IBM Tivoli NetView for z/OS V5.4 helps expand management of your business-critical IT resources, including further enhancements to its already robust IP, sysplex management, and automation capabilities

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At a glance

New in IBM® Tivoli® NetView® for z/OS® V5.4:

• Sysplex management
  – Expanded discovery and management of sysplexes and associated resources including subplexes, NetView domains, Telnet servers and ports, Central Processing Complexes (CPCs) and Logical Partitions (LPARs)
• IP management
  – IP trace has been enhanced. In addition Open System Adapter (OSA) trace functions are now supported.
  – Has expanded information on inactive IP connections, including termination codes.
  – Dynamic Virtual IP Address (DVIPA) monitoring has been enhanced to include information on connections through a distributed DVIPA and DVIPA connection status.
  – IP Subnet and z/OS discovery through MultiSystem Manager support of IBM Tivoli Network Manager.
  – Network Manager Console support for IPv6 communications.
• Expanded Tivoli Enterprise Portal (TEP) support
  – New and expanded data and workspaces, including OSA, HiperSockets™, and Telnet servers and additional self-management (NetView health) and DVIPA information, plus out-of-the-box situations and expert advice.
• Core NetView
  – Service oriented architecture through a Web services gateway.
  – Long password phrase support.
  – SMF type 30 record automation support.
  – The KEEP stage in the PIPE programming language has been enhanced to allow access globally from any regular task.
• Time to value
  – Updated CNMSTYLE report generator
Overview

IBM Tivoli NetView for z/OS V5.4 provides state-of-the-art management for your business-critical IT network infrastructure. Use NetView to manage your mainframe systems, your networks, and the key services these systems and networks support. V5.4 expands NetView capabilities to continue to match the evolution in your System z® environments and to strengthen ties to the Tivoli portfolio to allow you to better manage your IT environments.

Sysplex management

Sysplex environments are increasingly important. NetView continues to build upon the support included in V5.3, and now supports discovery and monitoring of subplexes, NetView domains, Telnet servers and ports, Central Processing Complexes (CPCs), and Logical Partitions (LPARs).

Information from multiple sysplexes in the enterprise can be forwarded to and stored at a single NetView to allow sysplexes across the enterprise to be managed from a central NetView.

Enhanced IP Management

NetView’s long history of providing management for the mainframe environment (including the operating system, its communications server, and other functions) continues with several important enhancements to better manage IP networks.

Expanded Tivoli Enterprise Portal (TEP) integration

NetView continues to strengthen its presence in the TEP by adding new and enhanced workspaces, situations, and expert advice. For V5.4, NetView has expanded the ability to monitor and manage Dynamic Virtual IP Address (DVIPA) information, further refined information about the health of NetView itself as well as applications running on NetView. New support has been added to display the health of Telnet servers, Open System Adapter (OSA) Direct Express, and HiperSockets.

Key prerequisites

Refer to the Hardware requirements and Software requirements sections

Planned availability date

- October 2, 2009

Description

IBM Tivoli NetView for z/OS V.4 capabilities

Sysplex management

Sysplex environments are increasingly important. NetView already discovers the z/OS images within a sysplex and the stacks on each of those images, and provides management capabilities for such environments. NetView also discovers a variety of Dynamic Virtual IP Address (DVIPA)-related information, including connections through a distributed DVIPA and DVIPA connection status. With NetView for z/OS V5.4, management of the sysplex is further expanded to include:

- Subplexes
- Coupling Facility
- Logical Partitions
• Central Processor Complexes (CPCs)
• Management of multiple sysplexes from a central NetView
• Telnet servers and ports
• NetView domains

**Enhanced IP management**

NetView's long history of providing management for the mainframe environment (including the operating system, its communications server, and other functions) continues with several important enhancements to better manage IP networks.

**IP subnet and z/OS**

The MultiSystem Manager component of NetView has a long history of providing management of distributed resources from the z/OS platform. To further enhance this function, MultiSystem Manager will now gather subnet and z/OS resources discovered by IBM Tivoli Network Manager and load them into the NetView for z/OS Resource Object Data Manager (RODM) data cache. These resources can then be managed from the NetView Management Console (NMC). By utilizing RODM, these resources can be related to objects discovered through other means, such as sysplex management, to provide a comprehensive representation of the distributed and z/OS networks.

**Packet trace**

Managing an IP network can often involve having to run IP traces and examine individual IP packets in order to understand communications between a remote system and z/OS. With NetView for z/OS V5.4, this task is simplified through a new easy-to-use interface that allows for the control of IP traces, individual packet capture, and detailed packet formatting.

**Open system adapter (OSA) trace**

Similar to the new packet trace function, NetView V5.4 also provides a new easy-to-use interface to control tracing of packets through OSA Direct Express in your system. The OSA trace allows for the starting, stopping, and viewing of traces as well as specifying trace options. From active traces, criteria can be specified to capture groups of related packets and provide summary data. If further details are required, individual packets can be formatted and examined.

**IPv6 support**

Continuing with support of IPv6, NetView for z/OS now supports the NetView Management Console and Server in an IPv6 environment.

**Product integration**

NetView for z/OS V5.4 continues the direction begun in V5.3 by strengthening its presence in the Tivoli Enterprise Portal (TEP) through:

• A wide array of new and expanded workspaces and views allowing cross-product links to the OMEGAMON® XE suite of products for consolidated availability and performance management
• Situations and expert advice
• Information about the health of NetView itself

**Core NetView functions**

**Long password phrase support**

Security continues to be increasingly important across the enterprise. NetView for z/OS now allows for password phrases up to 100 characters long to assist you in further securing your environment.
Command revision

This extends and supersedes the function of NetView's MVS™ Command Management, but with new interfaces, and more powerful, easy-to-use mechanisms and procedures. Simple changes can be performed in-line after the manner of Message Revision, without the need to transfer the command to the NetView application address space. Simple changes include command deletion (cancellation), expansion of nicknames (for example, creating new command or parameter synonyms), adding parameters, and issuing explanatory Write to Operators (WTOs), complex changes, requiring a transfer to the NetView address space, include getting a response to a Write to Operator with Reply (WTOR), obtaining responses to other MVS commands, and reading files.

SMF30 record automation

Further enhancing its automation capabilities, NetView now enables automated processing of SMF type 30 records. These records are generated by z/OS for a number of reasons, including job and job-step termination. With NetView for z/OS V5.4, key information such as abend reason codes from the SMF record type 30, subtypes 4 and 5 can be sent to NetView automation to allow you to monitor and react automatically to these events.

Pipe support for global keep

NetView pipes are a powerful, comprehensive programming language. The keep stage allows programs to create, delete, modify, and access repositories of NetView messages. For NetView for z/OS V5.4, the keep stage is expanded to allow:

- 255 character name space identifiers.
- Specially designated keeps that are accessible from any regular task (a task capable of executing regular commands).

Web services gateway

NetView for z/OS supports service oriented architecture through a Web services gateway implemented as a SOAP server allowing for secure web based connections.

Tivoli Service Request Manager

As a part Tivoli product integration, Tivoli NetView for z/OS provides the ability to automatically create incident records in Tivoli Service Request Manager (formerly known as Maximo®) when particular alert or message events occur. This includes:

- Keeping the event until it has been confirmed that the next entity involved in its processing has received and accepted it.
- The ability to try back-up entities if a primary entity involved in incident record creation cannot be reached or fails to respond.

