

Program Directory for Tivoli NetView for z/OS Japanese

Version 5 Release 1, Modification Level 00

Program Number 5697-ENV

FMID HENV510

for Use with z/OS

Document Date: June 2004

Note!				
Before using this information and the product it supports, be sure to read the general information under "Notices" on page vii.				
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APAR numbers are provided in this document to assist in locating PTFs that may be required. Ongoing problem reporting may result in additional APARs being created. Therefore, the APAR lists in this document may not be complete. To obtain current service recommendations and to identify current product service requirements, always contact the Tivoli or IBM Customer Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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NetView Language Environment

Operating System/2 OS/390 UNIX System Services OS/2 AIX

OS/390 Netfinity

MVS RISC System/6000

MVS/370 RISC/6000 MVS/XA RS/6000 **POWERserver** MVS/ESA

CBPDO Tivoli Management Environment **RACF** Global Enterprise Manager

System/370 **LPDA** System/390 DB2

ServicePac

Tivoli Management Framework Tivoli Enterprise Console

Tivoli Management Region Tivoli Global Enterprise Manager

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1.0 Introduction

This program directory is intended for the system programmer responsible for program installation and maintenance. It contains information concerning the material and procedures associated with the installation of Tivoli NetView for z/OS. This publication refers to Tivoli NetView for z/OS as Tivoli NetView for z/OS Version 5 Release 1. You should read all of this program directory before installing the program and then keep it for future reference.

The program directory contains the following sections:

- 2.0, "Program Materials" on page 4 identifies the basic and optional program materials and documentation for Tivoli NetView for z/OS Version 5 Release 1.
- 3.0, "Program Support" on page 10 describes the Tivoli support available for Tivoli NetView for z/OS Version 5 Release 1.
- 4.0, "Program and Service Level Information" on page 12 lists the APARs (program level) and PTFs (service level) incorporated into Tivoli NetView for z/OS Version 5 Release 1.
- 5.0, "Installation Requirements and Considerations" on page 13 identifies the resources and considerations for installing and using Tivoli NetView for z/OS Version 5 Release 1.
- 6.0, "Installation Instructions" on page 34 provides detailed installation instructions for Tivoli NetView for z/OS Version 5 Release 1. It also describes the procedures for activating the functions of Tivoli NetView for z/OS Version 5 Release 1, or refers to appropriate publications.
- Appendix A, "Program Level Information" on page 54 provides program level information for Tivoli NetView for z/OS Version 5 Release 1.

Before installing Tivoli NetView for z/OS Version 5 Release 1, read 3.2, "Preventive Service Planning" on page 10. This section tells you how to find any updates to the information and procedures in this program directory.

Do not use this program directory if you are installing Tivoli NetView for z/OS Version 5 Release 1 with a SystemPac or ServerPac. When using these offerings, use the jobs and documentation supplied with the offering. This documentation may point you to specific sections of the program directory as required.

If you are installing Tivoli NetView for z/OS Version 5 Release 1 using the Custom-Built Product Delivery Offering (CBPDO, 5751-CS3), a softcopy program directory is provided on the CBPDO tape which is identical to the printed copy shipped with your order. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for Tivoli NetView for z/OS Version 5 Release 1 are included on the CBPDO tape.

1.1 Tivoli NetView for z/OS Version 5 Release 1 Description

Building on the already rich functionality of Tivoli NetView for OS/390 Version 1 Release 4, Version 5 Release 1 provides these additional enhancements.

• TCP/IP Management

IP Resource Discovery and Management on Linux on zSeries

Support for Dynamic Virtual IP Addressing (DVIPA)

TCP/IP Connection Monitoring and Thresholding

· Enhanced Web Console

Redesigned Web interface

SNMP services from the Web Console

TCP/IP Stack Management

· Time to Value

Simpler customization through enhancements to the NetView Style Sheet

Streamlined Packaging

NetView Management Console (NMC)

NMC Topology Server now supports Linux on zSeries

NMC Topology Console now supports Linux on Intel platforms

Enhanced Security

SAF surrogate authority for TSO commands

Automatic logging of suppressed operator commands

Command Authorization Checking in context

Additional NMC Security

IP Packet Tracing

Capture and view formatted TCP/IP packet trace data in real time

1.2 Tivoli NetView for z/OS Version 5 Release 1 FMIDs

Tivoli NetView for z/OS Version 5 Release 1 consists of the following FMIDs:

HENV510

JENV512

JENV513

JENV515

2.0 Program Materials

A Tivoli program is identified by a program number and a feature number. The program number for Tivoli NetView for z/OS Version 5 Release 1 is 5697-ENV.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature code, and are required for the use of the product. Optional Machine-Readable Materials are orderable under separate feature codes, and are not required for the product to function.

The program announcement material describes the features supported by Tivoli NetView for z/OS Version 5 Release 1. Ask your Tivoli representative for this information if you have not already received a copy.

2.1 Basic Machine-Readable Material

The distribution medium for this program is magnetic tape or downloadable files. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 34 for more information about how to install the program.

Figure 1 describes the physical tapes. Figure 2 on page 5 and Figure 3 on page 5 describe the file content.

Notes:

- 1. The data set attributes in these tables should be used in the JCL of jobs reading the data sets, but since the data sets are in IEBCOPY unloaded format, their actual attributes may be different.
- If you are installing Tivoli NetView for z/OS Version 5 Release 1 using the Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), some of the information in these figures may not be valid. Consult the CBPDO documentation for actual values.
- 3. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

Figure 1 (Pag	Figure 1 (Page 1 of 2). Basic Material: Program Tape						
Medium	Feature Number	Physical Volume	External Label	R/M *	VOLSER		
3480 cart	5822	1	U 1/2 VOLSER=ENV51	N 0	JNV510		
3480 cart	5822	2	U 2/2 VOLSER=ENV51	N 0	JNV513		
4mm cart	5722	1	U 1/2 VOLSER=ENV51	N 0	JNV510		
4mm cart	5722	2	U 2/2 VOLSER=ENV51	N 0	JNV513		

Figure 1 (Pag	Figure 1 (Page 2 of 2). Basic Material: Program Tape					
Medium	Feature Number	Physical Volume	External Label	R/M *	VOLSER	
CDROM			LCD4-4929 Tivoli NetView for z/OS	N		
CDROM			LK2T-6175 Tivoli NetView for z/OS Online Library	N		
CDROM			LCD4-4928 Integrated TCP/IP Services	N		

* R/M = Restricted Materials of IBM

Figure 2. Program File Content Base tape				
Name	O R G	R E C F	L R E C L	BLK SIZE
SMPMCS	SEQ	FB	80	8800
HENV510.F1	SEQ	FB	80	8800
HENV510.F2	SEQ	FB	80	8800
HENV510.F3	SEQ	U	0	6144
HENV510.F4	SEQ	FB	80	8800
HENV510.F5	SEQ	FB	125	3125
HENV510.F6	SEQ	VB	1028	23648
JENV512.F1	SEQ	FB	80	8800
JENV512.F2	SEQ	FB	80	8800

Figure 3 (Page 1 of 2). Program File Content Base tape 2				
		R	L	
		Ε	R	
	0	С	Ε	
	R	F	С	BLK
Name	G	M	L	SIZE
SMPMCS	SEQ	FB	80	8800

Figure 3 (Page 2 of 2). Program File Content Base tape 2				
Name	O R G	R E C F	L R E C L	BLK SIZE
JENV513.F1	SEQ	FB	80	8800
JENV513.F2	SEQ	FB	80	8800
JENV513.F3	SEQ	U	0	6144
JENV513.F4	SEQ	FB	80	8800
JENV513.F5	SEQ	VB	1028	23648
JENV515.F1	SEQ	FB	80	8800
JENV515.F2	SEQ	FB	125	3125
JENV515.F3	SEQ	FB	80	8800
JENV515.F4	SEQ	U	0	6144
JENV515.F5	SEQ	VB	516	8256

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Tivoli NetView for z/OS Version 5 Release 1.

2.3 Program Publications

The following sections identify the basic and optional publications for Tivoli NetView for z/OS Version 5 Release 1.

2.3.1 Basic Program Publications

Figure 4 identifies the basic unlicensed program publications for Tivoli NetView for z/OS Version 5 Release 1. One copy of each of these publications is included when you order the basic materials for Tivoli NetView for z/OS Version 5 Release 1. For additional copies, contact your IBM and/or Tivoli representative.

