IBM Z NetView 6.4 provides a modernized user experience through integration of technologies and accelerating user productivity along with network management enhancements and increased security capabilities

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At a glance

IBM Z[(R)] NetView 6.4:

- Provides plug-ins for Zowe[TM] CLI, a command-line interface that administrators and operators can use to interact with IBM Z NetView from a platform other than IBM[(R)] z/OS[(R)]
- Provides the ability to display messages queued on NetView tasks to enable users to make informed decisions before acting on the task
- Provides support for longer z/OS symbol names and values, which gives clients added flexibility
- Improves network management, including z/OS Encryption Readiness Technology (zERT) Policy Enforcement, removal of the SNMP requirement for packet trace and Discovery Manager display of interfaces, SNMPV3 support for NVSNMP, and conversion of AON Dynamic Display Facility (DDF) communication to RMTCMD
- Provides users the ability to increase their security with the use of encrypted NetView data sets using DFSMS and ICSF, as well as being able to hide any sensitive user information issued as part of NetView commands

Overview

IBM Z NetView 6.4 provides automation, and network and systems management to address your requirements for business agility on IBM Z. Key capabilities and advanced functions include networking and automation, enhanced enterprise integration, and client time-to-value. System and network automation is provided by IBM Z NetView and addresses the continued drive for increased IT workload and automation. Because network requirements are ever-increasing, largely because of mobile phones, the need for a robust network management solution becomes increasingly important.

IBM Z NetView 6.4 continues to provide a modernized user experience through the integration of technologies that may aid in productivity. This is accomplished by introducing three new IBM Z NetView plug-ins for Zowe CLI:

- Base plug-in enables clients to access core NetView information and issue most NetView commands. The specific categories of data are:

- Canzlog messages
- Task utilization information
- List of NetView domains to which commands can be sent
- Authentication to NetView through the NetView REST Server

  Note: You must download this plug-in if you want to use the network and automation plug-ins.

- Automation plug-in enables you to manage automation table members or statements:
  - Activate an automation table member.
  - Download an automation table member.
  - List active automation tables.
  - Run a simulated test of an automation table statement.
  - Upload an automation table statement.
  - Validate an automation table member.
- Network plug-in enables you to monitor your network:
  - Display distributed DVIPA (DDVIPA) health information.
  - Display distributed DVIPA (DDVIPA) statistics.

IBM Z NetView 6.4 provides the following additional enhancements:

- Display of messages queued on attended and automated operator tasks. This enables the user to see what is queued up on a task behind a process that is not completing, thus allowing the user to make an informed decision on whether to recycle, stop, or reset the task.
- Support for z/OS symbol names of up to 16 characters with a maximum substitution text of up to 44 characters (including spaces), as defined by z/OS. The following areas have been enhanced for this support:
  - Some configuration samples, such as CxxSTGEN, CNMSTUSR, and CNMPOLCY
  - PIPE SUBSYM stage
- Network management enhancements:
  - IBM z/OS V2.5 Communications Server enhanced the z/OS Encryption Readiness Technology (zERT) function to provide enforcement of network encryption standards. The zERT policy-based enforcement (zERT enforcement) solution allows policy-based rules that describe different levels of cryptographic protection along with optional actions to take when TCP connections match those rules. zERT enforcement actions enable immediate notification through messages, auditing through SMF records, and automatic connection termination when questionable or unacceptable cryptographic protection is detected. IBM Z NetView catches the syslogd and SMF record notifications and generates a message upon which users can automate an action.
  - The SNMP requirement is removed for:
    -- Displaying of interfaces using Discovery Manager
    -- Packet trace

    This enhancement provides time to value because SNMP no longer needs to be configured for this function.

  - The NVSNMP command support for SNMPv3 allows additional security parameters to be issued. SNMPv3 requires a username, and authentication and encryption can optionally be specified.
- Security
  - The use of encrypted data sets, as supported by DFSMS and IBM z/OS Integrated Cryptographic Service Facility (ICSF). IBM Z NetView supports encrypted:

- -- Partitioned data sets extended (PDSEs), such as DSIPARM and Canzlog archive data sets
- -- VSAM data sets, such as DSILOGP/DSILOGS
  - Ability to prevent the echoing, logging, and tracing of sensitive information about a command. See the CNMSELTE DSIPARM member.
- NetView Enterprise Management Agent
  - Support is provided for Extended Access Volume usage for history performance information. The IBM Z NetView Enterprise Management Agent now includes the use of the OMEGAMON$^{(R)}$ persistent data store (PDS V2) large file setup for history information. This increases the amount of information that can be stored and retrieved from history to populate product workspaces.