Time to value

Updated Report Generator for CNMSTYLE: This tool provides a report that shows the layout of the NetView stylesheet (CNMSTYLE) and its included members. It allows you to quickly and easily see which towers and subtowers have been activated, and which parameter values are actually in effect. This helps to reduce the time to value and to prevent unwanted recyclces of NetView due to parameter values that are syntactically correct and semantically valid, but not the desired values.

Accessibility by people with disabilities

A U.S. Section 508 Voluntary Product Accessibility Template (VPAT) containing details on accessibility compliance can be requested at

**Product positioning**

Tivoli NetView for z/OS V5.4 provides a comprehensive set of tools for maintaining complex, multivendor, multiplatform networks, and systems from a single point of control.

NetView provides management functions that work in cooperation with other products or can function alone. As a stand-alone management application, NetView manages both TCP/IP resources and SNA resources, and provides facilities to automate the handling of any network or system event.

Examples of products that work with NetView for z/OS include System Automation for z/OS (5698-A14), IBM Tivoli Network Manager (5724-S45), and Tivoli NetView (5698-NVW). NetView provides the automation services and graphical topology services for System Automation for z/OS, whose strength is OS/390® and z/OS system automation.

Tivoli NetView for z/OS can receive TCP/IP resource topology data from Tivoli NetView (5698-NVW) running on a UNIX®, Windows®, or Linux® on System z, or IBM Tivoli Network Manager (5724-S45) running on UNIX or Windows platform to show an enterprise-wide view of the network, track resources status, and issue commands to those resources.

Through data correlation and cross linkage between workspaces, NetView joins with the OMEGAMON XE suite of products in the TEP to provide a consolidated management console for availability and performance that allows you to better understand and isolate root causes, and thereby to reduce problem determination time. Tivoli NetView for z/OS V5.4 management data is also available to other management products. NetView provides a Discovery Library Adapter (DLA) that extracts data about TCP/IP resources and their relationships from the NetView for z/OS Resource Object Data Manager (RODM) data cache, formats the data into an output XML file, and sends that managed resource data to IBM Configuration and Change Management Database (CCMDB). NetView for z/OS TCP/IP data in the CCMDB database enables consuming applications, such as the Tivoli Application Dependency Discovery Manager (TADDM), to locate resources discovered by other providers, such as an FTP server or router, in a TCP/IP network. This resource correlation helps operators and network analysts to solve outages and improve configuration and change management. Of particular value is the correlation in CCMDB between TCP/IP z/OS resources discovered by NetView for z/OS and z/OS resources discovered by the z/OS DLA. Other examples of data sharing include NetView’s ability to send z/OS messages and events to the Tivoli Netcool/OMNibus™ and to the Tivoli Enterprise Console® (TEC) as events for end-to-end correlation, action, and display.

NetView for z/OS supports service oriented architecture through a Web services gateway implemented as a SOAP server allowing for secure Web-based connections.

With its open application programming interfaces (APIs), NetView for z/OS can be an integration point for both z/OS vendors and distributed vendors.

NetView for z/OS is a program for managing networks and systems through graphical display and automation. It reduces manual resource definition and complex automation setup through production-ready automation and extends centralized management into multiple SNA network environments. NetView for z/OS can be used in an enterprise as a centralized manager, a mid-level manager, or a z/OS management endpoint.

**Hardware and software support services**

**SmoothStart/installation services**

IBM SmoothStart™ Services and Installation Services are not provided.
Reference information


Program number

<table>
<thead>
<tr>
<th>Program number</th>
<th>VRM</th>
<th>Program name</th>
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<tbody>
<tr>
<td>5697-ENV</td>
<td>5.4</td>
<td>IBM Tivoli NetView for z/OS</td>
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Technical information

Specified operating environment

Hardware requirements

IBM Tivoli NetView for z/OS V5.4 runs in a virtual storage environment on any IBM system configuration with sufficient storage that supports z/OS.

NetView for z/OS Enterprise Management Agent

- Any hardware that supports one of the following operating system:
  - z/OS V1.9, or later

NetView Management Console, NetView 3270 Management Console

Topology server

- Any hardware that supports one of the following operating systems:
  - AIX® V5.3, or later
  - Windows Server 2003 Standard with R2 SP2
  - Windows Server 2003 Enterprise with R2 SP2
  - Windows Server 2003 Data Center with R2 SP2
  - Windows Server 2008
  - Windows Server 2008 (AMD64/EM64T)
  - Red Hat Enterprise Linux 4.0 for System z
  - Red Hat Enterprise Linux 5.0 for System z
  - SuSE Linux Enterprise Server 9 for System z
  - SuSE Linux Enterprise Server 10 for System z
  - SuSE Linux Enterprise Server 11 for System z
- Install footprint: 110 MB of additional fixed disk space

Topology console

- Any hardware that supports one of the following operating systems with TCP/IP installed:
  - Windows Server 2003 Standard with R2 SP2
  - Windows Server 2003 Enterprise with R2 SP2
  - Windows Server 2003 Data Center with R2 SP2
  - Windows Server 2008
  - Windows Server 2008 (AMD64/EM64T)
  - Windows XP Professional SP3
  - Windows Vista Desktop
– SUSE Linux Enterprise Server 9 (Intel®)
– SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)
– SUSE Linux Enterprise Server 10 (Intel)
– SUSE Linux Enterprise Server 10 (AMD64/EM64T) (32-bit application/64-bit kernel)
– SUSE Linux Enterprise Server 11 (Intel)
– SUSE Linux Enterprise Server 11 (AMD64/EM64T) (32-bit application/64-bit kernel)
– Red Hat Enterprise Linux 4 AS (Intel)
– Red Hat Enterprise Server 4 ES (Intel)
– Red Hat Enterprise Linux 4 (AMD64/EM64T) (32-bit application/64-bit kernel)
– Red Hat Enterprise Linux 5 for IA32 (32-bit application/32-bit kernel)
– Red Hat Enterprise Linux 5 (AMD64/EM64T) (32-bit application/64 bit)
• Install footprint: 150 MB of additional fixed disk space
• Color display (1024 x 768, 256 colors)
• Maximum color palette is 16-bit high color; 256-color palette recommended (32-bit true color is not supported.)

NetView Web Application

HTTP server and Web application server

Any hardware that supports one of the following operating systems running on IBM WebSphere® Application Server V7.0.0.1 or the embedded version of IBM WebSphere Application Server V7.0.0.1.

• AIX V5.3, or later
• Windows Server 2003 Standard with R2 SP2
• Windows Server 2003 Enterprise with R2 SP2
• Windows Server 2003 Data Center with R2 SP2
• Windows Server 2008
• Windows Server 2008 (AMD64/EM64T)
• SUSE Linux Enterprise Server 9 for System z
• SUSE Linux Enterprise Server 10 for System z
• SUSE Linux Enterprise Server 11 for System z
• Red Hat Enterprise Server 4 AS (Intel)
• Red Hat Enterprise Server 4 ES (Intel)
• Red Hat Enterprise Server 5 (Intel)
• Red Hat Enterprise Linux 4.0 for System z with Update 2, or later
• Red Hat Enterprise Linux 5.0 for System z

The install footprint is 550 MB of fixed disk space for Windows and 750 for all other platforms.

For additional hardware requirements for IBM WebSphere Application Server V7.0.0.1, refer to the WebSphere documentation for the applicable platform.