Figure 4 (Page 1 of 2). Basic Material: Unlicensed Publications	
Publication Title	Form Number
Tivoli NetView for OS/390 Licensed Program Specifications	GC31-8848
Tivoli NetView for OS/390 Installation: Getting Started	SC31-8872

Figure 4 (Page 2 of 2). Basic Material: Unlicensed Publications	
Publication Title	Form Number
Tivoli NetView for OS/390 Installations: Migration Guide	SC31-8873
Tivoli NetView for OS/390 Tuning Guide	SC31-8869

Figure 5 identifies the basic licensed program publications for Tivoli NetView for z/OS Version 5 Release 1. The first copy is available at no charge to licensees of the basic material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx Feature Number. A fee is charged for additional copies.

Figure 5. Basic Material: Licensed Publications		
Publication Title	Form Number	Feature Number
Tivoli NetView for OS/390 Diagnosis Guide	LY43-0093	

2.3.2 PDF format only Program Publications

Figure 6 identifies the basic unlicensed program publications for Tivoli NetView for z/OS Version 5 Release 1 that will only be delivered in softcopy PDF format. You may print as many copies of these publications as you need.

Figure 6 (Page 1 of 2). Basic Material: Unlicensed Publications	
Publication Title	Form Number
Tivoli NetView for OS/390 Administration Reference	SC31-8854
Tivoli NetView for OS/390 Security Reference	SC31-8870
Tivoli NetView for OS/390 Installation: Configuring Graphical Components	SC31-8875
Tivoli NetView for OS/390 Installation: Configuring Additional Components	SC31-8874
Tivoli NetView for OS/390 User's Guide	GC31-8849
Tivoli NetView for OS/390 Application Programmer's Guide	SC31-8855
Tivoli NetView for OS/390 Automation Guide	SC31-8853
Tivoli NetView for OS/390 Command Reference Volume I	SC31-8857
Tivoli NetView for OS/390 Command Reference Volume II	SC31-8858
Tivoli NetView for OS/390 Messages and Codes	SC31-8866
Tivoli NetView for OS/390 Customization Guide	SC31-8859
Tivoli NetView for OS/390 Customization: Using Assembler	SC31-8860
Tivoli NetView for OS/390 Customization: Using PL/I and C	SC31-8861

Figure 6 (Page 2 of 2). Basic Material: Unlicensed Publications	
Publication Title	Form Number
Tivoli NetView for OS/390 Customization: Using REXX and the NetView Command List Language	SC31-8862
Tivoli NetView for OS/390 Data Model Reference	SC31-8864
Tivoli NetView for OS/390 RODM & GMFHS Programmer's Guide	SC31-8865
Tivoli NetView for OS/390 Customization: Using Pipes	SC31-8863
Tivoli NetView for OS/390 Automated Operations Network User's Guide	GC31-8851
Tivoli NetView for OS/390 Automated Operations Network Customization Guide	SC31-8871
Tivoli NetView for OS/390 SNA Topology Manager and APPN Accounting Manager Implementation Guide	SC31-8868
Tivoli NetView for OS/390 NetView Management Console User's Guide	GC31-8852
Tivoli NetView for OS/390 MultiSystem Manager User's Guide	GC31-8850

2.3.3 Optional Program Publications

No optional publications are provided for Tivoli NetView for z/OS Version 5 Release 1.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for Tivoli NetView for z/OS Version 5 Release 1.

2.5 Publications Useful During Installation

The publications listed in Figure 7 may be useful during the installation of Tivoli NetView for z/OS Version 5 Release 1. To order copies, contact your IBM and/or Tivoli representative or visit the IBM and/or Tivoli Publications Center at http://www.elink.ibmlink.ibm.com/applications/public/applications/cgibin/pbi.cgi on the Internet.

Figure 7 (Page 1 of 2). Publications Useful During Installation	
Publication Title	Form Number
IBM SMP/E for z/OS and OS/390 User's Guide	SA22-7773
IBM SMP/E for z/OS and OS/390 Commands	SA22-7771
IBM SMP/E for z/OS and OS/390 Reference	SA22-7772

Figure 7 (Page 2 of 2). Publications Useful During Installation	
Publication Title	Form Number
IBM SMP/E for z/OS and OS/390 Messages, Codes, and Diagnosis	GA22-7770
z/OS UNIX System Services Command Reference	SC28-1892
z/OS UNIX System Services Messages and Codes	SC28-1908
IBM Communications Manager Configuration Guide	S04G-1002
MVS Custom-Built Offering Planning and Installation	SC23-0352

3.0 Program Support

This section describes the Tivoli support available for Tivoli NetView for z/OS Version 5 Release 1.

3.1 Program Services

Contact your IBM and/or Tivoli representative for specific information about available program services.

3.2 Preventive Service Planning

Before installing Tivoli NetView for z/OS Version 5 Release 1, you should review the current Preventive Service Planning (PSP) information. If you obtained Tivoli NetView for z/OS Version 5 Release 1 as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO.

If you obtained Tivoli NetView for z/OS Version 5 Release 1 on a product tape, or if the CBPDO is more than two weeks old when you install it, you should contact the IBM and/or Tivoli Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

For access to RETAIN, visit http://www.ibmlink.ibm.com on the Internet.

PSP Buckets are identified by UPGRADEs, which specify product levels, and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for Tivoli NetView for z/OS Version 5 Release 1 are:

Figure 8. PSP Upgrade and Subset ID			
UPGRADE SUBSET Description			
TIVNETV510	HENV510/0412 JENV512/0412 JENV513/0412 JENV515/0412	NetView System Services Base NetView System Services Japanese NetView Enterprise Base NetView Enterprise Japanese	

3.3 Statement of Support Procedures

Report any difficulties you have using this program to your Tivoli Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 9 identifies the component IDs (COMPID) for Tivoli NetView for z/OS Version 5 Release 1.

Figure 9. Component IDs			
FMID	COMPID	Component Name	RETAIN Release
HENV510	5697ENV00	NetView System Services Base	510
JENV512	5697ENV00	NetView System Services Japanese	512
JENV513	5697ENV00	NetView Enterprise Base	513
JENV515	5697ENV00	NetView Enterprise Japanese	515
	5698NVW05	ITSC dNetView	711

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of Tivoli NetView for z/OS Version 5 Release 1. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated.

This program is at Service Level SMC0412.

4.1 Program Level Information

Appendix A, "Program Level Information" on page 54 lists the APAR fixes for previous releases of NetView that have been incorporated into Tivoli NetView for z/OS Version 5 Release 1.

4.2 Service Level Information

PTFs containing APAR fixes against this release of Tivoli NetView for z/OS Version 5 Release 1 have been incorporated into this product tape. For a list of included PTFs, examine the ++VER statement in the product's SMPMCS.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating Tivoli NetView for z/OS Version 5 Release 1. The following terminology is used:

- Driving system: the system used to install the program.
- · Target system: the system on which the program is installed.

In many cases, the same system can be used as both a driving system and a target system. However, you may want to set up a clone of your system to use as a target system by making a separate IPL-able copy of the running system. The clone should include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Some cases where two systems should be used include the following:

- When installing a new level of a product that is already installed, the new product will delete the old
 one. By installing onto a separate target system, you can test the new product while still keeping the
 old one in production.
- When installing a product that shares libraries or load modules with other products, the installation can
 disrupt the other products. Installing onto a test system or clone will allow you to assess these
 impacts without disrupting your production system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install Tivoli NetView for z/OS Version 5 Release 1.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements

Figure 10. Driving System Software Requirements	
Program Product Name and Number Minimum VRM/Service Level	
Any one of the following:	
5647-A01	OS/390 SMP/E Version 2 Release 10 or higher with PTF UR51068
5694-A01	z/OS Version 1 Release 1 or higher
5655-G44	IBM SMP/E for z/OS and OS/390 Version 3 Release 1 or higher

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5.2 Target System Requirements

This section describes the environment of the target system required to install and use Tivoli NetView for z/OS Version 5 Release 1.

Tivoli NetView for z/OS Version 5 Release 1 installs in the MVS (Z038) SREL.

5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

5.2.2 Programming Requirements

5.2.2.1 Mandatory Requisites

A mandatory requisite is defined as a product that is required without exception; this product either will not install or will not function unless this requisite is met. This includes products that are specified as REQs or PREs.

Figure 11. Mandatory Requisites	
Program Product Name and Number Minimum VRM/Service Level	
Any one of the following:	
5647-A01	OS/390 Release 10
5694-A01	z/OS Version 1 Release 1 or higher

5.2.2.2 Functional Requisites

A functional requisite is defined as a product that is not required for the successful installation of this product or for the basic function of the product, but is needed at run time for a specific function of this product to work. This includes products that are specified as IF REQs.

