Tivoli IBM Tivoli NetView for z/OS

IBM

Version 5 Release 4

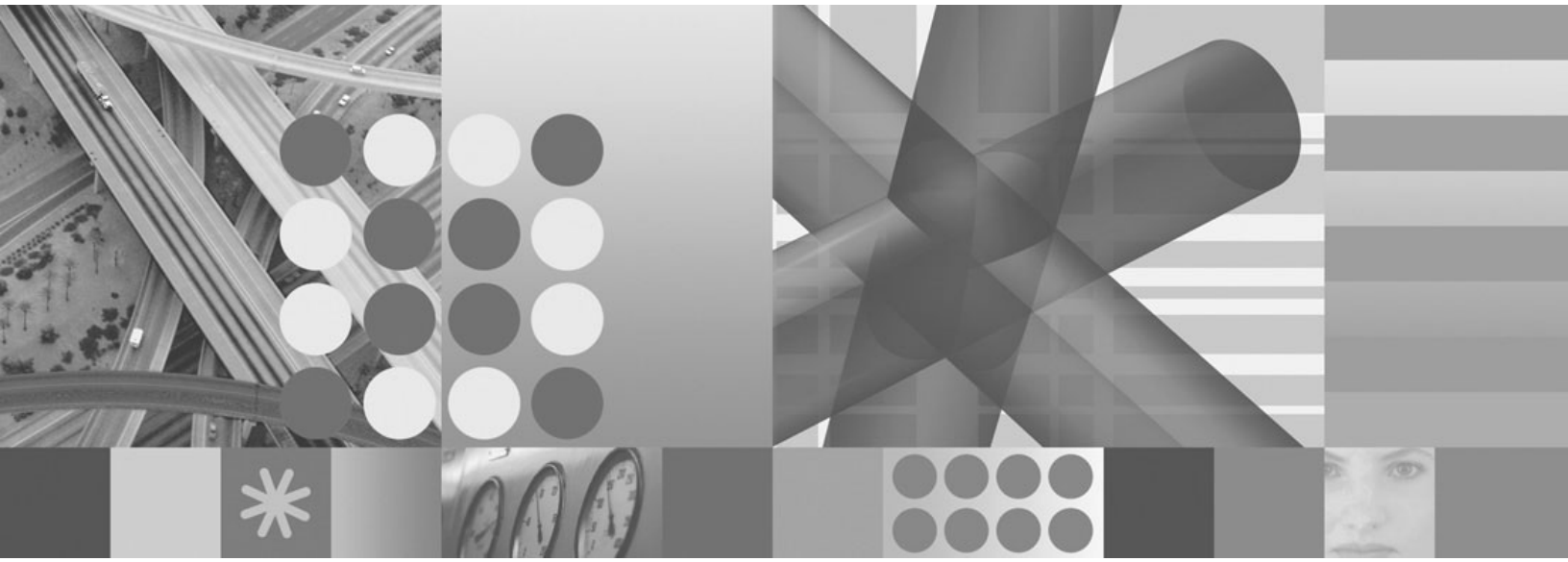
Installation: Migration Guide

SC31-8873-04

Tivoli® IBM Tivoli NetView for z/OS

IBM

Version 5 Release 4



Installation: Migration Guide

SC31-8873-04

Note
Before using this information and the product it supports, read the information in "Notices" on page 231.

This edition applies to version 5, release 4 of IBM Tivoli NetView for z/OS (product number 5697-ENV) and to all subsequent versions, releases, and modifications until otherwise indicated in new editions.

This edition replaces SC31-8873-03.

Contents

Figures

About this publication

The IBM® Tivoli® NetView® for z/OS® product provides advanced capabilities that you can use to maintain the highest degree of availability of your complex, multi-platform, multi-vendor networks and systems from a single point of control. This publication, the *IBM Tivoli NetView for z/OS Installation: Migration Guide*, provides information about migrating the base functions from a previous release of the NetView program. It also describes procedures to migrate from the NetView Graphic Monitoring Facility (NGMF) to the NetView management console and to migrate from the unattended feature, the procedural feature, and NetView System Services.

Intended audience

This publication is for system programmers, network planners, and system designers who migrate the NetView program from a previous release to the current release.

Publications

This section lists publications in the IBM Tivoli NetView for z/OS library and related documents. It also describes how to access Tivoli publications online and how to order Tivoli publications.

IBM Tivoli NetView for z/OS library

The following documents are available in the IBM Tivoli NetView for z/OS library:

- *Administration Reference*, SC31-8854, describes the NetView program definition statements required for system administration.
- *Application Programmer's Guide*, SC31-8855, describes the NetView program-to-program interface (PPI) and how to use the NetView application programming interfaces (APIs).
- *Automation Guide*, SC31-8853, describes how to use automated operations to improve system and network efficiency and operator productivity.
- *Command Reference Volume 1 (A-N)*, SC31-8857, and *Command Reference Volume 2 (O-Z)*, SC31-8858, describe the NetView commands, which can be used for network and system operation and in command lists and command procedures.
- *Customization Guide*, SC31-8859, describes how to customize the NetView product and points to sources of related information.
- *Data Model Reference*, SC31-8864, provides information about the Graphic Monitor Facility host subsystem (GMFHS), SNA topology manager, and MultiSystem Manager data models.
- *Installation: Configuring Additional Components*, SC31-8874, describes how to configure NetView functions beyond the base functions.
- *Installation: Configuring Graphical Components*, SC31-8875, describes how to install and configure the NetView graphics components.
- *Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*, SC31-6969, describes how to install and configure the NetView for z/OS Enterprise Management Agent.
- *Installation: Getting Started*, SC31-8872, describes how to install and configure the base NetView functions.

- *Installation: Migration Guide*, SC31-8873, describes the new functions provided by the current release of the NetView product and the migration of the base functions from a previous release.
- *IP Management*, SC27-2506, describes how to use the NetView product to manage IP networks.
- *Messages and Codes Volume 1 (AAU-DSI)*, SC31-6965, and *Messages and Codes Volume 2 (DUI-IHS)*, SC31-6966, describe the messages for the NetView product, the NetView abend codes, the sense codes that are included in NetView messages, and generic alert code points.
- *Programming: Assembler*, SC31-8860, describes how to write exit routines, command processors, and subtasks for the NetView product using assembler language.
- *Programming: Pipes*, SC31-8863, describes how to use the NetView pipelines to customize a NetView installation.
- *Programming: PL/I and C*, SC31-8861, describes how to write command processors and installation exit routines for the NetView product using PL/I or C.
- *Programming: REXX and the NetView Command List Language*, SC31-8862, describes how to write command lists for the NetView product using the Restructured Extended Executor language (REXX) or the NetView command list language.
- *Resource Object Data Manager and GMFHS Programmer's Guide*, SC31-8865, describes the NetView Resource Object Data Manager (RODM), including how to define your non-SNA network to RODM and use RODM for network automation and for application programming.
- *Security Reference*, SC31-8870, describes how to implement authorization checking for the NetView environment.
- *SNA Topology Manager Implementation Guide*, SC31-8868, describes planning for and implementing the NetView SNA topology manager, which can be used to manage subarea, Advanced Peer-to-Peer Networking, and TN3270 resources.
- *Troubleshooting Guide*, GC27-2507, provides information about documenting, diagnosing, and solving problems that might occur in using the NetView product.
- *Tuning Guide*, SC31-8869, provides tuning information to help achieve certain performance goals for the NetView product and the network environment.
- *User's Guide: Automated Operations Network*, GC31-8851, describes how to use the NetView Automated Operations Network (AON) component, which provides event-driven network automation, to improve system and network efficiency. It also describes how to tailor and extend the automated operations capabilities of the AON component.
- *User's Guide: NetView*, GC31-8849, describes how to use the NetView product to manage complex, multivendor networks and systems from a single point.
- *User's Guide: NetView Management Console*, GC31-8852, provides information about the NetView management console interface of the NetView product.
- *User's Guide: Web Application*, SC32-9381, describes how to use the NetView Web application to manage complex, multivendor networks and systems from a single point.
- *Licensed Program Specifications*, GC31-8848, provides the license information for the NetView product.
- *Program Directory for IBM Tivoli NetView for z/OS US English*, GI10-3194, contains information about the material and procedures that are associated with installing the IBM Tivoli NetView for z/OS product.

- *Program Directory for IBM Tivoli NetView for z/OS Japanese*, GI10-3210, contains information about the material and procedures that are associated with installing the IBM Tivoli NetView for z/OS product.
- *IBM Tivoli NetView for z/OS V5R4 Online Library*, SK2T-6175, contains the publications that are in the NetView for z/OS library. The publications are available in PDF, HTML, and BookManager® formats.

Related publications

The following publications provide information that is common to agents that work with the IBM Tivoli Monitoring product:

- *Quick Start Guide*, GI11-8918, summarizes the installation and setup of an OMEGAMON® XE monitoring agent on z/OS.
- *Common Planning and Configuration Guide*, SC23-9734, provides instructions for planning and configuration tasks that are common to the Tivoli Management Services components on z/OS and to the OMEGAMON XE monitoring agents on z/OS.
- *Upgrade Guide*, SC23-9745, provides instructions for complete and staged upgrades of the OMEGAMON XE V4.2.0 products.
- *End-to-End Response Time Feature Reference*, SC27-2303, provides instructions and reference information for the End-to-End Response Time Feature, which supplies response time data to several OMEGAMON XE products.
- *Reports for Tivoli Common Reporting*, SC27-2304, explains how to use the Tivoli Common Reporting tool to create reports from data that is displayed in the Tivoli Enterprise Portal and stored in the Tivoli Data Warehouse database.

You can find additional product information on the NetView for z/OS Web site:

http://www.ibm.com/software/tivoli/products/netview-zos/

For information about the NetView Bridge function, see *Tivoli NetView for OS/390 Bridge Implementation*, SC31-8238-03 (available only in the V1R4 library).

Accessing terminology online

The *Tivoli Software Glossary* includes definitions for many of the technical terms related to Tivoli software. The *Tivoli Software Glossary* is available at the following Tivoli software library Web site:

http://publib.boulder.ibm.com/tividd/glossary/tivoliglossarymst.htm

The IBM Terminology Web site consolidates the terminology from IBM product libraries in one convenient location. You can access the Terminology Web site at the following Web address:

http://www.ibm.com/software/globalization/terminology/

For a list of NetView for z/OS terms and definitions, refer to the IBM Terminology Web site. The following terms are used in this library:

NetView

For the following products:

- Tivoli NetView for z/OS version 5 release 4
- Tivoli NetView for z/OS version 5 release 3
- Tivoli NetView for z/OS version 5 release 2
- Tivoli NetView for z/OS version 5 release 1

- Tivoli NetView for OS/390® version 1 release 4

MVS For z/OS operating systems

MVS element
For the BCP element of the z/OS operating system

CNMCMD
For the CNMCMD member and the members that are included in it using the %INCLUDE statement

CNMSTYLE
For the CNMSTYLE member and the members that are included in it using the %INCLUDE statement

PARMLIB
For SYS1.PARMLIB and other data sets in the concatenation sequence

Unless otherwise indicated, references to programs indicate the latest version and release of the programs. If only a version is indicated, the reference is to all releases within that version.

When a reference is made about using a personal computer or workstation, any programmable workstation can be used.

Using NetView for z/OS online help

The following types of NetView for z/OS mainframe online help are available, depending on your installation and configuration:
- General help and component information
- Command help
- Message help
- Sense code information
- Recommended actions

Using LookAt to look up message explanations

LookAt is an online facility that you can use to look up explanations for most of the IBM messages you encounter, and for some system abends and codes. Using LookAt to find information is faster than a conventional search because, in most cases, LookAt goes directly to the message explanation.

You can use LookAt from the following locations to find IBM message explanations for z/OS elements and features, z/VM®, VSE/ESA, and Clusters for AIX® and Linux® systems:
- The Internet. You can access IBM message explanations directly from the LookAt Web site at http://www.ibm.com/systems/z/os/zos/bkserv/lookat/ .
- Your z/OS TSO/E host system. You can install code on your z/OS or z/OS.e system to access IBM message explanations, using LookAt from a TSO/E command line (for example, TSO/E prompt, ISPF, or z/OS UNIX® System Services running OMVS).
- Your Microsoft® Windows® workstation. You can install LookAt directly from the *z/OS Collection* (SK3T-4269) or the *z/OS and Software Products DVD Collection* (SK3T-4271) and use it from the resulting Windows graphical user interface (GUI). The command prompt (also known as the DOS command line) version can still be used from the directory in which you install the Windows version of LookAt.

- Your wireless handheld device. You can use the LookAt Mobile Edition from http://www.ibm.com/systems/z/os/zos/bkserv/lookat/lookatm.html with a handheld device that has wireless access and an Internet browser.

You can obtain code to install LookAt on your host system or Microsoft Windows workstation from the following locations:

- A CD in the *z/OS Collection* (SK3T-4269).
- The *z/OS and Software Products DVD Collection* (SK3T-4271).
- The LookAt Web site. Click **Download** and then select the platform, release, collection, and location that you want. More information is available in the LOOKAT.ME files that is available during the download process.

Accessing publications online

The documentation DVD, *IBM Tivoli NetView for z/OS V5R4 Online Library*, SK2T-6175, contains the publications that are in the product library. The publications are available in PDF, HTML, and BookManager formats. Refer to the readme file on the DVD for instructions on how to access the documentation.

IBM posts publications for this and all other Tivoli products, as they become available and whenever they are updated, to the Tivoli Information Center Web site at http://publib.boulder.ibm.com/infocenter/tivihelp/v3r1/index.jsp.

Note: If you print PDF documents on other than letter-sized paper, set the option in the **File → Print** window that enables Adobe® Reader to print letter-sized pages on your local paper.

Ordering publications

You can order many Tivoli publications online at http://www.elink.ibmlink.ibm.com/publications/servlet/pbi.wss

You can also order by telephone by calling one of these numbers:

- In the United States: 800-879-2755
- In Canada: 800-426-4968

In other countries, contact your software account representative to order Tivoli publications. To locate the telephone number of your local representative, perform the following steps:

1. Go to http://www.elink.ibmlink.ibm.com/publications/servlet/pbi.wss.
2. Select your country from the list and click **Go**.
3. Click **About this site** to see an information page that includes the telephone number of your local representative.

Accessibility

Accessibility features help users with a physical disability, such as restricted mobility or limited vision, to use software products successfully. Standard shortcut and accelerator keys are used by the product and are documented by the operating system. Refer to the documentation provided by your operating system for more information.

For additional information, see the Accessibility appendix in the *User's Guide: NetView*.

Tivoli technical training

For Tivoli technical training information, refer to the following IBM Tivoli Education Web site at http://www.ibm.com/software/tivoli/education.

Downloads

Clients and agents, NetView product demonstrations, and several free NetView applications can be downloaded from the NetView for z/OS support Web site:

http://www.ibm.com/software/sysmgmt/products/support/IBMTivoliNetViewforzOS.html

In the "IBM Tivoli for NetView for z/OS support" pane, click **Download** to go to a page where you can search for or select downloads.

These applications can help with the following tasks:

- Migrating customization parameters and initialization statements from earlier releases to the CNMSTUSR member and command definitions from earlier releases to the CNMCMDU member.
- Getting statistics for your automation table and merging the statistics with a listing of the automation table
- Displaying the status of a job entry subsystem (JES) job or canceling a specified JES job
- Sending alerts to the NetView program using the program-to-program interface (PPI)
- Sending and receiving MVS commands using the PPI
- Sending Time Sharing Option (TSO) commands and receiving responses

Support for problem solving

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
Go to the IBM Software Support site at http://www.ibm.com/software/support/probsub.html and follow the instructions.

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 http://www.ibm.com/software/support/isa/.

Troubleshooting information
For more information about resolving problems with the NetView for z/OS product, see the *IBM Tivoli NetView for z/OS Troubleshooting Guide*. Additional support for the NetView for z/OS product is available through the NetView user group on Yahoo at http://groups.yahoo.com/group/NetView/. This support is for NetView for z/OS customers only, and registration is required. This forum is monitored by NetView developers who answer questions and provide guidance. When a problem with the code is found, you are asked to open an official problem management record (PMR) to obtain resolution.

Conventions used in this publication

This publication uses several conventions for special terms and actions, operating system-dependent commands and paths, and command syntax.

Typeface conventions

This publication uses the following typeface conventions:

Bold

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

Italic

- Citations (examples: titles of publications, diskettes, and CDs
- Words defined in text (example: a nonswitched line is called a *point-to-point line*)
- Emphasis of words and letters (words as words example: "Use the word *that* to introduce a restrictive clause."; letters as letters example: "The LUN address must start with the letter *L*.")
- New terms in text (except in a definition list): a *view* is a frame in a workspace that contains data.
- Variables and values you must provide: ... where *myname* represents...

`Monospace`

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

Operating system-dependent variables and paths

For workstation components, this publication uses the UNIX convention for specifying environment variables and for directory notation.

When using the Windows command line, replace **$***variable* with **%***variable***%** for environment variables and replace each forward slash (**/**) with a backslash (\) in directory paths. The names of environment variables are not always the same in the Windows and UNIX environments. For example, %TEMP% in Windows environments is equivalent to $TMPDIR in UNIX environments.

Note: If you are using the bash shell on a Windows system, you can use the UNIX conventions.

Syntax diagrams

Read syntax diagrams from left-to-right, top-to-bottom, following the horizontal line (the main path). This section describes how syntax elements are shown in syntax diagrams.

Symbols

The following symbols are used in syntax diagrams:

►► Marks the beginning of the command syntax.

► Indicates that the command syntax is continued.

| Marks the beginning and end of a fragment or part of the command syntax.

►◄ Marks the end of the command syntax.

Parameters

The following types of parameters are used in syntax diagrams:

Required Required parameters are shown on the main path.

Optional Optional parameters are shown below the main path.

Default Default parameters are shown above the main path. In parameter descriptions, default parameters are underlined.

Syntax diagrams do not rely on highlighting, brackets, or braces. In syntax diagrams, the position of the elements relative to the main syntax line indicates whether an element is required, optional, or the default value.

Parameters are classified as keywords or variables. Keywords are shown in uppercase letters. Variables, which represent names or values that you supply, are shown in lowercase letters and are either italicized or, in NetView help and BookManager publications, displayed in a differentiating color.

In the following example, the USER command is a required keyword parameter, *user_id* is a required variable parameter, and *password* is an optional variable parameter.

Punctuation and parentheses

You must include all punctuation that is shown in the syntax diagram, such as colons, semicolons, commas, minus signs, and both single and double quotation marks.

When an operand can have more than one value, the values typically are enclosed in parentheses and separated by commas. For a single value, the parentheses typically can be omitted. For more information, see “Multiple operands or values” on page xxii.

If a command requires positional commas to separate keywords and variables, the commas are shown before the keywords or variables.

When examples of commands are shown, commas are also used to indicate the absence of a positional operand. For example, the second comma indicates that an optional operand is not being used:

```
COMMAND_NAME opt_variable_1,,opt_variable_3
```

You do not need to specify the trailing positional commas. Trailing positional and non-positional commas either are ignored or cause a command to be rejected. Restrictions for each command state whether trailing commas cause the command to be rejected.

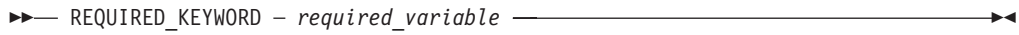
Abbreviations

Command and keyword abbreviations are listed in synonym tables after each command description.

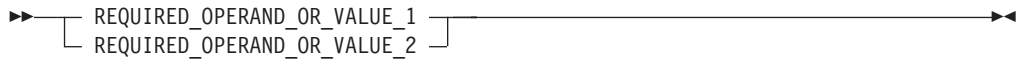
Syntax examples

This section show examples for the different uses of syntax elements.

Required syntax elements: Required keywords and variables are shown on the main syntax line. You must code required keywords and variables.

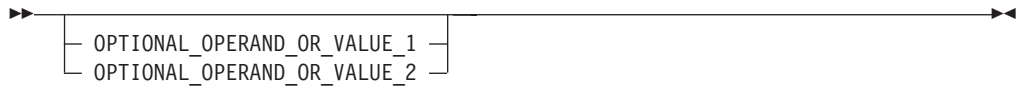


If multiple mutually exclusive required keywords or variables are available to choose from, they are stacked vertically in alphanumeric order.



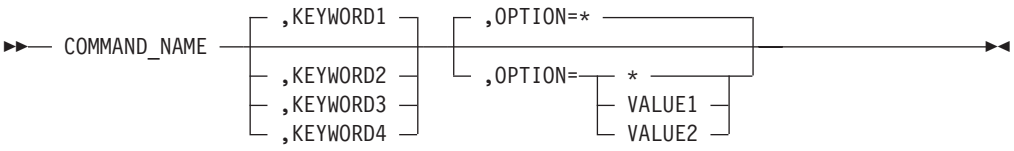
Optional syntax elements: Optional keywords and variables are shown below the main syntax line. You can choose not to code optional keywords and variables.

If multiple mutually exclusive optional keywords or variables are available to choose from, they are stacked vertically in alphanumeric order below the main syntax line.

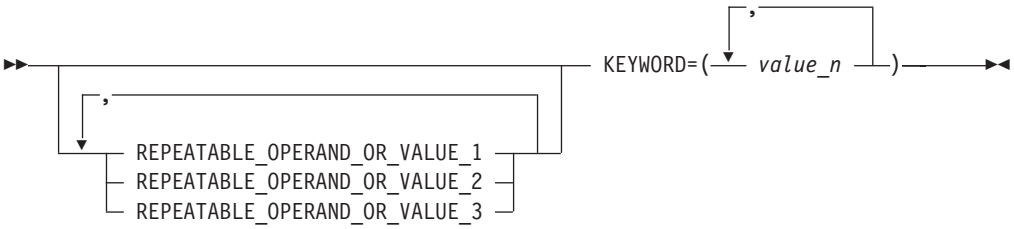


Default keywords and values: Default keywords and values are shown above the main syntax line in one of the following ways:

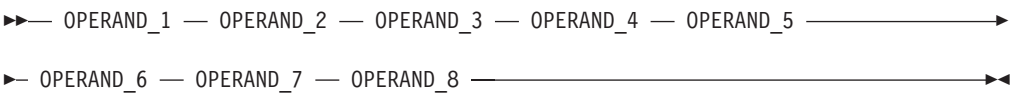
- A default keyword is shown only above the main syntax line. You can specify this keyword or allow it to default. The following syntax example shows the default keyword KEYWORD1 above the main syntax line and the rest of the optional keywords below the main syntax line.
- If an operand has a default value, the operand is shown both above and below the main syntax line. A value below the main syntax line indicates that if you specify the operand, you must also specify either the default value or another value shown. If you do not specify the operand, the default value above the main syntax line is used. The following syntax example shows the default values for operand OPTION=* above and below the main syntax line.



Multiple operands or values: An arrow returning to the left above a group of operands or values indicates that more than one can be selected or that a single one can be repeated.



Syntax that is longer than one line: If a diagram is longer than one line, each line that is to be continued ends with a single arrowhead and the following line begins with a single arrowhead.



Syntax fragments: Some syntax diagrams contain syntax fragments, which are used for lengthy, complex, or repeated sections of syntax. Syntax fragments follow the main diagram. Each syntax fragment name is mixed case and is shown in the main diagram and in the heading of the fragment. The following syntax example shows a syntax diagram with two fragments that are identified as Fragment1 and Fragment2.

Fragment1

Fragment2

Chapter 1. New, Changed, or Deleted Functions in the NetView V5R4 Program

Whether you have a small installation or you are managing a large, distributed enterprise, the NetView program provides efficient systems and network management capability on any platform. The new, changed, or deleted functions in this release are described in the following topics:

For comparison information on prior NetView release functions, refer to the IBM Tivoli NetView for z/OS Web site.

Automation

Table 1. Automation Enhancements

Function	Description	Additional information
Event/Automation Service	Added the confirmed alert adapter service and the confirmed message adapter service that confirm the delivery of EIF events to the target receiver.	• *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* • *IBM Tivoli NetView for z/OS Customization Guide*
NetView MVS Command Revision	You can use the NetView Command Revision function to examine, modify, or delete (cancel) MVS commands. You can make complex changes, requiring a transfer to the NetView address space, that include getting a response to a WTOR request, obtaining responses to other MVS commands, and reading files. The existing MVS command management function is still supported for migration purposes only, but is considered deprecated.	• *IBM Tivoli NetView for z/OS Automation Guide*

Table 1. Automation Enhancements (continued)

Function	Description	Additional information
SMF type 30 record automation	The MVS IEFACTRT SMF installation exit receives control from the system when a job or job step ends, either normally or abnormally. The NetView program provides a sample IEFACTRT exit (CNMSMF3E) that passes data across the Program-to-Program Interface (PPI) to a receiver, which issues a message containing the data that can be processed using NetView automation facilities. This enables quicker and more consistent responses for jobs that end abnormally.	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*

IP Management

Table 2. IP Management Enhancements

Function	Description	Additional information
Tivoli NetView for z/OS Enterprise Management Agent workspaces for DVIPA and discovery manager	New and changed DVIPA workspaces are provided to assist users with diagnosing DVIPA and distributed DVIPA problems. New and changed workspaces that display data collected by discovery manager are provided to assist users with diagnosing problems with TCP/IP stacks, IP interfaces, Telnet servers and ports, NetView applications, OSA and HiperSockets™ adapters.	For a list of changes, see "Enterprise Management Agent Changes" on page 208. For installation information, see *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*.
Discovery manager	The discovery manager collects sysplex, z/OS image, TCP/IP stack, IP interface, OSA, HiperSockets, NetView, and Telnet Server data for display in the NetView management console and the NetView for z/OS Enterprise Management Agent. It also provides real-time 3270 TCP/IP stack, IP interface, Telnet Server, OSA, HiperSockets, and NetView application commands.	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*
Distributed DVIPA statistics	Distributed DVIPA statistics are collected to help you evaluate how workload is being distributed to distributed DVIPA targets. This information is collected each time distributed DVIPA data collection is run and log the information into data sets for problem determination or historical trends. You can start logging the statistics at NetView initialization or by dynamically issuing the DVIPALOG command. The CNMSDVST sample command can be used to browse the data in the statistical data sets.	*IBM Tivoli NetView for z/OS IP Management*

Table 2. IP Management Enhancements (continued)

Function	Description	Additional information
Event-based updates for DVIPA	In addition to sampling, the NetView program can use events to update DVIPA information. This provides updates when changes occur. These events include z/OS Communications Server DVIPA SNMP traps, z/OS Communications Server VIPADYNAMIC TCP/IP profile updates, and some z/OS Communications Server sysplex monitoring messages. **Note:** Events for VIPADYNAMIC TCPIP profile updates require z/OS V1R11 Communications Server or later.	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*
IP packet trace and view	The packet trace interface no longer requires the AON component. The trace function provides management of IP packet traces. The view function provides capturing and viewing of IP packets.	*IBM Tivoli NetView for z/OS IP Management*
OSA packet trace and view	The packet trace interface has been updated to provide menu-driven OSA packet trace and view functions. The trace function provides management of OSA packet traces. The view function provides capturing and viewing of OSA packets.	*IBM Tivoli NetView for z/OS IP Management*
MultiSystem Manager IBM Tivoli Network Manager agent	The MultiSystem Manager agent for IBM Tivoli Network Manager extracts IP topology information from the IBM Tivoli Network Manager topology database about the network resources and relationships that are discovered by Tivoli Network Manager and loads the information into Resource Object Data Manager (RODM). This allows consolidated management of mainframe and enterprise IP resources from a central site.	*IBM Tivoli NetView for z/OS IP Management*
NetView management console supports communication on IPv6	The NetView management console supports communication on IPv6. For consistency with other IP functions provided by the NetView product, the term "IP sessions" was changed to "IP connections" in NetView management console windows, messages, and helps.	"Migrating the NetView Management Console Topology Server and Console" on page 161
AON functions	The following functions moved from the AON component to the base NetView program: • ACTMON • Intrusion Detection • IP component trace • IP trace • IPMAN • IPSTAT • NVSNMP	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*

Sysplex and System Management

Table 3. Sysplex and System Management Enhancements

Function	Description	Additional information
Sysplex and system management	The increasing complexity of managing a sysplex environment has led to the need for management from a single point of control. The NetView program provides high availability sysplex management to ease complex system interactions and to maximize operational effectiveness. A master NetView program is automatically available for you to use in managing and displaying information about your sysplex. Automatic failover to another NetView program that can monitor the sysplex in the event of an outage is also provided. Monitoring of sysplex and system resources, including sysplexes, coupling facilities, z/OS images, TCP/IP stacks, IP interfaces, dynamic virtual IP addresses (DVIPAs), Telnet servers and ports, central processor complexes, logical partitions, Open Systems Adapter (OSA) and HiperSockets adapters, is available with this powerful management capability. A master NetView program can provide management for systems outside of the sysplex as well as for another sysplex. This NetView program is known as an enterprise NetView program. Additional configuration is needed for the enterprise NetView program to manage systems that are outside of the sysplex. DVIPA information is restricted to sysplex management.	*IBM Tivoli NetView for z/OS IP Management*
XCF services	XCF services are used to automatically provide awareness of other NetView programs within the sysplex. This awareness allows the NetView program to failover to another NetView program in the event of an outage. By using XCF services, a master NetView program is implemented that collects and processes data from other NetView programs within the sysplex to provide a single point of control.	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*

Enterprise Integration

Table 4. Enterprise Integration

Function	Description	Additional information
Tivoli NetView for z/OS Enterprise Management Agent	With the NetView V5R4 product, the NetView for z/OS Enterprise Management Agent (NetView agent) becomes a separate function modification identifier (FMID), and has been removed from the base NetView program installation. The new FMID uses IBM Tivoli Monitoring V6.2.1 Interim Fix 3 or later as its base. When running the installation using SMP/E, the NetView agent is installed into the IBM Tivoli Monitoring target libraries.	Program Directory for Tivoli NetView for z/OS Enterprise Management Agent
MultiSystem Manager IBM Tivoli Network Manager feature	The IBM Tivoli Network Manager feature transfers information about resources that are identified and managed locally by the IBM Tivoli Network Manager product. After the information is stored in RODM, the NetView operator can view and manage these network resources from the NetView management console.	*IBM Tivoli NetView for z/OS User's Guide: NetView*
Tivoli Common Reporting	Both real-time and historical data are available within the NetView agent workspaces. After historical data collection is configured, enabled, and data is collected and sent to the Tivoli Data Warehouse, you can create reports using the Tivoli Common Reporting tool. The NetView program provides historical reports that you can use with this tool.	*IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*

Additional Enhancements

Table 5. Additional Enhancements

Function	Description	Additional information
CLOSE command and message automation	You can use the endcmd.close.leeway statement in the CNMSTYLE member to specify how long commands can run after a CLOSE IMMED, CLOSE STOP, or an MVS STOP (P) command is entered for the NetView program. This allows for the completion of complex cleanup activities in user-written code. During the leeway period, message automation remains active, but no new commands can be queued.	• *IBM Tivoli NetView for z/OS Automation Guide* • *IBM Tivoli NetView for z/OS Administration Reference*

Table 5. Additional Enhancements (continued)

Function	Description	Additional information
NetView Web Services Gateway	NetView Web Services Gateway provides an open interface into the NetView program to issue commands and receive responses. SOAP is used for communications and HTTP or HTTPS as the transport mechanism.	• *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* • *IBM Tivoli NetView for z/OS Application Programmer's Guide*
Global KEEP	The global KEEP function enhances and extends the existing capabilities of the NetView PIPE KEEP function, which users use to create, delete, modify, and access repositories (keeps) of NetView messages. The name space is expanded to allow 255-byte identifiers for the keeps. Additionally, specially designated keeps are accessible from any regular task.	*IBM Tivoli NetView for z/OS Programming: Pipes*
Security - password phrase support	Password phrases can be substituted for passwords. The password phrase can include phrases up to 100 characters in length, allowing for stronger sign-on protection.	*IBM Tivoli NetView for z/OS Security Reference*

Removed Functions

Table 6. Removed Functions

Function	Description	Additional information
Tivoli NetView for z/OS Enterprise Management Agent workspaces	The following three workspaces have been deprecated: • DVIPA Distributor Targets • DVIPA Workload by Port • Filtered DVIPA Distributor Targets	For details about these workspace changes, see "Enterprise Management Agent Changes" on page 208.
Tivoli NetView for z/OS Enterprise Management Agent Reports using Tivoli Common Reporting	The DVIPA Workload report has been deprecated.	*IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*
NetView for z/OS Tivoli Enterprise Portal Agent	The following versions of the NetView for z/OS Tivoli Enterprise Portal Agent have been removed: • NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0 • NetView for z/OS Tivoli Enterprise Portal V6.1 Agent Version 5.2.5 • NetView for z/OS Tivoli Enterprise Portal Agent Version 5.3	• Chapter 5, "Migrating from Tivoli NetView for z/OS Version 5 Release 2," on page 95 • Chapter 6, "Migrating from Tivoli NetView for z/OS Version 5 Release 3," on page 117
SNMP functions in the Web application	SNMP functions have been removed from the NetView Web application.	"NetView Web Application" on page 138

Table 6. Removed Functions (continued)

Function	Description	Additional information
SNMP functions in the NetView management console	SNMP functions that have been removed from the Web application can no longer be launched from the NetView management console.	"NetView Management Console" on page 138
Multisystem Manager LAN Network Manager support	Support for this discontinued product has been removed.	
LPDA	Support for this discontinued hardware has been removed.	

Library Changes

Table 7. Library Changes

Publication	Description	Additional information
MultiSystem Manager User's Guide	This manual has been removed from the library, and the information in this manual has been moved to other manuals.	Installing and configuring MultiSystem Manager: *IBM Tivoli NetView for z/OS Installation: Configuring Graphical Components* MultiSystem Manager IP agent: *IBM Tivoli NetView for z/OS IP Management* Using MultiSystem Manager: *IBM Tivoli NetView for z/OS User's Guide: NetView Management Console*
Automated Operations Network Customization Guide	This manual has been combined with the *IBM Tivoli NetView for z/OS User's Guide: Automated Operations Network*.	*IBM Tivoli NetView for z/OS User's Guide: Automated Operations Network*
IP Management	This new manual about using the NetView for z/OS program for IP management has been added to the library.	*IBM Tivoli NetView for z/OS IP Management*
OMEGAMON XE shared publications	OMEGAMON XE shared publications are available from the NetView information center. These books are useful during installation of the Tivoli NetView for z/OS Enterprise Management Agent.	*IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*

Chapter 2. Preparing for Migration

This book provides information for migration to the NetView V5R4 program. Before beginning your installation, read the NetView program directory.

Other sources of information

- For detailed information about the steps required to install the NetView program, refer to *IBM Tivoli NetView for z/OS Installation: Getting Started*.
- If you are installing the NetView program on the same LPAR as an existing NetView program, see "Running Multiple NetView Programs in the Same LPAR" in *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* while completing the steps in this book.

If you are migrating from a release prior to Tivoli NetView for OS/390 V1R3, install as a new user. Refer to *IBM Tivoli NetView for z/OS Installation: Getting Started*.

Overview

Migration consists of:

1. Installing the NetView program from distribution tape using SMP/E with the help of the NetView program directory
2. Making necessary additional preparations to your z/OS system for the current NetView release
3. Modifying your existing NetView installation to incorporate changes that have been made to the current NetView release
4. Verifying the migration by testing the basic functions of the NetView program

This book is designed to guide you through the migration and verification of the NetView program in a minimum amount of time.

Hardware and Software Requirements

Refer to the NetView program directory for detailed information and an inclusive list of the hardware and software requirements for installation.

Installation Package

For detailed information on the installation package contents, refer to the NetView program directory.

Workstation-based NetView code is provided in two formats:

- CD or DVD
- Tivoli Web site

The Tivoli NetView for z/OS Enterprise Management Agent (NetView agent) was available as a component of NetView for z/OS V5R3. Starting with NetView for z/OS V5R4, it is packaged as a separate FMID that is SMP/E installable. For more

information about installing the NetView agent, see *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*.

Installing the New NetView Release While Running the Old NetView Release

If you want to keep running your old version of the NetView program as your production system while you plan for and migrate to V5R4, the following actions can make your migration easier:

- If you ordered this package as a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3), you can install the V5R4 files into separate SMP global and target zones from those used for your existing NetView release.
- Unless you plan to run two full NetView programs concurrently, it is a good idea to delete the old NetView release when your migration is completed.
- The modules that are copied into SCNMLPA1 during V5R4 installation are backward-compatible with:
  - Tivoli NetView for z/OS Version 5 Release 3
  - Tivoli NetView for z/OS Version 5 Release 2
  - Tivoli NetView for z/OS Version 5 Release 1
  - Tivoli NetView for OS/390 Version 1 Release 4

  While the modules in SCNMLPA1 are backward-compatible with previous NetView releases, it is recommended to run with the copy of these modules from the current release to keep SCNMLPA1 up to date. Therefore, delete the old copy of SCNMLPA1 and place the V5R4 copy of SCNMLPA1 in LPALST. Schedule this activity at a convenient time because this requires you to restart your z/OS system.
- The ISTIECCE load module in NETVIEW.V5R4M0.SCNMLNK1 is not compatible with the ISTIECCE module from NetView V1R4. Be sure that the correct level of this module is included in the VTAMLIB DD statement in your VTAM® start procedure. Using an earlier version of the ISTIECCE module or not having this module in the correct library can result in status monitor initialization failure or other unpredictable results.
- Decide how you are going to access the LNKLST modules for the previous (existing) NetView release while migrating to the NetView V5R4 program. You can use the STEPLIB data set concatenation to access the NetView LNKLST libraries for both releases while you are migrating to the new release, or you can use a PROG*xx* PARMLIB member to access the NetView V5R4 libraries while using the STEPLIB data set concatenation for the libraries for the NetView program from which you are migrating.

Support is provided for running two releases of the NetView program, NetView management console, and RODM on one production system. For more information about running two NetView releases on the same system, see "Running Multiple NetView Programs in the Same LPAR" in *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

Migration Process

Follow the steps in the process outlined in subsequent sections to migrate to the current release of the NetView program. These steps are a high-level overview of the installation process used for new users, and serve as a checklist to ensure that the environment is prepared and that the NetView program is installed properly. The environments that are prepared for the current NetView release include:

- MVS system
- UNIX system services

After preparing these environments for the NetView program, the migration steps are grouped in the following way:

- Base NetView functions
- Graphical NetView functions
- Advanced NetView configuration

Before you begin the migration process, make a backup copy of your NetView libraries.

Data Set Consolidation

The AON, Event/Automation Service (E/AS), and RODM data sets from previous releases have been consolidated into NetView data sets.

Table 8. Data Set Consolidation

Release When Consolidated	Previous Data Set Name	V5R4 Data Set Name
V5R2	AEKGCAS1	ACNMSAMP
	AEKGLUTB	ACNMSAMP
	AEKGMOD1	ACNMLINK
	AEKGPNL1	ACNMPNL1
	AEKGSMP1	ACNMSAMP
	AEZLCLST	ACNMCLST
	AEZLINST	ACNMSAMP
	AEZLLINK	ACNMLINK
	AEZLPNLU	ACNMPNL1
	AEZLSAMP	ACNMSAMP
	SEKGCAS1	CNMSAMP
	SEKGLNK1	SCNMLNKN
	SEKGLUTB	CNMSAMP
	SEKGMOD1	CNMLINK
	SEKGMOD2	CNMLINK
	SEKGPNL1	CNMPNL1
	SEKGSMP1	CNMSAMP
	SEZLCLST	CNMCLST
	SEZLINST	CNMSAMP
	SEZLLINK	CNMLINK
	SEZLPNLU	CNMPNL1
	SEZLSAMP	CNMSAMP
V5R4	ACNMUXLK	ACNMLINK
	ACNMUXMS	ACNMSAMP or ADUIMSG1
	SCNMUXLK	CNMLINK
	SCNMUXMS	CNMSAMP or SDUIMSG1

Notes:

1. For V5R2, SCNMLNKN is a new data set name.
2. RODM data sets AEKGLANG and SEKGLANG were not consolidated.
3. E/AS data sets ACNMUXCL and SCNMUXCL were not consolidated.

Preparing the MVS System

The following steps are required to update MVS for the NetView V5R4 program. These are the same basic steps required for a new installation. For additional information on these steps, refer to *IBM Tivoli NetView for z/OS Installation: Getting Started*.

Refer to Table 9 to update members in SYS1.PARMLIB.

Table 9. SYS1.PARMLIB Members

Member Name	Suggested Updates
COUPLExx	Add the following DATA statement to identify the automatic restart manager (ARM) couple data to XCF: `DATA TYPE(ARM) PCOUPLE(primary-dsname) ACOUPLE(alternate-dsname)` Initialize the primary and alternate ARM couple data sets after you create them. If you are adding this system to a sysplex to enable the NetView program to use XCF Services, see *z/OS MVS Setting Up a Sysplex* .
PROGxx or IEAAPFxx	If these are not already authorized, authorize all the libraries included in the STEPLIB, VTAMLIB, and NCPLOAD concatenations in your VTAM and NetView start procedures: • VTAM start procedure: CNMSJ008 (CNMNET) • NetView start procedure: CNMSJ009 (CNMPROC) • NetView subsystem interface (SSI) start procedure: CNMSJ010 (CNMPSSI) • RODM start procedure: EKGXRODM • GMFHS start procedure: CNMSJH10 (CNMGMFHS) • Event/Automation Service start procedure: IHSAEVNT Verify the following NetView libraries are authorized: • NETVIEW.V5R4M0.SCNMLNK1 • NETVIEW.V5R4M0.SCNMLPA1 • NETVIEW.V5R4M0.CNMLINK • NETVIEW.V5R4M0.SCNMLNKN If you are installing the Japanese program V5R4, authorize the NetView data set, SCNMMJPN. This data set is in the STEPLIB of CNMPROC. If you plan to use the Tivoli NetView for z/OS Enterprise Management Agent, authorize the following additional libraries: • RKANMOD • RKANMODL • RKANMODU • Any runtime libraries that are concatenated in the STEPLIB DDNAME and in the RKANMODL DDNAME of the CANSNA and CANSDSST started tasks

Table 9. SYS1.PARMLIB Members (continued)

Member Name	Suggested Updates
PROGxx or IEAAPFxx (continued)	For the REXX environment, verify that one of the following libraries is APF-authorized: • REXX/370 runtime library: SEAGLPA • REXX alternate library: SEAGALT If you plan to use the Web Services Gateway, verify that the following libraries are APF-authorized: • XML toolkit runtime library: SIXMLOD1 • GSKit runtime library: SIEALNKE **Note:** You can use the SETPROG APF command to dynamically update the list of APF-authorized libraries. The following data sets are no longer used by NetView V5R4 and can be removed if they are not being used for other reasons: • SCNMUXLK • SEKGMOD1 • SEKGMOD2 • SEZLLINK • SEKGLNK1 • SEKGSMP1
IEAIPSxx	For the workload manager, you can no longer specify a dispatching priority in JCL. The system ignores the DPRTY keyword on the JCL EXEC statement. No warning message is issued when a DPRTY parameter is recognized but ignored.

IEASYMxx	Add a SYSDEF statement to identify user-defined system symbols for the NetView program, including the TCP/IP application name, RODM name, and network ID.
	
	Setting these symbolic variables can alleviate modification of many of the NetView initialization members unless some default parameter such as a TCP/IP port needs to be changed.
	
	For example, you can define the following symbolic variables (these are the default NetView symbolic names):
	`SYSDEF SYMDEF(&CNMTCPN='tcpip_name')`
	`SYSDEF SYMDEF(&CNMRODM='rodm_name')`
	`SYSDEF SYMDEF(&CNMNETID='network_id')`
	
	The initialization members that use the symbolic variables are shown in Table 11 on page 18.
	
	If you use sample A01APPLS (CNMS0013), you can set the &CNMDOMN symbol to the NetView domain. If you do not set this symbol, replace &CNMDOMN with the NetView domain.
	Note: The NetView for z/OS Enterprise Management Agent also supports system symbolics if you need to make updates. See the *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*.

Table 9. SYS1.PARMLIB Members (continued)

Member Name	Suggested Updates
IEASYSxx	Specify the maximum number of ASIDs and replacement ASIDs for the NetView program. Beginning with V5R3, there are one or two additional address spaces per LPAR for the NetView for z/OS Enterprise Management Agent. You will have two if you run a z/OS Tivoli Enterprise Monitoring Server. • Set MAXUSER to the number of ASIDs you want available at any one time. • Set RSVNONR to the value you want for replacement values. **Note:** The total of the values of MAXUSER, RSVNONR, and RSVSTRT, cannot exceed 32767. If you want a low MAXUSER value, be sure to provide a reasonably large value for RSVNONR. Add a COUPLE system parameter to identify the COUPLExx member containing the DATA statements for the automatic restart manager (ARM) or the workload manager (WLM). Add PLEXCFG=MONOPLEX or PLEXCFG=MULTISYSTEM for ARM or WLM support. If you are adding this system to a sysplex to enable the NetView program to use XCF Services, see *z/OS MVS Setting Up a Sysplex* . If you are using ARM support, use the COUPLE system parameter to identify the COUPLE*xx* member containing your DATA statements. Set the PLEXCFG operand as appropriate for your environment.
IEFSSNxx	Verify that the NetView and RODM subsystem names are defined: • RODM subsystem name (EKGX is the default) • 4-character NetView subsystem name (CNMP is the default) Consider the following conditions before deciding where to place the NetView subsystem name in IEFSSNxx: • If you place the NetView subsystem name before other subsystem names in IEFSSNxx, the NetView subsystem receives all MVS system messages and commands without any modification by the other subsystems. • If you place the NetView subsystem name after other subsystem names in IEFSSNxx, all MVS messages and commands received by the NetView subsystem are affected by the changes made by the other subsystems listed before the NetView subsystem.
IKJTSO*xx*	If you plan to use the NetView for z/OS Enterprise Management Agent, add the KPDDSCO program in the authorized program (AUTHPGM) section: `AUTHPGM NAMES(KPDDSCO,pgm2,...)`

Table 9. SYS1.PARMLIB Members (continued)

Member Name	Suggested Updates
PROGxx or LNKLSTxx	If you are using LINKLST instead of a STEPLIB DD statement in any of your NetView JCL members (for example, your startup procedure), update your PROG*xx* member in the SYS1.PARMLIB data set to include the following program libraries as extensions to the SYS1.LINKLIB data set: • NETVIEW.V5R4M0.CNMLINK • NETVIEW.V5R4M0.SCNMLNKN Note that the SCNMLNKN data set is used for RODM trace, MVS command exit, and DSIPHONE (which is used by the UNIX and TSO command servers). The SCNMLNKN data set is not referenced in the NetView program samples; JCL for those samples must specify the SCNMLNKN data set on the STEPLIB DD statement if it is not included in the PROG*xx* member. The following data sets are no longer used by NetView V5R4 and can be removed if they are not being used for other reasons: • SCNMUXLK • SEKGMOD1 • SEKGMOD2 • SEZLLINK • SEKGLNK1 • SEKGSMP1 **Note:** If you are using the Take Action security solution for z/OS products which use the Tivoli Management Services infrastructure, coding the NetView CNMLINK data set in LNKLSTxx is not sufficient. You must also concatenate in the NetView CNMLINK data set under the RKANMODL DD statement in the Tivoli Enterprise Monitoring Server or the z/OS agent. See the *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent* about the Take Action security.
PROGxx EXIT	If you plan to use the CNMSMF3E sample as an IEFACTRT exit routine, associate the CNMSMF3E sample to the IEFACTRT exit by adding the following statement to your PROG*xx* member: `EXIT ADD EXITNAME(SYS.IEFACTRT) MODNAME(CNMSMF3E)` Note that more than one exit routine can be defined for the IEFACTRT exit, so there might be more than one EXIT statement for the SYS.IEFACTRT exit in your PROG*xx* member.
LOADxx	If necessary, add an IEASYM statement to identify the IEASYMxx member to use for user-defined system variables.
LPALSTxx	Include the SCNMLPA1 data set. If you are running a previous NetView release on the same system as V5R4, add the V5R4 SCNMLPA1 to LPALST*xx*. Ensure that LPALST*xx* does not include any previous NetView SCNMLPA1. Data sets specified in the LPALST*xx* member no longer need to be APF-authorized or cataloged in the system master catalog. If the SCNMLPA1 data set is cataloged in a user catalog, specify (in parenthesis immediately following the data set name) the 1- to 6-character VOLSER of the pack on which the SCNMLPA1 data set resides, for example: `NETVIEW.V5R4M0.SCNMLPA1(`*`volser`*`)`

Table 9. SYS1.PARMLIB Members (continued)

Member Name	Suggested Updates

MPFLST*xx*	If you plan to use the MVS command exit DSIRVCEX for Command Revision, add the following statement to MPFLSTxx member in SYS1.PARMLIB:
	`.CMD USEREXIT(DSIRVCEX)`
	If you are currently using MVS Command Management and want to continue using it during your transition to the NetView Command Revision function, use the following statement:
	`.CMD USEREXIT(DSIRVCEX,DSIMCAEX)`
	For more information on the NetView Command Revision function, refer to *IBM Tivoli NetView for z/OS Automation Guide*.

SCHEDxx	Verify that the NetView program runs in MVS storage key 8. Ensure the SCHEDxx statements for the NetView program are used:
	• The NetView program without the hardware monitor (NPDA), PGM=DSIMNT in your NetView JCL PROC:
	`PPT PGMNAME(DSIMNT) NOSWAP KEY(8)`
	• The NetView program with the hardware monitor (NPDA), PGM=BNJLINTX in your NetView JCL PROC:
	`PPT PGMNAME(BNJLINTX) NOSWAP KEY(8)`
	• The RODM program, PGM=EKGTC000 in your RODM JCL PROC:
	`PPT PGMNAME(EKGTC000) NOSWAP NOCANCEL`
	• The NetView GMFHS program, PGM=DUIFT000 in your GMFHS JCL PROC:
	`PPT PGMNAME(DUIFT000) NOSWAP KEY(8)`
	The NetView program SSI address space and the NetView for z/OS Enterprise Management Agent can make themselves nonswappable.

SMFPRMxx	Verify that type 37 (hardware monitor) and type 39 (session monitor) SMF records are set up to be collected. As of V5R4, if you plan to use the CNMSMF3E sample as an IEFACTRT exit routine, verify that type 30 SMF records are set up to be collected and that the EXITS operand of the SYS specification includes the IEFACTRT exit. **Note:** Use of the supervisor call instruction (SVC) number is no longer supported in the NetView program. If you were using an SVC number, delete the following statement: `LOGSVC nnn` The corresponding SVC can be deleted from LPALIB if you are no longer running a previous release of the NetView program.

Table 10 on page 18 lists the data spaces that are created by various NetView address spaces. If you limit the size of your data spaces in your installation with the IEFUSI exit, adjustments might be necessary when activating the functions listed in Table 10.

Table 10. Data spaces created by the NetView program

Address Space	Data Spaces Created
NetView	• The NetView program creates an internal trace data space at initialization that is managed through the TRSIZE parameter in the CNMPROC startup procedure. • As of V5R2, TCP/IP connection management (TCPCONN) creates a data space for each TCP/IP stack on your system. • As of V5R2, the IP packet trace (PKTS) function creates a data space for each TCP/IP stack on your system. • As of V5R4, the OSA packet trace (OPKT) function creates a data space for each TCP/IP stack on your system. • As of V5R4, if the DISCOVERY tower is enabled in the CNMSTYLE member, the real-time SMF data network management interface (SYSTCPSM) creates a data space for each TCP/IP stack on your system.
RODM	RODM creates and utilizes three data spaces. Note that RODM allocates a 2 gigabyte data space at initialization.
NetView for z/OS Enterprise Management Agent	As of V5R3, the NetView for z/OS Enterprise Management Agent creates a data space for each NetView program with which it communicates and a second data space is created if the value of the NACMD.PERSIST statement in the CNMSTYLE member is greater than zero.

The initialization members that use the symbolic variables are listed in Table 11:

Table 11. Symbolic Variable Usage by Initialization Members

Member	Task	TCP/IP NAME	RODM NAME	NETID
		&CNMTCPN	&CNMRODM	&CNMNETID
CNMSTYLE	NetView initialization	X	X	X
DUIGINIT	GMFHS (Graphics)		X	
FLBSYSD	SNA Topology manager		X	
Note: After you run job CNMSJBUP (see Table 13 on page 20), you can use sample CNMSJM12 in data set NETVIEW.V5R4USER.INSTALL as an alternate method to do symbol substitution. CNMSJM12 replaces symbolic variables in NetView members.				

Additional considerations include:

- The NetView V5R4 program requires access to the REXX runtime library or the REXX alternate library.
- Several of the NetView components (such as MultiSystem Manager and AON) and base NetView functions exercise code that is written in REXX. The NetView program also contains several parts that make use of the Data REXX function. Use the Data REXX function to include REXX instructions and functions in data files. To initialize the NetView program, you might need to adjust the maximum number of language processor environments that the system initializes for the NetView address space. For more information on language processor (REXX) environments for the NetView program, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

- If you are going to run System Automation for z/OS and the AON component of the NetView program in the same address space, enable the workload manager. For more information, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

Preparing UNIX System Services

The following steps are required to update the UNIX System Services for NetView V5R4. When you upgrade your MVS NetView components to V5R4, also upgrade your UNIX System Services NetView components to V5R4.

Notes:

1. Because of the way the NetView program accesses UNIX System Services configuration files, you can only run one version of the configuration files with the NetView program.
2. If you are running multiple NetView programs under one LPAR, you can only access the CNMEUNIX program from one of these NetView programs. This is because the PPI receiver is specified in the CNMEUNIX program.

These are the same basic steps required for a new installation. For additional information on these steps, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

1. Update member BPXPRM*xx* in SYS1.PARMLIB to specify UNIX System Services parameters.
2. The CNMSJ032 job creates directories in your z/OS UNIX System Services environment, copies application files, and MIB source files. Review the comments in the CNMSJ032 job profile and make any changes before running this job.
3. If necessary, update the z/OS UNIX System Services environment variables.
4. Review your existing RACF® definitions. For more information, refer to the *IBM Tivoli NetView for z/OS Security Reference*.
5. Enable the UNIX command server.
6. Review the Event/Automation Service startup procedure IHSAEVNT.
7. After installation, review the correlation engine/Common Event Infrastructure interface start-up job CNMSJZCE.

The NetView program uses hierarchical file system (HFS) or zSeries® file system (zFS) data sets relative to z/OS UNIX system services as described in the NetView program directory. The NetView program allocates the following directories:

```
./usr/lpp/netview/v5r4/bin
./usr/lpp/netview/v5r4/mibs
./usr/lpp/netview/v5r4/lib
./usr/lpp/netview/v5r4/samples
./usr/lpp/netview/v5r4/samples/at-tls
./usr/lpp/netview/v5r4/samples/properties
./usr/lpp/netview/v5r4/www
./usr/lpp/netview/v5r4/www/img
```

When you have completed your configuration, NetView V5R4 USS uses the directories in Table 12:

Table 12. Directory structure used by UNIX System Services

Directory	Description
/usr/lpp/netview/v5r4/bin	Executable files

Table 12. Directory structure used by UNIX System Services (continued)

Directory	Description
/usr/lpp/netview/v5r4/mibs	Management Information Base (MIB) files
/etc/netview/mibs	For user-defined MIBs and MIBs not included with NetView V5R4
/etc/netview/v5r4	Application files
/etc/netview/v5r4/properties	Application files
/tmp/netview/v5r4	Application files
/tmp/netview/v5r4/logs	Application files
/var/netview/v5r4/rulefiles	Application files

The NetView MIB collection can be found in the `/usr/lpp/netview/v5r4/mibs` directory. As provided, the NetView program looks for user-defined MIBs in the `/etc/netview/mibs/` directory. If you place your user-defined MIBs in another location, you must update the COMMON.CNMSNMP.MIBPATH statement in the CNMSTUSR or C*xx*STGEN member to reflect the locations of your MIBs. For more information on the MIB collection provided by the NetView program, refer to the README.mibs file in the `/usr/lpp/netview/v5r4/mibs/` directory.

Note: If, as part of your NetView migration, you upgraded the z/OS system to V1.10 or later, make sure that you run the CNMSJ032 sample to copy the MIB files to `/etc/netview/mibs`. For additional information on copying the MIB files, see the comments in the CNMSJ032 sample.

Preparing the NetView Program

Consider the steps in Table 13 when migrating to NetView V5R4. These are the same basic steps required for a new installation. Noted in these steps are changes that affect migrating users. For additional information, refer to *IBM Tivoli NetView for z/OS Installation: Getting Started*.

Warning: After running CNMSJBUP, all of the NetView installation JCL and related members can be found in data set NETVIEW.V5R4USER.INSTALL. Only work from this data set. Continuing to work from NETVIEW.V5R4M0.CNMSAMP can cause unexpected results when you are running the installation JCL described in Table 13.

Table 13. Installation JCL

Member	Description
CNMSJBUP	Copies the installation JCL members in NETVIEW.V5R4M0.CNMSAMP into data set NETVIEW.V5R4USER.INSTALL. **Note:** The entire NetView samples library is not copied. Only a subset of the members that might need modification in data set NETVIEW.V5R4M0.CNMSAMP is copied.
CNMSJ001	Creates an ICF catalog and defines the ALIAS name NETVIEW as the high-level qualifier for the NetView data sets. Run this job if you did not define this alias name during the NetView program directory installation and you plan to use this high-level qualifier.

Table 13. Installation JCL (continued)

Member	Description
CNMSJ002	Allocates partitioned data sets. Allocate a set of V5R4 user data sets for each NetView domain that you are installing and copy all of your customized members from that domain's user data sets into these V5R4 data sets. **Notes:** 1. Review the symbolic variables in the comments supplied in this job. Change the &UNIT and &SER JCL variables to match your installation, if needed. 2. Change the &DOMAIN JCL variable to match the NetView domain name you are installing. 3. As of V1R4, the following data sets are no longer needed: • NETVIEW.V*x*R*x*USER.&*domain*.USER.PROFILE • NETVIEW.V*x*R*x*USER.&*domain*.VIEW.OUTPUT 4. As of V5R1, the SEZLPNLU user data set is no longer used. Instead, use NETVIEW.V5R4USER.&*domain*.CNMPNL1. If you previously customized panels in the SEZLPNLU data set, migrate those changes to the panels in CNMPNL1. 5. As of V5R2, a user NETVIEW.V*x*R*x*USER.&*domain*.CNMCLST data set is provided to use for customized command lists and REXX execs. 6. As of V5R4, the following data sets are required to collect distributed DVIPA statistics: • NETVIEW.V5R4USER.CNM01.CNMDVIPP • NETVIEW.V5R4USER.CNM01.CNMDVIPS Use the default size allocations for these data sets to prevent data loss when the data sets reach their capacity. The default number of records written to these data sets is specified in the CNMSTYLE member.
CNMSJ000	Changes the default NetView domain (CNM01), subarea (01), and the VSAM allocate volume (CPDLB2) in the NetView installation JCL and NetView samples. Changed samples are placed in the following data sets: • NETVIEW.V5R4USER.&domain.DSIPARM • NETVIEW.V5R4USER.INSTALL • NETVIEW.V5R4USER.&*domain*.VTAMLST If you specify a value of NOVOLSER for a VSAM volume symbol (V1, V2, and so on) in the CNMSJ000 member, this will cause the volume parameter to be removed from the IDCAMS member that allocates VSAM clusters for the associated component.
CNMSJ003	Copies NetView procedures to PROCLIB, AON members to the user DSIPARM and user CNMPNL1 data sets, and sample network VTAM members to the user VTAMLST data set. **Notes:** 1. Review CNMSJI10 and make any changes before running CNMSJ003 to ensure that you do not write over existing members in your PROCLIB. Then, uncomment the //PDS2 EXEC statement in CNMSJ003. 2. As of V5R4, the copy steps for the NetView for z/OS Enterprise Management Agent are no longer required.