The following functions are no longer available in IBM Z NetView 6.4:

- NetView Web Services Gateway (SOAP Server)
- SNA Topology Manager
- The NetView task DSIWBTSK that provided support for the NetView Web Application Server
- Correlation Engine
- MultiSystem Manager support
- SECOPTS.AUTHCHK.TARGETID command authorization security option

Key requirements

For additional details about IBM Z NetView 6.4, see the Technical information section.

Planned availability date

June 17, 2022

Availability within a country is subject to local legal requirements.

Section 508 of the US Rehabilitation Act

The product or offering is capable as of the planned availability date, when used in accordance with associated IBM documentation, of satisfying the applicable standards, including the Worldwide Consortium Web Content Accessibility Guidelines, European Standard EN 301 349, and US Section 508, provided that any assistive technology used with the product properly interoperates with it. An Accessibility Conformance Statement can be requested on the IBM Accessibility Conformance Report website.

Product positioning

IBM Z NetView 6.4 provides a robust set of tools for maintaining complex multivendor and multiplatform networks and systems from a single point of control.

IBM Z NetView supports and participates in Integrated Service Management and demonstrates the importance of network and systems management in providing visibility, control, and automation across both business and IT. By fully participating and working with the IBM Tivoli$^{(R)}$ Application Dependency Discovery Manager product, IBM Z NetView can preserve your investments in NetView and exploit its new functionality to better manage your IT resources and the technical and business processes that govern how an enterprise functions.

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

IBM Z NetView is a core integration point for IBM Integrated System Management. Examples of products that work with IBM Z NetView 6.4 include the following:

- IBM Z System Automation (5698-SA4)
- IBM OMEGAMON monitoring tools
- IBM Z Workload Scheduler (5698-T08)
- IBM Tivoli Business Service Manager (5724-C51)
- IBM Tivoli Application Dependency Discovery Manager (5724-N55)

Statement of direction

Notice of planned withdrawal

IBM Z NetView 6.4 will be the last release that supports the following functions:
- NetView Management Console (NMC)
- NetView Discovery Library Adapter (DLA)
- NetView-NetView (NNT) task support

Statements by IBM regarding its plans, directions, and intent are subject to change or withdrawal without notice at the sole discretion of IBM. Information regarding potential future products is intended to outline general product direction and should not be relied on in making a purchasing decision. The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for IBM products remain at the sole discretion of IBM.

Availability of national languages

Language	Availability date
English US	June 17, 2022

Translation information, if available, can be found at the Translation Reports website.

Program number

Program number	VRM	Program name
5697-NV6	6.4.0	IBM Z NetView

Services

IBM Systems Lab Services

Systems Lab Services offers infrastructure services to help build hybrid cloud and enterprise IT solutions. From servers to storage systems and software, Systems Lab Services can help deploy the building blocks of a next-generation IT infrastructure to empower a client's business. Systems Lab Services consultants can perform infrastructure services for clients online or onsite, offering deep technical expertise, valuable tools, and successful methodologies. Systems Lab Services is designed to help clients solve business challenges, gain new skills, and apply best practices.

Systems Lab Services offers a wide range of infrastructure services for IBM Power[R] servers, IBM Storage systems, IBM Z, and IBM LinuxONE. Systems Lab Services has a global presence and can deploy experienced consultants online or onsite around the world.

For assistance, contact Systems Lab Services at ibmsls@us.ibm.com.

To learn more, see the IBM Systems Lab Services website.

IBM Consulting[TM]

As transformation continues across every industry, businesses need a single partner to map their enterprise-wide business strategy and technology infrastructure. IBM Consulting is the business partner to help accelerate change across an organization. IBM specialists can help businesses succeed through finding collaborative ways of working that forge connections across people, technologies, and partner ecosystems. IBM Consulting brings together the business expertise and an ecosystem of technologies that help solve some of the biggest problems faced by organizations. With methods that get results faster, an integrated approach that is grounded in an open and flexible hybrid cloud architecture, and incorporating technology from IBM Research[R] and IBM Watson[R] AI, IBM Consulting enables businesses to lead change with confidence and deliver continuous improvement across a business and its bottom line.