Figure 12 (Page 1 of 2). Functional Requisites		
Program Number	Product Name and Minimum VRM/Service Level	Function
5695-014	IBM Compiler for SAA* REXX/370 Release 3	Compiling REXX Clists or Programs (See notes 1 & 2 below)
-	ACF/NCP Version 4.3.2 or later	All functions related to the ACF/NCP program

Program Number	Product Name and Minimum VRM/Service Level	Function
-	OS/390 Version 2.10 or z/OS IP Services	All functions using TCP/IP communications from OS/390 or z/OS
5695-014	IBM Library for SAA* REXX/370 Release 3 (FMID HWJ9130) - or - REXX Alternate Library (FMID HWJ9133) US English shipped with Tivoli NetView for OS/390	Running Compiled REXX Clists or Programs (See notes 1 & 2 below)
-	Tivoli NetView for z/OS Functions	(See note 3)
-	Tivoli NetView for z/OS Automated Operations Network (AON) Component	(See note 4)
-	Tivoli NetView for z/OS MultiSystem Manager Component	(See note 5)
5697-D10	Tivoli Management Framework for OS/390 Version 3.6.1	Installation of Graphical Enterprise Workstation Components from OS/390 using Tivoli Software Installation Service (SIS)

Notes:

- 1. If you compile AON REXX Command Lists, the IBM Compiler for SAA REXX/370 R3(or higher) is needed.
- 2. Several components of NetView have REXX programs that have been compiled with the ALTERNATE option. If you access the REXX library from NetView (or from z/OS UNIX System Services for NetView's z/OS UNIX System Services Related Components), these REXX programs are run in compiled mode. Otherwise, the REXX alternate library is used and these REXX programs are run in the interpreted mode. Some of the components of NetView that have compiled REXX programs are MultiSystem Manager, UNIX for OS/390 Command Server, and the TSO Command Server.

Note: Your OS/390 environment must be modified so that the REXX data set you are using (either SEAGLMD or SEAGALT) is APF-authorized. Edit your APF member in SYS1.PARMLIB and add the REXX data set (SEAGLMD or SEAGALT) if it is not already there. Re-IPL OS/390 if necessary. If your system is set up to use dynamic APF services, you can avoid re-IPLing OS/390 by using the SETPROG command to dynamically update the APF list. Refer to the Initialization and Tuning Reference for your OS/390 system for more information on authorizing data sets.

Note: The TSO server jobs themselves are either batch TSO jobs or started tasks which should be set up to access the REXX library so that the TSO server REXX program will run in compiled mode. Otherwise, the REXX alternate library is used and the server will run in interpreted mode.

- 3. For additional functional requisite information regarding specific Tivoli NetView for z/OS functions refer to 5.4, "Special Considerations" on page 22.
- 4. For additional functional requisite information regarding the Automated Operations Network component refer to 5.4.23, "Considerations for Tivoli NetView for z/OS Version 5 Release 1 Automated Operations Network Component" on page 28.
- 5. For additional functional requisite information regarding the MultiSystem Manager component(s) refer to 5.4.24, "Special Considerations for Tivoli NetView for z/OS Version 5 Release 1 MultiSystem Manager Component" on page 29.

5.2.2.3 Toleration/Coexistence Requisites

A toleration/coexistence requisite is defined as a product which must be present on a sharing system. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD at different time intervals.

Tivoli NetView for z/OS Version 5 Release 1 has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites

A negative requisite identifies products which must *not* be installed on the same system as this product.

Tivoli NetView for z/OS Version 5 Release 1 has no negative requisites.

5.2.3 DASD Storage Requirements

Tivoli NetView for z/OS Version 5 Release 1 libraries can reside on all supported DASD types.

Figure 13 lists the total space required for each type of library.

Figure 13 (F	Figure 13 (Page 1 of 2). Total DASD Space Required by Tivoli NetView for z/OS Version 5 Release 1	
Library Type	Total Space Required	
Target	3102 Tracks of 3390	
Distribution	3423 Tracks of 3390	

Figure 13	(Page 2 of 2). Total DASD Space Required by Tivoli NetView for z/OS Version 5 Release 1
Library Type	Total Space Required
-71	· · · · · · · · · · · · · · · · · · ·
HFS	120 Tracks of 3390

Notes:

- 1. Tivoli recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, Tivoli recommends a block size of 32760, which is the most efficient from a performance and DASD utilization perspective.
- 2. Abbreviations used for the data set type are:
 - Unique data set, allocated by this product and used only by this product. To determine the correct storage needed for this data set, this table provides all required information; no other tables (or program directories) need to be referenced for the data set size.
 - Shared data set, allocated by this product and used by this product and others. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
 - Existing shared data set, used by this product and others. This data set is NOT allocated by this product. To determine the correct storage needed for this data set, the storage size given in this table needs to be added to other tables (perhaps in other program directories). This existing data set must have enough free space to accommodate the storage size given in this table.

If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old one and reclaim the space used by the old release and any service that had been installed. You can determine whether or not these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information on the names and sizes of the required data sets, please refer to 6.1.8, "Allocate SMP/E Target and Distribution Libraries and Paths" on page 41.

- 3. Abbreviations used for the HFS Path type are:
 - **N** New path, created by this product.
 - **X** Path created by this product, but may already exist from a previous release.
 - **P** Previously existing path, created by another product.
- 4. All target and distribution libraries listed have the following attributes:
 - The default name of the data set may be changed
 - The default block size of the data set may be changed
 - The data set may be merged with another data set that has equivalent characteristics
 - The data set may be either a PDS or a PDSE
- 5. All target libraries listed have the following attributes:

- The data set may be SMS managed
- It is not required for the data set to be SMS managed
- The data set may be in the LPA
- It is not required for the data set to be in the LPA
- · The data set may be in the LNKLST
- It is not required for the data set to be APF authorized
- It is not required for the data set to reside on the IPL volume
- The values in the "Member Type" column are not necessarily the actual SMP/E element types identified in the SMPMCS.

Figure 14 estimates the storage requirements for the SMPCSI data set for SMP/E. This estimate must be added to those of any other programs and services being installed to determine the total additional space requirements.

Figure 14. Storage Require Release 1	ments for SMPCSI Data Sets for SMP/E for Ti	voli NetView for z/OS Version 5
DASD	Tracks Required for SMPCSI Data	Tracks Required for SMPCSI Index
3390	1230	61

Figure 15. Storage Requirements for SMP/E Work Data Se	ets					
Library DDNAME	T Y P E	O R G	R E C F	L R E C L	No. of 3390 Trks	No. of DIR BIks
SMPWRK1	S	PDS	FB	80	150	250
SMPWRK2	S	PDS	FB	80	150	250
SMPWRK3	S	PDS	FB	80	150	250
SMPWRK4	S	PDS	FB	80	150	250
SMPWRK6	S	PDS	FB	80	150	250
SYSUT1	U	SEQ			30	-
SYSUT2	U	SEQ			30	-
SYSUT3	U	SEQ			30	-
SYSUT4	U	SEQ			30	-

The following table provides an estimate of the storage needed in the SMP/E data sets for Tivoli NetView for z/OS Version 5 Release 1. The estimates must be added to those of any other programs and service being installed to determine the total additional storage requirements.

If the table indicates that the SMPLTS data set must be a PDSE, but your existing SMPLTS is a PDS, you will need to allocate a new PDSE and copy your existing SMPLTS into it, and then change the SMPLTS DDDEF entry to indicate the new PDSE data set.

Figure 16. Storage Requirements for SMP/E Data Sets						
Library DDNAME	T Y P E	O R G	R E C F	L R E C L	No. of 3390 Trks	No. of DIR BIks
SMPLTS	S	PDS	U	0	390	17
SMPMTS	S	PDS	FB	80	1	1
SMPPTS	S	PDS	FB	80	47	1
SMPSCDS	S	PDS	FB	80	5	1
SMPSTS	S	PDS	FB	80	1	1

The following figures describe the target and distribution libraries and HFS paths required to install Tivoli NetView for z/OS Version 5 Release 1. The storage requirements of Tivoli NetView for z/OS Version 5 Release 1 must be added to the storage required by other programs having data in the same library or path.