Table 13. Installation JCL (continued)

Member	Description
CNMSJ004	Allocates VSAM clusters. Consider allocating new VSAM clusters for NetView V5R4. **Notes:** 1. If you are migrating from a release prior to Tivoli NetView V1R3, reallocate all your VSAM clusters for optimal performance. 2. If necessary, redefine the NetView log, including passwords and switching between primary and secondary logs. 3. For more information about allocating VSAM clusters for RODM, refer to the *IBM Tivoli NetView for z/OS Installation: Configuring Graphical Components*. 4. As of V5R2, the DSITCONP and DSITCONS VSAM clusters are new for TCP/IP connection management. 5. As of V5R2, the VSAM clusters for AON are allocated by default in CNMSJ004. 6. If you are migrating from V5R2 or V5R3, allocate new DSITCONP and DSITCONS VSAM clusters because the allocation parameters for these have changed. **Note:** If you want to continue using your existing DSITCONP and DSITCONS VSAM clusters that were allocated with a CISZ of 22528, make sure that you include buffers of this size in the VSAM buffer DATA pool defined in the DSIZVLSR module. 7. The default DSIZVLSR module is based on using 3390 DASD (using ICF catalogs). Make sure that the copy of the DSIZVLSR module that you are using is compatible with your cluster definitions. If you change the default control interval size (CISZ) values or the default number of buffers for each buffer size, use the CNMSJM01 sample job to assemble and link-edit a copy of the DSIZVLSR module into a user library. For information about the DSIZVLSR module, see the *IBM Tivoli NetView for z/OS Tuning Guide*. For information about running the CNMSJM01 sample, see the *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

Additional installation considerations include:

1. To run the V5R4 NetView program with System Automation for z/OS, apply APAR OA10721. This APAR provides System Automation command definitions in member INGCMD. These command definitions replace member AOFCMD0. If your existing NetView environment includes AOFCMD0, remove any references to AOFCMD0 to avoid conflicts during NetView initialization.
2. Reassemble or recompile any user-written NetView code.

   If you have written applications that run with the NetView program, recompile your code with the SCNMMAC1 data set. Refer to the *IBM Tivoli NetView for z/OS Customization Guide* and *IBM Tivoli NetView for z/OS Programming: Assembler* for more information.
3. The MESSAGE category is no longer supported. Message forwarding is done by users or application programs such as AON. For migration, previously included NetView message forwarding samples will continue to work. Some of these samples rely on the following common global variables to be set during NetView initialization:

&DIALTIME
Maximum time that the alert forwarding command lists processing the VARY NET,DIAL command waits for a response from the command before continuing to process data.

&WAITTIME
Maximum time that the alert forwarding command lists processing commands other than VARY NET,DIAL waits for a response from the command before continuing to process data.

&RETRYTIM
Time that the message-forwarding command lists wait between link station dial attempts if the dial fails because the link station is in a state that is not valid.

&LNK*domid*
Link station name associated with the remote domain (*domid*). You can set this variable using the SETADIAL command.

&CDRM*domid*
CDRM name associated with the remote domain (*domid*). You can set this variable using the SETADIAL command.

The following command can set the &LNK*domid* and the &CDRM*domid* variables. Code one for each host (remote domain) with which this host communicates over a switched line:

```
SETADIAL domid linkid cdrmid
```

Where:

domid Is the 1–5 character name of the remote domain that communicates with this host over a switched line.

linkid Is the 1–8 character cross-domain link station name associated with the remote domain.

cdrmid Is the 1–8 character cross-domain CDRM name associated with the remote domain.

4. After the NetView program is distributed throughout the network, gradually migrate the nodes to use the RMTCMD command and LU 6.2 sessions.

   In a multiple CMC or multiple focal-point enterprise, update all CMCs or focal points to use the RMTCMD command and LU 6.2 sessions before you migrate these nodes to use extended multiple console support (EMCS) consoles. Also, in networks that use distributed automation, update all NetView programs that exchange messages to use the RMTCMD command and LU 6.2 sessions before you migrate the programs to use EMCS consoles. In both cases, if possible, complete the migration to the RMTCMD command and LU 6.2 sessions before you use EMCS consoles, to avoid losing MDB data such as highlighting and some DOM information.
5. The VIEW command processor is used to display full-screen panels from user-written programs. VIEW attempts to retrieve the value for any variables defined on a panel from the calling procedure's local dictionary. If you have existing panels that need updates from global variables, you might have to isolate the VIEW call from local variables. You can do this with the REXX DROP or PROCEDURE statements or by using PIPE VAR. For more information, refer to the *IBM Tivoli NetView for z/OS Customization Guide*.

Preparing Graphical NetView Components

The graphics components are activated with TOWER statements in the CNMSTYLE member. Copy the TOWER statement to the CNMSTUSR or C*xx*STGEN member and remove the asterisk (*) from the components that you plan to use, including Graphics.

Some changes to members included in the CNMSTYLE member (using the %INCLUDE statement) require a restart of the NetView program for them to take effect. For this reason, make all CNMSTYLE member updates at the same time for the graphics functions that you plan to use as part of this installation.

The steps that follow are required to update the graphics functions for the NetView V5R4 program:

- "RODM and GMFHS"
- "NetView Management Console"
- "SNA Topology Manager"
- "MultiSystem Manager" on page 25

For additional information on these steps, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Graphical Components*.

RODM and GMFHS

Consider the following items in migrating RODM and GMFHS functions to the current release:

1. NetView VSAM clusters for the RODM log and checkpoint databases were defined when you ran sample job CNMSJ004 (see Table 13 on page 20).

   Note: Consider increasing the size of the RODM checkpoint data sets if you use the checkpoint function and the estimated number of objects that you expect to store in RODM exceeds the previous maximum supported number of approximately 524,000 objects.
2. Update the RODM start procedure EKGXRODM to match your environment.
3. Update the RODM definition member EKGCUST.
4. Review the initialization values for the RODM DSIQTSK task in DSIQTSKI.
5. Update the GMFHS start procedure CNMGMFHS to match your environment.
6. Update the GMFHS definition statements in DUIGINIT as needed.
7. Review the initialization values for the status focal point in members DUIISFP, DUIFPMEM, and DUIIGHB.

NetView Management Console

Consider the following items in migrating the NetView management console:

1. Review your NetView management console topology server configuration.
2. Review your NetView management console topology console configurations.
3. Configure NetView management console for the NetView 3270 management console.

SNA Topology Manager

To migrate the SNA Topology manager, review the initialization files FLBSYSD, FLBOSIDS, FLBSRT, and FLBEXV.

MultiSystem Manager

To migrate the MultiSystem Manager:

1. To enable the MultiSystem Manager agents, locate the following statement in the CNMSTYLE member:

   ```
   TOWER.MSM = ITNM IP OPN TMR
   ```

   Agent names preceded by an asterisk (*) are disabled. Copy the TOWER.MSM statement to the CNMSTUSR or C*xx*STGEN member and remove or add asterisks as necessary to enable the agents that you plan to use. When the TOWER.MSM statement is enabled, the %INCLUDE statement for FLCSOPF (used for operator profiles) is also enabled.
2. Upgrade your MultiSystem Manager agents to the current level.
3. For the Tivoli Management Region agent or the IP agent, review the Event/Automation Service initialization member IHSAECFG.
4. For the IBM Tivoli Network Manager agent, ensure an SNMP trap receiver task is configured and active .
5. Review your MultiSystem Manager initialization file (provided as FLCSAINP prior to NetView V5R1).
6. Allocate additional NetView DSRBs if necessary.
7. Review the number of REXX environments specified. For more information, refer to the *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.
8. Review the settings for the NetView RATE and AUTORATE statements, and for the RUNCMD time-out value.
9. Review the setup for the NetView cross-domain environment.

Preparing the AON Component

Make the following changes for AON:

- Copy the TOWER CNMSTYLE statement to the CNMSTUSR or C*xx*STGEN member and remove the asterisk (*) preceding the AON function. This enables all of the AON components.
- On the subtower statement, add asterisks preceding any of the AON functions that you are not going to use:

  ```
  TOWER.AON = SNA TCP
  ```

  For IP functions, note that the AON TCP subtower and IPMGT towers are mutually exclusive.
- (Optional) Define STATMON statements for AON/SNA.
- Move any TCP390 statements from AON configuration members EZLCFG01, FKXCFG01, and FKVCFG01 into the NetView base policy member CNMPOLCY.
- Update the AON control file.
- Review the AON policy definitions.
- Enable minimal AON functions if you are not using full AON automation.

Migrating from the Sysplex IP Stack Manager

Because of the added functionality, use the new discovery manager function instead of the existing sysplex IP stack manager function. For information on the discovery manager, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

Starting the Sysplex IP Stack Manager with a V5R2 or V5R3 Data Model

While you are migrating your V5R2 or V5R3 data model customization to the V5R4 NetView data model, you can start the sysplex IP stack manager using the existing V5R2 or V5R3 data model that is loaded in RODM. To do this, change the DISCOVERY.STMODEL statement in the CNMSTYLE member to specify the V5R2 or V5R3 version of the data model that you are using, and then issue the INITSTM command. This procedure is intended as a temporary measure while you are making customization updates to the V5R4 data model. Note that new NetView V5R4 functions (for example, the discovery manager and the MultiSystem Manager network manager) use the V5R4 version of the data model. Do not start these new functions during this migration period while you have the V5R2 or V5R3 data model loaded.

When you use the INITSTM command to start the sysplex IP stack manager, note that the default autotask name is changed to AUTOAON, which is the same autotask that is used by the discovery manager.

Viewing V5R2 and V5R3 Sysplex IP Stack Manager Data in NetView V5R4

If you use the Sysplex IP Stack Manager resource discovery function in the NetView V5R2 or NetView V5R3 program and want to continue to see this information at a master NetView V5R4 program, while migrating to V5R4, apply the fix for APAR OA29938 to the appropriate V5R2 and V5R3 systems. When the fix for the APAR is applied to a resource discovery nucleus NetView program, data forwarded to it from other V5R2 or V5R3 NetView programs will be passed to the master NetView V5R4 program. Note that the fix for the APAR only needs to be applied to the nucleus NetView program for the V5R4 master program to receive data from all the systems forwarding to the nucleus NetView program.

For a V5R4 master NetView program to receive Sysplex IP Stack Manager resource information from V5R2 or V5R3 systems, consider the following options:

- Apply the fix for APAR OA29938 to all V5R2 or V5R3 NetView programs and then migrate a NetView program to V5R4 that will be a master NetView program.
- Apply the fix for APAR OA29938 to a nucleus NetView program that will forward its data to the V5R4 master NetView program and then migrate a NetView program to V5R4 that will be a master NetView program. If the NetView program that you want to migrate is the nucleus system, you can set up another nucleus NetView program for the purpose of collecting data from V5R2 or V5R3 systems to forward to the V5R4 master NetView program.

Note that NetView V5R4 discovery manager resource information cannot be viewed in downlevel NetView programs.

If this NetView will be a master NetView program for V5R4, then add an ENT.SYSTEMS statement for each V5R2 or V5R3 NetView program that has the fix applied for APAR OA29938 and will forward data to this master NetView program. For information about the ENT.SYSTEMS statement, see the *IBM Tivoli NetView for z/OS Administration Reference*.

Migrating from the NetView Web Server

Some of the data sources that are accessed using the NetView Web server can be migrated to the Web Services Gateway function. This includes dynamically generated HTML files referred to by the DSICMDS function and other sources of data presented by the NetView Web server.

Migrating HTML Files Referred to by the DSICMDS Function

Existing dynamically generated HTML files referred to by the DSICMDS function can be used by the Web Services Gateway function by specifying them in one of the following URLs:

- `http://`*`yournvhost`*`:`*`port`*`/?DSICMDS=`*`command`*
- `https://`*`yournvhost`*`:`*`port`*`/?DSICMDS=`*`command`*

where *command* specifies the NetView command to be issued. Any blanks in the command must be specified as a plus sign (+) for the command to be correctly parsed. NetView Web services changes the plus signs to blanks before issuing the command. The first time you use the DSICMDS function in your Browser session, you are prompted to provide a NetView operator ID and password under which the command will run. The operator ID and password are bas64 encoded. Using an HTTPS session prevents the password from being sent as clear text.

Using Sources of Data Relative to NVSP.SOASRVR1.PDS

You can display data sources that are relative to the base URL defined by the `NVSP.SOASRVR1.PDS` statement in the CNMSTYLE member, which can be a USS directory or an MVS partitioned data set (PDS). For security, verify that these files are protected by an SAF product such as RACF and that you have the correct level of file permissions.

Example 1: Using a USS directory

The CNMSTYLE member contains the following statement:

```
(NVSOA)NVSP.SOASRVR1.PDS = /usr/xyz
```

In this case, to access resource /usr/xyz/resource, use one of the following URLs:

- `http://`*`yournvhost`*`:`*`port`*`/resource`
- `https://`*`yournvhost`*`:`*`port`*`/resource`

Example 2: Using a PDS

The CNMSTYLE member contains the following statement:

```
(NVSOA)NVSP.SOASRVR1.PDS = USER.INIT
```

In this case, to access resource 'USER.INIT(RESOURCE)', use one of the following URLs:

- `http://`*`yournvhost`*`:`*`port`*`/resource`
- `https://`*`yournvhost`*`:`*`port`*`/resource`

Migrating Sources of Data by Specifying DD Name or Data Set Name

You can display sources of data that reside in a PDS by specifying their DD name or data set name along with the member name.

Example 1: Using a DD name

To display member *panel_name* from the CNMPNL1 data set, use one of the following URLs:

- `http://yournvhost:port/DD/CNMPNL1/panel_name`
- `https://yournvhost:port/DD/CNMPNL1/panel_name`

Example 2: Using a data set name

To display member *member_name* from the USER.INIT data set, use one of the following URLs:

- `http://yournvhost:port/DSN/USER.INIT/member_name`
- `https://yournvhost:port/DSN/USER.INIT/member_name`

Sending the Data

The HTML <form> tag has an action attribute that you can use to specify a URL that defines where to send the data when you click **Submit**. Use `/znvsoa/dsicmds` as the action attribute.

Within the <form> tag, the first <input> tag must be a hidden tag that defines the command to be used to process the form, for example:

```
<form method="post" name="NetView"
  action="/znvsoa/dsicmds" />

  <INPUT TYPE=HIDDEN VALUE="?mytest" NAME="COMMAND">
  <h3>This form sends an e-mail to IBM. </h3>
  Name:<br>
  <input type="text" name="name"
  value="yourname" size="20"><br>
 <br>Mail:<br>
 <input type="text" name="mail"
 value="yourmail" size="20">
 <br>
 Comment:<br>
 <input type="text" name="comment"
 value="yourcomment" size="40">
 <br><br>
 <input type="submit" value="Submit">
 <input type="reset" value="Reset">
 <hr>
</form>
```

Additional Considerations for Migrating DSIPARM and DSICLD Members

If your existing DSIPARM and DSICLD members contain changes that you added, you can add the changes for the new release to your existing members, instead of using the copies created during NetView installation. For more information, see one of the following topics:

- Chapter 3, “Migrating from Tivoli NetView for OS/390 Version 1 Release 4,” on page 31
- Chapter 4, “Migrating from Tivoli NetView for z/OS Version 5 Release 1,” on page 67
- Chapter 5, “Migrating from Tivoli NetView for z/OS Version 5 Release 2,” on page 95
- Chapter 6, “Migrating from Tivoli NetView for z/OS Version 5 Release 3,” on page 117

After you have made any necessary changes, continue with Chapter 7, "Getting Ready to Start NetView," on page 141.

Chapter 3. Migrating from Tivoli NetView for OS/390 Version 1 Release 4

This chapter describes how to migrate the NetView program to run as a production system if you are migrating from the Tivoli NetView for OS/390 Version 1 Release 4. The migration information is based on the NetView components included with the initial release of V1R4. Review your maintenance to see if you have already made some of the changes that are described in this chapter.

You can either add the V5R4 content into your V1R4 NetView definitions, or add your V1R4 customization to the default V5R4 members supplied with the NetView program. Either way, place the customized member into an appropriate user-allocated data set such as NETVIEW.V5R4USER.CNM01.DSIPARM. Do not customize members in the SMP/E-managed data sets such as NETVIEW.V5R4M0.DSIPARM.

Several factors can influence the method you use when migrating your NetView definition members. Factors such as the size and complexity of your network, security policies that must be followed, and established practices within your business can all influence what is the best method for your migration. The checklist that follows details the documented method of migration as outlined in this book and supported by other books in the NetView library. Choose the method of migration that is best for you.

Perform the following steps to migrate your V1R4 definitions:

1. Allocate a new set of V5R4 user data sets by running sample job CNMSJ002. You needed to have done this when you completed the steps in Table 13 on page 20.
2. Run the CNMSJMIG sample job to convert statements in various members in your V1R4 DSIPARM data set to the new CNMSTYLE format. See Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221 for more details.
3. Run the CNMSJMIG sample job to convert the statements in your V1R4 DSICMD member to the new statement format in the CNMCMD member. See Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221 for more details.
4. Define a unique &NV2I value (*xx*) for each NetView domain.
5. If you ran the CNMSJMIG job, move any domain-specific statements that were created from the CNMSTUSR member into the C*xx*STGEN member, where *xx* is the value of the local symbolic variable &NV2I that you defined in the previous step.
6. Review your customized V1R4 copy of the CNMSTYLE member. Move all of your domain-specific customization of V1R4 CNMSTYLE statements into the C*xx*STGEN member and all of your system-wide customization of V1R4 CNMSTYLE statements into the CNMSTUSR member, noting that some of these changes might have been added by the CNMSJMIG job. Do not copy your V1R4 CNMSTYLE member into the V5R4 user DSIPARM data set.
7. Review the CNMSTYLE information in this chapter and the V5R4 CNMSTNXT member shipped with the NetView program. Place any domain-specific customization of CNMSTYLE statements into the C*xx*STGEN member and any

system-wide customization of CNMSTYLE statements into the CNMSTUSR member. Do not modify the V5R4 default CNMSTYLE member.

8. Review the remaining information in this chapter, and migrate your V1R4 NetView definition members and JCL procedures as appropriate, placing only those members that were modified into the V5R4 user data sets.

Figure 1 shows the initialization flow for NetView V1R4, and Figure 2 shows the NetView V5R4 initialization flow. Keep this new initialization flow in mind as you make changes to your DSIPARM members.

NetView Initialization Flow

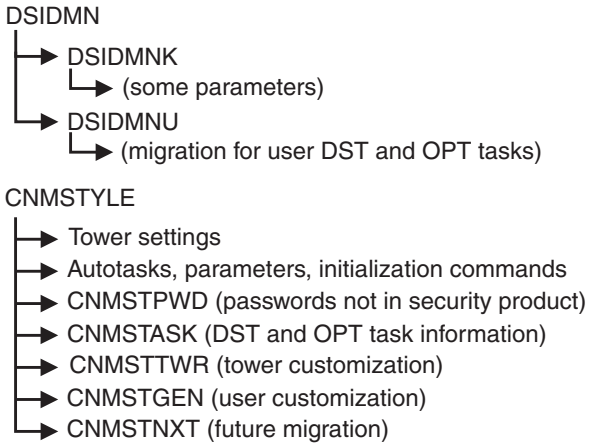


Figure 1. NetView V1R4 Initialization Flow

NetView Initialization Flow

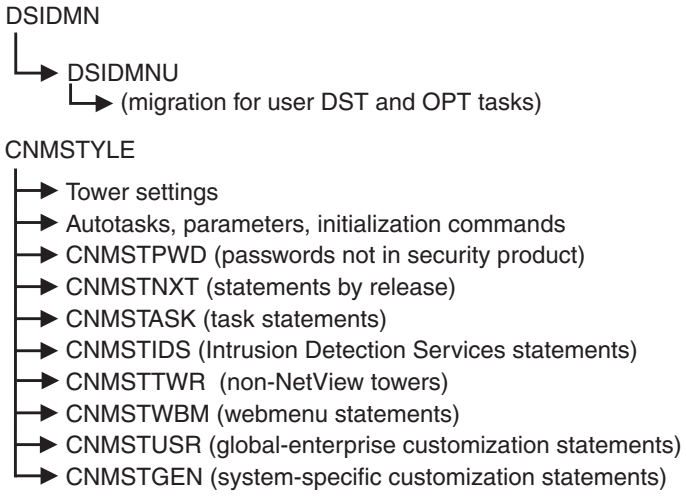


Figure 2. NetView V5R4 Initialization Flow

When you finish with this chapter, continue with Chapter 7, "Getting Ready to Start NetView," on page 141.

If you want information about...	Refer to...
Changes including panels, commands, messages, and samples	• Appendix A, "Changes from Tivoli NetView for OS/390 Version 1 Release 4 to Tivoli NetView for z/OS Version 5 Release 1," on page 163 • Appendix B, "Changes from Tivoli NetView for z/OS Version 5 Release 1 to Tivoli NetView for z/OS Version 5 Release 2," on page 181

Migrating the Unattended or Procedural Feature

The NetView Unattended and Procedural options are no longer available. If you previously installed the NetView program using the Unattended or Procedural options, use the following steps to migrate to the NetView V5R4 program (Graphical Enterprise option).

Migrating to the Graphical Enterprise NetView program does not require you to run any of the graphical functions. However, there might be some additional installation steps that are required to activate the Graphical Enterprise option of NetView. You can skip certain installation steps that are marked as only applying to a graphical function that you do not want to activate. However, keep in mind that if at some point you decide to activate a graphical function, these installation steps need to be revisited to ensure that all of the necessary setup has been completed.

Table 14 lists functions that were available with the V1R4 Graphical Enterprise option that are now available to you with the NetView V5R4 program.

Table 14. Available New Functions

Function	Procedural	Unattended
GMFHS	•	•
NetView management console	•	•
MultiSystem Manager	•	•
SNA topology manager	•	•
AON		•

RODM is available at the Unattended and Procedural levels of the NetView program but is mostly utilized by the graphical functions available with the Graphical Enterprise option and therefore might not have not been activated with your Unattended or Procedural NetView program.

New Samples

Table 15 lists new samples to review during migration.

Table 15. List of New Samples

Distributed As	Name	Description	Data Set Name
CNMCMD	same	NetView command definitions for NetView commands The CMDDEF statements provide the definitions for the commands. Some of the CMDDEF statements have command synonyms (CMDSYN). These statements provide a synonym for the command. This definition also provides the cross-domain logon definitions and the CMDDEF statements (and synonyms) for the terminal access facility (TAF) and the VTAM program. Files with names that begin with CNMS6 are included in NETVIEW.V5R4M0.CNMSAMP. Include these files in CNMCMD so that you can use the automation command lists that are also included on the distribution tape.	DSIPARM
CNMCMDO	same	Command definitions for product-specific defined commands	DSIPARM
CNMCMDU	same	Command definitions for user-defined commands	DSIPARM
CNMCMENT	same	NetView command definitions	DSIPARM
CNMCMSYS	same	NetView command definitions	DSIPARM
CNMIPMGT	same	Automation policy for NetView IP management	DSIPARM
CNMPOLCY	same	Automation policy for NetView	DSIPARM
CNMSAF2	same	Sets RACF definitions for NetView operators and commands	CNMSAMP
CNMSBAK1	same	Backup command authorization table	DSIPARM
CNMSCAT2	same	Sample command authorization table	DSIPARM
CNMSCBEA	same	Automation sample that shows how to use the Common Base Event automation table action to produce common base event XML documents	DSIPARM
CNMSCBET	same	Template file for defining Common Base Event XML elements	DSIPARM
CNMSCM	same	SNMP community names for TCP/IP stacks	DSIPARM
CNMSDCA	same	Provides automation statements that help control the data collection autotasks that are managed by the COLLCTL command.	CNMSAMP

Table 15. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSDDCR	same	Displays distributed DVIPA connection routing information. It formats the DVIPDDCR command output (BNH815I message) into a readable format.	CNMSAMP
CNMSDVCG	same	Automation table member for z/OS Communications Server VIPADYNAMIC TCP/IP profile updates that is included when the DVIPA tower is enabled. The VIPADYNAMIC TCP/IP profile statements that are changed trigger rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSDVDS	same	Automation table member that is used for DVIPA data discovery (including rediscovery) and distributed DVIPA statistics on the master NetView program. It processes the DSIIF003I (DVIPA rediscovery), DSIIF004I (DVIPA data forwarding), DSIIF006I (DVIPA data request), and BNH867I (distributed DVIPA statistical records) messages.	CNMSAMP
CNMSDVIP	same	This sample displays the DVIPA definition and status data. It formats the DVIPSTAT command output (BNH846I message) into a readable format.	CNMSAMP
CNMSDVPC	same	Displays DVIPA connections. It formats the DVIPCONN command output (BNH849I message) into a readable format.	CNMSAMP
CNMSDVPH	same	Displays distributed DVIPA server health information. It formats the DVIPHLTH command output (BNH814I message) into a readable format.	CNMSAMP
CNMSDVST	same	Displays the data in the distributed DVIPA statistical data sets.	CNMSAMP
CNMSDVTP	same	Automation table member for DVIPA SNMP trap automation that is included when the DVIPA tower is enabled. The automation detects that a z/OS Communications Server DVIPA trap was received, which then triggers rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSEMAA	same	Automation table member for the NetView for z/OS Enterprise Management Agent	DSIPARM
CNMSEPTL	same	Automation table sample for resource discovery	DSIPARM
CNMSHIPR	same	Displays HiperSockets configuration and status information. It formats the HIPERSOC command output (BNH598I message) into a readable format.	CNMSAMP
CNMSIFST	same	Displays IP interfaces. It formats the IFSTAT command output (BNH498I message) into a readable format.	CNMSAMP

Table 15. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSJCRG	same	CNMSTYLE report generator sample job	CNMSAMP
CNMSJMIG	same	CNMSTYLE migration tool sample job	CNMSAMP
CNMSJZCE	same	Sample start job for the event correlation engine	CNMSAMP
CNMSMF3A	same	Sample command list that is called by the automation table when the BNH874I message is issued. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3E	same	Sample IEFACTRT SMF exit to process type 30 SMF records and send them across the program-to-program interface (PPI) to the NetView program for automation	CNMSAMP
CNMSMF3F	same	Sample that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3R	same	Sample PPI receiver that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMRT1	same	Message revision table	DSIPARM
CNMSMSIP	same	Sends a CP-MSU over IP	CNMSAMP
CNMSNVST	same	Displays NetView application information. It formats the NVSTAT command output (BNH495I message) into a readable format.	CNMSAMP
CNMSOSAP	same	Displays the OSA channel and port information. It formats the OSAPORT command output (BNH597I message) into a readable format.	CNMSAMP
CNMSPAN2	same	Sample NetView span table	DSIPARM
CNMSPLEX	same	This sample displays the DVIPA sysplex distributor data. It formats the DVIPPLEX command output (BNH847I message) into a readable format.	CNMSAMP
CNMSSMON	same	This sample provides z/OS Communications Server sysplex monitoring message automation and is included when the DVIPA tower is enabled.	CNMSAMP
CNMSSTAC	same	This sample displays the TCP/IP stack configuration and status data. It formats the STACSTAT command output (BNH845I message) into a readable format.	CNMSAMP
CNMSTARG	same	This sample displays the distributed DVIPA target data. It formats the DVIPTARG command output (BNH813I message) into a readable format.	CNMSAMP
CNMSTIDS	same	Includes Intrusion Detection Services (IDS) initialization statements.	DSIPARM

Table 15. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSTNST	same	This sample displays the configuration and status information about Telnet servers. It formats the TELNSTAT command output (BNH496I message) into a readable format.	CNMSAMP
CNMSTPST	same	This sample displays the configuration and status information about Telnet server ports. It formats the TNPTSTAT command output (BNH497I message) into a readable format.	CNMSAMP
CNMSTUSR	same	Customization member for the CNMSTYLE member: include additional or modified global (enterprise) definition statements that override statements in the CNMSTYLE member.	DSIPARM
CNMSTWBM	same	Includes Web browser portfolio definitions	DSIPARM
CNMSVPRT	same	Displays status information about VIPA routes. It formats the VIPAROUT command output (BNH824I message) into a readable format.	CNMSAMP
CNMSXCFA	same	Automation sample for XCF sysplex support	DSIPARM
DSIAUTB	same	Part list for usage of the AUTBYPAS REXX or CLIST function	DSIPARM
DSIAUTBU	same	User defined part list for AUTBYPAS REXX or CLIST function	DSIPARM
DSIPROFG	same	Automated operator profile that is functionally equivalent to the DSIPROFD profile. It is provided for compatibility reasons.	DSIPRF
DSIPROFN	same	Automated operator profile for the NetView for z/OS Enterprise Management Agent data collection autotasks (AUTODC*n*)	DSIPRF
DSIW3PRF	same	Properties definitions for 3270 Web sessions	DSIPARM
DSIZCETB	same	Automation table sample for the event correlation engine	DSIPARM
EKG51100	same	PL/I Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
EKG61100	same	C Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
EZLCMENT	same	NetView command definitions for base AON commands	DSIPARM
FKVCMENT	same	NetView command definitions for AON/SNA commands	DSIPARM
FKXCMENT	same	NetView command definitions for AON/TCP commands	DSIPARM

Table 15. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
FKXIPMTB	same	Configuration data for NetView IP management automation	DSIPARM
FKXOPFIP	same	Operator definitions for NetView IP management automation	DSIPARM
FLCAINP	same	Sample initialization file This file can be used as a template when creating the MultiSystem Manager initialization file (or files) for your site. If you rename this file, specify that file name when issuing the INITTOPO command. FLCAINP contains an example of how to use the %INCLUDE statement to include other MultiSystem Manager initialization files.	DSIPARM
IHSABCDS		The IHSABCDS sample contains the sample class definition statements for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSABCFG		The IHSABCFG sample is the sample configuration file for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSANCFG		The IHSANCFG sample is the sample configuration file for the Event/Automation Service confirmed message adapter.	SCNMUXCL
IHSANFMT		The IHSANFMT sample provides sample format specification statements for the Event/Automation Service confirmed message adapter.	SCNMUXCL

VTAM Address Space

The samples in this section list changes for the VTAM address space.

A01APPLS (CNMS0013)

This member contains the application (APPL) major nodes coded for the NetView program.

If you did not reallocate and recopy the VTAMLST data sets, make the following changes to A01APPLS:

- Either set the domain ID (system variable &CNMDOMN) in SYS1.PARMLIB member IEASYM*xx* or change *every* occurrence of &CNMDOMN. in A01APPLS (CNMS0013) to the current domain ID.
- If you are not using the status monitor preprocessor, you can replace the APPL statements defining tasks for multiple concurrent NetView operators with one APPL statement using wildcard characters (??), for example:

```
&CNMDOMN.0?? APPL  AUTH=(NVPACE,SPO,ACQ,PASS),PRTCT=&CNMDOMN.,     X
               EAS=4,MODETAB=AMODETAB,DLOGMOD=DSILGMOD
```

- If you are not using the status monitor preprocessor, you can replace the TAF APPL statements with one APPL statement using wildcard characters (??) following the LU name, for example:

```
TAF010?? APPL  MODETAB=AMODETAB,EAS=9,       X
               DLOGMOD=M3767
```

APPL names defined for use by other applications (such as TAF) must not be defined with the same naming scheme as terminal logon APPLs (for example, the domain name followed by a 3-character suffix). Doing so can cause these application names to be used by the NetView program for terminal logons, which can make the application names unavailable for the purpose for which they were defined.

CNMNET (CNMSJ008)

CNMNET (CNMSJ008) is the start procedure for the VTAM program.

Change CNMNET in your PROCLIB in the following way:

1. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.

NetView Address Space

The samples in this section list changes for the NetView address space.

AAUPRMLP

The AAUPRMLP member in the DSIPARM data set contains initialization statements for the session monitor. It includes logic to extract initialization values from the CNMSTYLE member. Use the V5R4 copy of the AAUPRMLP member, and update the NLDM statements in the CNMSTUSR or C*xx*STGEN member to reflect the values previously specified in the AAUPRMLP member. Do not modify the version of the AAUPRMLP member that is included with the NetView product.

BNJMBDST

If you made changes to the BNJMBDST hardware monitor initialization member, migrate the changes to the CNMSTUSR or C*xx*STGEN member. Most BNJMBDST statements have associated statements in the CNMSTYLE member (for example, NPDA.DSRBO or NPDA.ALERTFWD).

BNJMBDST statements that apply to DST members (for example XITCI) have no associated CNMSTYLE statements. In this case, add these statements to the Data REXX version of the BNJMBDST member. Make sure that you enclose the statements in quotation marks so that the REXX program can return them as NetView data lines rather than interpreting them as REXX statements.

CNMEALUS

The CNMEALUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to alert information and pass the alert information to either the alert adapter or the confirmed alert adapter of Event/Automation Service.

CNMEMSUS

The CNMEMSUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to message information and pass the message information to either the message adapter or the confirmed message adapter of Event/Automation Service.

CNMPROC (CNMSJ009)

CNMPROC (CNMSJ009) is the start procedure for the NetView program.

Make the following changes to CNMPROC in your PROCLIB:

1. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
2. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
3. Because the AON VSAM data sets have increased in size, reallocate them during migration. For more information on allocating VSAM data sets, refer to *IBM Tivoli NetView for z/OS Installation: Getting Started*. Also note that the VSAM cluster name prefixes have changed to NETVIEW.&*domain*.
4. The default region size was increased to 98304K. If you are using the existing default region size (32768K) for the NetView product, increase the region size value:

   ```
   //       REG=98304,            ** REGION SIZE(IN K) FOR NETVIEW
   ```

   Depending on the components that you are running, you might want to increase the region size even more. For additional information, refer to the *IBM Tivoli NetView for z/OS Tuning Guide*.
5. Add the following REXX statement after the SQ1 statement to specify the high level qualifier of your REXX libraries:

   ```
   //       REXX='EAG.V1R4M0',    ** REXX DSN HIGH LEVEL QUALIFIER
   ```
6. Add the following TRSIZE statement and comments after the NV2I statement to allow the specification of the trace table size:

   ```
   //       NV2I='',
   //       TRSIZE=4000
   //*                            ** INTERNAL TRACE TABLE SIZE - Number
   //*                            ** of pages to be allocated for the
   //*                            ** NetView Internal Trace table. The
   //*                            ** trace table is located in a data
   //*                            ** space, so the value can be up to
   //*                            ** 524286. If no value is specified,
   //*                            ** the default of 4000 is used. If
   //*                            ** a value of 0 is passed, internal
   //*                            ** trace is not started early. Trace
   //*                            ** options in CNMSTYLE take effect
   //*                            ** even if trace is not started early.
   //*
   ```
7. Add the &TRSIZE variables to the NetView EXEC statement, as shown:

   ```
   //NETVIEW  EXEC PGM=&PROG,TIME=1440,
   //         REGION=&REG.K,
   //         PARM=(&BFSZ.K,&SLSZ,
   //           '&DOMAIN','&DOMAINPW','&ARM','&SUBSYM','&NV2I','&TRSIZE'),
   //         DPRTY=(13,13)
   ```
8. Remove the following DD statement from the STEPLIB concatenation:

   ```
   //         DD   DSN=&SQ1..SEKGMOD1,DISP=SHR
   ```
9. Change the following DD statement in the STEPLIB concatenation (change SEAGLMD to SEAGLPA):

```
//* YOU WILL NEED ACCESS TO EITHER THE REXX/370 RUNTIME LIBRARY
//* OR THE REXX ALTERNATE LIBRARY AS FOLLOWS:
//*
//* - IF YOU HAVE THE REXX/370 LIBRARY ON YOUR SYSTEM BUT SEAGLPA
//*   IS NOT ACCESSIBLE FROM THE PAGEABLE LINK PACK AREA (PLPA),
//*   THEN YOU MUST UNCOMMENT THE "SEAGLPA" LINE BELOW.
//*
//*    OR
//*
//* - IF YOU HAVE THE REXX ALTERNATE LIBRARY ON YOUR SYSTEM,
//*   BUT SEAGALT IS NOT ACCESSIBLE FROM THE PLPA OR LINKLST,
//*   THEN YOU MUST UNCOMMENT THE "SEAGALT" LINE BELOW.
//*
//* WHEN YOU UNCOMMENT EITHER OF THE LINES BELOW, MAKE SURE
//* THAT THE DSN ACTUALLY MATCHES THE NAME ON YOUR SYSTEM.
//* IN ADDITION, MAKE SURE THAT THE DATASET IS APF-AUTHORIZED.
//*
//*        DD   DSN=&REXX..SEAGLPA,DISP=SHR
//*        DD   DSN=&REXX..SEAGALT,DISP=SHR
```

Note: Either the REXX/370 runtime library or the REXX alternate library is required.

10. If you plan to use the Web Services Gateway function, uncomment the XML toolkit and GSKit library DD statements.

```
//*************************************************************
//*
//* IF YOUR ARE STARTING NETVIEW WEB SERVICES SERVER THEN
//* YOU WILL NEED ACCESS TO BOTH IBM XML AND GSK TOOL RUN TIME
//* LIBRARIES
//*
//* - IF YOU HAVE THESE LIBRARIES ON YOUR SYSTEM
//*   BUT THEY ARE NOT ACCESSIBLE FROM THE PLPA OR LINKLST,
//*   THEN YOU MUST UNCOMMENT LINES BELOW.
//*
//* WHEN YOU UNCOMMENT EITHER OF THE LINES BELOW, MAKE SURE
//* THAT THE DSN ACTUALLY MATCHES THE NAME ON YOUR SYSTEM.
//* IN ADDITION, MAKE SURE THAT THE DATASET IS APF-AUTHORIZED.
//*      QIXM='IXM.V1R8M0', ** IBM XML TOOLKIT RUNTIME LIB.
//*      QGSK='SYS1',       ** IBM GSK TOOLKIT RUNTIME LIB.
//*        DD   DSN=&QGSK..SIEALNKE,DISP=SHR
//*        DD   DSN=&QIXM..SIXMLOD1,DISP=SHR
//*
```

11. Remove the following statements from the STEPLIB concatenation:

```
//        DD   DSN=&SQ1..SEZLLINK,DISP=SHR
```

12. If you plan to run Language Environment® (LE) HLL programs with the NetView program, and did not install the LE runtime library in the LNKLSTxx, be sure the library name in the STEPLIB of CNMPROC is correct and uncommented.

13. Update the DSICLD DD statement to add the following user data set:

```
//DSICLD   DD   DSN=&Q1..&DOMAIN..CNMCLST,DISP=SHR
//         DD   DSN=&SQ1..CNMCLST,DISP=SHR
//         DD   DSN=&SQ1..CNMSAMP,DISP=SHR
```

    Remove the following DD statements from the DSICLD concatenation:

```
//         DD   DSN=&SQ1..SEZLCLST,DISP=SHR
```

14. Remove the following statements from the CNMPNL1 concatenation:

```
//         DD   DSN=&SQ1..SEKGPNL1,DISP=SHR
//* COMMENT THE FOLLOWING LINE OUT IF YOU WILL NOT BE USING AON INFORM
//* POLICY, TIMER COMMAND, CGED COMMAND OR DM COMMAND.
//         DD   DSN=&Q1..&DOMAIN..SEZLPNLU,DISP=SHR
//         DD   DSN=&SQ1..SEZLPNLU,DISP=SHR
```

```
:
//* UNCOMMENT THE SEKGPNL2 DEFINITION STATEMENT FOR A JAPANESE
//* SYSTEM WITH RODM
//*         DD   DSN=&SQ1..SEKGPNL2,DISP=SHR
```

Update the CNMPNL1 concatenation in the following way:

```
//CNMPNL1  DD   DSN=&Q1..&DOMAIN..CNMPNL1,DISP=SHR
//* JAPANESE ONLINE HELP DATASET (PANELS)
//*        DD   DSN=&SQ1..SCNMPNL2,DISP=SHR
//* ENGLISH ONLINE HELP DATASET (PANELS)
//         DD   DSN=&SQ1..CNMPNL1,DISP=SHR
```

15. Add the following TCP connection VSAM databases:

```
//DSITCONP DD   DSN=&VQ1..&DOMAIN..DSITCONP,
//         DISP=SHR,AMP='AMORG'
//DSITCONS DD   DSN=&VQ1..&DOMAIN..DSITCONS,
//         DISP=SHR,AMP='AMORG'
```

16. If you plan to collect distributed DVIPA statistics, add the following data sets:

```
//CNMDVIPP DD   DSN=&VQ1.&DOMAIN.CNMDVIPP,DISP=SHR
//CNMDVIPS DD   DSN=&VQ1.&DOMAIN.CNMDVIPS,DISP=SHR
```

17. Update the EZLSTAT DD statement:

```
//*EZLSTAT  DD   DSN=&VQ1..&DOMAIN..STATS,
//*         DISP=SHR,AMP='AMORG,BUFNI=10,BUFND=5'
```

18. Update the EZLPSWD DD statement:

```
//*EZLPSWD  DD   DSN=&VQ1..&DOMAIN..PASSWORD,
//*         DISP=SHR,AMP='AMORG,BUFNI=10,BUFND=5'
```

19. Update the AON log DD statements:

```
//*EZLLOGP  DD   DSN=&VQ1..&DOMAIN..LOGP,
//*         DISP=SHR,AMP='AMORG,BUFNI=10,BUFND=5'
//*EZLLOGS  DD   DSN=&VQ1..&DOMAIN..LOGS,
//*         DISP=SHR,AMP='AMORG,BUFNI=10,BUFND=5'
```

20. Add the following TCP/IP translate data set information and update the statement as needed for your installation:

```
//*
//*****************************************************************
//* If you are using the TCP/IP translate data set TCPXLBIN,
//* specify the appropriate data set name and uncomment the
//* following DD statement to prevent dynamic allocation
//* messages from being issued each time the data set is needed.
//*
//*CNMXLBIN  DD  DISP=SHR,DSN=datasetprefix.STANDARD.TCPXLBIN
//*
//* For more information please see your IP Configuration Guide.
```

CNMPSSI (CNMSJ010)

CNMPSSI (CNMSJ010) starts the NetView subsystem address space.

Make the following changes to CNMPSSI in your PROCLIB:

1. Ensure that the high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. The default value for MSGIFAC has changed from SYSTEM to SSIEXT. Beginning with z/OS v1r8, the QUESSI, QSSIAT, and USESSI values are not supported.

   ```
   //       MSGIFAC='SSIEXT',    ** SSI/EXTENDED CONSOLE OVERRIDE SWITCH
   ```

3. Add the following statements after the P4000BUF parameter to set the route code. If you add these statements, add a comma after the P4000BUF=0 statement.

```
//       ROUTECDE=1           ** Route code to be used for WTOs issued
//*                           **  by the SSI address space.  Messages
//*                           **  that may be issued before this parm
//*                           **  is processed will use route code 1
//*                           **  regardless of the value set here.
```

4. Add the &ROUTECDE variable to the NetView EXEC statement, as shown:

```
//NETVIEW  EXEC PGM=&PROG,TIME=1440,REGION=&REG.K,
//         PARM=(&MBUF,&CBUF,'&DSIG','&MSGIFAC','&PPIOPT','&ARM',
//          '&PFXREG',&P256BUF,&P4000BUF,&ROUTECDE),DPRTY=(13,13)
```

CNMSIHSA

The CNMSIHSA automation table sample is enhanced. This sample provides examples on how to automate messages and alerts in order to send message and alert data to the various Event/Automation Service adapters:

- Message adapter
- Confirmed message adapter
- Alert adapter
- Confirmed alert adapter
- Alert-to-trap adapter

CNMSTYLE

The CNMSTYLE member in the DSIPARM data set is used during NetView initialization. Make any changes to CNMSTYLE statements in the CNMSTUSR or C*xx*STGEN member. For information about changing CNMSTYLE statements, see *IBM Tivoli NetView for z/OS Installation: Getting Started*. The CNMSTYLE member is designed to simplify the NetView initialization process.

You can use the CNMSJMIG sample job in the NETVIEW.V5R4USER.INSTALL data set to migrate initialization members from prior releases (including the CNME1034 command list and some DSIPARM members) to the CNMSTUSR member. For more information, see Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221.

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function. Because of this, the MVScmdMgt tower is removed.

The following TOWERs were added:

- DISCOVERY - enables the discovery of sysplexes, z/OS systems, coupling facilities, TCP/IP stacks, TCP/IP subplexes, and NetView applications
- DVIPA - enables the collection of dynamic virtual IP address (DVIPA) definition and status data.
- IPMGT - enables IP management
- NLDM - enables the session monitor
- NPDA - enables the hardware monitor
- NVSOA - enables the Web Services Gateway function
- TARA - enables the 4700 support facility
- TCPIPCOLLECT - enables the collection of TCP/IP connection and packet trace data from z/OS Communications Server
- TEMA - enables the NetView program to communicate with the Tivoli NetView for z/OS Enterprise Management Agent

The following subtowers were removed:

- AON LAN
- Multisystem Manager ATM feature (ATM), LAN Network Manager (LNM), NetFinity (NTF), and Novell NetWare (NVL)

The ITNM subtower was added for the Multisystem Manager IBM Tivoli Network Manager feature.

The CNMSTYLE member replaces some of the definition statements in members of the DSIPARM data set and all the initialization performed by the CNME1034 command list.

Table 16. CNMSTYLE Statement Relationship to Older DSIPARM Statements

CNMSTYLE Statement	DSIPARM Statement or Command	NetView Member
DB2SEC=RRS	DB2RRS	DSIDMNK
DEFAULTS.*	DEFAULTS	CNME1034
FLC_DEF_NETW_VIEW	DEF_NETW_VIEW	FLCSAINP
FLC_EXCEPTION_VIEW_FILE	EXCEPTION_VIEW_FILE	FLCSAINP
FLC_RODMINT	RODMINT	FLCSAINP
FLC_RODMNAME	RODMNAME	FLCSAINP
FLC_RODMRETRY	RODMRETRY	FLCSAINP
FLC_RUNCMDRETRY	RUNCMDRETRY	FLCSAINP
FLC_TCPNAME	TCPNAME	FLCSAINP
FLC_TN3270_FILE	TN3270_FILE	FLCSAINP
GHB.TCPANAME	TCPANAME	DUIIGHB
IPLOG	*parameters*	DSIILGCF
LOADEXIT	LOADEXIT	DSIDMNK
LUC.*	*parameters*	DSILUCTD
MCON.*	*parameters*	DSITCPCF
MSMdefault	DEF_AUTOTASK	FLCSAINP
MVSPARM.*	MVSPARM	DSIDMNK
NLDM.*	*parameters*	• AAUPRMLP • DSIAMLTD
NPDA.ALERTFWD	ALERTFWD	DSIDMNK
REXEC.*	*parameters*	DSIREXCF
RRD	RRD	DSIDMNK
RSH.*	*parameters*	DSIRSHCF
RTT.*	*parameters*	DSIRTTTD
SECOPTS.*	OPTIONS	DSIDMNK
TAMEL.*	*parameters*	DUIFPMEM
transTbl	TRANSTBL	DSIDMNK
VTAMCP.USE	VTAMCP	DSIDMNK
WEB.*	*parameters*	DSIWBMEM

The CNMSTYLE member contains descriptive comments about the types of statements that are included. Read the comments and review the defaults.

The following defaults changed:

Table 17. CNMSTYLE statements

Default	Prior default	Current default
NCCF Trace **Note:** If you notice a significant increase in processor utilization during initialization, you might want to change the TRACE options or start the trace after NetView initialization is complete.	Off	On, MODE=INT
LOGONPW	CMDMDL commented out	CMDDEF enabled
ASSIGN	STATGRP specifies: • NETOP1 • NETOP2	STATGRP specifies: • NETOP1 • NETOP2 • AUTO1 OPERGRP specifies: • OPER1 • OPER2 • OPER3 • OPER4 • OPER5 • OPER6
MEMSTOR	Commented out in CNME1034	Enabled
	No predefined include or exclude lists	Predefined include list: • CNMPNL1.CNMKWIND • CNMPNL1.CNMBROWS • DSIOPEN.CNMKEYS • DSICLD.CNME1505 • DSICLD.CNME1096 If the DVIPA tower is enabled: • DSICLD.FKXEDVPT • DSICLD.FKXEDVPA • DSICLD.FKXEDVP1 • DSICLD.FKXEDVP2 • DSICLD.FKXEDVP3 • DSICLD.FKXEXLAT Predefined exclude list: • DSIPARM.DSIOPF • DSIPARM.DSIOPFU • DSILIST.* • *.USERMEM

Table 17. CNMSTYLE statements (continued)

Default	Prior default	Current default
MVSPARM.MSGIFAC	SYSTEM	SSIEXT The default value for MSGIFAC is SSIEXT. Beginning with z/OS v1r8, the QUESSI, QSSIAT, and USESSI values are not supported.
HLLENV	Commented out in CNME1034	Initializes two environments each for PL/I and C in the CNMSTYLE member.
HLLENV keywords	PHEAP=4096	PHEAP=131072
	PSTACK=4096	PSTACK=131072
DEFAULTS command keywords	CMD=HIGH	CMD=LOW
	STRTSERV=SBMTJOB	STRTSERV=STRTPROC
Tasks started automatically: • &DOMAIN.LUC • &DOMAIN.VMT • AAUTCNMI • AAUTSKLP • BNJDSERV • BNJDSE36 • BNJMNPDA • DSIAMLUT • DSIATOPT • DSICRTR • DSIGDS • DSIKREM • DSIQTSK • DSIROVS • DSITRACE	CNME1034 included a STARTCNM ALL command that started these tasks.	The CNMSTYLE member includes these tasks as INIT=N, indicating that they no longer start automatically.

Note: For the SECOPTS.CMDAUTH statement, the NetView program supports the SCOPE option in migration mode only. If you currently use scope of commands security definitions (CMDCLASS, KEYCLASS, VALCLASS statements in DSICMD, with matching OPCLASS statements), you can convert them into equivalent command authorization table statements using the SECMIGR command. If you initialize the NetView program using the SCOPE option, the SECMIGR command is used to convert existing scope security definitions. The converted table is written to the first DSIPARM data set and is put into effect. Make sure the PPT has authority to write the converted command authorization table to the DSIPARM data set.

CNMSTNXT

The CNMSTNXT member contains statements that are new, changed, or deleted. Statements are grouped according to version and release level of the NetView product. Review the statements in the CNMSTNXT member and update the CNMSTUSR or C*xx*STGEN member as necessary.

If you want information about...	Refer to...
CNMSTYLE statements	*IBM Tivoli NetView for z/OS Administration Reference*

DSIAMLTD

The DSIAMLTD member in the DSIPARM data set contains initialization statements for the session monitor. It includes logic to extract initialization values from the CNMSTYLE member. Use the V5R4 DSIAMLTD member, and update the NLDM statements in the CNMSTUSR or C*xx*STGEN member to reflect the values specified in the DSIAMLTD member on the system from which you are migrating. Do not modify the DATA REXX version of the DSIAMLTD member.

DSICCDEF

If you made changes to DSICCDEF, merge your current copy of DSICCDEF with the sample shipped with V5R4. Because z/OS V1R4 is the minimum requirement, the VTAM DISPLAY and MODIFY commands do not need CCDEF support. VTAM provides an affirmative end-of-stream indicator.

DSICMD

The command definition statements in the DSICMD member were replaced by new command definitions in the CNMCMD member. NetView initialization continues to read the DSICMDU member for migration purposes. You can use the CNMSJMIG sample job to migrate the DSICMD member to the new CNMCMD format. For more information, see Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221.

If you do not convert your definitions in the DSICMDU member to the new format before NetView initialization, information contained in the DSICMDU member is converted and stored in a NetView KEEP under the PPT for 2 hours. During this time, you can use a NetView PIPE command to retrieve these converted command definitions. The following example shows one way of retrieving these definitions for display:

```
/PPT: PIPE KEEP DSICMDU | CONS
```

You can also use a similar PIPE command to write the converted definitions to the CNMCMDU member of the DSIPARM data set.

Note: Data REXX statements in DSICMDU have already been processed and therefore do not exist in the DSICMDU KEEP.

Command definitions in the DSICMDU member that duplicate command definitions found in the CNMCMSYS or CNMCMENT member are overridden by the latter. Command definitions in the DSICMDU member that duplicate commands in the NetView internal command set are considered to be in error.

To migrate your definitions from the DSICMDU member, complete the following steps:

1. Start NetView in a test environment and note any DSI234I messages for duplicate command definitions.
2. Retrieve the migrated DSICMDU command definitions from the NetView KEEP and store them in CNMCMDU, for example:

   ```
   /PPT: PIPE KEEP DSICMDU | QSAM (DSN) user.dsiparm(CNMCMDU)
   ```

   where *user.dsiparm* specifies the data set in which to place the migrated command definition statements.

   Note: You can also use sample CNMSJMIG to migrate DSICMDU definitions before you start NetView V5R4.

3. Update the CNMCMDU definitions to change any duplicate command definitions noted during NetView initialization.

Make all changes to command definitions in CNMCMSYS or CNMCMENT using CMDDEF statements in CNMCMDU.

DSICMENT

The DSICMENT member of DSIPARM was replaced by CNMCMENT. You can remove SEC=BY from some AON command definition statements. For a list of these statements, refer to Appendix E, "AON CMDDEF Statements Not Requiring SEC=BY," on page 217.

DSICMSYS

The DSICMSYS member in the DSIPARM data set was replaced by the CNMCMSYS member.

The CNMCMSYS member does not contain a CMDMDL statement for the CNME1500 command list. As a result, the READYRMT alias (command) is no longer defined. The CNME1500 member is still available.

EZLCMD

The EZLCMD member of DSIPARM has been replaced by EZLCMENT. You can remove SEC=BY from some AON command definition statements. For a list of these statements, refer to Appendix E, "AON CMDDEF Statements Not Requiring SEC=BY," on page 217.

FKXCMD

DSIPARM member FKXCMD has been replaced by FKXCMENT. You can remove SEC=BY from some AON command definition statements. For a list of these statements, refer to Appendix E, "AON CMDDEF Statements Not Requiring SEC=BY," on page 217.

DSICTMOD

DSICTMOD is the NetView constants module that can be updated using sample job CNMS0055. Use the DSICTMOD module shipped with V5R4. If you updated CNMS0055 for your current release, merge those changes into the V5R4 version of CNMS0055, submit it to assemble, and link-edit your changes into the DSICTMOD module.

The default number of common global variables has increased from 300 to 400 variables.

DSIDMN

The parameters set in the DSIDMN member were migrated to the CNMSTYLE member. If you do not remove existing statements, they are ignored during DSIDMN processing.

User defined TASK statements are still supported. You can also add these statements to the CNMSTYLE member. For information on the CNMSTYLE TASK statements, see *IBM Tivoli NetView for z/OS Administration Reference*.

The following changes were made to the DSIDMN member:

1. EXCMDSEC is no longer supported. Review your keyword and value authorizations for the EXCMD command to make sure that you maintain your preferred security. For more information, refer to *IBM Tivoli NetView for z/OS Security Reference*.
2. The default value for the MSGIFAC keyword on the MVSPARM statement was changed from SYSTEM to SSIEXT and is now specified by the MVSPARM.MSGIFAC statement in the CNMSTYLE member.

Note: Statements that were in the DSIDMNK member are now in the CNMSTYLE member. The DSIDMNK member has been removed.

DSIILGCF

The DSIILGCF member in the DSIPARM data set defines the initialization values for the IP log. It includes logic to extract initialization values from the CNMSTYLE member. Update IPLOG statements in the CNMSTUSR or C*xx*STGEN member to reflect the values previously specified in the DSIILGCF member.

DSILUCTD

The DSILUCTD member in the DSIPARM data set contains initialization statements for the CNM data transfer task. It includes logic to extract initialization values from the CNMSTYL member. Update LUC statements in the CNMSTUSR or C*xx*STGEN member to reflect the values specified in DSILUCTD on the system from which you are migrating.

DSIOPF

Because of extensive changes to the DSIOPF member, use the V5R4 version of the DSIOPF member. Data REXX logic was added to conditionally define operator definitions based on the level of the NetView program installed, the towers that are enabled by the CNMSTYLE member, or both.

The following information highlights modifications to DSIOPF since NetView V1R4. Consider the following lists of new, changed, and deleted operator definitions as you migrate your operator definitions, especially with regard to security.

Remove the FKWOPF %INCLUDE member.

The following operator definitions were removed:

```
AUTOATMA      OPERATOR    PASSWORD=AUTOATMA
              PROFILEN    FLCSPRFB
AUTOATM1      OPERATOR    PASSWORD=AUTOATM1
              PROFILEN    FLCSPRFB
AUTOEWA       OPERATOR    PASSWORD=AUTOEWA
              PROFILEN    FLCSPRFB
AUTOEW1       OPERATOR    PASSWORD=AUTOEW1
              PROFILEN    FLCSPRFB
AUTONWA       OPERATOR    PASSWORD=AUTONWA
              PROFILEN    FLCSPRFB
AUTONW1       OPERATOR    PASSWORD=AUTONW1
              PROFILEN    FLCSPRFB
FLBGMMGR      OPERATOR    PASSWORD=FLBGMMGR
              PROFILEN    FLBGMMPR
```

The following operator definitions changed their profile name from DSIPROFD to DSIPROFG:

```
AUTO2        OPERATOR    PASSWORD=AUTO2
             PROFILEN    DSIPROFG
DBAUTO1      OPERATOR    PASSWORD=DBAUTO1
             PROFILEN    DSIPROFG
DBAUTO2      OPERATOR    PASSWORD=DBAUTO2
             PROFILEN    DSIPROFG
DSIWEB       OPERATOR    PASSWORD=WEBSERV
             PROFILEN    DSIPROFG
DSIMCAOP     OPERATOR    PASSWORD=CMDAUTO
             PROFILEN    DSIPROFG
```

The following statement was added:

```
%>IF TOWER('IPMGT') & ¬TOWER('AON') THEN
  %INCLUDE FKXOPFIP
```

This is a conditional include for operator definitions for the IPMAN function if the AON tower is not active:

The following operator definitions were added:

Table 18. Operator Definitions Added to DSIOPF

Operator Definition	DSIOPF Statements		
NetView Web application DVIPA support autotask	AUTDVIPA	OPERATOR PROFILEN	PASSWORD=AUTDVIPA DSIPROFC
Distributed DVIPA statistics autotask	DVIPSTAT	OPERATOR PROFILEN	PASSWORD=DVIPSTAT DSIPROFC
DVIPA event and data forwarding autotask	DVIPAUTO	OPERATOR PROFILEN	PASSWORD=DVIPAUTO DSIPROFC
Autotask that manages the NETVONLY action for Command Revision.	MVSCMDS	OPERATOR PROFILEN	PASSWORD=MVSCMDSL DSIPROFC
DVIPA definition and status autotask	AUTOCT1	OPERATOR PROFILEN	PASSWORD=AUTOCT1 DSIPROFN
DVIPA sysplex distributors, distributed targets, and server health autotask	AUTOCT2	OPERATOR PROFILEN	PASSWORD=AUTOCT2 DSIPROFN
DVIPA connections autotask	AUTOCT3	OPERATOR PROFILEN	PASSWORD=AUTOCT3 DSIPROFN
VIPA routes and distributed DVIPA connection routing autotask	AUTOCT4	OPERATOR PROFILEN	PASSWORD=AUTOCT4 DSIPROFN
OSA channels and ports autotask	AUTOCT5	OPERATOR PROFILEN	PASSWORD=AUTOCT5 DSIPROFN
Telnet servers and Telnet server ports autotask	AUTOCT6	OPERATOR PROFILEN	PASSWORD=AUTOCT6 DSIPROFN
NetView applications autotask	AUTOCT7	OPERATOR PROFILEN	PASSWORD=AUTOCT7 DSIPROFN
Tivoli NetView for z/OS Enterprise Management Agent autotasks	AUTONALC AUTODC1 AUTODC2 AUTODC3 AUTODC4	OPERATOR PROFILEN OPERATOR PROFILEN OPERATOR PROFILEN OPERATOR PROFILEN OPERATOR PROFILEN	PASSWORD=AUTONALC DSIPROFC PASSWORD=AUTODC1 DSIPROFN PASSWORD=AUTODC2 DSIPROFN PASSWORD=AUTODC3 DSIPROFN PASSWORD=AUTODC4 DSIPROFN

Table 18. Operator Definitions Added to DSIOPF (continued)

Operator Definition	DSIOPF Statements		
Autotasks that are used for running commands that are used with the Tivoli NetView for z/OS Enterprise Management Agent	NATEP1	OPERATOR PROFILEN	PASSWORD=NATEP1 DSIPROFC
	NATEP2	OPERATOR PROFILEN	PASSWORD=NATEP2 DSIPROFC
	SYSADMIN	OPERATOR PROFILEN	PASSWORD=SYSADMIN DSIPROFC
TCP connections	DSIIPCHK	OPERATOR PROFILEN	PASSWORD=DSIIPCHK DSIPROFC
IP management services (AUTIPMGT) autotask	AUTIPMGT	OPERATOR PROFILEN	PASSWORD=AUTIPMGT DSIPROFC
XCF services autotasks	AUTOXCF	OPERATOR PROFILEN	PASSWORD=AUTOXCF DSIPROFC
	AUTOXDSC	OPERATOR PROFILEN	PASSWORD=AUTOXDSC DSIPROFC
	AUTOEDAT	OPERATOR PROFILEN	PASSWORD=AUTOEDAT DSIPROFC
Autotasks for opening NMI sockets to the Communications Server.	AUTOTCPC	OPERATOR PROFILEN	PASSWORD=AUTOTCPC DSIPROFG
	AUTOPKTS	OPERATOR PROFILEN	PASSWORD=AUTOPKTS DSIPROFG
	AUTOOPKT	OPERATOR PROFILEN	PASSWORD=AUTOOPKT DSIPROFG
	AUTOTCPS	OPERATOR PROFILEN	PASSWORD=AUTOTCPS DSIPROFG
Autotask to receive SMF 30 records	AUTOSMF3	OPERATOR PROFILEN	PASSWORD=AUTOSMF3 DSIPROFC
NetView Web Services Gateway autotask	AUTONVSP	OPERATOR PROFILEN	PASSWORD=AUTONVSP DSIPROFC

DSIOPFU

Copy any operator definitions that you defined in your V1R4 DSIOPFU member to the V5R4 version.