For additional information, see the IBM Consulting website.

IBM Technology Support Services (TSS)

Get preventive maintenance, onsite and remote support, and gain actionable insights into critical business applications and IT systems. Speed developer innovation with support for over 240 open-source packages. Leverage powerful IBM analytics and AI-enabled tools to enable client teams to manage IT problems before they become emergencies.

TSS offers extensive IT maintenance and support services that cover more than one niche of a client's environment. TSS covers products from IBM and OEMs, including servers, storage, network, appliances, and software, to help clients ensure high availability across their data center and hybrid cloud environment.

For details on available services, see the Technology support for hybrid cloud environments website.

IBM Expert Labs

Expert Labs can help clients accelerate their projects and optimize value by leveraging their deep technical skills and knowledge. With more than 20 years of industry experience, these specialists know how to overcome the biggest challenges to deliver business results that can have an immediate impact.

Expert Labs' deep alignment with IBM product development allows for a strategic advantage as they are often the first in line to get access to new products, features, and early visibility into roadmaps. This connection with the development enables them to deliver First of a Kind implementations to address unique needs or expand a client's business with a flexible approach that works best for their organization.

For additional information, see the IBM Expert Labs website.

IBM Security[R] Expert Labs

With extensive consultative expertise on IBM Security software solutions, Security Expert Labs helps clients and partners modernize the security of their applications, data, and workforce. With an extensive portfolio of consulting and learning services, Expert Labs provides project-based and premier support service subscriptions.

These services can help clients deploy and integrate IBM Security software, extend their team resources, and help guide and accelerate successful hybrid cloud

solutions, including critical strategies such as zero trust. Remote and on-premises software deployment assistance is available for IBM Cloud Pak(R) for Security, IBM Security QRadar(R)/QRoC, IBM Security SOAR/Resilient(R), IBM i2(R), IBM Security Verify, IBM Security Guardium(R), and IBM Security MaaS360(R).

For more information, contact Security Expert Labs at sel@us.ibm.com.

For additional information, see the IBM Security Expert Labs website.

IBM Support

IBM Support is your gateway to technical support tools and resources that are designed to help you save time and simplify support. IBM Support can help you find answers to questions, download fixes, troubleshoot, submit and track problem cases, and build skills. Learn and stay informed about the transformation of IBM Support, including new tools, new processes, and new capabilities, by going to the IBM Support Insider.

Additional IBM support

IBM Client Engineering for Systems

Client Engineering for Systems is a framework for accelerating digital transformation. It helps you generate innovative ideas and equips you with the practices, technologies, and expertise to turn those ideas into business value in weeks. When you work with Client Engineering for Systems, you bring pain points into focus. You empower your team to take manageable risks, adopt leading technologies, speed up solution development, and measure the value of everything you do. Client Engineering for Systems has experts and services to address a broad array of use cases, including capabilities for business transformation, hybrid cloud, analytics and AI, infrastructure systems, security, and more. Contact Client Engineering at sysgarage@ibm.com.

Technical information

Specified operating environment

Hardware requirements
IBM Z NetView 6.4

Z NetView 6.4 runs in a virtual storage environment on any IBM system configuration with sufficient storage that supports IBM z/OS V2.3, or later.

IBM Z NetView Enterprise Management Agent

Any hardware that supports one of the following operating systems:

• z/OS V2.3, or later

NetView Management Console

Topology server

Any hardware that supports one of the following operating systems:

• IBM AIX(R) 7.1 (IBM Power Systems), or later
• Red Hat(R) Enterprise Linux(R) 6 (IBM Z)
• Red Hat Enterprise Linux 7 (IBM Z)
• Red Hat Enterprise Linux 8 (IBM Z)

- SUSE Linux Enterprise Server 12 (IBM Z)
- SUSE Linux Enterprise Server 15 (IBM Z)
- Microsoft™ Windows™ Server 2012 R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

Installation footprint: 100 MB of additional fixed disk space.

