the actual problem that caused the event is not resolved, and the event ID entry is also present in the Windows Event Viewer.	A timeout occurs on the cache of events for the NT Event Log group. Increase the cache time of Event Log collection to meet your requirements by adding the following variable and timeout value to the `KpcENV` file for the agent (where *pc* is the two-letter product code): `CDP_NT_EVENT_LOG_CACHE_TIMEOUT=3600` This variable determines how long events from the NT Event Log are kept.
For a situation that uses the 'MISSING' operator and is distributed to a remote agentless monitoring subnode, no indication is displayed in the Tivoli Enterprise Portal or in the Situation Event Console when the situation becomes true.	The MISSING predicate is currently not supported on subnodes. If a situation with a MISSING predicate is distributed to a subnode, the agent cannot tell which subnode or node the event is occurring on. It inserts the system name as the origin node for the event and returns. When the event reaches the Tivoli Enterprise Portal Server, the origin node does not match the system name of the subnode where the situation is associated, so the event is dropped.
The situation for a specific agent is not visible in the Tivoli Enterprise Portal.	Open the Situation Editor. Access the All managed servers view. If the situation is not displayed, confirm that the monitoring server has been seeded for the agent. If not, seed the server, as described in the *IBM Tivoli Monitoring Installation and Setup Guide*.
The monitoring interval is too long.	Access the Situation Editor view for the situation that you want to modify. Check the **Sampling interval** area in the **Formula** tab. Adjust the time interval as required.

Table 9. Situation problems and solutions (continued)

Problem	Solution
The situation did not activate at startup.	Manually recycle the situation as follows: 1. Right-click the situation and select **Stop Situation**. 2. Right-click the situation and select **Start Situation**. **Note:** You can permanently avoid this problem by selecting the **Run at Startup** check box of the Situation Editor view for a specific situation.
The situation is not displayed.	Click the **Action** tab and check whether the situation has an automated corrective action. This action can occur directly or through a policy. The situation might be resolving so quickly that you do not see the event or the update in the graphical user interface.
An Alert event did not occur even though the predicate was correctly specified.	Check the logs, reports, and workspaces.
A situation fires on an unexpected managed object.	Confirm that you distributed and started the situation on the correct managed system.
The product did not distribute the situation to a managed system.	Click the **Distribution** tab and check the distribution settings for the situation.

Table 9. Situation problems and solutions (continued)

Problem	Solution
The situation does not fire.	This problem can be caused when incorrect predicates are present in the formula that defines the situation. For example, the managed object shows a state that normally triggers a monitoring event, but the situation is not true because the wrong attribute is specified in the formula. In the **Formula** tab, analyze predicates as follows: 1. Click the **fx** icon in the **Formula** area. The Show formula window is displayed. a. Confirm the following details in the **Formula** area of the window: • The attributes that you intend to monitor are specified in the formula. • The situations that you intend to monitor are specified in the formula. • The logical operators in the formula match your monitoring goal. • The numeric values in the formula match your monitoring goal. b. (Optional) Select the **Show detailed formula** check box to see the original names of attributes in the application or operating system that you are monitoring. c. Click **OK** to dismiss the Show formula window. 2. (Optional) In the **Formula** area of the **Formula** tab, temporarily assign numeric values that immediately trigger a monitoring event. The triggering of the event confirms that other predicates in the formula are valid. **Note:** After you complete this test, you must restore the numeric values to valid levels so that you do not generate excessive monitoring data based on your temporary settings. For additional information about situations that do not fire, see "Situations are not firing" in the *IBM Tivoli Monitoring Troubleshooting Guide*.
Situation events are not displayed in the Events Console view of the workspace.	Associate the situation with a Navigator item. **Note:** The situation does not need to be displayed in the workspace. It is sufficient that the situation is associated with any Navigator item.
You do not have access to a situation.	**Note:** You must have administrator privileges to complete these steps. 1. Click **Edit** > **Administer Users** to access the Administer Users window. 2. In the **Users** area, select the user whose privileges you want to modify. 3. In the **Permissions** tab, **Applications** tab, and **Navigator Views** tab, select the permissions or privileges that correspond to the user role. 4. Click **OK**.

Table 9. Situation problems and solutions (continued)

Problem	Solution
A managed system seems to be offline.	1. Select **Physical View** and click the Enterprise Level of the navigator tree. 2. Click **View** > **Workspace** > **Managed System Status** to see a list of managed systems and their status. 3. If a system is offline, check network connectivity and the status of the specific system or application.

Take Action commands troubleshooting

Problems can occur with Take Action commands.

Table 10 contains problems and solutions that can occur with Take Action commands.

When each Take Action command runs, it generates a log file listed in Table 3 on page 185.

Table 10. Take Action commands problems and solutions

Problem	Solution
Take Action commands often require several minutes to complete.	Allow several minutes. If you do not see a message advising you of completion, try to run the command manually.
Situations fail to trigger Take Action commands.	Attempt to manually run the Take Action command in the Tivoli Enterprise Portal. If the Take Action command works, look for configuration problems in the situation. See "Situation troubleshooting" on page 204. If the Take Action command fails, for general information about troubleshooting Take Action commands, see the *IBM Tivoli Monitoring Troubleshooting Guide*.

Discovery Library Adapter for the agent troubleshooting

Problems can occur when using the Discovery Library Adapter for the Citrix Virtual Desktop Infrastructure agent.

Table 11 contains problems and solutions that can occur when using the Discovery Library Adapter for IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure. For additional information about troubleshooting for the Discovery Library Adapter, see the IBM Tivoli Application Dependency Discovery Manager Information Center (http://publib.boulder.ibm.com/infocenter/tivihelp/v10r1/topic/com.ibm.taddm.doc_7.2/welcome_page/welcome.html).

Table 11. Discovery Library Adapter for Citrix Virtual Desktop Infrastructure agent problems and solutions

Problem	Solution

Tivoli Common Reporting troubleshooting

You can troubleshoot problems that occur with installation and with using the Tivoli Common Reporting predefined reports for the Citrix Virtual Desktop Infrastructure agent.

For installation problems, use the report installer log to identify the step where installation failed. Use the problems and solutions information to troubleshoot other problems.

Analyzing the report installer log

Review the Report_Installer_For_TCR_Output.txt file (on Windows under C:\Documents and Settings\Administrator; on Linux and UNIX under $HOME.) to identify the step on which the installer failed.

Sample log output

```
=======================================
INSTALLATION COMPLETED.
=======================================
The status of installation steps:
TCRRunDBScripts(runDbScript): FAILED
INFORMATION: /tmp/450480.tmp/reports/itmfvs/build.xml:31:
The <fileset> type doesn't support the "erroronmissingdir" attribute.
InstallReportsAction(IBM Tivoli Monitoring for
Virtual Environments Reports v7.1): SUCCESS
CognosDataSource(TDW): SUCCESS
=======================================
```

Analysis

In the sample log, the success or failure of each step is evident:

1. InstallReportsAction (Step 1 - Importing Reports) succeeded.
2. CognosDataSource(TDW) (Step 2 - Defining the Tivoli Data Warehouse data source in Cognos) succeeded.
3. RunDBScripts (Step 3 - Updating schema by running scripts against the Tivoli Data Warehouse) failed.