You can add Data REXX logic to conditionally define operator definitions in the DSIOPFU member. Data REXX files must have either `/*%DATA*/` or `/*%LOGIC*/` as the first statement. Comments can follow on the same or subsequent lines. A blank in the first column indicates a continuation of the previous statement. For more information on Data REXX, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

FKXOPFIP

The FKXOPFIP member is used when the IPMGT tower is enabled. This member is not used if the AON component is enabled. Because of this, operator definitions duplicate those in the EZLOPF and FKXOPF members.

The following operator definitions were added:

Table 19. Operator Definitions Added to FKXOPFIP

Operator Definition	DSIOPF Statements		
IP management services autotasks	AUTIPM*x*	OPERATOR PROFILEN	PASSWORD=AUTIPM*x* EZLPRFAO

DSIREXCF

The DSIREXCF member in the DSIPARM data set defines the initialization values for the REXEC Server. It includes logic to extract initialization values from the CNMSTYLE member. Update REXEC statements in the CNMSTUSR or C*xx*STGEN member to reflect the values previously specified in the DSIREXCF member. Do not modify the Data REXX version of the DSIREXCF member.

DSIRSHCF

The DSIRSHCF member in the DSIPARM data set defines the initialization values for the RSH Server. It includes logic to extract initialization values from the CNMSTYLE member. Update RSH statements in the CNMSTUSR or C*xx*STGEN member to reflect the values previously specified in the DSIRSHCF member. Do not modify the Data REXX version of the DSIRSHCF member.

DSIRTTTD

The DSIRTTTD member of the DSIPARM data set contains initialization statements for the TCP/IP alert receiver. It includes logic to extract initialization values from the CNMSTYLE member. Update RTT statements in the CNMSTUSR or C*xx*STGEN member to reflect the values that you previously specified in the DSIRTTTD member. Do not modify the Data REXX version of the DSIRTTTD member.

DSIRXPRM

DSIRXPRM contains the REXX initialization parameters required to establish a new REXX environment. Update DSIRXPRM using sample job CNMSJM11. Use the V5R4 version of DSIRXPRM. If you updated CNMSJM11 for your current release, merge those changes into the V5R4 version of CNMSJM11 and run it to assemble and link-edit your changes into the DSIRXPRM module.

DSISPN

The DSISPN member is now obsolete.

Use the SECMIGR migration tool to convert existing VTAMLST and DSISPN definitions into entries in the NetView span table. The SECMIGR tool creates the span table, converts your existing span of control definitions into span table statements, and loads them into the span table. When you are ready to initialize the NetView program, load the NetView span table by specifying its name on the SECOPTS.SPANAUTH statement in the CNMSTUSR or C*xx*STGEN member. For an example span table, refer to the CNMSPAN2 sample.

DSITBL01

The DSITBL01 member contains sample automation table definitions. Some %INCLUDE statements and associated statements to start automation have been replaced by entries in the CNMSTYLE member. If you modified the DSITBL01 member, merge your changes with the V5R4 DSITBL01 member. After making changes, renumber the NetView automation table. When the NetView automation table processes a message and finds a match that results in a command or command list being run, it writes the CNM493I message to the NetView log file. The CNM493I message contains the line number of the automation table entry matched.

Several messages that are supplied with the NetView product are changed with the V5R4 program. These messages are listed in the appendixes. Review the list and make any necessary changes to your automation table.

If your primary automation table name is not DSITBL01, update the CNMSTUSR or C*xx*STGEN member to include an AUTOCMD statement for your automation table. For more information on the AUTOCMD statement, refer to the *IBM Tivoli NetView for z/OS Administration Reference*.

Message automation is used to update information when some discovery manager resources start and stop. Add the CNMSEPTL automation sample member for these events. The CNMSEPTL member is included when the DISCOVERY tower is enabled.

```
* Load local resource discovery table
%>IF tower('DISCOVERY') THEN
%INCLUDE CNMSEPTL
```

For DVIPA automation, add the following statements:

```
* Include the following DVIPA samples:
* CNMSDVDS - Automation for forwarding information to the master NetView
* CNMSDVTP - Samples for automating z/OS Communications Server SNMP
*            DVIPA traps
* CNMSDVCG - Samples for automating z/OS Communications Server DVIPA
*            configuration updates
* CNMSSMON - Samples for automating z/OS Communications Server
*            sysplex autonomics messages
%>IF tower('DVIPA') THEN
%>do;
     %INCLUDE CNMSDVDS
     %INCLUDE CNMSDVTP
     %INCLUDE CNMSDVCG
     %INCLUDE CNMSSMON
%>end;
```

For XCF sysplex support, add the following statements:

```
** Load statements that relate to the z/OS sysplex master function.
%INCLUDE CNMSXCFA
```

For COLLCTL command automation, add the following statements:

```
*************** COLLCTL command AUTOMATION ****************************
%INCLUDE CNMSDCA
```

For SMF type 30 record automation using the CNMSMF3E sample, add the following statements:

```
*************** SMF 30 RECORD AUTOMATION ******************************
IF MSGID = 'BNH874I' THEN
     EXEC(CMD('CNMSMF3A')) NETLOG(Y) SYSLOG(N);
```

For more information on automating the SMF type 30 records, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

DSITCPCF

The DSITCPCF member in the DSIPARM data set defines the initialization values for the DSITCPIP task. These values are used in communicating between TCP/IP and the NetView 3270 management console. The DSITCPCF member includes logic to extract initialization values from the CNMSTYLE member. Update the MCON

statements in the CNMSTUSR or C*xx*STGEN member to reflect the values that you previously specified in the DSITCPCF member. Do not modify the Data REXX version of the DSITCPCF member.

DSITCPRF

The DSITCPRF member in the DSIPRF data set defines TCP/IP operator security profiles. The WEB_SERVER statement has been added to define the encryption keys for HTTP server sessions:

```
WEB_SERVER: default default
```

DSIWBMEM

The DSIWBMEM member in the DSIPARM data set defines initialization values for the Web server. It now includes logic to extract initialization values from the CNMSTYLE member. Update the WEB statements in the CNMSTUSR or C*xx*STGEN member to reflect the values previously specified in the DSIWBMEM member. Do not modify the Data REXX version of the DSIWBMEM member.

DSIZVLSR

The DSIZVLSR module defines the buffer pools to be used with the VSAM LSR and DSR performance options. Update the DSIZVLSR module by using the CNMSJM01 sample job. Use the DSIZVLSR module shipped with V5R4. If you previously updated the CNMSJM01 job, merge those changes into the V5R4 version of the CNMSJM01 job and run it to assemble and link-edit your changes into the DSIZVLSR module.

The following changes were made to the DSIZVLSR module:

- The default STRNO value was increased from 30 to 40.
- New buffers were added to the index and data buffer pools for the new VSAM clusters allocated for the DSITCONT task to support the TCPCONN command.

DUIFPMEM

The DUIFPMEM member in the DSIPARM data set contains TCP/IP initialization statements for the CNMTAMEL task. It includes logic to extract initialization values from the CNMSTYLE member. Update TAMEL statements in the CNMSTUSR or C*xx*STGEN member to reflect the values that you previously specified in the DUIFPMEM member. Do not modify the DATA REXX version of the DUIFPMEM member.

DUIIGHB

The DUIIGHB member in the DSIPARM data set contains initialization statements for the DUIDGHB task. It includes logic to extract initialization values from the CNMSTYLE member. Update the GHB statements in the CNMSTUSR or C*xx*STGEN member to reflect the values that you previously specified in the DUIIGHB member. Do not modify the Data REXX version of the DUIIGHB member.

FKXCFG01

The FKXCFG01 member in the DSIPARM data set contains configuration information for the AON component.

TCP390 policy information was moved from the FKXCFG01 member to the CNMPOLCY member. Move any TCP390 statements in your V1R4 FKXCFG01

member to the V5R4 CNMPOLCY member. Review your other AON configuration members (for example the EZLCFG01 member and the FKVCFG01 member) and any additional members that you included to find other TCP390 statements. Move all TCP390 statements to the CNMPOLCY member.

(Web Application only) Add a DVIPADAT keyword on the TCP390 statement and set the value to Y (Yes) if you want to collect DVIPA data from the stack.

FLBSYSDA

The FLBSYSDA member in the DSIPARM data set is the initialization member for the APPN accounting manager. This member was removed.

FLCSAINP

The FLCSAINP member is obsolete.

In V1R4, The FLCSAINP member was the sample initialization file for the MultiSystem Manager. You can modify and rename the FLCSAINP member to either FLCAINP or another unique name. In V5R4, the FLCAINP member is used to specify the GETTOPO statements that you want to run during MultiSystem Manager initialization. All other MultiSystem Manager initialization definitions were migrated to the CNMSTYLE member.

For V5R4, use your existing FLCAINP (or other uniquely named member) and make the following updates:

1. If you made changes to initialization definitions (other than GETTOPO statements), migrate the changes to the CNMSTUSR or C*xx*STGEN member.
2. Delete the definitions (non-GETTOPO statements) that you migrated to the CNMSTYLE member.
3. Delete any GETTOPO ATM*xxx* statements.
4. Delete any GETTOPO LNM*xxx* statements.
5. Delete any GETTOPO NETF*xxx* statements.
6. Delete any GETTOPO NWCP*xxx* statements.
7. Delete any START_DISCOVERY statements.

Refer to *IBM Tivoli NetView for z/OS Installation: Configuring Graphical Components* for additional information about the FLCAINP member.

RODM Address Space

The samples in this section list changes for the RODM address space.

EKGLOADP

EKGLOADP is the sample RODM load procedure JCL.

Make the following changes to EKGLOADP:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. To set the ROUTECODE parameter, add the following statement after the COPIES parameter in the PROC statement. When you add this parameter, add a comma after the COPIES=1 parameter.

   ```
   //            ROUTECDE=1
   ```

3. Add the &ROUTECDE variable to the NetView EXEC statement, as shown:

```
//LOADRODM EXEC PGM=EKGLOTLM,
//         PARM=('OPERATION=&OPER,LOAD=&LOAD,NAME=&RODMNAME',
// 'LISTLEVEL=&LISTL,SEVERITY=&SEVERITY,ROUTECODE=&ROUTECDE')
```

As a result of the addition of the ROUTECODE parameter, you also need to update the JCL procedure EKGLLOAD to specify &ROUTECDE when calling EKGLOADP.

4. If you are using the RODM component and are migrating from a previous release, remove the following statement from the STEPLIB data set concatenation:

   ```
   //STEPLIB  DD DSN=&SQ1..SEKGMOD1,DISP=SHR
   ```

5. Add the following DD statement to the STEPLIB data set concatenation:

   ```
   //STEPLIB  DD DSN=&SQ1..CNMLINK,DISP=SHR
   ```

6. If you are using the RODM component and are migrating from a previous release, change the following statement from:

   ```
   //EKGLUTB  DD DSN=&SQ1..SEKGLUTB,DISP=SHR
   ```

   to

   ```
   //EKGLUTB  DD DSN=&SQ1..CNMSAMP,DISP=SHR
   ```

7. If you are using the RODM component and are migrating from a previous release, change the following statement from:

   ```
   //EKGIN2  DD DSN=&SQ1..SEKGCAS1,DISP=SHR
   ```

   to

   ```
   //EKGIN2  DD DSN=&SQ1..CNMSAMP,DISP=SHR
   ```

EKGSI101

EKGSI101 is used for allocating the RODM log and checkpoint databases. This sample is used by sample job CNMSJ004.

If you allocated RODM checkpoint data sets for fewer than the maximum number of windows supported by RODM and the estimated number of objects that you expect to store in the RODM data cache exceeds the previous maximum supported number (approximately 524,000 objects), consider increasing the size of the RODM checkpoint databases.

EKGXRODM

EKGXRODM is the RODM start procedure.

Make the following changes to EKGXRODM:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
3. Add the following ROUTECDE parameter after the SUBSYM parameter:

   ```
   //        SUBSYM=*SUBSYM,        ** SYMBOL SUBSTITUTION OPTION
   //        ROUTECDE=1             ** ROUTE CODE FOR WTO/WTOR
   ```

4. Add the &ROUTECDE variable to the START EXEC statement, as shown:

   ```
   //START    EXEC PGM=EKGTC000,REGION=0K,TIME=1440,
   // PARM='&TYPE,&NAME,&INIT,&CLRSSB,&CUST,&ARM,&SUBSYM,&ROUTECDE'
   ```

5. If you are using the RODM component and are migrating from a previous release, replace the following statements in the STEPLIB data set concatenation:

```
//         DD DSN=&SQ1..SEKGMOD1,DISP=SHR
//         DD DSN=&SQ1..SEKGMOD2,DISP=SHR
```

   with

```
//         DD DSN=&SQ1..CNMLINK,DISP=SHR
```

6. The EKGCUST DD statement has changed to include a user DSIPARM data set:

```
//EKGCUST  DD DSN=&Q1..CNM01.DSIPARM,DISP=SHR
//         DD DSN=&SQ1..CNMSAMP,DISP=SHR
```

7. If you are using the RODM component and are migrating from a previous release, change the following statement from:

```
//EKGLUTB  DD DSN=&SQ1..SEKGLUTB,DISP=SHR
```

   to

```
//EKGLUTB  DD DSN=&SQ1..CNMSAMP,DISP=SHR
```

8. If you are using the RODM component and are migrating from a previous release, change the following statement from:

```
//EKGIN1  DD DSN=&SQ1..SEKGSMP1(EKGIN1),DISP=SHR
```

   to

```
//EKGIN1  DD DSN=&SQ1..CNMSAMP(EKGIN1),DISP=SHR
```

9. If you are using the RODM component and are migrating from a previous release, change the following statement from:

```
//EKGIN2  DD DSN=&SQ1..SEKGCAS1,DISP=SHR
```

   to

```
//EKGIN2  DD DSN=&SQ1..CNMSAMP,DISP=SHR
```

10. If you have not installed the Language Environment for OS/390 runtime library in LNKLST*xx* or PROG*xx*, be sure the library name in the STEPLIB of EKGXRODM is correct and uncommented. Remove DD statements for PL/I or C/C++ runtime libraries because these libraries are no longer being used.

GMFHS Address Space

The samples in this section list changes for the GMFHS address space.

CNMGMFHS (CNMSJH10)

CNMGMFHS (CNMSJH10) is the GMFHS start procedure.

Make the following changes to CNMGMFHS:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
3. Add the following ROUTECDE parameter after the SUBSYM parameter:

```
//            SUBSYM=*SUBSYM, ** SYMBOL SUBSTITUTION
//            ROUTECDE=1    ** ROUTE CODE FOR ALL WTO'S
```

4. Add the &ROUTECDE variable to the STEP1 EXEC statement, as shown:

```
//STEP1    EXEC PGM=&PROG,REGION=&REG,TIME=1440,
// PARM='&AGGRST,RESWS=&RESWS,DOMAIN=&DOMAIN,ARM=&ARM,SUBSYM=&SUBSYM,  *
//              ROUTECDE=&ROUTECDE'
```

5. If you are using the RODM component and are migrating from a previous release, remove the following statement:

   ```
   //STEPLIB  DD DSN=&SQ1..SEKGMOD1,DISP=SHR
   ```

6. If you are using the RODM component and are migrating from a previous release, change the following statement from:

   ```
   //EKGLUTB  DD DSN=&SQ1..SEKGLUTB,DISP=SHR
   ```

   to

   ```
   //EKGLUTB  DD DSN=&SQ1..CNMSAMP,DISP=SHR
   ```

CNMSJH12

CNMSJH12 is the sample GMFHS/SNA Topology Manager data model load job. Because of the number of changes, use the new sample job.

DUIGINIT

DUIGINIT is the initialization member for GMFHS. It contains the initialization statements for the GMFHS host main task. These statements are system-controlling constants that are read when GMFHS is initialized. You can use symbols in DUIGINIT if symbolic substitution is enabled on your system. Ensure that the symbols are defined in member IEASYMxx of SYS1.PARMLIB.

The DOMAIN statement has been commented out in the default DUIGINIT member. The preferred approach is to use the DOMAIN symbolic variable in the GMFHS start procedure (CNMGMFHS). If the default values that are provided in the DUIGINIT member that is supplied by the NetView product are acceptable for your environment, consider using the default DUIGINIT member.

Event/Automation Service Address Space

The sample in this section lists changes for the Event/Automation Service address space.

IHSAEVNT

The IHSAEVNT sample starts the Event/Automation Service address space. Make the following changes to the IHSAEVNT member in your PROCLIB:

1. Add the following comments:

   ```
   //*  4.  There are additional keywords and values which may be
   //*      specified in the PARM string, which a) are not in the
   //*      style of a UNIX System Services shell command parameter and
   //*      b) do not have procedure keyword definitions in this sample
   //*      procedure.  They are described as follows.
   //*
   //*      CMSGCFG=value
   //*
   //*        CMSGCFG provides the name of a member of the IHSSMP3 file
   //*        containing configuration parameters for the confirmed
   //*        message adapter task, MESSAGEC.  If the value is provided,
   //*        it must be a valid partitioned data set member name.
   //*        If the keyword is omitted or is given no value, the
   //*        default value is IHSANCFG.
   //*
   //*      CALRTCFG=value
   //*
   ```

```
//*       CALRTCFG provides the name of a member of the IHSSMP3 file
//*       containing configuration parameters for the confirmed
//*       alert adapter task, ALERTC.  If the value is provided,
//*       it must be a valid partitioned data set member name.
//*       If the keyword is omitted or is given no value, the
//*       default value is IHSABCFG.
//*
```

2. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
3. Remove the DD statement for the C/C++ runtime library because this library is no longer used.
4. Add the following ROUTECDE parameter after the OUTSIZE parameter:

   ```
   //             ROUTECDE=1,    ** ROUTE CODE FOR ALL WTO'S
   ```

5. The SCNMUXLK data set has been replaced with the CNMLINK data set. See Table 20 for an example on how to change the STEPLIB DD statement.

Table 20. STEPLIB DD statement

Existing statement:
`//STEPLIB  DD DSN=NETVIEW.V1R4M0.SCNMUXLK,DISP=SHR`
Updated statement:
`//STEPLIB  DD DSN=`**`NETVIEW.V5R4M0.CNMLINK,`**`DISP=SHR`

6. The SCNMUXMS data set that was specified on the IHSMSG1 DD statement has been replaced with the SDUIMSG1 data set. See Table 21 for an example on how to change the IHSMSG1 DD statement.

Table 21. IHSMSG1 DD statement

Existing statement:
`//IHSMSG1  DD DSN=NETVIEW.V1R4M0.SCNMUXMS,DISP=SHR`
Updated statement:
`//IHSMSG1  DD DSN=`**`NETVIEW.V5R4M0.SDUIMSG1,`**`DISP=SHR`

7. Add the following &ROUTECDE variable after the &OUTSIZE variable:

   ```
   INITFILE=&INITFILE OUTSIZE=&OUTSIZE ROUTECDE=&ROUTECDE
   ```

8. Add the following output data sets:

   ```
   //*   EAS OUTPUT DATASETS
   //IHSN     DD SYSOUT=A
   //IHSB     DD SYSOUT=A
   :
   //IHSNS    DD SYSOUT=A
   //IHSBS    DD SYSOUT=A
   :
   //IHSNSTD  DD SYSOUT=A
   //IHSBSTD  DD SYSOUT=A
   ```

IHSAINIT

The IHSAINIT sample is the initialization file for the Event/Automation Service. Information was added to this sample to support the confirmed alert and message adapters. The NOSTART statements are included to prevent the Event/Automation Service from automatically starting the confirmed alert adapter and confirmed message adapter services.

```
# The following keywords are supported:
#   CMSGCFG  - Specifies the confirmed message adapter configuration file
#   CALRTCFG - Specifies the confirmed alert adapter configuration file
#
```

```
# The syntax for each keyword follows:
#   CMSGCFG=confirm_message_config_file
#   CALRTCFG=confirm_alert_config_file
#   TRACE TASK=task_designator LEVEL=trace_level IP=on_or_off
#
#     confirm_message_config_file - Specifies the name of the confirmed message
#                         adapter configuration file.  If not prefaced with the
#                         escape character (\), this is the name of a member of
#                         the IHSSMP3 file.  Otherwise, this is a complete file
#                         name.  If E/AS is an MVS started task, the default
#                         value of this keyword is IHSANCFG.  If E/AS is started
#                         in a UNIX System Services shell, the default value is
#                         /etc/netview/confirm_message_adpt.conf.
#
#     confirm_alert_config_file - Specifies the name of the confirmed alert
#                         adapter configuration file.  If not prefaced with the
#                         escape character (\), this is the name of a member of
#                         the IHSSMP3 file.  Otherwise, this is a complete file
#                         name.  If E/AS is an MVS started task, the default
#                         value of this keyword is IHSABCFG.  If E/AS is started
#                         in a UNIX System Services shell, the default value is
#                         /etc/netview/confirm_alert_adpt.conf.
#     output_destination - specifies the location where the trace and error
#                          messages will be logged. The values are:
#     SYSOUT - Specifies a system output file.  When started by an MVS startup
#              procedure, the primary and secondary files for each task are:
#
#                 IHSN and IHSNS for the MESSAGEC task
#                 IHSB and IHSBS for the ALERTC task
#
#               When started under UNIX System Services, the default primary and
#               secondary file names for each task are:
#
                  cmessagep.err and cmessages.err for the MESSAGEC task
#                 calertp.err and calerts.err for the ALERTC task

#     task_designator - is one of the following:
#       MESSAGEC - Specifies the confirmed message adapter task
#       ALERTC   - Specifies the confirmed alert adapter task

#       Note : CONTROL is not valid on the NOSTART statement.  ALL does not
#              include CONTROL for the NOSTART statement
#
#     on_or_off - is one of the following:
#       ON      - Specifies that data sent or received using TCP/IP
#                 will be traced.  Additional information for the
#                 z/OS UNIX C/C++ socket functions used may appear.
#       OFF     - Specifies that no tracing of data or socket
#                 functions will be done.  This is the default.
#
# Confirmed Message Adapter Configuration File
#CMSGCFG=IHSANCFG
#CMSGCFG=\/etc/netview/confirm_message_adpt.conf
#
# Confirmed Alert Adapter Configuration File
#CALRTCFG=IHSABCFG
#CALRTCFG=\/etc/netview/confirm_alert_adpt.conf
#
# Tasks not started at initialization (example)
NOSTART TASK=MESSAGEC
NOSTART TASK=ALERTC
#
# Confirmed Message Adapter Task
#TRACE TASK=MESSAGEC LEVEL=OFF
#
# Confirmed Alert Adapter Task
#TRACE TASK=ALERTC LEVEL=OFF
```

Additional Considerations

Consider changes to the following functions:

BROWSE Facility

A new DEFAULTS setting called LBHOURLY controls whether the hourly-statistics messages CNM154I, CNM155I, and CNM156I are posted to the network log. In previous releases, these hourly statistics messages were posted to the network log automatically, without an option to prevent them from being posted. The default setting for LBHOURLY is NO, as set by the DEFAULTS.LBHOURLY statement in the CNMSTYLE member. To continue receiving these hourly statistics messages in the network log, add a DEFAULTS.LBHOURLY statement to the CNMSTUSR or C*xx*STGEN member and set its value to YES.

NetView Resource Manager

As a result of being able to customize the NetView Resource Manager autotask, forwarding status from a host at the V5R2 or later level to a manager host on a previous release works only if the NetView Resource Manager autotask is AUTONRM. However, you can continue to forward status from a host at the V1R4 level to a manager at the V5R2 or later level. There is no restriction on the NetView Resource Manager autotask name in V5R2 or later for the upward migration to work.

UNIX System Services

The following section describes the directories, configuration files, and functions that have changed from NetView V1R4 to NetView V5R4. Also review the section in "Preparing UNIX System Services" on page 19.

The NetView MIB collection has moved from the `/usr/lpp/netview/mibs/` directory to the `/usr/lpp/netview/v5r4/mibs/` directory.

The following configuration files found in NetView V1R4 are no longer used in NetView V5R4:

- /etc/netview/fkxcm [1]
- /etc/netview/ipdiscovery.conf
- /etc/netview/nv390mibs.def
- /etc/netview/nv390srvc.conf
- /etc/netview/snmp.conf
- /var/netview/properties/JdnServerProperties.txt
- /var/netview/properties/startup/config.properties
- /var/netview/properties/startup/node.def
- /var/netview/properties/startup/pollobj.def
- /var/netview/properties/startup/resource.def

- /var/netview/properties/startup/template.def
- /var/netview/properties/startup/view.def

The Web resources files that are used by the Web Services Gateway function are located in the following directory:

`/usr/lpp/netview/v5r4/www/`

See *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* to update the files for your environment. The WSDL files automatically generate a proxy-client connection.

Table 22. Web Services Gateway files

File name	Purpose	Modifications
znvsoatx.htm	Text-based Web Services client. This file works with Microsoft Internet Explorer version 7 or later or Mozilla 2.0.014 or later.	Update URLs for your environment. Locate the `<SELECT>` tag and modify the `<OPTION>`*`your.web.services.server`*`</OPTION>` tag.
znvsoa.htm	Graphic version of the Web Services client. This file works only with Microsoft Internet Explorer version 7 or later.	Update URLs for your environment. Locate the `<SELECT>` tag and modify the `<OPTION>`*`your.web.services.server`*`</OPTION>` tag.
znvwsdl.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.
znvwsdl1.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.
znvwsdl2.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.

The following functions are no longer available on UNIX system services for NetView V5R4:

- The TCP/IP discovery sample which previously ran on z/OS and OS/390 in UNIX system services. [2]
- The -jsnmp option of the NVSNMP command
- Java™ Application Server (JAS)

  The Java Application Server provided for starting, stopping, and checking the status of the following services in an UNIX system services environment:
  - SNMPSRVC [3]
  - POLLSRVC [3]
  - MIBSRVC [3]
  - LOADMIB [3]

Notes:

1. Copy any non-duplicate community names from fkxcm into DSIPARM member CNMSCM.
2. This sample is available for downloading from the NetView for z/OS Web page (http://www.ibm.com/software/tivoli/products/netview-zos/). It is replaced in the product by the TCP/IP discovery function for Linux on zSeries.

3. These services are available through the SNMP server which is shipped as a feature of the NetView Web application.

Use of Symbolic Variables in Parameter Files

The NetView program uses the system variables listed in Table 23 and defined in the SYS1.PARMLIB data set for the following members of the DSIPARM data set:

- CNMSTYLE
- DUIGINIT
- FLBSYSD

Table 23. Symbolic Variable Usage by Initialization Members

Member	Task	TCP/IP NAME	RODM NAME	NETID
		&CNMTCPN	&CNMRODM	&CNMNETID
CNMSTYLE	NetView initialization	X	X	X
DUIGINIT	GMFHS (Graphics)		X	
FLBSYSD	SNA Topology manager		X	

&DOMAIN is an additional NetView user symbolic variable and is used in the following parameter files:

- CNMSCBET
- CNMSMRT1
- CNMSTASK
- CNMSTGEN
- CNMSTPWD
- CNMSTUSR
- CNMSTYLE
- DSIAMIAT
- DSIAMII
- DSITBL01
- DSIVPARM
- FKXWHTML
- FLBSYSD

Use of Data REXX in Parameter Files

Data REXX allows for REXX-style logic to be coded in NetView data set members. For example, Data REXX allows conditional inclusion of files and the assignment of values to parameters based on settings in the CNMSTYLE member.

The NetView program uses Data REXX in the following parameter files:

- AAUPRMLP
- BNJMBDST
- CNMNEWS
- CNMSTASK
- CNMSTTWR
- C*xx*STGEN
- DSIAMLTD
- DSICMDU (Data REXX support)
- DSIDMN
- DSIILGCF
- DSILUCTD

- DSIOPF
- DSIREXCF
- DSIRSHCF
- DSIRTTTD
- DSITBL01
- DSITCPCF
- DSIUINIT
- DSIWBMEM
- DUIFPMEM
- DUIIGHB
- EZLCFG01
- EZLDSIAO
- FKVCFG01
- FKVISTAO
- FKVTABLE
- FLBAUT
- HELPMAP (CNMS1048)

TCP/IP Management

The following functions changed:

- ACTMON
- IP tracing
- IPMAN
- IPSTAT
- Ping
- Tracerte

MVS Command Management

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function.

Consider the following migration notes:

- You can continue to use the MVS Command Management function until you are finished migrating your system to the MVS Command Revision function. Both functions can coexist. Ensure that both functions do not simultaneously operate on the same command. One way to do this is to activate the MVS Command Revision function in test mode.
- For installation instructions for the MVS Command Revision function, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.
- Review your current MVS Command Management actions and then create a Command Revision Table. For information on how to do this, see *IBM Tivoli NetView for z/OS Automation Guide*.
- The Command Revision Table and the Message Revision Table use high level UPON statements to group all other statements. You can place Command Revision and Message Revision statements in the same member.

  The Message Revision Table `UPON(ALWAYS)` action is replaced with the `UPON(OTHERMSG)` action. Change all the `UPON(ALWAYS)` actions to `UPON(OTHERMSG)` actions in your Message Revision Table. The `UPON(ALWAYS)` action is supported for migration purposes, but might create confusion because actions for commands and messages can be in the same source member.
- The action of the SSI.ReviseTable CNMSTYLE statement is unchanged if the member to which this statement is referring is unchanged. If new UPON

statements related to Command Revision are in the CNMSTYLE member or its included members, a Command Revision Table is created.

- (Optional) The REVISMSG command is being replaced with the REVISE MSG command. Wherever you issue a REVISMSG command, consider changing it to the REVISE MSG command. For syntax information, see the online help or the *IBM Tivoli NetView for z/OS Command Reference Volume 1 (A-N)*.

  This step is optional because the REVISE command defaults to MSG processing when the defined verb is REVISMSG. REVISMSG command arguments are supported by the REVISE command.
- When reports or testing indicate that all of the MVS Command Management actions are satisfactorily implemented using a Command Revision table, disable the MVS Command Management function. This includes deleting the MVScmdMgt tower from the CNMSTUSR or C*xx*STGEN member.

Security Enhancements

The NetView program provides support for mixed case passwords and password phrases.

Mixed Case Passwords

If you use an SAF product for password checking, you might be able to use the mixed case password function. For more information, see *IBM Tivoli NetView for z/OS Security Reference*.

Password Phrases

The NetView program provides support for password phrase authorization. A password phrase can be used as a substitute for a password for all NetView functions that use an SAF product, such as RACF, for security checking. Any panel that accepts passwords has been updated to accept password phrases. The password phrase can include phrases from 9-100 characters in length.

The RACF product allows password phrases to contain any valid EBCDIC characters. When setting a password phrase for a user ID that will be accessed from a non-z/OS system, the password on that system is entered as ASCII text. Not all EBCDIC characters have an ASCII equivalent, so limit the EBCDIC password phrase to characters that have an ASCII equivalent.

Password phrases are not supported in the following environments:

- Password checking using the DSIOPF member
- Logon validation using the DSIEX12 installation exit
- Tivoli Enterprise Portal login. Because of this restriction, the password phrase cannot be passed to the Tivoli Enterprise Monitoring Server for RACF verification.
- Functions that use the NetView-NetView task (NNT)

1-Byte Console IDs

With z/OS V1R8, support for 1-byte console IDs was removed. Because of this, the NetView program no longer supports the use of a 1-byte console ID when defining a console to the NetView program. Instead of using a console ID, use a 2- to 8-character console name. For example, use the console name when referencing a specific console in the GETCONID, SETCONID, and AUTOTASK commands and in the AUTOTASK.task.CONSOLE statement in the CNMSTYLE member.

Chapter 4. Migrating from Tivoli NetView for z/OS Version 5 Release 1

This chapter describes how to migrate the NetView program to run as a production system if you are migrating from the Tivoli NetView for z/OS Version 5 Release 1. The migration information is based on the NetView components that are included with the initial release of V5R1. Review your maintenance to see if you have already made some of the changes that are described in this chapter.

You can either add the V5R4 content into your V5R1 NetView definitions, or add your V5R1 customization to the default V5R4 members supplied with the NetView program. Either way, place the customized member into an appropriate user-allocated data set such as NETVIEW.V5R4USER.CNM01.DSIPARM. Do not customize members in the SMP/E-managed data sets such as NETVIEW.V5R4M0.DSIPARM.

Several factors can influence the method you use when migrating your NetView definition members. Factors such as the size and complexity of your network, security policies that must be followed, and established practices within your business can all influence what is the best method for your migration. The checklist that follows details the documented method of migration as outlined in this book and supported by other books in the NetView library. Choose the method of migration that is best for you.

Perform the following steps to migrate your V5R1 definitions:

1. Allocate a new set of V5R4 user data sets by running sample job CNMSJ002. You needed to have done this when you completed the steps in Table 13 on page 20.
2. Run the CNMSJMIG sample job to convert statements in various members in your V5R1 DSIPARM data set to the new CNMSTYLE format. See Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221 for more details.
3. Run the CNMSJMIG sample job to convert the statements in your V5R1 DSICMD member to the new statement format in the CNMCMD member. See Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221 for more details.
4. Define a unique &NV2I value (*xx*) for each NetView domain.
5. Move any domain-specific statements from the CNMSTUSR member that was created by the CNMSJMIG job into the C*xx*STGEN member, where *xx* is the value of the local symbolic variable &NV2I that you defined in the previous step.
6. Review your customized V5R1 copy of the CNMSTYLE member. Move all of your domain-specific customization of CNMSTYLE statements into the C*xx*STGEN member and all of your system-wide customization of CNMSTYLE statements into the CNMSTUSR member, noting that some of these changes might have been added by the CNMSJMIG job. Do not copy your V5R1 CNMSTYLE member into the V5R4 user DSIPARM data set.
7. Review the CNMSTYLE information in this chapter and the V5R4 CNMSTNXT member included with the NetView program. Place any domain-specific customization of V5R1 CNMSTYLE statements into C*xx*STGEN member and

any system-wide customization of V5R1 CNMSTYLE statements into the CNMSTUSR member. Do not modify the V5R4 default CNMSTYLE member.

8. Review the remaining information in this chapter, and migrate your V5R1 NetView definition members and JCL procedures as appropriate, placing only those members that were modified into the V5R4 user data sets.

Figure 3 shows the NetView V5R4 initialization flow. Keep this new initialization flow in mind as you make changes to your DSIPARM members.

NetView Initialization Flow

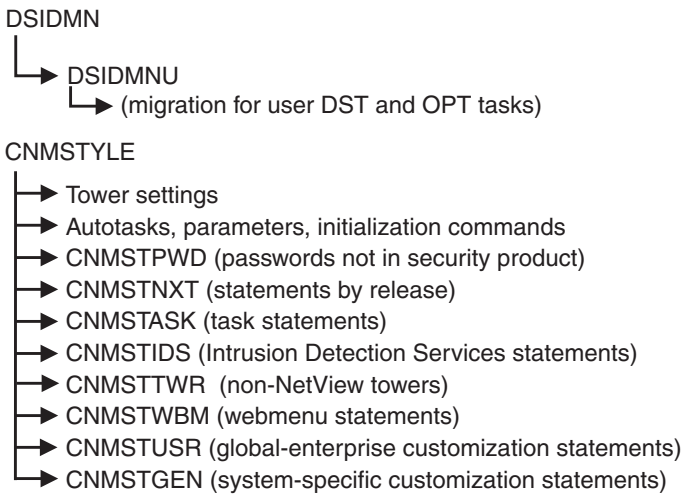


Figure 3. NetView V5R4 Initialization Flow

When you finish with this chapter, continue with Chapter 7, "Getting Ready to Start NetView," on page 141.

If you want information about...	Refer to...
Changes including panels, commands, messages, and samples	Appendix B, "Changes from Tivoli NetView for z/OS Version 5 Release 1 to Tivoli NetView for z/OS Version 5 Release 2," on page 181

New Samples

Table 24 lists new samples to review during migration.

Table 24. List of New Samples

Distributed As	Name	Description	Data Set Name
CNMCMD	same	NetView command definitions for NetView commands The CMDDEF statements provide the definitions for the commands. Some of the CMDDEF statements have command synonyms (CMDSYN). These statements provide a synonym for the command. This definition also provides the cross-domain logon definitions and the CMDDEF statements (and synonyms) for the terminal access facility (TAF) and the VTAM program. Files with names that begin with CNMS6 are included in NETVIEW.V5R4M0.CNMSAMP. Include these files in CNMCMD so that you can use the automation command lists that are also included on the distribution tape.	DSIPARM
CNMCMDO	same	Command definitions for product-specific defined commands	DSIPARM
CNMCMDU	same	Command definitions for user-defined commands	DSIPARM
CNMCMENT	same	NetView command definitions	DSIPARM
CNMCMSYS	same	NetView command definitions	DSIPARM
CNMIPMGT	same	Automation policy for NetView IP management	DSIPARM
CNMPOLCY	same	Automation policy for NetView	DSIPARM
CNMSALRT	same	Converts SNMP trap data to an alert and sends the alert to a NetView alert receiver	CNMSAMP
CNMSCBEA	same	Automation sample that shows how to use the Common Base Event automation table action to produce common base event XML documents	DSIPARM
CNMSCBET	same	Template file for defining Common Base Event XML elements	DSIPARM
CNMSCM	same	SNMP community names for TCP/IP stacks	DSIPARM
CNMSDCA	same	Provides automation statements that help control the data collection autotasks that are managed by the COLLCTL command.	CNMSAMP
CNMSDDCR	same	Displays distributed DVIPA connection routing information. It formats the DVIPDDCR command output (BNH815I message) into a readable format.	CNMSAMP

Table 24. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSDVCG	same	Automation table member for z/OS Communications Server VIPADYNAMIC TCP/IP profile updates that is included when the DVIPA tower is enabled. The VIPADYNAMIC TCP/IP profile statements that are changed trigger rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSDVDS	same	Automation table member that is used for DVIPA data discovery (including rediscovery) and distributed DVIPA statistics on the master NetView program. It processes the DSIIF003I (DVIPA rediscovery), DSIIF004I (DVIPA data forwarding), DSIIF006I (DVIPA data request), and BNH867I (distributed DVIPA statistical records) messages.	CNMSAMP
CNMSDVIP	same	This sample displays the DVIPA definition and status data. It formats the DVIPSTAT command output (BNH846I message) into a readable format.	CNMSAMP
CNMSDVPC	same	Displays DVIPA connections. It formats the DVIPCONN command output (BNH849I message) into a readable format.	CNMSAMP
CNMSDVPH	same	Displays distributed DVIPA server health information. It formats the DVIPHLTH command output (BNH814I message) into a readable format.	CNMSAMP
CNMSDVST	same	Displays the data in the distributed DVIPA statistical data sets.	CNMSAMP
CNMSDVTP	same	Automation table member for DVIPA SNMP trap automation that is included when the DVIPA tower is enabled. The automation detects that a z/OS Communications Server DVIPA trap was received, which then triggers rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSEMAA	same	Automation table member for the NetView for z/OS Enterprise Management Agent	DSIPARM
CNMSEPTL	same	Automation table sample for resource discovery	DSIPARM
CNMSHIPR	same	Displays HiperSockets configuration and status information. It formats the HIPERSOC command output (BNH598I message) into a readable format.	CNMSAMP
CNMSIFST	same	Displays IP interfaces. It formats the IFSTAT command output (BNH498I message) into a readable format.	CNMSAMP
CNMSJCRG	same	CNMSTYLE report generator sample job	CNMSAMP
CNMSJMIG	same	CNMSTYLE migration tool sample job	CNMSAMP
CNMSJZCE	same	Sample start job for the event correlation engine	CNMSAMP

Table 24. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSMF3A	same	Sample command list that is called by the automation table when the BNH874I message is issued. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3E	same	Sample IEFACTRT SMF exit to process type 30 SMF records and send them across the program-to-program interface (PPI) to the NetView program for automation	CNMSAMP
CNMSMF3F	same	Sample that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3R	same	Sample PPI receiver that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMRT1	same	Message revision table	DSIPARM
CNMSMSIP	same	Sends a CP-MSU over IP	CNMSAMP
CNMSNVST	same	Displays NetView application information. It formats the NVSTAT command output (BNH495I message) into a readable format.	CNMSAMP
CNMSOSAP	same	Displays the OSA channel and port information. It formats the OSAPORT command output (BNH597I message) into a readable format.	CNMSAMP
CNMSPLEX	same	This sample displays the DVIPA sysplex distributor data. It formats the DVIPPLEX command output (BNH847I message) into a readable format.	CNMSAMP
CNMSSMON	same	This sample provides z/OS Communications Server sysplex monitoring message automation and is included when the DVIPA tower is enabled.	CNMSAMP
CNMSSTAC	same	This sample displays the TCP/IP stack configuration and status data. It formats the STACSTAT command output (BNH845I message) into a readable format.	CNMSAMP
CNMSTARG	same	This sample displays the distributed DVIPA target data. It formats the DVIPTARG command output (BNH813I message) into a readable format.	CNMSAMP
CNMSTIDS	same	Includes Intrusion Detection Services (IDS) initialization statements.	DSIPARM
CNMSTNST	same	This sample displays the configuration and status information about Telnet servers. It formats the TELNSTAT command output (BNH496I message) into a readable format.	CNMSAMP
CNMSTPST	same	This sample displays the configuration and status information about Telnet server ports. It formats the TNPTSTAT command output (BNH497I message) into a readable format.	CNMSAMP

Table 24. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSTUSR	same	Customization member for the CNMSTYLE member: include additional or modified global (enterprise) definition statements that override statements in the CNMSTYLE member.	DSIPARM
CNMSTWBM	same	Includes Web browser portfolio definitions	DSIPARM
CNMSVPRT	same	Displays status information about VIPA routes. It formats the VIPAROUT command output (BNH824I message) into a readable format.	CNMSAMP
CNMSXCFA	same	Automation sample for XCF sysplex support	DSIPARM
DSIPROFN	same	Automated operator profile for the NetView for z/OS Enterprise Management Agent data collection autotasks (AUTODC*n*)	DSIPRF
DSIZCETB	same	Automation table sample for the event correlation engine	DSIPARM
EKG51100	same	PL/I Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
EKG61100	same	C Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
EZLCMENT	same	NetView command definitions for base AON commands	DSIPARM
FKVCMENT	same	NetView command definitions for AON/SNA commands	DSIPARM
FKXCMENT	same	NetView command definitions for AON/TCP commands	DSIPARM
FKXIPMTB	same	Configuration data for NetView IP management automation	DSIPARM
FKXOPFIP	same	Operator definitions for NetView IP management automation	DSIPARM
IHSABCDS		The IHSABCDS sample contains the sample class definition statements for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSABCFG		The IHSABCFG sample is the sample configuration file for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSANCFG		The IHSANCFG sample is the sample configuration file for the Event/Automation Service confirmed message adapter.	SCNMUXCL
IHSANFMT		The IHSANFMT sample provides sample format specification statements for the Event/Automation Service confirmed message adapter.	SCNMUXCL

VTAM Address Space

The samples in this section list changes for the VTAM address space.

A01APPLS (CNMS0013)

This member contains the application (APPL) major nodes coded for the NetView program.

If you did not reallocate and recopy the VTAMLST data sets, make the following changes to A01APPLS:

- Either set the domain ID (system variable &CNMDOMN) in SYS1.PARMLIB member IEASYM*xx* or change *every* occurrence of &CNMDOMN. in A01APPLS (CNMS0013) to the current domain ID.
- If you are not using the status monitor preprocessor, you can replace the APPL statements defining tasks for multiple concurrent NetView operators with one APPL statement using wildcard characters (??), for example:

```
&CNMDOMN.0?? APPL  AUTH=(NVPACE,SPO,ACQ,PASS),PRTCT=&CNMDOMN.,     X
               EAS=4,MODETAB=AMODETAB,DLOGMOD=DSILGMOD
```

- If you are not using the status monitor preprocessor, you can replace the TAF APPL statements with one APPL statement using wildcard characters (??) following the LU name, for example:

```
TAF01O?? APPL  MODETAB=AMODETAB,EAS=9,       X
               DLOGMOD=M3767
```

APPL names defined for use by other applications (such as TAF) must not be defined with the same naming scheme as terminal logon APPLs (for example, the domain name followed by a 3-character suffix). Doing so can cause these application names to be used by the NetView program for terminal logons, which can make the application names unavailable for the purpose for which they were defined.

CNMNET (CNMSJ008)

CNMNET (CNMSJ008) is the start procedure for the VTAM program.

Change CNMNET in your PROCLIB in the following way:

1. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.

NetView Address Space

The samples in this section list changes for the NetView address space.

CNMEALUS

The CNMEALUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to alert information and to pass the alert information to either the alert adapter or the confirmed alert adapter of Event/Automation Service.

CNMEMSUS

The CNMEMSUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to message information and to pass the message information to either the message adapter or the confirmed message adapter of Event/Automation Service.

CNMPROC (CNMSJ009)

CNMPROC (CNMSJ009) is the start procedure for the NetView program.

Make the following changes to CNMPROC in your PROCLIB:

1. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
2. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
3. Because the AON VSAM data sets have increased in size, reallocate them during migration. For more information on allocating VSAM data sets, refer to *IBM Tivoli NetView for z/OS Installation: Getting Started*. Also note that the VSAM cluster name prefixes have changed to NETVIEW.&*domain*.
4. The default region size was increased to 98304K. If you are using the existing default region size (32768K) for the NetView product, increase the region size value:

   ```
   //       REG=98304,            ** REGION SIZE(IN K) FOR NETVIEW
   ```

   Depending on the components that you are running, you might want to increase the region size even more. For additional information, refer to the *IBM Tivoli NetView for z/OS Tuning Guide*.
5. Add the following REXX statement after the SQ1 statement to specify the high level qualifier of your REXX libraries:

   ```
   //       REXX='EAG.V5R1M0',    ** REXX DSN HIGH LEVEL QUALIFIER
   ```
6. Add the following TRSIZE statement and comments after the NV2I statement to allow the specification of the trace table size:

   ```
   //       NV2I='',
   //       TRSIZE=4000
   //*                            ** INTERNAL TRACE TABLE SIZE - Number
   //*                            ** of pages to be allocated for the
   //*                            ** NetView Internal Trace table. The
   //*                            ** trace table is located in a data
   //*                            ** space, so the value can be up to
   //*                            ** 524286. If no value is specified,
   //*                            ** the default of 4000 is used. If
   //*                            ** a value of 0 is passed, internal
   //*                            ** trace is not started early. Trace
   //*                            ** options in CNMSTYLE take effect
   //*                            ** even if trace is not started early.
   //*
   ```
7. Add the &TRSIZE variables to the NetView EXEC statement, as shown:

   ```
   //NETVIEW  EXEC PGM=&PROG,TIME=1440,
   //         REGION=&REG.K,
   //         PARM=(&BFSZ.K,&SLSZ,
   //           '&DOMAIN','&DOMAINPW','&ARM','&SUBSYM','&NV2I','&TRSIZE'),
   //         DPRTY=(13,13)
   ```
8. Change the following DD statement in the STEPLIB concatenation (change SEAGLMD to SEAGLPA):

   ```
   //* YOU WILL NEED ACCESS TO EITHER THE REXX/370 RUNTIME LIBRARY
   //* OR THE REXX ALTERNATE LIBRARY AS FOLLOWS:
   //*
   ```

```
//* - IF YOU HAVE THE REXX/370 LIBRARY ON YOUR SYSTEM BUT SEAGLPA
//*   IS NOT ACCESSIBLE FROM THE PAGEABLE LINK PACK AREA (PLPA),
//*   THEN YOU MUST UNCOMMENT THE "SEAGLPA" LINE BELOW.
//*
//*    OR
//*
//* - IF YOU HAVE THE REXX ALTERNATE LIBRARY ON YOUR SYSTEM,
//*   BUT SEAGALT IS NOT ACCESSIBLE FROM THE PLPA OR LINKLST,
//*   THEN YOU MUST UNCOMMENT THE "SEAGALT" LINE BELOW.
//*
//* WHEN YOU UNCOMMENT EITHER OF THE LINES BELOW, MAKE SURE
//* THAT THE DSN ACTUALLY MATCHES THE NAME ON YOUR SYSTEM.
//* IN ADDITION, MAKE SURE THAT THE DATASET IS APF-AUTHORIZED.
//*
//*        DD   DSN=&REXX..SEAGLPA,DISP=SHR
//*        DD   DSN=&REXX..SEAGALT,DISP=SHR
```

Note: Either the REXX/370 runtime library or the REXX alternate library is required.

9. If you plan to use the Web Services Gateway function, uncomment the XML toolkit and GSKit library DD statements.

```
//*************************************************************
//*
//* IF YOUR ARE STARTING NETVIEW WEB SERVICES SERVER THEN
//* YOU WILL NEED ACCESS TO BOTH IBM XML AND GSK TOOL RUN TIME
//* LIBRARIES
//*
//* - IF YOU HAVE THESE LIBRARIES ON YOUR SYSTEM
//*   BUT THEY ARE NOT ACCESSIBLE FROM THE PLPA OR LINKLST,
//*   THEN YOU MUST UNCOMMENT LINES BELOW.
//*
//* WHEN YOU UNCOMMENT EITHER OF THE LINES BELOW, MAKE SURE
//* THAT THE DSN ACTUALLY MATCHES THE NAME ON YOUR SYSTEM.
//* IN ADDITION, MAKE SURE THAT THE DATASET IS APF-AUTHORIZED.
//*      QIXM='IXM.V1R8M0', ** IBM XML TOOLKIT RUNTIME LIB.
//*      QGSK='SYS1',       ** IBM GSK TOOLKIT RUNTIME LIB.
//*        DD   DSN=&QGSK..SIEALNKE,DISP=SHR
//*        DD   DSN=&QIXM..SIXMLOD1,DISP=SHR
//*
```

10. If you plan to run Language Environment (LE) HLL programs with the NetView program, and did not install the LE runtime library in the LNKLSTxx, be sure the library name in the STEPLIB of CNMPROC is correct and uncommented.

11. Update the DSICLD DD statement to add the following user data set:

```
//DSICLD   DD   DSN=&Q1..&DOMAIN..CNMCLST,DISP=SHR
//         DD   DSN=&SQ1..CNMCLST,DISP=SHR
//         DD   DSN=&SQ1..CNMSAMP,DISP=SHR
```

12. Add the following TCP connection VSAM databases:

```
//DSITCONP DD   DSN=&VQ1..&DOMAIN..DSITCONP,
//         DISP=SHR,AMP='AMORG'
//DSITCONS DD   DSN=&VQ1..&DOMAIN..DSITCONS,
//         DISP=SHR,AMP='AMORG'
```

13. If you plan to collect distributed DVIPA statistics, add the following data sets:

```
//CNMDVIPP DD   DSN=&VQ1.&DOMAIN.CNMDVIPP,DISP=SHR
//CNMDVIPS DD   DSN=&VQ1.&DOMAIN.CNMDVIPS,DISP=SHR
```

14. Add the following TCP/IP translate data set information and update the statement as needed for your installation:

```
//*
//*************************************************************
//* If you are using the TCP/IP translate data set TCPXLBIN,
//* specify the appropriate data set name and uncomment the
```

```
//* following DD statement to prevent dynamic allocation
//* messages from being issued each time the data set is needed.
//*
//*CNMXLBIN  DD  DISP=SHR,DSN=datasetprefix.STANDARD.TCPXLBIN
//*
//* For more information please see your IP Configuration Guide.
```

CNMPSSI (CNMSJ010)

CNMPSSI (CNMSJ010) starts the NetView subsystem address space.

Make the following changes to CNMPSSI in your PROCLIB:

1. Ensure that the high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. The default value for MSGIFAC has changed from SYSTEM to SSIEXT. Beginning with z/OS v1r8, the QUESSI, QSSIAT, and USESSI values are not supported.

   ```
   //       MSGIFAC='SSIEXT',    ** SSI/EXTENDED CONSOLE OVERRIDE SWITCH
   ```

3. Add the following statements after the P4000BUF parameter to set the route code. If you add these statements, add a comma after the P4000BUF=0 statement.

   ```
   //       ROUTECDE=1           ** Route code to be used for WTOs issued
   //*                           **  by the SSI address space.  Messages
   //*                           **  that may be issued before this parm
   //*                           **  is processed will use route code 1
   //*                           **  regardless of the value set here.
   ```

4. Add the &ROUTECDE variable to the NetView EXEC statement, as shown:

   ```
   //NETVIEW  EXEC PGM=&PROG,TIME=1440,REGION=&REG.K,
   //         PARM=(&MBUF,&CBUF,'&DSIG','&MSGIFAC','&PPIOPT','&ARM',
   //          '&PFXREG',&P256BUF,&P4000BUF,&ROUTECDE),DPRTY=(13,13)
   ```

CNMSAF2

The CNMSAF2 member in the CNMSAMP data set contains sample RACF definitions for NetView operators and commands.

Because of extensive changes to the CNMSAF2 member, use the V5R4 version as the base and copy over any installation-specific changes that you made to the V5R1 copy.

The following information highlights some of the modifications to the CNMSAF2 member since NetView V5R1.

1. Add the following statements after the SYSTSIN DD statement. These statements define &SLASH as a RACF variable.

   ```
   //SYSTSIN   DD  *,DLM=@@
   /*
   /*********************************************************************
   /*  The following three statements are needed to define &SLASH as     *
   /*  a RACF variable.  This variable is needed because some NetView    *
   /*  resource names have the string '/*' as part of the name.  When    *
   /*  the RACF statements containing this string are executed in the    *
   /*  TSO/E background command environment, the '/*' is treated as      *
   /*  the beginning of a comment causing the remainder of the RACF      *
   /*  statement to be ignored.  This &SLASH RACF variable definition    *
   /*  makes it possible to code '&SLASH*' to prevent this string        *
   /*  from being treated as an opening comment delimiter and still      *
   /*  allow RACF to interpret the string as a '/*' as intended.         *
   /*********************************************************************
   SETROPTS CLASSACT(RACFVARS) GENERIC(RACFVARS) +
   ```

```
                                RACLIST(RACFVARS) LIST
RDEF RACFVARS &SLASH ADDMEM(/)
SETROPTS RACLIST(RACFVARS) REFRESH
/*****************************************************************
```

2. The RDEF NETCMD statements and the PE statements use the &SLASH variable:

```
RDEF NETCMDS *.*.DSIPIINS.*.DSICLD&SLASH*   UACC(NONE)
RDEF NETCMDS *.*.DSIPIINS.*.DSIPARM&SLASH*  UACC(NONE)
RDEF NETCMDS *.*.DSIPIINS.*.DSIPRF&SLASH*   UACC(NONE)
RDEF NETCMDS *.*.DSIPIINS.*.DSIVTAM&SLASH*  UACC(NONE)
PE *.*.DSIPIINS.*.DSICLD&SLASH* +
                          CLASS(NETCMDS) ID(NVOPS2) ACCESS(READ)
PE *.*.DSIPIINS.*.DSIPARM&SLASH* +
                          CLASS(NETCMDS) ID(NVOPS2) ACCESS(READ)
PE *.*.DSIPIINS.*.DSIPRF&SLASH* +
                          CLASS(NETCMDS) ID(NVOPS2) ACCESS(READ)
PE *.*.DSIPIINS.*.DSIVTAM&SLASH* +
                          CLASS(NETCMDS) ID(NVOPS2) ACCESS(READ)
```

3. The following autotasks were added:

Table 25. Autotask definitions

Function	Autotask Definitions
Command Revision	ADDUSER MVSCMDS ALTUSER MVSCMDS NETVIEW(MSGRECVR(NO) CTL(GLOBAL))
NetView for z/OS Enterprise Management Agent	ADDUSER AUTONALC ALTUSER AUTONALC NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER NATEP1 ALTUSER NATEP1 NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER NATEP2 ALTUSER NATEP2 NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER SYSADMIN ALTUSER SYSADMIN NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC1 ALTUSER AUTODC1 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC2 ALTUSER AUTODC2 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC3 ALTUSER AUTODC3 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC4 ALTUSER AUTODC4 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))
DVIPA	ADDUSER DVIPAUTO ALTUSER DVIPAUTO NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER DVIPSTAT ALTUSER DVIPSTAT NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT1 ALTUSER AUTOCT1 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT2 ALTUSER AUTOCT2 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT3 ALTUSER AUTOCT3 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT4 ALTUSER AUTOCT4 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))
Discovery manager	ADDUSER AUTOCT5 ALTUSER AUTOCT5 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT6 ALTUSER AUTOCT6 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT7 ALTUSER AUTOCT7 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))

Table 25. Autotask definitions (continued)

Function	Autotask Definitions
TCP/IP	ADDUSER AUTOTCPC ALTUSER AUTOTCPC NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOPKTS ALTUSER AUTOPKTS NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOOPKT ALTUSER AUTOOPKT NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOTCPS ALTUSER AUTOTCPS NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL))
Web Services Gateway	ADDUSER AUTONVSP ALTUSER AUTONVSP NETVIEW(MSGRECVR(NO) CTL(GLOBAL))
XCF services	ADDUSER AUTOXCF ALTUSER AUTOXCF NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOXDSC ALTUSER AUTOXDSC NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOEDAT ALTUSER AUTOEDAT NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL))

CNMSCAT2

The CNMSCAT2 member in the DSIPARM data set contains the sample command authorization table.

Because of extensive changes to the CNMSCAT2 member, use the V5R4 version as the base and copy over any installation-specific changes that you made to the V5R1 copy.

CNMSIHSA

The CNMSIHSA automation table sample is enhanced. This sample provides examples on how to automate messages and alerts in order to send message and alert data to the various Event/Automation Service adapters:

- Message adapter
- Confirmed message adapter
- Alert adapter
- Confirmed alert adapter
- Alert-to-trap adapter

CNMSTYLE

The CNMSTYLE member in the DSIPARM data set is used during NetView initialization. Make any changes to CNMSTYLE statements in the CNMSTUSR or C*xx*STGEN member. For information about changing CNMSTYLE statements, see *IBM Tivoli NetView for z/OS Installation: Getting Started*. The CNMSTYLE member is designed to simplify the NetView initialization process.

You can use the CNMSJMIG sample job in the NETVIEW.V5R4USER.INSTALL data set to migrate initialization members from prior releases (including the CNME1034 command list and some DSIPARM members) to the CNMSTUSR member. For more information, see Appendix F, “Migrating to the CNMSTYLE and CNMCMD Members,” on page 221.

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function. Because of this, the MVScmdMgt tower is removed.

The following TOWERs were added:

- DISCOVERY - enables the discovery of sysplexes, z/OS systems, coupling facilities, TCP/IP stacks, TCP/IP subplexes, and NetView applications
- DVIPA - enables the collection of dynamic virtual IP address (DVIPA) definition and status data.
- IPMGT - enables IP management
- NVSOA - enables the Web Services Gateway function
- TCPIPCOLLECT - enables the collection of TCP/IP connection and packet trace data from z/OS Communications Server
- TEMA - enables the NetView program to communicate with the Tivoli NetView for z/OS Enterprise Management Agent

The Multisystem Manager NetFinity (NTF) and LAN Network Manager (LNM) subtowers were removed:

The ITNM subtower was added for the Multisystem Manager IBM Tivoli Network Manager feature.

The CNMSTYLE member replaces some of the definition statements in members of the DSIPARM data set and all the initialization performed by the CNME1034 command list.

Table 26. CNMSTYLE Statement Relationship to Older DSIPARM Statements

CNMSTYLE Statement	DSIPARM Statement or Command	NetView Member
COMMON.CNMSTYLE. DVIPAINTVL	DVIPA	FKXCFG01
COMMON.CNMSTYLE. DVIPAMAX	MAXDVIPA	FKXCFG01
NPDA.PDFILTER	NPDA SRFILTER	CNME3004
TAMEL.USETCPIP	USETCPIP	DUIFPMEM
WEB.*	*parameters*	DSIWBMEM

The CNMSTYLE member contains descriptive comments about the types of statements that are included. Read the comments and review the defaults.