Topology console

Any hardware that supports one of the following operating systems with TCP/IP installed:

- Red Hat Enterprise Linux Desktop 6 (x86-32, x86-64)
- Red Hat Enterprise Linux Desktop 7 (x86-32, x86-64)
- Red Hat Enterprise Linux Desktop 8 (x86-32, x86-64)
- Red Hat Enterprise Linux Server 6 (x86-64)
- Red Hat Enterprise Linux Server 7 (x86-64)
- Red Hat Enterprise Linux Server 8 (x86-64)
- SUSE Linux Enterprise Desktop 15 (x86-64)
- SUSE Linux Enterprise Server 15 (x86-64)
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022
- Microsoft Windows 10
- Microsoft Windows 11

Installation footprint: 300 MB of additional fixed disk space.

Software requirements

IBM Z NetView 6.4

This section defines the minimum programming requirements for IBM Z NetView 6.4 and its operating environments. Specific functions of IBM Z NetView might require products, higher levels, or later versions of the products listed.

IBM Z NetView runs as an application on the z/OS operating system. IBM Z NetView support is provided at the listed levels or subsequent levels that are compatible with later versions, unless otherwise stated. Compatibility with later versions means that functions that are provided by the earlier releases are still supported.

Programming requirements for all functions include:

- IBM z/OS V2.3, or later
- NetView-to-NetView communication: In a multiple-domain network or across multiple SNA networks, the IBM Z NetView program can communicate with another Tivoli NetView program, regardless of the operating system. IBM Z NetView 6.4.0 can communicate with the following at the listed system's level of capabilities:
  - IBM Tivoli NetView for OS/390$^{(R)}$, 1.4
  - IBM Tivoli NetView for z/OS, 6.2
  - IBM Tivoli NetView for z/OS, 6.2.1
  - IBM Z NetView, 6.3.0

Function compatibility

Except for previously withdrawn functions, the functions of the following versions and releases are compatible with IBM Z NetView 6.4:

- IBM Tivoli NetView for OS/390, 1.4
- IBM Tivoli NetView for z/OS, 6.2
- IBM Tivoli NetView for z/OS, 6.2.1
- IBM Z NetView, 6.3.0

System definition compatibility

To facilitate migration from a previous release, IBM Z NetView host code runs with the NetView Management Console (NMC) Topology Server and Console from the following earlier releases:

- IBM Tivoli NetView for z/OS, 6.2
- IBM Tivoli NetView for z/OS, 6.2.1
- IBM Z NetView, 6.3.0

Note: See the IBM Z NetView 6.4 *Installation: Migration Guide* for details.

For equivalent, non-system-dependent functions, IBM Z NetView operates with the REXX procedures of Tivoli NetView for OS/390, 1.4.

User applications, written for these NetView releases in accordance with NetView customization publications and using NetView customization services, are source compatible. A reassembly or recompile by using IBM Z NetView macro libraries is required.

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

Enhanced function support

The following IBM Z NetView functions and features require the specified program levels or subsequent upward-compatible levels unless stated otherwise:

- z/OS Encryption Readiness Technology (zERT): z/OS V2.3, or later
  - zERT policy-based enforcement (zERT enforcement): z/OS V2.5, or later
- IBM Z NetView Enterprise Management Agent:
  - IBM Tivoli Monitoring 6.3.0 Fix Pack 7, or later, which bundles IBM Db2(R) 11.5.7 Standard Edition Server. For information about software requirements for IBM Tivoli Monitoring 6.3.0, see the *IBM Tivoli Monitoring: Installation and Setup Guide* (SC22-5445).
  - Optional: IBM OMEGAMON for Networks on z/OS, 5.5.0, IBM Z OMEGAMON for CICS(R), 5.6.0, IBM OMEGAMON on z/OS, 5.5.0, IBM OMEGAMON for IMS on z/OS, 5.5.0, IBM Z OMEGAMON for JVM, 5.5.0, IBM OMEGAMON for Db2 Performance Expert on z/OS, 5.5.0, and IBM OMEGAMON for Messaging on z/OS, 7.5.0.
  - Or, IBM Z OMEGAMON Monitor for z/OS, 5.6 and IBM Z OMEGAMON Network Monitor 5.6, included only in IBM Z Service Management Suite V2.x and IBM Z Monitoring Suite V1.x.
- Mixed-case passwords: z/OS 1.12 Security Server (RACF(R)), or later.
- IBM Z NetView REST Server component: z/OS V2.3, or later, with Java(TM) 8, or later.
- Optional: IBM Zowe Distribution V1
  - IBM Zowe Distribution is a supporting program for Zowe use cases related to NetView extensions

NetView Management Console

Topology server

One of the following is required.