Note: The data in these tables should be used when determining which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

5.2.3.1 Target Libraries for Tivoli NetView for z/OS Version 5 Release 1

Figure 17 (Page 1 of 2). S	Storage Requireme	ents for Tivoli	NetView	for z/OS	Version 5	Release	1 Target L	ibraries
Library DDNAME	Member Type	Target Volume	T Y P E	O R G	R E C F	L R E C L	No. of 3390 Trks	No. of DIR BIks
BNJPNL2	LMOD	ANY	U	PO	FB	80	8	5
SBNJPNL3	LMOD	ANY	U	PO	FB	80	381	232
BNJSRC1	LMOD	ANY	U	PO	FB	80	1	1
CNMCLST	LMOD	ANY	U	PO	FB	80	733	51
CNMINST	LMOD	ANY	U	PO	FB	80	5	1
CNMLINK	LMOD	ANY	U	PO	U	0	706	191
CNMPNL1	LMOD	ANY	U	PO	FB	80	73	41
SCNMPNL2	LMOD	ANY	U	РО	FB	80	565	131

			т		R E	L R	No.	No.
Library DDNAME	Member Type	Target Volume	Y P E	O R G	C F M	E C L	of 3390 Trks	of DIR BIks
SCNMMJPN	LMOD	ANY	U	PO	U	0	8	9
CNMSAMP	LMOD	ANY	U	PO	FB	80	319	33
DSIPARM	LMOD	ANY	U	РО	FB	80	69	12
DSIPRF	LMOD	ANY	U	РО	FB	80	2	1
SDSIOPEN	LMOD	ANY	U	РО	FB	80	2	1
SEKGLANG	LMOD	ANY	U	РО	FB	125	1	1
SCNMMAC1	LMOD	ANY	U	РО	FB	80	129	13
NVULIB	LMOD	ANY	U	PO	U	0	4	6
SCNMLNK1	LMOD	ANY	U	РО	U	0	1	1
SCNMLNKN	LMOD	ANY	U	РО	U	0	1	1
SCNMLPA1	LMOD	ANY	U	РО	U	0	1	2
SDSIMSG1	LMOD	ANY	U	РО	FB	80	10	1
SDUIMSG1	LMOD	ANY	U	PO	FB	80	2	1
SFLBDAT1	LMOD	ANY	U	PO	VB	1028	4	1
SCNMUXLK	LMOD	ANY	U	PO	U	0	70	2
SCNMUXCL	LMOD	ANY	U	РО	VB	516	4	1
SCNMUXMS	LMOD	ANY	U	РО	FB	80	2	1

5.2.3.2 HFS Paths for Tivoli NetView for z/OS Version 5 Release 1 Graphical **Enterprise Option**

Figure 18. Tivo	oli NetVie	w for z/OS Version 5 Release 1 HFS Paths
	T	
	P	
DDNAME	E	Path Name
SCNMUX00	N	/usr/lpp/netview/v5r1/bin/IBM/
SCNMUX03	N	/usr/lpp/netview/v5r1/mibs/IBM/

5.2.3.3 Distribution Libraries for Tivoli NetView for z/OS Version 5 Release 1

Library DDNAME	T Y P E	O R G	R E C F M	L R E C L	No. of 3390 Trks	No. of DIR BIks
ABNJPNL2	U	PO	FB	80	8	5
ABNJPNL3	U	PO	FB	80	380	232
ABNJSRC1	U	PO	FB	80	1	1
ACNMCLST	U	PO	FB	80	733	51
ACNMINST	U	РО	FB	80	5	1
ACNMLINK	U	PO	U	0	1000	709
ACNMPNL1	U	PO	FB	80	73	41
ACNMPNL2	U	PO	FB	80	563	131
ACNMMJPN	U	РО	U	0	8	8
ACNMSAMP	U	PO	FB	80	319	33
ADSIPARM	U	PO	FB	80	69	12
ADSIPRF	U	PO	FB	80	2	1
ADSIOPEN	U	РО	FB	80	2	1
ADSIMSG1	U	РО	FB	80	10	1
ADUIMSG1	U	РО	FB	80	2	1
AEKGLANG	U	РО	FB	125	1	1
ACNMMAC1	U	РО	FB	80	129	13
ANVULIB	U	РО	U	0	4	6
AFLBDAT1	U	РО	VB	1028	4	1
ACNMUXLK	U	РО	U	0	68	2
ACNMUXCL	U	РО	VB	516	30	3
ACNMUXMS	U	РО	FB	80	2	1

5.3 FMIDs Deleted

Installing Tivoli NetView for z/OS Version 5 Release 1 may result in the deletion of other FMIDs. To see what FMIDs will be deleted, examine the ++VER statement in the product's SMPMCS.

If you do not wish to delete these FMIDs at this time, you must install Tivoli NetView for z/OS Version 5 Release 1 into separate SMP/E target and distribution zones.

Note: These FMIDs will not automatically be deleted from the Global Zone. Consult the SMP/E manuals for instructions on how to do this.

5.4 Special Considerations

The following table identifies README file names and installation methods associated with the noted Tivoli NetView for z/OS Version 5 Release 1 components.

Component Name	Web Page (1)	CD (2)	README
NetView Web Application	X	Х	zNetViewWebApp_ja.me
NMC Topology Console	Х	Х	EGVREAD3.ME
NMC Topology Server	Х	Х	EGVREAD4.ME
NetView Visual BLDVIEWS	Х	Х	VBVRead.ME
NetView 3270 Management Console	Х	Х	FLBREAD2.ME
Event Automation Service(EAS)	Х	Х	IHSREAD1.ME
(1) URL: http://www.tivoli.com/nv390_su	pported		

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

5.4.1 Tivoli NetView Management Console, NetView 3270 Management Console

- Topology Server
 - Any Hardware that supports any of the following operating systems
 - AIX 4.3.3 (5765-C34) at Recommended Maintenance level 09 or later with
 - C Set++ for AIX Applications xlC.rte 3.6.6.0 or later
 - IBM class libraries ibmcxx.ioc.rte 3.6.6.0 for later and ibmcxx.rt 3.6.6.0 or later
 - Information Presentation Facility ipfx.rte.2.2.0.0 or later

Note: xIC.rte, ibmcxx.ioc.rte, ibmcxx.rte and ipfx.rte are included on the Tivoli NetView for z/OS Version 5 Release 1 product CD

- AIX 5.1 (5765-E61) at Recommended Maintenance level 01 or later with
 - C Set++ for AIX Applications xlC.rte 3.6.6.0 or later

- IBM class libraries ibmcxx.ioc.rte 3.6.6.0 for later and ibmcxx.rt 3.6.6.0 or later
- Information Presentation Facility ipfx.rte.2.2.0.0 or later

Note: xIC.rte, ibmcxx.ioc.rte, ibmcxx.rte and ipfx.rte are included on the Tivoli NetView for z/OS Version 5 Release 1 product CD

- Windows NT 4.0 Server with service pack 6a or later
- Windows 2000 with service pack 2 or later
- SuSE Linux Enterprise Server 7.0 for S/390 at kernel level 2.2.16 with TCP/IP and pdksh Korn shell RPM package installed (English only, Japanese not supported).
- SuSE Linux Enterprise Server 7 for S/390 and zSeries at kernel level 2.4.7 with glibc at level 2.2.4
- Processor speed of at least 350MHz
- Minimum memory of 128MB, 256 recommended
- 60 MB of additional fixed space
- · Topology Console
 - Any Hardware that supports any of the following operating systems with TCP/IP installed
 - AIX 4.3.3 (5765-C34) at Recommended Maintenance level 09 or later with TCP/IP installed
 - AIX 5.1 (5765-E61) at Recommended Maintenance level 01 or later with TCP/IP installed
 - Windows NT 4.0 with Service Pack 6a or later
 - Windows 2000 with Service Pack 2 or later with TCP/IP installed
 - Red Hat 7.1 or SuSE 7.1 Linux distributions on 32-bit IA-32 Intel Architecture (English only, Japanese not supported)
 - Red Hat 7.2 or SuSE 7.2 Linux distributions on 32-bit IA-32 Intel Architecture (e.g., Pentium III or Pentium 4 processors). Also, one of the following desktops and window managers:
 - · GNOME/Sawfish (previously known as Sawmill)
 - K Desktop Environment (KDE)/KWM 2.0.1
 - HP-UX 11 or later with TCP/IP installed (English only). Since the NMC Topology Console uses Java, patches are needed to support the Java Runtime Environment. The latest list of patches can be found at HP's Web site: http://hp.com/products1/unix/java/infolibrary/patches.html
 - Sun Solaris 2.8 or later with TCP/IP installed and the following patches: 108940-32, 108652-37, 108921-13.
 - Processor speed of at least 350MHZ
 - 256MB of memory
 - 50 MB of additional fixed disk space

- A color display with 1024 x 768, and 256 colors
- Maximum color palette is 16-bit high color. 256-color palette recommended. 32-bit true color is not supported
- Server communications with NetView for z/OS using LU 6.2
 - For IP connections, OS/390 Version 2 Release 10 (5647-A01) IP Services, or later, or z/OS (5694-A01) IP Services
 - For LU 6.2 connections
 - For AIX, IBM Communications Server for AIX, Version 6.1 (5765-E51)
 - For Windows NT and Windows 2000, IBM Communications Server for Windows NT 6.1.1
- For additional information on installing the NetView 3270 Management Console, refer to the readme file identified in Figure 20 on page 22.