Web browsers: Mozilla Firefox V3.0, or later

Any hardware that runs one of the following operating systems with Mozilla Firefox browser:

• SUSE Linux Enterprise Server 9 (Intel)
• SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)
• SUSE Linux Enterprise Server 10 (Intel)
• SUSE Linux Enterprise Server 10 (AMD64/EM64T) (32-bit application/64-bit kernel)
• SUSE Linux Enterprise Server 11 (Intel)
• SUSE Linux Enterprise Server 11 (AMD64/EM64T) (32-bit application/64-bit kernel)
• Red Hat Enterprise Linux 4 AS (Intel)
• Red Hat Enterprise Linux 4 ES (Intel)
• Red Hat Enterprise Linux 4 (AMD64/EM64T) (32-bit application/64-bit kernel)
• Red Hat Enterprise Linux 5 (Intel)
• Red Hat Enterprise Linux 5 (AMD64/EM64T) (32-bit application/64-bit kernel)

Internet Explorer 7.0, or later

Any hardware that runs one of the following operating systems with Internet Explorer browser:

• Windows Server 2003 Standard with R2 SP2
• Windows Server 2003 Enterprise with R2 SP2
• Windows Server 2003 Data Center with R2 SP2
• Windows Server 2008
• Windows Server 2008 AMD64/EM64T (32-bit application/32-bit or 64-bit kernel)
• Windows XP Professional with SP3
• Windows Vista Desktop

NetView for z/OS MultiSystem Manager component

MultiSystem Manager IBM Tivoli Network Manager support: The NetView for z/OS MultiSystem Manager Agent for Tivoli Network Manager runs in many different environments. The hardware required is any hardware that supports one of the environments listed below. The topology agent for Tivoli Network Manager is shipped with NetView for z/OS on the workstation CD-ROM.

AIX

When the MultiSystem Manager Tivoli Network Manager agent is installed on AIX, the agent requires hardware that supports the following:

• AIX V5.3 with at least TL 5300-07, or later
• Tivoli Network Manager V3.8, or later

Windows

When the MultiSystem Manager Tivoli Network Manager agent is installed on Solaris, the agent requires hardware that supports the following:

• Windows Server 2003 Standard with R2 SP2
• Windows Server 2003 Enterprise with R2 SP2
• Windows Server 2003 Data Center with R2 SP2
• Windows Server 2008
• Windows Server 2008 (AMD64/EM64T)
• Windows XP Professional with SP3
• Windows Vista Desktop
• Tivoli Network Manager V3.8, or later

Solaris

When the MultiSystem Manager Tivoli Network Manager agent is installed on Solaris, the agent requires hardware that supports the following:
- Solaris 9, or later
- Tivoli Network Manager V3.8, or later

Linux

When the MultiSystem Manager Tivoli Network Manager agent is installed on Linux, the agent requires hardware that supports the following:

- SUSE Linux Enterprise Server 9 (Intel)
- SUSE Linux Enterprise Server 9 (AMD64/EM64T (32-bit application/64-bit kernel)
- SUSE Linux Enterprise Server 10 (Intel)
- SUSE Linux Enterprise Server 10 (AMD64/EM64T) (32-bit application/64-bit kernel)
- SUSE Linux Enterprise Server 11 (Intel)
- SUSE Linux Enterprise Server 11 (AMD64/EM64T) (32-bit application/64-bit kernel)
- Red Hat Enterprise Linux 4 AS (Intel)
- Red Hat Enterprise Linux 4 ES (Intel)
- Red Hat Enterprise Linux 4 (AMD64/EM64T) (32-bit application/64-bit kernel)
- Red Hat Enterprise Linux 5 (Intel)
- Red Hat Enterprise Linux 5 (AMD64/EM64T) (32-bit application/64-bit)
- Tivoli Network Manager V3.8, or later

MultiSystem Manager TCP/IP support: The NetView for z/OS MultiSystem Manager Agent for TCP/IP runs in many different environments. The hardware required is any hardware that supports one of the environments listed below. The topology agent for TCP/IP is shipped with NetView for z/OS on the workstation CD-ROM.

The agent can communicate with Tivoli NetView for z/OS via TCP/IP or SNA. If you are using SNA to communicate between the MultiSystem Manager TCP/IP agent and Tivoli NetView for z/OS, hardware that supports the following is also required:

- AIX NetView Service Point V1.3.3 (5621-107), or later
- IBM Communication Server for AIX V6.1 (5765-E51), or later

Hewlett-Packard UNIX (HP-UX)

The MultiSystem Manager TCP/IP network feature for HP-UX uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and IBM Tivoli NetView for z/OS. The MultiSystem Manager TCP/IP agent for HP OpenView running on HP-UX requires hardware that supports:

- HP-UX 11iv2
- Hewlett-Packard Network Node Manager (HP OpenView) V5.1, or later

Windows

The MultiSystem Manager TCP/IP network feature for Windows uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and Tivoli NetView for z/OS. The MultiSystem Manager TCP/IP agent for Tivoli NetView for Windows requires hardware that supports the following:

- Windows Server 2003 Standard with R2 SP2
- Windows Server 2003 Enterprise with R2 SP2
- Windows Server 2003 Data Center with R2 SP2
- Windows XP Professional with SP3
- Tivoli NetView for Windows V7.1.5, or later

Solaris
The agent can be installed on Tivoli NetView for Solaris or Hewlett Packard Network Node Manager. The MultiSystem Manager TCP/IP network feature for Solaris uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and IBM Tivoli NetView for z/OS.

- The MultiSystem Manager TCP/IP feature for Tivoli NetView for Solaris requires hardware that supports the following:
  - Solaris 9 or 10
  - Tivoli NetView for Solaris V7.1.5, or later
- The MultiSystem Manager TCP/IP agent for OpenView for Solaris requires hardware that supports the following:
  - Solaris 9 or 10
  - Hewlett Packard Network Node Manager (HP OpenView) V5.1, or later

Linux

The MultiSystem Manager TCP/IP network feature for Linux uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and Tivoli NetView for z/OS. The MultiSystem Manager TCP/IP agent for Tivoli NetView for Linux requires hardware that supports the following:

- SUSE Linux Enterprise Server 9 for S/390® and System z
- SUSE Linux Enterprise Server 9 (Intel)
- SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)
- Red Hat Enterprise Linux 4 AS (Intel)
- Red Hat Enterprise Linux 4 ES (Intel)
- Red Hat Enterprise Linux 4.0 for System z
- Red Hat Enterprise Linux 4.0 (AMD64/EM64T) (32-bit application/64-bit support)
- NetView Integrated TCP/IP Services Component (ITSC) V7.1.5, or later

MultiSystem Manager Tivoli Management Region

The topology agent for TMR is shipped with NetView on the workstation CD-ROM. Any hardware that supports one of the following is required:

- AIX V5.2 or V5.3
- Windows Server 2003 Standard with SP1
- Windows Server 2003 Enterprise with SP1
- Windows Server 2003 Data Center with SP1
- Solaris 9, or later
- HP-UX 11i v2, or later
- SUSE Linux Enterprise Server 9 (Intel)
- SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)

NetView for z/OS Automated Operations network component

- TCP/IP for AIX Automation uses SNA communication between Tivoli NetView for AIX and Tivoli NetView for z/OS, and requires hardware that supports:
  - AIX V5.2, or later
  - Tivoli NetView for AIX V7.1.5, or later
  - AIX NetView Service Point V1.3.3 (5621-107), or later
  - IBM Communication Server for AIX V6.1 (5765-E51), or later
**Software requirements**

This section defines the minimum programming requirements for IBM Tivoli NetView for z/OS V5.4 and its operating environments. Specific functions of NetView for z/OS may require additional products or higher levels of the products listed below.

NetView for z/OS is executed as an application on the z/OS operating system. NetView for z/OS support is provided at the listed levels or subsequent levels that are upward compatible, unless otherwise stated. Upward compatibility means that functions provided by the earlier releases are still supported.