- AIX 7.1 (Power Systems), or later, with one of the following:
  – XL C/C++ Runtime for AIX applications:
    -- xlC.rte 8.0.0.0, or later
  – XL C/C++ Runtime for AIX V7.1 applications:
    -- xlC.aix50.rte 8.0.0.0, or later

Note: xlC.rte and xlC.aix50.rte are included on the IBM Z NetView 6.4 product DVD.

- Red Hat Enterprise Linux 6 (IBM Z)
- Red Hat Enterprise Linux 7 (IBM Z)
- Red Hat Enterprise Linux 8 (IBM Z)
- SUSE Linux Enterprise Server 12 (IBM Z)
- SUSE Linux Enterprise Server 15 (IBM Z)
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

Topology console

One of the following is required:

- Red Hat Enterprise Linux Desktop 6 (x86-32, x86-64)
- Red Hat Enterprise Linux Desktop 7 (x86-32, x86-64)
- Red Hat Enterprise Linux Desktop 8 (x86-32, x86-64)
- Red Hat Enterprise Linux Server 6 (x86-64)
- Red Hat Enterprise Linux Server 7 (x86-64)
- Red Hat Enterprise Linux Server 8 (x86-64)
- SUSE Linux Enterprise Desktop 15 (x86-64)
- SUSE Linux Enterprise Server 15 (x86-64)
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022
- Microsoft Windows 10
- Microsoft Windows 11

Server communications with IBM Z NetView using LU 6.2

For LU 6.2 connections, one of the following is required:

- IBM Communications Server for AIX 6.4 (5765-E51)
- IBM Communications Server for Windows 6.4 (5639-F25), or later

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

- Mozilla Firefox 60 (ESR), or later

Event/Automation Service to Tivoli Netcool[R]/OMNIbus

- EIF Probe with Tivoli Netcool/OMNIbus 8.1 (5724-S44)

System Authorization Facility (SAF) security checking

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

Security, auditability, and control

IBM Z NetView 6.4 uses the security and auditability features of the host hardware or operating system software.

The client is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

Ordering information

Ordering z/OS through the internet

Shopz provides an easy way to plan and order your z/OS packaged offering. It will analyze your current installation, determine the correct product migration, and present your new configuration based on z/OS. Additional products can also be added to your order. Shopz will determine whether all product requisites are satisfied. Shopz is available in all countries. For more details and availability, go to the Shopz website.

New licensees

Orders for new licenses can be placed now. Registered clients can access IBMLink 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 IBM Z NetView 6.3.0.
- Orders entered with a scheduled ship date after planned availability will be shipped IBM Z NetView 6.4.0. Unless a later date is specified, an order is scheduled for the week following order entry.

Shipment will begin on the planned availability date.

- Orders that ship before the planned availability will receive IBM Z NetView 6.3.0.
- Orders that ship after the planned availability date will receive IBM Z NetView 6.4.0.

New users of IBM Z NetView should specify:

Type: 5697 Model: NV6

Parallel Sysplex License Charges (PSLC)

Parallel Sysplex[(R)] 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.

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, PSLC below 3 MSU
		Basic MLC, PSLC AD
		SYSUSGREG NC, PSLC AD
Entitlement identifier	**Description**	**License option/Pricing metric**
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, PSLC below 3 MSU
		Basic MLC, PSLC AD

Advanced Workload License Charges (AWLC)

Advanced Workload License Charges (AWLC) basic license

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

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, AWLC
Entitlement identifier	**Description**	**License option/Pricing metric**
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, AWLC
Entitlement identifier	**Description**	
S016RPT	License Certificate	

Advanced Entry Workload License Charges (AEWLC)

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

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, AEWLC

Entitlement identifier	Description	License option/Pricing metric
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, AEWLC

Country Multiplex License Charges (CMLC)

Country Multiplex License Charges (CMLC)

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

If there is more than one program copy in a Country Multiplex, the charge for all copies is associated to one license if all the copies are licensed to one customer number within the multiplex. If there is more than one customer number, the charge for all copies is prorated to one license for each customer within the multiplex.