5.4.2 Considerations for NMC Server Audit Log

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

- Netscape 6.0 or later
- Microsoft Internet Explorer 5.5 or later

5.4.3 Considerations for NetView Web Application

- HTTP Server and Web Application Server
 - Any Hardware that supports any of the following operating systems running IBM WebSphere Application Server V4.0, Advanced Edition or the Jetty Java HTTP Server and Servlet Container from Mort Bay Consulting
 - AIX 4.3.3 (5765-C34) at Recommended Maintenance level 09, or later
 - IBM AIX Version 5.1 at Recommended Maintenance level 01, or later
 - Windows NT 4.0 Server with Service Pack 5 of later
 - Windows 2000 Server with Service Pack 1 or later
 - SuSE Linux Enterprise Server 7.0 for S/390 at kernel level 2.2.16 with pdksh Korn shell RPM package installed (available on SuSE's distributed media, CD1) (English only)
 - For a Japanese system, GNU Awk 3.1.0 is also required
 - SuSE Linux Enterprise Server 7 for S/390 and zSeries at kernel level 2.4.7 and glibc at level 2.2.4

Note: At this time, WebSphere Application Server V4.0, Advanced Edition, does not have Japanese support on SuSE Linux Enterprise Server 7 for S/390 and zSeries.

- For additional requirements for IBM Websphere Application Server V4.0, Advanced Edition, see the WebSphere documentation for the applicable platform.
- Jetty is an Open Source HTTP Server and Servlet Container that is packaged with Tivoli NetView for z/OS Version 5 Release 1 Jetty requires the following
 - Processor speed of at least 350MHZ
 - 256MB minimum
 - 68 MB of additional fixed disk space
 - Supported locales for the Japanese version of the NetView Web Application are
 - For Windows, SJIS
 - For AIX, ja_JP (EUC) and Ja_JP (PC or IBM-943)
 - For Linux on zSeries, ja_JP.eucjp
- Web Console
 - One of the following operating system and browser combinations

Note: Netscape 6.x is not supported on any operating system

- Windows 2000 with one of the following browsers with Java Plug-in level 1.3.1_03
 - Microsoft Internet Explorer 5.0 or later
 - Netscape 4.78 or later 4.7x release
- Windows NT 4.0 or later with one of the following browsers with Java Plug-in level 1.3.1_03
 - Microsoft Internet Explorer 5.0 or later with SP2
 - Netscape 4.78 or later 4.7x release
- AIX 4.3.3 (5765-C34) with APAR IY2043 installed.
 - Netscape 4.76i with Java Plug-in level J2RE 1.3.0 IBM build ca130-20020208
- AIX 5.1 (5765-E61) with Recommended Maintenance package 5100-01
 - Netscape 4.78i with Java Plug-in level J2RE 1.3.0 IBM build ca130-20020208
- Sun Solaris 2.8 or later with Netscape 4.76 with JRE 1.3.1_02 Plug-ins
- SuSE 7.2 distribution of Linux with Netscape 4.76 and Java Plug-in level J2RE 1.3.0 IBM build cxia131-20020410
- Red Hat 7.2 distribution of Linux with Netscape 4.79 and Java Plug-in level J2RE 1.3.0 IBM build cxia131-20020410

5.4.4 Considerations for DYNAMIC VIPA and Sysplex Distribution Support

NetView Web Browser Interface prerequisites

- · One of the following
 - OS/390 Release 10 IP Services with APAR PQ56105
 - z/OS Release 1 IP Services with APAR PQ56105
 - z/OS Release 2 IP Services with PTFs UQ59826 and UQ59827

5.4.5 Considerations for TCP/IP Resource Discovery and Management on Linux zSeries

 SuSE Linux Enterprise Server for S/390 version 7.0 at kernel level 2.2.16 or later supported distribution

with TCP/IP and Korn shell RPM package installed

Note: TCP/IP Resource Discovery and Management on Linux on zSeries includes the SNMP Server for the SNMP MIB Browser and Real-Time Poller/Grapher as well as the Jetty HTTP Server. If either of these servers has been installed on a Linux on zSeries logical partition (LPAR), it must be uninstalled before installing the TCP/IP Resource Discovery and Management function in that LPAR.

5.4.6 Considerations for Launching Tivoli Business System Manager (TBSM) from NMC or NMC from TBSM

• TBSM V1R5 (5698-BSM) or later

5.4.7 Considerations for SNMP MIB Browser, Real-time Poller

The prerequisites for the Web Browser Interface

5.4.8 Considerations for Event Automation Service to and from the **Tivoli Enterprise Console (TEC)**

- · The Event Automation Service requires the following:
 - Tivoli Enterprise Console (TEC) 3.6.1 (5697-EAS, 5698-EAS)

Using secure framework communication also requires:

- Tivoli Management Framework for OS/390 3.6.1 (5697-D10, 5698-FRA)
- For additional information on installing Event Automation Service workstation component, refer to the readme file identified in Figure 20 on page 22.

5.4.9 Considerations for issuing Commands from Tivoli Management Environment to OS/390 or z/OS

• NetView Management Console Topology Server or Tivoli Management Framework for OS/390 3.6.1 (5697-D10, 5698-FRA)

5.4.10 Considerations for Issuing OS/390 or z/OS UNIX System Services Commands from Tivoli NetView for z/OS Version 5 Release 1

 REXX alternate run-time (same as for Tivoli NetView for z/OS Version 5 Release 1 MultiSystem Manager Component)

5.4.11 Considerations for Using the UNIX Command Server

OS/390 APAR OW45635 must be applied

5.4.12 Considerations for OS/390 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 Version5 Release 1 (5655-DB2) or later is required

5.4.13 Considerations for Beeper/Pager Support

• IBM NetFinity for OS/2 Version 5.0 or later (if using the IBM sample for beeper/pager requests).

5.4.14 SNA Topology Manager

Generalized Trace Facility

5.4.15 NetView Bridge -- Support for INFO Access

- Tivoli Service Desk for OS/390 (5648-142)
- Application Programming Interface (API) requirements as applicable

5.4.16 Support for IBM LAN Network Manager Enhanced Command Interface

• IBM LAN Network Manager Version 2.0 (03H3519, 03H3523 or 03H3527)

5.4.17 Management of Frame Relay (DTE) and Ethernet

ACF/NCP Version 6 (5688-231)

5.4.18 NetView Parallel Transmission Group Support

• ACF/NCP Version 5 Release 4 (5668-738)

5.4.19 NetView Network Asset Management

Provides NCP vital product data (VPD) and hardware device vital product information for those devices that support the Request Product Set ID (PSID) architecture or signal converters that support LPDA-2 commands:

- ACF/NCP Version 4 Release 3.1 (5668-854) for the 3725
- ACF/NCP Version 5 Release 4 (5668-738) or later for the 3720 or 3745

5.4.20 NetView Performance Monitor (NPM) Alerts

NPM Version 1 Release 6 (5665-333 MVS) or later for session alerts

5.4.21 Considerations for SAF Security Checking

OS/390 Version 2 Release 10 (5647-A01) or z/OS (5694-A01) Security Server or later 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

5.4.22 Considerations for using Router Fault Isolation

Tivoli NetView 6.0.3 (5698-NVW)

5.4.23 Considerations for Tivoli NetView for z/OS Version 5 Release 1 **Automated Operations Network Component**

 Dynamic Display Facility (DDF) requires either a 3x79 Terminal with Extended Attribute Support with a display capable of seven colors or a workstation that supports the NetView 3270 Management Console, or a workstation-based 327x terminal emulator program that provides Extended Attribute Support with a display capable of seven colors.