The following defaults changed:

Table 27. CNMSTYLE statements

Default	Prior default	Current default
NCCF Trace **Note:** If you notice a significant increase in processor utilization during initialization, you might want to change the TRACE options or start the trace after NetView initialization is complete.	Off	On, MODE=INT

Table 27. CNMSTYLE statements (continued)

Default	Prior default	Current default
MVSPARM.MSGIFAC	SYSTEM	SSIEXT The default value for MSGIFAC is SSIEXT. Beginning with z/OS v1r8, the QUESSI, QSSIAT, and USESSI values are not supported.
HLLENV keywords	PHEAP=4096	PHEAP=131072
	PSTACK=4096	PSTACK=131072
TOWER=DVIPA	Enabled on the TCP390 statement in FKXCFG01	Commented out in CNMSTYLE

Note: For the SECOPTS.CMDAUTH statement, the NetView program supports the SCOPE option in migration mode only. If you currently use scope of commands security definitions (CMDCLASS, KEYCLASS, VALCLASS statements in DSICMD, with matching OPCLASS statements), you can convert them into equivalent command authorization table statements using the SECMIGR command. If you initialize the NetView program using the SCOPE option, the SECMIGR command is used to convert existing scope security definitions. The converted table is written to the first DSIPARM data set and is put into effect. Make sure the PPT has authority to write the converted command authorization table to the DSIPARM data set.

If you want information about...	Refer to...
CNMSTYLE statements	*IBM Tivoli NetView for z/OS Administration Reference*
CNMSTYLE report	Chapter 7, "Getting Ready to Start NetView," on page 141

You can use the CNMSJCRG sample to produce a report of CNMSTYLE statements. The statements are organized by function. CNMSTYLE %INCLUDE member statements are also listed in the report. You can use this report to analyze initialization statements.

CNMSTNXT

The CNMSTNXT member contains statements that are new, changed, or deleted. Statements are grouped according to version and release level of the NetView product. Review the statements in the CNMSTNXT member and update the CNMSTUSR or C*xx*STGEN member as necessary.

If you want information about...	Refer to...
CNMSTYLE statements	*IBM Tivoli NetView for z/OS Administration Reference*

DSIAUTB

The DSIAUTB sample lists parts that use the AUTBYPAS REXX or CLIST function. Do not modify this sample. Use the V5R4 version. Add any customization for your system to the DSIAUTBU member.

DSICMD

The command definition statements in the DSICMD member were replaced by new command definitions in the CNMCMD member. NetView initialization continues to read the DSICMDU member for migration purposes. You can use the CNMSJMIG sample job to migrate the DSICMD member to the new CNMCMD format. For more information, see Appendix F, "Migrating to the CNMSTYLE and CNMCMD Members," on page 221.

If you do not convert your definitions in the DSICMDU member to the new format before NetView initialization, information contained in the DSICMDU member is converted and stored in a NetView KEEP under the PPT for 2 hours. During this time, you can use a NetView PIPE command to retrieve these converted command definitions. The following example shows one way of retrieving these definitions for display:

```
/PPT: PIPE KEEP DSICMDU | CONS
```

You can also use a similar PIPE command to write the converted definitions to the CNMCMDU member of the DSIPARM data set.

Note: Data REXX statements in the DSICMDU member have already been processed and therefore do not exist in the DSICMDU KEEP.

Command definitions in the DSICMDU member that duplicate command definitions found in the CNMCMSYS or CNMCMENT member are overridden by the latter. Command definitions in the DSICMDU member that duplicate commands in the NetView internal command set are considered to be in error.

To migrate your definitions from the DSICMDU member, complete the following steps:

1. Start NetView in a test environment and note any DSI234I messages for duplicate command definitions.
2. Retrieve the migrated DSICMDU command definitions from the NetView KEEP and store them in CNMCMDU. For example:

   ```
   /PPT: PIPE KEEP DSICMDU | QSAM (DSN) user.dsiparm(CNMCMDU)
   ```

   where *user.dsiparm* specifies the data set in which to place the migrated command definition statements.

   Note: You can also use sample CNMSJMIG to migrate DSICMDU definitions before you start NetView V5R4.
3. Update the CNMCMDU definitions to change any duplicate command definitions noted during NetView initialization.

Make all changes to command definitions in CNMCMSYS or CNMCMENT using CMDDEF statements in CNMCMDU.

DSICMENT

The DSICMENT member of DSIPARM has been replaced by CNMCMENT.

DSICMSYS

The DSICMSYS member in the DSIPARM data set was replaced by the CNMCMSYS member.

The CNMCMSYS member does not contain a CMDMDL statement for the CNME1500 command list. As a result, the READYRMT alias (command) is no longer defined. The CNME1500 member is still available.

EZLCMD

The EZLCMD member of DSIPARM has been replaced by EZLCMENT.

FKXCMD

DSIPARM member FKXCMD has been replaced by FKXCMENT.

DSIOPF

If you are using the version of the DSIOPF member that is supplied by the NetView product, no changes are required. If you modified the V5R1 DSIOPF member, copy any changes that you made into the V5R4 version.

The following statement was added:

```
%>IF TOWER('IPMGT') & ¬TOWER('AON') THEN
  %INCLUDE FKXOPFIP
```

This is a conditional include for operator definitions for the IPMAN function if the AON tower is not active:

The following operator definitions were added:

Table 28. Operator Definitions Added to DSIOPF

Operator Definition	DSIOPF Statements		
NetView Web application DVIPA support autotask	AUTDVIPA	OPERATOR PROFILEN	PASSWORD=AUTDVIPA DSIPROFC
Distributed DVIPA statistics autotask	DVIPSTAT	OPERATOR PROFILEN	PASSWORD=DVIPSTAT DSIPROFC
DVIPA event and data forwarding autotask	DVIPAUTO	OPERATOR PROFILEN	PASSWORD=DVIPAUTO DSIPROFC
Autotask that manages the NETVONLY action for Command Revision.	MVSCMDS	OPERATOR PROFILEN	PASSWORD=MVSCMDSL DSIPROFC
DVIPA definition and status autotask	AUTOCT1	OPERATOR PROFILEN	PASSWORD=AUTOCT1 DSIPROFN
DVIPA sysplex distributors, distributed targets, and server health autotask	AUTOCT2	OPERATOR PROFILEN	PASSWORD=AUTOCT2 DSIPROFN
DVIPA connections autotask	AUTOCT3	OPERATOR PROFILEN	PASSWORD=AUTOCT3 DSIPROFN
VIPA routes and distributed DVIPA connection routing autotask	AUTOCT4	OPERATOR PROFILEN	PASSWORD=AUTOCT4 DSIPROFN
OSA channels and ports autotask	AUTOCT5	OPERATOR PROFILEN	PASSWORD=AUTOCT5 DSIPROFN
Telnet servers and Telnet server ports autotask	AUTOCT6	OPERATOR PROFILEN	PASSWORD=AUTOCT6 DSIPROFN
NetView applications autotask	AUTOCT7	OPERATOR PROFILEN	PASSWORD=AUTOCT7 DSIPROFN

Table 28. Operator Definitions Added to DSIOPF (continued)

Operator Definition	DSIOPF Statements
Tivoli NetView for z/OS Enterprise Management Agent autotasks	AUTONALC OPERATOR PASSWORD=AUTONALC PROFILEN DSIPROFC AUTODC1 OPERATOR PASSWORD=AUTODC1 PROFILEN DSIPROFN AUTODC2 OPERATOR PASSWORD=AUTODC2 PROFILEN DSIPROFN AUTODC3 OPERATOR PASSWORD=AUTODC3 PROFILEN DSIPROFN AUTODC4 OPERATOR PASSWORD=AUTODC4 PROFILEN DSIPROFN
Autotasks that are used for running commands that are used with the Tivoli NetView for z/OS Enterprise Management Agent	NATEP1 OPERATOR PASSWORD=NATEP1 PROFILEN DSIPROFC NATEP2 OPERATOR PASSWORD=NATEP2 PROFILEN DSIPROFC SYSADMIN OPERATOR PASSWORD=SYSADMIN PROFILEN DSIPROFC
XCF services autotasks	AUTOXCF OPERATOR PASSWORD=AUTOXCF PROFILEN DSIPROFC AUTOXDSC OPERATOR PASSWORD=AUTOXDSC PROFILEN DSIPROFC AUTOEDAT OPERATOR PASSWORD=AUTOEDAT PROFILEN DSIPROFC
Autotasks for opening NMI sockets to the Communications Server.	AUTOTCPC OPERATOR PASSWORD=AUTOTCPC PROFILEN DSIPROFG AUTOPKTS OPERATOR PASSWORD=AUTOPKTS PROFILEN DSIPROFG AUTOOPKT OPERATOR PASSWORD=AUTOOPKT PROFILEN DSIPROFG AUTOTCPS OPERATOR PASSWORD=AUTOTCPS PROFILEN DSIPROFG
IP management services (AUTIPMGT) autotask	AUTIPMGT OPERATOR PASSWORD=AUTIPMGT PROFILEN DSIPROFC
Autotask to receive SMF 30 records	AUTOSMF3 OPERATOR PASSWORD=AUTOSMF3 PROFILEN DSIPROFC
NetView Web Services Gateway autotask	AUTONVSP OPERATOR PASSWORD=AUTONVSP PROFILEN DSIPROFC

The following operator definition was removed:

```
FLBGMMGR      OPERATOR    PASSWORD=FLBGMMGR
              PROFILEN    FLBGMMPR
```

DSIOPFU

Copy any operator definitions that you defined in your V5R1 DSIOPFU member to the V5R4 version.

You can add Data REXX logic to conditionally define operator definitions in DSIOPFU. Data REXX files must have either `/*%DATA*/` or `/*%LOGIC*/` as the first statement. Comments can follow on the same or subsequent lines. A blank in the first column indicates a continuation of the previous statement. For more information on Data REXX, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

FKXOPFIP

The FKXOPFIP member is used when the IPMGT tower is enabled. This member is not used if the AON component is enabled. Because of this, operator definitions duplicate those in the EZLOPF and FKXOPF members.

The following operator definitions were added:

Table 29. Operator Definitions Added to FKXOPFIP

Operator Definition	DSIOPF Statements		
IP management services autotasks	AUTIPM*x*	OPERATOR PROFILEN	PASSWORD=AUTIPM*x* EZLPRFAO

DSITBL01

The DSITBL01 member contains sample automation table definitions. Some %INCLUDE statements and associated statements to start automation were replaced by entries in the CNMSTYLE member. If you modified the DSITBL01 member, merge your changes with the V5R4 DSITBL01 member. After making changes, renumber the NetView automation table. When the NetView automation table processes a message and finds a match that results in a command or command list being run, it writes the CNM493I message to the NetView log file. The CNM493I message contains the line number of the automation table entry matched.

Several messages that are supplied by the NetView product have changed with the V5R4 program. These messages are listed in the appendices. Review the list and make any necessary changes to your automation table.

If your primary automation table name is not DSITBL01, update the CNMSTUSR or C*xx*STGEN member to include an AUTOCMD statement for your automation table. For more information on the AUTOCMD statement, refer to the *IBM Tivoli NetView for z/OS Administration Reference*.

Message automation is used to update information when some discovery manager resources start and stop. Add the CNMSEPTL automation sample member for these events. The CNMSEPTL member is included when the DISCOVERY tower is enabled.

```
* Load local resource discovery table
%>IF tower('DISCOVERY') THEN
%INCLUDE CNMSEPTL
```

For DVIPA automation, add the following statements:

```
* Include the following DVIPA samples:
* CNMSDVDS - Automation for forwarding information to the master NetView
* CNMSDVTP - Samples for automating z/OS Communications Server SNMP
*            DVIPA traps
* CNMSDVCG - Samples for automating z/OS Communications Server DVIPA
*            configuration updates
* CNMSSMON - Samples for automating z/OS Communications Server
*            sysplex autonomics messages
%>IF tower('DVIPA') THEN
%>do;
     %INCLUDE CNMSDVDS
     %INCLUDE CNMSDVTP
     %INCLUDE CNMSDVCG
     %INCLUDE CNMSSMON
%>end;
```

For XCF sysplex support, add the following statements:

```
** Load statements that relate to the z/OS sysplex master function.
%INCLUDE CNMSXCFA
```

For COLLCTL command automation, add the following statements:

```
*************** COLLCTL command AUTOMATION ***************************
%INCLUDE CNMSDCA
```

For SMF type 30 record automation using the CNMSMF3E sample, add the following statements:

```
*************** SMF 30 RECORD AUTOMATION *****************************
IF MSGID = 'BNH874I' THEN
     EXEC(CMD('CNMSMF3A')) NETLOG(Y) SYSLOG(N);
```

For more information on automating the SMF type 30 records, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

DSIZVLSR

The DSIZVLSR module defines the buffer pools to be used with the VSAM LSR and DSR performance options. Update the DSIZVLSR module by using the CNMSJM01 sample job. Use the DSIZVLSR module shipped with V5R4. If you previously updated the CNMSJM01 job, merge those changes into the V5R4 version of the CNMSJM01 job and run it to assemble and link-edit your changes into the DSIZVLSR module.

The following changes were made to the DSIZVLSR module:

- The default STRNO value was increased from 30 to 40.
- New buffers were added to the index and data buffer pools for the new VSAM clusters allocated for the DSITCONT task to support the TCPCONN command.

DSIW3PRF

This sample contains TCP/IP session properties.

This sample has moved from the DSIPRF member to the DSIPARM member.

DUIFPMEM

The DUIFPMEM member in the DSIPARM data set contains TCP/IP initialization statements for the CNMTAMEL task. It includes logic to extract initialization values from the CNMSTYLE member. Update TAMEL statements in the CNMSTUSR or C*xx*STGEN member to reflect the values that you previously specified in the DUIFPMEM member. Do not modify the DATA REXX version of the DUIFPMEM member.

FKXCFG01

The FKXCFG01 member in the DSIPARM data set contains configuration information for the AON component.

TCP390 policy information was moved from the FKXCFG01 member to the CNMPOLCY member. Move any TCP390 statements in your V5R1 FKXCFG01 member to the V5R4 CNMPOLCY member. Review your other AON configuration members (for example the EZLCFG01 member and the FKVCFG01 member) and any additional members that you included to find other TCP390 statements. Move all TCP390 statements to the CNMPOLCY member.

(Web Application only) The following table shows the TCP390 DVIPA parameters that were changed:

Table 30. TCP390 DVIPA Parameter Changes

Old parameter	New parameter/statement
TCP390 DVIPA parameter	TCP390 DVIPADAT parameter
TCP390 MAXDVIPA parameter	COMMON.CNMSTYLE. DVIPAMAX statement in CNMSTYLE

Previously the MAXDVIPA parameter was specified for each TCP/IP stack. Beginning with V5R2, this value is specified once for each NetView domain in the CNMSTYLE member.

RODM Address Space

The samples in this section list changes for the RODM address space.

EKGLOADP

EKGLOADP is the sample RODM load procedure JCL.

Make the following changes to EKGLOADP:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. To set the ROUTECODE parameter, add the following statement after the COPIES parameter in the PROC statement. When you add this parameter, add a comma after the COPIES parameter.

   ```
   //            ROUTECDE=1
   ```

3. Add the &ROUTECDE variable to the NetView EXEC statement, as shown:

   ```
   //LOADRODM EXEC PGM=EKGLOTLM,
   //         PARM=('OPERATION=&OPER,LOAD=&LOAD,NAME=&RODMNAME',
   // 'LISTLEVEL=&LISTL,SEVERITY=&SEVERITY,ROUTECODE=&ROUTECDE')
   ```

   As a result of the addition of the ROUTECODE parameter, you also need to update the JCL procedure EKGLLOAD to specify &ROUTECDE when calling EKGLOADP.

EKGSI101

EKGSI101 is used for allocating the RODM log and checkpoint databases. This sample is used by sample job CNMSJ004.

If you allocated RODM checkpoint data sets for fewer than the maximum number of windows supported by RODM and the estimated number of objects that you expect to store in the RODM data cache exceeds the previous maximum supported number (approximately 524,000 objects), consider increasing the size of the RODM checkpoint databases.

EKGXRODM

EKGXRODM is the RODM start procedure.

Make the following changes to EKGXRODM:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.

2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
3. Add the following ROUTECDE parameter after the SUBSYM parameter:

```
//        SUBSYM=*SUBSYM,        ** SYMBOL SUBSTITUTION OPTION
//        ROUTECDE=1             ** ROUTE CODE FOR WTO/WTOR
```

4. Add the &ROUTECDE variable to the START EXEC statement, as shown:

```
//START    EXEC PGM=EKGTC000,REGION=0K,TIME=1440,
// PARM='&TYPE,&NAME,&INIT,&CLRSSB,&CUST,&ARM,&SUBSYM,&ROUTECDE'
```

5. The EKGCUST DD statement has changed to include a user DSIPARM data set:

```
//EKGCUST  DD DSN=&Q1..CNM01.DSIPARM,DISP=SHR
//         DD DSN=&SQ1..CNMSAMP,DISP=SHR
```

6. If you have not installed the Language Environment for OS/390 runtime library in LNKLST*xx* or PROG*xx*, be sure the library name in the STEPLIB of EKGXRODM is correct and uncommented. Remove DD statements for PL/I or C/C++ runtime libraries because these libraries are no longer being used.

GMFHS Address Space

The samples in this section list changes for the GMFHS address space.

CNMGMFHS (CNMSJH10)

CNMGMFHS (CNMSJH10) is the GMFHS start procedure.

Make the following changes to CNMGMFHS:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
3. Add the following ROUTECDE parameter after the SUBSYM parameter:

```
//             SUBSYM=*SUBSYM, ** SYMBOL SUBSTITUTION
//             ROUTECDE=1    ** ROUTE CODE FOR ALL WTO'S
```

4. Add the &ROUTECDE variable to the STEP1 EXEC statement, as shown:

```
//STEP1    EXEC PGM=&PROG,REGION=&REG,TIME=1440,
// PARM='&AGGRST,RESWS=&RESWS,DOMAIN=&DOMAIN,ARM=&ARM,SUBSYM=&SUBSYM,  *
//              ROUTECDE=&ROUTECDE'
```

5. If you are using the RODM component and are migrating from a previous release, change the following statement from:

```
//EKGLUTB  DD DSN=&SQ1..SEKGLUTB,DISP=SHR
```

   to

```
//EKGLUTB  DD DSN=&SQ1..CNMSAMP,DISP=SHR
```

CNMSJH12

CNMSJH12 is the sample GMFHS/SNA Topology Manager data model load job.

The REGION=0M specification was added to ensure that the CNMSJH12 job completes without errors in a JES3 environment. The REGION=0M specification can be subject to JES definitions and to IEFUSI and IEALIMIT installation exits.

DUIGINIT

DUIGINIT is the initialization member for GMFHS. It contains the initialization statements for the GMFHS host main task. These statements are system-controlling

constants that are read when GMFHS is initialized. You can use symbols in DUIGINIT if symbolic substitution is enabled on your system. Ensure that the symbols are defined in member IEASYMxx of SYS1.PARMLIB.

The DOMAIN statement has been commented out in the default DUIGINIT member. The preferred approach is to use the DOMAIN symbolic variable in the GMFHS start procedure (CNMGMFHS). If the default values that are provided in the DUIGINIT member that is supplied by the NetView product are acceptable for your environment, consider using the default DUIGINIT member.

Event/Automation Service Address Space

The sample in this section lists changes for the Event/Automation Service address space.

IHSAEVNT

IHSAEVNT starts the Event/Automation Service address space. Make the following changes to IHSAEVNT in your PROCLIB:

1. Add the following comments:

```
//*  4.  There are additional keywords and values which may be
//*      specified in the PARM string, which a) are not in the
//*      style of a UNIX System Services shell command parameter and
//*      b) do not have procedure keyword definitions in this sample
//*      procedure.  They are described as follows.
//*
//*      CMSGCFG=value
//*
//*        CMSGCFG provides the name of a member of the IHSSMP3 file
//*        containing configuration parameters for the confirmed
//*        message adapter task, MESSAGEC.  If the value is provided,
//*        it must be a valid partitioned data set member name.
//*        If the keyword is omitted or is given no value, the
//*        default value is IHSANCFG.
//*
//*      CALRTCFG=value
//*
//*        CALRTCFG provides the name of a member of the IHSSMP3 file
//*        containing configuration parameters for the confirmed
//*        alert adapter task, ALERTC.  If the value is provided,
//*        it must be a valid partitioned data set member name.
//*        If the keyword is omitted or is given no value, the
//*        default value is IHSABCFG.
//*
```

2. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
3. The SCNMUXLK data set has been replaced with the CNMLINK data set. See Table 31 for an example on how to change the STEPLIB DD statement.

Table 31. STEPLIB DD statement

Existing statement:
`//STEPLIB  DD DSN=NETVIEW.V5R1M0.SCNMUXLK,DISP=SHR`
Updated statement:
`//STEPLIB  DD DSN=`**`NETVIEW.V5R4M0.CNMLINK,`**`DISP=SHR`

4. The SCNMUXMS data set that was specified on the IHSMSG1 DD statement has been replaced with the SDUIMSG1 data set. See Table 32 on page 89 for an example on how to change the IHSMSG1 DD statement.

Table 32. IHSMSG1 DD statement

Existing statement:
//IHSMSG1 DD DSN=NETVIEW.V5R1M0.SCNMUXMS,DISP=SHR
Updated statement:
//IHSMSG1 DD DSN=**NETVIEW.V5R4M0.SDUIMSG1**,DISP=SHR

5. Add the following ROUTECDE parameter after the OUTSIZE parameter:

```
//             ROUTECDE=1,    ** ROUTE CODE FOR ALL WTO'S
```

6. Add the following &ROUTECDE variable after the &OUTSIZE variable:

```
INITFILE=&INITFILE OUTSIZE=&OUTSIZE ROUTECDE=&ROUTECDE
```

7. Add the following output data sets:

```
//*   EAS OUTPUT DATASETS
//IHSN     DD SYSOUT=A
//IHSB     DD SYSOUT=A
:
//IHSNS    DD SYSOUT=A
//IHSBS    DD SYSOUT=A
:
//IHSNSTD  DD SYSOUT=A
//IHSBSTD  DD SYSOUT=A
```

IHSAINIT

The IHSAINIT sample is the initialization file for the Event/Automation Service. Information has been added to this sample to support the confirmed alert and message adapters. The NOSTART statements are included to prevent the Event/Automation Service from automatically starting the confirmed alert adapter and confirmed message adapter services.

```
# The following keywords are supported:
#   CMSGCFG  - Specifies the confirmed message adapter configuration file
#   CALRTCFG - Specifies the confirmed alert adapter configuration file
#
# The syntax for each keyword follows:
#   CMSGCFG=confirm_message_config_file
#   CALRTCFG=confirm_alert_config_file
#   TRACE TASK=task_designator LEVEL=trace_level IP=on_or_off
#
#     confirm_message_config_file - Specifies the name of the confirmed message
#                          adapter configuration file.  If not prefaced with the
#                          escape character (\), this is the name of a member of
#                          the IHSSMP3 file.  Otherwise, this is a complete file
#                          name.  If E/AS is an MVS started task, the default
#                          value of this keyword is IHSANCFG.  If E/AS is started
#                          in a UNIX System Services shell, the default value is
#                          /etc/netview/confirm_message_adpt.conf.
#
#     confirm_alert_config_file - Specifies the name of the confirmed alert
#                          adapter configuration file.  If not prefaced with the
#                          escape character (\), this is the name of a member of
#                          the IHSSMP3 file.  Otherwise, this is a complete file
#                          name.  If E/AS is an MVS started task, the default
#                          value of this keyword is IHSABCFG.  If E/AS is started
#                          in a UNIX System Services shell, the default value is
#                          /etc/netview/confirm_alert_adpt.conf.
#     output_destination - specifies the location where the trace and error
#                           messages will be logged. The values are:
#     SYSOUT - Specifies a system output file.  When started by an MVS startup
#              procedure, the primary and secondary files for each task are:
#
#                   IHSN and IHSNS for the MESSAGEC task
```

```
#                  IHSB and IHSBS for the ALERTC task
#
#                When started under UNIX System Services, the default primary and
#                secondary file names for each task are:
#
                   cmessagep.err and cmessages.err for the MESSAGEC task
#                  calertp.err and calerts.err for the ALERTC task

#     task_designator - is one of the following:
#       MESSAGEC - Specifies the confirmed message adapter task
#       ALERTC   - Specifies the confirmed alert adapter task

#       Note : CONTROL is not valid on the NOSTART statement.  ALL does not
#              include CONTROL for the NOSTART statement
#
#     on_or_off - is one of the following:
#       ON      - Specifies that data sent or received using TCP/IP
#                 will be traced.  Additional information for the
#                 z/OS UNIX C/C++ socket functions used may appear.
#       OFF     - Specifies that no tracing of data or socket
#                 functions will be done.  This is the default.
#
# Confirmed Message Adapter Configuration File
#CMSGCFG=IHSANCFG
#CMSGCFG=\/etc/netview/confirm_message_adpt.conf
#
# Confirmed Alert Adapter Configuration File
#CALRTCFG=IHSABCFG
#CALRTCFG=\/etc/netview/confirm_alert_adpt.conf
#
# Tasks not started at initialization (example)
NOSTART TASK=MESSAGEC
NOSTART TASK=ALERTC
#
# Confirmed Message Adapter Task
#TRACE TASK=MESSAGEC LEVEL=OFF
#
# Confirmed Alert Adapter Task
#TRACE TASK=ALERTC LEVEL=OFF
```

Additional Considerations

Consider changes to the following functions:

BROWSE Facility

A new DEFAULTS setting called LBHOURLY controls whether the hourly-statistics messages CNM154I, CNM155I, and CNM156I are posted to the network log. In previous releases, these hourly statistics messages were posted to the network log automatically, without an option to prevent them from being posted. The default

setting for LBHOURLY is NO, as set by the DEFAULTS.LBHOURLY statement in the CNMSTYLE member. To continue receiving these hourly statistics messages in the network log, add a DEFAULTS.LBHOURLY statement to the CNMSTUSR or C*xx*STGEN member and set its value to YES.

NetView Resource Manager

As a result of being able to customize the NetView Resource Manager autotask, forwarding status from a host at the V5R2 or later level to a manager host on a previous release works only if the NetView Resource Manager autotask is AUTONRM. However, you can continue to forward status from a host at the V5R1 level to a manager at the V5R2 or later level. There is no restriction on the NetView Resource Manager autotask name in V5R2 or later for the upward migration to work.

UNIX System Services

The following section describes the directories, configuration files, and functions that have changed from NetView V5R1 to NetView V5R4. Also review the section in "Preparing UNIX System Services" on page 19.

The NetView MIB collection has moved from the `/usr/lpp/netview/v5r1/mibs/` directory to the `/usr/lpp/netview/v5r4/mibs/` directory. Make sure that your MIBPATH statement in the CNMSTYLE member points to the mib directory in the current release.

The Web resources files that are used by the Web Services Gateway function are located in the following directory:

`/usr/lpp/netview/v5r4/www/`

See *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* to update the files for your environment. The WSDL files automatically generate a proxy-client connection.

Table 33. Web Services Gateway files

File name	Purpose	Modifications
znvsoatx.htm	Text-based Web Services client. This file works with Microsoft Internet Explorer version 7 or later or Mozilla 2.0.014 or later.	Update URLs for your environment. Locate the `<SELECT>` tag and modify the `<OPTION>`*`your.web.services.server`*`</OPTION>` tag.
znvsoa.htm	Graphic version of the Web Services client. This file works only with Microsoft Internet Explorer version 7 or later.	Update URLs for your environment. Locate the `<SELECT>` tag and modify the `<OPTION>`*`your.web.services.server`*`</OPTION>` tag.
znvwsdl.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.
znvwsdl1.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.

Table 33. Web Services Gateway files (continued)

File name	Purpose	Modifications
znvwsdl2.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.

NetView Web Application

Uninstall the current version of your NetView Web application and reinstall the V5R4 version of the NetView Web application. For details, refer to the *netview_installation_dir*/doc/znetview_webapp_readme_en.htm file and the *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* manual.

DVIPA Support

DVIPA support is no longer a function of AON. It is an independent function of the base NetView program. To enable this support, uncomment the DVIPA tower in the CNMSTUSR or C*xx*STGEN member.

The default polling interval has changed from 10 minutes to 1 hour. You can change this polling interval by using the COMMON.CNMSTYLE.DVIPAINTVL statement in the CNMSTUSR or C*xx*STGEN member.

Use of Symbolic Variables in Parameter Files

The NetView program uses the system variables that are listed in Table 34 and defined in the SYS1.PARMLIB data set for the following members of the DSIPARM data set:

- CNMSTYLE
- DUIGINIT
- FLBSYSD

Table 34. Symbolic Variable Usage by Initialization Members

Member	Task	TCP/IP NAME	RODM NAME	NETID
		&CNMTCPN	&CNMRODM	&CNMNETID
CNMSTYLE	NetView initialization	X	X	X
DUIGINIT	GMFHS (Graphics)		X	
FLBSYSD	SNA Topology manager		X	

&DOMAIN is an additional NetView user symbolic variable and is used in the following parameter files:

- CNMSCBET
- CNMSMRT1
- CNMSTASK
- CNMSTGEN
- CNMSTPWD
- CNMSTUSR
- CNMSTYLE
- DSIAMIAT
- DSIAMII
- DSITBL01

- DSIVPARM
- FKXWHTML
- FLBSYSD

TCP/IP Management

The following functions changed:

- ACTMON
- IP tracing
- IPMAN
- IPSTAT
- Ping
- Tracerte

MVS Command Management

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function.

Migration Notes:

1. You can continue to use the MVS Command Management function until you are finished migrating your system to the MVS Command Revision function. Both functions can coexist. Ensure that both functions do not simultaneously operate on the same command. One way to do this is to activate the MVS Command Revision function in test mode.
2. For installation instructions for the MVS Command Revision function, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.
3. Review your current MVS Command Management actions and then create a Command Revision Table. For information on how to do this, see *IBM Tivoli NetView for z/OS Automation Guide*.
4. The Command Revision Table and the Message Revision Table use high level UPON statements to group all other statements. You can place Command Revision and Message Revision statements in the same member.

   The Message Revision Table `UPON(ALWAYS)` action is being replaced with the `UPON(OTHERMSG)` action. Change all the `UPON(ALWAYS)` actions to `UPON(OTHERMSG)` actions in your Message Revision Table. The `UPON(ALWAYS)` action is supported for migration purposes, but might create confusion because actions for commands and messages can be in the same source member.
5. The action of the SSI.ReviseTable CNMSTYLE statement is unchanged if the member to which this statement is referring is unchanged. If new UPON statements related to Command Revision are in the CNMSTYLE member or its included members, a Command Revision Table is created.
6. (Optional) The REVISMSG command is being replaced with the REVISE MSG command. Wherever you issue a REVISMSG command, consider changing it to the REVISE MSG command. For syntax information, see the online help or the *IBM Tivoli NetView for z/OS Command Reference Volume 1 (A-N)*.

   This step is optional because the REVISE command defaults to MSG processing when the defined verb is REVISMSG. REVISMSG command arguments are supported by the REVISE command.
7. When reports or testing indicates that all of the MVS Command Management actions are satisfactorily implemented using a Command Revision table, disable the MVS Command Management function. This includes deleting the MVScmdMgt tower from the CNMSTUSR or C*xx*STGEN member.

Security Enhancements

The NetView program provides support for mixed case passwords and password phrases.

Mixed Case Passwords

If you use an SAF product for password checking, you might be able to use the mixed case password function. For more information, see *IBM Tivoli NetView for z/OS Security Reference*.

Password Phrases

The NetView program provides support for password phrase authorization. A password phrase can be used as a substitute for a password for all NetView functions that use an SAF product, such as RACF, for security checking. Any panel that accepts passwords has been updated to accept password phrases. The password phrase can include phrases from 9-100 characters in length.

The RACF product allows password phrases to contain any valid EBCDIC characters. When setting a password phrase for a user ID that will be accessed from a non-z/OS system, the password on that system is entered as ASCII text. Not all EBCDIC characters have an ASCII equivalent, so limit the EBCDIC password phrase to characters that have an ASCII equivalent.

Password phrases are not supported in the following environments:

- Password checking using the DSIOPF member
- Logon validation using the DSIEX12 installation exit
- Tivoli Enterprise Portal login. Because of this restriction, the password phrase cannot be passed to the Tivoli Enterprise Monitoring Server for RACF verification.
- Functions that use the NetView-NetView task (NNT)

1-Byte Console IDs

With z/OS V1R8, support for 1-byte console IDs was removed. Because of this, the NetView program no longer supports the use of a 1-byte console ID when defining a console to the NetView program. Instead of using a console ID, use a 2- to 8-character console name. For example, use the console name when referencing a specific console in the GETCONID, SETCONID, and AUTOTASK commands and in the AUTOTASK.task.CONSOLE statement in the CNMSTYLE member.

Chapter 5. Migrating from Tivoli NetView for z/OS Version 5 Release 2

This chapter describes how to migrate the NetView program to run as a production system if you are migrating from the Tivoli NetView for z/OS Version 5 Release 2. The migration information is based on the NetView components included with the initial release of V5R2. Review your maintenance to see if you have already made some of the changes that are described in this chapter.

You can either add the V5R4 content into your V5R2 NetView definitions, or add your V5R2 customization to the default V5R4 members supplied with the NetView program. Either way, place the customized member into an appropriate user-allocated data set such as NETVIEW.V5R4USER.CNM01.DSIPARM. Do not customize members in the SMP/E-managed data sets such as NETVIEW.V5R4M0.DSIPARM.

Several factors can influence the method you use when migrating your NetView definition members. Factors such as the size and complexity of your network, security policies that must be followed, and established practices within your business can all influence what is the best method for your migration. The checklist that follows details the documented method of migration as outlined in this book and supported by other books in the NetView library. Choose the method of migration that is best for you.

Perform the following steps to migrate your V5R2 definitions:

1. Allocate a new set of V5R4 user data sets by running sample job CNMSJ002. You needed to have done this when you completed the steps in Table 13 on page 20.
2. Define a unique &NV2I value (*xx*) for each NetView domain.
3. Review your customized V5R2 copy of the CNMSTYLE member. Move all of your domain-specific customization of V5R2 CNMSTYLE statements into the C*xx*STGEN member and all of your system-wide customization of V5R2 CNMSTYLE statements into the CNMSTUSR member. Do not copy your V5R2 CNMSTYLE member into the V5R4 user DSIPARM data set.
4. Review the CNMSTYLE information in this chapter and the V5R4 CNMSTNXT member shipped with the NetView program. Place any domain-specific customization of CNMSTYLE statements into the C*xx*STGEN member and any system-wide customization of CNMSTUSR statements into the CNMSTUSR member. Do not modify the V5R4 default CNMSTYLE member.
5. Review the remaining information in this chapter, and migrate your V5R2 NetView definition members and JCL procedures as appropriate, placing only those members that have been modified into the V5R4 user data sets.

Figure 4 on page 96 shows the NetView V5R4 initialization flow. Keep this new initialization flow in mind as you make changes to your DSIPARM members.

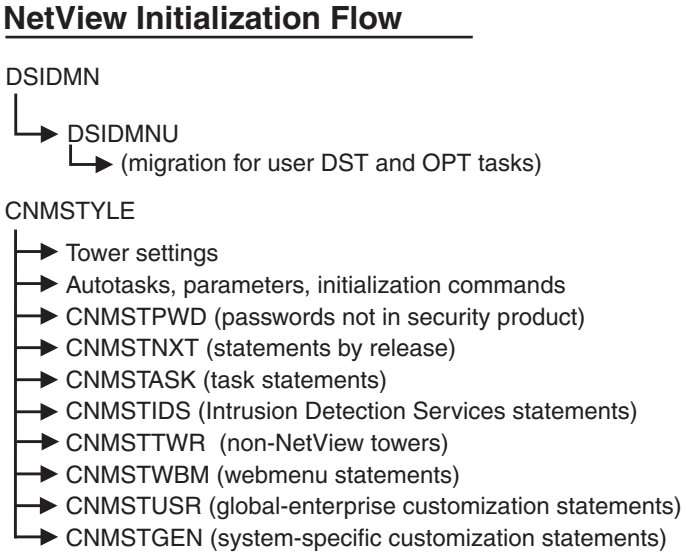


Figure 4. NetView V5R4 Initialization Flow

When you finish with this chapter, continue with Chapter 7, "Getting Ready to Start NetView," on page 141.

If you want information about...	Refer to...
Changes including panels, commands, messages, and samples	Appendix C, "Changes from Tivoli NetView for z/OS Version 5 Release 2 to Tivoli NetView for z/OS Version 5 Release 3," on page 195

New Samples

Table 35 lists new samples to review during migration.

Table 35. List of New Samples

Distributed As	Name	Description	Data Set Name
CNMIPMGT	same	Automation policy for NetView IP management	DSIPARM
CNMSALRT	same	Converts SNMP trap data to an alert and sends the alert to a NetView alert receiver	CNMSAMP
CNMSCRT1	same	Command revision table	DSIPARM
CNMSDCA	same	Provides automation statements that help control the data collection autotasks that are managed by the COLLCTL command.	CNMSAMP
CNMSDDCR	same	Displays distributed DVIPA connection routing information. It formats the DVIPDDCR command output (BNH815I message) into a readable format.	CNMSAMP

Table 35. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSDVCG	same	Automation table member for z/OS Communications Server VIPADYNAMIC TCP/IP profile updates that is included when the DVIPA tower is enabled. The VIPADYNAMIC TCP/IP profile statements that are changed trigger rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSDVDS	same	Automation table member that is used for DVIPA data discovery (including rediscovery) and distributed DVIPA statistics on the master NetView program. It processes the DSIIF003I (DVIPA rediscovery), DSIIF004I (DVIPA data forwarding), DSIIF006I (DVIPA data request), and BNH867I (distributed DVIPA statistical records) messages.	CNMSAMP
CNMSDVIP	same	This sample displays the DVIPA definition and status data. It formats the DVIPSTAT command output (BNH846I message) into a readable format.	CNMSAMP
CNMSDVPC	same	Displays DVIPA connections. It formats the DVIPCONN command output (BNH849I message) into a readable format.	CNMSAMP
CNMSDVPH	same	Displays distributed DVIPA server health information. It formats the DVIPHLTH command output (BNH814I message) into a readable format.	CNMSAMP
CNMSDVST	same	Displays the data in the distributed DVIPA statistical data sets.	CNMSAMP
CNMSDVTP	same	Automation table member for DVIPA SNMP trap automation that is included when the DVIPA tower is enabled. The automation detects that a z/OS Communications Server DVIPA trap was received, which then triggers rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSEMAA	same	Automation table member for the NetView for z/OS Enterprise Management Agent	DSIPARM
CNMSHIPR	same	Displays HiperSockets configuration and status information. It formats the HIPERSOC command output (BNH598I message) into a readable format.	CNMSAMP
CNMSIFST	same	Displays IP interfaces. It formats the IFSTAT command output (BNH498I message) into a readable format.	CNMSAMP
CNMSMF3A	same	Sample command list that is called by the automation table when the BNH874I message is issued. This sample is used for SMF record type 30 automation.	CNMSAMP

Table 35. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSMF3E	same	Sample IEFACTRT SMF exit to process type 30 SMF records and send them across the program-to-program interface (PPI) to the NetView program for automation	CNMSAMP
CNMSMF3F	same	Sample that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3R	same	Sample PPI receiver that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMSIP	same	Sends a CP-MSU over IP	CNMSAMP
CNMSNVST	same	Displays NetView application information. It formats the NVSTAT command output (BNH495I message) into a readable format.	CNMSAMP
CNMSOSAP	same	Displays the OSA channel and port information. It formats the OSAPORT command output (BNH597I message) into a readable format.	CNMSAMP
CNMSPLEX	same	This sample displays the DVIPA sysplex distributor data. It formats the DVIPPLEX command output (BNH847I message) into a readable format.	CNMSAMP
CNMSRVMC	same	This sample provides an example of the NETVONLY action command that is used in the command revision table.	DSIPARM
CNMSSMON	same	This sample provides z/OS Communications Server sysplex monitoring message automation and is included when the DVIPA tower is enabled.	CNMSAMP
CNMSSTAC	same	This sample displays the TCP/IP stack configuration and status data. It formats the STACSTAT command output (BNH845I message) into a readable format.	CNMSAMP
CNMSTARG	same	This sample displays the distributed DVIPA target data. It formats the DVIPTARG command output (BNH813I message) into a readable format.	CNMSAMP
CNMSTNST	same	This sample displays the configuration and status information about Telnet servers. It formats the TELNSTAT command output (BNH496I message) into a readable format.	CNMSAMP
CNMSTPST	same	This sample displays the configuration and status information about Telnet server ports. It formats the TNPTSTAT command output (BNH497I message) into a readable format.	CNMSAMP
CNMTRAPI	same	Contains the data services task initialization parameters required for an SNMP trap automation task	DSIPARM

Table 35. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSVPRT	same	Displays status information about VIPA routes. It formats the VIPAROUT command output (BNH824I message) into a readable format.	CNMSAMP
CNMSXCFA	same	Automation sample for XCF sysplex support	DSIPARM
DSIPROFN	same	Automated operator profile for the NetView for z/OS Enterprise Management Agent data collection autotasks (AUTODC*n*)	DSIPRF
EKG51100	same	PL/I Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
EKG61100	same	C Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
FKXIPMTB	same	Configuration data for NetView IP management automation	DSIPARM
FKXOPFIP	same	Operator definitions for NetView IP management automation	DSIPARM
IHSABCDS		The IHSABCDS sample contains the sample class definition statements for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSABCFG		The IHSABCFG sample is the sample configuration file for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSANCFG		The IHSANCFG sample is the sample configuration file for the Event/Automation Service confirmed message adapter.	SCNMUXCL
IHSANFMT		The IHSANFMT sample provides sample format specification statements for the Event/Automation Service confirmed message adapter.	SCNMUXCL

VTAM Address Space

The samples in this section list changes for the VTAM address space.

A01APPLS (CNMS0013)

This member contains the application (APPL) major nodes coded for the NetView program.

If you did not reallocate and recopy the VTAMLST data sets, make the following changes to A01APPLS:

- Either set the domain ID (system variable &CNMDOMN) in SYS1.PARMLIB member IEASYM*xx* or change *every* occurrence of &CNMDOMN. in A01APPLS (CNMS0013) to the current domain ID.

- If you are not using the status monitor preprocessor, you can replace the APPL statements defining tasks for multiple concurrent NetView operators with one APPL statement using wildcard characters (??), for example:

```
&CNMDOMN.0?? APPL  AUTH=(NVPACE,SPO,ACQ,PASS),PRTCT=&CNMDOMN.,     X
               EAS=4,MODETAB=AMODETAB,DLOGMOD=DSILGMOD
```

- If you are not using the status monitor preprocessor, you can replace the TAF APPL statements with one APPL statement using wildcard characters (??) following the LU name, for example:

```
TAF010?? APPL  MODETAB=AMODETAB,EAS=9,       X
               DLOGMOD=M3767
```

APPL names defined for use by other applications (such as TAF) must not be defined with the same naming scheme as terminal logon APPLs (for example, the domain name followed by a 3-character suffix). Doing so can cause these application names to be used by the NetView program for terminal logons, which can make the application names unavailable for the purpose for which they were defined.

CNMNET (CNMSJ008)

CNMNET (CNMSJ008) is the start procedure for the VTAM program.

Change CNMNET in your PROCLIB in the following way:

1. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.

NetView Address Space

The samples in this section list changes for the NetView address space.

CNMCMENT

The CNMCMENT member in the DSIPARM data set contains sample CMDDEF statements. Do not modify this sample. Use the V5R4 version. Add any customization for your system to the CNMCMDU member.

CNMCMSYS

DSIPARM member CNMCMSYS contains sample CMDDEF statements.

Add the following statements to define the NetView Web Services server:

```
*-------------------------------------------------------------------*
*  NetView SOA server                                               *
*-------------------------------------------------------------------*
CMDDEF.DSISRVR.MOD=DSISRVR
CMDDEF.DSISRVR.TYPE=R
CMDDEF.DSISAUTH.MOD=DSISAUTH
CMDDEF.DSISAUTH.TYPE=R
CMDDEF.DSISAUTH.ECHO=N
```

CNMEALUS

The CNMEALUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to alert information and to pass the alert information to either the alert adapter or the confirmed alert adapter of Event/Automation Service.

CNMEMSUS

The CNMEMSUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to message information and to pass the message information to either the message adapter or the confirmed message adapter of Event/Automation Service.

CNMSAF2

The CNMSAF2 member in the CNMSAMP data set contains sample RACF definitions for NetView operators and commands.

Because of extensive changes to the CNMSAF2 member, use the V5R4 version as the base and copy over any installation-specific changes that you made to the V5R2 copy.

The following autotasks were deleted:

- AUTOLNM1
- AUTOLNMA
- AUTONA
- AUTONF1
- AUTONFA

The following autotasks were added:

Table 36. Autotask definitions

Function	Autotask Definitions
Command Revision	ADDUSER MVSCMDS ALTUSER MVSCMDS NETVIEW(MSGRECVR(NO) CTL(GLOBAL))
NetView for z/OS Enterprise Management Agent	ADDUSER AUTONALC ALTUSER AUTONALC NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER NATEP1 ALTUSER NATEP1 NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER NATEP2 ALTUSER NATEP2 NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER SYSADMIN ALTUSER SYSADMIN NETVIEW(MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC1 ALTUSER AUTODC1 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC2 ALTUSER AUTODC2 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC3 ALTUSER AUTODC3 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTODC4 ALTUSER AUTODC4 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))
DVIPA	ADDUSER DVIPAUTO ALTUSER DVIPAUTO NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER DVIPSTAT ALTUSER DVIPSTAT NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT1 ALTUSER AUTOCT1 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT2 ALTUSER AUTOCT2 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT3 ALTUSER AUTOCT3 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT4 ALTUSER AUTOCT4 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))

Table 36. Autotask definitions (continued)

Function	Autotask Definitions
Discovery manager	ADDUSER AUTOCT5 ALTUSER AUTOCT5 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT6 ALTUSER AUTOCT6 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT7 ALTUSER AUTOCT7 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))
TCP/IP	ADDUSER AUTOTCPC ALTUSER AUTOTCPC NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOPKTS ALTUSER AUTOPKTS NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOOPKT ALTUSER AUTOOPKT NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOTCPS ALTUSER AUTOTCPS NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL))
Web Services Gateway	ADDUSER AUTONVSP ALTUSER AUTONVSP NETVIEW(MSGRECVR(NO) CTL(GLOBAL))
XCF services	ADDUSER AUTOXCF ALTUSER AUTOXCF NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOXDSC ALTUSER AUTOXDSC NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOEDAT ALTUSER AUTOEDAT NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL))

CNMSCAT2

The CNMSCAT2 member in the DSIPARM data set contains the sample command authorization table.

Because of extensive changes to the CNMSCAT2 member, use the V5R4 version as the base and copy over any installation-specific changes that you made to the V5R2 copy.

CNMPOLCY

DSIPARM member CNMPOLCY contains the automation policy for the NetView program.

TCP390 Statement Notes:

1. (Web Application only) Specify the DVIPADAT keyword to view DVIPA data.
2. Many of the NetView components (for example, IPTRACE and NVSNMP) use SNMP queries to retrieve data, and must therefore have correct community names. Be sure to use the same community names in the CNMPOLCY member that are defined to the TCPIP stacks being managed. For additional information on community names, see *IBM Tivoli NetView for z/OS IP Management*.
3. The IPSTAT keyword was removed from the TCP390 statement.

CNMPROC (CNMSJ009)

CNMPROC (CNMSJ009) is the start procedure for the NetView program.

Make the following changes to CNMPROC in your PROCLIB:

1. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
2. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.

3. The default region size was increased to 98304K. If you are using the existing default region size (65536K) for the NetView product, increase the region size value:

```
//       REG=98304,            ** REGION SIZE(IN K) FOR NETVIEW
```

   Depending on the components that you are running, you might want to increase the region size even more. For additional information, refer to the *IBM Tivoli NetView for z/OS Tuning Guide*.

4. If you plan to run Language Environment (LE) HLL programs with the NetView program, and did not install the LE runtime library in the LNKLSTxx, be sure the library name in the STEPLIB of CNMPROC is correct and uncommented.

5. If you plan to use the Web Services Gateway function, uncomment the XML toolkit and GSKit library DD statements.

```
//*************************************************************
//*
//* IF YOUR ARE STARTING NETVIEW WEB SERVICES SERVER THEN
//* YOU WILL NEED ACCESS TO BOTH IBM XML AND GSK TOOL RUN TIME
//* LIBRARIES
//*
//* - IF YOU HAVE THESE LIBRARIES ON YOUR SYSTEM
//*   BUT THEY ARE NOT ACCESSIBLE FROM THE PLPA OR LINKLST,
//*   THEN YOU MUST UNCOMMENT LINES BELOW.
//*
//* WHEN YOU UNCOMMENT EITHER OF THE LINES BELOW, MAKE SURE
//* THAT THE DSN ACTUALLY MATCHES THE NAME ON YOUR SYSTEM.
//* IN ADDITION, MAKE SURE THAT THE DATASET IS APF-AUTHORIZED.
//*      QIXM='IXM.V1R8M0', ** IBM XML TOOLKIT RUNTIME LIB.
//*      QGSK='SYS1',       ** IBM GSK TOOLKIT RUNTIME LIB.
//*        DD   DSN=&QGSK..SIEALNKE,DISP=SHR
//*        DD   DSN=&QIXM..SIXMLOD1,DISP=SHR
//*
```

6. If you plan to collect distributed DVIPA statistics, add the following data sets:

```
//CNMDVIPP DD   DSN=&VQ1.&DOMAIN.CNMDVIPP,DISP=SHR
//CNMDVIPS DD   DSN=&VQ1.&DOMAIN.CNMDVIPS,DISP=SHR
```

CNMPSSI (CNMSJ010)

CNMPSSI (CNMSJ010) starts the NetView subsystem address space.

Make the following changes to CNMPSSI in your PROCLIB:

1. Ensure that the high-level qualifier for system data sets points to NETVIEW.V5R4M0.

CNMSIHSA

The CNMSIHSA automation table sample is enhanced. This sample provides examples on how to automate messages and alerts in order to send message and alert data to the various Event/Automation Service adapters:

- message adapter
- confirmed message adapter
- alert adapter
- confirmed alert adapter
- alert-to-trap adapter

CNMSTYLE

The CNMSTYLE member in the DSIPARM data set is used during NetView initialization. Make any changes to CNMSTYLE statements in the CNMSTUSR or C*xx*STGEN member. For information about changing CNMSTYLE statements, see *IBM Tivoli NetView for z/OS Installation: Getting Started*. The CNMSTYLE member is designed to simplify the NetView initialization process.

The CNMSTYLE member replaces some of the definition statements in members of the DSIPARM data set and all the initialization performed by the CNME1034 command list.

The CNMSTYLE member contains descriptive comments about the types of statements that are included. Read the comments and review the defaults.

The WEBSITE statements defining the URLs and titles for accessing the publications in the Tivoli NetView for z/OS library from the host were changed. See the CNMSTYLE sample.

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function. Because of this, the MVScmdMgt tower is commented out.

The following TOWERs were added:

- DISCOVERY - enables the discovery of sysplexes, z/OS systems, coupling facilities, TCP/IP stacks, TCP/IP subplexes, and NetView applications
- IPMGT - enables IP management
- NVSOA - enables the Web Services Gateway function
- TEMA - enables the NetView program to communicate with the Tivoli NetView for z/OS Enterprise Management Agent

The Multisystem Manager NetFinity (NTF) and LAN Network Manager (LNM) subtowers were removed.

The ITNM subtower was added for the Multisystem Manager IBM Tivoli Network Manager feature.

Define any NetView programs that have the fix applied for APAR OA29938 on the ENT.SYSTEMS statements in the CNMSTYLE member of the V5R4 master NetView program. For information about the ENT.SYSTEMS statement, see the *IBM Tivoli NetView for z/OS Administration Reference*.

Because the NetView for z/OS Tivoli Enterprise Portal Agents are no longer supported, the following CNMSTYLE statements were deleted:

- function.autotask.NAOPER
- INIT.NACMD
- NACMD.AGENT
- NACMD.HOSTDEST
- NACMD.PORT
- NACMD.SRCNAME
- NACMD.TCPNAME

The following defaults changed:

Table 37. CNMSTYLE statements

Default	Prior default	Current default
function.autotask.autoip	auto2	autoaon

CNMSTNXT

CNMSTNXT contains statements that are new, changed, or deleted. Statements are grouped according to version and release level of the NetView product. Review the statements in the CNMSTNXT member and update the CNMSTUSR or C*xx*STGEN member as necessary.

If you want information about...	Refer to...
CNMSTYLE statements	*IBM Tivoli NetView for z/OS Administration Reference*

DSIAUTB

The DSIAUTB sample lists parts that use the AUTBYPAS REXX or CLIST function. Do not modify this sample. Use the V5R4 version. Add any customization for your system to the DSIAUTBU member.

DSIOPF

If you are using the version of the DSIOPF member that is supplied by the NetView product, no changes are required. If you modified the V5R2 DSIOPF member, copy any changes that you made into the V5R4 version.

The following statements were added to the DSIOPF member:

- Conditional include for operator definitions for the IPMAN function if the AON tower is not active:

```
%>IF TOWER('IPMGT') & ¬TOWER('AON') THEN
  %INCLUDE FKXOPFIP
```

Additionally, the following operator definitions were added:

Table 38. Operator Definitions Added to DSIOPF

Operator Definition	DSIOPF Statements
Tivoli NetView for z/OS Enterprise Management Agent autotask	AUTONALC OPERATOR PASSWORD=AUTONALC PROFILEN DSIPROFC AUTODC1 OPERATOR PASSWORD=AUTODC1 PROFILEN DSIPROFN AUTODC2 OPERATOR PASSWORD=AUTODC2 PROFILEN DSIPROFN AUTODC3 OPERATOR PASSWORD=AUTODC3 PROFILEN DSIPROFN AUTODC4 OPERATOR PASSWORD=AUTODC4 PROFILEN DSIPROFN
Distributed DVIPA statistics autotask	DVIPSTAT OPERATOR PASSWORD=DVIPSTAT PROFILEN DSIPROFC
DVIPA event and data forwarding autotask	DVIPAUTO OPERATOR PASSWORD=DVIPAUTO PROFILEN DSIPROFC
Autotask that manages the NETVONLY action for Command Revision.	MVSCMDS OPERATOR PASSWORD=MVSCMDSL PROFILEN DSIPROFC

Table 38. Operator Definitions Added to DSIOPF (continued)

Operator Definition	DSIOPF Statements		
DVIPA definition and status autotask	AUTOCT1	OPERATOR PROFILEN	PASSWORD=AUTOCT1 DSIPROFN
DVIPA sysplex distributors, distributed targets, and server health autotask	AUTOCT2	OPERATOR PROFILEN	PASSWORD=AUTOCT2 DSIPROFN
DVIPA connections autotask	AUTOCT3	OPERATOR PROFILEN	PASSWORD=AUTOCT3 DSIPROFN
VIPA routes and distributed DVIPA connection routing autotask	AUTOCT4	OPERATOR PROFILEN	PASSWORD=AUTOCT4 DSIPROFN
OSA channels and ports autotask	AUTOCT5	OPERATOR PROFILEN	PASSWORD=AUTOCT5 DSIPROFN
Telnet servers and Telnet server ports autotask	AUTOCT6	OPERATOR PROFILEN	PASSWORD=AUTOCT6 DSIPROFN
NetView applications autotask	AUTOCT7	OPERATOR PROFILEN	PASSWORD=AUTOCT7 DSIPROFN
IP management services (AUTIPMGT) autotask	AUTIPMGT	OPERATOR PROFILEN	PASSWORD=AUTIPMGT DSIPROFC
XCF services autotasks	AUTOXCF AUTOXDSC AUTOEDAT	OPERATOR PROFILEN OPERATOR PROFILEN OPERATOR PROFILEN	PASSWORD=AUTOXCF DSIPROFC PASSWORD=AUTOXDSC DSIPROFC PASSWORD=AUTOEDAT DSIPROFC
Autotasks for opening NMI sockets to the Communications Server (see note 1)	AUTOTCPC AUTOPKTS AUTOOPKT AUTOTCPS	OPERATOR PROFILEN OPERATOR PROFILEN OPERATOR PROFILEN OPERATOR PROFILEN	PASSWORD=AUTOTCPC DSIPROFG PASSWORD=AUTOPKTS DSIPROFG PASSWORD=AUTOOPKT DSIPROFG PASSWORD=AUTOTCPS DSIPROFG
Autotask to receive SMF 30 records	AUTOSMF3	OPERATOR PROFILEN	PASSWORD=AUTOSMF3 DSIPROFC
NetView Web Services Gateway autotask	AUTONVSP	OPERATOR PROFILEN	PASSWORD=AUTONVSP DSIPROFC

Notes:

1. If you already defined operators for the function.autotask.TCPCONN.*stckname* statement or the function.autotask.PKTS.stckname statement in the CNMSTYLE member, then you might not need to add the AOTOTCPC or AUTOPKTS operators.

DSIOPFU

Copy any operator definitions that you defined in your V5R2 DSIOPFU member to the V5R4 version.

You can add Data REXX logic to conditionally define operator definitions in DSIOPFU. Data REXX files must have either `/*%DATA*/` or `/*%LOGIC*/` as the first statement. Comments can follow on the same or subsequent lines. A blank in the first column indicates a continuation of the previous statement. For more information on Data REXX, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

FKXOPFIP

The FKXOPFIP member is used when the IPMGT tower is enabled. This member is not used if the AON component is enabled. Because of this, operator definitions duplicate those in the EZLOPF and FKXOPF members.

The following operator definitions were added:

Table 39. Operator Definitions Added to FKXOPFIP

Operator Definition	DSIOPF Statements		
IP management services autotasks	AUTIPM*x*	OPERATOR PROFILEN	PASSWORD=AUTIPM*x* EZLPRFAO

DSITBL01

The DSITBL01 member contains sample automation table definitions. Some %INCLUDE statements and associated statements to start automation have been replaced by entries in the CNMSTYLE member. If you modified the DSITBL01 member, merge your changes with the V5R4 DSITBL01 member. After making changes, renumber the NetView automation table. When the NetView automation table processes a message and finds a match that results in a command or command list being run, it writes the CNM493I message to the NetView log file. The CNM493I message contains the line number of the automation table entry that is matched.

Several messages that are supplied by the NetView product are changed with the V5R4 program. These messages are listed in the appendices. Review the list and make any necessary changes to your automation table.

If your primary automation table name is not DSITBL01, update the CNMSTUSR or C*xx*STGEN member to include an AUTOCMD statement for your automation table. For more information on the AUTOCMD statement, refer to the *IBM Tivoli NetView for z/OS Administration Reference*.

Modify the IDS conditional statements in the automation table that check for the presence of the IDS subtower under the AON tower to check for the presence of the IDS subtower under the AON tower or the IPMGT tower. See Table 40 for an example on how to change the conditional statements in the DSITBL01 member.

Table 40. DSITBL01 conditional statements

Existing conditional statement:
`%>IF TOWER('AON.TCP.IDS') THEN`
Updated conditional statement:
`%>IF TOWER('AON.TCP.IDS') | TOWER('IPMGT.IDS') THEN`

Message automation is used to update information when some discovery manager resources start and stop. Add the CNMSEPTL automation sample member for these events. The CNMSEPTL member is included when the DISCOVERY tower is enabled.

```
* Load local resource discovery table
%>IF tower('DISCOVERY') THEN
%INCLUDE CNMSEPTL
```

For DVIPA automation, add the following statements:

```
* Include the following DVIPA samples:
* CNMSDVDS - Automation for forwarding information to the master NetView
* CNMSDVTP - Samples for automating z/OS Communications Server SNMP
*            DVIPA traps
* CNMSDVCG - Samples for automating z/OS Communications Server DVIPA
*            configuration updates
* CNMSSMON - Samples for automating z/OS Communications Server
*            sysplex autonomics messages
%>IF tower('DVIPA') THEN
%>do;
     %INCLUDE CNMSDVDS
     %INCLUDE CNMSDVTP
     %INCLUDE CNMSDVCG
     %INCLUDE CNMSSMON
%>end;
```

For XCF sysplex support, add the following statements:

```
** Load statements that relate to the z/OS sysplex master function.
%INCLUDE CNMSXCFA
```

For SMF type 30 record automation using the CNMSMF3E sample, add the following statements:

```
*************** SMF 30 RECORD AUTOMATION *****************************
IF MSGID = 'BNH874I' THEN
     EXEC(CMD('CNMSMF3A')) NETLOG(Y) SYSLOG(N);
```

For more information on automating the SMF type 30 records, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

DSIZVLSR

The DSIZVLSR module defines the buffer pools to be used with the VSAM LSR and DSR performance options. Update the DSIZVLSR module by using the CNMSJM01 sample job. Use the DSIZVLSR module shipped with V5R4. If you previously updated the CNMSJM01 job, merge those changes into the V5R4 version of the CNMSJM01 job and run it to assemble and link-edit your changes into the DSIZVLSR module.

The following change was made to the DSIZVLSR module:

- The buffer size in the DATA buffer pool for the DSITCONT VSAM clusters were changed from 22528 bytes to 26624 bytes.

DSIW3PRF

This sample contains TCP/IP session properties.