Programming requirements for all functions

- z/OS V1.9 (5694-A01), or later
- All functions related to the ACF/NCP program require:
  - ACF/NCP V4.3.1 (5668-854), or later
- All functions using TCP/IP communications from z/OS require:
  - z/OS V1.9, or later

NetView-to-NetView communication: In a multiple-domain network or across multiple SNA networks, the NetView program can communicate with another NetView program, regardless of the operating system. NetView for z/OS V5.4 can communicate with the following, at the listed system's level of capabilities:

- NetView V2.3 for VM/ESA® and VSE/ESA™
- Tivoli NetView for OS/390 V1.4
- IBM Tivoli NetView for z/OS V5.1
- IBM Tivoli NetView for z/OS V5.2
- IBM Tivoli NetView for z/OS V5.3
- IBM Tivoli NetView for z/OS V5.4

Function compatibility

Except as noted below under withdrawn functions, the functions of the following versions and releases are upwardly compatible with Tivoli NetView for z/OS V5.4:

- NetView V2.3 for VM/ESA and VSE/ESA
- Tivoli NetView for OS/390 V1.4
- Tivoli NetView for z/OS V5.1
- Tivoli NetView for z/OS V5.2
- Tivoli NetView for z/OS V5.3

Withdrawn functions

As previously announced, the following functions are withdrawn beginning with IBM Tivoli NetView for z/OS, and are no longer available:

- MultiSystem Manager LAN Network Management (LNM) Agent
- Web standalone applications
  - MIB Browser
  - Real-Time Poller
  - MIB Loader
  - SNMP Command Server
- LPDA-1 and LPDA-2 modem support
- NetView for z/OS Tivoli Enterprise Portal Agent (NetView for z/OS V5.2 for OMEGAMON V3.6.0 platform and NetView for z/OS V5.3)
- NetView for z/OS Tivoli Enterprise Portal V6.1 Agent (NetView for z/OS V5.2 only)
Notice of planned withdrawal

IBM Tivoli NetView for z/OS V5.4 is the last release that will support the following functions:

- MultiSystem Manager TCP/IP Management Agent
- MultiSystem Manager Tivoli Managed Region Agent
- Support for NetView-to-NetView Transport (NNT) sessions
- NetView Portfolio of the Web Application
- Programmable Network Access (PNA)

System definition compatibility

In order to facilitate migration from a previous release, Tivoli NetView for z/OS host code will run with the NMC Topology Server and Console from the following earlier releases:

- Tivoli NetView for OS/390 V1.4
- Tivoli NetView for z/OS V5.1
- Tivoli NetView for z/OS V5.2
- Tivoli NetView for z/OS V5.3

For equivalent, non-system-dependent functions, IBM Tivoli NetView for z/OS V5.4 will operate with most definition statements and command lists of the following.

Note: For details, refer to the IBM Tivoli NetView for z/OS V5.4 Installation Migration Guide.

- NetView V2.3 for VM/ESA and VSE/ESA
- Tivoli NetView for OS/390 V1.4
- Tivoli NetView for z/OS V5.1
- Tivoli NetView for z/OS V5.2
- Tivoli NetView for z/OS V5.3

For equivalent, non-system-dependent functions, NetView for z/OS will operate with the REXX™ procedures of NetView V2 and Tivoli NetView for OS/390.

User applications, written for these NetView releases in accordance with NetView customization publications and using NetView customization services, will be source compatible. A re-assembly or re-compile using NetView for z/OS macro libraries is required.

If user customization code is being migrated from one operating system release to another, user code that contains system-dependent functions may not run and may require conversion.

Enhanced function support: The following NetView for z/OS functions and features require the specified program levels or subsequent upward-compatible levels unless stated otherwise.

TCP/IP connection management

- z/OS V1.9, or later

IP Packet Trace Formatting

- z/OS V1.9, or later

NetView for z/OS Enterprise Management Agent

- IBM Tivoli Monitoring V6.2.1 Interim Fix 3, or later
• Optionally: IBM Tivoli OMEGAMON XE for Mainframe Networks V4.2.0, IBM Tivoli OMEGAMON XE for CICS® on z/OS V4.2.0, IBM Tivoli OMEGAMON XE on z/OS V4.2.0, and OMEGAMON XE for DB2® Performance Expert on z/OS V4.2.0

For information on software requirements for IBM Tivoli Monitoring V6.2.1, refer to the IBM Tivoli Monitoring: Installing and Setup Guide, GC32-9407.

Opening incident records from NetView

One of the following:

• IBM Tivoli Information Management
  – IBM Tivoli Information Management for z/OS V7.1
  – Web Access for Information Management V1.2
  – IBM z/OS HTTP Server V5.2 or V5.3

• Peregrine ServiceCenter
  – ServiceCenter Server 6.0 Server
  – ServiceCenter Web Client or Windows client for Database Management
  – Optionally: ServiceCenter Web Client for additional management of incidents

Application-Transparent Transport Layer Security (AT-TLS)

• z/OS V1.9 (Communications Server), or later

Mixed-case passwords

• z/OS V1.9 Security Server (RACF®), or later

Comprehensive Network Address Translator (CNAT) support

• IBM Tivoli NetView V7.1.5, or later

Support for Hot Standby Router Protocol (HSRP)

• IBM Tivoli NetView V7.1.5, or later

Support for Common Event Infrastructure

• IBM WebSphere Application Server V7.0.0.1 or the embedded version of IBM WebSphere Application Server - Express V7.0.0.1 for the appropriate operating system
  
  For additional software requirements for IBM WebSphere Application Server V7.0.0.1, refer to the WebSphere documentation for the applicable platform.

NetView Management Console, NetView 3270 Management Console

Topology server

• AIX V5.3, or later

Additional prerequisites to run on AIX:

• C Set++ for AIX Applications xlC.rte 3.6.6.0, or later
• IBM class libraries ibmcxx.ioc.rte 3.6.6.0, or later and ibmcxx.rte 3.6.6.0, or later
• Information Presentation Facility ipfx.rte 2.2.0.0, or later

Note: xlC.rte, ibmcxx.ioc.rte, ibmcxx.rte, and ipfx.rte are included on the IBM Tivoli NetView for z/OS V5.4 product CD.

• Windows Server 2003 Standard with R2 SP2
• Windows Server 2003 Enterprise with R2 SP2
• Windows Server 2003 Data Center with R2 SP2
• Windows Server 2008
• Windows Server 2008 (AMD64/EM64T)
• SUSE Linux Enterprise Server 9 for System z
• SUSE Linux Enterprise Server 10 for System z
• SUSE Linux Enterprise Server 11 for System z
• RED Hat Enterprise Linux 4.0 for System z
• Red Hat Enterprise Linux 5.0 for System z

Note: If justified for business and technical reasons, other Linux distributions may be supported at a later date. For the most current list of supported distributions, refer to the NMC Topology Server README in the Downloads area under "Product Support" on the NetView Web site


Topology console

One of the following:

• Windows XP Professional with SP3
• Windows Vista Desktop
• Windows Server 2003 Standard with R2 SP2
• Windows Server 2003 Enterprise with R2 SP2
• Windows Server 2003 Data Center with R2 SP2
• Windows Server 2008
• Windows Server 2008 (AMD64/EM64T)
• SUSE Linux Enterprise Server 9 (Intel)
• SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)
• SUSE Linux Enterprise Server 10 (Intel)
• SUSE Linux Enterprise Server 10 (AMD64/EM64T) (32-bit application/64-bit kernel)
• SUSE Linux Enterprise Server 11 (Intel)
• SUSE Linux Enterprise Server 11 (AMD64/EM64T) (32-bit application/64-bit kernel)
• Red Hat Enterprise Linux 4 AS (Intel)
• Red Hat Enterprise Linux 4 ES (Intel)
• Red Hat Enterprise Linux 4 (AMD64/EM64T) (32-bit application/64-bit kernel)
• Red Hat Enterprise Linux 5 (Intel)
• Red Hat Enterprise Linux 5 (AMD64/EM64T) (32-bit application/64-bit kernel)
• Solaris 9, or later