- The SNA Automation feature has these additional requirements for Switched Network Backup Automation:
 - IBM 586x modems (except Model 1) with 2 or 4 wire SNBU couplers, if desired, or
 - The 786x, 7855, or LPDA-2 command set capable modems

Note: Only the 786x Models 45, 46, and 47 can automatically switch back from SNBU.

Note: To use the SNBU automation, ACF/NCP Version 4 Release 3.1 (5684-854), or later is required. ACF/NCP Version 5 Release 4 (5668-738) or later is required for complete DMPX support of IBM 7861/8 Model 4x modems.

• TCP/IP for AIX Automation has these additional requirements:

TCP/IP for AIX automation uses SNA to communicate between Tivoli NetView for AIX and Tivoli NetView for z/OS, and requires:

- AIX 4.3.3.10 (5765-C34) or later
- Tivoli NetView for AIX 6.0.3 (5698-NVW) or later
- AIX NetView Service Point 1.3.3 (5621-107)

Note: If 1.2.2 is already installed, PTF U473211 provides an upgrade to 1.3.3

- IBM Communication Server for AIX 6.1 (5765-E51)

5.4.24 Special Considerations for Tivoli NetView for z/OS Version 5 Release 1 MultiSystem Manager Component

The MultiSystem Manager component of Tivoli NetView for z/OS Version 5 Release 1 requires one of the following:

- IBM Library for SAA REXX/370 Release 3.0 (5695-014)
- REXX Alternate Library (Release 3.0 level) shipped with Tivoli NetView for z/OS
 - FMID HWJ9133 US English

The following table identifies README file names and installation methods associated with the Tivoli NetView for z/OS Version 5 Release 1 MultiSystem Manager features.

Figure 21 (Page 1 of 2). README file names and installation methods for Tivoli NetView for z/OS Version 5 Release 1 MultiSystem Manager features.				
MultiSystem Manager Agent Name	Web Page (1)	CD (2)	README	
MSM Agent downloads	Х	Х	MSMAGNT.ME	
IP	Х	Х	MSMIP.ME	
LAN Network Manager	Х	Х	(3) & (4)	
NetFinity	Х	Х	MSMNF.ME (3)	

Figure 21 (Page 2 of 2).	README file names	and installation	methods for	Tivoli NetView for z/OS	Version 5
Release 1 MultiSystem Ma	anager features.				

MultiSystem Manager Agent Name	Web Page (1)	CD (2)	README
Open	Χ	Х	(5)
TMR	Х	х	FLCTMR1.HTML

- (1) URL: http://www.tivoli.com/nv390_supported
- (2) The readme documentation on the Tivoli NetView for z/OS Version 5 Release 1 CDROM is located in the README\ENU directory.
- (3) The MultiSystem Manager topology agent for the LAN Network Manager and the NetFinity features are included with the LAN Network Manager and NetFinity products.
- (4) For additional information on installing the MultiSystem Manager LAN Network Manager feature, refer to the Tivoli NetView for z/OS Installation: Getting Started, SC31-8872.
- (5) For a vendor-supplied topology agent, refer to the documentation provided with the agent.

5.4.24.1 System Considerations for the MultiSystem Manager LAN Network **Manager Feature**

The MultiSystem Manager LAN Network Manager feature of Tivoli NetView for z/OS Version 5 Release 1 requires:

- IBM LAN Network Manager 2.0 (03H3519, 03H3523 or 03H3527) with NetView connectivity.
- Communications Manager/2 Version 1 Release 1 (79G0258 or 79G0257) or higher configured with Service Point Application Router (SPAR)

5.4.24.2 System Considerations for the MultiSystem Manager NetFinity Network **Feature**

The MultiSystem Manager NetFinity Networks feature of Tivoli NetView for z/OS Version 5 Release 1 requires:

- Any IBM Personal Computer or compatible computer as required for NetFinity will support the topology agent for NetFinity. The topology agent for NetFinity is shipped with the NetFinity product.
- NetFinity Manager Version 5.0 or later running on OS/2 or Windows NT
- Windows NT:
 - TCP/IP connectivity
- OS/2:
 - Communications Server for OS/2, Personal Communications for OS/2 or Communications Manager as per the requirements for NetFinity Manager V5.0 SNA communication

5.4.24.3 System Considerations for the MultiSystem Manager TMR Feature

The MultiSystem Manager Tivoli Management Region (TMR) feature of Tivoli NetView for z/OS Version 5 Release 1 requires:

- Tivoli Distributed Monitoring 3.6.2 or 3.7 (5697-EMN, 5698-EMN) or later
- A compatible level between 3.6.2 and 3.71 of each of the following:
 - Tivoli Management Framework (5697-FRA, 5698-FRA)
 - Tivoli Enterprise Console (TEC) (5697-EAS, 5698-EAS)
- Any of the following Operating Systems:
 - Windows NT 4.0
 - Windows 2000
 - AIX 4.3.3.10 (5765-C34) or later
 - Sun Solaris 2.6 or higher
 - HP UX 10.20 or higher

5.4.24.4 Considerations for Sending Commands from Tivoli NetView for z/OS Version 5 Release 1 to TEC

Sending commands from Tivoli NetView for z/OS Version 5 Release 1 to TEC requires:

• The MultiSystem Manager Tivoli Management Region (TMR) Feature

5.4.24.5 System Considerations for the MultiSystem Manager IP Network Feature

The MultiSystem Manager Internet Protocol feature requires the Event Automation Service (EAS) component of Tivoli NetView for z/OS.

The MultiSystem Manager Internet Protocol feature of Tivoli NetView for z/OS Version 5 Release 1 runs in many different environments. The requirements for each environment are included below:

AIX

When the MultiSystem Manager IP agent is installed on Tivoli NetView for AIX, the IP agent can communicate with Tivoli NetView for z/OS via SNA or TCP/IP. If you are using TCP/IP to communicate between the IP agent and Tivoli NetView for z/OS, the following are required:

- AIX 4.3.3.10 (5765-C34) or later
- Tivoli NetView for AIX 6.0.3 (5698-NVW)

If you are using SNA to communicate between the MultiSystem Manager IP agent and Tivoli NetView for z/OS, the following are required:

- AIX 4.3.3.10 (5765-C34) or later

- Tivoli Netview for AIX 6.0.3 (5698-NVW) or later
- AIX NetView Service Point Version 1 Release 3.3 (5621-107)

Note: If 1.2.2 is already installed, PTF U473211 provides an upgrade to 1.3.3

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

HP-UX

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

- HP-UX Version 10 Release 20 or higher
- Hewlett Packard Network Node Manager (HP OpenView) Version 5 Release 1, or later

save

· Windows NT and Windows 2000

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

- Windows NT Version 4 or Windows 2000
- Tivoli NetView for NT Version 5 Release 1, or later

Sun Solaris

The MultiSystem Manager IP network agent for Solaris uses TCP/IP to communicate between the MultiSystem Manager 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 IP feature for Tivoli Netview for Solaris requires:
 - Solaris Version 2 Release 6 or later
 - Tivoli NetView for Solaris Version 5 Release 1, or later
- The MultiSystem Manager IP agent for OpenView for Solaris requires:
 - Solaris Version 2 Release 6 or later
 - Hewlett Packard Network Node Manager (HP OpenView) Version 5 Release 1 or later

5.4.25 System Considerations for using the REXX Alternate Library (FMID HWJ9133)

Before using the REXX Alternate Library with Tivoli NetView for z/OS Version 5 Release 1 you must first apply the following PTFs.

- UN78518
- UN78525

- UN84251
- UN86020
- UN88434
- UN90776
- UN93567
- UN93568
- UN96368
- UQ02796
- UQ04867
- UQ06343
- UQ06344
- UQ06830
- UQ10660
- UQ12616
- UQ17096
- UQ18015

5.4.26 System Considerations for using Packet Trace Formatting

Before the Packet Trace Formatting function can be used, the correct level of z/OS (or Communications Server) is needed. Either of the following levels are sufficient

z/OS Communications Server 1.4 with APARs PQ77244, PQ77837 and PQ79566

z/OS Communications Server 1.5

The Packet Trace Formatting README file can be found in the CNMSAMP data set as member CNMREAD2.

You are now aware of all of the installation requirements for Tivoli NetView for z/OS Version 5 Release 1. Proceed to 6.0, "Installation Instructions" on page 34 to begin your product installation.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of Tivoli NetView for z/OS Version 5 Release 1.