This sample was moved from the DSIPRF data set to the DSIPARM data set.

RODM Address Space

The samples in this section list changes for the RODM address space.

EKGLOADP

The EKGLOADP member contains the sample RODM load procedure JCL.

Make the following changes to EKGLOADP:

1. For NetView data sets, ensure that your high-level qualifier for system data sets points to NETVIEW.V5R4M0.

EKGSI101

The EKGSI101 member is used for allocating the RODM log and checkpoint databases. This sample is used by the CNMSJ004 sample job.

If you allocated RODM checkpoint data sets for fewer than the maximum number of windows supported by RODM and the estimated number of objects that you expect to store in the RODM data cache exceeds the previous maximum supported number (approximately 524,000 objects), consider increasing the size of the RODM checkpoint databases.

EKGXRODM

The EKGXRODM member contains the RODM start procedure.

Make the following changes to the EKGXRODM member:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
3. If you have not installed the Language Environment for OS/390 runtime library in LNKLST*xx* or PROG*xx*, be sure the library name in the STEPLIB of EKGXRODM is correct and uncommented. Remove DD statements for PL/I or C/C++ runtime libraries because these libraries are no longer being used.

GMFHS Address Space

The samples in this section list changes for the GMFHS address space.

CNMGMFHS (CNMSJH10)

CNMGMFHS (CNMSJH10) is the GMFHS start procedure.

Make the following changes to CNMGMFHS:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.

CNMSJH12

CNMSJH12 is the sample GMFHS/SNA Topology Manager data model load job.

The REGION=0M specification was added to ensure that the CNMSJH12 job completes without errors in a JES3 environment. The REGION=0M specification can be subject to JES definitions and to IEFUSI and IEALIMIT installation exits.

Event/Automation Service Address Space

The sample in this section lists changes for the Event/Automation Service address space.

IHSAEVNT

IHSAEVNT starts the Event/Automation Service address space. Make the following changes to IHSAEVNT in your PROCLIB:

1. Add the following comments:

```
//*  4.  There are additional keywords and values which may be
//*      specified in the PARM string, which a) are not in the
//*      style of a UNIX System Services shell command parameter and
//*      b) do not have procedure keyword definitions in this sample
//*      procedure.  They are described as follows.
//*
//*      CMSGCFG=value
//*
//*        CMSGCFG provides the name of a member of the IHSSMP3 file
//*        containing configuration parameters for the confirmed
//*        message adapter task, MESSAGEC.  If the value is provided,
//*        it must be a valid partitioned data set member name.
//*        If the keyword is omitted or is given no value, the
//*        default value is IHSANCFG.
//*
//*      CALRTCFG=value
//*
//*        CALRTCFG provides the name of a member of the IHSSMP3 file
//*        containing configuration parameters for the confirmed
//*        alert adapter task, ALERTC.  If the value is provided,
//*        it must be a valid partitioned data set member name.
//*        If the keyword is omitted or is given no value, the
//*        default value is IHSABCFG.
//*
```

2. The SCNMUXLK data set has been replaced with the CNMLINK data set. See Table 41 for an example on how to change the STEPLIB DD statement.

Table 41. STEPLIB DD statement

Existing statement:
`//STEPLIB  DD DSN=NETVIEW.V5R2M0.SCNMUXLK,DISP=SHR`
Updated statement:
`//STEPLIB  DD DSN=`**`NETVIEW.V5R4M0.CNMLINK,`**`DISP=SHR`

3. The SCNMUXMS data set that was specified on the IHSMSG1 DD statement has been replaced with the SDUIMSG1 data set. See Table 42 for an example on how to change the IHSMSG1 DD statement.

Table 42. IHSMSG1 DD statement

Existing statement:
`//IHSMSG1  DD DSN=NETVIEW.V5R2M0.SCNMUXMS,DISP=SHR`
Updated statement:
`//IHSMSG1  DD DSN=`**`NETVIEW.V5R4M0.SDUIMSG1,`**`DISP=SHR`

4. Add the following output data sets:

```
//*   EAS OUTPUT DATASETS
//IHSN     DD SYSOUT=A
//IHSB     DD SYSOUT=A
  .
  .
  .
//IHSNS    DD SYSOUT=A
//IHSBS    DD SYSOUT=A
  .
  .
  .
//IHSNSTD  DD SYSOUT=A
//IHSBSTD  DD SYSOUT=A
```

IHSAINIT

The IHSAINIT sample is the initialization file for the Event/Automation Service. Information was added to this sample to support the confirmed alert and message

adapters. The NOSTART statements are included to prevent the Event/Automation Service from automatically starting the confirmed alert adapter and confirmed message adapter services.

```
# The following keywords are supported:
#   CMSGCFG  - Specifies the confirmed message adapter configuration file
#   CALRTCFG - Specifies the confirmed alert adapter configuration file
#
# The syntax for each keyword follows:
#   CMSGCFG=confirm_message_config_file
#   CALRTCFG=confirm_alert_config_file
#   TRACE TASK=task_designator LEVEL=trace_level IP=on_or_off
#
#     confirm_message_config_file - Specifies the name of the confirmed message
#                          adapter configuration file.  If not prefaced with the
#                          escape character (\), this is the name of a member of
#                          the IHSSMP3 file.  Otherwise, this is a complete file
#                          name.  If E/AS is an MVS started task, the default
#                          value of this keyword is IHSANCFG.  If E/AS is started
#                          in a UNIX System Services shell, the default value is
#                          /etc/netview/confirm_message_adpt.conf.
#
#     confirm_alert_config_file - Specifies the name of the confirmed alert
#                          adapter configuration file.  If not prefaced with the
#                          escape character (\), this is the name of a member of
#                          the IHSSMP3 file.  Otherwise, this is a complete file
#                          name.  If E/AS is an MVS started task, the default
#                          value of this keyword is IHSABCFG.  If E/AS is started
#                          in a UNIX System Services shell, the default value is
#                          /etc/netview/confirm_alert_adpt.conf.
#     output_destination - specifies the location where the trace and error
#                           messages will be logged. The values are:
#     SYSOUT - Specifies a system output file.  When started by an MVS startup
#              procedure, the primary and secondary files for each task are:
#
#                  IHSN and IHSNS for the MESSAGEC task
#                  IHSB and IHSBS for the ALERTC task
#
#                When started under UNIX System Services, the default primary and
#                secondary file names for each task are:
#
                   cmessagep.err and cmessages.err for the MESSAGEC task
#                  calertp.err and calerts.err for the ALERTC task

#     task_designator - is one of the following:
#       MESSAGEC - Specifies the confirmed message adapter task
#       ALERTC   - Specifies the confirmed alert adapter task

#       Note : CONTROL is not valid on the NOSTART statement.  ALL does not
#              include CONTROL for the NOSTART statement
#
#     on_or_off - is one of the following:
#       ON      - Specifies that data sent or received using TCP/IP
#                 will be traced.  Additional information for the
#                 z/OS UNIX C/C++ socket functions used may appear.
#       OFF     - Specifies that no tracing of data or socket
#                 functions will be done.  This is the default.
#
# Confirmed Message Adapter Configuration File
#CMSGCFG=IHSANCFG
#CMSGCFG=\/etc/netview/confirm_message_adpt.conf
#
# Confirmed Alert Adapter Configuration File
#CALRTCFG=IHSABCFG
#CALRTCFG=\/etc/netview/confirm_alert_adpt.conf
#
# Tasks not started at initialization (example)
```

```
NOSTART TASK=MESSAGEC
NOSTART TASK=ALERTC
#
# Confirmed Message Adapter Task
#TRACE TASK=MESSAGEC LEVEL=OFF
#
# Confirmed Alert Adapter Task
#TRACE TASK=ALERTC LEVEL=OFF
```

Additional Considerations

Consider changes to the following functions:

UNIX System Services

This section describes the directories, configuration files, and functions that have changed from NetView V5R2 to NetView V5R4. Also review the section in "Preparing UNIX System Services" on page 19.

The NetView MIB collection has moved from the `/usr/lpp/netview/v5r2/mibs/` directory to the `/usr/lpp/netview/v5r4/mibs/` directory. Make sure your MIBPATH statement in the CNMSTYLE member points to the V5R4 mib directory.

The Web resources files that are used by the Web Services Gateway function are located in the following directory:

`/usr/lpp/netview/v5r4/www/`

See *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* to update the files for your environment. The WSDL files automatically generate a proxy-client connection.

Table 43. Web Services Gateway files

File name	Purpose	Modifications
znvsoatx.htm	Text-based Web Services client. This file works with Microsoft Internet Explorer version 7 or higher or Mozilla 2.0.014 or later.	Update URLs for your environment. Locate the `<SELECT>` tag and modify the `<OPTION>`*`your.web.services.server`*`</OPTION>` tag.
znvsoa.htm	Graphic version of the Web Services client. This file works only with Microsoft Internet Explorer version 7 or later.	Update URLs for your environment. Locate the `<SELECT>` tag and modify the `<OPTION>`*`your.web.services.server`*`</OPTION>` tag.
znvwsdl.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.

Table 43. Web Services Gateway files (continued)

File name	Purpose	Modifications
znvwsdl1.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.
znvwsdl2.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the `<soap:address location= >` tag.

Tivoli NetView for z/OS Enterprise Agents

The following versions of the NetView for z/OS Tivoli Enterprise Portal Agent are no longer supported:

- NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0
- NetView for z/OS Tivoli Enterprise Portal V6.1 Agent Version 5.2.5

There is no migration path to move from these existing agents to the Tivoli NetView for z/OS Enterprise Management Agent Version 5.4. To install the new agent, refer to *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*.

Migration Considerations:

1. If you have the AGENT keyword coded in automation or in EXECs that you have written, remove it. It is no longer valid.
2. For information on upgrading an existing installation of IBM Tivoli Monitoring, see the *IBM Tivoli Monitoring Installation and Setup Guide* and the *IBM Tivoli OMEGAMON XE and Tivoli Management Services on z/OS Upgrade Guide*.

Removing the NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0

The NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0 runs in the OMEGAMON version 3.6.0 environment. Do not install the Tivoli NetView for z/OS Enterprise Management Agent 5.4 data files in the OMEGAMON version 3.6.0 environment.

To remove the NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0, complete the following steps based on your installation system.

Windows system:

1. Stop the IBM Tivoli Monitoring components, including the Tivoli Service Manager (Manage Tivoli Enterprise Monitoring Services dialog).
2. From the Control Panel, select **Add or Remove Programs**.
3. Select **NetView for z/OS Tivoli Enterprise Portal Agent**.
4. From the Modify, Repair, or Remove the Program window, select **Remove**.

UNIX system:

1. Stop the IBM Tivoli Monitoring components, including the Tivoli Service Manager (Manage Tivoli Enterprise Monitoring Services dialog).
2. From the $CANDLEHOME/bin directory, issue the following shell script:

   ```
   /uninstall.sh
   ```
3. You are prompted to choose a product to uninstall. Select **NetView for z/OS Agent**.

Removing the NetView for z/OS Tivoli Enterprise Portal V6.1 Agent Version 5.2.5

The NetView for z/OS Tivoli Enterprise Portal V6.1 Agent runs with Version 6.1 of the Tivoli Management Services components.

To remove the NetView for z/OS Tivoli Enterprise Portal V6.1 Agent, complete the following steps based on your installation system.

Windows system:

1. Stop the IBM Tivoli Monitoring components and Manage IBM Tivoli Monitoring.
2. From the Control Panel, select **Add or Remove Programs**.
3. Select **IBM NetView for z/OS Tivoli Enterprise Portal V6.1 Agent**.
4. From the Modify, Repair, or Remove the Program window, select **Remove**.

UNIX or Linux system:

1. Stop the IBM Tivoli Monitoring components and Manage IBM Tivoli Monitoring.
2. From the <install-dir>/bin directory, issue the following shell script:
   ```
   /uninstall.sh
   ```
3. You are prompted to choose a product to uninstall. Select **NetView for z/OS V5R2 Agent**.

NetView Web Application

Uninstall the current version of your NetView Web application and reinstall the V5R4 version of the NetView Web application. For details, refer to the *netview_installation_dir*/doc/znetview_webapp_readme_en.htm file and the *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* manual.

IPv6 Support

By default, the NetView program supports both IPv4 and IPv6 addressing. However, you can limit the NetView program to one addressing family using the IPv6Env environment statement in the CNMSTUSR or C*xx*STGEN member. For information about the IPv6Env statement, see the *IBM Tivoli NetView for z/OS Administration Reference*. See also Appendix G, "Differences Between IPv4 and IPv6 Addresses," on page 229 for more information.

MVS Command Management

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function.

Migration Notes:

1. You can continue to use the MVS Command Management function until you are finished migrating your system to the MVS Command Revision function. Both functions can coexist. Ensure that both functions do not simultaneously operate on the same command. One way to do this is to activate the MVS Command Revision function in test mode.
2. For installation instructions for the MVS Command Revision function, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.
3. Review your current MVS Command Management actions and then create a Command Revision Table. For information on how to do this, see *IBM Tivoli NetView for z/OS Automation Guide*.

4. The Command Revision Table and the Message Revision Table use high level UPON statements to group all other statements. You can place Command Revision and Message Revision statements in the same member.

   The Message Revision Table `UPON(ALWAYS)` action is being replaced with the `UPON(OTHERMSG)` action. Change all the `UPON(ALWAYS)` actions to `UPON(OTHERMSG)` actions in your Message Revision Table. The `UPON(ALWAYS)` action is supported for migration purposes, but might create confusion because actions for commands and messages can be in the same source member.
5. The action of the SSI.ReviseTable CNMSTYLE statement is unchanged if the member to which this statement is referring is unchanged. If new UPON statements related to Command Revision are in the CNMSTYLE member or its included members, then a Command Revision Table is created.
6. (Optional) The REVISMSG command is being replaced with the REVISE MSG command. Wherever you issue a REVISMSG command, consider changing it to the REVISE MSG command. For syntax information, see the online help or the *IBM Tivoli NetView for z/OS Command Reference Volume 1 (A-N)*.

   This step is optional because the REVISE command defaults to MSG processing when the defined verb is REVISMSG. REVISMSG command arguments are supported by the REVISE command.
7. When reports or testing indicate all of the MVS Command Management actions are satisfactorily implemented using a Command Revision table, disable the MVS Command Management function. This includes deleting the MVScmdMgt tower from the CNMSTUSR or C*xx*STGEN member.

Password Phrase Support

The NetView program provides support for password phrase authorization. A password phrase can be used as a substitute for a password for all NetView functions that use an SAF product, such as RACF, for security checking. Any panel that accepts passwords has been updated to accept password phrases. The password phrase can include phrases from 9-100 characters in length.

The RACF product allows password phrases to contain any valid EBCDIC characters. When setting a password phrase for a user ID that will be accessed from a non-z/OS system, the password on that system is entered as ASCII text. Not all EBCDIC characters have an ASCII equivalent, so limit the EBCDIC password phrase to characters that have an ASCII equivalent.

Password phrases are not supported in the following environments:

- Password checking using the DSIOPF member
- Logon validation using the DSIEX12 installation exit
- Tivoli Enterprise Portal login. Because of this restriction, the password phrase cannot be passed to the Tivoli Enterprise Monitoring Server for RACF verification.
- Functions that use the NetView-NetView task (NNT)

1-Byte Console IDs

With z/OS V1R8, support for 1-byte console IDs was removed. Because of this, the NetView program no longer supports the use of a 1-byte console ID when defining a console to the NetView program. Instead of using a console ID, use a 2- to 8-character console name. For example, use the console name when referencing a specific console in the GETCONID, SETCONID, and AUTOTASK commands and in the AUTOTASK.task.CONSOLE statement in the CNMSTYLE member.

Chapter 6. Migrating from Tivoli NetView for z/OS Version 5 Release 3

This chapter describes how to migrate the NetView program to run as a production system if you are migrating from the Tivoli NetView for z/OS Version 5 Release 3. The migration information provided in this chapter is based on the NetView components supplied with the initial release of V5R3. Review your maintenance to see if you have already made some of the changes that are described in this chapter.

You can either add the V5R4 content into your V5R3 NetView definitions, or add your V5R3 customization to the default V5R4 members supplied with the NetView program. Either way, place the customized member into an appropriate user-allocated data set such as NETVIEW.V5R4USER.CNM01.DSIPARM. Do not customize members in the SMP/E-managed data sets such as NETVIEW.V5R4M0.DSIPARM.

Several factors can influence the method you use when migrating your NetView definition members. Factors such as the size and complexity of your network, security policies that must be followed, and established practices within your business can all influence what is the best method for your migration. The checklist that follows details the documented method of migration as outlined in this book and supported by other books in the NetView library. Choose the method of migration that is best for you.

Perform the following steps to migrate your V5R3 definitions:

1. Allocate a new set of V5R4 user data sets by running sample job CNMSJ002. You needed to have done this when you completed the steps in Table 13 on page 20.
2. Define a unique &NV2I value (*xx*) for each NetView domain.
3. Review your customized V5R3 copy of the CNMSTYLE member. Move all of your domain-specific customization of V5R3 CNMSTYLE statements into the C*xx*STGEN member and all of your system-wide customization of V5R3 CNMSTYLE statements into the CNMSTUSR member. Do not copy your V5R3 CNMSTYLE member into the V5R4 user DSIPARM data set.
4. Review the CNMSTYLE information in this chapter and the V5R4 CNMSTNXT member included with the NetView program. Place any domain-specific customization of CNMSTYLE statements into the C*xx*STGEN member and any system-wide customization of CNMSTYLE statements into the CNMSTUSR member. Do not modify the V5R4 default CNMSTYLE member.
5. Review the remaining information in this chapter, and migrate your V5R3 NetView definition members and JCL procedures as appropriate, placing only those members that have been modified into the V5R4 user data sets.

Figure 5 on page 118 shows the NetView V5R4 initialization flow. Keep this new initialization flow in mind as you make changes to your DSIPARM members.

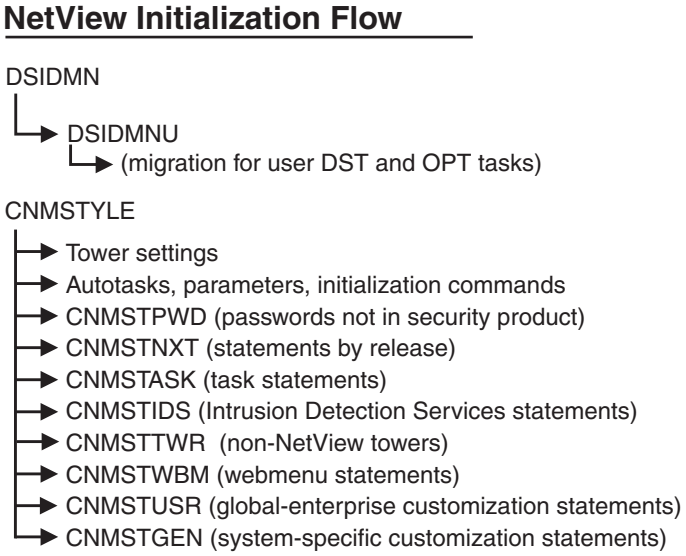


Figure 5. NetView V5R4 Initialization Flow

When you finish with this chapter, continue with Chapter 7, "Getting Ready to Start NetView," on page 141.

If you want information about...	Refer to...
Changes including panels, commands, messages, and samples	Appendix C, "Changes from Tivoli NetView for z/OS Version 5 Release 2 to Tivoli NetView for z/OS Version 5 Release 3," on page 195

New Samples

Table 44 lists new samples to review during migration.

Table 44. List of New Samples

Distributed As	Name	Description	Data Set Name
CNMIPMGT	same	Automation policy for NetView IP management	DSIPARM
CNMSALRT	same	Converts SNMP trap data to an alert and sends the alert to a NetView alert receiver	CNMSAMP
CNMSCRT1	same	Command revision table	DSIPARM
CNMSDCA	same	Provides automation statements that help control the data collection autotasks that are managed by the COLLCTL command.	CNMSAMP
CNMSDDCR	same	Displays distributed DVIPA connection routing information. It formats the DVIPDDCR command output (BNH815I message) into a readable format.	CNMSAMP

Table 44. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSDVCG	same	Automation table member for z/OS Communications Server VIPADYNAMIC TCP/IP profile updates that is included when the DVIPA tower is enabled. The VIPADYNAMIC TCP/IP profile statements that are changed trigger rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSDVDS	same	Automation table member that is used for DVIPA data discovery (including rediscovery) and distributed DVIPA statistics on the master NetView program. It processes the DSIIF003I (DVIPA rediscovery), DSIIF004I (DVIPA data forwarding), DSIIF006I (DVIPA data request), and BNH867I (distributed DVIPA statistical records) messages.	CNMSAMP
CNMSDVPH	same	Displays distributed DVIPA server health information. It formats the DVIPHLTH command output (BNH814I message) into a readable format.	CNMSAMP
CNMSDVST	same	Displays the data in the distributed DVIPA statistical data sets.	CNMSAMP
CNMSDVTP	same	Automation table member for DVIPA SNMP trap automation that is included when the DVIPA tower is enabled. The automation detects that a z/OS Communications Server DVIPA trap was received, which then triggers rediscovery for DVIPA functions on this z/OS system.	CNMSAMP
CNMSHIPR	same	Displays HiperSockets configuration and status information. It formats the HIPERSOC command output (BNH598I message) into a readable format.	CNMSAMP
CNMSIFST	same	Displays IP interfaces. It formats the IFSTAT command output (BNH498I message) into a readable format.	CNMSAMP
CNMSMF3A	same	Sample command list that is called by the automation table when the BNH874I message is issued. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3E	same	Sample IEFACTRT SMF exit to process type 30 SMF records and send them across the program-to-program interface (PPI) to the NetView program for automation	CNMSAMP
CNMSMF3F	same	Sample that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMF3R	same	Sample PPI receiver that formats the BNH874I message. This sample is used for SMF record type 30 automation.	CNMSAMP
CNMSMSIP	same	Sends a CP-MSU over IP	CNMSAMP

Table 44. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
CNMSNVST	same	Displays NetView application information. It formats the NVSTAT command output (BNH495I message) into a readable format.	CNMSAMP
CNMSOSAP	same	Displays the OSA channel and port information. It formats the OSAPORT command output (BNH597I message) into a readable format.	CNMSAMP
CNMSRVAR	same	This sample shows how to manipulate the revision variable table that exists in the NetView SSI and is loaded or queried using the SETRVAR command.	CNMSAMP
CNMSRVMC	same	This sample provides an example of the NETVONLY action command that is used in the command revision table.	DSIPARM
CNMSSMON	same	This sample provides z/OS Communications Server sysplex monitoring message automation and is included when the DVIPA tower is enabled.	CNMSAMP
CNMSTNST	same	This sample displays the configuration and status information about Telnet servers. It formats the TELNSTAT command output (BNH496I message) into a readable format.	CNMSAMP
CNMSTPST	same	This sample displays the configuration and status information about Telnet server ports. It formats the TNPTSTAT command output (BNH497I message) into a readable format.	CNMSAMP
CNMSVPRT	same	Displays status information about VIPA routes. It formats the VIPAROUT command output (BNH824I message) into a readable format.	CNMSAMP
CNMSXCFA	same	Automation sample for XCF sysplex support	DSIPARM
EKG51100	same	PL/I Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
EKG61100	same	C Sample - Function (connect with password phrase) EKG_ConnectLong	CNMSAMP
FKXIPMTB	same	Configuration data for NetView IP management automation	DSIPARM
FKXOPFIP	same	Operator definitions for NetView IP management automation	DSIPARM
FLCSITNM	same	The FLCSITNM sample contains a GETTOPO initialization statement for the MultiSystem Manager IBM Tivoli Network Manager agent. This statement is included in the MultiSystem Manager initialization file sample (FLCAINP).	DSIPARM

Table 44. List of New Samples (continued)

Distributed As	Name	Description	Data Set Name
FLCSPAUT	same	The FLCSPAUT sample contains the REXX source code from the FLCAPAUT command list, which is called from the NetView automation table to process alerts generated by IBM Tivoli Network Manager.	CNMSAMP
IHSABCDS		The IHSABCDS sample contains the sample class definition statements for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSABCFG		The IHSABCFG sample is the sample configuration file for the Event/Automation Service confirmed alert adapter.	SCNMUXCL
IHSANCFG		The IHSANCFG sample is the sample configuration file for the Event/Automation Service confirmed message adapter.	SCNMUXCL
IHSANFMT		The IHSANFMT sample provides sample format specification statements for the Event/Automation Service confirmed message adapter.	SCNMUXCL

VTAM Address Space

The samples in this section list changes for the VTAM address space.

A01APPLS (CNMS0013)

This member contains the application (APPL) major nodes coded for the NetView program.

If you did not reallocate and recopy the VTAMLST data sets, make the following changes to A01APPLS:

- Either set the domain ID (system variable &CNMDOMN) in SYS1.PARMLIB member IEASYM*xx* or change *every* occurrence of &CNMDOMN. in A01APPLS (CNMS0013) to the current domain ID.
- If you are not using the status monitor preprocessor, you can replace the APPL statements defining tasks for multiple concurrent NetView operators with one APPL statement using wildcard characters (??), for example:

```
&CNMDOMN.0?? APPL  AUTH=(NVPACE,SPO,ACQ,PASS),PRTCT=&CNMDOMN.,     X
               EAS=4,MODETAB=AMODETAB,DLOGMOD=DSILGMOD
```

- If you are not using the status monitor preprocessor, you can replace the TAF APPL statements with one APPL statement using wildcard characters (??) following the LU name, for example:

```
TAF01O?? APPL  MODETAB=AMODETAB,EAS=9,       X
               DLOGMOD=M3767
```

APPL names defined for use by other applications (such as TAF) must not be defined with the same naming scheme as terminal logon APPLs (for example, the domain name followed by a 3-character suffix). Doing so can cause these application names to be used by the NetView program for terminal logons, which can make the application names unavailable for the purpose for which they were defined.

CNMNET (CNMSJ008)

CNMNET (CNMSJ008) is the start procedure for the VTAM program.

Change CNMNET in your PROCLIB in the following way:

1. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.

NetView Address Space

The samples in this section list changes for the NetView address space.

CNMCMSYS

DSIPARM member CNMCMSYS contains sample CMDDEF statements.

Add the following statements to define the NetView Web Services server:

```
*--------------------------------------------------------------------*
*  NetView Web Services Server                                       *
*--------------------------------------------------------------------*
CMDDEF.DSISRVR.MOD=DSISRVR
CMDDEF.DSISRVR.TYPE=R
CMDDEF.DSISAUTH.MOD=DSISAUTH
CMDDEF.DSISAUTH.TYPE=R
CMDDEF.DSISAUTH.ECHO=N
```

CNMCMENT

The CNMCMENT member in the DSIPARM data set contains sample CMDDEF statements. Do not modify this sample. Use the V5R4 version. Add any customization for your system to the CNMCMDU member.

CNMEALUS

The CNMEALUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to alert information and to pass the alert information to either the alert adapter or the confirmed alert adapter of Event/Automation Service.

CNMEMSUS

The CNMEMSUS REXX EXEC sample is enhanced. This sample provides examples on how to add user data to message information and to pass the message information to either the message adapter or the confirmed message adapter of Event/Automation Service.

CNMIPMGT

DSIPARM member CNMIPMGT contains IP management policy definitions. It is included by the CNMPOLCY member.

CNMPOLCY

The CNMPOLCY member in the DSIPARM data set contains the automation policy for the NetView program.

For IP management, add the following statement:

```
%>IF TOWER('IPMGT') & ¬TOWER('AON.TCP') THEN
%INCLUDE CNMIPMGT
```

TCP390 Statement Notes:

1. (Web Application only) Specify the DVIPADAT keyword to view DVIPA data.
2. Many of the NetView components (for example, IPTRACE and NVSNMP) use SNMP queries to retrieve data, and must therefore have correct community names. Be sure to use the same community names in the CNMPOLCY member that are defined to the TCPIP stacks being managed. For additional information on community names, see *IBM Tivoli NetView for z/OS IP Management*.
3. The IPSTAT keyword was removed from the TCP390 statement.

CNMPROC (CNMSJ009)

CNMPROC (CNMSJ009) is the start procedure for the NetView program.

Make the following changes to CNMPROC in your PROCLIB:

1. For NetView data sets ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
2. For NetView data sets ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
3. The default region size was increased to 98304K. If you are using the existing default region size (65536K) for the NetView product, increase the region size value:

   ```
   //       REG=98304,            ** REGION SIZE(IN K) FOR NETVIEW
   ```

   Depending on the components that you are running, you might want to increase the region size even more. For additional information, refer to the *IBM Tivoli NetView for z/OS Tuning Guide*.
4. If you plan to run Language Environment (LE) HLL programs with the NetView program, and did not install the LE runtime library in the LNKLSTxx, be sure the library name in the STEPLIB of CNMPROC is correct and uncommented.
5. If you plan to use the Web Services Gateway function, uncomment the XML toolkit and GSKit library DD statements.

   ```
   //*************************************************************
   //*
   //* IF YOUR ARE STARTING NETVIEW WEB SERVICES SERVER THEN
   //* YOU WILL NEED ACCESS TO BOTH IBM XML AND GSK TOOL RUN TIME
   //* LIBRARIES
   //*
   //* - IF YOU HAVE THESE LIBRARIES ON YOUR SYSTEM
   //*   BUT THEY ARE NOT ACCESSIBLE FROM THE PLPA OR LINKLST,
   //*   THEN YOU MUST UNCOMMENT LINES BELOW.
   //*
   //* WHEN YOU UNCOMMENT EITHER OF THE LINES BELOW, MAKE SURE
   //* THAT THE DSN ACTUALLY MATCHES THE NAME ON YOUR SYSTEM.
   //* IN ADDITION, MAKE SURE THAT THE DATASET IS APF-AUTHORIZED.
   //*      QIXM='IXM.V1R8M0', ** IBM XML TOOLKIT RUNTIME LIB.
   //*      QGSK='SYS1',       ** IBM GSK TOOLKIT RUNTIME LIB.
   //*        DD   DSN=&QGSK..SIEALNKE,DISP=SHR
   //*        DD   DSN=&QIXM..SIXMLOD1,DISP=SHR
   //*
   ```
6. If you plan to collect distributed DVIPA statistics, add the following data sets:

   ```
   //CNMDVIPP DD   DSN=&VQ1.&DOMAIN.CNMDVIPP,DISP=SHR
   //CNMDVIPS DD   DSN=&VQ1.&DOMAIN.CNMDVIPS,DISP=SHR
   ```

CNMPSSI (CNMSJ010)

CNMPSSI (CNMSJ010) starts the NetView subsystem address space.

Make the following changes to CNMPSSI in your PROCLIB:

1. Ensure that the high-level qualifier for system data sets points to NETVIEW.V5R4M0.

CNMSAF2

The CNMSAF2 member in the CNMSAMP data set contains sample RACF definitions for NetView operators and commands.

Because of extensive changes to the CNMSAF2 member, use the V5R4 version as the base and copy over any installation-specific changes that you made to the V5R3 copy.

The following autotasks were deleted:

- AUTODC5
- AUTODC6
- AUTODC7
- AUTOLNM1
- AUTOLNMA
- AUTONA
- AUTONF1
- AUTONFA

The following autotasks were added:

Table 45. Autotask definitions

Function	Autotask Definitions
Command Revision	ADDUSER MVSCMDS ALTUSER MVSCMDS NETVIEW(MSGRECVR(NO) CTL(GLOBAL))
DVIPA	ADDUSER DVIPAUTO ALTUSER DVIPAUTO NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER DVIPSTAT ALTUSER DVIPSTAT NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT1 ALTUSER AUTOCT1 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT2 ALTUSER AUTOCT2 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT3 ALTUSER AUTOCT3 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT4 ALTUSER AUTOCT4 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))
Discovery manager	ADDUSER AUTOCT5 ALTUSER AUTOCT5 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT6 ALTUSER AUTOCT6 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOCT7 ALTUSER AUTOCT7 NETVIEW(IC(LOGPROF5) MSGRECVR(NO) CTL(GLOBAL))
TCP/IP	ADDUSER AUTOTCPC ALTUSER AUTOTCPC NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOPKTS ALTUSER AUTOPKTS NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOOPKT ALTUSER AUTOOPKT NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOTCPS ALTUSER AUTOTCPS NETVIEW(IC(LOGPROF4) MSGRECVR(NO) CTL(GLOBAL))

Table 45. Autotask definitions (continued)

Function	Autotask Definitions
Web Services Gateway	ADDUSER AUTONVSP ALTUSER AUTONVSP NETVIEW(MSGRECVR(NO) CTL(GLOBAL))
XCF services	ADDUSER AUTOXCF ALTUSER AUTOXCF NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOXDSC ALTUSER AUTOXDSC NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL)) ADDUSER AUTOEDAT ALTUSER AUTOEDAT NETVIEW(IC(LOGPROF2) MSGRECVR(NO) CTL(GLOBAL))

CNMSCAT2

DSIPARM member CNMSCAT2 contains the sample command authorization table.

Make the following changes to the CNMSCAT2 member:

1. Add the following GROUP NVOPS1 statements:

```
GROUP   NVOPS1   AUTOCT1,AUTOCT2,AUTOCT3,AUTOCT4,AUTOCT5,AUTOCT6
GROUP   NVOPS1   AUTOCT7,AUTOXDSC,DVIPAUTO,DVIPSTAT,AUTOEDAT
```

2. Remove the AUTODC5, AUTODC6, and AUTODC7 autotasks from the GROUP NVOPS1 statement and add the MVSCMDS and AUTOXCF autotasks:

```
GROUP   NVOPS1   AUTODC2,AUTODC3,AUTODC4,MVSCMDS,AUTOXCF
```

3. Change the following GROUP NVOPS2 statement to add the MVSCMDS and AUTOXCF autotasks:

```
GROUP   NVOPS2   NETOP1,NETOP2,AUTO1,AUTO2,AUTDVIPA,MVSCMDS,AUTOXCF
```

4. Add the following GROUP NVOPS2 statement:

```
GROUP   NVOPS2   AUTOXDSC,AUTOEDAT
```

5. Change the following GROUP NCONVGRP statement to add the AUTOXCF autotask:

```
GROUP   NCONVGRP AUTO1,NETOP1,NETOP2,OPER1,OPER2,OPER3,AUTOXCF
```

6. Delete the AUTONA task from the following GROUP NAOPS1 statement:

```
GROUP   NAOPS1   AUTONA,NETOP1,NETOP2,AUTO1,AUTO2,AUTONALC
```

7. Add the following GROUP SOAOPS1 statement:

```
GROUP   SOAOPS1   NETOP1,NETOP2,AUTO1,AUTO2,AUTONVSP
```

8. Add the following PROTECT statements:

```
PROTECT          *.*.CNMEXCON
PROTECT          *.*.CNMEXPRC
PROTECT          *.*.DSISRVR
PROTECT          *.*.DSISAUTH
PROTECT          *.*.CNME8206
PROTECT          *.*.CNME8206.START
PROTECT          *.*.CNME8206.STOP
PROTECT          *.*.CNME8206.LISTINFO
PROTECT          *.*.CNME8206.LSTSRVRS
PROTECT          *.*.CNME8250.START
PROTECT          *.*.CNME8250.STOP
PROTECT          *.*.CNME8260
PROTECT          *.*.DSIPIXCF
PROTECT          *.*.DSIPIXTB
PROTECT          *.*.DSISRVR
PROTECT          *.*.DSISAUTH
PROTECT          *.*.REVISE
PROTECT          *.*.PLEXCTL
PROTECT          *.*.START.XCFGROUP.*
```

9. Delete the following PROTECT statements:

```
PROTECT          *.*.CNME7200
PROTECT          *.*.CNME7205
PROTECT          *.*.CNME7210
PROTECT          *.*.CNME7211
PROTECT          *.*.CNME7212
PROTECT          *.*.CNME7213
PROTECT          *.*.CNME7221
PROTECT          *.*.CNME7225
```

10. Add the following PERMIT statements:

```
PERMIT  NAOPS1   *.*.CNME8200
PERMIT  NVOPS1   *.*.CNME8250.START
PERMIT  NVOPS1   *.*.CNME8250.STOP
PERMIT  NVOPS1   *.*.CNME8260
PERMIT  NVOPS2   *.*.CNMEXCON
PERMIT  NVOPS2   *.*.CNMEXPRC
PERMIT  NVOPS2   *.*.DSIPIXCF
PERMIT  NVOPS2   *.*.DSIPIXTB
PERMIT  NVOPS2   *.*.REVISE
PERMIT  NVOPS2   *.*.PLEXCTL
PERMIT  NVOPS2   *.*.START.XCFGROUP.*
PERMIT  SOAOPS1  *.*.CNME8206
PERMIT  SOAOPS1  *.*.CNME8206.START
PERMIT  SOAOPS1  *.*.CNME8206.STOP
PERMIT  SOAOPS1  *.*.CNME8206.LISTINFO
PERMIT  SOAOPS1  *.*.CNME8206.LSTSRVRS
PERMIT  SOAOPS1  *.*.DSISRVR
PERMIT  SOAOPS1  *.*.DSISAUTH
```

11. Delete the following PERMIT statements:

```
PERMIT  NAOPS1   *.*.CNME7200
PERMIT  NAOPS2   *.*.CNME7205
PERMIT  NAOPS2   *.*.CNME7210
PERMIT  NAOPS2   *.*.CNME7211
PERMIT  NAOPS2   *.*.CNME7212
PERMIT  NAOPS2   *.*.CNME7213
PERMIT  NAOPS2   *.*.CNME7221
PERMIT  NAOPS2   *.*.CNME7225
```

CNMSIHSA

The CNMSIHSA automation table sample is enhanced. This sample provides examples on how to automate messages and alerts in order to send message and alert data to the various Event/Automation Service adapters:

- message adapter
- confirmed message adapter
- alert adapter
- confirmed alert adapter
- alert-to-trap adapter

CNMSTYLE

The CNMSTYLE member in the DSIPARM data set is used during NetView initialization. Make any changes to CNMSTYLE statements in the CNMSTUSR or C*xx*STGEN member. For information about changing CNMSTYLE statements, see *IBM Tivoli NetView for z/OS Installation: Getting Started*. The CNMSTYLE member is designed to simplify the NetView initialization process.

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function. Because of this, the MVScmdMgt tower is removed.

The following TOWERs were added:

- DISCOVERY - enables the discovery of sysplexes, z/OS systems, coupling facilities, TCP/IP stacks, TCP/IP subplexes, and NetView applications
- IPMGT - enables IP management
- NVSOA - enables the Web Services Gateway function

The Multisystem Manager LAN Network Manager (LNM) subtower was removed.

The ITNM subtower was added for the Multisystem Manager IBM Tivoli Network Manager feature.

The HiperSockets configuration and status (HIPERSOCKETS), VIPA routes and distributed DVIPA connection routing (DVROUT), OSA channels and ports (OSA), and Telnet servers and ports (TELNET) subtowers were added to the Tivoli NetView for z/OS Enterprise Management Agent.

Define any NetView programs that have the fix applied for APAR OA29938 on the ENT.SYSTEMS statements in the CNMSTYLE member of the V5R4 master NetView program. For information about the ENT.SYSTEMS statement, see the *IBM Tivoli NetView for z/OS Administration Reference*.

WEB.NMC statements were removed. The NetView management console for V5R4 no longer launches SNMP functions provided by the Web application. Update CNMSTUSR or C*xx*STGEN as necessary.

Because the NetView for z/OS Tivoli Enterprise Portal Agents are no longer supported, the following CNMSTYLE statements were deleted:

- function.autotask.NAOPER
- INIT.NACMD
- NACMD.AGENT
- NACMD.HOSTDEST
- NACMD.PORT
- NACMD.SRCNAME
- NACMD.TCPNAME

Because the DVIPA Workload by Port workspace is deprecated in the NetView for z/OS Enterprise Management Agent, the NACMD.ROWSDVTADWP statement was deleted.

The DVIPA data collection function moved from the TEMA tower to the DVIPA tower. For changes, see Table 46.

Table 46. CNMSTYLE Statement Changes (DVIPA Tower)

V5R3 statement	V5R4 statement (replacement)
function.autotask.NAPOLTSK7	function.autotask.COLTSK1
function.autotask.NAPOLTSK5	function.autotask.COLTSK2
function.autotask.NAPOLTSK6	function.autotask.COLTSK3
NACMD.INTDVDEF	DVIPA.INTDVDEF
NACMD.INTDVTAD	DVIPA.INTDVTAD
NACMD.INTDVCONN	DVIPA.INTDVCONN

For information about new, changed, or deleted CNMSTYLE statements, see "CNMSTNXT."

CNMSTNXT

The CNMSTNXT member contains statements that are new, changed, or deleted. Statements are grouped according to version and release level of the NetView product. Review the statements in the CNMSTNXT member and update the CNMSTUSR or C*xx*STGEN member as necessary.

If you want information about...	Refer to...
CNMSTYLE statements	*IBM Tivoli NetView for z/OS Administration Reference*

CNMSTWBM

If you are using the version of the CNMSTWBM member that is supplied by the NetView product, no changes are required. If you modified the V5R3 CNMSTWBM member, copy any changes that you made into the V5R4 version.

In V5R4, the following statements were removed from the CNMSTWBM member:
- webmenu.mytasks.mibloadr (load and unload SNMP MIBs)
- webmenu.mytasks.mib (launch MIB Browser)
- webmenu.mytasks.rtp (launch Real Time Poller)
- webmenu.mytasks.clistart (issue SNMP commands)

DSIAUTB

The DSIAUTB sample lists parts that use the AUTBYPAS REXX or CLIST function. Do not modify this sample. Use the V5R4 version. Add any customization for your system to the DSIAUTBU member.

DSIOPF

If you are using the version of the DSIOPF member that is supplied by the NetView product, no changes are required. If you modified the V5R3 DSIOPF member, copy any changes that you made into the V5R4 version.

The following statements were added to the DSIOPF member:

- Conditional include for operator definitions for the IPMAN function if the AON tower is not active:

```
%>IF TOWER('IPMGT') & ¬TOWER('AON') THEN
  %INCLUDE FKXOPFIP
```

The following operator definitions were added:

Table 47. Operator Definitions Added to DSIOPF

Operator Definition	DSIOPF Statements		
Distributed DVIPA statistics autotask	DVIPSTAT	OPERATOR PROFILEN	PASSWORD=DVIPSTAT DSIPROFC
DVIPA event and data forwarding autotask	DVIPAUTO	OPERATOR PROFILEN	PASSWORD=DVIPAUTO DSIPROFC
Autotask that manages the NETVONLY action for Command Revision.	MVSCMDS	OPERATOR PROFILEN	PASSWORD=MVSCMDSL DSIPROFC
DVIPA definition and status autotask	AUTOCT1	OPERATOR PROFILEN	PASSWORD=AUTOCT1 DSIPROFN

Table 47. Operator Definitions Added to DSIOPF (continued)

Operator Definition	DSIOPF Statements
DVIPA sysplex distributors, distributed targets, and server health autotask	AUTOCT2 OPERATOR PASSWORD=AUTOCT2 PROFILEN DSIPROFN
DVIPA connections autotask	AUTOCT3 OPERATOR PASSWORD=AUTOCT3 PROFILEN DSIPROFN
VIPA routes and distributed DVIPA connection routing autotask	AUTOCT4 OPERATOR PASSWORD=AUTOCT4 PROFILEN DSIPROFN
OSA channels and ports autotask	AUTOCT5 OPERATOR PASSWORD=AUTOCT5 PROFILEN DSIPROFN
Telnet servers and Telnet server ports autotask	AUTOCT6 OPERATOR PASSWORD=AUTOCT6 PROFILEN DSIPROFN
NetView applications autotask	AUTOCT7 OPERATOR PASSWORD=AUTOCT7 PROFILEN DSIPROFN
XCF services autotasks	AUTOXCF OPERATOR PASSWORD=AUTOXCF PROFILEN DSIPROFC AUTOXDSC OPERATOR PASSWORD=AUTOXDSC PROFILEN DSIPROFC AUTOEDAT OPERATOR PASSWORD=AUTOEDAT PROFILEN DSIPROFC
Autotasks for opening NMI sockets to the Communications Server (see note 1)	AUTOTCPC OPERATOR PASSWORD=AUTOTCPC PROFILEN DSIPROFG AUTOPKTS OPERATOR PASSWORD=AUTOPKTS PROFILEN DSIPROFG AUTOOPKT OPERATOR PASSWORD=AUTOOPKT PROFILEN DSIPROFG AUTOTCPS OPERATOR PASSWORD=AUTOTCPS PROFILEN DSIPROFG
Autotask to receive SMF 30 records	AUTOSMF3 OPERATOR PASSWORD=AUTOSMF3 PROFILEN DSIPROFC
NetView Web Services Gateway autotask	AUTONVSP OPERATOR PASSWORD=AUTONVSP PROFILEN DSIPROFC

Notes:

1. If you already defined operators for the function.autotask.TCPCONN.*stckname* statement or the function.autotask.PKTS.stckname statement in the CNMSTYLE member, then you might not need to add the AOTOTCPC or AUTOPKTS operators.

Remove the following statements:

```
AUTONA      OPERATOR    PASSWORD=AUTONA
PROFILEN    DSIPROFC

AUTODC5      OPERATOR    PASSWORD=AUTODC5
             PROFILEN    DSIPROFN
AUTODC6      OPERATOR    PASSWORD=AUTODC6
             PROFILEN    DSIPROFN
AUTODC7      OPERATOR    PASSWORD=AUTODC7
             PROFILEN    DSIPROFN
```

DSIOPFU

Copy any operator definitions that you defined in your V5R3 DSIOPFU member to the V5R4 version.

You can add Data REXX logic to conditionally define operator definitions in the DSIOPFU member. Data REXX files must have either `/*%DATA*/` or `/*%LOGIC*/` as the first statement. Comments can follow on the same or subsequent lines. A blank

in the first column indicates a continuation of the previous statement. For more information on Data REXX, refer to *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

FKXOPFIP

The FKXOPFIP member is used when the IPMGT tower is enabled. This member is not used if the AON component is enabled. Because of this, operator definitions duplicate those in the EZLOPF and FKXOPF members.

The following operator definitions were added:

Table 48. Operator Definitions Added to FKXOPFIP

Operator Definition	DSIOPF Statements		
IP management services autotasks	AUTIPM*x*	OPERATOR PROFILEN	PASSWORD=AUTIPM*x* EZLPRFAO

DSITBL01

The DSITBL01 member contains sample automation table definitions.

Several messages that are supplied by the NetView product have changed with the V5R4 program. These messages are listed in the appendixes. Review the list and make any necessary changes to your automation table.

Modify the IDS conditional statements in the automation table that check for the presence of the IDS subtower under the AON tower to check for the presence of the IDS subtower under the AON tower or the IPMGT tower. See Table 49 for an example on how to change the conditional statements in the DSITBL01 member.

Table 49. DSITBL01 conditional statements

Existing conditional statement:
`%>IF TOWER('`**`AON.TCP.IDS`**`') THEN`
Updated conditional statement:
`%>IF TOWER('`**`AON.TCP.IDS`**`') | TOWER('`**`IPMGT.IDS`**`') THEN`

Message automation is used to update information when some discovery manager resources start and stop. Add the CNMSEPTL automation sample member for these events. The CNMSEPTL member is included when the DISCOVERY tower is enabled.

```
* Load local resource discovery table
%>IF tower('DISCOVERY') THEN
%INCLUDE CNMSEPTL
```

For DVIPA automation, add the following statements:

```
* Include the following DVIPA samples:
* CNMSDVDS - Automation for forwarding information to the master NetView
* CNMSDVTP - Samples for automating z/OS Communications Server SNMP
*            DVIPA traps
* CNMSDVCG - Samples for automating z/OS Communications Server DVIPA
*            configuration updates
* CNMSSMON - Samples for automating z/OS Communications Server
*            sysplex autonomics messages
%>IF tower('DVIPA') THEN
%>do;
     %INCLUDE CNMSDVDS
```

```
     %INCLUDE CNMSDVTP
     %INCLUDE CNMSDVCG
     %INCLUDE CNMSSMON
%>end;
```

For XCF sysplex support, add the following statements:

```
** Load statements that relate to the z/OS sysplex master function.
%INCLUDE CNMSXCFA
```

For COLLCTL command automation, add the following statements:

```
*************** COLLCTL command AUTOMATION ***************************
%INCLUDE CNMSDCA
```

For SMF type 30 record automation using the CNMSMF3E sample, add the following statements:

```
*************** SMF 30 RECORD AUTOMATION *****************************
IF MSGID = 'BNH874I' THEN
     EXEC(CMD('CNMSMF3A')) NETLOG(Y) SYSLOG(N);
```

For more information on automating the SMF type 30 records, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.

DSIZVLSR

The DSIZVLSR module defines the buffer pools to be used with the VSAM LSR and DSR performance options. Update the DSIZVLSR module by using the CNMSJM01 sample job. Use the DSIZVLSR module shipped with V5R4. If you previously updated the CNMSJM01 job, merge those changes into the V5R4 version of the CNMSJM01 job and run it to assemble and link-edit your changes into the DSIZVLSR module.

The following change was made to the DSIZVLSR module:

- The buffer size in the DATA buffer pool for the DSITCONT VSAM clusters were changed from 22528 bytes to 26624 bytes.

EZLCMENT

Several command definitions were moved from the EZLCMENT member into the CNMCMENT member so that these commands are available to IPMGT tower processing. If you are using the versions of the EZLCMENT and CNMCMENT members that are supplied by the NetView product, no changes are required. If you modified the V5R3 EZLCMENT member, move any changes that you made into the V5R4 CNMCMDU member to facilitate future migrations.

FKXCMENT

Several command definitions were moved from the FKXCMENT member into the CNMCMENT member so that these commands are available for IPMGT tower processing. If you are using the versions of the FKXCMENT and CNMCMENT members that are supplied with the NetView product, no changes are required. If you modified V5R3 FKXCMENT member, move any changes that you made into the V5R4 CNMCMDU member to facilitate future migrations.

RODM Address Space

The samples in this section list changes for the RODM address space.

EKGLOADP

EKGLOADP is the sample RODM load procedure JCL.

Make the following changes to EKGLOADP:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.

EKGXRODM

EKGXRODM is the RODM start procedure.

Make the following changes to EKGXRODM:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.
3. If you have not installed the Language Environment for OS/390 runtime library in LNKLST*xx* or PROG*xx*, be sure the library name in the STEPLIB of EKGXRODM is correct and uncommented. Remove DD statements for PL/I or C/C++ runtime libraries because these libraries are no longer being used.

GMFHS Address Space

The samples in this section list changes for the GMFHS address space.

CNMGMFHS (CNMSJH10)

CNMGMFHS (CNMSJH10) is the GMFHS start procedure.

Make the following changes to CNMGMFHS:

1. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
2. For NetView data sets, ensure your high-level qualifier for user-defined data sets points to NETVIEW.V5R4USER.

CNMSJH12

CNMSJH12 is the sample GMFHS/SNA Topology Manager data model load job.

The REGION=0M specification was added to ensure that the CNMSJH12 job completes without errors in a JES3 environment. The REGION=0M specification can be subject to JES definitions and to IEFUSI and IEALIMIT installation exits.

Event/Automation Service Address Space

The sample in this section lists changes for the Event/Automation Service address space.

IHSAEVNT

IHSAEVNT starts the Event/Automation Service address space. Make the following changes to IHSAEVNT in your PROCLIB:

1. Add the following comments:

```
//*  4.  There are additional keywords and values which may be
//*      specified in the PARM string, which a) are not in the
//*      style of a UNIX System Services shell command parameter and
```

```
//*      b) do not have procedure keyword definitions in this sample
//*      procedure.  They are described as follows.
//*
//*      CMSGCFG=value
//*
//*        CMSGCFG provides the name of a member of the IHSSMP3 file
//*        containing configuration parameters for the confirmed
//*        message adapter task, MESSAGEC.  If the value is provided,
//*        it must be a valid partitioned data set member name.
//*        If the keyword is omitted or is given no value, the
//*        default value is IHSANCFG.
//*
//*      CALRTCFG=value
//*
//*        CALRTCFG provides the name of a member of the IHSSMP3 file
//*        containing configuration parameters for the confirmed
//*        alert adapter task, ALERTC.  If the value is provided,
//*        it must be a valid partitioned data set member name.
//*        If the keyword is omitted or is given no value, the
//*        default value is IHSABCFG.
//*
```

2. The SCNMUXLK data set has been replaced with the CNMLINK data set. See Table 50 for an example on how to change the STEPLIB DD statement.

Table 50. STEPLIB DD statement

Existing statement:
`//STEPLIB  DD DSN=NETVIEW.V5R3M0.SCNMUXLK,DISP=SHR`
Updated statement:
`//STEPLIB  DD DSN=`**`NETVIEW.V5R4M0.CNMLINK,`**`DISP=SHR`

3. The SCNMUXMS data set that was specified on the IHSMSG1 DD statement has been replaced with the SDUIMSG1 data set. See Table 51 for an example on how to change the IHSMSG1 DD statement.

Table 51. IHSMSG1 DD statement

Existing statement:
`//IHSMSG1  DD DSN=NETVIEW.V5R3M0.SCNMUXMS,DISP=SHR`
Updated statement:
`//IHSMSG1  DD DSN=`**`NETVIEW.V5R4M0.SDUIMSG1,`**`DISP=SHR`

4. For NetView data sets, ensure your high-level qualifier for system data sets points to NETVIEW.V5R4M0.
5. Add the following output data sets:

```
//*   EAS OUTPUT DATASETS
//IHSN     DD SYSOUT=A
//IHSB     DD SYSOUT=A
  .
  .
  .
//IHSNS    DD SYSOUT=A
//IHSBS    DD SYSOUT=A
  .
  .
  .
//IHSNSTD  DD SYSOUT=A
//IHSBSTD  DD SYSOUT=A
```

IHSAINIT

The IHSAINIT sample is the initialization file for the Event/Automation Service. Information was added to this sample to support the confirmed alert and message

adapters. The NOSTART statements are included to prevent the Event/Automation Service from automatically starting the confirmed alert adapter and confirmed message adapter services.

```
# The following keywords are supported:
#   CMSGCFG  - Specifies the confirmed message adapter configuration file
#   CALRTCFG - Specifies the confirmed alert adapter configuration file
#
# The syntax for each keyword follows:
#   CMSGCFG=confirm_message_config_file
#   CALRTCFG=confirm_alert_config_file
#   TRACE TASK=task_designator LEVEL=trace_level IP=on_or_off
#
#     confirm_message_config_file - Specifies the name of the confirmed message
#                          adapter configuration file.  If not prefaced with the
#                          escape character (\), this is the name of a member of
#                          the IHSSMP3 file.  Otherwise, this is a complete file
#                          name.  If E/AS is an MVS started task, the default
#                          value of this keyword is IHSANCFG.  If E/AS is started
#                          in a UNIX System Services shell, the default value is
#                          /etc/netview/confirm_message_adpt.conf.
#
#     confirm_alert_config_file - Specifies the name of the confirmed alert
#                          adapter configuration file.  If not prefaced with the
#                          escape character (\), this is the name of a member of
#                          the IHSSMP3 file.  Otherwise, this is a complete file
#                          name.  If E/AS is an MVS started task, the default
#                          value of this keyword is IHSABCFG.  If E/AS is started
#                          in a UNIX System Services shell, the default value is
#                          /etc/netview/confirm_alert_adpt.conf.
#     output_destination - specifies the location where the trace and error
#                           messages will be logged. The values are:
#     SYSOUT - Specifies a system output file.  When started by an MVS startup
#              procedure, the primary and secondary files for each task are:
#
#                  IHSN and IHSNS for the MESSAGEC task
#                  IHSB and IHSBS for the ALERTC task
#
#                When started under UNIX System Services, the default primary and
#                secondary file names for each task are:
#
                   cmessagep.err and cmessages.err for the MESSAGEC task
#                  calertp.err and calerts.err for the ALERTC task

#     task_designator - is one of the following:
#       MESSAGEC - Specifies the confirmed message adapter task
#       ALERTC   - Specifies the confirmed alert adapter task

#       Note : CONTROL is not valid on the NOSTART statement.  ALL does not
#              include CONTROL for the NOSTART statement
#
#     on_or_off - is one of the following:
#       ON      - Specifies that data sent or received using TCP/IP
#                 will be traced.  Additional information for the
#                 z/OS UNIX C/C++ socket functions used may appear.
#       OFF     - Specifies that no tracing of data or socket
#                 functions will be done.  This is the default.
#
# Confirmed Message Adapter Configuration File
#CMSGCFG=IHSANCFG
#CMSGCFG=\/etc/netview/confirm_message_adpt.conf
#
# Confirmed Alert Adapter Configuration File
#CALRTCFG=IHSABCFG
#CALRTCFG=\/etc/netview/confirm_alert_adpt.conf
#
# Tasks not started at initialization (example)
```

```
NOSTART TASK=MESSAGEC
NOSTART TASK=ALERTC
#
# Confirmed Message Adapter Task
#TRACE TASK=MESSAGEC LEVEL=OFF
#
# Confirmed Alert Adapter Task
#TRACE TASK=ALERTC LEVEL=OFF
```

Additional Considerations

Consider changes to the following functions:

UNIX System Services

This section describes the directories, configuration files, and functions that changed from NetView V5R3 to NetView V5R4. Also review the section in "Preparing UNIX System Services" on page 19.

The NetView MIB collection was moved from the /usr/lpp/netview/v5r3/mibs/ directory to the /usr/lpp/netview/v5r4/mibs/ directory. Make sure that your MIBPATH statement in the CNMSTYLE member points to the V5R4 mib directory.

The at-tls sample configuration files in Table 52 were renamed and moved from the /usr/lpp/netview/v5r3/samples directory to the /usr/lpp/netview/v5r4/samples/at-tls directory.

Table 52. at-tls sample configuration files

V5R3 file name	V5R4 file name
znetview_at-tls.conf	conf
znetview_at-tls.rules	rules
znetview_at-tls_keyring.db	keyring.db
znetview_at-tls_keyring.rdb	keyring.rdb
znetview_at-tls_keyring.sth	keyring.sth
znetview_at-tls_nmcSrvrCert.arm	nmcSrvrCert.arm
znetview_at-tls_pagent.env	pagent.env
znetview_at-tls_znvCert.arm	znvCert.arm

The Web resources files that are used by the Web Services Gateway function are located in the following directory:

```
/usr/lpp/netview/v5r4/www/
```

See *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* to update the files for your environment. The WSDL files automatically generate a proxy-client connection.

Table 53. Web Services Gateway files

File name	Purpose	Modifications
znvsoatx.htm	Text-based Web Services client. This file works with Microsoft Internet Explorer version 7 or higher or Mozilla 2.0.014 or later.	Update URLs for your environment. Locate the <SELECT> tag and modify the <OPTION>*your.web.services.server*</OPTION> tag.
znvsoa.htm	Graphic version of the Web Services client. This file works only with Microsoft Internet Explorer version 7 or later.	Update URLs for your environment. Locate the <SELECT> tag and modify the <OPTION>*your.web.services.server*</OPTION> tag.
znvwsdl.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the <soap:address location= > tag.
znvwsdl1.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the <soap:address location= > tag.
znvwsdl2.wsdl	Provides Web services definitions for different output formats.	Update the soap:address location for your environment. Locate the <soap:address location= > tag.

Tivoli NetView for z/OS Enterprise Agents

The following versions of the NetView for z/OS Tivoli Enterprise Portal Agent are no longer supported:

- NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0
- NetView for z/OS Tivoli Enterprise Portal V6.1 Agent Version 5.2.5
- NetView for z/OS Tivoli Enterprise Portal Agent Version 5.3

There is no migration path to move from these existing agents to the Tivoli NetView for z/OS Enterprise Management Agent Version 5.4. To install the new agent, refer to *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*.

Migration Considerations:

1. If you have the AGENT keyword coded in automation or in EXECs that you have written, remove it. It is no longer valid.
2. For information about upgrading an existing installation of IBM Tivoli Monitoring, see the *IBM Tivoli Monitoring Installation and Setup Guide*.

Removing the NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0

The NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0 runs in the OMEGAMON version 3.6.0 environment. Do not install the Tivoli NetView for z/OS Enterprise Management Agent 5.4 data files in the OMEGAMON version 3.6.0 environment.

To remove the NetView for z/OS Tivoli Enterprise Portal Agent Version 5.2.0, complete the following steps based on your installation system.

Windows system:

1. Stop the IBM Tivoli Monitoring components, including the Tivoli Service Manager (Manage Tivoli Enterprise Monitoring Services dialog).
2. From the Control Panel, select **Add or Remove Programs**.
3. Select **NetView for z/OS Tivoli Enterprise Portal Agent**.
4. From the Modify, Repair, or Remove the Program window, select **Remove**.