Note: If justified for business and technical reasons, other Linux distributions may be supported at a later date. For the most current list of supported distributions, refer to the NMC Topology Console README in the Supported Functions Download area of the NetView Web site


Server communications with NetView for z/OS using LU V6.2

For LU V6.2 connections, one of the following is required.
AIX

- IBM Communications Server for AIX V6.1 (5765-E51)

Windows

- IBM Communications Server for Windows XP, or later

NMC Server Audit Log: To use a Web browser to view the audit log requires a browser which supports eXtensible Stylesheet Language (XSL). Common browsers which support XSL include:

- Mozilla Firefox V3.0, or later
- Microsoft® Internet Explorer V7.0, or later

NetView Web Application

HTTP Server and WebSphere Application Server

- One of the following operating systems with TCP/IP installed:
  - AIX V5.3, or later
  - Windows Server 2003 Standard with R2 SP2
  - Windows Server 2003 Enterprise with R2 SP2
  - Windows Server 2003 Data Center with R2 SP2
  - Windows Server 2008
  - Windows Server 2008 (AMD64/EM64T)
  - SUSE Linux Enterprise Server 9 for System z
  - SUSE Linux Enterprise Server 10 for System z
  - SUSE Linux Enterprise Server 11 for System z
  - Red Hat Enterprise Server 4 AS (Intel)
  - Red Hat Enterprise Server 4 ES (Intel)
  - Red Hat Enterprise Server 5 (Intel)
  - Red Hat Enterprise Linux 4.0 for System z with Update 2, or later
  - Red Hat Enterprise Linux 5.0 for System z

Note: If justified for business and technical reasons, other Linux distributions may be supported at a later date. For the most current list of supported distributions, refer to the NetView Web Application README in the Downloads area under "Product Support" on the NetView Web site


- IBM WebSphere Application Server V7.0.0.1 or the embedded version of IBM WebSphere Application Server V7.0.0.1 for the appropriate operating system
  2 For additional software requirements for IBM WebSphere Application Server V7.0.0.1, refer to the WebSphere documentation for the applicable platform.

- Supported locales for the Japanese version of the NetView Web Application
  - For Windows, UTF-8
  - For AIX, Ja_JP IBM-939
  - For Linux on System z, ja_JP.euc JP

Note: If the NetView Web Application is installed on the same workstation as an existing Tivoli NetView for NT or Tivoli NetView for AIX or in the same logical partition (LPAR) as IP resource discovery and management on Linux on System z, port assignment changes are required as described in the NetView Web Application README.
Web browsers

For the English version of the NetView Web Application, one of the following operating system and browser combinations is required:

- Solaris 9, or later with Mozilla Firefox 3.0, or later with Java Plug-in level 1.4.2_07
- SUSE Linux Enterprise Server 9, SUSE Linux Enterprise Server 10, SUSE Linux Enterprise Server 11, SUSE Linux Enterprise Server 9 (AMD64/EM64T), SUSE Linux Enterprise Server 10 (AMD64/EM64T), and SUSE Linux Enterprise Server 11 (AMD64/EM64T) with Mozilla Firefox 3.0, or later with Java Plug-in level 1.4.2_07
- Red Hat Enterprise Linux 4 AS, Red Hat Enterprise Linux 4 ES, Red Hat Enterprise Linux 4 WS, Red Hat Enterprise Linux 4 (AMD64/EM64T), Red Hat Enterprise Linux 5, or Red Hat Enterprise Linux 5 (AMD64/EM64T) with Mozilla Firefox 3.0 or later with Java Plug-in level 1.4.2_07

Note: If justified for business and technical reasons, other Linux distributions may be supported at a later date. For the most current list of supported distributions, refer to the NetView Web Application README in the Downloads area under "Product Support" on the NetView Web site


Launching Tivoli Business System Manager from NMC or NMC from Tivoli System Manager

- IBM Tivoli Business System Manager V1.5 (5698-BSM), or later

Event/Automation Service to and from the Tivoli Enterprise Console

- Tivoli Enterprise Console V3.8 or V3.9

Using secure framework communication also requires:

- Tivoli Management Framework for OS/390 3.7.1, or later

z/OS TCP/IP Stack Management and Telnet 3270 Management

- Optional: In order to be able to dynamically add to the set of resources monitored and displayed at NMC, DB2 for OS/390 V5.1 (5655-DB2), or later is required.

Issuing z/OS UNIX Services Commands from NetView

- REXX alternate run-time (same as for MultiSystem Manager component)

Management of Frame Relay (DTE) and Ethernet

- ACF/NCP V6 (5688-231)

NetView Parallel Transmission Group Support

- ACF/NCP V5.4 MVS (5668-738)

NetView Network Asset Management

This provides NCP vital product data (VPD) and hardware device vital product information for those devices that support the Request Product Set ID (PSID) architecture:
• ACF/NCP V4.3.1 (5668-854) for the 3725
• ACF/NCP V5.4 MVS (5668-738), or later, for the 3720 or 3745

NetView Performance Monitor (NPM)

• NetView Performance Monitor V2.7 (5654-011), or later for session alerts

SAF security checking

z/OS (5694-A01) Security Server or an equivalent SAF product is required for SAF security checking of each of the following functions:

• RODM connections
• NetView operator passwords
• RMTCMD through the RMTOPS Class
• NetView command authorization
• NetView Span of Control access
• NetView operator logon information
• Graphical View security
• List RACF Profile for NetView operators

MultiSystem Manager component

Topology feature for Tivoli Management Region

• IBM Tivoli Monitoring V5.1.2
• A compatible level between each of the following:
  – Tivoli Enterprise Console V3.8 or V3.9
  – Tivoli Management Framework V3.7.1 or V4.1.1
• One of the following:
  – AIX V5.2 or AIX V5.3
  – Windows Server 2003 Standard with R2 SP2
  – Windows Server 2003 Enterprise with R2 SP2
  – Windows Server 2003 Data Center with R2 SP2
  – Solaris 9, or later
  – HP-UX 11iV2, or later
  – SUSE Linux Enterprise Server 9
  – SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)
  – SUSE Linux Enterprise Server 9 for System z

Commands from IBM Tivoli NetView for z/OS to TEC

• MSM topology feature for Tivoli Management Region

Topology feature for IBM Tivoli Network Manager: The MultiSystem Manager for IBM Tivoli Network Manager runs in many different environments. The requirements for each environment are included below.