For each license being charged, specify the applicable CMLC license options and the prorated quantity of the Service Units in Millions (MSUs) for each customer number within the multiplex. For all other program copies, specify the Workload Registration No-Charge (WLREG NC) Identifier on the licenses.

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, CMLC
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, CMLC

Variable Workload License Charge (VWLC)

Workload License Charge (WLC) 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 Service Units in Millions (MSUs) in your Parallel Sysplex. For all other program copies, specify the Workload Registration Variable WLC Identifier on the licenses.

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, Variable WLC
		Workload Registration, Variable WLC

Entitlement identifier	Description	License option/Pricing metric
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, Variable WLC
		Workload Registration, Variable WLC

Entry Workload License Charges (EWLC)

Entry Workload License Charge (EWLC) Basic License

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, Entry WLC

Entitlement identifier	Description	License option/Pricing metric
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, Entry WLC

Growth Opportunity License Charge (GOLC)

Growth Opportunity License Charge (GOLC) Basic License

To order a basic license, specify the program number and the correct level.

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/ Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, GOLC

Entitlement identifier	Description	License option/ Pricing metric
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, GOLC

To order a basic license, specify the program number and the correct level.

IBM Z Entry License Charge (zELC)

IBM Z Entry License Charge (zELC) Basic License

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

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/ Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, zELC

Entitlement identifier	Description	License option/ Pricing metric
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, zELC

IBM Advanced Workload License Charge AWLC Basic License

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

Program name: IBM Z NetView

Program ID: 5697-NV6

Entitlement identifier	Description	License option/ Pricing metric
S016RPV	IBM Z NetView 6	Basic MLC, Advanced WLC
		Workload Registration, License Certificate

Entitlement identifier	Description	License option/ Pricing metric
S016RPM	IBM Z NetView Ent Mgmt Agent	Basic MLC, Advanced WLC
		Workload Registration

For more information about the AWL Charge, see Software Announcement 210-238, dated July 22, 2010.

Basic machine-readable material

Orderable Supply ID	Description	Language
S016RPP	IBM Z NetView 6	English US
S016RPW	IBM Z NetView Enterprise Management Agent	English US

IBM recommends internet delivery. However, if you still require physical media, you can choose DVD.

Customization options

Not applicable

Publications

The following publications will be available for ordering on the general availability date. To order, use the IBM Documentation, or contact your IBM representative.

Title	Publication number
IBM Z NetView - Program Directory	GI11-9444
IBM Z NetView Enterprise Management Agent - Program Directory	GI11-9446
IBM Service Management Unite Automation on xLinux CD	LCD7-7520
IBM Service Management Unite Automation on zLinux CD	LCD7-7521

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 through CBPDO and ServerPac. These customized offerings are offered for internet delivery from Shopz. For more details on internet delivery, go to the Help section on the Shopz website.

IBM recommends internet delivery. However, if you still require physical media, you can choose DVD.

Many products can be ordered in ServerPac the month following their availability in CBPDO. z/OS can be ordered through CBPDO and ServerPac on the planned availability date. Many products will also be orderable in a ServerPac without also having to order the z/OS operating system or subsystem.

Shopz and CFSW will determine the eligibility based on product requisite checking. For more details on the ServerPac, go to the Help section on the Shopz website.

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

- CBPDO shipments will begin within 3 business days after the planned availability date.
- ServerPac availability and shipments will begin within 3 - 4 weeks after the planned availability date due to additional customization and data input verification.

Terms and conditions

Agreement

IBM Client Relationship Agreement (CRA) or IBM Customer Agreement (ICA)

Variable charges apply

No

Location license applies

No

Educational allowance available

Yes, 15% education allowance applies to qualified education institution Clients.

Volume orders

Not applicable.

Multi-Version Measurement

Multi-Version Measurement (MVM) sub-capacity charges for the most recent program version are for the combined concurrent peak utilization of the LPARs where any version of the eligible program is used. MVM full capacity charges for the most recent program version are for the full capacity of the machine. Program charges are waived for any older eligible versions. MVM does not extend support dates for programs withdrawn from service.