UNIX system:

1. Stop the IBM Tivoli Monitoring components, including the Tivoli Service Manager (Manage Tivoli Enterprise Monitoring Services dialog).
2. From the $CANDLEHOME/bin directory, issue the following shell script:

   ```
   /uninstall.sh
   ```
3. You are prompted to choose a product to uninstall. Select **NetView for z/OS Agent**.

Removing the NetView for z/OS Tivoli Enterprise Portal V6.1 Agent Version 5.2.5

To remove the NetView for z/OS Tivoli Enterprise Portal V6.1 Agent, complete the following steps based on your installation system.

Windows system:

1. Stop the IBM Tivoli Monitoring components and Manage IBM Tivoli Monitoring.
2. From the Control Panel, select **Add or Remove Programs**.
3. Select **IBM NetView for z/OS Tivoli Enterprise Portal V6.1 Agent**.
4. From the Modify, Repair, or Remove the Program window, select **Remove**.

UNIX or Linux system:

1. Stop the IBM Tivoli Monitoring components and Manage IBM Tivoli Monitoring.
2. From the <install-dir>/bin directory, issue the following shell script:

   ```
   /uninstall.sh
   ```
3. You are prompted to choose a product to uninstall. Select **NetView for z/OS V5R2 Agent**.

Removing the NetView for z/OS Tivoli Enterprise Portal Agent Version 5.3

The NetView for z/OS Tivoli Enterprise Portal Agent Version 5.3 runs with Version 6.1 Fix pack 5 or a later FP1 fixpack of the Tivoli Management Services components.

To remove the NetView for z/OS Tivoli Enterprise Portal Agent, complete the following steps based on your installation system.

Windows system:

1. Stop the IBM Tivoli Monitoring components and Manage IBM Tivoli Monitoring.
2. From the Control Panel, select **Add or Remove Programs**.
3. Select **IBM NetView for z/OS Tivoli Enterprise Portal Agent**.
4. From the Modify, Repair, or Remove the Program window, select **Remove**.

UNIX or Linux system:

1. Stop the IBM Tivoli Monitoring components and Manage IBM Tivoli Monitoring.
2. From the <install-dir>/bin directory, issue the following shell script:

```
/uninstall.sh
```

3. You are prompted to choose a product to uninstall. Select **NetView for z/OS V5R3 Agent**.

NetView for z/OS and Tivoli NetView for z/OS Enterprise Management Agent Versions

The Tivoli NetView for z/OS Enterprise Management Agent (NetView agent) requires Tivoli Management Services V6.2.1 Interim Fix 3. If you are not currently running at this level, upgrade the following components to the V6.2.1 Interim Fix 3 level before you install the NetView agent:

- Tivoli Enterprise Portal desktop client
- Tivoli Enterprise Portal Server
- Hub Tivoli Enterprise Monitoring Server

The NetView program is the data source for the NetView agent. Because of this, both the NetView program and the NetView agent must be at the V5R4 level.

Before upgrading the NetView agent, review the *IBM Tivoli OMEGAMON XE and Tivoli Management Services on z/OS Upgrade Guide*. The general order of upgrade procedures documented for the OMEGAMON XE V4.2 monitoring agents also applies to the NetView agent.

For a list of changes to the NetView agent for Version 5.4, see "Enterprise Management Agent Changes" on page 208.

NetView Web Application

Uninstall the current version of your NetView Web application and reinstall the V5R4 version of the NetView Web application. For details, refer to the *netview_installation_dir*/doc/znetview_webapp_readme_en.htm file and the *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components* manual.

Usage Notes:

1. The NetView Web Application continues to process the GET method and the POST method in user-written HTML files. If you are using the POST method, the NetView Web Application changes it to a GET before processing. For the GET method, all relevant data is placed in the query string portion of the URL and is displayed at the top of the browser window. You can add a TITLE element in your HTML file so that the TITLE is displayed instead of the data in the query string.
2. The load and unload SNMP MIBs, launch MIB Browser, launch Real Time Poller, and issue SNMP commands tasks have been removed from the NetView Web application. Statements and mappings for the following servlets have been removed from the web.xml file. If you are using a V5R3 or earlier version of the web.xml file, these statements are ignored.
   - MIBServiceServlet
   - MIBLoaderServiceServlet
   - SnmpServiceServlet
   - CommandServiceServlet
   - DpmServiceServlet
   - InstanceServiceServlet

NetView Management Console

SNMP functions that have been removed from the Web application can no longer be launched from the NetView management console; see "NetView Web Application." Also, see "Migrating the NetView Management Console Topology Server and Console" on page 161.

MVS Command Management

The MVS Command Management function is deprecated and is replaced by the MVS Command Revision function.

Migration Notes:

1. You can continue to use the MVS Command Management function until you are finished migrating your system to the MVS Command Revision function. Both functions can coexist. Ensure that both functions do not simultaneously operate on the same command. One way to do this is to activate the MVS Command Revision function in test mode.
2. For installation instructions for the MVS Command Revision function, see *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.
3. Review your current MVS Command Management actions and then create a Command Revision Table. For information on how to do this, see *IBM Tivoli NetView for z/OS Automation Guide*.
4. The Command Revision Table and the Message Revision Table use high level UPON statements to group all other statements. You can place Command Revision and Message Revision statements in the same member.

   The Message Revision Table `UPON(ALWAYS)` action is being replaced with the `UPON(OTHERMSG)` action. Change all the `UPON(ALWAYS)` actions to `UPON(OTHERMSG)` actions in your Message Revision Table. The `UPON(ALWAYS)` action is supported for migration purposes, but might create confusion because actions for commands and messages can be in the same source member.
5. The action of the SSI.ReviseTable CNMSTYLE statement is unchanged if the member to which this statement is referring is unchanged. If new UPON statements related to Command Revision are in the CNMSTYLE member or its included members, then a Command Revision Table is created.
6. (Optional) The REVISMSG command is being replaced with the REVISE MSG command. Wherever you issue a REVISMSG command, consider changing it to the REVISE MSG command. For syntax information, see the online help or the *IBM Tivoli NetView for z/OS Command Reference Volume 1 (A-N)*.

   This step is optional because the REVISE command defaults to MSG processing when the defined verb is REVISMSG. REVISMSG command arguments are supported by the REVISE command.
7. When reports or testing indicate all of the MVS Command Management actions are satisfactorily implemented using a Command Revision table, disable the MVS Command Management function. This includes deleting the MVScmdMgt tower from the CNMSTUSR or C*xx*STGEN member.

Password Phrase Support

The NetView program provides support for password phrase authorization. A password phrase can be used as a substitute for a password for all NetView functions that use an SAF product, such as RACF, for security checking. Any panel that accepts passwords has been updated to accept password phrases. The password phrase can include phrases from 9 to 100 characters in length.

The RACF product allows password phrases to contain any valid EBCDIC characters. When setting a password phrase for a user ID that will be accessed from a non-z/OS system, the password on that system is entered as ASCII text. Not all EBCDIC characters have an ASCII equivalent, so limit the EBCDIC password phrase to characters that have an ASCII equivalent.

Password phrases are not supported in the following environments:

- Password checking using the DSIOPF member
- Logon validation using the DSIEX12 installation exit
- Tivoli Enterprise Portal login. Because of this restriction, the password phrase cannot be passed to the Tivoli Enterprise Monitoring Server for RACF verification.
- Functions that use the NetView-NetView task (NNT)

1-Byte Console IDs

With z/OS V1R8, support for 1-byte console IDs was removed. Because of this, the NetView program no longer supports the use of a 1-byte console ID when defining a console to the NetView program. Instead of using a console ID, use a 2- to 8-character console name. For example, use the console name when referencing a specific console in the GETCONID, SETCONID, and AUTOTASK commands and in the AUTOTASK.task.CONSOLE statement in the CNMSTYLE member.

Chapter 7. Getting Ready to Start NetView

When you start the NetView program, you use two START procedures, one for the NetView application (CNMPROC (CNMSJ009)) and one for the NetView subsystem (CNMPSSI (CNMSJ010)). It does not matter which you start first. If you start a second copy of the NetView program, create an additional pair of start procedures whose names are based on a second subsystem name.

Modifying the NetView and Subsystem Application Procedure

Review the copies of CNMPROC (CNMSJ009) and CNMPSSI (CNMSJ010) supplied with the V5R4 samples for the following considerations:

- The name of the PROCLIB member and the PROC statement must begin with the 4-character subsystem name you have defined for running the NetView program. The associated CNMPSSI (CNMSJ010) start procedure must also begin with the same subsystem name. CNMP is used in the sample network.

  Note: If the PROCLIB member name matches an entry in IEFSSN*xx*, use the SUB= parameter with the START command to specify a subsystem other than the MASTER subsystem. Specify a subsystem where SYSIN and SYSOUT are not supported.
- If you start a second copy of the NetView program in the same host, you must use a procedure name that begins with a 4-character subsystem name that is different from the one you have already started.

  Note: Remember to add any 4-character subsystem name to the IEFSSN*xx* member in SYS1.PARMLIB.
- You can adjust the symbolic parameters in the sample CNMPSSI (CNMSJ010) procedure to meet your installation requirements. You can also adjust these parameters using the SSI statement in the CNMSTYLE member.

Modifying the NetView Startup Procedure

CNMPROC (CNMSJ009) was copied to the PROCLIB when you loaded partitioned data sets during installation. Make the following changes to the NetView startup procedure (CNMPROC):

- Set the value for &NV2I if you are running more than one NetView program on a system or sysplex.
- Change the name of the program that starts NetView if you do not want to use the SVC76 interface for local device alerts.
- Ensure the NetView dispatch priority is adequate.
- Adjust the region size, buffer size and slot size if necessary.
- Ensure that your user-defined data sets are included.
- Ensure that the SYSTCPD statement specifies your TCP/IP control data set.

Defining TCP/IP to the NetView Program

The NetView program provides many services that rely on TCP/IP to communicate with remote applications. To communicate with TCP/IP, each of these services use a program function library, referred to as the TCP/IP MVS sockets library. This makes the NetView application an MVS sockets application.

Any MVS sockets application needs to reference TCP/IP configuration data. The method of accessing this data is defined by the z/OS version of TCP/IP that you are running.

An example SYSTCPD DD statement is provided in the NetView startup procedure to identify the location of TCP/IP configuration data. A SYSTCPD statement is not required for the NetView program, but any MVS sockets application must be able to locate TCP/IP configuration data.

You also need access to z/OS TCP/IP data sets from the NetView start procedure. If the z/OS TCP/IP data sets are not contained in the LNKLST*xx* concatenation, add the following z/OS TCP/IP data set (which must be APF-authorized) to the STEPLIB DD concatenation:

SEZALOAD Executable load modules for concatenation to LINKLIB

To optimize performance, make these data sets available from the LNKLST*xx* concatenation.

The NetView program must run under an SAF user ID or group that has an OMVS segment. This is required so that the NetView program can utilize TCP/IP functions.

Usage Notes:

1. For each of the TCP/IP services that is provided by the NetView program, the stack affinity is specified in the CNMSTYLE member using the TCPname statement. Using this name, NetView sets the stack affinity by specifying it on an INITAPI socket call.
2. Some NetView applications that are not a part of the NetView address space rely on TCP/IP to communicate with remote applications. Some of these applications use the z/OS UNIX sockets library. These applications are therefore z/OS UNIX sockets applications. Information on how these applications reference TCP/IP configuration data is discussed in the books describing those applications. Examples of z/OS UNIX sockets applications are the Event/Automation Service and the UNIX command server.

If you want information about...	Refer to...
MVS sockets applications, SYSTCPD DD statement	*z/OS Communications Server IP Configuration Guide*

Updating the CNMSTYLE Member

CNMSTYLE is a member of DSIPARM that is used during NetView initialization. Changes to the NetView initialization process are made in CNMSTUSR or C*xx*STGEN.

The member name for CNMSTYLE is controlled by the value of &NV2I in the NetView start procedure. The NetView default value for &NV2I is NM. If you specify a value for &NV2I (*xx*), NetView reads C*xx*STYLE in DSIPARM for initialization parameters. If this member is not found, NetView reads the CNMSTYLE member instead. The included member C*xx*STGEN is also resolved using the value of &NV2I for *xx*.

The sample CNMSTYLE member in DSIPARM contains descriptive comments about the types of statements that are included in the member. Read the comments and review the defaults. The sections that follow provide additional details for

some of the NetView functions.

If you want information about...	Refer to...
CNMSTYLE Processing	*IBM Tivoli NetView for z/OS Installation: Getting Started*
CNMSTYLE statements	Comments in the CNMSTYLE member and *IBM Tivoli NetView for z/OS Administration Reference*

Customizing the CNMSTYLE Member

Customize the CNMSTYLE member by making global (enterprise) changes to the CNMSTUSR member, and then copying the modified CNMSTUSR member to each NetView system.

You can make system-specific changes to the C*xx*STGEN member that is included in the CNMSTYLE member using the %INCLUDE statement (where *xx* is the value of &NV2I, which is initially set to NM). Code all override statements for the CNMSTYLE and CNMSTUSR members in this member. Duplicate statements found in the C*xx*STGEN member override earlier statements in the CNMSTYLE and CNMSTUSR members. You can specify the value of NV2I in the NetView start procedure.

You can use Data REXX in the members that are included in the CNMSTYLE member using the %INCLUDE statement. Data REXX is not supported in the CNMSTYLE member. Instead, you can define tower and subtower conditions in the CNMSTUSR or C*xx*STGEN members to control the statements in the CNMSTYLE member.

Note: If you make changes to the included members while the NetView program is running, the changes become effective when you recycle the NetView program. For certain types of changes (including hardware monitor, session monitor, Web interface, NetView Resource Manager, visual BLDVIEWS, and various global variable updates), you can use the RESTYLE command to activate these changes without recycling the NetView program. For more information on the types of changes that can be activated using the RESTYLE command, see the NetView online help or *IBM Tivoli NetView for z/OS Command Reference Volume 1 (A-N)*.

If you want information about...	Refer to...
RESTYLE command	NetView online help or *IBM Tivoli NetView for z/OS Command Reference Volume 2 (O-Z)*

Using %INCLUDE Members

The following members are included when the CNMSTYLE member initializes:

Member	Usage
CNMSTPWD	If needed, you can use this member to include VPD, VSAM, and ACB passwords. You can use the READSEC command to protect the CNMSTPWD member from being displayed by the BROWSE command.
CNMSTNXT	Includes modifiable CNMSTYLE statements by release. The CNMSTNXT member is commented out in the CNMSTYLE member. It is provided for documentation purposes only.

CNMSTASK Task statements that are provided with the NetView program. Do not modify this member. Instead, include any task statements that you want to include directly in the CNMSTUSR or C*xx*STGEN member. The task statements in the CNMSTUSR and C*xx*STGEN member override those that are provided in the CNMSTASK member.

CNMSTIDS Includes Intrusion Detection Services (IDS) statements. Review this member if you are enabling IDS support.

CNMSTTWR Includes statements from non-NetView towers. Do not edit this member unless specifically instructed by documentation for a tower you are installing.

CNMSTWBM Includes webmenu statements.

CNMSTUSR You can include global (enterprise) definition statements that override statements in the CNMSTYLE member. Use this member to customize the CNMSTYLE member. You can use Data REXX logic.

Note: You can also use the %INCLUDE statement in this member to include other members of your choosing.

C&NV2I.STGEN
You can include system-specific definition statements in this member, including Data REXX logic.

Note: You can also use the %INCLUDE statement in this member to include other members of your choosing.

Using Symbolic Variables

Many NetView processes require the RODM name, NetView domain, TCP name, and network ID. CNMSTYLE processing sets local symbolic variables for these names. You can also set system variables for the RODM name, TCP name, and network ID in member IEASYM*xx* in SYS1.PARMLIB. If you choose to set a system variable for the network ID, it must be the same as the value returned by VTAM when NetView opens its ACB.

Table 54. Symbolic Variables in the CNMSTYLE member

Symbolic Variable	CNMSTYLE Statement
RODM Name	**RODMname** = &CNMRODM. **Note:** This statement is ignored if you are not using RODM.
NetView domain	**DOMAIN**=C&NV2I.01 (CNM01 is the default that is supplied by the NetView product) **Note:** This identifier is the access method control block (ACB) name that is listed on the VTAM APPL statement.
TCP name	**TCPname**=&CNMTCPN.
Network ID	**NetID**=&CNMNETID.

Notes:

1. If you specified the NetView domain ID or password in the CNMPROC (CNMSJ009) procedure, the DOMAIN or the ACBpassword statements in the CNMSTYLE member are not used. They are ignored unless the parameters

passed by the CNMPROC procedure are null. If the domain password is not specified in the CNMPROC procedure or in the CNMSTYLE member, the domain name becomes the password.

2. The system symbolic variables set in IEASYM*xx* are enabled for all address spaces. Global variables that you set using the CNMSTUSR or C*xx*STGEN member only apply to this NetView address space.

Using STYLEVAR

Use STYLEVAR to define variables that can be used anywhere within the CNMSTYLE member (except for the command phase). You can use these variables to simplify the process of entering repetitious data.

Notes:

1. System symbolic names are not valid names for STYLEVAR variable names.
2. STYLEVAR variable values cannot contain another STYLEVAR variable.

If you want information about...	Refer to...
STYLEVAR statement	Comments in the CNMSTYLE member and *IBM Tivoli NetView for z/OS Administration Reference*

Activating NetView Components

NetView components can be activated with TOWER statements. Tower statements are examined earlier in the initialization process than most other variables (for example, common global variables). This is useful, for example, to conditionally control the initialization process.

This is an example of the default TOWER statement:

```
TOWER = *SA  *AON  *MSM  *Graphics  NPDA NLDM TCPIPCOLLECT
  *AMI *TARA *DVIPA *TEMA *IPMGT *NVSOA DISCOVERY
```

Usage Notes:

1. A tower is enabled if it is not preceded by an asterisk. To enable a tower, remove the asterisk (*) before the tower name.
2. To disable a tower, preface the name of the tower with an asterisk.
3. If multiple TOWER statements exist, the last TOWER statement encountered is processed. It is important to remember that modified TOWER statements are not recognized until NetView is restarted.

You can use subtower statements (TOWER.*subtower*) to enable specific components within a tower. These are some examples of subtower statements:

```
TOWER.AON = SNA TCP
TOWER.DISCOVERY = *INTERFACES *TELNET
TOWER.DISCOVERY.INTERFACES = *OSA *HIPERSOCKETS
TOWER.DVIPA = *DVTAD *DVCONN *DVROUT
TOWER.Graphics = SNATM
TOWER.IPMGT = *ACTMON *IDS
TOWER.MSM = ITNM IP OPN TMR
TOWER.TCPIPCOLLECT = TCPCONN PKTS
TOWER.TEMA = *HEALTH *CONNACT *CONINACT *SESSACT *DVDEF *DVTAD *DVCONN
  *SYSPLEX *TELNET *DVROUT *OSA *HIPERSOCKETS
```

Review the subtower statements that are associated with the towers that are supplied with the NetView product that you enable. To update a subtower statement, copy the subtower statement to the CNMSTUSR or C*xx*STGEN member.

To enable a function, delete the asterisk (*) preceding the function name. To disable a function, add an asterisk (*) in front of the function name.

For tower statements and subtower statements to take effect, you must recycle the NetView program. Because of this, review these statements carefully. If you plan on implementing any of the tower and subtower components, consider enabling the functions during this step in the installation process.

See the following TOWER statements that are provided with the NetView program:

Tower	Description		
AMI	Enables the Application Management Instrumentation.		
AON	Enables network automation (AON component).		
	Subtower	**Description**	
	SNA	SNA automation (AON/SNA)	
		Subtower	**Description**
		X25	AON/SNA X.25 support
	TCP	TCP/IP automation (AON/TCP)	
		Subtower	**Description**
		IDS	Intrusion Detection Services (IDS) support
DISCOVERY	Enables the discovery of sysplexes, z/OS systems, coupling facilities, TCP/IP stacks, TCP/IP subplexes, and NetView applications.		
	Subtower	**Description**	
	INTERFACES	Enables the discovery of IP interface information.	
		Subtower	**Description**
		OSA	Enables the discovery of OSA channels and ports.
		HIPERSOCKETS	Enables the discovery of HiperSockets configuration and status information.
	TELNET	Enables the discovery of Telnet servers and ports.	
DVIPA	Enables the collection of dynamic virtual IP address (DVIPA) definition and status data.		
	Subtower	**Description**	
	DVCONN	Enables the collection of DVIPA connections data.	
	DVROUT	Enables the collection of VIPA routes and distributed DVIPA connection routing data (requires z/OS V1R11 Communications Server or later).	
	DVTAD	Enables collection of DVIPA sysplex distributors,	

distributed DVIPA targets, distributed DVIPA server health statistics, and distributed DVIPA statistics (if enabled).

GRAPHICS Enables the NetView Management console.

Subtower	Description
SNATM	SNA Topology Manager.

IPMGT Enables IP Management.

If the AON TCP subtower is enabled, do not enable the IPMGT subtowers.

Subtower	Description
ACTMON	Performs active monitoring for IP resources without enabling the AON component (AON tower).
IDS	Enables Intrusion Detection automation without enabling the AON component (AON tower).

MSM Enables the MultiSystem Manager.

Subtower	Description
IP	IP function.
ITNM	IBM Tivoli Network Manager function.
OPN	Open function.
TMR	Tivoli management region function.

NLDM Enables the session monitor.

NPDA Enables the hardware monitor.

NVSOA Enables the Web Services Gateway function.

SA Enables System Automation for z/OS.

TARA Enables the 4700 support facility.

TCPIPCOLLECT
Enables the collection of TCP/IP connection and packet trace data from z/OS Communications Server.

Subtower	Description
TCPCONN	Required for the collection of TCP/IP connection data using the TCPCONN START and TCPCONN STOP commands.
PKTS	Required for the collection of TCP/IP packet trace data using the PKTS START and PKTS STOP commands, and for the collection of OSA packet trace data.

TEMA Enables the NetView program to communicate with the Tivoli NetView for z/OS Enterprise Management Agent.

Usage Note: Do not enable the TEMA tower unless you are installing the Tivoli NetView for z/OS Enterprise Management Agent. Only enable the TEMA tower on one NetView program for each LPAR.

Subtower	Description
CONINACT	Enables the collection and display of inactive TCP/IP connections.
CONNACT	Enables the collection and display of active TCP/IP connections.
DVCONN	Enables the display of DVIPA connections.
DVDEF	Enables the display of DVIPA definition and status data.
DVROUT	Enables the display of VIPA route and distributed DVIPA connection routing data.
DVTAD	Enables the display of distributed DVIPA data.
HEALTH	Enables the collection and display of NetView task data.
HIPERSOCKETS	Enables the display of HiperSockets configuration and status information. (Requires RODM.)
OSA	Enables the display of OSA channels and ports information. (Requires RODM.)
SESSACT	Enables the collection and display of active sessions. The SESSACT subtower is only supported in one NetView program per system.
SYSPLEX	Enables the display of stack configuration and status data.
TELNET	Enables the display of Telnet servers and Telnet server port information.

If you want information about...	Refer to...
AON, hardware monitor, session monitor, 4700 support facility	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*
MultiSystem Manager subtowers	*IBM Tivoli NetView for z/OS Installation: Configuring Graphical Components*
Tivoli NetView for z/OS Enterprise Management Agent tower and subtowers	*IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*

Setting up Security

You can use the SECOPTS statement to specify:

- Operator security
- Command authority
- Span of control authority
- Web browser access

If you want information about...	Refer to...
Security options	*IBM Tivoli NetView for z/OS Security Reference*

If you want information about...	Refer to...
SECOPTS keywords	*IBM Tivoli NetView for z/OS Administration Reference*

Specifying Commands to Run Automatically When the NetView Program Is Started

To define a command or a command list to run automatically when the NetView program is started, use the auxInitCmd statement in CNMSTUSR or C*xx*STGEN. You can specify any number of commands or command lists to be run. The EBCDIC value following the auxInitCmd keyword determines the order the commands are run.

An example follows:

```
auxInitCmd.A  = MSG SYSOP,Auxiliary commands beginning.
auxInitCmd.AC = RESTORE TIMER
```

In this case, the `MSG SYSOP` command (A) runs before the `RESTORE TIMER` command (AC).

Note: These AuxInitCmd commands run before any commands at any autotask. All commands for autotasks, including both task initial command lists and commands sent by EXCMD, are queued and held up. They run only after all AuxInitCmds have completed. Messages are also queued; they are not submitted to automation nor logged until all AuxInitCmds have completed.

If you want information about...	Refer to...
Creating a command list to run at NetView initialization	*IBM Tivoli NetView for z/OS Programming: REXX and the NetView Command List Language*

Starting the NetView Subsystem Interface

You can start the NetView Subsystem Interface (SSI) by using the SSI.ProcString statement in CNMSTUSR or C*xx*STGEN:

```
SSI.ProcString = CNMPSSI.SS,SUB=MSTR,ARM='*ARM'
```

Specify the procedure name (for example CNMPSSI). The NetView program provides the correct value for the MSGIFAC parameter and, optionally, for the DSIG and PPIOPT parameters. You can also specify additional start parameters (such as SUB=MSTR) that are required for your installation.

Note: Do not specify the MSGIFAC, PPIOPT, or DSIG parameters on the SSI.ProcString statement because the NetView program might add these parameters during processing. To update these values, use the MVSPARM.MSGIFAC, SSI.PPI, and SSI.DSIG statements.

If you specify *NONE* for SSI.ProcString statement, the CNMCSSIR task does not start the SSI procedure. This is the default.

If you want information about...	Refer to...
Starting the SSI using CNMPSSI	
SSI CNMSTYLE statements	Comments in the CNMSTYLE member and *IBM Tivoli NetView for z/OS Administration Reference*

Specifying Initialization Values for NetView Components

The initialization values for some NetView components are specified in the CNMSTYLE initialization member. Table 55 shows the NetView component, its primary task name, its initialization member in DSIPARM, and the CNMSTYLE statement prefix for its initialization values.

Table 55. NetView Component Initialization

NetView Component	Primary Task Name	Initialization Member	CNMSTYLE Statement Prefix
CNM data transfer	*domid*LUC	DSILUCTD	LUC.*
Get-host-by task	DUIDGHB	DUIIGHB	GHB.*
Hardware monitor	BNJDSERV	BNJMBDST	NPDA.*
IP log	DSIIPLOG	DSIILGCF	IPLOG.*
LU 6.2 communication	DSIUDST	DSIUINIT	RMTINIT.*
NetView Resource Manager	AUTONRM	n/a	NRM.*
Resource status monitor	CNMTAMEL	DUIISFP DUIFPMEM	TAMEL.*
REXEC server	DSIRXEXC	DSIREXCF	REXEC.*
RSH server	DSIRSH	DSIRSHCF	RSH.*
Session monitor	DSIAMLUT AAUTSKLP	DSIAMLTD AAUPRMLP	NLDM.*
TCP/IP alert receiver	DSIRTTR	DSIRTTTD	RTT.*
TCP/IP communication for the NetView 3270 management console	DSITCPIP	DSITCPCF	MCON.*
Tivoli NetView for z/OS Enterprise Management Agent	AUTONALC	n/a	NACMD.*[1]
Visual BLDVIEWS	AUTOVBV	n/a	VBV.*
XCF services	AUTOXCF	n/a	XCF*
Web server interface task	DSIWBTSK	DSIWBMEM	WEB.*

Notes:

1. The NACMD.* statements associated with the Tivoli NetView for z/OS Enterprise Management Agent are only processed if the TEMA tower is enabled.

If you want information about...	Refer to...
CNMSTYLE statements	*IBM Tivoli NetView for z/OS Administration Reference*
RESTYLE command	*IBM Tivoli NetView for z/OS Command Reference Volume 1 (A-N)*
The Tivoli NetView for z/OS Enterprise Management Agent	*IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*

Listing the Active CNMSTYLE Member Name

The common global variable CNMSTYLE.STYLE is set to the name of the CNMSTYLE member read. To list the active CNMSTYLE member, enter:

```
QRYGLOBL COMMON VARS=CNMSTYLE.STYLE
```

Using the Report Generator

You can use the CNMSTYLE report generator to analyze the CNMSTYLE member. You can use the report that is created to take the following actions:

- List the %INCLUDE structure.
- Analyze multiple occurrences of statements within the CNMSTYLE member. Use this to determine which value is used during NetView initialization. For statements that are listed multiple times in the report, the last statement that is listed is the one used for initialization.
- List the CNMSTYLE towers that are enabled.
- Analyze initialization statements for a particular function.

To run the CNMSTYLE report generator, use the CNMSJCRG sample in the NETVIEW.V5R4USER.INSTALL data set. This INSTALL data set was created during installation by the CNMSJBUP sample job. The CNMSJCRG sample is a job that runs outside of the NetView address space and runs the REXX program CNMECRG under the TSO terminal monitor program.

The CNMSJCRG sample requires the following data sets:

STEPLIB
The NetView CNMLINK data set from the current release, NETVIEW.V5R4M0.CNMLINK.

SYSEXEC
The concatenated data set list of the NetView CNMCLST data sets from the current release.

DSIPARM
The concatenated data set list containing current release versions of the CNMSTYLE member. Ensure that the data set concatenation order is the same as that specified in the NetView start procedure CNMPROC.

CNMPNL1
The NetView CNMPNL1 data set from the current release, NETVIEW.V5R4M0.CNMPNL1.

DSIWRIT
The output partition data set to which the generated report member is written. The output of the report generator is written as a member of a partition data set. If you use the NetView default naming convention, the data set name is NETVIEW.V5R4USER.CNM01.DSILIST.

The CNMSTYLE report is written to member CNMCRG in the DSIWRIT data set. If member CNMCRG already exists, a backup copy of the existing CNMCRG member is created and named CNMCRGBK. If member CNMCRGBK already exists, it is overwritten with the existing CNMCRG member.

You can specify keyword parameters in CNMSJCRG. Each keyword parameter and value must be specified on a separate line, just below the CNMECRG command. Do not continue the value onto a second line. All characters typed on a line are interpreted as input to CNMECRG. If a keyword parameter is specified more than

once, the first value is used and all subsequent values specified are ignored. Input ends when either a blank line or a /* occurs.

You can specify the following keywords:

TASKS=YES | NO
Specifies whether to include CNMSTASK statements in the report.

YES Includes statements from the CNMSTASK member. This is the default value.

NO Does not include CNMSTASK statements.

&NV2I=*xx*
The default value for *xx* is NM. If a value that is not valid is specified, an error message is issued and the default value NM is used in the report. If you use alphabetic characters, the characters are converted to uppercase.

&*symbolic_name***=** *value*
Provides the *value* of a system or NetView symbolic variable (&*symbolic_name*) that you are using in the CNMSTYLE member. A symbolic parameter must be passed to CNMECRG to be resolved in the report.

The CNMSTYLE Report Generator, when reading a NetView definition member, cannot resolve symbolic references that refer to a substring of a symbolic variable such as

```
%INCLUDE C&DOMAIN(2:2).STGEN
```

Usage Notes:

1. Precede the *symbolic_name* with an ampersand (&).
2. The *symbolic_name* can optionally include a trailing period (.).
3. Use single quotation marks (' ') if *value* has leading or trailing blanks.
4. Do not specify a value that contains a symbolic variable, such as

   ```
   &AAAAA='C&NV2I.01'
   ```

   or that contains a substring of a symbolic variable, such as

   ```
   &AAAAA='C&DOMAIN(2:2).01'
   ```

The following example shows keyword parameters for CNMECRG within CNMSJCRG:

```
CNMECRG
  TASKS=NO
  &DOMAIN=CNM01
  &NV2I=NM
  &CNMTCPN=TCPIP
  &CNMRODM=RODMNAME
  &CNMNETID=NETA
  &MYSYMBL=' A B C '
/*
```

The CNMSTYLE report includes the following sections:

1. General information and CNMSTYLE statements that pertain to all of NetView
2. CNMSTYLE statements that pertain to specific functions of NetView
3. auxInitCmd statements and user-defined statements
4. Data REXX statements within the CNMSTYLE member

Because the TASKS parameter is set to NO, the report in this example does not include CNMSTASK statements.

The first section of the CNMSTYLE report is shown in Figure 6. This part of the report contains general information related to the CNMSTYLE member, such as:

- The date and time the report was created
- The &NV2I symbolic variable value being used
- A nested listing of the members included by the CNMSTYLE member
- A list of the CNMSTYLE towers that are enabled when NetView initializes
- A list of CNMSTYLE statements that apply to base NetView

```
                              CNMSTYLE REPORT

DATE: 21 Jul 2009
TIME: 14:03:25

&NV21 value: NM

%INCLUDE structure of: CNMSTYLE

    CNMSTYLE
         CNMSTPWD
         CNMSTASK
         CNMSTIDS
         CNMSTTWR
         CNMSTWBM
         CNMSTUSR
              MYINCLUD
         CNMSTGEN

Enabled Towers:  NPDA  NLDM  TCPIPCOLLECT  DISCOVERY

Statements for function: NetView General

Member   Line# Indicators   Statement
-------- ----- ------------ --------------------------------------------------
CNMSTYLE   217 Y            DOMAIN = CNM01
CNMSTYLE   304 Y            NetID = NETA
CNMSTYLE   747              TOWER = *SA *AON *MSM *Graphics NPDA NLDM
                             | TCPIPCOLLECT *AMI *TARA *DVIPA *TEMA *IPMGT
                             | *NVSOA DISCOVERY
CNMSTYLE  1589              CNMI = Yes
CNMSTYLE   582              SECOPTS.OPERSEC = NETVPW
CNMSTYLE   596              SECOPTS.SURROGAT = NO
CNMSTYLE   615              SECOPTS.CMDAUTH = TABLE.CNMSCAT2
CNMSTYLE   626              SECOPTS.AUTHCHK = SOURCEID
CNMSTYLE   634              SECOPTS.OPSPAN = NETV
CNMSTYLE   653              SECOPTS.SPANAUTH = *NONE*
     .      .                   .
     .      .                   .
     .      .                   .
```

Figure 6. First section of CNMSTYLE report

The format of the CNMSTYLE statements presented in the generated report includes the following fields:

Member
Member name containing the statement

Line# Line number within the member where the CNMSTYLE statement is located. If a statement is a continuation statement, only the line number where the statement begins is listed.

Indicators
Lists information about the statement. This information is formatted in the following way:

```
R CCCCCC
```

where **R** represents the Resolve indicator and **CCCCCC** represents the Condition indicator:

Resolve
Indicates whether the given CNMSTYLE statement was modified by the report generator. A specification of **Y** indicates that the statement was modified. For example, a symbolic variable was substituted or an autotask statement that uses the question mark (?) feature was resolved.

If the resolve field has no value listed, no modifications were made to the statement.

Condition
Indicates that a condition is required for the listed CNMSTYLE statement to be active, such as a tower that must be enabled. If only one tower is required to be enabled the condition field is set to the required tower name. The first 10 characters of the tower name are listed. If more than one tower must be enabled or if some other condition must be met, the condition field is set to four asterisks (****).

If the condition field has no value listed, no conditions are required for the statement to be active.

Statement
Lists the CNMSTYLE statement and its value. Extra spacing in the statement might be removed, along with any tower conditionals that are found at the beginning of the statement. Statements can be further modified by having values substituted into either the CNMSTYLE keyword or its value.

Values of CNMSTYLE keywords that contain passwords and other values critical to security are identified as a security risk and are listed in the report as four asterisks (****) to prevent unauthorized viewing.

The second section of the report lists CNMSTYLE statements for specific NetView functions. For example, Figure 7 on page 155 lists statements for the hardware monitor (NPDA) component.

If a CNMSTYLE statement applies to multiple NetView functions, that statement is listed for each NetView function to which it applies. For example, the TOWER statement applies to both the hardware monitor and the session monitor, and various other NetView functions.

Within a function, the most critical statements are listed first, followed by less critical statements. NetView functions are presented in the report alphabetically.

```
Statements for function: Hardware Monitor (NPDA)

Member   Line# Indicators   Statement
-------- ----- ------------ ------------------------------------------------
CNMSTYLE   747              TOWER = *SA *AON *MSM *Graphics NPDA NLDM
                             | TCPIPCOLLECT *AMI *TARA *DVIPA *TEMA *IPMGT
                             | *NVSOA DISCOVERY
CNMSTYLE  1701              TASK.BNJMNPDA.INIT = N
CNMSTYLE  1690              TASK.BNJDSERV.INIT = N

CNMSTYLE  2733              NPDA.ALCACHE = WRAPCNT
MYINCLUD    18   NPDA       NPDA.ALCACHE = 500

CNMSTYLE  2749              NPDA.ALERTFWD = SNA-MDS-LOGONLY
CNMSTYLE  2807              NPDA.ALERTLOG = RANDRANG
CNMSTYLE  2783              NPDA.ALRTINFP.RECORD = Yes
CNMSTYLE  2793              NPDA.ALT_ALERT = DOMAIN
CNMSTYLE  2864              NPDA.AUTORATE = 1
CNMSTYLE  2701              NPDA.DSRBO = 5
CNMSTYLE  2693              NPDA.DSRBU = 5
CNMSTYLE  2901              NPDA.ERR_RATE = 10 50
CNMSTYLE  2708              NPDA.MACRF = LSR
CNMSTYLE  2758              NPDA.MDSIND = Yes
CNMSTYLE  2686              NPDA.PDDNM = BNJLGPR
CNMSTYLE  2714              NPDA.PNA = No
CNMSTYLE  2873              NPDA.PRELOAD_BER = No

CNMSTYLE  2720              NPDA.REPORTS = OFF
CNMSTUSR    14              NPDA.REPORTS = ON

CNMSTYLE  2687              NPDA.SDDNM = BNJLGSE
CNMSTYLE  2728              NPDA.TECROUTE = IHSATEC
MYINCLUD    17   NPDA       NPDA.W.1 = AL 500
CNMSTYLE  1846              function.autotask.HMONdbMaint = DBAUTO2
```

Figure 7. NetView Function Information

The third section of the report lists the auxInitCmd statements and the user-defined statements, as shown in Figure 8 on page 156. The auxInitCmd statements are listed in the order they are encountered in the CNMSTYLE member.

The statements listed under User-Defined CNMSTYLE Statements are not recognized by the CNMSTYLE report generator as belonging to a specific NetView function or to general NetView information in the first section of the report. For example, you can define an autotask named OPAAA01 in the following way:

```
%> IF TOWER('NPDA') THEN DO;
function.autotask.MyAutoOp = OPAAA01
%> END;
```

When you do this, the function.autotask.MyAutoOp statement is listed as a user-defined statement as shown in Figure 8 on page 156:

```
auxInitCmd Statements

 Member   Line# Indicators   Statement
 -------- ----- ------------ --------------------------------------------------
 CNMSTYLE  4633              auxInitCmd.A = MSG SYSOP,Auxiliary commands beginn
                              |ing.
 CNMSTYLE  4636   NLDM       auxInitCmd.SNLDM = STARTCNM NLDM
 CNMSTYLE  4637   NPDA       auxInitCmd.SNPDA = STARTCNM NPDA
 CNMSTYLE  4638              auxInitCmd.POLICY = EXCMD ?Policy,EZLEANTL
 CNMSTYLE  4639   DISCOVERY  auxInitCmd.ZDISC = EXCMD ?Policy,CNMEERSC
 MYINCLUD    16   NPDA       auxInitCmd.BB = MSG SYSOP,NPDA will be activated

 User-Defined CNMSTYLE Statements

 Member   Line# Indicators   Statement
 -------- ----- ------------ --------------------------------------------------
 CNMSTYLE   361              AUTOTASK.?Helper.Console = D761CON
 CNMSTYLE  1079              AUTOTASK.?APSERV.Console = *NONE*
 CNMSTYLE  1080              AUTOTASK.?APSERV.InitCmd = APSERV xyz
 CNMSTYLE  1090              AUTOTASK.?SMF30.Console = *NONE*
 CNMSTYLE  1091              AUTOTASK.?SMF30.InitCmd = CNMSMF3R
 MYINCLUD    15   NPDA       function.autotask.MyAutoOp = OPAAA01
```

Figure 8. auxInitCmd Statements and User-defined Statements

The fourth section of the report lists Data REXX statements, as shown in Figure 9 on page 157. During report processing, Data REXX statements are ignored. These statements are listed in the report in the order that they are encountered in the CNMSTYLE member. Only the first 63 characters of each Data REXX statement are placed in the report. CNMSTYLE statements within a %DATA portion of a Data REXX block that are affected by an IF-THEN statement are also listed to help you understand which CNMSTYLE statements are impacted by your Data REXX statements.

```
Data Rexx Statements

Member   Line# Statement
-------- ----- ----------------------------------------------------------------

  .         .        .
  .         .        .
  .         .        .

CNMSTTWR     1 /*%LOGIC REXX ------------------------------------------------
CNMSTTWR     2 /* Licensed Materials - Property of IBM
CNMSTTWR     3    5697-B82 (C) Copyright IBM Corp. 2001
CNMSTTWR     4    All rights reserved.
CNMSTTWR     5
CNMSTTWR     6    US Government Users Restricted Rights - Use, duplication or
CNMSTTWR     7    disclosure restricted by GSA ADP Schedule Contract with IBM
CNMSTTWR     8 /* The one line "commentary" below is needed because empty memb
CNMSTTWR     9    are treated as being "not found."  Appears as I/O error.
CNMSTTWR    10 '* ----- tower member  ----- *'
CNMSTTWR    11 IF TOWER('SA') THEN
CNMSTTWR    12   '%INCLUDE AOFSTYLE'

MYINCLUD     1 /*%DATA REXX ------------------------------------------------

MYINCLUD    13 %> IF TOWER('NPDA') THEN DO;

MYINCLUD    15 function.autotask.MyAutoOp = OPAAA01
MYINCLUD    16 auxInitCmd.BB = MSG SYSOP,NPDA will be activated
MYINCLUD    17 NPDA.W.1 = AL 500
MYINCLUD    18 NPDA.ALCACHE = 500

MYINCLUD    20 %> END;

CNMSTGEN     1 /*%DATA REXX ------------------------------------------------

CNMSTGEN    13 %> IF domain() = 'CNM01' THEN  /* Never true! Data Rexx runs...
CNMSTGEN    14 %>                     /* earlier than resolution of system-sym
CNMSTGEN    15 %>  'STYLEMSG = Illustration only. You will never see this.'
```

Figure 9. Data REXX Statements

Note: Only the first 63 characters of each Data REXX statement are displayed.

The following return codes are set by CNMECRG:

0 Successful completion; a file was created in DSIWRIT

4 Minor errors encountered; a file was created in DSIWRIT

8 Major error encountered; a file was not created in DSIWRIT

For non-zero return codes, error messages can be found in the CNMSJCRG job log.

Chapter 8. Verifying the Migration

This chapter leads you through a series of steps to test the NetView program you have just installed. Run the steps in the order presented:

1. Ensure that VTAM has been started.
2. Start the NetView subsystem address space using job CNMPSSI.
3. Start the NetView program using job CNMPROC.

   If you are running an additional copy of the NetView program on this LPAR and are using the hardware monitor, enter the following command at the system console:

   ```
   S CNMPROC,PROG=DSIMNT
   ```
4. Log on to the command facility.
5. From the NetView main menu, enter **HELP** to display the NetView help facility main menu.
6. Press **PF3** twice to go to the command facility, then issue the **help** command to display the command facility help menu.
7. Enter **4** to display a list of command and command lists for which help exists.
8. Press **PF3** twice to return to the command facility, then enter **WHO** to display information about your session.
9. Press the **Enter** key until all data has been displayed, then enter **BR NETLOGA** to browse the active network log.
10. Press **PF3** to return to the command facility, then issue the **NPDA** command to display the hardware monitor main menu.
11. Issue the **ALERTSH** command to display the history of alerts recorded on the hardware monitor data base.
12. Press **PF3** twice to return to the command facility, then issue the **NLDM** command to display the session monitor main menu.
13. Issue the **LIST HISTORY LU** command to display a historical listing of logical units.
14. Press **PF3** twice to return to the command facility, then issue the **LOGOFF** command to end your operator session.

This completes installation and migration of the NetView program with minimum function. To run the NetView program in production, consider the following actions:

- Ensure that the V5R4 modules are active in the system, and that the V5R4 VTAMLIB members are in use by VTAM. This might require an IPL with CLPA before running the NetView program in production.
- Allocate the VSAM for the product LPAR.
- Make sure VTAM is started.
- If you have been running multiple NetView programs in the same LPAR, then make sure that one NetView program is set up as the primary program operator (PPO) and the second NetView is set up as the secondary program operator (SPO). For more details, see the information about running multiple NetView programs in the same LPAR in *IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*.
- Complete any tuning and customization tasks your system requires. See Table 56 on page 160 for more information.

- If you are using the NetView program for system automation, review your system automation planning and verify that any new operating procedures are ready for implementation.

For each administration task that you have prepared, test to ensure that it has been done correctly. When you are satisfied, the NetView program is ready for full production.

Note: If you resume production under a previous release of the NetView program, cancel the NetView subsystem job and close the V5R4 application.

Table 56. Additional Installation, Configuration, Customization, and Tuning Information

If you want information about...	Refer to...
Updating NetView for your environment	*IBM Tivoli NetView for z/OS Installation: Configuring Additional Components*
Updating NetView for graphics	*IBM Tivoli NetView for z/OS Installation: Configuring Graphical Components*
Writing installation exits	*IBM Tivoli NetView for z/OS Programming: Assembler* or *IBM Tivoli NetView for z/OS Programming: PL/I and C*
Writing command processors	*IBM Tivoli NetView for z/OS Programming: Assembler* or *IBM Tivoli NetView for z/OS Programming: PL/I and C*
The Tivoli NetView for z/OS Enterprise Management Agent	*IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*

Chapter 9. Migrating Graphics

This chapter describes the steps to follow to migrate from NGMF to the NetView management console. The last version of NetView that included NGMF support was NetView V1R4. NetView V5R4 does not allow a NETCONV connection to an NGMF server. Current NGMF users must be upgraded to the NetView management console.

This chapter also describes how to migrate to the NetView V5R4 NetView management console from previous levels of the NetView management console.

Migrating from NGMF to the NetView Management Console

Migration consists of replacing your NGMF graphic data servers and graphic monitor workstations with NetView management console workstations (both console and server). GMFHS requires no modification when a user migrates from NGMF to the NetView management console.

Other migration considerations include:

- Context menu command definitions.

  These include user-defined commands in the Command Profile Editor, and user-defined Command Tree definitions from NGMF to the NetView management console. The NetView program provides a utility to migrate these Command Tree definitions. Refer to the *IBM Tivoli NetView for z/OS User's Guide: NetView Management Console* for additional information on this utility. This section also has some tips on migrating the user-defined commands in the Command Profile Editor.
- View customization.

  Any view customization is not migrated. It must be redone.
- NGMF server-based command exits.

  These command exits must be recoded, recompiled, and reinstalled into the NetView management console server.
- NGMF client-based command exits.

  These command exits must be rewritten in Java.

Migrating the NetView Management Console Topology Server and Console

Complete the migration of the NetView V5R4 host program before migrating the NetView management console topology server and console. New resources for V5R4 be displayed with a red X in place of the icon.

In NetView V5R4, some of the flows between the NetView management console topology console and the NetView management console topology server were changed, resulting in incompatibility with prior levels. A console at the V5R4 topology console communicates only with a server at the V5R4 level, and a server at the V5R4 level communicates only with consoles at the V5R4 level. Also, the Java environment for the NetView management console has been upgraded. Therefore, for each server, you must install the V5R4 level of the NetView

management console topology server at the same time you install the V5R4 level of the NetView management console topology console on all consoles that communicate with that server.

As of V5R4, a V5R3 or earlier topology console can communicate with a NetView host using an IP connection only when the IPv6ENV statement at the host is set to NONE or MIXED. The topology console can still communicate with the NetView host using an LU6.2 connection. For information about the IPv6ENV statement, which is a CNMSTYLE initialization statement, see the *IBM Tivoli NetView for z/OS Administration Reference*.

As of V5R4, the NetView management console no longer launches the SNMP functions that were provided by the Web application because they were removed from the Web application; see "NetView Web Application" on page 138. SNMP commands can be issued from the command line.

If you want information about...	Refer to...
Migrating the NetView management console topology console	egvread1.me
Migrating the NetView management console topology server	egvread2.me

Appendix A. Changes from Tivoli NetView for OS/390 Version 1 Release 4 to Tivoli NetView for z/OS Version 5 Release 1

This appendix includes a summary of changes for the NetView V5R1 release. It also lists new, changed, and deleted:

Note: The lists in this section are listed alphabetically from left to right.

Summary of Changes for NetView V5R1

Changes for NetView V5R1 are included in the following sections:

Installation and Packaging Changes

There are a number of installation and packaging changes, which simplify the process for ordering, installing, and customizing the product.

Table 57. Installation and Packaging Changes

Function	Description
Streamlined packaging	Packaging options are consolidated into one orderable entity, eliminating the Unattended and Procedural offerings. This simplifies the ordering and installation processes and reduces documentation.
Consolidate data sets	The following data sets are merged into equivalent NetView data sets: • AON (SEZL) • RODM (SEKG)
Extend usage of the CNMSTYLE member	• Remaining DSIDMN definitions are migrated to the CNMSTYLE member. • Towers for the hardware monitor, session monitor, and the 4700 support facility are included in the CNMSTYLE member. • Common TCP/IP definitions are added to the CNMSTYLE member. • MultiSystem Manager initialization definitions (with the exception of the GETTOPO statements) are migrated to the CNMSTYLE member.
Removal of normal non-zero return codes	Conditions leading to expected non-zero return codes in several product installation steps are eliminated.

Table 57. Installation and Packaging Changes (continued)

Function	Description
Remove outdated functions	The following functions are no longer available: • Command security using NetView scope definitions • Span-of-control defined in members of the VTAMLST parameter data set • AON/LAN support • APPN accounting manager • APPN topology and accounting agent • MultiSystem Manager NetWare and ATM support • NMC command profile editor graphical user interface • Launch of Tivoli Inventory from the NMC topology console • NMC and NMC3270 support for Windows 95, Windows 98, and OS/2 • TCP/IP Discovery sample from OS/390 UNIX System Services • Support for the Katakana character set • The -jsnmp option of the NVSNMP command • Java Application Server (JAS) • Visual BLDVIEWS (VBV) support for OS/2

NetView Web Application

The Web interface to NetView is greatly expanded this release. Enhancements include many more management options available through the Web, and use of an external Web server to provide the NetView Web pages to users.

Table 58. NetView Web Application

Function	Description
Redesigned Web console	More functionality with new interface, and integrated help information.
Support for an external Web server	Using the WebSphere® Application Server or a Java based servlet engine provided by the NetView product, exploits an industry-standard Java Servlet 2.2 API to provide new Web-based functions more quickly. The Web.xml editor is included to simplify configuration of WebSphere Application Server or Jetty.
Web console security	RACF-based security checking when using browser-based access with authentication through the NetView user ID and password.

TCP/IP and SNMP Management

Continued in this release are a number of enhancements to the already powerful TCP/IP and SNMP management capabilities of the NetView product. Additional types of resources can now be managed by the NetView program, and several interfaces are improved.

Table 59. TCP/IP and SNMP Management

Function	Description
Manage TCP/IP traces	Start and stop component and packet traces, display active traces, and display trace status.
TCP/IP stack management	Detailed stack information, including connections and connection details.

Table 59. TCP/IP and SNMP Management (continued)

Function	Description
Management of dynamic virtual IP addresses (DVIPA)	Dynamically discover DVIPAs, provide configuration and status information, and TCP/IP connection data. Information about sysplex distributors and associated target stacks.
IP Discovery on Linux on zSeries	Discovery equivalent to the MultiSystem Manager TCP/IP agent running on Tivoli NetView for AIX and Windows NT® systems.
TCP/IP connection monitoring and thresholding	Manage connections to any application (any socket) on an OS/390 or z/OS host. Enables management of printers and other devices connected by way of TCP/IP.
PING and SNMP commands as native NetView commands	Improved performance, do not need to use UNIX System Services for these functions.
SNMP services	Real-time MIB Poller/Grapher, MIB Browser, and SNMP command dialogs are available through the NetView Web console.

Graphics Enhancements

The NetView Management Console is enhanced to provide new options for Console and Server operating system platforms, provide interfaces to other products, and provide greater flexibility.

Table 60. Graphics Enhancements

Function	Description
Enhance the NetView management console	• The NetView management console server can run on Linux on zSeries. • The NetView management console server maintains an audit trail that can be customized. • The NetView management console can run on Linux (for Intel® systems). • The NetView management console Signon can now be protected by restricting access to the LOGON command.
Provide additional integration with other Tivoli products	• Launch the IBM Tivoli Business Systems Manager in context from NetView management console to locate business systems affected by faulty network or system resources. • Launch the NetView management console from the IBM Tivoli Business Systems Manager to locate network and system resources that are affecting a business system. • Launch the IBM Tivoli NetView Performance Monitor for TCP/IP from the NetView management console.
Enhance the NETCONV function	• Allow the NetView management console topology server and Tivoli Business Systems Manager task server to run on the same workstation. • Allow asynchronous connection for IP NETCONV.
Resource-specific commands for TCP/IP resources	List resource-specific commands in command menu.

Security Enhancements

Additional security options are provided in this release for improved auditing capabilities and more control over sensitive functions.

Table 61. Security Enhancements

Function	Description
NetView management console	• Provide an audit log for commands and command responses, views accessed, and other actions. • Control of operator access
AON	Remove AON bypass of EXCMD security check.
Logging	Automatic logging of suppressed operator commands
TSO commands	Provide support for SAF surrogate authority.
Command authorization bypass	Provide command authorization checking in context of command lists.

Additional Enhancements

There are also enhancements to automation, serviceability, network management, session monitor, publications, and PIPEs.

Table 62. Additional Enhancements

Function	Description
Enhance automation	• Allow mixed case in the automation table • Allow asynchronous update of VIEW panels • Improve TIMER command function and security with RMTCMD support for cross-domain access • Enhance e-mail support
Extended serviceability	• Additional diagnostic information for PPI buffers and traces • Additional problem determination aids in the event/automation service
Network management	• Provide MultiSystem Manager IP router fault isolation • Provide MultiSystem Manager IP agent capability to forward traps to multiple hosts, thus enabling hot backup. • Filter traps at the workstation to avoid sending unnecessary traps to a NetView host. Conserves bandwidth by forwarding the correct traps to the correct hosts.
Session monitor	Improved timeout scenarios and improved performance.
Online access to publications	Sample to display publications from NetView operator console
New PIPE stages and PIPE EDIT orders	Additional PIPE stages and EDIT orders increase the capabilities of pipelines to work with commands, messages, and other data.

Help Panels

This section lists new and deleted help data set members for migration considerations.

- "New Help Panels" on page 167
- "Deleted Help Panels" on page 167

New Help Panels

BNH75	BNH76	BNH77	CNMHEAS
CNM120	CNM121	EZLH5501	EZLH6005
EZLH621C	EZLH622C	EZLH623C	EZLNDYWH
EZLWI700	EZLWI710	FKXH2H21	FKXWBANR
FKXWB000	FKXWB001	FKXWDV01	FKXWDV02
FKXWDV03	FKXWDV04	FKXWDV05	FKXWELCM
FKXWIHLF	FKXWIHTP	FKXWILGC	FKXWILGF
FKXWINOA	FKXWINOH	FKXWINVC	FKXWI10B
FKXWI100	FKXWI130	FKXWI14A	FKXWI140
FKXWI150	FKXWI160	FKXWI200	FKXWI210
FKXWI220	FKXWPORB	FKXWPORF	FKXWTITL
FKX10	FKX97	IHS019	IHS020

Deleted Help Panels

CNMKACNA	CNM110	CNM111	CNM112
EUYACDIY	EUYACLIE	EUYACMOY	EUYACQUF
EUYACREE	EUYACSES	EUYACSTP	EUYACSTR
EUYACSTT	EUYACTRE	EUYAOLAN	EUYRERMT
EUYTOINT	EUYTOREE	FKWHCAUQ	FKWHCAU1
FKWHCMDS	FKWHCMD1	FKWHCMD2	FKWHCMD3
FKWHCMD4	FKWHC100	FKWHC101	FKWHC102
FKWHC103	FKWHC104	FKWHD100	FKWHD110
FKWHD120	FKWHD130	FKWHD140	FKWHD141
FKWHD150	FKWHD151	FKWHD152	FKWHD201
FKWHD202	FKWHD203	FKWHLAD3	FKWHLAD4
FKWHLCAR	FKWHLMCP	FKWHLMR1	FKWHLMR2
FKWHLMT1	FKWHLMT2	FKWHLOBC	FKWHLOB1
FKWHLOCC	FKWHLSEL	FKWHLW44	FKWHL100
FKWHL101	FKWHL110	FKWHL111	FKWHL112
FKWHL113	FKWHO100	FKWHO101	FKWHO102
FKWHQUA1	FKWHQUA2	FKWHQUA3	FKWHR100
FKWHR101	FKWHSOVR	FKWHSWI0	FKWHS100
FKWHS110	FKWHS111	FKWHS121	FKWHS122
FKWHS123	FKWHS124	FKWHS125	FKWHS130
FKWHVIEW	FKWHVIE2	FKWHVIE3	FKWHVIE4
FKWH0000	FKWH0001	FKWH0002	FKWH0003
FKWH1000	FKWH1001	FKWH1002	FKWH1010
FKWH1011	FKWH1100	FKWH111A	FKWH111B
FKWH1110	FKWH1111	FKWH1120	FKWH1130
FKWH1140	FKWH1141	FKWH1200	FKWH1210
FKWH1220	FKWH123A	FKWH1230	FKWH1231
FKWH1240	FKWH1250	FKWH1251	FKWH1260
FKWH1261	FKWH127A	FKWH1270	FKWH1271
FKWH1272	FKWH1273	FKWH1274	FKWH1275
FKWH1276	FKWH1277	FKWH1278	FKWH1279
FKWH1280	FKWH1281	FKWH1282	FKWH13SA
FKWH13SE	FKWH13SL	FKWH13S2	FKWH13S3
FKWH13W1	FKWH13W2	FKWH13W3	FKWH13W4
FKWH130A	FKWH1300	FKWH1301	FKWH131A
FKWH131B	FKWH1310	FKWH1311	FKWH1320
FKWH1321	FKWH133A	FKWH1330	FKWH134A
FKWH134B	FKWH1340	FKWH1341	FKWH1342

FKWH1360
FKWH14IN
FKWH140A
FKWH1400
FKWH1401
FKWH141A
FKWH141B
FKWH1410
FKWH1411
FKWH1412
FKWH1413
FKWH1415
FKWH1416
FKWH1417
FKWH1418
FKWH1420
FKWH1430
FKWH144A
FKWH144B
FKWH1440
FKWH1442
FKWH1445
FKWH1447
FKWH1449
FKWH146A
FKWH146B
FKWH1460
FKWH147A
FKWH147B
FKWH1470
FKWH1475
FKWH15A3
FKWH150A
FKWH1500
FKWH151A
FKWH1510
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FKWKCMD2
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FKWKC120
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FKWKLAC9
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FKWKLBR2
FKWKLBR4
FKWKLBR5
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FKWKLBR8
FKWKLBR9
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FKWKLDL
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FKWKLLC1
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FKWKLLL1
FKWKLLL2
FKWKLLL3
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FKWKLOB5
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FKWKLSX3
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FKWKLSX5
FKWKLSYN
FKWKLSY3

FKWKLSY4
FKWKLSY5
FKWKLTA1
FKWKLTA2
FKWKLTA3
FKWKLTA4
FKWKLTD1
FKWKLTD2
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FKWKLW22
FKWKLW3N
FKWKLW33
FKWKLW44
FKWKL000
FKWKL100
FKWKL110
FKWKO100
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FKWKQUA2
FKWKQUA3
FKWKQUA4
FKWKR100
FKWKSWI1
FKWKSWI2
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FKWKS122
FKWKS130
FKWKVIEW
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FKWK1620
FKWK1630
FKWK1640
FKWK1650
FKWT0000
FKW0LAD1
FKW0LAD2
FKW0LAD3
FKW0LAHD
FKW0LBRG
FKW0LBR1
FKW0LBR2
FKW0LBR3
FKW0LCAU
FKW0LCA1

FKW0LLM1 FKW0LLM2 FKW0LLSB FKW0LSE1
FKW0LSE2 FKW0LSE3 FKW0WIN2 FKW0WIN3
FKW1LAD1 FKW1LAD2 FKW1LAD3 FKW1LAHD
FKW1LBRG FKW1LBR1 FKW1LBR2 FKW1LBR3
FKW1LCAU FKW1LCA1 FKW1LLM1 FKW1LLM2
FKW1LLSB FKW1LSE1 FKW1LSE2 FKW1LSE3
FKW1WIN2 FKW1WIN3 FKW100 FKW101
FKW102 FKW103 FKW104 FKW105
FKW106 FKW107 FKW2LAD1 FKW2LAD3
FKW2LAHD FKW2LBRG FKW2LBR1 FKW2LBR2
FKW2LBR3 FKW2LCAU FKW2LCA1 FKW2LLM2
FKW2LLSB FKW2LSE1 FKW2LSE3 FKW20
FKW200 FKW201 FKW202 FKW203
FKW204 FKW205 FKW206 FKW27
FKW3LAD1 FKW3LBRG FKW3LBR1 FKW3LCAU
FKW3LCA1 FKW3LLM2 FKW3LLSB FKW3LSE1
FKW4LBRG FKW5LBRG FKW70 FKW71
FKW72 FKW73 FKW74 FKW75
FKW76 FKW77 FKW78 FKW79
FKW80 FKW81 FKW82 FKW83
FKW84 FKW85 FKW86 FKW87
FKW88 FKW90 FKW909 FKW91
FKW92 FKW93 FKW94 FKW95
FKXIP000 FKXIP100 FKXIP130 FKXIP14A
FKXIP140 FKXIP150 FKXIP160 FKXIP170
FKXIP171 FKXIP172 FKXIP173 FKXIP174
FKXIP175 FKXIP200 FKXIP210 FKXIP220
FLB20 FLB21 FLB22 FLB23
FLB24 FLB25 FLB26 FLB27
FLB28 FLCA00 FLCA01 FLCA02
FLCA07 FLCA10 FLCA11 FLCA12
FLCE00 FLCE02 FLCE03 FLCE04
FLCE05 FLCE10 FLCE15 FLCE16
FLCE20 FLCE21 FLCE22 FLCE23
FLCE24 FLCE25 FLCE26 FLCE30
FLCE35 FLCE40 FLCE41 FLCE42
FLCE43 FLCE44 FLCE45 FLCE50
FLCE55 FLCE60 FLCE65 FLCE66
FLCE67 FLCE68 FLCE69 FLCE80
FLCE81 FLCE82 FLCE90 FLCE91
FLCE92 FLCFA0 FLCF50 FLCF55
FLCF60 FLCF62 FLCF63 FLCF70
FLCF71

Command Lists

This section lists new and deleted command lists for migration considerations.