AIX

When the MultiSystem Manager Tivoli Network Manager agent is installed on AIX, the following are required:

• AIX V5.3 with at least TL 5300-07, or later
• Tivoli Network Manager V3.8, or later
Windows

When the MultiSystem Manager Tivoli Network Manager agent is installed on Solaris, the following are required:

- Windows Server 2003 Standard with R2 SP2
- Windows Server 2003 Enterprise with R2 SP2
- Windows Server 2003 Data Center with R2 SP2
- Windows Server 2008
- Windows Server 2008 (AMD64/EM64T)
- Windows XP Professional with SP3
- Windows Vista Desktop
- Tivoli Network Manager V3.8, or later

Solaris

When the MultiSystem Manager Tivoli Network Manager agent is installed on Solaris, the agent requires hardware that supports the following:

- Solaris 9, or later
- Tivoli Network Manager V3.8, or later

Linux

When the MultiSystem Manager ITNM agent is installed on Linux, the following are required:

- SUSE Linux Enterprise Server 9 (Intel)
- SUSE Linux Enterprise Server 9 (AMD64/EM64T (32-bit application/64-bit kernel)
- SUSE Linux Enterprise Server 10 (Intel)
- SUSE Linux Enterprise Server 10 (AMD64/EM64T) (32-bit application/64-bit kernel)
- SUSE Linux Enterprise Server 11 (Intel)
- SUSE Linux Enterprise Server 11 (AMD64/EM64T) (32-bit application/64-bit kernel)
- Red Hat Enterprise Linux 4 AS (Intel)
- Red Hat Enterprise Linux 4 ES (Intel)
- Red Hat Enterprise Linux 4 (AMD64/EM64T) (32-bit application/64-bit kernel)
- Red Hat Enterprise Linux 5 (Intel)
- Red Hat Enterprise Linux 5 (AMD64/EM64T) (32-bit application/64 bit)
- Tivoli Network Manager V3.8, or later

Topology TCP/IP network feature: The MultiSystem Manager for TCP/IP agent for IBM Tivoli NetView for z/OS runs in many different environments. The requirements for each environment are included below.

AIX

When the MultiSystem Manager TCP/IP agent is installed on Tivoli NetView for AIX, the following are required:

- AIX V5.2 or AIX V5.3
- Tivoli NetView for AIX V7.1.5, or later

The agent can communicate with IBM Tivoli NetView for z/OS via SNA or TCP/IP. If you are using SNA to communicate between the MultiSystem Manager TCP/IP agent and IBM Tivoli NetView for z/OS, the following are also required:
- AIX NetView Service Point V1.3.3 (5621-107), or later (Note: If V1.2.2 is already installed, PTF U473211 provides an upgrade to V1.3.3.)
- IBM Communication Server for AIX V6.1 (5765-E51), or later

**HP-UX**

The MultiSystem Manager TCP/IP network feature for HP-UX uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and IBM Tivoli NetView for z/OS. The MultiSystem Manager IP agent for HP OpenView running on HP-UX requires:

- HP-UX V11iV2
- Hewlett Packard Network Node Manager (HP OpenView) V5.1, or later

**Windows**

The MultiSystem Manager TCP/IP network feature for Windows uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and IBM Tivoli NetView for z/OS. The MultiSystem Manager TCP/IP agent for Tivoli NetView for Windows requires:

- Windows Server 2003 Standard with R2 SP2
- Windows Server 2003 Enterprise with R2 SP2
- Windows Server 2003 Data Center with R2 SP2
- Windows XP Professional with SP3
- IBM Tivoli NetView for Windows V7.1.5, or later

**Solaris**

The MultiSystem Manager TCP/IP network feature for Solaris uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and Tivoli NetView for z/OS. The agent can be installed on Tivoli NetView for Solaris or Hewlett Packard Network Node Manager.

- The MultiSystem Manager TCP/IP feature for Tivoli NetView for Solaris requires:
  - Solaris 9 or 10
  - Tivoli NetView for Solaris V7.1.5, or later
- The MultiSystem Manager TCP/IP agent for OpenView for Solaris requires:
  - Solaris 9 or 10
  - HP OpenView V5.1, or later

**Linux**

The MultiSystem Manager TCP/IP network feature for Linux uses TCP/IP to communicate between the MultiSystem Manager TCP/IP agent and Tivoli NetView for z/OS. The MultiSystem Manager TCP/IP agent for Tivoli NetView for Linux requires hardware that supports the following:

- Requires NetView Integrated TCP/IP Services Component (ITSC) V7.1.5, with one of the following:
  - SUSE Linux Enterprise Server 9 (Intel)
  - SUSE Linux Enterprise Server 9 (AMD64/EM64T) (32-bit application/64-bit kernel)
  - SUSE Linux Enterprise Server 9 for S/390 and System z
  - SUSE Linux Enterprise Server 10 for System z
  - Red Hat Enterprise Linux 4 AS (Intel)
  - Red Hat Enterprise Linux 4 ES (Intel)
  - Red Hat Enterprise Linux 4 (AMD64/EM64T) (32-bit application/64 bit)
Web Services Gateway

- XML Toolkit for z/OS V1.9, or later
- z/OS V1.9 Cryptographic Services System SSL, or later

Automated Operations network component

TCP/IP for AIX Automation

TCP/IP for AIX Automation uses SNA communication between Tivoli NetView for AIX and IBM Tivoli NetView for z/OS, and requires:

- AIX V5.2, or later
- Tivoli NetView for AIX V7.1.5, or later
- AIX NetView Service Point V1.3.3 (5621-107), or later
  - If V1.2.2 is already installed, PTF U473211 provides an upgrade to V1.3.
- IBM Communication Server for AIX V6.1 (5765-E51), or later

User group requirements

- MR0102085046: Provide a way in NetView to automate all doms
- MR0105063042: Expand AON panel FKXK2221 function
- MR011609149: Allow MVS command management exit to remain active even when the MPF table is reloaded
- MR0222083215: Allow NetView to track SMF type 30 records
- MR0317085210: Obtaining the Job Type for JES3 Jobs from NetView Automation Table or Message Revision Table
- MR032807341: PIPE WAIT stage additional early termination capability
- MR0517054618: User Friendly IP Packet Trace
- MR0709074624: NetView 5.2 define RMTCMD over TCP/IP
- MR1024083652: z/OS Console requirement to provide a formal MGCRE mechanism
- MR112107388: Netview &JOBNUM variable
- MR1124061812: Netview TCPCONN: indicate whether a connection was terminated normally, as opposed to timed out or was cancelled
- MR120805441: Would like a new PIPE stage for a global PIPE KEEP
- MR1101063131: NetView ConsMask
- MR0215082439: NetView V5R3 "DIS" command enhancement (CNME1023)

Planning information

Packaging

IBM Tivoli NetView for z/OS, V5.4 is distributed with:

- International Program License Agreement (Z125-3301)
- Media
- Publications (refer to the Publications section)

Security, auditability, and control

IBM Tivoli NetView for z/OS V5.4 uses the security and auditability features of the host hardware or operating system software. The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.
Ordering information

**New licensees**

Orders for new licenses can be placed now.

Registered customers can access IBMLink\textsuperscript{TM} for ordering information and charges.

Shipment will not occur before the availability date.

Unless a later date is specified, orders entered before the planned availability date will be assigned a schedule date of one week following availability.

- Orders entered after the planned availability date will be assigned a schedule date for the week following order entry.
- Orders entered with a scheduled date before the planned availability date will be shipped with IBM Tivoli NetView for z/OS 5.3.
- Orders entered with a scheduled ship date after planned availability will be shipped IBM Tivoli NetView for z/OS 5.4. Unless a later date is specified, an order is scheduled for the week following order entry.

To ensure customers receive technical support to which they are entitled for Tivoli NetView for distributed systems, a no-charge support order for non z/OS deliverables is required from Passport Advantage®. Order the following Passport Advantage part number:

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>E02BLLL</td>
<td>IBM Tivoli Netview - Support Only ANNUAL SW MAINT RNWL</td>
</tr>
</tbody>
</table>

New users of IBM Tivoli NetView for z/OS should specify:

Type: 5697 Model: ENV

**Parallel sysplex license charge (PSLC) basic license**

To order a basic license, specify the program number and quantity of MSU.