Warranty applies

No

Program currency

Not applicable.

IBM Technology Support Services - SoftwareXcel Enterprise Edition

For operating system software, the revised IBM Technology Support Services - SoftwareXcel Enterprise Edition offering provides usage and how-to support for those operating systems and associated products.

This can ensure total support coverage for your enterprise needs, including IBM and selected non-IBM products. For complete lists of products supported under both the current and revised offering, see the Supported Product List website.

Installation and technical support is provided by IBM Systems Services. For more information, see the IBM Enterprise Support and Preferred Care options for IBM Z website.

Statement of good security practices

IT system security involves protecting systems and information through prevention, detection, and response to improper access from within and outside your enterprise. Improper access can result in information being altered, destroyed, or misappropriated or can result in misuse of your systems to attack others. Without a comprehensive approach to security, no IT system or product should be considered completely secure and no single product or security measure can be completely effective in preventing improper access. IBM systems and products are designed to

be part of a lawful, comprehensive security approach, which will necessarily involve additional operational procedures, and may require other systems, products, or services to be most effective.

Important: IBM does not warrant that any systems, products, or services are immune from, or will make your enterprise immune from, the malicious or illegal conduct of any party.

Prices

Registered clients and IBM Business Partners can access IBMLink to view pricing information.

Specify "Price type," "Search type," and "Search value," then click **Search** .

Note: Enter program number in the "Search value."

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

Sub-capacity charges for AWLC, AEWLC, CMLC, zNALC, VWLC, EWLC, and MWLC products

Sub-capacity charges for eligible products are based on product LPAR utilization capacity. Product LPAR utilization capacity for a sub-capacity product is the highest number of MSUs utilized by the combined LPARs in which the product runs concurrently during a reporting period. The number of MSUs is based on the highest observed rolling 4-hour average utilization used by the combination of the relevant LPARs during the reporting period.

Sub-capacity charges terms and conditions

IBM Z software charges at less than full machine capacity for eligible sub-capacity products apply when z/OS, z/TPF, or z/VSE$^{(R)}$ is running in z/Architecture$^{(R)}$ (64-bit) mode on an IBM Z, no other MVS-based, TPF-based, or VSE-based operating system respectively is licensed to that server, and the required information is provided by the client in accordance with the applicable terms.

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

- Sign and abide by the terms of one of the following:

  - Attachment for IBM System z$^{(R)}$ Advanced Workload License Charges (Z125-8538)
  - Attachment for IBM System z Advanced Entry Workload License Charges (Z125-8755)
  - Attachment for IBM Country Multiplex Pricing (Z126-6965)
  - Attachment for zNALC License Charges on IBM System z (Z125-7454)
  - Attachment for IBM System z Workload License Charges (Z125-6516)
  - Attachment for EWLC, TWLC, zELC, and z/OS.e License Charges (Z125-6587)
  - Attachment for IBM System z Midrange Workload License Charges (Z125-7452)
- Required service will be listed on the IBM Z software pricing website.
- Collect SMF or SCRT89 data as required by the Sub-Capacity Reporting Tool. Retain the collected data for a period of not less than six months.
- Use the IBM provided Sub-Capacity Reporting Tool to process the collected SMF or SCRT89 data. The Sub-Capacity Report produced by the tool is used to determine required license capacity for the sub-capacity products. Required license capacity is determined based on the largest MSU value of a sub-capacity 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 between the second and ninth day of the month after the reporting period.
- Submit Sub-Capacity Reports for all sub-capacity products with complete data for the entire reporting period through the method specified on the IBM Z software pricing website.

  Sub-Capacity Reports that reflect a changed product defined capacity will be considered to be orders placed by the client without further action on the client's part, and IBM is authorized to make any resulting billing increase or decrease, including the ordering of any necessary new licenses. To discontinue licenses, move licenses between machines, report a hardware model upgrade, or enable or disable product features, the client must contact IBM or their IBM Business Partner.

- Configure the machine to send weekly Transmit System Availability Data (TSAD) to IBM through the IBM Z Remote Support Facility (RSF). If the machine cannot connect through the RSF, provide this TSAD through an alternate means documented in the *SCRT Users Guide* (SG24-6522) publication on the IBM Z software pricing website.

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