- "New Command Lists"
- "Deleted Command Lists" on page 171

New Command Lists

CNMEAUTB CNMEPING CNMEPWD CNMERSYN
CNMESNMP CNME1037 CNME1056 EZLEIPIL

EZLEIPLR
EZLE5501
FKXEDVM1
FKXEDVPT
FKXEDVST
FKXEGPLU
FKXEIHIC
FKXEILOS
FKXEITRG
FKXENCMD
FKXEWBIN
FKXEWITB
FKXEWIT1
FKXEWIT8
FKXEWLOG
FKXEWSVS
FKXEXLAT
EZLELROP
FKXEACT3
FKXEDVPA
FKXEDVP1
FKXEDVUX
FKXEIDST
FKXEIHLP
FKXEIPTR
FKXEIWND
FKXENVDR
FKXEWCON
FKXEWITC
FKXEWIT5
FKXEWIU0
FKXEWRSP
FKXEWSVU
EZLERMTS
FKXECMAN
FKXEDVPF
FKXEDVP2
FKXEGCIP
FKXEIDVF
FKXEILGO
FKXEISES
FKXEMKCT
FKXESNMP
FKXEWER0
FKXEWITD
FKXEWIT6
FKXEWIU1
FKXEWRTR
FKXEW390
EZLEWBHP
FKXEDCON
FKXEDVPP
FKXEDVP3
FKXEGHBA
FKXEIGEN
FKXEILOG
FKXEISSF
FKXENCIP
FKXEV216
FKXEWITA
FKXEWIT0
FKXEWIT7
FKXEWIU2
FKXEWSVR
FKXEXCIP

Deleted Command Lists

CNMENV39
FKWCMDS
FKWEAMS1
FKWECMDS
FKWEC110
FKWEDB1A
FKWEF005
FKWEIBR2
FKWEILM1
FKWEISLC
FKWEISLP
FKWELAHD
FKWELA03
FKWELBRP
FKWELCGL
FKWELHDC
FKWELMR
FKWELMU1
FKWELNSC
FKWELOA4
FKWELOB4
FKWELOC1
FKWELPSS
FKWELRUN
FKWELSCB
FKWELSE1
FKWELSL2
FKWELTP1
FKWELUBS
FKWELUID
FKWELULS
FKWELUSY
FKWELUUS
FKWEL110
CNMEOUTS
FKWEAID1
FKWECAU
FKWECMD1
FKWEC120
FKWEDB10
FKWEIADL
FKWEICAL
FKWEIQNT
FKWEISLD
FKWEIVER
FKWELAH1
FKWELBDG
FKWELBR1
FKWELCLR
FKWELLSB
FKWELMSP
FKWELNAF
FKWELNSF
FKWELOA5
FKWELOB5
FKWELOS1
FKWELPT
FKWELR01
FKWELSCS
FKWELSLA
FKWELSTD
FKWELTRA
FKWELUCS
FKWELULI
FKWELUMS
FKWELUS1
FKWELU04
FKWEMGRR
CNME1502
FKWEAID2
FKWECAUC
FKWECPRT
FKWEDBBR
FKWEDB20
FKWEIBRL
FKWEICAP
FKWEISEL
FKWEISLG
FKWELADP
FKWELA01
FKWELBPP
FKWELCAR
FKWELDG
FKWELLS1
FKWELMT
FKWELNBF
FKWELOA1
FKWELOBC
FKWELOB6
FKWELPAC
FKWELRFR
FKWELR02
FKWELSEG
FKWELSLB
FKWELSTH
FKWELTR1
FKWELUDL
FKWELULM
FKWELUSF
FKWELUTL
FKWEL00A
FKWENETB
CNME7023
FKWEAID3
FKWECAUQ
FKWEC100
FKWEDBB2
FKWEDUP1
FKWEIBRP
FKWEILMU
FKWEISLA
FKWEISLL
FKWELAD1
FKWELA02
FKWELBRG
FKWELCAU
FKWELDL
FKWELMCP
FKWELMUP
FKWELNCF
FKWELOA3
FKWELOB3
FKWELOCC
FKWELPBC
FKWELROP
FKWELSCA
FKWELSEL
FKWELSLP
FKWELST1
FKWELUAS
FKWELUFA
FKWELULR
FKWELUSS
FKWELUTU
FKWEL000
FKWENMVT

FKWEO100	FKWEPUNM	FKWERCMD	FKWEROP1
FKWESEGU	FKWESWIT	FKWES10A	FKWES100
FKWES110	FKWES121	FKWES122	FKWES125
FKWES130	FKWES200	FKWES210	FKWETIME
FKWEVIEW	FKWEVIE1	FKWE100A	FKWE1000
FKWE1001	FKWE1100	FKWE1110	FKWE1120
FKWE1130	FKWE1131	FKWE1140	FKWE1150
FKWE1160	FKWE1200	FKWE1210	FKWE1220
FKWE13SL	FKWE13S2	FKWE13S3	FKWE1300
FKWE1310	FKWE1320	FKWE1330	FKWE1340
FKWE1350	FKWE1360	FKWE14BR	FKWE14RF
FKWE1400	FKWE1410	FKWE1420	FKWE1430
FKWE1440	FKWE1450	FKWE1460	FKWE1500
FKWE1600	FKWE1610	FKWE1620	FKWE1630
FKWE1640	FKWE1650	FKWE8501	FKWE8502
FKWWIND2	FKWWIND3	FKXEIPSM	FKXIPHIC
FKXIPLOS	FKXIPPTR	FKXIPSES	FKXIPSGD
FKXIPSGR	FKXIPSNG	FKXIPSNM	FKXIPSNS
FKXIPSNW	FKXIPSSF	FKXIPWND	FKXWBINT
FKXWBRSP	FKXWBRTR	FLCACMSM	FLCAEALH
FLCAEALT	FLCAEAUT	FLCAINW	FLCANALH
FLCANAUT	FLCANFSU	FLCANNAU	FLCANREQ
FLCANSER	FLCANVER	FLCARREQ	FLCDJASS

Messages

This section lists new, changed, and deleted messages for migration considerations.

New Messages

BNH757E The SAFNODEC setting will be used for surrogate decisions due to a problem with the dataspace for the SURROGAT class.

BNH758I Surrogate authorization using the SURROGAT class has resumed.

BNH759E *clist1* INVOKED AS *clist2* CAUSED THE AUTBYPAS *parm* LIMIT TO BE EXCEEDED

BNH760I *name* DOES NOT HAVE A CMDMDL STATEMENT OR IT IS NOT A COMMAND PROCEDURE

BNH761E Attempt to initialize socket interface on *ipStack* failed

BNH763E No IP address or hostname specified for PING

BNH764W Host name resolution timed out

BNH765I Pinging *ipHostname* at *ipAddress* with *count* packets of length *length* bytes

BNH766I Pinging *ipHostname* at *ipAddress* indefinitely with packets of length *length* bytes

BNH767I *numBytes* bytes received from *ipAddress*: seq=*number* in *time* ms

BNH768I Ping timed out

BNH769I *pingPackets* packets sent, *echoPackets* packets received, *percent*% packet loss

BNH770I Round trip times from *min* to *max* ms, averaging *avg* ms

BNH771I Pinging of *ipHostname* at *ipAddress result*

CNM005I *normal_SNMP_output*

CNM006E *SNMP_error*

CNM007I SNMP *request requestPDU* sent successfully

CNM008W SNMP *request* command encountered errors, RC = *rc*

CNM1200E Security exposure: You are using another person's credentials.

CNM1201E Browser's IP address is not authorized to connect to Tivoli NetView for z/OS *domain*.

CNM1202E User name must contain between 1 and 8 characters.

CNM1203E Password must contain between 0 and 8 characters.

CNM1204E User name or password is invalid.

CNM1205E User *name* is not authorized to use the MIB Browser.

CNM1206E User *name* is not authorized for SNMP set.

CNM1207E User *name* is not authorized to use the Real Time Poller.

CNM1208E User *name* is not authorized to execute SNMP *command_name* command.

> **CNM1209E** Failed to obtain the NetView for z/OS Access Servlet (FLB_NvServ) for the NetView for z/OS domain *domain*.

CNM1210E No credentials exists to access NetView for z/OS *domain*.

CNM1211E Unrecognized value for parm '*key*' that identifies the applet to launch: '*value*'

CNM1212E Missing parm '*key*' that identifies the applet to launch.

CNM1213E Missing parm '*key*' that identifies the NetView for z/OS domain to perform security checks.

CNM1214E *host* refused connection on port *portnumber*

CNM1215E Unable to resolve IP address for *host*

CNM1216E Unable to find route to *host*

CNM1217E Connect attempt to *host* interrupted

CNM1218E Connect attempt to *host* failed. Exception was *exception*

DSI760E No valid license certificate was found for this NetView program. NetView is terminating.

DSI761I NetView is terminating - IBM License Management call returned the following values: Return code: *retcode* Status code: *status*.

DWO082I (no text)

DWO978E URL WAS NOT DEFINED IN CNMSTYLE

DWO979I LIMIT REACHED - OUTPUT TRUNCATED

EZL003E	RECOVERY PROCESSING CAN NOT BE PERFORMED. AON INITIALIZATION HAS NOT COMPLETED. RELATED DATA: *data*
EZL222I	THERE IS NO DATA TO DISPLAY
EZL242I	PROGRAM *program*-RUNCMD RETRY COUNT LIMIT OF *number* EXCEEDED FOR *resname*
EZL244E	DSICTMOD RUNCMD TIMEOUT HAS BEEN EXCEEDED, RUNCMD TO *service point* FAILED FOR *program*.
EZL245E	RCMD CORRWAIT TIMEOUT OF *seconds* SECONDS HAS BEEN EXCEEDED, RUNC MD TO *service point* FAILED FOR *program*.
EZL246E	RUNCMD FAILED TO SP *spname* - RECEIVED MESSAGE *msgnum* SENSE CODE *sensecode*
FKX101I	IDLE TIME THRESHOLD EXCEEDED FOR CONNECTION *conn_id* BETWEEN *stack_ipaddr* : *port* AND *client_ipaddr* : *port*. ACTION=NOTIFY SP=*sp_name* POLICY=*policy_name*.
FKX102I	IDLE TIME THRESHOLD EXCEEDED FOR CONNECTION *conn_id* BETWEEN *stack_ipaddr* : *port* AND *client_ipaddr* : *port*. ACTION=DROP SP=*sp_name* POLICY=*policy_name*.
FKX104I	MINIMUM BYTES THRESHOLD EXCEEDED FOR CONNECTION *conn_id* BETWEEN *stack_ipaddr* : *port* AND *client_ipaddr* : *port*. ACTION=NOTIFY SP=*sp_name* POLICY=*policy_name*.
FKX105I	MINIMUM BYTES THRESHOLD EXCEEDED FOR CONNECTION *conn_id* BETWEEN *stack_ipaddr* : *port* AND *client_ipaddr* : *port*. ACTION=DROP SP=*sp_name* POLICY=*policy_name*.
FKX107I	MAXIMUM BYTES THRESHOLD EXCEEDED FOR CONNECTION *conn_id* BETWEEN *stack_ipaddr* : *port* AND *client_ipaddr* : *port*. ACTION=NOTIFY SP=*sp_name* POLICY=*policy_name*.
FKX108I	MAXIMUM BYTES THRESHOLD EXCEEDED FOR CONNECTION *conn_id* BETWEEN *stack_ipaddr* : *port* AND *client_ipaddr* : *port*. ACTION=DROP SP=*sp_name* POLICY=*policy_name*.
FKX510I	IPPORT MONITORING CANNOT BE STOPPED
FKX615I	CONNECTION DOES NOT EXIST
FKX682I	FUNCTION NOT SUPPORTED FOR z/OS *release*
FKX970I	NO SESSIONS MATCH DEFINED FILTER CRITERIA
FKX979E	UNIXSERV=YES IS REQUIRED ON TCP390 STATEMENT IN POLICY DEFINITION
IHS0181E	The *service* will continue recycling until it can successfully define a socket.
IHS0182I	<==Current *service* Service Settings==>
IHS0183I	CFG file : *cfgfilename* (*fromtype*)
IHS0184I	** The service is not active **
IHS0185I	*setting* = *value* (*fromtype*)
IHS0186I	Filter *number* slots:

IHS0187I *slotname = slotvalue*

IHS0188I FilterCache *number* slots:

IHS0189I The adapter services are running in secure mode.

IHS0190E *service*: Could not access the TestMode file.

IHS0191I *service*: Number of ServerLocations (*number*) exceeds the maximum of *maximum*; ignoring extras.

IHS0192I *service*: Server connections are suspended.

IHS0193I *service*: Server connections have been resumed.

IHS0194E *service*: A file access error occurred for the cache file.

IHS0195E *service*: An event cannot be cached: The event size is greater than the maximum cache file size.

IHS0196I *service*: File access errors have been corrected. Caching is resumed.

IHS0197E *service*: Cache file corrupted. The current contents will be discarded.

IHS0198E *service*: An event in the cache file is not properly terminated. The event will be discarded.

IHS0199E *service*: An event in the cache file is too large for the Read buffer. The event will be discarded.

IHS0200I *service*: Number of ServerPorts (*number*) exceeds the maximum of *maximum*; ignoring extras.

IHS0201I *service*: At least one ServerLocation must be specified.

Changed Messages

BNH064I DISTRIBUTED ORIGIN ORIGIN ORIGIN

BNH065I AUTOTASK NETVIEW OPERATOR VERSION TRANSPORT

BNH401E LOAD FAILED FOR DB2® INTERFACE MODULE '*module_name*' WITH ABEND CODE = X'*abend_code*' AND REASON CODE = X'*reason_code*'

BNH652I NETVIEW RESOURCE MANAGER IS TERMINATING DUE TO '*reason*'

DSI231I NO *element* IS ACTIVE

DUI400W IP COMMUNICATIONS SETUP FOR IP *ipid*:*port* HAS FAILED. THE NETCONV START COMMAND IS REJECTED.

DUI401I NETCONV COMMAND PROCESSED SUCCESSFULLY. COMMUNICATION TO IP *ipid*:*port* STARTED.

DUI402I IP *ipid*:*port* HAS ALREADY BEEN STARTED BY *operatorid*. CONDITION CODE = *condcode*

DUI404E NETCONV START FOR IP *ipid*:*port* REJECTED. DSIMQS FAILED WITH RC=*retcode*.

DUI405E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: TCP/IP HAS TERMINATED.

DUI406E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: VTAM TPEND.

DUI407I A DUPLICATE NETCONV START REQUEST WAS ISSUED FOR IP *ipid*:*port*. THE REQUEST IS IGNORED.

DUI408I A NETCONV STOP REQUEST FOR IP *ipid*:*port* THAT WAS ISSUED BY *operatorid* COULD NOT BE PROCESSED.

DUI409E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: OST ABEND.

DUI410E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: OPERATOR LOGOFF.

DUI411E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: CNMTAMEL TASK IS TERMINATING.

DUI412E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: FATAL ERROR DURING RECEIVE.

DUI413E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: FATAL ERROR DURING SEND.

DUI414E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: FATAL ERROR

DUI415E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: RECEIVED DATA THAT WAS NOT VALID.

DUI416E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: WORKSTATION FATAL ERROR.

DUI417I NETCONV COMMAND PROCESSED SUCCESSFULLY. COMMUNICATION TO IP *ipid*:*port* STOPPED.

DUI419I COMMUNICATION TO IP *ipid*:*port* TERMINATED NORMALLY. THE COMMUNICATION SERVER CLOSED THE SOCKET.

DUI421E THE NETCONV START COMMAND HAS FAILED BECAUSE IP *ipid*:*port* IS COMMUNICATING WITH ANOTHER STATUS FOCAL POINT, IS RUNNING AN UNSUPPORTED LEVEL OF NMC, OR IS ALREADY COMMUNICATING WITH THIS STATUS FOCAL POINT.

DUI422E CNMTAMEL FAILED TO RECEIVE DATA FROM IP '*ipid*:*port*' DUE TO A STORAGE SHORTAGE. REQUESTED AMOUNT = *amount* BYTES.

DUI423E COMMUNICATION TO IP *ipid*:*port* TERMINATED ABNORMALLY: WORKSTATION NOT RESPONDING.

DUI424I OPERATOR *operatorid* IS COMMUNICATING WITH WORKSTATION AT IP *ipid*:*port*.

DUI461I IP *ipid*:*port* NOT AVAILABLE FOR WORK; REQUEST TO THIS IP WAS ABORTED.

DUI500E CNMTAMEL RECEIVED CORRUPTED DATA FROM IP *ipid*:*port*.

DUI611I THE OPERATOR ID AND PASSWORD FOR GRAPHIC MONITOR OPERATOR *operatorid* HAS BEEN VERIFIED. *ipid*:*port* IS THE SERVER PWS SERVING THIS GRAPHIC MONITOR.

DUI623E CNMTAMEL IS UNABLE TO ALLOCATE *bytes* BYTES OF STORAGE FOR SENDING A REQUIRED RESPONSE TO SERVER PWS AT IP *ipid*:*port*

DUI625E CNMTAMEL COULD NOT SEND A DATA PACKET TO THE DATA SERVER AT IP *ipid*:*port* BECAUSE OF A STORAGE SHORTAGE.

DUI627E CNMTAMEL FAILED TO SEND DATA TO THE DATA SERVER AT IP *ipid*:*port* DUE TO AN MQS FAILURE.

TYPE = *sesstype* STATUS = *sessionstat* SESSION = *session*

DWO948I RECEIVER RECEIVER BUFFER QUEUED TOTAL STORAGE RCVR

DWO949I IDENTITY STATUS LIMIT BUFFERS BUFFERS ALLOCATED ASID

DWO950I -------- -------- ---------- ---------- ---------- ---------- ----

DWO951I &1 ACTIVE &2 &3 &4 &5 &6

EZL970I NO TIMERS ARE SCHEDULED FOR THE FILTER CRITERIA *'filter'* ON *'target'*

EZL971I REQUESTED TIMERS WERE DELETED ON *'target'*

EZL973I REQUESTED TIMER *timer* ADDED ON *' target'*

EZL974I REQUESTED TIMER *timer* CHANGED ON *'target'*

EZL975I REQUEST FAILED TIMER *timer* ALREADY EXISTS ON *'target'*

FLB010E FLBTOPO RECEIVED RETURN CODE *retcode*, ABEND CODE *abncode*, REASON CODE *rsncode*, ATTEMPTING TO LOAD MODULE '*module*'

FLB534E TOPOSNA *requestparm* COMMAND HAS INCORRECT RODM OBJECT ID '*rodmobjectid*'

IHS0076I TASK=*task* LEVEL=*level* IP=*iptrace*

IHS0094E *service*: Initialization failed. The configuration file is *configfile*.

Deleted Messages

AAU971I	BNH180I	BNH191I	BNH193I
BNH201E	BNH204E	BNH216E	BNH260I
BNH292I	BNH320W	BNH325W	BNH332I
BNH746E	CNM1100I	CNM1101E	CNM1102E
CNM1103I	CNM1104I	CNM1105E	CNM1106I
CNM1107I	CNM1108E	CNM1109E	CNM1110E
CNM1111E	CNM1112E	CNM1113E	CNM1114E
CNM1115E	CNM1116E	CNM1117E	CNM1118E
CNM1119E	CNM1120E	CNM1121E	CNM1122I
CNM1123E	CNM1124E	CNM1125E	CNM1126I
DSI088I	DSI181I	DSI182I	DSI183I
DSI211I	DSI212I	DSI218I	DSI796I
DUI543E	DUI544E	FLB200I	FLB201E
FLB202I	FLB204E	FLB205E	FLB206E
FLB207E	FLB208W	FLB209E	FLB210E
FLB211E	FLB212E	FLB213E	FLB214I
FLB215W	FLB216E	FLB217E	FLB218I
FLB219E	FLB220E	FLB221E	FLB222E
FLB223E	FLB224I	FLB226W	FLB227I
FLB228I	FLB229I	FLB230I	FLB231W
FLB232E	FLB233E	FLB234E	FLB235E

FLB236E	FLB237E	FLB238I	FLB239E
FLB243W	FLB244E	FLB245E	FLB247E
FLB248I	FLB250E	FLB251E	FLB252E
FLB253E	FLB260I	FLB261I	FLB262I
FLB263I	FLB264I	FLB265I	FLB266I
FLB267I	FLB268I	FLB269I	FLB270I
FLB271I	FLB272I	FLB273I	FLB274I
FLB275I	FLB276I	FLB277I	FLB278I
FLB279I	FLB280I	FLB281I	FLB282I
FLB283I	FLB284I	FLB285I	FLB287I
FLB428E	FLB510I	FLB511I	FLB512I
FLB513I	FLB514E	FLB515E	FLB518E
FLB519E	FLB522E	FLB523E	FLB526E
FLB527E	FLB530E	FLB531E	FLB535I
FLB536I	FLB569I	FLB570I	FLB571I
FLB572I	FLB573I	FLB574I	FLB575I
FLC123I	FLC124I	FLC125I	FLC127I
FLC128I			

Additionally, all FKW, FLCA, FLCE, and FLCF messages were deleted, except the following which were renamed:

Table 63. NetView V5R1 Message IDs That Were Renamed

Pre-NetView V5R1 Message ID	NetView V5R1 Message ID
FKW201I	EZL242I
FKW204I	EZL222I
FKW732E	EZL244E
FKW733E	EZL245E
FKW829E	EZL246E

Samples

This section lists new and deleted samples for migration considerations.

- "New Samples"
- "Deleted Samples"

New Samples

CNMSAF2	CNMSBAK1	CNMSCAT2	CNMSPAN2
CNMSRPLY	CNMSHTSP	CNMSURLS	DSIAUTB
DSIAUTBU	DSICMD51	DSIPROFG	DSIW3PRF
FKXSCM	FKXSDVPT	FKXVHTML	FKXWHTML
FLCAINP			

Deleted Samples

CNM$SAMP	CNMIPDCN[1]	CNMSXBAS	CNMSXMON
DSICMPRC	DSICMRMT	DSIDMNK	DSISPN
EKG$1SYS	EKG$4SYS	EKG$8SYS	EZL$5SYS
EZLJSMTP	FKWCFGDL	FKWCFG01	FKWCGLOB

FKWCMD	FKWHELP	FKWNDCMD	FKWOPF
FKWTABLE	FKWTREE	FKXCM[2]	FKXSNMP[3]
FLBGMMPR	FLBSYSDA	FLBS4210	FLBS4211
FLCSAALH	FLCSAINP	FLCSDM6A	FLCSDM6N
FLCSEALH	FLCSEALT	FLCSEAUT	FLCSIATM
FLCSINW	FLCSNALH	FLCSNAUT	FLCSNNAU
IHSDNODE[4]	IHSDPOLL[5]	IHSDRESO[6]	IHSDTEMP[7]
IHSDVIEW[8]	IHSMIBS[9]	IHSPCONF[10]	IHSPJDMS[11]
IHSSNMP[12]	IHSSRVR[13]		

File names in UNIX system services:

1. ipdiscovery.conf
2. fkxcm
3. fkxsnmp.grp
4. node.def
5. pollobj.def
6. resource.def
7. template.def
8. view.def
9. nv390mibs.def
10. config.properties
11. JdmServerProperties.txt
12. snmp.conf
13. nv390srvr.conf

Appendix B. Changes from Tivoli NetView for z/OS Version 5 Release 1 to Tivoli NetView for z/OS Version 5 Release 2

This appendix includes a summary of changes for the NetView V5R2 release. It also lists new, changed, and deleted:

Note: The lists in this section are listed alphabetically from left to right.

Summary of Changes for NetView V5R2

Changes for NetView V5R2 are included in the following sections:

Installation and Packaging Changes

There are a number of installation and packaging changes, which simplify the process for ordering, installing, and customizing the product.

Table 64. Installation and Packaging Changes

Function	Description
Migrate to the CNMSTYLE member	You can use the CNMSJMIG sample to migrate initialization member statements from prior releases (including CNME1034 and some DSIPARM members) to statements required for CNMSTYLE processing. New statements are placed in the CNMSTUSR member. You can also use the CNMSJMIG sample to migrate DSICMD statements to the new CNMCMD format. New statements are placed in the CNMCMDU member.
Customize the CNMSTYLE member	The way to customize the CNMSTYLE member is changed. Make all global (enterprise) changes in the CNMSTUSR member that is included in the CNMSTYLE member using the %INCLUDE statement. Make system-specific changes in the C*xx*STGEN member that is included using the %INCLUDE statement.

Table 64. Installation and Packaging Changes (continued)

Function	Description
Create a CNMSTYLE report	You can use the CNMSTYLE report generator to analyze the CNMSTYLE member. You can use the report that is created to do the following tasks: • List the %INCLUDE structure. • Analyze multiple occurrences of statements within the CNMSTYLE member. • List the CNMSTYLE towers that are enabled. • Analyze initialization statements for a particular function.
Automatically start NETCONV sessions	You can use the function.autotask.NetConv and TAMEL.CONV statements in the CNMSTYLE member to automatically start NETCONV sessions.
Migrate to new command definition statements (CMDDEF)	The CNMCMD sample replaces the DSICMD member. Add any installation-defined commands to the CNMCMDU member. You can use the CNMSJMIG sample to migrate the DSICMD member.
Set domain ID in IEASYM*xx*	If you use VTAM APPL A01APPLS (CNMS0013) sample, you can set the domain ID using a system variable (&CNMDOMN) in SYS1.PARMLIB member IEASYM*xx*.
Specify volume serial information for VSAM clusters	You can use the CNMSJ000 job to specify the volume serial information that is used when creating VSAM clusters during installation.
ROUTECDE statement	A new ROUTECDE statement was added to the CNMSTYLE member that defines the routing default for all NetView-generated WTOs and WTORs and the WTO and WTOR commands. Any commands issued before this parameter is processed are issued with a default ROUTECDE value of 1. The ROUTECDE statement was added to the CNMSTYLE member and the following NetView procedures: • CNMPSSI (CNMSJ010) • CNMGMFHS (CNMSJH10) • EKGLLOAD • EKGLOADP • EKGXRODM • IHSAEVNT
New default value for MSGIFAC	The default value for MSGIFAC statement was changed to SSIEXT in the CNMSTYLE and CNMPSSI members. If a future release of the z/OS program includes the Stage 2 console restructuring, the QUESSI, QSSIAT, and USESSI values will not be supported.

NetView Web Application

The Web interface to the NetView program is greatly expanded this release. Enhancements include many more management options that are available through a Web browser.

Table 65. NetView Web Application

Function	Description
Embedded version of IBM WebSphere Application Server - Express® replaces the Jetty Web server	The embedded version of IBM WebSphere Application Server - Express is shipped as part of the NetView Web application and acts as your Web application server if you do not have the WebSphere product installed.
Sysplex IP stack management	You can use the NetView Web application to manage sysplex TCP/IP stack information.
TCP/IP connection and IP packet trace management	You can use the NetView Web application to manage live and historical TCP/IP connections and to view formatted, real-time IP packet traces. You can also view performance data provided by the IBM Tivoli OMEGAMON XE for Mainframe Networks program.
Event viewing	You can use the NetView Web application to view events in the Common Event Infrastructure database.
Incident reports	You can use the NetView Web application to open incident reports in your incident management application.
Setting of user preferences	You can set or control individual user preferences for the NetView Web application.
Controlling access to tasks	You can define a set of users that have access to specified NetView Web application tasks.
Consistent user interface	The NetView Web application interface, including the MIB Browser and Real Time Poller, is more consistent with the standard Tivoli user interface.
Portfolio layout	You can control the layout and hierarchy of the NetView Web application portfolio. You can also add, delete, or rename tasks.
Additional portfolio changes	Tasks for loading and unloading SNMP MIBs, starting the 3270 console, and launching procedures were added to the portfolio. History Log, Inform Actions, SNA Session Data, SNMP View, IP and TCP/IP commands, and TCP/IP Trace were removed from the portfolio.

TCP/IP and SNMP Management

Continued in this release is a number of enhancements to the already powerful TCP/IP and SNMP management capabilities of the NetView program. Additional types of resources can now be managed by the NetView program, and several interfaces were improved.

Table 66. TCP/IP and SNMP Management

Function	Description
NetView for z/OS Tivoli Enterprise Portal V6.1 Agent	You can use the NetView for z/OS Tivoli Enterprise Portal V6.1 Agent to manage both TCP/IP availability and performance data from a single user interface. The NetView program provides TCP/IP availability data and OMEGAMON XE for Mainframe Networks provides TCP/IP performance data.

Table 66. TCP/IP and SNMP Management (continued)

Function	Description
Intrusion Detection Services	Working in conjunction with the z/OS Communications Server Intrusion Detection Service, you can define automated responses to the following items: • Scans • Attacks • Traffic regulation for TCP connections and UDP receive queues Using notification and inform policies, you can send an e-mail to a security administrator, issue a message, generate an alert or Tivoli Enterprise Console® event, issue commands, or generate a report in response to an intrusion.
Support for IP address translation	For IP addresses that are translated by Comprehensive Network Address Translation (available with Tivoli NetView 7.1.1 or later) as packets move from one network to another, the NetView program provides both the translated address and the original address.
Layer 2 support	The MultiSystem Manager IP agent can represent the layer 2 status supported by the IBM Tivoli NetView product.
Support for IPv6 and SNMPv3	IPv6 addresses are displayed in messages, views, and other user interfaces. IPv6 addresses are accepted as input in ping, tracerte, and some other commands. You can use SNMPv3 authentication and encryption from the command line, REXX and command lists, with switches to set the authentication protocol, the authentication pass phrase, and the privacy pass phrase used with SNMPv3 messages.
MultiSystem Manager IP agent enhancements	New traps provide support for the Hot Standby Router Protocol (HSRP).
DVIPA support	AON is no longer required for DVIPA management. To enable DVIPA support, customize CNMSTYLE statements.

NetView Management Console

The NetView management console is enhanced to provide new options for console and server operating system platforms, provide interfaces to other products, and provide greater flexibility.

Table 67. Enhancements to NetView management console

Function	Description
Automatically start NETCONV sessions	You can automatically start NETCONV sessions between the host NetView program and the NetView management console server during NetView initialization.
Save the topology console log to the console	Save the NetView management console log to a file on the NetView management console server or the console.
Customize labels	You can customize labels for the Data1, Data2, and Data3 fields for RODM resources on the NetView management console. You can also customize labels in the NetView management console navigation tree.
Define double-click mouse actions	You can define double-click mouse actions for displaying information about real or aggregate resources on the NetView management console.

Table 67. Enhancements to NetView management console (continued)

Function	Description
Sysplex IP stack management	You can use the NetView management console to manage sysplex TCP/IP stack information.

Security Enhancements

Additional security options are provided in this release to allow improved auditing capabilities and more control over sensitive functions.

Table 68. Security Enhancements

Function	Description
Security for TCP/IP communication	Support is added for the Application-Transparent Transport Layer Security (AT-TLS) service provided by z/OS Communications Server. This provides encryption for communication between the NetView host and the NetView management console server, as an alternative to the encryption function provided by the NetView program. Consider changing to the new encryption support.

Usability Enhancements

Various enhancements are provided in this release to enhance usability.

Table 69. Usability Enhancements

Function	Description
Convert a command to uppercase	You can use the FOLDUP parameter on the CMDDEF statement or the ADDCMD command to convert a command to uppercase before sending it to the command processor. FOLDUP=Y takes precedence over the OVERRIDE NETVASIS=YES specification.
Specify an exception list	You can specify an exception list when purging items from the NLDM database. This applies to the DBAUTO, DBINIT, DBMAINT, NLDM PURGE, and PURGEDB commands.
Specify an autotask for NetView Resource Manager processing	You can rename automatic operators that are supplied by the NetView product through a change in the CNMSTYLE member.
Limit the output of the CNMPRT and DSIPRT samples	You can limit the output of the CNMPRT (CNMSJM04) sample and the DSIPRT (CNMS6214) sample by specifying a starting and ending date and time, or a date and time range.
Increase the number of objects supported by RODM	Currently RODM supports approximately 524,000 objects (theoretical maximum limit). This theoretical limit is increased to approximately 2 million objects, depending on the compositions of the objects and other information in the RODM cache. The RODM API does not change.

Additional Changes

There are also changes to VTAM command routing, automation, performance, and serviceability.

Table 70. Additional Enhancements

Function	Description
Explicit and implicit routing of VTAM commands	The following methods for explicit and implicit routing of VTAM commands are no longer supported: • VTAM commands entered from the operator console • VTAM commands prefixed with MVS entered from the operator console • VTAM commands issued with the PIPE VTAM stage Use the RMTCMD or ROUTE command to send VTAM commands to another NetView program. The NPDA DDOMAIN command no longer supports a resource name.
Enhance automation	• You can use the message revision table (MRT) to intercept original z/OS-based messages (not copies) and suppress them, make changes to attributes (for example, color, text, route codes, and descriptor codes), or automate the messages. • You can route messages and MSUs to the correlation engine to correlate multiple events over time.
Increase performance	• Performance is improved for high-level language (HLL) programs that use preinitialized PL/I and C environments. The primary stack and heap extent sizes increased to 128K and the secondary stack and heap extent sizes increased to 128K.
Enhance serviceability	• The Interactive Problem Control System (IPCS) verb exit CNMIPCS is enhanced to run in multiple address spaces.

Command Lists

This section lists new and deleted command lists for migration considerations.

- "New Command Lists"
- "Deleted Command Lists" on page 187

New Command Lists

CNMCRMSG	CNMEABND	CNMEAUX	CNMEBCOR
CNMECMNM	CNMECONV	CNMECRG	CNMEDCNV
CNMEDCST	CNMEDCSY	CNMEDCUT	CNMEDC0A
CNMEDC01	CNMEDC02	CNMEDC03	CNMEDC05
CNMEDC06	CNMEDC07	CNMEDPRV	CNMEEPAP
CNMEEPST	CNMEEPSY	CNMEERSC	CNMEFPTC
CNMEHTSP	CNMEMIG	CNMENVHB	CNMEPLXI
CNMESCAC	CNMESCCD	CNMESPAT	CNMESPAU
CNMESPAY	CNMESPIN	CNMESPRO	CNMESPWE
CNMESTMN	CNMETACC	CNMETACI	CNMETACN
CNMETACW	CNMETALW	CNMETAPK	CNMETAPW
CNMETRTE	CNMEWEBM	CNMEXLCH	CNMEZPM1
CNMEZPM2	CNMEZPM3	CNMEZPM4	CNMEZZMG
CNME7200	CNME7201	CNME7203	CNME7205
CNME7210	CNME7211	CNME7212	CNME7213
CNME7221	CNME7225	CNMMONSY	FKXECOLD
FKXECOLS	FKXEDVSR	FKXEGTCN	FKXEGTDT

FKXEGTIF	FKXEGTPF	FKXEGTPT	FKXEGTST
FKXEIDSA	FKXEIDSC	FKXEIDSE	FKXEIDSR
FKXESTCK	FKXETRA6	FKXEVP1X	FKXEVP2X
FKXEVP3X	FKXEWPNG	FKXEWSVM	FKXEWTRA
FKXE221A			

Deleted Command Lists

EZLEIPIL	EZLEIPLR	FKXEDCON	FKXEIDST
FKXEIDVF	FKXEIGEN	FKXEIHIC	FKXEIHLP
FKXEILGO	FKXEILOG	FKXEILOS	FKXEIPTR
FKXEISES	FKXEISSF	FKXEITRG	FKXEIWND
FKXENVDR	FKXEWBIN	FKXEWCON	FKXEWLOG
FKXEWRSP	FKXEWRTR	FKXEW390	READYRMT

Messages

This section lists new, changed, and deleted messages for migration considerations.

- "New Messages"
- "Changed Messages" on page 191
- "Deleted Messages" on page 192

New Messages

AAU927I *modid locid* INVALID PURGE EXCEPTION LIST *xx*

BNH180I INTRUSION DETECTION MESSAGE RECEIVED.

BNH193I ERROR MONITORING SYSLOG '*filename*'

BNH202E UNIX SYSTEM SERVICE *service* FAILED. SOCKET CLOSED.

BNH299I *srvc_name* caching for *pattern* is disabled.

BNH541I lcldate lcltime (gmtdate gmttime) LOCAL TIME ADJUSTMENT STARTED

BNH542I lcldate lcltime (gmtdate gmttime) LOCAL TIME ADJUSTMENT ENDED

BNH557E MISMATCH DETECTED BETWEEN var1 AND var2 ENTRIES IN var3.

BNH648I *member_id* removed from cache by *action*

BNH649I No members cached by *srvc_name* found for the action *action_name*

BNH738E COMMAND NOT PROCESSED — PPI SEND FAILURE

BNH750I *member_id* was cached by *task_name*

BNH772I NUMBER OF CONNECTIONS: *numcon*, MISSED BUFFERS: *missbuf*

BNH773I NUMBER OF PACKETS: *nump*, MISSED BUFFERS: *missbuf*, TCPNAME: *tname*

BNH780I UNABLE TO SEND EVENT TO CORRELATION ENGINE.

BNH781I CORRELATION ENGINE MESSAGE RECEIVED.

BNH782I NO MESSAGE/MSU FOUND FOR CORRELATION EVENT *event*.

BNH783I *number* CORRELATION MESSAGES/MSUS PURGED.

BNH784I CORRSERV COMMAND ACCEPTED.

BNH785I CORRELATION FAILED. MQS FAILED TO DSICORSV. RC = *rc*.

BNH786I EVENT THRESHOLD *nn* REACHED.

BNH787I CORRSERV STATUS command response data

BNH788I COMMAND RESPONSE TO *command* RECEIVED

BNH789I CORRELATION LOOP DETECTED. MESSAGE/MSU REJECTED.

BNH790I NetView Resource Agent ***domain*** is down-level. Processing continues.

BNH791I ADDRESS FAMILY IS ***family***

BNH792I PORT NUMBER IS ***nnn***

BNH793I SOCKET TYPE IS ***socktype***

BNH794I PROTOCOL NUMBER IS ***nnn***

BNH795I SCOPE ID IS ***scopeid***

BNH796I SERVICE NAME IS ***service***

BNH797I CONVERSION FAILED FOR IP ADDRESS ***ipaddress*** WITH RC ***retcode***. COMMAND PROCESSING TERMINATED.

BNH798I NO INTERFACES WERE RETURNED

BNH799I INTERFACE NAME IS ***name***

BNH800I INTERFACE ADDRESS IS ***address***

BNH801I INTERFACE INDEX IS ***nnn***

BNH802I SOCKET ***nnn*** ADDRESS FAMILY IS INCOMPATIBLE WITH IP ADDRESS ***address***

BNH803I VALUE ***value1*** FOR KEYWORD ***keyword1*** CONFLICTS WITH VALUE ***value2*** FOR KEYWORD ***keyword2***

BNH804I NETVIEW TIVOLI ENTERPRISE PORTAL AGENT '*agent_info*' INTERFACE INITIALIZATION IS *action*

BNH805I NETVIEW TIVOLI ENTERPRISE PORTAL AGENT '*agent_info*' INTERFACE IS TERMINATING DUE TO '*reason*'

BNH806I TAKE ACTION COMMAND '*command*' RECEIVED FOR TASK *task_name*

BNH807I TAKE ACTION RESPONSE SENT FOR COMMAND '*command*' TASK *task_name*

BNH808I TAKE ACTION COMMAND '*command*' FAILED FOR TASK *task_name*

BNH809I DVIPA DATA IS NOT AVAILABLE FOR DOMAIN *domain*

BNH810I Tracing IP route to *target* max *hops* hops

BNH811I *hop*: *addr* (*name*) *t1*ms *t2*ms *t3*ms...*tn*ms

BNH812I *command* ISSUED FOR *task_name* COMPLETED WITH STATUS *code*

BNH816I SYSPLEX IP STACK MANAGER INITIALIZATION IS COMPLETE

BNH817I SYSPLEX IP STACK MANAGER INITIALIZATION IS STARTING

BNH818I SYSPLEX IP STACK MANAGER IS ENDED DUE TO OPERATOR REQUEST

BNH819E SYSPLEX IP STACK MANAGER RECEIVED UNRECOGNIZED DATA WHILE PROCESSING *key*

BNH820E INVALID IP ADDRESS *ipaddr* SPECIFIED

BNH821I AT-TLS CONNECTION STATUS: X'*connection-status*'

BNH822I AT-TLS POLICY STATUS: X'*policy-status*'

BNH823I AT-TLS ENCRYPTION PROTOCOL: X'*protocol*'

BNH829E AT-TLS POLICY X'*policy-status*' NOT SUPPORTED

BNH830I ONE OR MORE SPECIFIED OUTPUT ORDERS ARE NOT SUPPORTED IN A WHEN STATEMENT

BNH831I DISPLAY OF NETVIEW TIVOLI ENTERPRISE PORTAL AGENT CONNECTIONS

BNH832I TASK STATUS TCP/IP SOURCE PORT IP HOST

BNH833I NAME NAME NAME ADDRESS NAME

BNH834I *insert1 insert2 insert3 insert4 insert5 insert6 insert7*

BNH835I DISPLAY OF MAPPED TIVOLI ENTERPRISE PORTAL USER IDS

BNH836I TIVOLI ENTERPRISE PORTAL USER ID NETVIEW OPERATOR ID

BNH837I *insert1 insert2*

BNH875I COMMON_BASE_EVENT. TYPE: *type* MSG: *msg*

BNH876E ERROR PROCESSING TEMPLATE TAG *tag* ON LINE *linenumber*. REASON: *cde*

BNH883I CBE TEMPLATE *template* NOT FOUND.

BNH884I CBE TEMPLATE MEMBER *member* SUCCESSFULLY LOADED.

BNH885I NO CBE TEMPLATES LOADED.

BNH886I CBE TEMPLATES *template* FOUND. CONTENTS ARE:

BNH887I CBE TEMPLATE NAME *template* that is not valid was specified.

CNM012I REVISION TABLE *table_name*, LOADED BY *task_name*, HAS EXAMINED *count* MESSAGES SINCE BEING LOADED, *date time*

CNM014I REVISION TABLE REPORT FOLLOWS:

CNM015I TOTAL HITS FOR THE FOLLOWING UPON OR UPON-GROUP: *number*

CNM594I NO MATCH WAS FOUND. LBFINDMX WAS EXCEEDED. ENTER RFIND TO CONTINUE.

CNM597I MAXIMUM ERROR COUNT EXCEEDED

DSI047E *operation* failed: *tower* not enabled.

DSI500I *object* restarted.

DSI891I USING DEFAULT MEMBER – *member*

DSI892I	*keyword* KEYWORD USING DEFAULT VALUE OF *value*
DSI893E	*cmd_name* COMMAND FAILED WITH A RC = *rc* : *command*
DSI894E	UNMATCHED COMMENT DELIMITER IN MEMBER *member_name*
DSI895E	UNMATCHED QUOTE IN MEMBER *member_name* ON LINE *line_no*
DSI896E	*utility* COMPLETED WITH RC = *rc*
DSI897E	COULD NOT FIND ANY DATA SETS FOR DDNAME *ddname*
DSI898E	COULD NOT FIND MEMBER *member_name* IN DDNAME *ddname*
DWO083I	*text*
DWO084E	The value *value* specified for keyword *keyword* on the *command* command is incorrect. It is too long.
DWO085E	The value 'MEM-' was specified for the MODFILT keyword without a member name following 'MEM-'.
DWO086I	*ddname* member *member* contains no MODFILT filter entries.
DWO087E	*ddname* member *member* contains the following incorrect MODFILT filter entry: *'MEM-badmem'*. Nesting members is not permitted.
DWO088E	An error was encountered while processing *ddname* member *member*.
DWO089I	*type* not currently decoded. The trace record follows.
EKG1927E	*jobname*: JCL EXEC STATEMENT PARAMETER FOR THE ROUTE CODE OPTION IS NOT VALID
EZL230E	REQUIRED PARAMETER *parm* MISSING FROM *entry* STATEMENT IN *name* FILE
EZL442I	INFORM LOG MEMBER NOT DEFINED
EZL478E	INFORM LOG MEMBER *member_name* CONTAINS INVALID DATA
EZL479I	INFORM LOG MEMBER *member_name* CONTAINS NO ENTRIES
EZL510I	*restype resname* WAS REPORTED AS UNAVAILABLE, BUT IS NOW AVAILABLE (REPORTED BY *reporter*)
EZL710I	EZL710I One or more *policy_type policy_name* keywords found.
FKX300I	IDS EVENT RECEIVED : DIPADDR=*dest_ip_addr*, SIPADDR=*src_ip_addr*, CORRELATOR=*nnnn*. MEMBER=*member_name*
FKX301I	IDS EVENT THRESHOLD OF *nnn* EVENTS DURING INTERVAL *interval* REACHED FOR STACK *stackname*
FKX303I	IDS EVENT DETECTED CONTAINS UNKNOWN *probeid*
FKX305I	IDS EVENT DETECTED FOR DESTINATION IP ADDRESS *dest_ip_addr* BUT COULD NOT CORRELATE TO A KNOWN TCP/IP STACK.
FKV655I	NO DIRECTORY INFORMATION RELATED TO RESOURCE *cpname* IS AVAILABLE

Changed Messages

AAU130I REQUESTED TRACE FUNCTION IS PENDING GTF START WITH USR OR USRP OPTION

AAU270I SYNTAX ERROR INVOLVING BEFORE PHRASE OR PEXLST PARAMETER

BNH197E UNABLE TO WRITE TO EXTERNAL LOG, CMDDEF STATEMENT DSIELDAT IS MISSING

BNH642I *requestname* DISPLAY TERMINATED DUE TO UNEXPECTED ERROR

BNH681I DOMAIN TASK COMMUNICATION IP HOST

BNH682I NAME NAME MODE ADDRESS NAME

BNH684I *domain taskname mode ipaddress hostname*

BNH760I *name* DOES NOT HAVE A CMDDEF STATEMENT OR IT IS NOT A COMMAND PROCEDURE

BNH763E No IP address or hostname specified for *command*

CNM008W SNMP *request* command encountered errors

CNM330E *command* : *parm* PARAMETER MISSING OR INCORRECT

CNM516E VALUE SPECIFIED FOR "*name*" *type* IS TOO LONG IN *ddname* MEMBER *member_name*

CNM518E AN INVALID NULL QUOTED STRING WAS SPECIFIED FOR "*name*" *type*

CNM552I NO MVS CONSOLE ASSIGNED TO THIS OPERATOR

CNM567I NO MVS CONSOLE AVAILABLE—TRY AGAIN LATER

CNM569I MVS CONSOLE RELEASED

DSI141I *macro* FAILED. REGISTER 15 = X'*code*', REGISTER 0 = X'*code*', LUNAME = *luname extra extra*

DSI590I CMDDEF STATEMENTS MAY BE MISSING FOR *module*

DUI373E NETVIEW SUBSYSTEM NOT AVAILABLE FOR PROGRAM TO PROGRAM INTERFACE REQUEST FROM *task*.

DUI400W IP COMMUNICATIONS SETUP FOR IP '*ipid*:*port*' HAS FAILED. THE NETCONV START COMMAND IS REJECTED.

DUI401I NETCONV COMMAND PROCESSED SUCCESSFULLY. COMMUNICATION TO IP '*ipid*:*port*' STARTED.

DUI402I IP '*ipid*:*port*' HAS ALREADY BEEN STARTED BY *operatorid*. CONDITION CODE = *condcode*

DUI404E NETCONV START FOR IP '*ipid*:*port*' REJECTED. DSIMQS FAILED WITH RC=*retcode*.

DUI405E COMMUNICATION TO IP '*ipid*:*port*' TERMINATED ABNORMALLY: TCP/IP HAS TERMINATED.

DUI406E COMMUNICATION TO IP '*ipid*:*port*' TERMINATED ABNORMALLY: VTAM TPEND.

DUI407I A DUPLICATE NETCONV START REQUEST WAS ISSUED FOR IP '*ipid*:*port*'. THE REQUEST IS IGNORED.

DUI408I	A NETCONV STOP REQUEST FOR IP *'ipid:port'* THAT WAS ISSUED BY *operatorid* COULD NOT BE PROCESSED.
DUI409E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: OST ABEND.
DUI410E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: OPERATOR LOGOFF.
DUI411E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: CNMTAMEL TASK IS TERMINATING.
DUI412E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: FATAL ERROR DURING RECEIVE.
DUI413E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: FATAL ERROR DURING SEND.
DUI414E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: FATAL ERROR
DUI415E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: RECEIVED DATA THAT WAS NOT VALID.
DUI416E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: WORKSTATION FATAL ERROR.
DUI417I	NETCONV COMMAND PROCESSED SUCCESSFULLY. COMMUNICATION TO IP *'ipid:port'* STOPPED.
DUI419I	COMMUNICATION TO IP *'ipid:port'* TERMINATED NORMALLY. THE COMMUNICATION SERVER CLOSED THE SOCKET.
DUI421E	THE NETCONV START COMMAND HAS FAILED BECAUSE IP *'ipid:port'* IS COMMUNICATING WITH ANOTHER STATUS FOCAL POINT, IS RUNNING AN UNSUPPORTED LEVEL OF NMC, OR IS ALREADY COMMUNICATING WITH THIS STATUS FOCAL POINT.
DUI422E	CNMTAMEL FAILED TO RECEIVE DATA FROM IP '*ipid:port*' DUE TO A STORAGE SHORTAGE. REQUESTED AMOUNT = *amount* BYTES.
DUI423E	COMMUNICATION TO IP *'ipid:port'* TERMINATED ABNORMALLY: WORKSTATION NOT RESPONDING.
DUI424I	OPERATOR *operatorid* IS COMMUNICATING WITH WORKSTATION AT IP *'ipid:port'*.
DUI4022A	GMFHS INITIALIZATION CHECKPOINT PARAMETER *keyword* IS INVALID OR CONFLICTS
DUI4030E	RODMNAME MISSING FROM GMFHS INITIALIZATION PARAMETERS
	GMFHS INITIALIZATION PARAMETER *parameter_name* VALUE IS NOT VALID OR IS OUTSIDE ALLOWED LIMITS
DWO339I	*command* COMMAND FAILED. TASK '*task*' HAS ALREADY OBTAINED CONSOLE '*console*'.

Deleted Messages

CNM907I DSI629I

Samples

This section lists new and deleted samples for migration considerations.

- "New Samples"
- "Deleted Samples"

New Samples

CNMCMD	CNMCMDO	CNMCMDU	CNMCMENT
CNMCMSYS	CNMCRGI1	CNMCRGI2	CNMPOLCY
CNMSCBEA	CNMSCBET	CNMSCM	CNMSEPTL
CNMSJCRG	CNMSJI10	CNMSJMIG	CNMSJZCE
CNMSMRT1	CNMSMSGT	CNMSTCPC	CNMSTIDS
CNMSTUSR	CNMSTWBM	DSITCONM	DSIZCECF
DSIZCETB	EZLCMENT	EZLSI300	EZLSI301
FKVCMENT	FKXCMENT	IHSCRPRP[1]	IHSJLOGP[2]
IHSRTDTD[3]	IHSTLS00[4]	IHSTLS01[5]	IHSUASJZ[6]
IHSUSCMP[7]	IHSZRLES[8]		

File names in UNIX system services:

1. correlator.properties
2. corJlog.properties
3. rule.dtd
4. znetview_at-tls_readme.txt
5. znetview_at-tls_example.tar
6. UserActionSample.java
7. usercomp.sh
8. znvrules.xml

Deleted Samples

CNMSHTSP	CNMSI201	CNMSI301	CNMSI601
CNMSJI00	CNMSJI07	CNMSJI12	CNMSJI18
CNMSJI21	CNMSJI23	CNMSJI24	CNMSURLS
DSICMD	DSICMDU	DSICMENT	DSICMSYS
EKGSID03	EKGSI102	EKGSJ004	EZLCMD
EZLJ1ALC	EZLSID01	EZLSI201	EZLSJ006
EZLSJ008	EZLSJ100	FKVCMD	FKXCMD
FKXVHTML	FKXWHTML		

Appendix C. Changes from Tivoli NetView for z/OS Version 5 Release 2 to Tivoli NetView for z/OS Version 5 Release 3

This appendix includes a summary of changes for the NetView V5R3 release. It also lists new, changed, and deleted:

Note: The lists in this section are listed alphabetically from left to right.

Summary of Changes for NetView V5R3

Changes for NetView V5R3 are included in the following sections:

Networking and Automation

Table 71. Networking and Automation Changes

Function	Description
Session Monitor (NLDM)	• Ability to select sessions that pass through user-selected resources, including Enterprise Extender (EE) sessions • Annotated display of formatted PIU SNA message units
Support for Enterprise Extender (EE)	The DIS command has been updated to determine if a named resource is Enterprise Extender (EE) connected and, if so, additional information can be displayed about RTP pipes, TCIDs, IP addresses, and transmission group numbers. You can also use the DIS command to perform TRACERTE and EEDIAG analysis for the resource.
Formatted Packet Trace	Filter traced IP packets by protocol (for example, TCP, UDP, and OSPF)
Suppress system logging for selected MVS command responses	Specify whether responses to MVS commands (issued from NetView or from other message traffic) naming a console owned by a NetView operator are sent to the system log.
Dynamic Pipes	Provides a new option for the PIPE PERSIST stage that allows for handling intermediate output from commands. This allows REXX procedures to run while asynchronous, correlated messages are being returned.
Enhanced IP Connection Management	Additional information about active IP connections is available.
RMTCMD over IP connection enhancement	If a remote NetView host loses RMTCMD connectivity with a local NetView host for a user-specified amount of time, the RMTCMD connection ends. This allows reestablishment of the connection with the next RMTCMD request.

Table 71. Networking and Automation Changes (continued)

Function	Description
Additional TCP/IP connection data	Active TCP/IP connection data is now available in the Tivoli Enterprise Portal.
DVIPA data	DVIPA data is now available from a NetView 3270 console, and enhancements were made to the data in the Tivoli Enterprise Portal.
Authorization checking for REXX/CLISTs	The NetView program confirms the existence of a REXX/CLIST before authorization checking occurs. This prevents possibly erroneous security violations when a command is entered that is not valid.
Identify Hung Listeners	At times, a port can refuse connections but appear normal in a NETSTAT command. This new function allows for the monitoring of critical ports and automated recovery of hung ports.
IPv6 support fully enabled	Commands, components, and services are enabled for support of IPv6 addressing.
SNMP traps	Trap-to-alert and alert-to-trap conversion is now available as a base NetView function and supports SNMPv2c and SNMPv3. Use of the Event/Automation Service (E/AS) in the NetView program is no longer required.

Usability Enhancements

Table 72. Usability Enhancements

Function	Description
NetView Management Console (NMC) and RODM	Mainframe TCP/IP hosts are now highlighted in NMC by use of an icon that is distinct from distributed TCP/IP hosts. The Resource Properties window, Other Data field, contains additional z/OS information about mainframe TCP/IP hosts, such as Sysplex Name and SNA name.
Identify duplicate statements in policy files.	Use the CNMEDUPS command to specify a policy file to be searched for duplicate statements. Duplicates can optionally be removed.

Enterprise Integration

Table 73. Enterprise Integration Enhancements

Function	Description
IBM Tivoli NetView for z/OS Enterprise Management Agent	Provides information that you can use to manage your network from the Tivoli Enterprise Portal using sampled and real-time data. The data provides information about network resources and outages, using situations and expert advice, as well as trends in your network through the use of historical data. You can issue NetView, VTAM, and z/OS commands directly from the Tivoli Enterprise Portal to provide instant display and troubleshooting capabilities. The NetView for z/OS Enterprise Management Agent enables you to manage both availability and performance data from the Tivoli Enterprise Portal using cross-product links to selected z/OS OMEGAMON XE agents.

Table 73. Enterprise Integration Enhancements (continued)

Function	Description
CMDB support	Provides a Discovery Library Adapter (DLA) that extracts information about TCP/IP resources and relationships from the NetView for z/OS RODM data cache and sends the managed resource information to the IBM Tivoli Change and Configuration Management Database (CCMDB), where it is available to other management products.
APSERV command interface	Allows authorized programs (clients) to run NetView or MVS commands under a properly established user name and to log the results.

Serviceability

Table 74. Serviceability

Function	Description
AON CLISTS are shipped as uncompiled REXX.	In previous releases of the NetView program, AON CLISTs were included in the CNMCLST data set as compiled REXX. In NetView for z/OS V5R3, these are included as uncompiled REXX. There are no changes to AON functionality.

Command Lists

This section lists new and deleted command lists for migration considerations.

- "New Command Lists"
- "Deleted Command Lists"

New Command Lists

CNMDLAQ	CNMDLAR	CNMEAPCS	CNMECKPT
CNMEDUPS	CNMETSTL	CNME1038	CNME7204
CNME8200	CNME8202	CNME8203	CNME8204
CNME8205	CNME8210	CNME8211	CNME8212
CNME8213	CNME8221	CNME8225	CNME8230
CNME8240	CNMFTP	FKXEDVPI	FKXEDVP4

Deleted Command Lists

No command lists were deleted for V5R3

Messages

This section lists new, changed, and deleted messages for migration considerations.