If there is more than one program copy in a Parallel Sysplex, the charge for all copies is associated to one license by specifying the applicable PSLC license options and quantity represented by the sum of the Service Units in Millions (MSUs) in your Parallel Sysplex. For all other program copies, specify the System Usage Registration No-Charge (SYSUSGREG NC) Identifier on the licenses.

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/ pricing metric</th>
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</thead>
<tbody>
<tr>
<td>S00WM20</td>
<td>Tivoli Netview for z/OS V5.4</td>
<td>Basic MLC, PSLC below 3 MSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic MLC, PSLC AD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SYSUSGREG NC, PSLC AD</td>
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<tr>
<td>S00WLL0</td>
<td>License Certificate</td>
<td></td>
</tr>
<tr>
<td>S0148PZ</td>
<td>Tivoli Enterprise Monitoring Agent V5.4</td>
<td>Basic MLC, PSLC below 3 MSU</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic MLC, PSLC AD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SYSUSGREG NC, PSLC AD</td>
</tr>
<tr>
<td>S00WLL0</td>
<td>License Certificate</td>
<td></td>
</tr>
</tbody>
</table>

**Workload License Charge (VWLC) basic license**

If there is more than one program copy in a Parallel Sysplex, the charge for all copies is associated to one license by specifying the applicable WLC license options and quantity represented by the sum of the MSUs in your Parallel Sysplex. For all other program copies, specify the Workload Registration Variable WLC Identifier on the licenses.

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
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<th>License option/ pricing metric</th>
</tr>
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<tbody>
<tr>
<td>S00WM20</td>
<td>Tivoli Netview for z/OS V5.4</td>
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<td></td>
<td>Basic MLC, PSLC AD</td>
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<td>SYSUSGREG NC, PSLC AD</td>
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<td>S00WLL0</td>
<td>License Certificate</td>
<td></td>
</tr>
<tr>
<td>S0148PZ</td>
<td>Tivoli Enterprise Monitoring Agent V5.4</td>
<td>Basic MLC, PSLC below 3 MSU</td>
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<tr>
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<td></td>
<td>Basic MLC, PSLC AD</td>
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<tr>
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<td>SYSUSGREG NC, PSLC AD</td>
</tr>
<tr>
<td>S00WLL0</td>
<td>License Certificate</td>
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</tbody>
</table>
Entry Workload License Charge (EWLC) basic license

To order a basic license, specify the program number and the quantity of MSUs.

<table>
<thead>
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<th>Description</th>
<th>License option/ pricing metric</th>
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</thead>
<tbody>
<tr>
<td>S00WM20</td>
<td>IBM Tivoli NetView for z/OS V5.4</td>
<td>Basic MLC, Variable WLC Workload Registration, Variable WLC</td>
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<td>S00WLL0</td>
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<td>License Certificate</td>
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<tr>
<td>S0148PZ</td>
<td>Tivoli Enterprise Monitoring Agent V5.4</td>
<td>Basic MLC, Variable WLC Workload Registration, Variable WLC</td>
</tr>
<tr>
<td>S00WLL0</td>
<td></td>
<td>License Certificate</td>
</tr>
</tbody>
</table>

Growth opportunity license charge (GOLC)

To order GOLC software, specify the program number, and the GOLC monthly charge feature from the table below. Also, specify the desired distribution medium.

Specify the GOLC monthly license option.

<table>
<thead>
<tr>
<th>Entitlement identifier</th>
<th>Description</th>
<th>License option/ pricing metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>S00WM20</td>
<td>IBM Tivoli NetView for z/OS V5.4</td>
<td>Basic MLC, Entry WLC</td>
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<td>S00WLL0</td>
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<tr>
<td>S0148PZ</td>
<td>Tivoli Enterprise Monitoring Agent V5.4</td>
<td>Basic MLC, Entry WLC</td>
</tr>
<tr>
<td>S00WLL0</td>
<td></td>
<td>License Certificate</td>
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</tbody>
</table>

System z Entry License Charge:

To order a basic license, specify the program number and z800 model.

Specify the System z monthly license option.

<table>
<thead>
<tr>
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</thead>
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<td>S00WM20</td>
<td>IBM Tivoli NetView for z/OS V5.4</td>
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<td>License Certificate</td>
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<tr>
<td>S0148PZ</td>
<td>Tivoli Enterprise Monitoring Agent V5.4</td>
<td>Basic MLC, zELC</td>
</tr>
<tr>
<td>S00WLL0</td>
<td></td>
<td>License Certificate</td>
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</table>

Basic machine-readable material

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<tr>
<th>Orderable supply ID:</th>
<th>Language</th>
<th>Distribution medium</th>
<th>Description</th>
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<tbody>
<tr>
<td>S00WLLX</td>
<td>US English</td>
<td>3480 Tape Cartridge</td>
<td>Tivoli NetView for z/OS - English</td>
</tr>
<tr>
<td>S00WP42</td>
<td>Japanese</td>
<td>3480 Tape Cartridge</td>
<td>Tivoli NetView for z/OS - Japanese</td>
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<tr>
<td>S01496J</td>
<td>US English</td>
<td>3480 Tape Cartridge</td>
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Publications

The following U.S. English publications are supplied automatically with the basic machine-readable material:

<table>
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<th>Publication</th>
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<tbody>
<tr>
<td>IBM Tivoli NetView for z/OS English Program Directory</td>
<td>GI10-3194</td>
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<tr>
<td>IBM REXX/370 Alternate Library Program Directory</td>
<td>GI10-3243</td>
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<tr>
<td>IBM Tivoli NetView for z/OS V5.4 Online Library DVD</td>
<td>SK2T-6175</td>
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<td>IBM Tivoli Netview for z/OS DVD (English)</td>
<td>LCD4-4916</td>
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<tr>
<td>IBM Tivoli Netview for z/OS Licensed Programming Specifications</td>
<td>GC31-8848</td>
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<tr>
<td>IBM Tivoli Netview for z/OS Installation: Migration Guide</td>
<td>SC31-8873</td>
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<tr>
<td>IBM Tivoli Netview for z/OS Installation: Getting Started</td>
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When the IBM Tivoli NetView for z/OS Enterprise Management Agent is ordered, the following U.S. English publications are supplied automatically with the basic machine-readable material:

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<th>Publication</th>
<th>Form number</th>
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<tr>
<td>IBM Tivoli NetView for z/OS Enterprise Management Agent Program Directory</td>
<td>GI11-9425</td>
</tr>
<tr>
<td>IBM Tivoli Netview for z/OS Installation: Configuring the Tivoli NetView for z/OS Enterprise Management Agent Application Support DVD (Seeding)</td>
<td>LCD7-1390</td>
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<tr>
<td>IBM Tivoli Netview for z/OS Enterprise Management Agent Quickstart Memo</td>
<td>GI11-8109</td>
</tr>
</tbody>
</table>

The following softcopy publications are shipped on the soft copy DVD, LK2T-6175 Tivoli NetView for z/OS V5R4 Online Library DVD.