Step 2: Define the Tivoli Data Warehouse data source in Cognos.

Possible causes of the failure:

- The database alias that is specified during installation did not match the cataloged DB2 database alias, the Oracle local TNS service name, or the MS SQL Server ODBC data source name.
- The credentials are incorrect for connecting to the Tivoli Data Warehouse.

Solution:

- Ensure that you installed the database client on the same server as Tivoli Common Reporting and cataloged the database. If you are using Oracle, the TNS service name must be defined in the tnsnames.ora file. If you are using MS SQL server, the ODBC data source must be defined . See Connecting to the Tivoli Data Warehouse using the database client over ODBC in the *IBM Tivoli Monitoring Administrator's Guide* (http://www-01.ibm.com/support/knowledgecenter/SSTFXA_6.2.3/com.ibm.itm.doc_6.2.3/tcr_tdwconnect.htm). If you already have a Tivoli Data Warehouse data source that is defined, adding another one overwrites the existing data source.

Step 3: Make schema updates

Possible causes of failure:

- Database administrative privileges (such as db2admin or sys) are required for this step; if user is specified as ITMUSER, the schema cannot be updated.
- Database issues such as connectivity problems, full logs, space issues, or any other performance problems that prevent writing to the database.

Solution:

- An error at Step 3 is accompanied by an informational message that contains SQL errors with SQL codes. You can search on the SQL code to determine the problem.
- If Time Dimension tables are present in the database, you can choose to skip the schema update (JDBC) step while you are running the dashboard installer. If you want to create time dimension with a different granularity, you must edit the following sql file:
  1. Go to *reports package*\reports\cognos_reports\itmfvs\db_scripts.

2. Open `call_proc_DB2.sql` , `call_proc_MSSQL.sql`, or `call_proc_ORACLE.sql` depending on the database that is used.
3. Edit the last parameter in the call to `IBM_TRAM.CREATE_TIME_DIMENSION`.

Notes

- The database scripts for creating indexes are provided for enhanced reporting performance in the Tivoli Data Warehouse. If your data warehouse is not prepared with history before installation, this step is skipped by the installer. You can manually run one the following scripts, depending on your database type:
  - `create_index_DB2.sql`
  - `create_index_MSSQL.sql`
  - `create_index_ORACLE.sql`

  For more information, see Creating shared dimensions tables and populating the time dimensions table in the *IBM Tivoli Monitoring Administrator's Guide* (http://pic.dhe.ibm.com/infocenter/tivihelp/v15r1/topic/com.ibm.itm.doc_6.2.3fp1/adminuse/tcr_reports_dimensionsshared.htm).
- Although indexes help to enhance report performance, some limitations apply: Use indexes only on large tables with thousands of rows; because indexes degrade the performance of insert, update, and delete operations on a table.

  You can run a script to drop these indexes if you run into either of these performance issues:
  - `drop_index_DB2.sql`
  - `drop_index_MSSQL.sql`
  - `drop_index_ORACLE.sql`
- Connections under the Tivoli Data Warehouse are overwritten by the report installer. Overwriting these connections is a limitation of the current installer.
- The privileges that are required while you are running the installer are `ITMUSER` (database user) for the Tivoli Data Warehouse creation step and `ADMIN` (database administrator) for the schema update step. The Database Test connection for the schema update panel does not check for privileges of the database user. Installation fails at the schema update step if the database user does not have administrative privileges.

Problems and solutions

Table 12 contains problems and solutions that can occur with the Tivoli Common Reporting predefined reports for IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure. See the Tivoli Common Reporting Information Center (http://pic.dhe.ibm.com/infocenter/tivihelp/v3r1/topic/com.ibm.tivoli.tcr.doc_211/ic-home.html) for more information about troubleshooting for the Tivoli Common Reporting tool.

For timeout problems, if the default timeout values for the Tivoli Common Reporting or the Cognos console login is too short, you can change the settings. If your Java virtual machine runs out of memory, you can increase the heap size.

Table 12. Tivoli Common Reporting for Citrix Virtual Desktop Infrastructure agent problems and solutions

Problem	Solution

Support information

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:

Online

The following websites contain troubleshooting information:

- Go to the IBM Software Support website (http://www.ibm.com/support/entry/portal/software) and follow the instructions.
- Go to the Application Performance Management Wiki (http://www.ibm.com/developerworks/servicemanagement/apm/index.html). Feel free to contribute to this wiki.

IBM Support Assistant

The IBM Support Assistant (ISA) is a free local software serviceability workbench that helps you resolve questions and problems with IBM software products. The ISA provides quick access to support-related information and serviceability tools for problem determination. To install the ISA software, go to the IBM Support Assistant website (http://www.ibm.com/software/support/isa).

Informational, warning, and error messages overview

Messages relay information about how the system or application is performing and can alert you to exceptional conditions when they occur.

Messages are sent to an output destination, such as a file, database, or console screen.

If you receive a warning or error message, you can do one of the following actions:

- Follow the instructions listed in the Detail window of the message if this information is included there.
- Consult the message details listed in this topic to see what action you can take to correct the problem.
- Consult the message log for message ID, text, time, and date of the message, as well as other data you can use to diagnose the problem.

Message format

The message format contains a message ID and text, an explanation, and an operator response.

IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure messages have the following format:

Message ID and text
Explanation
Operator Response

The message ID has the following format:

`CCC####severity`

where:

CCC Prefix that indicates the component to which the message applies. The following components are used:

KVD General Citrix Virtual Desktop Infrastructure agent messages

Number of the message

severity

Severity of the message. Three levels of severity are used:

I Informational messages provide feedback about something that happened in the product or system that might be important. These messages can provide guidance when you are requesting a specific action from the product.

W Warning messages call your attention to an exception condition. The condition might not be an error but can cause problems if not resolved.

E Error messages indicate that an action cannot be completed because of a user or system error. These messages require user response.

The *Text* of the message provides a general statement regarding the problem or condition that occurred. The *Explanation* provides additional information about the message and the possible cause for the condition. The *Operator Response* provides actions to take in response to the condition, particularly for error messages (messages with the "E" suffix).

Note: Many message texts and explanations contain variables, such as the specific name of a server or application. Those variables are represented in this topic as symbols, such as "&1." Actual messages contain values for these variables.

Agent messages

The following messages apply to IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure.

KVD00001

`The collection of Application Instance data from the XenDesktop system did not return in a timely fashion.`

Explanation:
The collection of Application Instances data from the XenDesktop system did not return promptly.

Operator response:
None.

KVD00002

`The collection of Application data from the XenDesktop system did not return promptly.`

Explanation:
The collection of Applications data from the XenDesktop system did not return promptly.

Operator response:
None.

KVD00003

`The collection of Catalog data from the XenDesktop system did not return promptly.`

Explanation:
The collection of Catalog data from the XenDesktop system did not return promptly.

Operator response:
None.

KVD00004

`The collection of Connection Failure Log data from the XenDesktop system did not return promptly.`

Explanation:
The collection of Connection Failure Log data from the XenDesktop system did not return promptly.

Operator response:
None.