- "New Messages"
- "Changed Messages" on page 199
- "Deleted Messages" on page 199

New Messages

AAU148I FORMATTED RU NOT AVAILABLE

BNH533I	*data*
BNH775I	NUMBER OF CONNECTIONS: *numcon*
BNH838W	PORT *portnum* ON HOST *host* IS NOT RESPONDING
BNH839I	PORT *portnum* ON HOST *host* IS ACTIVE
BNH840W	SOCKET ERROR OCCURRED DURING IPPORTMON PROCESSING
BNH841E	*parm* PARAMETER MISSING FROM IPPORTMON DEFINITIONS
BNH842I	NO IPPORTMON DEFINITIONS FOUND
BNH843I	NO DUPLICATE ENTRIES FOUND IN FILE *file*
BNH844W	FILE *file* HAS DUPLICATE ENTRIES
BNH845I	NUMBER OF STACKS: *numstack*
BNH846I	NUMBER OF DVIPA DEFINITIONS: *numdvipa*
BNH847I	NUMBER OF DVIPA SYSPLEX DISTRIBUTORS: *numdist*
BNH848I	NUMBER OF DVIPA DISTRIBUTOR TARGETS: *numtargs*
BNH849I	NUMBER OF DVIPA CONNECTIONS: *numconns*
BNH850I	NUMBER OF PORTS: *numports*
BNH851I	SUBNODE *subnode* HAS NO HEARTBEAT. DEREGISTERING SUBNODE
BNH852I	COMMAND OPERAND MISSING
BNH853I	COMMAND UNKNOWN: *command*
BNH854I	NETVIEW ENTERPRISE MANAGEMENT AGENT SHUTDOWN OR STOP REQUESTED
BNH855E	ERROR INITIALIZING THE NETVIEW ENTERPRISE MANAGEMENT AGENT
BNH856I	NETVIEW ENTERPRISE MANAGEMENT AGENT INITIALIZED SUCCESSFULLY.
BNH857I	PROGRAM TO PROGRAM INTERFACE *ppi_type ppi_name*
BNH858I	NETVIEW ENTERPRISE MANAGEMENT AGENT PROGRAM TO PROGRAM INTERFACE IS *status*
BNH859I	NETVIEW ENTERPRISE MANAGEMENT AGENT COMMUNICATION LAYER CURRENTLY TRACING: *trace_types*
BNH860W	NETVIEW ENTERPRISE MANAGEMENT AGENT FAILED TO INITIALIZE PPI RECEIVER: *receiver*, RC: *return_code*
BNH877I	NETVIEW ENTERPRISE MANAGEMENT AGENT INTERFACE IS READY FOR WORK
BNH878I	NETVIEW ENTERPRISE MANAGEMENT AGENT INTERFACE HAS TERMINATED
BNH879I	NETVIEW ENTERPRISE MANAGEMENT AGENT *domain* SUBNODE IS ACTIVE
BNH880I	NETVIEW ENTERPRISE MANAGEMENT AGENT *domain* SUBNODE IS INACTIVE

BNH881I DATA COLLECTION FAILED FOR SUBTOWER *subtower_name*, REASON '*reason_code*'

BNH882I DATA TRUNCATED FOR WORKSPACE *workspace*, MAXIMUM ROW SIZE EXCEEDED

BNH888I DISPLAY OF NETVIEW ENTERPRISE MANAGEMENT AGENT CONNECTIONS

BNH889I TASK STATUS SOURCE DEST PPI LCL PPI

BNH890I NAME NAME RECEIVER RECEIVER

BNH891I DATA COLLECTION INTERVAL *interval_name* DEFAULTED TO *interval*

BNH892I DISPLAY DATA COLLECTION STATISTICS

CNM016W TRANSMISSION BY *trname* WAS UNSUCCESSFUL. SEE *logfile* FOR ADDITIONAL INFORMATION.

FKX518I Cannot start IPMGT because the POLICY is not loaded

FKX519I AONTCP TOWER ACTIVE. IPMGT INITIALIZATION TERMINATED

Changed Messages

BNH066I *taskid o_netview o_opid VxRy* N/A *transport*

BNH804I '*intfc_name*' '*intfc_qual*' INTERFACE INITIALIZATION IS *action*

BNH805I '*intfc_name*' '*intfc_qual*' INTERFACE IS TERMINATING DUE TO *'reason'*

DSI461A SRCLU = *srclu* UNABLE TO ACCEPT A SESSION FROM APPLID = *applid*, SENSE = *X*'sense'

DWO575I *session_type* TERMINATED ON *netid.luname* WITH SENSE: X*'sensecode'*

DWO746I THE *process* FAILED. PROGRAM-TO-PROGRAM INTERFACE REQUEST TYPE IS *request_type*, RETURN CODE IS *retcode*.

Deleted Messages

BNH067I	CNM710I	CNM713I	CNM722E

Samples

This section lists new and deleted samples for migration considerations.

- "New Samples"
- "Deleted Samples" on page 200

New Samples

CNMSDVIP	CNMSDVPC	CNMSEMAA	CNMSJEMA
CNMSPLEX	CNMSSTAC	CNMSTARG	CNMSTATE
CNMTRAPI	DSIPROFN		

Deleted Samples

FKXSCM FLCSINF

Appendix D. Changes from Tivoli NetView for z/OS Version 5 Release 3 to Tivoli NetView for z/OS Version 5 Release 4

For a summary of changes for the NetView V5R4 release, see Chapter 1, "New, Changed, or Deleted Functions in the NetView V5R4 Program," on page 1. This appendix lists new, changed, or deleted:

- "Command Lists"
- "Messages" on page 202
- "Samples" on page 205
- "Command Changes" on page 206

Note: The lists in this section are listed alphabetically from left to right.

This appendix also lists the changes for the following components:

- Tivoli NetView for z/OS Enterprise Management Agent; see "Enterprise Management Agent Changes" on page 208
- Reports using Tivoli Common Reporting; see "Reports Using Tivoli Common Reporting Changes" on page 215

Command Lists

This section lists new and deleted command lists for migration considerations.

- "New Command Lists"
- "Deleted Command Lists"

New Command Lists

CNME8206	CNME8207	CNME8208	CNME8214
CNME8215	CNME8216	CNME8231	CNME8232
CNME8233	CNME8235	CNME8236	CNME8237
CNME8238	CNME8250	CNME8251	CNME8252
CNME8253	CNME8260	CNME8261	CNME8265
CNMEDCTN	CNMEDRCL	CNMEDVSV	CNMEEPTN
CNMEESYD	CNMEQRDM	CNMERVNA	CNMESOKS
CNMESPTO	CNMESPUR	CNMEVCPY	CNMEXCON
CNMEXPRC	FKXE221B	FKXE2A23	FKXE2A24
FKXE2A30	FKXE2A33	FKXE2A34	FKXEACT4
FKXEACTL	FKXEAIDF	FKXECOLT	FKXECSF
FKXEDVP7	FKXEDVP9	FKXEDVPC	FKXEDVPD
FKXEDVPS	FKXEIPMI	FKXETMON	FKXETRO1
FKXETRO2	FKXETRS1	FKXETRS2	FLCAALRT
FLCAIPIP	FLCAPAUT	FLCAPNET	FLCAPNMC
FLCAPTRP	FLCAPVER		

Deleted Command Lists

CNME7200	CNME7205	CNME7210	CNME7211
CNME7212	CNME7213	CNME7221	CNME7225
CNME8201	CNMETAPK	FLCAILNM	FLCALADP

FLCALALH	FLCALAUT	FLCALBRG	FLCALCAU
FLCALSEG	FLCALVER		

Messages

This section lists new, changed, and deleted messages for migration considerations.

New Messages

BNH067I	*scope* MASTER IN GROUP *group_name* SET TO *new_master*. PREVIOUS MASTER=*previous_master*, REASON=*reason_code*
BNH325I	Table loaded by *opid* at *date time*
BNH332I	For *ssiName* there are *nn* revision variables.
BNH495I	NUMBER OF NETVIEW APPLICATIONS: *numnvapp*
BNH496I	NUMBER OF TELNET SERVERS: *numsvrs*
BNH497I	NUMBER OF TELNET SERVER PORTS: *numports*
BNH498I	NUMBER OF INTERFACES: *numintf*
BNH558E	UNABLE TO CONTACT *name* USING *aliases*
BNH559E	COMMAND *cmd* FAILED. REASON=*reason_code*
BNH560I	KEEP Status for *taskname*
BNH587I	*scope* MASTER *master_name* ACTIVE IN GROUP *group_name*. TAKEOVER NOT ALLOWED.
BNH588I	WAITING FOR *scope* MASTER IN GROUP *group_name* TO BECOME ACTIVE.
BNH589I	GROUP *group_name* MEMBER *member_name* STATUS CHANGE. NEW STATUS=*status* PREVIOUS STATUS=*status*
BNH590I	XCF MESSAGE RECEIVED FROM *member_name* IN GROUP *group_name message*
BNH591I	*name* CONTACTED USING *alias*
BNH592I	MEMBER *member_name* HAS JOINED GROUP *group_name*.
BNH593I	MEMBER *member_name* HAS LEFT GROUP *group_name*.
BNH594I	PLEXNAME GROUP MEMBER SYSTEM STATUS ROLE RANK DUR FLGS VER TIMESTMP TOKEN
BNH596E	SRB EXIT *exit* ABENDED WITH CODE *abend_code*
BNH597I	NUMBER OF OSA PORTS: *numosa*
BNH598I	NUMBER OF HIPERSOCKETS INTERFACES: *numhiper*
BNH754I	GROUP *group_name* MEMBER *member_name* HAS UPDATED STATE FIELD. PREVIOUS VALUE= *previous_value* NEW VALUE=*new_value*
BNH776I	*P/M stack ident subtype sdata*

BNH813I	NUMBER OF DISTRIBUTED DVIPA TARGETS: *numtargs*
BNH814I	NUMBER OF APPLICATION SERVERS: *numserv*
BNH815I	NUMBER OF DISTRIBUTED DVIPA CONNECTION ROUTES: *numroutes*
BNH824I	NUMBER OF VIPA ROUTES: *numvipa*
BNH861I	DISTRIBUTED DVIPA STATISTICAL LOGGING INFORMATION
BNH862I	*object* FOUND IN *location*
BNH863I	DISPLAY OF NETVIEW WEB SERVICES INFORMATION
BNH864I	SERVER *soap_server* NOT FOUND
BNH865I	SERVER FAULT
BNH866I	CLIENT FAULT
BNH867I	NUMBER OF DISTRIBUTED DVIPA STATISTICAL RECORDS: *numrecords*
BNH868I	*command* RECEIVED AN ERROR FROM THE NETWORK MANAGEMENT INTERFACE: *return_code reason_code stack_name*
BNH874I	SMF RECORD RECEIVED: *sdata*
BNH893I	NETVIEW WEB SERVICES *srvr_name* STARTING ON VOST *vost_name*
BNH894I	NETVIEW WEB SERVICES *srvr_name function status*
BNH895I	NETVIEW WEB SERVICES *srvr_name* READY FOR WORK, LISTENING ON PORT: *port_number*
BNH896E	NETVIEW WEB SERVICES SERVER &ssq;*srvr_name*&ssq; ERROR SETTING VARIABLE *variable_name*, RC=*rc*, ERROR=*error_string*
BNH897I	NETVIEW WEB SERVICES SERVER *srvr_name* ENDED
BNH898E	NETVIEW WEB SERVICES *srvr_name* INITIALIZATION FAILED DUE TO *reason_text rc*
BNH899I	SERVER NAME STATUS
CNM017E	Command *cmd* completed without action *'missingAction'*
CNM018E	*'function'* is in exclusive use by *'owner'*.
DWO755W	The keyword *kywd* is deprecated.
FKX530I	NO COMMANDS FOUND FOR THIS RESOURCE TYPE
FKX918I	NO PACKETS MEET THE REQUESTED CRITERIA
FKX919I	UNABLE TO ACCESS PACKETS FROM REMOTE DOMAIN - *domain_name* EZLERGWY RC = *return_code*
IHS0024E	*service*: *request* failed, errno *number*
IHS0025I	*service*: Negative response limit for an event exceeded. The event will be discarded
IHS0026I	*service*: Connection with server at IP address *ipaddress* closed
IHS0029I	*service*: The current ServerLocation is location *location*, address *address*, port *port*.
IHS0121I	*service*: Reset of backup server connection was successful.

Changed Messages

The messages listed below have changed for the NetView V5R4 release in one or more of the following ways:

- The message text changed.
- The value of a message variable insert changed.
- The information provided in a multiline write-to-operator (MLWTO) message changed.

For specific details of how a message is being presented by the NetView program, refer to the online message help.

BNH804I *'intfc_name' 'intfc_qual'* INTERFACE INITIALIZATION IS *action*

BNH805I &ssq;*intfc_name*&ssq; &ssq;*intfc_qual*&ssq; INTERFACE IS TERMINATING DUE TO *'reason' rc*

BNH812I command ISSUED FOR *task_name* COMPLETED WITH STATUS *code*

BNH834I *insert1 insert2 insert3 insert4 insert5*

BNH567I NETVIEW MVS COMMAND EXIT TERMINATION REQUESTED FOR *module_name*

BNH772I NUMBER OF CONNECTIONS: *numcon*, MISSED BUFFERS: *missbuf*

BNH845I NUMBER OF STACKS: *numstack*

BNH846I NUMBER OF DVIPA DEFINITIONS: *numdvipa*

BNH847I NUMBER OF DVIPA SYSPLEX DISTRIBUTORS: *numdist*

BNH849I NUMBER OF DVIPA CONNECTIONS: *numconns*

CNM012I *type* REVISION TABLE *table_name*, LOADED BY *task_name*, HAS EXAMINED *count* OBJECTS SINCE BEING LOADED, *date time*

CNM1221I Click OK to replace all values in the User Preferences task with the values that are supplied with the NetView program or Cancel to ignore the restore defaults request.

DWO854I *object* is active.

EKGV8053E A blank User password or password phrase is not valid with the specified User ID

EKGV9015E A blank user password or password phrase is not valid with the specified user ID

IHS0001E *errorcode parm1 parm2 parm3*

IHS0076I TASK=*task* LEVEL=*level* IP=*iptrace*

IHS0118I *adapter* task has terminated.

IHS0122I *adapter* task already started or start in progress.

IHS0123I *adapter* task already stopped or stop in progress.

IHS0124I *adapter* task initialization complete.

IHS0143I *service status addinfo*

IHS0147I *task qcount sent recvd*

IHS0182I <==Current *service* Service Settings==>

Note: The BNH847I message has been changed to return the local XCF address and not a target XCF address.

Deleted Messages

BNH831I	BNH832I	BNH833I	BNH848I
BNH850I	CNM241I	CNM242I	CNM244I
CNM245I	CNM560I	CNM561I	CNM565I
CNM566I	CNM1205E	CNM1206E	CNM1207E
CNM1208E	CNM1268E	CNM1269I	CNM1270I
CNM1274I	CNM1275I	CNM1304E	CNM1305E
CNM1306E	CNM1307I	CNM1308I	CNM1311I
CNM1312I	CNM1314I	CNM1315I	CNM1319I
CNM1320E	CNM1321E	CNM1322E	CNM1323E
CNM1324E	CNM1325I	CNM1326I	CNM1327I
CNM1328I	CNM1329I	CNM1330E	CNM1331E
CNM1332E	CNM1400I	CNM1401I	CNM1402I
CNM1403I	CNM1404I	CNM1406I	CNM1407I
CNM1408I	CNM1409I	CNM1410I	CNM1413E
CNM1414E	CNM1416E	CNM1417E	CNM1418I
CNM1420E	CNM1421E	CNM1422E	CNM1423E
CNM1424E	CNM1425E	CNM1426E	CNM1427E
CNM1428E	CNM1429E	CNM1430E	DUI545E
DWO112I	DWO113I	DWO114I	DWO623I
FLC004E	FLC005I	FLC007E	FLC009I
FLC067E			

Samples

This section lists new and deleted samples for migration considerations.

- "New Samples"
- "Deleted Samples"

New Samples

CNMIPMGT	CNMSALRT	CNMSCRT1	CNMSDCA
CNMSDDCR	CNMSDVCG	CNMSDVDS	CNMSDVPH
CNMSDVST	CNMSDVTP	CNMSHIPR	CNMSIFST
CNMSJTLS	CNMSMF3A	CNMSMF3E	CNMSMF3F
CNMSMF3R	CNMSMSIP	CNMSNVST	CNMSOSAP
CNMSRVAR	CNMSRVMC	CNMSSMON	CNMSTNST
CNMSTPST	CNMSVPRT	CNMSXCFA	EKG51100
EKG61100	FKXIPMTB	FKXOPFIP	FKXSCM
FLCSIPIP	FLCSOX02	FLCSPAUT	IHSABCDS
IHSABCFG	IHSANCFG	IHSANFMT	

Deleted Samples

CNMSJEMA	CNMSJI04	CNMSJI05	CNMSJIE1
CNMSJIE2	CNMSJIE3	CNMSJIE4	CNMSJK61
CNMSJKVW	FLCSDM6L	FLCSILNM	FLCSLALH
FLCSLAUT			

Command Changes

This section lists new, changed, and deleted commands for migration considerations.

New Commands

Table 75 lists new commands to review during migration.

Table 75. List of New Commands

Command	Description
CNMEDRCL	Starts DVIPA data collection on the specified NetView domain.
COLLCTL	Controls the collection of data by the NetView program when using a timed interval on an autotask.
DVIPDDCR	Collects distributed DVIPA connection routing information.
DVIPHLTH	Collects distributed DVIPA server health information.
GETTOPO ITNMDETAIL	Collects IBM Tivoli Network Manager resource topology and status.
GETTOPO ITNMONLY	Collects MultiSystem Manager IBM Tivoli Network Manager agent status.
GETTOPO ITNMRES	Collects MultiSystem Manager IBM Tivoli Network Manager agent and resource status.
HIPERSOC	Provides HiperSockets adapter information from a 3270 console or from the Tivoli Enterprise Portal using the Tivoli NetView for z/OS Enterprise Management Agent.
IFSTAT	Collects TCP/IP stack interface information. You can use the CNMSIFST sample to view the information that is collected.
NVSTAT	Collects configuration and status information about the NetView domains that are known to this NetView program. You can use the CNMSNVST sample to view the information that is collected.
OSAPORT	Provides OSA channel and port information from a 3270 console or from the Tivoli Enterprise Portal using the Tivoli NetView for z/OS Enterprise Management Agent.
PIPE XCFMSG	Sends and receives XCF messages.
PIPE XCQUERY	Retrieves XCF data for group members.
PIPE XCFTABLE	Retrieves and sets XCF group state field information.
PLEXCTL	Changes the rank of the NetView program in the DSIPLX*nn* group in which it participates. If the NetView program is the group master, this command can also be used to control whether the master NetView program will allow another NetView program to assume the master role in the sysplex group.
REISSUE	Determines whether a revised command is to be issued or suppressed. This command is used for the MVS Command Revision function.
RESETSRV	Resets the connection for adapter services.
REVISE	Replaces and extends the REVISMSG command.
SETRVAR	Creates a table of variable names and values that is accessible from revision edit scripts.

Table 75. List of New Commands (continued)

Command	Description
TELNSTAT	Collects configuration and status information about Telnet servers.
TNPTSTAT	Collects configuration and status information about Telnet server ports.
VIPAROUT	Collects status information about VIPA routes.

Changed Commands

The following commands were changed:

- ALERTC - TASK keyword
- CLOSE
- DISPLAY (E/AS) - no syntax changes; output can include information on two new tasks (confirmed message adapter and confirmed alert adapter)
- DVIPCONN
- DVIPPLEX
- DVIPSTAT (SYSNAME removed)
- DVIPTARG
- ENDTASK
- IPTRACE
- INITNRM
- INITSTM - AUTOTASK keyword has new default (AUTOAON)
- LIST (NCCF)
- MESSAGEC - TASK keyword
- MVSPING
- NACMD - Removed NetView for z/OS Tivoli Enterprise Portal Agent support. The command list associated with the NACMD command changed from CNME7200 to CNME8200.
- NACTL - Removed NetView for z/OS Tivoli Enterprise Portal Agent support
- OUTPUT (E/AS) - no syntax changes; output can include information on two new tasks (confirmed message adapter and confirmed alert adapter)
- QRYKEEP - Added LOCAL or GLOBAL as the keep name
- RECYCLE (E/AS)
- RESETSRV (E/AS)
- RESTYLE
- RMTCMD
- SETTINGS (E/AS)
- STACSTAT
- START (E/AS)
- START (NCCF)
- STOP (E/AS)
- STOP (NCCF)
- STOPNA - Removed NetView for z/OS Tivoli Enterprise Portal Agent support
- TRACE (E/AS)

Deleted Commands

The following commands were deleted:

- ADAPTER (CNME8501)
- BRIDGE (CNME8503)
- GETTOPO LNMADP, LNMBRG and LNMCAU
- GETTOPO LNMRES and LNMONLY
- GETTOPO LNMSEG
- LAN (CNME8500)
- NALBRW (CNME7205)

- NAEDVPT (CNME7210)
- NAEDVP1 (CNME7211)
- NAEDVP2 (CNME7212)
- NAEDVP3 (CNME7213)
- NASESMG (CNME7221)
- NATCPCON (CNME7225)
- PATH (CNME8507)
- QNETWORK (CNME8505)
- RESETLAN (CNME8508)
- SEGMENT (CNME8506)

Enterprise Management Agent Changes

The following changes are available with the Tivoli NetView for z/OS Enterprise Management Agent for Version 5 Release 4:

- A new workspace and a new attribute group are added for monitoring the NetView applications that are available in the sysplex.
- A new workspace and two new attribute groups are added for monitoring the configuration and status of the Telnet servers and Telnet server ports that are available in the sysplex.
- Five new workspaces and a new attribute group are added for monitoring the health statistics for all application servers that reside on distributed DVIPA targets.
- A new workspace and a new attribute group are added for monitoring distributed DVIPA connection routing.
- A new workspace and a new attribute group are added for monitoring VIPA routes.
- A new workspace and a new attribute group are added for monitoring the channel and port configuration data of OSA-Express2 10 Gigabit and OSA-Express3 adapters.
- A new workspace and a new attribute group are added for monitoring the configuration and status of HiperSockets interfaces.
- All queries and workspaces that are new or changed for the V5R4 Tivoli NetView for z/OS Enterprise Management Agent include the qualifier `(V540)` in the query and workspace descriptions. Queries and workspaces that were part of the product before V5R4 do not include a qualifier. The identification of the version, release, and modification level for queries and workspaces begins with V5R4.
- IBM Tivoli Monitoring V6.2 provides a new SORTBYINTERNAL option that allows ENUM values that are defined for integer attributes to be sorted numerically rather than alphanumerically. All Tivoli NetView for z/OS Enterprise Management Agent integer attributes that have ENUM values defined are updated with the new SORTBYINTERNAL option.
- New situations and take action commands, and additional dynamic linking from selected NetView for z/OS workspaces to IBM Tivoli OMEGAMON XE for Mainframe Networks workspaces, are provided to support the new functions.
- By default, all situations do not start automatically and must be manually started to run. Some of the situations that were provided with the NetView for z/OS Enterprise Management Agent in V5R3 were enabled to run at startup. In NetView for z/OS V5R4, no situations are distributed and enabled to run at startup. This change decreases the initial processing overhead related to the distribution of the product-provided situations. You can use the situations that are provided with the NetView for z/OS Enterprise Management Agent as

templates and as a starting point to determine which situations to customize to meet your monitoring needs. For information about creating or modifying situations, see the *IBM Tivoli Monitoring User's Guide*. The following situations, which were automatically started in NetView for z/OS V5R3, are no longer automatically started in NetView for z/OS V5R4:
  - NAS_NVTask_CPU_Util_Crit
  - NAS_NVTask_Input_Msg_Rate_Crit
  - NAS_NVTask_IO_Rate_Crit
  - NAS_NVTask_Msg_Queue_Crit
  - NAS_NVTask_Output_Mst_Rate_Crit
  - NAS_NVTask_Storage_Crit
- The NAS_DVIPA_Number_of_Connections situation is no longer applicable in V5R4 because the attribute in the situation formula belongs to a deprecated attribute group. A new situation, NAS_DVIPA_Targ_Active_Conns, provides a similar capability in V5R4.
- The NAS_DVIPA_Server_Accept_Percent situation is no longer applicable in V5R4 because the attribute in the situation formula belongs to a deprecated attribute group. A new situation, NAS_DVIPA_Target_Serv_Resp_Rate, provides a similar capability in V5R4.
- The following situations are new:
  - NAS_DVIPA_Abnorm_Trans_Percent
  - NAS_DVIPA_Active_Target_Stacks
  - NAS_DVIPA_Bytes_Received
  - NAS_DVIPA_Bytes_Sent
  - NAS_DVIPA_Pct_Seg_Retran
  - NAS_DVIPA_Port_Health_Percent
  - NAS_DVIPA_Targ_Active_Conns
  - NAS_DVIPA_Targ_Delta_Conns
  - NAS_DVIPA_Targ_Listening_Srvrs
  - NAS_DVIPA_Target_Serv_Resp_Rate
  - NAS_DVIPA_WLM_Weight
  - NAS_NVApp_Status
  - NAS_NVApp_Total_CPU
  - NAS_NVApp_Total_Storage
  - NAS_Telnet_Active_Ports
  - NAS_Telnet_Configured_Ports
  - NAS_Telnet_SP_Port_Status
  - NAS_Telnet_SP_Server_Status
- The following attribute groups are deprecated:
  - NA DVIPA Distributor Targets
  - NA DVIPA Workload By Port
  - NA Inactive Session Count
  - NA Inactive Session Data
- Table 76 shows the workspaces that are new and the associated attribute group or groups.

Table 76. New Workspaces

Workspace	Attribute Group
Application-Instance DVIPA	DVIPA Definition and Status
Distributed DVIPA Connection Routing	Distributed DVIPA Connection Routing
Distributed DVIPA Server Health	Distributed DVIPA Server Health
Distributed DVIPA Server Health Details	Distributed DVIPA Server Health

Table 76. New Workspaces (continued)

Workspace	Attribute Group
Distributed DVIPA Targets	Distributed DVIPA Targets
Distributed DVIPA Unhealthy Servers	Distributed DVIPA Server Health
DVIPA Stack Summary	DVIPA Definition and Status DVIPA Sysplex Distributors Distributed DVIPA Targets
DVIPA Workload	Distributed DVIPA Targets
Filtered Distributed DVIPA Server Health	Distributed DVIPA Server Health
Filtered Distributed DVIPA Targets	Distributed DVIPA Targets
Filtered Distributed DVIPA Unhealthy Servers	Distributed DVIPA Server Health
Filtered DVIPA Sysplex Distributors	DVIPA Sysplex Distributors
Filtered Telnet Server Configuration and Status	Telnet Server Telnet Server Port
HiperSockets Configuration and Status	HiperSockets Configuration and Status
NetView Applications	NetView Applications
OSA Channels and Ports	OSA Channels and Ports
Stack-Defined DVIPA	DVIPA Definition and Status
Telnet Server Configuration and Status	Telnet Server Telnet Server Port
VIPA Routes	VIPA Routes

- Table 77 shows the changes to existing workspaces.

Table 77. Workspace Changes

Workspace	Changes
DVIPA Distributor Targets	• The DVIPA Distributor Targets workspace is no longer the default workspace from the DVIPA Distributor Targets item in the Navigator view. Both the DVIPA Distributor Targets workspace and the NA DVIPA Distributor Targets attribute group are deprecated. • The Distributed DVIPA Targets workspace is the new default workspace from the DVIPA Distributor Targets item in the Navigator view.

Table 77. Workspace Changes (continued)

Workspace	Changes
DVIPA Connections	• The following attributes are added: – Address Space ID – AT-TLS Cipher – AT-TLS Connection Status – AT-TLS Partner Userid – AT-TLS Policy Status – AT-TLS Security Type – AT-TLS SSL Protocol – Byte Rate – Bytes Received – Bytes Sent – Bytes Sent or Received – Connection Start Time – Connection State – Current Send Window Size – DDVIPA – Interface Name – Last Activity Remote Timestamp – Last Activity Timestamp – Last Timestamp Age – Max Send Window Size – Number of Duplicate ACKS – Passive or Active Open – Percent Segments Retransmitted – Segments Received – Segments Retransmitted – Segments Sent – Segments Sent or Received – Sysplex Name – TCB Address – TCPIP Job Name – Telnet Logmode – Telnet Protocol – Telnet User Client Name – Total Segments – Total Segments Received – Total Segments Retransmitted – Total Segments Sent – zOS Image Name – zOS Release Level • The Percent Segments Retransmitted >= 3 bar chart view replaces the Total Bytes = 0 table view. • The queries for the DVIPA Connection Summary table view and the Percent Segments Retransmitted >= 3 bar chart view use the Byte Rate attribute to filter the rows that can be retrieved for display. Because of the default filter, you might not see all your connections. You can modify the query to display more or fewer connections than the default filter allows. • The TCPIP Connection Data link is deprecated. • A new conditional link is added. Distributed DVIPA Connection Routing links to the Distributed DVIPA Connection Routing workspace using DVIPA and DVIPA Port as the link attributes. This link is enabled only if the connection is a distributed DVIPA and the connection is discovered on a z/OS V1R11 or later system.

Table 77. Workspace Changes (continued)

Workspace	Changes
DVIPA Definition and Status	• The following attributes are added: – Application Server Name – Time Activated • The caption for the existing Collection Time attribute is changed to Update Time.
DVIPA Sysplex Distributors	• The following attributes are added: – Configured Target Stacks – DESTIP ALL – ILWEIGHTING – Interface Name – Mobility – PROCTYPE CP – PROCTYPE zAAP – PROCTYPE zIIP – PROCXCOST zAAP – PROCXCOST zIIP – Rank – Status – zOS Release Level • The caption for the existing Number of Target Stacks attribute is changed to Active Target Stacks. • The caption for the existing Number of Listening Servers is changed to Listening Servers. • The caption for the existing Collection Time attribute is changed to Update Time. • The following values for the existing Distribution Method attribute are added: – weightedActive (4) – TargetControlled (5) • The Sysplex Distributor Target Stacks for DVIPA bar chart view is renamed to the Target Stacks for DVIPA bar chart. The Y-axis is renamed from Targets Stacks to Active Target Stacks. • The Listening Servers for DVIPA bar chart is added to provide a snapshot of the number of listening servers for each distributed DVIPA in the sysplex. • The DVIPA Distributed Targets link is deprecated. A new link, Distributed DVIPA Targets, is defined. • The following conditional links are added: – The Distributed DVIPA Connection Routing link is enabled only if the sysplex distributor is discovered on a z/OS V1R11 or later system. – The VIPA Routes link is enabled only if the sysplex distributor is discovered on a z/OS V1R11 or later system.
DVIPA Workload by Port	• The DVIPA Workload by Port workspace and the NA DVIPA Distributor Targets attribute group are deprecated. A new workspace, DVIPA Workload, is provided to view selected distributed DVIPA targets.

Table 77. Workspace Changes (continued)

Workspace	Changes
Filtered DVIPA Connections	• The following attributes are added: – Address Space ID – AT-TLS Cipher – AT-TLS Connection Status – AT-TLS Partner Userid – AT-TLS Policy Status – AT-TLS Security Type – AT-TLS SSL Protocol – Byte Rate – Bytes Received – Bytes Sent – Bytes Sent or Received – Connection Start Time – Connection State – Current Send Window Size – DDVIPA – Interface Name – Last Activity Remote Timestamp – Last Activity Timestamp – Last Timestamp Age – Max Send Window Size – Number of Duplicate ACKS – Passive or Active Open – Percent Segments Retransmitted – Segments Received – Segments Retransmitted – Segments Sent – Segments Sent or Received – Sysplex Name – TCB Address – TCPIP Job Name – Telnet Logmode – Telnet Protocol – Telnet User Client Name – Total Segments – Total Segments Received – Total Segments Retransmitted – Total Segments Sent – zOS Image Name – zOS Release Level • The Percent Segments Retransmitted >= 3 bar chart view replaces the Total Bytes = 0 table view. • A new conditional link is added. Distributed DVIPA Connection Routing links to the Distributed DVIPA Connection Routing workspace using DVIPA and DVIPA Port as the link attributes. This link is enabled only if the connection is a distributed DVIPA and the connection is discovered on a z/OS V1R11 or later system.
Filtered DVIPA Definition and Status	• The following attributes are added: – Application Server Name – Time Activated • The caption for the existing Collection Time attribute is changed to Update Time.
Filtered DVIPA Distributor Targets	• The Filtered DVIPA Distributor Targets workspace and the NA DVIPA Distributor Targets attribute group are deprecated. A new workspace, Filtered Distributed DVIPA Targets, is provided to view filtered distributed DVIPA targets.

Table 77. Workspace Changes (continued)

Workspace	Changes
Filtered Inactive TCPIP Connection Data	• The following attributes are added: – AT-TLS Connection Status – AT-TLS Policy Status – Termination Reason Code – Passive or Active Open – Type of Service
Inactive TCPIP Connection Data	• The following attributes are added: – AT-TLS Connection Status – AT-TLS Policy Status – Termination Reason Code – Passive or Active Open – Type of Service
NetView Tasks	• The NetView Tasks workspace is no longer the default workspace from the NetView Health item in the Navigator view. To continue to access this workspace from the NetView Health navigator item, select and right-click **NetView Health**, click **Workspace**, and then click **NetView Tasks**. You can also access the NetView Tasks workspace from a link in the NetView Applications workspace.
Stack Configuration and Status	• The following attributes are added: – IP Address – IPSecV6 Enabled – Segmentation Offload Enabled – Source VIPA Enabled – Source VIPAV6 Enabled – Sysplex WLM Polling Interval – TCP Stack Source VIPA Enabled – TCP Stack Source VIPAV6 Enabled – VTAM XCF Group – zIIP IP Security Enabled • The DVIPA Definition and Status link is deprecated. The following links are added: – DVIPA Stack Summary (default link) – Telnet Server Configuration and Status

- The following take action commands are new:
  - List Status for All NetView Tasks
  - Quiesce the Telnet Server Port
  - Resume the Telnet Server Port
  - View Application-Instance DVIPA
  - View Distributed DVIPA Connection Routing
  - View Distributed DVIPA Server Health
  - View HiperSockets Configuration and Status
  - View NetView Applications
  - View NetView Resource Utilization
  - View OSA Channels and Ports
  - View Stack-Defined DVIPA
  - View TASKMON Data For All Tasks
  - View TASKUTIL Data For All Tasks
  - View Telnet Server Configuration and Status
  - View Telnet Server Port Configuration and Status
  - View VIPA Routes

- Table 78 shows the changes to the existing take action commands.

Table 78. Take Action Command Changes

Take Action Name	V5R3 Take Action Command	V5R4 Take Action Command
List NetView Task	List KNAHEA.*Task_Name*	List Task=KNAHEA.*Task_Name*
View DVIPA Connections	CNMSDVPC DVIPA=*dvipa* PORT=*dvipaport* TARGETXCF=*xcfaddr* SERVERJOBNAME=(*jobname*)	CNMSDVPC DVIPA=*dvipa* PORT=*dvipaport* SERVERJOBNAME=(*jobname*) MAXRECS=*maxrecs*
View DVIPA Definition and Status	CNMSDVIP DVIPA=*dvipa* SYSNAME=*tcpstk*	CNMSDVIP DVIPA=*dvipa* DISPLAY=DEFSTAT
View Stack Configuration and Status	CNMSSTAC STACK=*jobname* SYSNAME=*zosimage*	CNMSSTAC STACK=*jobname*

Reports Using Tivoli Common Reporting Changes

The Tivoli NetView for z/OS Enterprise Management Agent provides a set of predefined reports to be used with Tivoli Common Reporting. The following changes have been made to the reports:

- The DVIPA Workload report has been deprecated.
- A new report, Distributed DVIPA Server Health, is provided on the Tivoli NetView for z/OS Enterprise Management Agent application CD in the REPORTS directory.

For additional information on the reports, see *IBM Tivoli NetView for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent*.

Appendix E. AON CMDDEF Statements Not Requiring SEC=BY

The SEC=BY keyword can be removed from the AON CMDDEF statements for the commands that follow. Review your AON command security definitions to determine if removing this keyword is appropriate for your environment. The %INCLUDE members that are listed contain the CMDDEF statements for the NetView V5R4 program.

CNMCMENT

This section lists command definitions that have had the SEC=BY keyword removed. The CMDDEF statements are in %INCLUDE member CNMCMENT.

EZLEASLN	EZLENFRM	EZLERGWY	EZLE1900

EZLCMENT

This section lists command definitions that have had the SEC=BY keyword removed. The CMDDEF statements are in %INCLUDE member EZLCMENT.

EZLALOG	EZLASTS	EZLAUST	EZLE1CDL
EZLE1CNT	EZLE1DAL	EZLE1DOM	EZLE1FUL
EZLE1FWD	EZLE1GXC	EZLE1GXD	EZLE1GXE
EZLE1I01	EZLE1I02	EZLE1I03	EZLE1I04
EZLE1I05	EZLE1I06	EZLE1I07	EZLE1I08
EZLE1ICK	EZLE1IGT	EZLE1IMN	EZLE1INT
EZLE1ITF	EZLE1IXD	EZLE1IXL	EZLE1NTF
EZLE1RGT	EZLE1RNT	EZLE1RSP	EZLE1RTN
EZLE1RUD	EZLE1RUR	EZLE1RUT	EZLE1RUU
EZLE1RUX	EZLE1TMX	EZLE1UFW	EZLE1XMN
EZLE1XTF	EZLE4110	EZLE4120	EZLE7110
EZLE7210	EZLE8110	EZLE8120	EZLE8410
EZLE8611	EZLE8612	EZLEAAGD	EZLEAAIC
EZLEAANV	EZLEAAT1	EZLEAAT2	EZLEAAT3
EZLEAAT4	EZLEAAT5	EZLEAAT6	EZLEAAT8
EZLEAAT9	EZLEAATR	EZLEAATS	EZLEAC10
EZLEAC11	EZLEACG0	EZLEACG1	EZLEACG2
EZLEACG3	EZLEACG4	EZLEACG5	EZLEACG6
EZLEACG7	EZLEACG8	EZLEACG9	EZLEACGA
EZLEACGL	EZLEACGT	EZLEACKT	EZLEACNT
EZLEACST	EZLEACSX	EZLEACT1	EZLEACT2
EZLEADLY	EZLEAEXI	EZLEAFST	EZLEAGEN
EZLEAGN1	EZLEAGRN	EZLEAHED	EZLEAINL
EZLEAINT	EZLEAIOP	EZLEAIPL	EZLEAIRP
EZLEAISM	EZLEAJUL	EZLEALCL	EZLEALD1
EZLEALDR	EZLEALFL	EZLEALIC	EZLEALRS
EZLEALSW	EZLEANTL	EZLEARCY	EZLEARFR
EZLEARST	EZLEASAO	EZLEASCD	EZLEASCN
EZLEASTK	EZLEASTM	EZLEATDS	EZLEATRC
EZLEATST	EZLEAU01	EZLEAU02	EZLEAU03
EZLEAUCG	EZLEAUCL	EZLEAUS1	EZLEAUSF
EZLEAUST	EZLEAX00	EZLEAX01	EZLEBELG

AON CMDDEF Statements Not Requiring SEC=BY

EZLECAUT	EZLECHAU	EZLECHGF	EZLECTHR
EZLEDAN1	EZLEDTSK	EZLEDUTL	EZLEF001
EZLEF003	EZLEF004	EZLEF009	EZLEF00B
EZLEF00D	EZLEFAIL	EZLEGTID	EZLEHBLD
EZLEHRCY	EZLEICGS	EZLEICGV	EZLEIDNT
EZLEITWR	EZLELSTH	EZLEMCOL	EZLEMSU
EZLENDET	EZLENPS2	EZLEOIVT	EZLEOPER
EZLEPAR	EZLEPDEL	EZLEPDIS	EZLEPRCY
EZLERAIP	EZLERCMD	EZLERECV	EZLERMSU
EZLERNGE	EZLEROUT	EZLESLCT	EZLESNTX
EZLESRMD	EZLESTOP	EZLESTRT	EZLEVACT
EZLEVIEW	EZLEVINA	EZLEVMOV	EZLEW001
EZLEW002	EZLEXIT7	EZLIPLDT	EZLSACAF
EZLSATHR	EZLSAU07	EZLSCMOD	EZLSHNDE
EZLSMSU	EZLSNHLP	EZLSPIPS	EZLSTMEM
EZLSUSER	EZLSX001		

FKVCMENT

This section lists command definitions that have had the SEC=BY keyword removed. The CMDDEF statements are in %INCLUDE member FKVCMENT.

EZLENCH1	EZLENCH2	EZLENCH3	EZLENCH4
FKVASNB	FKVE095A	FKVE1100	FKVE1101
FKVE1102	FKVE1103	FKVE1104	FKVE1110
FKVE1200	FKVE1300	FKVE1310	FKVE1320
FKVE1330	FKVE2100	FKVE270I	FKVE284A
FKVE285I	FKVE380I	FKVE464I	FKVE530I
FKVE881I	FKVE897I	FKVEA0IC	FKVEA200
FKVEA210	FKVEA410	FKVEADMP	FKVEAID1
FKVEAID2	FKVEAID3	FKVEAID4	FKVEAID5
FKVEAID6	FKVEAID7	FKVEAID8	FKVEAID9
FKVEAIDA	FKVEAIDB	FKVEAIDC	FKVEAIDD
FKVEAIDE	FKVEAIDF	FKVEAIDG	FKVEAIDH
FKVEAIDI	FKVEAIDJ	FKVEAIDK	FKVEAMS1
FKVEARLD	FKVECAPL	FKVECGBG	FKVECGCA
FKVECGCC	FKVECGCD	FKVECGDA	FKVECGDB
FKVECGDC	FKVECGDD	FKVECGDE	FKVECGDF
FKVECGDG	FKVECGEA	FKVECGEB	FKVECGEC
FKVECGED	FKVECGFD	FKVECGFF	FKVECGFG
FKVECGFH	FKVECGHA	FKVECGHB	FKVECGHD
FKVECHCM	FKVECHIN	FKVECHRP	FKVECHSG
FKVECHSR	FKVECNCP	FKVEDETL	FKVEF005
FKVEINIT	FKVEOG01	FKVEOG02	FKVEOG03
FKVEOG04	FKVEOG05	FKVEOG06	FKVEOG07
FKVEOG08	FKVEOG09	FKVEOI00	FKVEOPFI
FKVEOSEC	FKVERDIS	FKVETGSW	FKVEX74E
FKVEX74X	FKVEXACT	FKVEXCDB	FKVEXCON
FKVEXDIS	FKVEXINA	FKVEXMCH	FKVEXRES
FKVEXTRK	FKVSSNBU		

FKXCMENT

This section lists command definitions that have had the SEC=BY keyword removed. The CMDDEF statements are in %INCLUDE member FKXCMENT.

FKXEACT2	FKXEAID1	FKXEAID2	FKXEAIDA
FKXEALRT	FKXEAMS1	FKXECATV	FKXEDDFP
FKXEGTID	FKXEHNDE	FKXEINIT	FKXENSTH
FKXEOTHR	FKXEPING	FKXESVPT	FKXWIND1
FKXWIND2			

Appendix F. Migrating to the CNMSTYLE and CNMCMD Members

The CNMSTYLE member in the DSIPARM data set is used during NetView initialization. The CNMSTYLE members and its dependent members replace initialization that was performed in the CNME1034 command list and in some DSIPARM definition statements in prior releases of the NetView program.

The CNMCMD member in the DSIPARM data set contains command definitions. The CNMCMD member replaces the DSICMD member.

The CNMSJMIG sample in the NETVIEW.V5R4USER.INSTALL data set uses the CNMEMIG command list to assist in converting your CNME1034 command list and DSIPARM statements to the new CNMSTYLE format. This sample provides JCL that runs under the TSO terminal monitor program. The CNMSJMIG sample creates CNMSTYLE statements. In most cases, the CNMSJMIG sample converts existing initialization statements into statements that provide equivalent settings. Review the generated statements to validate that they provide the setting you want before enabling them in your installation. You can also use the CNMSJMIG sample to migrate DSICMD files to the new CNMCMD format.

The CNMEMIG command list performs system symbolic substitution, such as the &DOMAIN symbolic variable, when this information is supplied by the customer in the CNMSJMIG sample. However, the CNMEMIG command list cannot properly interpret Data REXX. Because of this, before running the CNMEMIG command list to migrate your DSIPARM definitions to the new CNMSTYLE and CNMCMD formats, ensure that your DSIPARM definitions (or any member that they include) do not contain Data REXX. You can convert your DSIPARM members to not contain Data REXX by running the following pipe under the NetView program from which you are migrating:

```
PIPE < member INCL | > 'altparmds(member)'
```

where *altparmds* is an alternate DSIPARM data set that will contain the converted DSIPARM member and *member* is the DSIPARM member that is being converted. Then specify this alternate data set in the CNMSJMIG sample as the first data set in your OLDPARM data set concatenation. It is important that you run the above PIPE command under the NetView program from which you are migrating in order to preserve your current settings.

Note: While not necessary unless the SA tower is activated or the shipped CNMCMDx members are not used, this same procedure can be done for CNMCMD because it also contains Data REXX.

Sample CNMSJMIG requires the following data sets:

DSIPARM
The concatenated data set list containing current release versions of the CNMSTYLE and CNMCMD members.

OLDPARM
The concatenated data set list containing NetView definitions for the release from which you are migrating.

OLDCLD
The concatenated data set list containing command lists (CNME1034 and CNME1054) for the release from which you are migrating. If you have renamed these members for the release from which you are migrating, place a copy of your members in the OLDCLD concatenation with the names CNME1034 and CNME1054 to enable the tool to find your customization.

DSIWRIT
The concatenated output data set list containing converted CNMSTYLE statements and intermediate output files.

The CNMSJMIG sample creates the following members in the output data sets specified by DSIWRIT:

CNMSTMIG
When the COMPARE option is specified, this member is created and contains converted CNMSTYLE statements that are different from existing V5R4 CNMSTYLE statements. It is placed in the first data set specified by the DSIWRIT DD statement.

Statements start in column 3. The first two columns are blank. Column 1 is reserved to specify which statements are to be copied into the CNMSTUSR member when the UPDATE option is specified. The member also contains section headings. The heading contains the name of the parameter member from which the CNMSTYLE statement was derived. All CNMSTYLE statements in a section are created from the same parameter member.

CNMCMMIG
When the COMPARE option is specified, this member is created and contains converted CNMCMD statements that are different from existing V5R4 CNMCMD statements. It is placed in the first data set specified by the DSIWRIT DD statement.

Statements start in column 3. The first two columns are blank. Column 1 is reserved to specify which statements are to be copied into CNMCMDU when the UPDATE option is specified.

CNMSTUSR
When the UPDATE option is specified, this member is appended with converted CNMSTYLE statements. Only statements in the CNMSTMIG member that are marked with a non-blank character in column 1 are appended. A comment line is also included that contains a timestamp when the update was made.

The first DSIWRIT data set is used that contains the CNMSTUSR member. If the CNMSTUSR member is not found in any data set in the concatenation, a new member is created in the first data set specified by the DSIWRIT DD statement.

Note: For evaluation of initialization statements, you can use the CNMSJCRG sample to produce a report of the CNMSTYLE member. For more information, see Chapter 7, “Getting Ready to Start NetView,” on page 141.

CNMCMDU
When the UPDATE option is specified, this member is appended with converted CNMCMD statements. Only statements in the CNMCMMIG

member that are marked with a non-blank character in column 1 are appended. A comment line is also included that contains a time stamp when the update was made.

The first DSIWRIT data set that contains the CNMCMDU member is used. If the CNMCMDU member is not found in any data set in the concatenation, a new member is created in the first data set specified by the DSIWRIT DD statement.

Specify the following keyword parameters on the CNMEMIG command in the CNMSJMIG sample:

NETVREL=*VxRx*
Specifies the release from which you are migrating:
- V2R4
- V3R1
- V1R1
- V1R2
- V1R3
- V1R4
- V5R1

FUNCTION=COMPARE | UPDATE
Specifies the processing step to perform:

COMPARE
Compares the parameter or command members from the release from which you are migrating with the current CNMSTYLE or DSICMD values. Migrated statements are placed in the CNMSTMIG or CNMCMMIG samples. If omitted, FUNCTION=COMPARE is the default.

UPDATE
Moves any statements with a character in column 1 from the CNMSTMIG member to the CNMSTUSR member, and any statements with a character in column 1 from the CNMCMMIG member to the CNMCMDU member.

FILES=CNMSTYLE | CNMCMD | BOTH
Specifies the definitions to be migrated:

CNMSTYLE
Indicates to migrate parameter definitions and initialization statements to the CNMSTUSR member.

CNMCMD
Indicates to migrate command definitions to the CNMCMDU member.

BOTH Indicates both the CNMSTYLE and CNMCMD members.

&*symbolic_name***=***value*
Indicates a system or NetView symbolic variable used in the data sets specified by OLDPARM and OLDCLD, for example &DOMAIN=CNM01.

The symbolic variable &NV2I defaults to the value NM if not specified.

Note: Do not use spaces in any of the parameter fields for CNMEMIG command list.

The following return codes are set by CNMEMIG:

0 Successful completion; a file was created in DSIWRIT

4 Minor errors encountered; a file was created in DSIWRIT

8 Major error encountered; a file was not created in DSIWRIT

For non-zero return codes, error messages can be found in the CNMSJMIG job log.

Table 79 shows DSIPARM statements in prior NetView releases that have been converted to CNMSTYLE or CNMCMD statements.

Table 79 also shows which commands within CNME1034 have been converted to CNMSTYLE statements. You might have added commands to CNME1034 that have not been converted to CNMSTYLE statements. Consider how to incorporate these commands into the NetView V5R4 initialization flow. One approach is to create a command list member with these unconverted commands and then call this command list using the CNMSTYLE auxInitCmd statement. For information about the auxInitCmd statement, refer to the *IBM Tivoli NetView for z/OS Administration Reference*.

Table 79. DSIPARM Member Statements

DSIPARM Member	DSIPARM Control Statement	CNMSTYLE or CNMCMD Statement
AAUPRLMP	DSTINIT DSRBO	NLDM.DSRBO
	DSTINIT MACRF	NLDM.MACRF
	DSTINIT PDDNM	NLDM.PDDNM
	DSTINIT SDDNM	NLDM.SDDNM
	INITMOD AAUICPEX AUTHROM	NLDM.AUTHDOM.X
	INITMOD AAUINLDM AMLUTDLY	NLDM.AMLUTDLY
	INITMOD AAUINLDM AUTHORIZ	NLDM.AUTHORIZ.X
	INITMOD AAUINLDM BUFTYPE	NLDM.OTHER
	INITMOD AAUINLDM CDTIME	NLDM.CDTIME
	INITMOD AAUINLDM DRDELAY	NLDM.DRDELAY
	INITMOD AAUINLDM ERCOUNT	NLDM.ERCOUNT
	INITMOD AAUINLDM FCTIME	NLDM.FCTIME
	INITMOD AAUINLDM KEEPDISC	NLDM.KEEPDISC
	INITMOD AAUINLDM KEEPMEM	NLDM.KEEPMEM
	INITMOD AAUINLDM KEEPPIU	NLDM.KEEPPIU
	INITMOD AAUINLDM KEEPRTM	NLDM.KEEPRTM
	INITMOD AAUINLDM KEEPSESS	NLDM.KEEPSESS
	INITMOD AAUINLDM LOG	NLDM.LOG
	INITMOD AAUINLDM LUCOUNT	NLDM.LUCOUNT
	INITMOD AAUINLDM MAXEND	NLDM.MAXEND
	INITMOD AAUINLDM NETID	NLDM.NETID
	INITMOD AAUINLDM PERFMEM	NLDM.PERFMEM
	INITMOD AAUINLDM PURGE	NLDM.PURGE
	INITMOD AAUINLDM RTDASD	NLDM.RTDASD
	INITMOD AAUINLDM RTM	NLDM.RTM
	INITMOD AAUINLDM RTMDISP	NLDM.RTMDISP
	INITMOD AAUINLDM SAW	NLDM.SAW
	INITMOD AAUINLDM TRACEGW	NLDM.TRACEGW
	INITMOD AAUINLDM TRACELU	NLDM.TRACELU
	INITMOD AAUINLDM TRACESC	NLDM.TRACESC

Table 79. DSIPARM Member Statements (continued)

DSIPARM Member	DSIPARM Control Statement	CNMSTYLE or CNMCMD Statement
BNJMBDST	ALCACHE	NPDA.ALCACHE
	ALERTLOG	NPDA.ALERTLOG
	ALRTINFP	NPDA.ALRTINFP.RECORD
	ALT_ALERT	NPDA.ALT_ALERT
	AUTORATE	NPDA.AUTORATE
	DSTINIT DSRBO	NPDA.DSRBO
	DSTINIT DSRBU	NPDA.DSRBU
	DSTINIT FUNCT	CNMI
	DSTINIT MACRF	NPDA.MACRF
	DSTINIT PDDNM	NPDA.PDDNM
	DSTINIT PPASS	NPDA.PPASS
	DSTINIT SDDNM	NPDA.SDDNM
	DSTINIT SPASS	NPDA.SPASS
	DSTINIT XITCI	NPDA.PNA
	DSTINIT XITCO	NPDA.PNA
	ERR_RATE	NPDA.ERR_RATE
	IHTHRESH	NPDA.IHTHRESH
	LQTHRESH	NPDA.LQTHRESH
	PRELOAD	NPDA.PRELOAD_BER
	R	NPDA.R.X
	RATE	NPDA.RATE
	REPORTS	NPDA.REPORTS
	TECROUTE	NPDA.TECROUTE
	W	NPDA.W.X
CNME1034[1]	ASSIGN	ASSIGN.OPGROUP.GROUP
	CCDEF MEMBER	CCDEF
	CNMOPDSPREFIX	OpDsPrefix
	DUIFHNAM	COMMON.DUIFHNAM
	DUIFHPRC	COMMON.DUIFHPRC
	EKGHNAM	COMMON.EKGHNAM
	EKGHPRC	COMMON.EKGHRPC
	EVERY	memStore.frequency
	HLLENV CHANGE	HLLENV.TYPE.CRITENVS
	HLLENV CHANGE	HLLENV.TYPE.DEFAULT
	HLLENV CHANGE	HLLENV.TYPE.PHEAP
	HLLENV CHANGE	HLLENV.TYPE.PSTACK
	HLLENV CHANGE	HLLENV.TYPE.REGENVS
	IDLEOFF INIT	function.autotask.idleoff
	IDLEOFF INIT	idleparms.exceptAuto
	IDLEOFF INIT	idleparms.exceptLU
	IDLEOFF INIT	idleparms.exceptNNT
	IDLEOFF INIT	idleparms.exceptOP
	IDLEOFF INIT	idleparms.exceptRmtCmd
	IDLEOFF INIT	idleparms.frequency
	IDLEOFF INIT	idleparms.idlemin
	MEMSTORE	memStore.minhits
	MEMSTORE	memStore.stgLimit
	NETV DEFAULTS	DEFAULTS.CMD
	ROUTE =	function.autotask.memStore
	SMFVPD	COMMON.SMFVPD
	TRANSMSG MEMBER	transMember

Table 79. DSIPARM Member Statements (continued)

DSIPARM Member	DSIPARM Control Statement	CNMSTYLE or CNMCMD Statement
CNME1034[2]	&DUIFHNAM &DUIFHPRC &EKGHNAM &EKGHPRC &SMFVPD ASSIGN CCDEF MEMBER DEFAULTS CMD TRANSMSG MEMBER	COMMON.DUIFHNAM COMMON.DUIFHPRC COMMON,.EKGHNAM COMMON.EKGHPRC COMMON.SMFVPD ASSIGN.OPGROUP.GROUP CCDEF DEFAULTS.CMD transMember
CNME1054	exlist.0	memStore.never
DSIAMLTD	CDRMDEF DSTINIT FUNCT	NLDM.CDRMDEF.X NPDA.RETRY
DSICMD	CMDMDL CMDSYN COMNTESC ECHO END IGNRLSUP MOD PARTSYN PARSE RES SEC TYPE	CMDDEF.MDLNAME.MOD CMDDEF.MDLNAME.CMDSYN *not migrated* CMDDEF.MDLNAME.ECHO *not migrated* CMDDEF.MDLNAME.IGNRLSUP CMDDEF.MDLNAME.MODNAME CMDDEF.MDLNAME.PARMSYN.PARMNAME CMDDEF.MDLNAME.PARSE CMDDEF.MDLNAME.RES CMDDEF.MDLNAME.SEC CMDDEF.MDLNAME.TYPE
DSIDMNB	MOD	SSIname
DSIDMNK	ALERTFWD DB2RRS HARDCOPY LOADEXIT MAXABEND MAXLOGON MVSPARM DEFAULT= MVSPARM MIGRATE= MVSPARM MSGIFAC= NCCFID DOMAINID= NCCFID SUPPCHAR= OPTIONS AUTHCHK= OPTIONS CMDAUTH= OPTIONS OPERSEC= OPTIONS OPSPAN OPTIONS SPANAUTH OPTIONS WEBAUTH RRD TRANSTBL MOD VTAMCP USE=	NPDA.ALERTFWD DB2SEC HARDCOPY LOADEXIT. DEFAULTS.MAXABEND DEFAULTS.MAXLOGON MVSPARM.DEFAUTH MVSPARM.MIGRATE MVSPARM.MSGIFAC DOMAIN SUPPCHAR SECOPT.AUTHCHK SECOPT.CMDAUTH SECOPT.OPERSEC SECOPT.OPSPAN SECOPT.SPANAUTH SECOPT.WEBAUTH RRD. TRANSTBL VTAMCP.USE
DSIILGCF	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DSILUCTD	CNMAUTH CTL= CNMTARG LU ″DSTINIT FUNCT=OTHER,PERSIST=″ MAXSESS	LUC.CTL LUC.CNMTARG.X LUC.PERSIST LUC.MAXSESS

Table 79. DSIPARM Member Statements (continued)

DSIPARM Member	DSIPARM Control Statement	CNMSTYLE or CNMCMD Statement
DSIREXCF	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DSIRSHCF	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DSIRTTTD	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DSITBL01	CMD('DBFULL NLDM 'MESSAGE) CMD('DBFULL NLDM 'MESSAGE) CMD('SAVECMD')	function.atutask.SMONdbMaint function.autotask.HMONdbMaint funtion.autotask.SAVECMD
DSITCPCF	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DSIUINIT	RMTSECUR SAFREFSH	RMTINIT.SECOPT RMTINIT.SAFrefresh
DSIWBMEM	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DUIFPMEM	PORT SOCKETS TCPANAME	PORT SOCKETS TCPANAME
DUIIGHB	TCPANAME	GHB.TCPANAME
EZLCFG01	WAIT XDOM	COMMON.WAITTIME COMMON.XDOMTIME
FKXEICMD	Default_Server_Name Default_Stack_Name	TCPserver TCPname
FLCSAINP	DEF_NETW_VIEW EXCEPTION_VIEW_FILE RODMCMDRETRY RODMINT RODMNAME RODMRETRY TCPNAME TN3270_FILE	(MSM)COMMON.FLC_DEF_NETW_VIEW (MSM)COMMON.FLC_EXCEPTION_VIEW (MSM)COMMON.FLC_RODMCMDRETRY (MSM)COMMON.FLC_RODMINT (MSM)COMMON.FLC_RODMNAME (MSM)COMMON.FLC_RODMRETRY (MSM)COMMON.FLC_TCPNAME (MSM)COMMON.FLC_TN3270_FILE

Notes:

1. REXX version
2. Pre-REXX version (NetView V1R2 and before)

Appendix G. Differences Between IPv4 and IPv6 Addresses

When you are specifying IP addresses, you can use the following formats:

- An IPv4 address in dotted-decimal format, *d.d.d.d* , where each *d* is a decimal number from 0 to 255. An IPv4 address is a 32-bit address separated into four 8-bit parts. Each part is converted to its decimal equivalent, and the parts are separated by periods. The following examples show IPv4 addresses:

  ```
  13.1.68.3
  129.144.52.38
  ```

- An IPv6 address in colon-hexadecimal format, *h:h:h:h:h:h:h:h* , where each *h* is a hexadecimal value (0-FFFF). An IPv6 address is a 128-bit address separated into eight 16-bit parts. Each part is converted to a hexadecimal number, and the parts are separated by colons. Leading zeros are not required, but, unless an address is compressed, each part must have at least one numeral. The following examples show colon-hexadecimal format IPv6 addresses:

  ```
  FEDC:BA98:7654:3210:FEDC:BA98:7654:3210
  1080:0:0:0:8:800:200C:417A
  ```

- An IPv4-compatible IPv6 address or IPv4-mapped IPv6 address in mixed format, *h:h:h:h:h:h:d.d.d.d* , where *h* is a hexadecimal value, one for each of the 6 high-order 16-bit parts of the address, and *d* is a decimal value, one for each of the 4 low-order 8-bit parts of the address (standard IPv4 representation). This format is useful in an environment that uses both IPv4 and IPv6 addresses. The following examples show these addresses:

  ```
  0:0:0:0:0:0:13.1.68.3   (IPv4-compatible IPv6 address)
  0:0:0:0:0:FFFF:129.144.52.38   (IPv4-mapped IPv6 address)
  ```

  Notes:

  1. The first five *h* values must be zero (0), and the sixth *h* value must be X'FFFF' in an IPv4-mapped IPv6 address.
  2. All six *h* values must be zero in an IPv4-compatible IPv6 address.

IPv6 addresses, IPv4-compatible IPv6 addresses, and IPv4-mapped IPv6 addresses that contain zero bits can be compressed. The value `::` can be substituted for multiple consecutive groups of zeros. The `::` can be used only once in an address and can be used to compress leading or trailing zeros in an address. The following examples are of IPv6 addresses, their compressed representations, and brief descriptions:

`1080:0:0:0:8:800:200C:417A`	`1080::8:800:200C:417A`	unicast
`FF01:0:0:0:0:0:0:101`	`FF01::101`	multicast
`0:0:0:0:0:0:0:1`	`::1`	loopback
`0:0:0:0:0:0:0:0`	`::`	unspecified
`0:0:0:0:0:0:13.1.68.3`	`::13.1.68.3`	IPv4-compatible
`0:0:0:0:0:FFFF:129.144.52.38`	`::FFFF:129.144.52.38`	IPv4-mapped

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Index

Special characters

A

B

C

D

E

F

G

H

I

L

M

N

O

P

R

S

T

U

V

W

Y

Z

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