If you obtained Tivoli NetView for z/OS Version 5 Release 1 as part of a CBPDO, you can use the RIMLIB job on the CBPDO tape to run the SMP/E RECEIVE as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the MVS CBPDO Memo to User Extension included with the CBPDO.

This release of the Tivoli NetView for z/OS Version 5 Release 1 program is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands.

The procedure outlined in this chapter assumes that the user has a knowledge of OS/390 Release 10 SMP/E or later based on the *SMP/E User's Guide*. To resolve any SMP/E related problems in the procedure, refer to the *SMP/E User's Guide* and the *SMP/E Reference*. This installation process does not cover the PARMLIB or other changes to OS/390 that are required to run Tivoli NetView for z/OS Version 5 Release 1. The OS/390 changes required to run Tivoli NetView for z/OS Version 5 Release 1 are discussed in the *Tivoli NetView for z/OS Installation: Getting Started, SC31-8872*.

Please note the following:

- The sample jobs are shown using REGION=0M. A region value equal to 0K or 0M gives the job all the storage available below and above 16 megabytes. Be aware that this can affect the performance of other jobs running in the system. If you do not choose to run with a region size of 0M, refer to z/OS SMP/E Reference, SA22-7772, for more information on how to determine region sizes.
- If you want to install Tivoli NetView for z/OS Version 5 Release 1 into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets.
- Sample jobs have been provided to help perform some or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries required for SMP/E execution have been defined in the appropriate zones.
- The SMP/E dialogs may be used instead of the sample jobs to accomplish the SMP/E installation steps.
- If you will be installing the IBM SAA REXX/370 Alternate Library (5695-014) for use with Tivoli NetView for z/OS Version 5 Release 1 then you should refer to its Program Directory for instructions on how to perform the installation.

The two basic choices for installing Tivoli NetView for z/OS Version 5 Release 1 are:

1. Install into new target and distribution zones. This is the recommended method for Tivoli NetView for z/OS Version 5 Release 1 for users who will continue to use a prior version of NetView after Tivoli NetView for z/OS Version 5 Release 1 has been installed. SMP/E jobs will load the necessary code into the appropriate libraries, then try to delete any prior releases of NetView.

Since you are installing into new CSI zones there is nothing to delete. SMP/E will continue by saying there was nothing deleted. There is no need to give any dummy library names for your prior NetView because SMP/E has no way to know that a previous release was ever installed.

When your testing is finished and you have migrated completely to Tivoli NetView for z/OS Version 5 Release 1, you can run a delete job to remove the old NetView, MultiSystem Manager, and AON/ANO FMIDs from the CSI zone(s). At that time you will have to provide SMP/E with access to the old LPALIB and LINKLIB libraries. For more information see 6.1.13.1, "APPLYing Tivoli NetView for z/OS Version 5 Release 1 on a System Having NCCF or" on page 45. The *Tivoli NetView for z/OS Installation: Configuring Additional Components, SC31-8874* contains additional information on running more than one NetView in a single host.

2. Install the NetView program within existing target and distribution zones. This is the recommended method for installing Tivoli NetView for z/OS Version 5 Release 1 for those who wish to delete their prior release of NetView without keeping the prior and the new NetView available for use at the same time (as in choice 1). If you install Tivoli NetView for z/OS Version 5 Release 1 into the same zone, you must provide access to your prior libraries via DDDEFs or DD statements. SMP/E will remove all traces of your previous release of NetView, including the FMIDs. In addition, you have to provide access to your SYS1.LPALIB so SMP/E may remove the old LPALIB modules. If by chance there are some traces of prior releases that still exist in SMP/E even though the libraries have been deleted, SMP/E will know and you will have to allocate dummy libraries for SMP/E and then apply again. When the apply and accept are complete, you may delete the dummy libraries. Be careful not to delete your real SYS1.LPALIB and SYS1.LINKLIB libraries. For more information see 6.1.13.1, "APPLYing Tivoli NetView for z/OS Version 5 Release 1 on a System Having NCCF or" on page 45.

Note: The HFS directories used in previous release are pointed to by DDDEF statements. Some of those same DDDEF statements are used in this release, but the directory structure has changed.

If you are installing Tivoli NetView for z/OS Version 5 Release 1 into existing SMP/E zones and/or existing target and distribution libraries, you should first make a backup of the zones, the target and distribution libraries and other SMP/E data sets that will be changed during the installation. This backup will allow you to start over in case a severe error occurs during installation.

There is no SYSGEN support for Tivoli NetView for z/OS Version 5 Release 1. If a SYSGEN is performed after the installation of Tivoli NetView for z/OS Version 5 Release 1 is complete, the GENERATE facility of SMP/E can be used to re-install Tivoli NetView for z/OS Version 5 Release 1.

6.1 Installing Tivoli NetView for z/OS Version 5 Release 1

The samples provided with Tivoli NetView for z/OS Version 5 Release 1 must be customized to work in your system's environment. Where possible, the samples call attention to places where customization is necessary; however, it is possible that additional customization might be required. For example, job card information might need to be customized. In addition to this program directory, read the comments in the JCL samples. They are designed to make it easy to find required changes. Some of the JCL values

which should be verified and are most likely to need customization are coded in lower case; a JCL error occurs if the values are overlooked.

6.1.1 SMP/E Considerations for Installing Tivoli NetView for z/OS Version 5 Release 1

This release of Tivoli NetView for z/OS Version 5 Release 1 is installed using the SMP/E RECEIVE, APPLY, and ACCEPT commands. The SMP/E dialogs may be used to accomplish the SMP/E installation steps.

6.1.2 SMP/E Environment

All SMP/E installation jobs provided assume that all necessary DD statements for the execution of SMP/E are defined using DDDEFs.

Sample jobs are provided to assist you in installing Tivoli NetView for z/OS Version 5 Release 1. After the RECEIVE step has been completed, the sample jobs can be found in SMPTLIB: IBM.JENV512.F2. Make a copy of these jobs in your own library and modify them to use during the installation of Tivoli NetView for z/OS Version 5 Release 1. Or you can use the UNLOAD job provided in the program directory to copy the install JCL from the tape. See 6.1.5, "Sample Jobs" on page 37.

In the sample SMP/E jobs provided, the name of the SMP/E CSI is GLOBAL. The global zone name in the SMP/E CSI is GLOBAL. The distribution zone name is dzone. The target zone name is tzone. The sample jobs should be updated to reflect the CSI and zone names used at your installation.

6.1.3 SMP/E Options Subentry Values

The recommended values for some SMP/E CSI subentries are shown in Figure 22. Use of values lower than these may result in failures in the installation process. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. Refer to the SMP/E manuals for instructions on updating the global zone.

Figure 22. SMP/E Options Subentry Values			
SUB-ENTRY	Value	Comment	
DSSPACE	(300,500,900)	Use 900 directory blocks	
PEMAX	SMP/E Default	Tivoli recommends using the SMP/E default for PEMAX.	

6.1.4 SMP/E CALLLIBS Processing

Tivoli NetView for z/OS Version 5 Release 1 uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When Tivoli NetView for z/OS Version 5 Release 1 is installed, ensure that DDDEFs exist for the following libraries:

- CSSLIB
- SCEELKED
- SCEELKEX
- SEZADPIL
- SEZACMTX

Note: The DDDEFs above are used only to resolve the link-edit for Tivoli NetView for z/OS Version 5 Release 1 using CALLLIBS. These data sets are not updated during the installation of Tivoli NetView for z/OS Version 5 Release 1.

Verify that the SMP/E SMPLTS data set has been allocated. Refer to SMP/E Reference for information on allocating the SMPLTS data set.

Note: For Tivoli NetView for z/OS Version 5 Release 1, 296 tracks of 3390 DASD space is adequate for the SMPLTS.