KVD00005

`The collection of Connection data from the XenDesktop system did not return promptly.`

Explanation:
The collection of Connection data from the XenDesktop system did not return promptly.

Operator response:
None.

KVD00006

`The collection of Delivery Group data from the XenDesktop system did not return in a timely fashion.`

Explanation:

The collection of Delivery Group data from the XenDesktop system did not return promptly.

Operator response:

None.

KVD00007

`The collection of Hypervisor data from the XenDesktop system did not return promptly.`

Explanation:

The collection of Hypervisor data from the XenDesktop system did not return in a timely fashion.

Operator response:

None.

KVD00008

`The collection of Load Index data from the XenDesktop system did not return promptly.`

Explanation:

The collection of Load Index data from the XenDesktop system did not return promptly.

Operator response:

None.

KVD00009

`The collection of Machine Failure Log data from the XenDesktop system did not return promptly.`

Explanation:

The collection of Machine Failure Log data from the XenDesktop system did not return promptly.

Operator response:

None.

KVD00010

`The collection of Machine data from the XenDesktop system did not return promptly.`

Explanation:

The collection of Machine data from the XenDesktop system did not return promptly.

Operator response:

None.

KVD00011

`The collection of Session data from the XenDesktop system did not return promptly.`

Explanation:

The collection of Session data from the XenDesktop system did not return promptly.

Operator response:

None.

KVD00012

`The collection of User data from the XenDesktop system did not return promptly.`

Explanation:

The collection of User data from the XenDesktop system did not return promptly.

Operator response:
None.

KVD00013
`The request to start data collection against the XenDesktop system was successful.`

Explanation:
The request to start data collection against the XenDesktop system was successful.

Operator response:
None.

KVD00014
`The request to start data collection against the XenDesktop system was unsuccessful.`

Explanation:
The request to start data collection against the XenDesktop system was unsuccessful.

Operator response:
None.

Appendix A. Event mapping

The Tivoli Event Integration Facility (EIF) interface is used to forward situation events to Tivoli Netcool/OMNIbus or Tivoli Enterprise Console.

EIF events specify an event class, and the event data is specified as name-value pairs that identify the name of an event slot and the value for the slot. An event class can have subclasses. IBM Tivoli Monitoring provides the base event class definitions and a set of base slots that are included in all monitoring events. Agents extend the base event classes to define subclasses that include agent-specific slots. For Citrix Virtual Desktop Infrastructure agent events, the event classes correspond to the agent attribute groups, and the agent-specific slots correspond to the attributes in the attribute group.

The situation editor in the Tivoli Enterprise Portal can be used to perform custom mapping of data to EIF slots instead of using the default mapping described in this topic. For more information about EIF slot customization, see the *Tivoli Enterprise Portal User's Guide*.

Tivoli Enterprise Console requires that event classes and their slots are defined in BAROC (Basic Recorder of Objects in C) files. Each agent provides a BAROC file that contains event class definitions for the agent and is installed on the Tivoli Enterprise Monitoring Server in the `TECLIB` directory (`install_dir/cms/TECLIB` for Windows systems and `install_dir/tables/TEMS_hostname/TECLIB` for UNIX systems) when application support for the agent is installed. The BAROC file for the agent and the base BAROC files provided with Tivoli Monitoring must also be installed onto the Tivoli Enterprise Console. For details, see "Setting up event forwarding to Tivoli Enterprise Console" in the *IBM Tivoli Monitoring Installation and Setup Guide*.

Each of the event classes is a child of KVD_Base and is defined in the `kvd.baroc` (version 07.50.00) file. The KVD_Base event class can be used for generic rules processing for any event from the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure.

For events that are generated by situations in the Agent Data Provider Log attribute group, events are sent by using the ITM_KVD_AGENT_DATA_PROVIDER_LOG event class. This event class contains the following slots:

- kvd_class: STRING
- kvd_date: STRING
- kvd_severity: STRING
- log_file_name: STRING
- message: STRING
- method: STRING
- node: STRING
- server_name: STRING
- thread: STRING
- time: STRING
- timestamp: STRING

For events that are generated by situations in the Application Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_APPLICATION_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING

- application_disabled: INTEGER
- application_disabled_enum: STRING
- application_id: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER
- connection_timeout_enum: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- license_feature_refused: INTEGER
- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER
- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER
- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER
- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING

- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the Application Connection Summary attribute group, events are sent by using the ITM_KVD_APPLICATION_CONNECTION_SUMMARY event class. This event class contains the following slots:

- application_id: STRING
- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER
- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING
- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING
- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING
- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- connection_count: INTEGER

- connection_count_enum: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING
- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Application Instance Summary attribute group, events are sent by using the ITM_KVD_APPLICATION_INSTANCE_SUMMARY event class. This event class contains the following slots:

- application_id: STRING
- average_instance_duration_minutes: INTEGER
- average_instance_duration_minutes_enum: STRING
- instance_count: INTEGER
- instance_count_enum: STRING
- node: STRING
- timestamp: STRING

For events that are generated by situations in the Application Resource Information attribute group, events are sent by using the ITM_KVD_APPLICATION_RESOURCE_INFORMATION event class. This event class contains the following slots:

- admin_folder: STRING
- application_id: STRING
- application_type: STRING
- enabled: STRING
- lifecycle_state: STRING
- name: STRING
- node: STRING
- published_name: STRING
- timestamp: STRING

For events that are generated by situations in the Application Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_APPLICATION_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING
- application_id: STRING
- connected_session_count: INTEGER
- connected_session_count_enum: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- node: STRING
- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING

- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the Application Session Count Summary attribute group, events are sent by using the ITM_KVD_APPLICATION_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- application_id: STRING
- application_name: STRING
- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Catalog Average Load Index Summary attribute group, events are sent by using the ITM_KVD_CATALOG_AVERAGE_LOAD_INDEX_SUMMARY event class. This event class contains the following slots:

- catalog_id: STRING
- cpu: INTEGER
- cpu_as_percent: INTEGER
- cpu_as_percent_enum: STRING
- cpu_enum: STRING
- disk: INTEGER
- disk_as_percent: INTEGER
- disk_as_percent_enum: STRING
- disk_enum: STRING
- effective_load_index: INTEGER
- effective_load_index_as_percent: INTEGER
- effective_load_index_as_percent_enum: STRING
- effective_load_index_enum: STRING
- memory: INTEGER
- memory_as_percent: INTEGER
- memory_as_percent_enum: STRING
- memory_enum: STRING
- network: INTEGER
- network_as_percent: INTEGER

- network_as_percent_enum: STRING
- network_enum: STRING
- node: STRING
- session_count: INTEGER
- session_count_as_percent: INTEGER
- session_count_as_percent_enum: STRING
- session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Catalog Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_CATALOG_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING
- application_disabled: INTEGER
- application_disabled_enum: STRING
- catalog_id: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER
- connection_timeout_enum: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- license_feature_refused: INTEGER
- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER

- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER
- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER
- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING
- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the Catalog Connection Summary attribute group, events are sent by using the ITM_KVD_CATALOG_CONNECTION_SUMMARY event class. This event class contains the following slots:

- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER
- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING

- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING
- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING
- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- catalog_id: STRING
- connection_count: INTEGER
- connection_count_enum: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING
- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Catalog Resource Information attribute group, events are sent by using the ITM_KVD_CATALOG_RESOURCE_INFORMATION event class. This event class contains the following slots:

- allocation_type: STRING
- catalog_id: STRING
- is_machine_physical: STRING
- lifecycle_state: STRING
- load_index_maximum_value: INTEGER
- load_index_maximum_value_enum: STRING
- name: STRING
- node: STRING
- persistent_user_changes: STRING
- provisioning_scheme: STRING
- provisioning_type: STRING
- session_capacity: INTEGER
- session_capacity_enum: STRING
- session_support: STRING
- timestamp: STRING

For events that are generated by situations in the Catalog Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_CATALOG_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING

- catalog_id: STRING
- connected_session_count: INTEGER
- connected_session_count_enum: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- node: STRING
- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING
- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the Catalog Session Count Summary attribute group, events are sent by using the ITM_KVD_CATALOG_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- application_session_count: INTEGER
- application_session_count_enum: STRING
- catalog_id: STRING
- desktop_session_count: INTEGER
- desktop_session_count_enum: STRING
- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING
- total_session_count: INTEGER
- total_session_count_enum: STRING

For events that are generated by situations in the DDC Machine Events attribute group, events are sent by using the ITM_KVD_DDC_MACHINE_EVENTS event class. This event class contains the following slots:

- event_reason: STRING
- event_severity: STRING
- event_timestamp: STRING
- event_type: STRING

- node: STRING
- timestamp: STRING

For events that are generated by situations in the DDC Machine Resource Information attribute group, events are sent by using the ITM_KVD_DDC_MACHINE_RESOURCE_INFORMATION event class. This event class contains the following slots:

- dns_name: STRING
- fault_state: STRING
- lifecycle_state: STRING
- machine_id: STRING
- machine_role: STRING
- node: STRING
- os_type: STRING
- timestamp: STRING

For events that are generated by situations in the Delivery Group Average Load Index Summary attribute group, events are sent by using the ITM_KVD_DELIVERY_GROUP_AVERAGE_LOAD_INDEX_SUMMARY event class. This event class contains the following slots:

- cpu: INTEGER
- cpu_as_percent: INTEGER
- cpu_as_percent_enum: STRING
- cpu_enum: STRING
- delivery_group_id: STRING
- disk: INTEGER
- disk_as_percent: INTEGER
- disk_as_percent_enum: STRING
- disk_enum: STRING
- effective_load_index: INTEGER
- effective_load_index_as_percent: INTEGER
- effective_load_index_as_percent_enum: STRING
- effective_load_index_enum: STRING
- memory: INTEGER
- memory_as_percent: INTEGER
- memory_as_percent_enum: STRING
- memory_enum: STRING
- network: INTEGER
- network_as_percent: INTEGER
- network_as_percent_enum: STRING
- network_enum: STRING
- node: STRING
- session_count: INTEGER
- session_count_as_percent: INTEGER
- session_count_as_percent_enum: STRING
- session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Delivery Group Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_DELIVERY_GROUP_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING
- application_disabled: INTEGER
- application_disabled_enum: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER
- connection_timeout_enum: STRING
- delivery_group_id: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- license_feature_refused: INTEGER
- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER
- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER
- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER

- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING
- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the Delivery Group Connection Summary attribute group, events are sent by using the ITM_KVD_DELIVERY_GROUP_CONNECTION_SUMMARY event class. This event class contains the following slots:

- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER
- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING
- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING
- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING

- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- connection_count: INTEGER
- connection_count_enum: STRING
- delivery_group_id: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING
- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Delivery Group Resource Information attribute group, events are sent by using the ITM_KVD_DELIVERY_GROUP_RESOURCE_INFORMATION event class. This event class contains the following slots:

- delivery_group_id: STRING
- delivery_type: STRING
- desktop_kind: STRING
- is_remote_pc: STRING
- lifecycle_state: STRING
- load_index_maximum_value: INTEGER
- load_index_maximum_value_enum: STRING
- name: STRING
- node: STRING
- session_capacity: INTEGER
- session_capacity_enum: STRING
- session_support: STRING
- timestamp: STRING

For events that are generated by situations in the Delivery Group Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_DELIVERY_GROUP_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING
- connected_session_count: INTEGER
- connected_session_count_enum: STRING
- delivery_group_id: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- node: STRING
- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING

- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the Delivery Group Session Count Summary attribute group, events are sent by using the ITM_KVD_DELIVERY_GROUP_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- application_session_count: INTEGER
- application_session_count_enum: STRING
- delivery_group_id: STRING
- desktop_session_count: INTEGER
- desktop_session_count_enum: STRING
- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING
- total_session_count: INTEGER
- total_session_count_enum: STRING

For events that are generated by situations in the Desktop Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_DESKTOP_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING
- application_disabled: INTEGER
- application_disabled_enum: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER
- connection_timeout_enum: STRING
- desktop_id: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- license_feature_refused: INTEGER

- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER
- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER
- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER
- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING
- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the Desktop Connection Summary attribute group, events are sent by using the ITM_KVD_DESKTOP_CONNECTION_SUMMARY event class. This event class contains the following slots:

- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER

- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING
- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING
- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING
- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- connection_count: INTEGER
- connection_count_enum: STRING
- desktop_id: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING
- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Desktop Instance Summary attribute group, events are sent by using the ITM_KVD_DESKTOP_INSTANCE_SUMMARY event class. This event class contains the following slots:

- average_instance_duration_minutes: INTEGER
- average_instance_duration_minutes_enum: STRING

- desktop_id: STRING
- instance_count: INTEGER
- instance_count_enum: STRING
- node: STRING
- timestamp: STRING

For events that are generated by situations in the Desktop Resource Information attribute group, events are sent by using the ITM_KVD_DESKTOP_RESOURCE_INFORMATION event class. This event class contains the following slots:

- desktop_id: STRING
- name: STRING
- node: STRING
- timestamp: STRING

For events that are generated by situations in the Desktop Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_DESKTOP_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING
- connected_session_count: INTEGER
- connected_session_count_enum: STRING
- desktop_id: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- node: STRING
- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING
- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the Desktop Session Count Summary attribute group, events are sent by using the ITM_KVD_DESKTOP_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- desktop_id: STRING

- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Hypervisor Average Load Index Summary attribute group, events are sent by using the ITM_KVD_HYPERVISOR_AVERAGE_LOAD_INDEX_SUMMARY event class. This event class contains the following slots:

- cpu: INTEGER
- cpu_as_percent: INTEGER
- cpu_as_percent_enum: STRING
- cpu_enum: STRING
- disk: INTEGER
- disk_as_percent: INTEGER
- disk_as_percent_enum: STRING
- disk_enum: STRING
- effective_load_index: INTEGER
- effective_load_index_as_percent: INTEGER
- effective_load_index_as_percent_enum: STRING
- effective_load_index_enum: STRING
- hypervisor_id: STRING
- memory: INTEGER
- memory_as_percent: INTEGER
- memory_as_percent_enum: STRING
- memory_enum: STRING
- network: INTEGER
- network_as_percent: INTEGER
- network_as_percent_enum: STRING
- network_enum: STRING
- node: STRING
- session_count: INTEGER
- session_count_as_percent: INTEGER
- session_count_as_percent_enum: STRING
- session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Hypervisor Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_HYPERVISOR_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING
- application_disabled: INTEGER
- application_disabled_enum: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER

- connection_timeout_enum: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- hypervisor_id: STRING
- license_feature_refused: INTEGER
- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER
- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER
- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER
- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING
- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the Hypervisor Connection Summary attribute group, events are sent by using the ITM_KVD_HYPERVISOR_CONNECTION_SUMMARY event class. This event class contains the following slots:

- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER
- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING
- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING
- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING
- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- connection_count: INTEGER
- connection_count_enum: STRING
- hypervisor_id: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING

- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Hypervisor Resource Information attribute group, events are sent by using the ITM_KVD_HYPERVISOR_RESOURCE_INFORMATION event class. This event class contains the following slots:

- hypervisor_id: STRING
- lifecycle_state: STRING
- load_index_maximum_value: INTEGER
- load_index_maximum_value_enum: STRING
- name: STRING
- node: STRING
- session_capacity: INTEGER
- session_capacity_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Hypervisor Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_HYPERVISOR_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING
- connected_session_count: INTEGER
- connected_session_count_enum: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- hypervisor_id: STRING
- node: STRING
- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING
- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the Hypervisor Session Count Summary attribute group, events are sent by using the ITM_KVD_HYPERVISOR_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- application_session_count: INTEGER
- application_session_count_enum: STRING
- desktop_session_count: INTEGER
- desktop_session_count_enum: STRING
- hypervisor_id: STRING
- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING
- total_session_count: INTEGER
- total_session_count_enum: STRING

For events that are generated by situations in the Performance Object Status attribute group, events are sent by using the ITM_KVD_PERFORMANCE_OBJECT_STATUS event class. This event class contains the following slots:

- average_collection_duration: REAL
- average_collection_duration_enum: STRING
- cache_hits: INTEGER
- cache_hit_percent: REAL
- cache_misses: INTEGER
- error_code: INTEGER
- error_code_enum: STRING
- intervals_skipped: INTEGER
- last_collection_duration: REAL
- last_collection_finished: STRING
- last_collection_finished_enum: STRING
- last_collection_start: STRING
- last_collection_start_enum: STRING
- node: STRING
- number_of_collections: INTEGER
- object_name: STRING
- object_status: INTEGER
- object_status_enum: STRING
- object_type: INTEGER
- object_type_enum: STRING
- query_name: STRING
- refresh_interval: INTEGER
- timestamp: STRING

For events that are generated by situations in the Resource Counts attribute group, events are sent by using the ITM_KVD_RESOURCE_COUNTS event class. This event class contains the following slots:

- application_count: INTEGER
- application_count_enum: STRING
- both_machine_count: INTEGER

- both_machine_count_enum: STRING
- catalog_count: INTEGER
- catalog_count_enum: STRING
- ddc_machine_count: INTEGER
- ddc_machine_count_enum: STRING
- delivery_group_count: INTEGER
- delivery_group_count_enum: STRING
- desktop_count: INTEGER
- desktop_count_enum: STRING
- hypervisor_count: INTEGER
- hypervisor_count_enum: STRING
- machine_count: INTEGER
- machine_count_enum: STRING
- node: STRING
- timestamp: STRING
- vda_machine_count: INTEGER
- vda_machine_count_enum: STRING

For events that are generated by situations in the Session Connection Details attribute group, events are sent by using the ITM_KVD_SESSION_CONNECTION_DETAILS event class. This event class contains the following slots:

- application_name: STRING
- authenticationdurationmilliseconds: INTEGER
- authenticationdurationmilliseconds_enum: STRING
- authenticationdurationseconds: REAL
- authenticationdurationseconds_enum: STRING
- brokeringdurationmilliseconds: INTEGER
- brokeringdurationmilliseconds_enum: STRING
- brokeringdurationseconds: REAL
- brokeringdurationseconds_enum: STRING
- client_address: STRING
- client_address_enum: STRING
- client_name: STRING
- client_name_enum: STRING
- client_version: STRING
- client_version_enum: STRING
- connected_via_host_name: STRING
- connected_via_host_name_enum: STRING
- connected_via_ip_address: STRING
- connected_via_ip_address_enum: STRING
- grouppolicydurationmilliseconds: INTEGER
- grouppolicydurationmilliseconds_enum: STRING
- grouppolicydurationseconds: REAL
- grouppolicydurationseconds_enum: STRING
- hdxdurationmilliseconds: INTEGER
- hdxdurationmilliseconds_enum: STRING

- hdxdurationseconds: REAL
- hdxdurationseconds_enum: STRING
- interactivedurationmilliseconds: INTEGER
- interactivedurationmilliseconds_enum: STRING
- interactivedurationseconds: REAL
- interactivedurationseconds_enum: STRING
- is_anonymous: STRING
- is_reconnect: STRING
- is_reconnect_enum: STRING
- is_secure_ica: STRING
- is_secure_ica_enum: STRING
- launched_via_host_name: STRING
- launched_via_host_name_enum: STRING
- launched_via_ip_address: STRING
- launched_via_ip_address_enum: STRING
- logondurationmilliseconds: INTEGER
- logondurationmilliseconds_enum: STRING
- logondurationseconds: REAL
- logondurationseconds_enum: STRING
- logonscriptsdurationmilliseconds: INTEGER
- logonscriptsdurationmilliseconds_enum: STRING
- logonscriptsdurationseconds: REAL
- logonscriptsdurationseconds_enum: STRING
- machine_name: STRING
- machine_name_enum: STRING
- node: STRING
- profileloaddurationmilliseconds: INTEGER
- profileloaddurationmilliseconds_enum: STRING
- profileloaddurationseconds: REAL
- profileloaddurationseconds_enum: STRING
- protocol: STRING
- protocol_enum: STRING
- session_duration_seconds: INTEGER
- session_duration_seconds_enum: STRING
- session_key: STRING
- timestamp: STRING
- user_upn: STRING
- vmstartdurationmilliseconds: INTEGER
- vmstartdurationmilliseconds_enum: STRING
- vmstartdurationseconds: REAL
- vmstartdurationseconds_enum: STRING

For events that are generated by situations in the Session Resource Information attribute group, events are sent by using the ITM_KVD_SESSION_RESOURCE_INFORMATION event class. This event class contains the following slots:

- connection_state_change_date: STRING

- connection_state_change_date_enum: STRING
- connection_state_enum: STRING
- current_connection_id: INTEGER
- current_connection_id_enum: STRING
- end_date: STRING
- end_date_enum: STRING
- exit_code_enum: STRING
- failure_date: STRING
- failure_date_enum: STRING
- is_anonymous: STRING
- lifecycle_state_enum: STRING
- log_on_duration: INTEGER
- log_on_duration_enum: STRING
- machine_id: STRING
- node: STRING
- session_key: STRING
- session_type_enum: STRING
- start_date: STRING
- start_date_enum: STRING
- timestamp: STRING
- user_id: INTEGER
- user_id_enum: STRING