<table>
<thead>
<tr>
<th>Publication</th>
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<tbody>
<tr>
<td>Automation Guide</td>
<td>SC31-8853</td>
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<tr>
<td>Administration Reference</td>
<td>SC31-8854</td>
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<tr>
<td>Application Programming Guide</td>
<td>SC31-8855</td>
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<tr>
<td>Command Reference Vol I</td>
<td>SC31-8857</td>
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<td>Command Reference Vol II</td>
<td>SC31-8858</td>
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<tr>
<td>Customization Guide</td>
<td>SC31-8859</td>
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<tr>
<td>IP Management</td>
<td>SC31-8860</td>
</tr>
<tr>
<td>Programming: Assembler</td>
<td>SC31-8861</td>
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<tr>
<td>Programming: Pipes</td>
<td>SC31-8863</td>
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<tr>
<td>Programming: PL/I and C</td>
<td>SC31-8864</td>
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<tr>
<td>Programming: REXX and the NetView Command List Language Data Model Reference</td>
<td>SC31-8862</td>
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<tr>
<td>Troubleshooting Guide</td>
<td>SC31-8870</td>
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<tr>
<td>Installation: Configuring Additional Components</td>
<td>SC31-8874</td>
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<tr>
<td>Installation: Configuring Graphical Components</td>
<td>SC31-8875</td>
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<tr>
<td>Messages and Codes Volume 1 (AAU-DSI)</td>
<td>SC31-8865</td>
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<td>Messages and Codes Volume 2 (DUI-IHS)</td>
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<tr>
<td>RODM and GMFHS Program Guide</td>
<td>SC31-8868</td>
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<td>User's Guide: Network Management Console</td>
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<td>Security Reference</td>
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<tr>
<td>SNA Topology Manager Implementation Guide</td>
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<tr>
<td>Installation: Configuring the Tivoli Netview for z/OS Enterprise Management Agent</td>
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</tr>
</tbody>
</table>

Subsequent updates (technical newsletters or revisions between releases) to the publications shipped with the product will be distributed to the user of record for as long as a license for this software remains in effect. A separate publication order or subscription is not needed.

Customized offerings

Product deliverables are shipped only via Customized Offerings (for example, CBPDO, ServerPac, SystemPac®).
CBPDO and ServerPac are offered for Internet delivery, where ShopzSeries product ordering is available. Internet delivery of ServerPac may help improve automation and software delivery time. For more details on Internet delivery, refer to the ShopzSeries help information at

http://www.software.ibm.com/ShopzSeries

Media type for this software product is chosen during the customized offerings ordering process. Based on your customer environment, it is recommended that the highest possible density tape media is selected. Currently offered media types are:

- CBPDOs - 3480, 3480 Compressed, 3490E, 3590, 3592*
- ServerPacs - 3480, 3480 Compressed, 3490E, 3590, 3592*
- SystemPacs - 3480, 3480 Compressed, 3490E, 3590, 3592*

*3592 is highest density media. Selecting 3592 will ship the fewest number of media.

Once a product becomes generally available, it will be included in the next ServerPac and SystemPac monthly update.

Production of software product orders will begin on the planned general availability date.

- CBPDO shipments will begin one week after general availability.
- ServerPac shipments will begin two weeks after inclusion in ServerPac.
- SystemPac shipments will begin four weeks after inclusion in SystemPac due to additional customization, and data input verification.

Global Technology Services

Contact your IBM representative for the list of selected services available in your country, either as standard or customized offerings for the efficient installation, implementation, and integration of this product.

Terms and conditions

The terms for IBM Tivoli NetView for z/OS, as previously announced in Software Announcement ZP07-0310, dated July 24, 2007, licensed under the IBM Customer Agreement, are unaffected by this announcement.

IBM Electronic Services

IBM has transformed its delivery of hardware and software support services to help you achieve higher system availability. Electronic Services is a Web-enabled solution that offers an exclusive, no-additional-charge enhancement to the service and support available for IBM servers. These services are designed to provide the opportunity for greater system availability with faster problem resolution and preemptive monitoring. Electronic Services comprises two separate, but complementary, elements: Electronic Services news page and Electronic Services Agent.

The Electronic Services news page is a single Internet entry point that replaces the multiple entry points traditionally used to access IBM Internet services and support. The news page enables you to gain easier access to IBM resources for assistance in resolving technical problems.

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reports hardware problems to IBM. Early knowledge about potential problems enables IBM to deliver proactive service that may result in higher system availability and performance. In addition, information collected through the Service Agent is made available to IBM service support representatives when they help answer your questions or diagnose problems. Installation and use of IBM Electronic Service Agent for problem reporting enables IBM to provide better support and service for your IBM server.

To learn how Electronic Services can work for you, visit

http://www.ibm.com/support/electronic

Prices

For additional information and current prices, contact your local IBM representative.

Prices for IBM Tivoli NetView for z/OS V5.4 remain the same and are unaffected by this announcement.

For additional information, refer to Software Announcement ZP07-0310, dated July 24, 2007.

Sub-capacity charges for VWLC products

Sub-capacity charges for VWLC products are based on product LPAR utilization capacity. Product LPAR utilization capacity for a VWLC product is the highest number of MSUs utilized by the combined LPARs in which a VWLC product runs concurrently during a reporting period. The number of MSUs is based on the highest observed rolling four-hour average utilization used by the combination of the relevant LPARs during the reporting period. Refer to Software Announcement ZA00-0318, dated October 03, 2000, Software Announcement ZA01-0280, dated September 11, 2001, and Software Announcement ZA02-0189, dated April 30, 2002, for additional details on IBM Workload License Charges.

Sub-capacity charges terms and conditions

System z software charges at less than full machine capacity for eligible VWLC products apply when z/OS is running in z/Architecture® (64-bit) mode on an IBM System z 900, no other MVS-based operating system is licensed to that server, and the required information is provided by the customer in accordance with the applicable terms.

Sub-capacity charges for a VWLC product is based on the utilization of the LPARs where/when the product executes. To obtain charges at less than full machine capacity for VWLC products, the customer is required to:

- Sign and abide by the terms of the Attachment for IBM System z Workload License Charges - (Z125-6516).
- Obtain the latest version of the Sub-Capacity Reporting Tool.
- Install any VWLC product and IBM e(logo)server System z 900 Licensed Internal Code (LIC) service required for sub-capacity charging. Required service will be listed on the WLC Web site

   http://www.ibm.com/zseries/swprice
- Collect SMF data as required by the Sub-Capacity Reporting Tool. Retain the collected SMF data for a period of not less than six months.
- Use the IBM provided Sub-Capacity Reporting Tool to process the collected SMF data. The Sub-Capacity Report produced by the tool is used to determine required license capacity for the VWLC products. Required license capacity is determined based on the largest MSU value of a VWLC product running concurrently in all LPARs during the reporting period. IBM reserves the right to request the system data that supports these product-defined capacity values for a period of up to six months after the data was collected.
• Provide an initial Sub-Capacity Report to begin to receive the benefits of less than full machine capacity charges. Sub-capacity charging will follow submission of a Sub-Capacity Report. There will be no retroactive application of sub-capacity charges.
• Submit Sub-Capacity Reports monthly.
• Submit Sub-Capacity Reports for all VWLC products with complete data for the entire reporting period to the e-mail address and by the date specified on the System z Software Pricing Web site
  
  http://www.ibm.com/zseries/swprice

  and in the current IBM System z Workload License Charges Exhibit (Z125-6324). Sub-Capacity Reports that reflect a changed product defined capacity will be considered to be orders placed by the customer without further action on the customer's part, and IBM is authorized to make any resulting billing increase or decrease. To place an order for a new license or to discontinue licenses, move licenses between machines, report a hardware model upgrade, or enable or disable product features, the customer must contact IBM or their IBM Business Partner.
• Configure the machine to send weekly Transmit System Availability Data (TSAD) to IBM via the IBM System z 900 Remote Support Facility (RSF). If the machine cannot connect via the RSF, provide this TSAD via an alternate means documented in the z/OS publication "Planning for Workload License Charges" at

  http://www.ibm.com/zseries/swprice

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