For events that are generated by situations in the Site Average Load Index Summary attribute group, events are sent by using the ITM_KVD_SITE_AVERAGE_LOAD_INDEX_SUMMARY event class. This event class contains the following slots:

- cpu: INTEGER
- cpu_as_percent: INTEGER
- cpu_as_percent_enum: STRING
- cpu_enum: STRING
- disk: INTEGER
- disk_as_percent: INTEGER
- disk_as_percent_enum: STRING
- disk_enum: STRING
- effective_load_index: INTEGER
- effective_load_index_as_percent: INTEGER
- effective_load_index_as_percent_enum: STRING
- effective_load_index_enum: STRING
- memory: INTEGER
- memory_as_percent: INTEGER
- memory_as_percent_enum: STRING
- memory_enum: STRING
- network: INTEGER
- network_as_percent: INTEGER
- network_as_percent_enum: STRING
- network_enum: STRING

- node: STRING
- session_count: INTEGER
- session_count_as_percent: INTEGER
- session_count_as_percent_enum: STRING
- session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Site Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_SITE_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING
- application_disabled: INTEGER
- application_disabled_enum: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER
- connection_timeout_enum: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- license_feature_refused: INTEGER
- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER
- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER

- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER
- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING
- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the Site Connection Summary attribute group, events are sent by using the ITM_KVD_SITE_CONNECTION_SUMMARY event class. This event class contains the following slots:

- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER
- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING
- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING

- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING
- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- connection_count: INTEGER
- connection_count_enum: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING
- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Site Events attribute group, events are sent by using the ITM_KVD_SITE_EVENTS event class. This event class contains the following slots:

- event_reason: STRING
- event_severity: STRING
- event_timestamp: STRING
- event_type: STRING
- node: STRING
- timestamp: STRING

For events that are generated by situations in the Site Resource Information attribute group, events are sent by using the ITM_KVD_SITE_RESOURCE_INFORMATION event class. This event class contains the following slots:

- load_index_maximum_value: INTEGER
- load_index_maximum_value_enum: STRING
- name: STRING
- node: STRING
- session_capacity: INTEGER
- session_capacity_enum: STRING
- timestamp: STRING

For events that are generated by situations in the Site Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_SITE_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING
- connected_session_count: INTEGER
- connected_session_count_enum: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- node: STRING

- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING
- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the Site Session Count Summary attribute group, events are sent by using the ITM_KVD_SITE_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- application_session_count: INTEGER
- application_session_count_enum: STRING
- desktop_session_count: INTEGER
- desktop_session_count_enum: STRING
- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING
- total_session_count: INTEGER
- total_session_count_enum: STRING

For events that are generated by situations in the Take Action Status attribute group, events are sent by using the ITM_KVD_TAKE_ACTION_STATUS event class. This event class contains the following slots:

- action_app_return_code: INTEGER
- action_command: STRING
- action_id: INTEGER
- action_instance: STRING
- action_message: STRING
- action_name: STRING
- action_node: STRING
- action_owner: STRING
- action_results: STRING
- action_status: INTEGER
- action_status_enum: STRING
- action_subnode: STRING

- action_type: INTEGER
- action_type_enum: STRING
- node: STRING
- timestamp: STRING

For events that are generated by situations in the Thread Pool Status attribute group, events are sent by using the ITM_KVD_THREAD_POOL_STATUS event class. This event class contains the following slots:

- node: STRING
- thread_pool_active_threads: INTEGER
- thread_pool_active_threads_enum: STRING
- thread_pool_avg_active_threads: REAL
- thread_pool_avg_active_threads_enum: STRING
- thread_pool_avg_job_wait: REAL
- thread_pool_avg_job_wait_enum: STRING
- thread_pool_avg_queue_length: REAL
- thread_pool_avg_queue_length_enum: STRING
- thread_pool_max_active_threads: INTEGER
- thread_pool_max_active_threads_enum: STRING
- thread_pool_max_queue_length: INTEGER
- thread_pool_max_queue_length_enum: STRING
- thread_pool_max_size: INTEGER
- thread_pool_max_size_enum: STRING
- thread_pool_min_active_threads: INTEGER
- thread_pool_min_active_threads_enum: STRING
- thread_pool_min_queue_length: INTEGER
- thread_pool_min_queue_length_enum: STRING
- thread_pool_queue_length: INTEGER
- thread_pool_queue_length_enum: STRING
- thread_pool_size: INTEGER
- thread_pool_size_enum: STRING
- thread_pool_total_jobs: INTEGER
- thread_pool_total_jobs_enum: STRING
- timestamp: STRING

For events that are generated by situations in the User Resource Information attribute group, events are sent by using the ITM_KVD_USER_RESOURCE_INFORMATION event class. This event class contains the following slots:

- domain: STRING
- full_name: STRING
- node: STRING
- sid: STRING
- timestamp: STRING
- upn: STRING
- user_id: INTEGER
- user_id_enum: STRING
- user_name: STRING

For events that are generated by situations in the VDA Machine Connection Failure Count Summary attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_CONNECTION_FAILURE_COUNT_SUMMARY event class. This event class contains the following slots:

- active_session_reconnect_disabled: INTEGER
- active_session_reconnect_disabled_enum: STRING
- application_disabled: INTEGER
- application_disabled_enum: STRING
- configuration_set_failure: INTEGER
- configuration_set_failure_enum: STRING
- connection_timeout: INTEGER
- connection_timeout_enum: STRING
- disallowed_protocol: INTEGER
- disallowed_protocol_enum: STRING
- general_fail: INTEGER
- general_fail_enum: STRING
- license_feature_refused: INTEGER
- license_feature_refused_enum: STRING
- licensing: INTEGER
- licensing_enum: STRING
- machine_id: STRING
- machine_not_functional: INTEGER
- machine_not_functional_enum: STRING
- maintenance_mode: INTEGER
- maintenance_mode_enum: STRING
- node: STRING
- none: INTEGER
- none_enum: STRING
- no_desktop_available: INTEGER
- no_desktop_available_enum: STRING
- no_machine_available: INTEGER
- no_machine_available_enum: STRING
- no_session_to_reconnect: INTEGER
- no_session_to_reconnect_enum: STRING
- other: INTEGER
- other_enum: STRING
- refused: INTEGER
- refused_enum: STRING
- registration_timeout: INTEGER
- registration_timeout_enum: STRING
- resource_unavailable: INTEGER
- resource_unavailable_enum: STRING
- session_limit_reached: INTEGER
- session_limit_reached_enum: STRING
- session_preparation: INTEGER

- session_preparation_enum: STRING
- spin_up_failed: INTEGER
- spin_up_failed_enum: STRING
- ticketing: INTEGER
- ticketing_enum: STRING
- timestamp: STRING
- total: INTEGER
- total_enum: STRING
- unknown: INTEGER
- unknown_enum: STRING

For events that are generated by situations in the VDA Machine Connection Summary attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_CONNECTION_SUMMARY event class. This event class contains the following slots:

- average_authentication_duration_milliseconds: INTEGER
- average_authentication_duration_milliseconds_enum: STRING
- average_authentication_duration_seconds: REAL
- average_authentication_duration_seconds_enum: STRING
- average_brokering_duration_milliseconds: INTEGER
- average_brokering_duration_milliseconds_enum: STRING
- average_brokering_duration_seconds: REAL
- average_brokering_duration_seconds_enum: STRING
- average_group_policy_duration_milliseconds: INTEGER
- average_group_policy_duration_milliseconds_enum: STRING
- average_group_policy_duration_seconds: REAL
- average_group_policy_duration_seconds_enum: STRING
- average_hdx_duration_milliseconds: INTEGER
- average_hdx_duration_milliseconds_enum: STRING
- average_hdx_duration_seconds: REAL
- average_hdx_duration_seconds_enum: STRING
- average_interactive_duration_milliseconds: INTEGER
- average_interactive_duration_milliseconds_enum: STRING
- average_interactive_duration_seconds: REAL
- average_interactive_duration_seconds_enum: STRING
- average_log_on_duration_milliseconds: INTEGER
- average_log_on_duration_milliseconds_enum: STRING
- average_log_on_duration_seconds: REAL
- average_log_on_duration_seconds_enum: STRING
- average_log_on_scripts_duration_milliseconds: INTEGER
- average_log_on_scripts_duration_milliseconds_enum: STRING
- average_log_on_scripts_duration_seconds: REAL
- average_log_on_scripts_duration_seconds_enum: STRING
- average_profile_load_duration_milliseconds: INTEGER
- average_profile_load_duration_milliseconds_enum: STRING
- average_profile_load_duration_seconds: REAL
- average_profile_load_duration_seconds_enum: STRING

- average_vm_start_duration_milliseconds: INTEGER
- average_vm_start_duration_milliseconds_enum: STRING
- average_vm_start_duration_seconds: REAL
- average_vm_start_duration_seconds_enum: STRING
- connection_count: INTEGER
- connection_count_enum: STRING
- machine_id: STRING
- new_connection_count: INTEGER
- new_connection_count_enum: STRING
- node: STRING
- secure_ica_connection_count: INTEGER
- secure_ica_connection_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the VDA Machine Events attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_EVENTS event class. This event class contains the following slots:

- event_reason: STRING
- event_severity: STRING
- event_timestamp: STRING
- event_type: STRING
- node: STRING
- timestamp: STRING

For events that are generated by situations in the VDA Machine Load Index Summary attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_LOAD_INDEX_SUMMARY event class. This event class contains the following slots:

- cpu: INTEGER
- cpu_as_percent: INTEGER
- cpu_as_percent_enum: STRING
- cpu_enum: STRING
- disk: INTEGER
- disk_as_percent: INTEGER
- disk_as_percent_enum: STRING
- disk_enum: STRING
- effective_load_index: INTEGER
- effective_load_index_as_percent: INTEGER
- effective_load_index_as_percent_enum: STRING
- effective_load_index_enum: STRING
- machine_id: STRING
- memory: INTEGER
- memory_as_percent: INTEGER
- memory_as_percent_enum: STRING
- memory_enum: STRING
- network: INTEGER
- network_as_percent: INTEGER

- network_as_percent_enum: STRING
- network_enum: STRING
- node: STRING
- session_count: INTEGER
- session_count_as_percent: INTEGER
- session_count_as_percent_enum: STRING
- session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the VDA Machine Resource Information attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_RESOURCE_INFORMATION event class. This event class contains the following slots:

- agent_version: STRING
- controller_dns_name: STRING
- current_power_state: STRING
- current_registration_state: STRING
- current_session_count: INTEGER
- current_session_count_enum: STRING
- dns_name: STRING
- fault_state: STRING
- functional_level: STRING
- hosting_server_name: STRING
- ip_address: STRING
- is_assigned: STRING
- is_in_maintenance_mode: STRING
- is_pending_update: STRING
- is_preparing: STRING
- last_deregistered_code: STRING
- lifecycle_state: STRING
- load_index_maximum_value: INTEGER
- load_index_maximum_value_enum: STRING
- machine_id: STRING
- machine_role: STRING
- node: STRING
- os_type: STRING
- session_capacity: INTEGER
- session_capacity_enum: STRING
- timestamp: STRING
- windows_connection_setting: STRING

For events that are generated by situations in the VDA Machine Sess Conn State Cnt Sum attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_SESS_CONN_STATE_CNT_SUM event class. This event class contains the following slots:

- active_session_count: INTEGER
- active_session_count_enum: STRING
- connected_session_count: INTEGER

- connected_session_count_enum: STRING
- disconnected_session_count: INTEGER
- disconnected_session_count_enum: STRING
- machine_id: STRING
- node: STRING
- non_brokered_session_session_count: INTEGER
- non_brokered_session_session_count_enum: STRING
- other_session_count: INTEGER
- other_session_count_enum: STRING
- pending_session_count: INTEGER
- pending_session_count_enum: STRING
- preparing_session_session_count: INTEGER
- preparing_session_session_count_enum: STRING
- reconnecting_session_count: INTEGER
- reconnecting_session_count_enum: STRING
- terminated_session_count: INTEGER
- terminated_session_count_enum: STRING
- timestamp: STRING
- unknown_session_count: INTEGER
- unknown_session_count_enum: STRING

For events that are generated by situations in the VDA Machine Session Count Summary attribute group, events are sent by using the ITM_KVD_VDA_MACHINE_SESSION_COUNT_SUMMARY event class. This event class contains the following slots:

- anonymous_session_count: INTEGER
- anonymous_session_count_enum: STRING
- application_session_count: INTEGER
- application_session_count_enum: STRING
- desktop_session_count: INTEGER
- desktop_session_count_enum: STRING
- machine_id: STRING
- node: STRING
- peak_concurrent_session_count: INTEGER
- peak_concurrent_session_count_enum: STRING
- timestamp: STRING

For events that are generated by situations in the XDS Performance Object Status attribute group, events are sent by using the ITM_KVD_XDS_PERFORMANCE_OBJECT_STATUS event class. This event class contains the following slots:

- average_collection_duration: REAL
- average_collection_duration_enum: STRING
- cache_hits: INTEGER
- cache_hit_percent: REAL
- cache_misses: INTEGER
- error_code: INTEGER
- error_code_enum: STRING

- intervals_skipped: INTEGER
- last_collection_duration: REAL
- last_collection_finished: STRING
- last_collection_finished_enum: STRING
- last_collection_start: STRING
- last_collection_start_enum: STRING
- node: STRING
- number_of_collections: INTEGER
- object_name: STRING
- object_status: INTEGER
- object_status_enum: STRING
- object_type: INTEGER
- object_type_enum: STRING
- query_name: STRING
- refresh_interval: INTEGER
- timestamp: STRING

For events that are generated by situations in the XenDesktop OData Performance attribute group, events are sent by using the ITM_KVD_XENDESKTOP_ODATA_PERFORMANCE event class. This event class contains the following slots:

- application_elapsed_time_ms: INTEGER
- application_elapsed_time_ms_enum: STRING
- application_instance_elapsed_time_ms: INTEGER
- application_instance_elapsed_time_ms_enum: STRING
- application_to_delivery_group_elapsed_time_ms: INTEGER
- application_to_delivery_group_elapsed_time_ms_enum: STRING
- catalog_elapsed_time_ms: INTEGER
- catalog_elapsed_time_ms_enum: STRING
- connection_elapsed_time_ms: INTEGER
- connection_elapsed_time_ms_enum: STRING
- connection_failure_log_elapsed_time_ms: INTEGER
- connection_failure_log_elapsed_time_ms_enum: STRING
- delivery_controller: STRING
- delivery_group_elapsed_time_ms: INTEGER
- delivery_group_elapsed_time_ms_enum: STRING
- hypervisor_elapsed_time_ms: INTEGER
- hypervisor_elapsed_time_ms_enum: STRING
- load_index_elapsed_time_ms: INTEGER
- load_index_elapsed_time_ms_enum: STRING
- machine_elapsed_time_ms: INTEGER
- machine_elapsed_time_ms_enum: STRING
- machine_failure_log_elapsed_time_ms: INTEGER
- machine_failure_log_elapsed_time_ms_enum: STRING
- node: STRING
- session_elapsed_time_ms: INTEGER
- session_elapsed_time_ms_enum: STRING

- timestamp: STRING
- user_elapsed_time_ms: INTEGER
- user_elapsed_time_ms_enum: STRING

For events that are generated by situations in the XenDesktop Resource Properties attribute group, events are sent by using the ITM_KVD_XENDESKTOP_RESOURCE_PROPERTIES event class. This event class contains the following slots:

- active_delivery_controller: STRING
- delivery_controller: STRING
- node: STRING
- timestamp: STRING
- total_users: INTEGER
- total_users_enum: STRING

For events that are generated by situations in the XenDesktopSite nodes attribute group, events are sent by using the ITM_KVD_XENDESKTOPSITE_NODES event class. This event class contains the following slots:

- node: STRING
- subnode_affinity: STRING
- subnode_msn: STRING
- subnode_resource_name: STRING
- subnode_type: STRING
- subnode_version: STRING
- timestamp: STRING

Appendix B. Documentation library

Various publications are relevant to the use of the IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure.

For information about how to access and use the publications, see *Using the publications* (http://pic.dhe.ibm.com/infocenter/tivihelp/v61r1/topic/com.ibm.itm.doc_6.3/common/using_publications.htm).

To find publications from the previous version of a product, click **Previous versions** under the name of the product in the **Contents** pane.

IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure library

The documentation for this agent and other product components is in the IBM Tivoli Monitoring Knowledge Center (http://www-01.ibm.com/support/knowledgecenter/SSTFXA_6.3.0/com.ibm.itm.doc_6.3/welcome.htm)IBM Tivoli Monitoring for Virtual Environments Knowledge Center (http://www-01.ibm.com/support/knowledgecenter/SS9U76_7.2.0/welcome_ve72.htm)ITCAM for Microsoft Applications Knowledge Center (http://www-01.ibm.com/support/knowledgecenter/SS9U76_7.1.0/com.ibm.tivoli.itmvs.doc_7.1/welcome_ve71.htm)ITCAM for Applications Knowledge Center (http://www-01.ibm.com/support/knowledgecenter/SS3JRN_7.2.0/com.ibm.itcama.doc_7.2/welcome_itcamfapps72.html).

One document is specific to the Citrix Virtual Desktop Infrastructure agent. The IBM Monitoring Agent for Citrix Virtual Desktop Infrastructure User's Guide provides agent-specific information for configuring, using, and troubleshooting the Citrix Virtual Desktop Infrastructure agent.

The *Offering Guide* also provides information about installing and configuring the component products in the offering.

The **Prerequisites** topic in the information center contains information about the prerequisites for each component.

Use the information in the user's guide for the agent with the *Tivoli Enterprise Portal User's Guide* to monitor Citrix XenApp and XenDesktop resources.

Prerequisite publications

To use the information in this publication effectively, you must have some prerequisite knowledge.

See the following publications to gain the required prerequisite knowledge:

- *IBM Tivoli Monitoring Administrator's Guide*
- *IBM Tivoli Monitoring Agent Builder User's Guide*
- *IBM Tivoli Monitoring Command Reference*
- *IBM Tivoli Monitoring Installation and Setup Guide*
- *IBM Tivoli Monitoring High Availability Guide for Distributed Systems*
- *IBM Tivoli Monitoring: Messages*
- *IBM Tivoli Monitoring Troubleshooting Guide*
- *IBM Tivoli Monitoring Universal Agent User's Guide*
- *IBM Tivoli Universal Agent API and Command Programming Reference Guide*

- *IBM Tivoli Monitoring: i5/OS™ Agent User's Guide*
- *IBMTivoli Monitoring: IBM i OS Agent User's Guide*
- *IBM Tivoli Monitoring: Linux OS Agent User's Guide*
- *IBM Tivoli Monitoring: UNIX OS Agent User's Guide*
- *IBM Tivoli Monitoring: UNIX Logs OS Agent User's*
- *IBM Tivoli Monitoring: Windows OS Agent User's Guide*
- *Tivoli Enterprise Portal User's Guide*
- *IBM Tivoli Performance Analyzer User's Guide*
- *IBM Tivoli Warehouse Proxy Agent User's Guide*
- *IBM Tivoli Warehouse Summarization and Pruning Agent User's Guide*

Related publications

The publications in related information centers provide useful information.

See the following information centers, which you can find by accessing Tivoli Documentation Central (http://www.ibm.com/tivoli/documentation):

- Tivoli Monitoring
- Tivoli Application Dependency Discovery Manager
- Tivoli Business Service Manager
- Tivoli Common Reporting
- Tivoli Enterprise Console

Other sources of documentation

You can obtain additional technical documentation about monitoring products from other sources.

See the following sources of technical documentation about monitoring products:

- Service Management Connect (SMC)

  For introductory information about SMC, see IBM Service Management Connect (http://www.ibm.com/developerworks/servicemanagement/).

  For information about Tivoli products, see the Application Performance Management community on SMC (http://www.ibm.com/developerworks/servicemanagement/apm/index.html).

  Connect, learn, and share with Service Management professionals. Get access to developers and product support technical experts who provide their perspectives and expertise. You can use SMC for these purposes:

  – Become involved with transparent development, an ongoing, open engagement between external users and developers of Tivoli products where you can access early designs, sprint demos, product roadmaps, and pre-release code.
  – Connect one-on-one with the experts to collaborate and network about Tivoli and Integrated Service Management.
  – Benefit from the expertise and experience of others using blogs.
  – Collaborate with the broader user community using wikis and forums.
- IBM Integrated Service Management Library (http://www.ibm.com/software/brandcatalog/ismlibrary/) is an online catalog that contains integration documentation as well as other downloadable product extensions.
- IBM Redbook publications (http://www.redbooks.ibm.com/) include Redbooks® publications, Redpapers, and Redbooks technotes that provide information about products from platform and solution perspectives.

- Technotes (http://www.ibm.com/support/entry/portal/software), which are found through the IBM Software Support website, provide the latest information about known product limitations and workarounds.

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