6.1.5 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install Tivoli NetView for z/OS Version 5 Release 1:

Figure 23 (P	Figure 23 (Page 1 of 2). Sample Installation Jobs			
Job Name	Job Type	Description	RELFILE	
CNMJSMPJ	ALLOCATE	Sample job to allocate SMP/E datasets	IBM.JENV512.F2	
CNMJCSIJ	SMPZONE	Sample job to allocate global, target and dlib zones, define the globalzone and default options to SMP/E	IBM.JENV512.F2	
CNMJUCLJ	SMPZONE	Sample job to update DSSPACE and/or PEMAX if using existing zones	IBM.JENV512.F2	
CNMRCVNJ	RECEIVE	RECEIVE job for System Services Base	IBM.JENV512.F2	
CNMRCVEJ	RECEIVE	RECEIVE job for Enterprise Base	IBM.JENV512.F2	
CNMALOCJ	ALLOCATE	Allocate job for target and distribution libraries for Tivoli NetView for z/OS Version 5 Release 1 host.	IBM.JENV512.F2	
CNMJMKPJ	MKDIR	Sample job to create HFS mount point directory of target HFS data set that was allocated. Must be done from ID with root authority.	IBM.JENV512.F2	
CNMJMKMJ	MKDIR	Rexx exec invoked by CNMJMKPJ to create the HFS mount point directory of the target HFS data set.	IBM.JENV512.F2	

Figure 23 (F	Figure 23 (Page 2 of 2). Sample Installation Jobs			
Job Name	Job Type	Description	RELFILE	
CNMJMKXJ	MKDIR	Sample job to execute the exec that creates HFS directories for z/OS UNIX System Services related components. Must be done from ID with root authority. HFS paths	IBM.JENV512.F2	
CNMJMKDJ	MKDIR	Rexx exec to create HFS directories for z/OS UNIX System Services related components HFS paths	IBM.JENV512.F2	
CNMDDEFJ	DDDEF	Sample job to define SMP/E DDDEFs for NetView	IBM.JENV512.F2	
CNMAPLYJ	APPLY	APPLY job for NetView. Must be done from ID with root authority.	IBM.JENV512.F2	
CNMACPTJ	ACCEPT	ACCEPT job for NetView	IBM.JENV512.F2	
CNMJUMCS	PRINT	Sample job to print out SMPMCS	IBM.JENV512.F2	

You may copy the jobs from the tape or product files by submitting the job below. Use either the //TAPEIN or the //FILEIN DD statement, depending on your distribution medium, and comment out or delete the other statement. Add a job card and change the lowercase parameters to uppercase values to meet your site's requirements before submitting.

```
//UNLOAD EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//TAPEIN
            DD DSN=IBM.JENV512.F2,UNIT=tunit,
//
               LABEL=(9,SL),DISP=OLD,
//
               VOL=SER=JNV510
//FILEIN
            DD DSN=IBM.JENV512.F2,UNIT=SYSALLDA,DISP=SHR,
//
            VOL=SER=filevol
//0UT
            DD DSN=HLQ.SLQ.INSTALL,
//
               DISP=(NEW, CATLG, DELETE),
               VOL=SER=dasdvol, UNIT=SYSALLDA,
//
//
               SPACE=(CYL,(100,10,25))
//SYSUT3
           DD UNIT=SYSALLDA, SPACE=(CYL, (1,1))
           DD *
//SYSIN
    COPY INDD=xxxxIN,OUTDD=OUT
/*
//
```

where tunit is the unit value matching the product tape, filevol is the volume serial of the DASD device where the downloaded files reside, HLQ.SLQ. are the high level and secondary level qualifiers for the output data set, dasdvol is the volume serial of the DASD device where the output data set will reside and xxxxIN on the SYSIN DD to either TAPEIN or FILEIN depending on your input DD statement.

You can also access the sample installation jobs by performing an SMP/E RECEIVE and then copying the jobs from the SMPTLIBs to a work data set for editing and submission. See Figure 23 on page 37 to find the appropriate SMPTLIB data set.

6.1.6 Establish the Correct SMP/E Environment for Tivoli NetView for z/OS Version 5 Release 1

6.1.6.1 SMP/E Data Sets for Tivoli NetView for z/OS Version 5 Release 1

If you chose to allocate a NetView SMP/E CSI then you may also wish to allocate separate SMP/E data sets for use with the new global zone. Sample CNMJSMPJ is provided in HLQ.SLQ.INSTALL for that purpose. It is important that the data set names match between sample job CNMJSMPJ and those that are specified in all of the installation jobs supplied with Tivoli NetView for z/OS Version 5 Release 1. CNMJSMPJ is written to allow for a customer supplied second level qualifier to the data set names but does not require it. If you choose to add a second level qualifier you should code it in the SMPSLQ parameter and be sure it contains the trailing period (e.g. SMPSLQ=USER.).

• Expected Return Codes and Messages: The CNMJSMPJ job is considered successful if return code zero is received.

6.1.6.2 SMP/E CSI for Tivoli NetView for z/OS Version 5 Release 1

Users who wish to allocate new CSI data sets and create a separate set of global, distribution and target zones for NetView may do so using the sample CNMJCSIJ supplied in HLQ.SLQ.INSTALL. CNMJCSIJ will allocate and prime a global CSI data set, allocate and prime separate CSI data sets for the target and distribution zones, and initialize the zones once the CSIs are allocated and primed. Along with following the directions specified in the comments of the CNMJCSIJ sample, you should review the SMP/E options defined in CNMJCSIJ. These options were chosen for maximum flexibility and a minimum number of later updates; you may wish to change some options. For example, the NOPURGE option, prevents the deletion of global zone SYSMOD entries, HOLDDATA entries, SMPPTS MCS entries and SMPTLIB data sets during ACCEPT processing. Specifying PURGE could save some disk space if the consequences are acceptable. The SMP/E User's Guide and the SMP/E Reference will be helpful in determining whether or not to specify NOPURGE.

The ACCJCLIN option tells SMP/E to save inline JCLIN in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. The ACCJCLIN option can be specified in the CNMJCSIJ sample job, or a separate UCLIN job can be executed at a later time to add this option. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

• Expected Return Codes and Messages: The CNMJCSIJ job is considered successful if return code zero is received. If this is the first time you have run this job, and there are no existing CSIs to delete, then you will get a return code of 8 for the delete step.

6.1.6.3 OS/390 Release 10 SMP/E or later access to Tivoli NetView for z/OS Version 5 Release 1 Data Sets

Tivoli NetView for z/OS Version 5 Release 1 now has it's own MACLIB and AMACLIB data sets instead of using the system data sets. They are SCNMMAC1 and ACNMMAC1.

To establish the correct SMP/E access to Tivoli NetView for z/OS Version 5 Release 1 data sets, complete the following steps:

- Ensure that the SMP/E space requirements outlined in Figure 15 on page 18 and Figure 16 on page 19 are met by the SMP/E environment that will be used to install Tivoli NetView for z/OS Version 5 Release 1. If you choose to use samples CNMJSMPJ and CNMJCSIJ to create your SMP/E environment, these requirements are met and you may continue to 6.1.7, "Perform SMP/E RECEIVE." If you are not using CNMJSMPJ and CNMJCSIJ to create your SMP/E environment, read the following items.
 - Storage requirements for the SMPCSI data sets are found in Figure 14 on page 18.
 - CNMJUCLJ, found in HLQ.SLQ.INSTALL, can be used to set DSSPACE and PEMAX to the
 values shown in Figure 22 on page 36. CNMJUCLJ should only be used if the values in your
 current OPTIONS entry are less than the values shown in Figure 22 on page 36.
 - Run CNMJUCLJ, if necessary, before proceeding to 6.1.7, "Perform SMP/E RECEIVE".
 Expected Return Codes and Messages: The CNMJUCLJ job is considered successful if return code zero is received.

6.1.7 Perform SMP/E RECEIVE

Edit and submit sample receive jobs CNMRCVNJ and CNMRCVEJ to perform the SMP/E RECEIVE for Tivoli NetView for z/OS Version 5 Release 1. Consult the instructions in the sample jobs for more information. You will need to run both CNMRCVNJ and CNMRCVEJ.

Note: If you obtained Tivoli NetView for z/OS Version 5 Release 1 as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the Tivoli NetView for z/OS Version 5 Release 1 FMIDs as well as any service, HOLDDATA, or preventive service planning (PSP) information included on the CBPDO tape. For more information, refer to the documentation included with the CBPDO.

Make the changes as indicated in the JCL comments (as well as any other changes required by your site) and submit the jobs.

CNMRCVNJ:

The JCL contained in the sample job CNMRCVNJ should be run for all installations.

Expected Return Codes and Messages: The CNMRCVNJ job is considered successful if return code zero is received.

CNMRCVEJ:

The JCL contained in the sample job CNMRCVEJ should be run for all installations.

Expected Return Codes and Messages: The CNMRCVEJ job is considered successful if return code zero is received.

6.1.8 Allocate SMP/E Target and Distribution Libraries and Paths

6.1.8.1 Allocate SMP/E Target and Distribution Libraries

Ensure that the Tivoli NetView for z/OS Version 5 Release 1 target and distribution libraries have sufficient space. To see the minimum sizes needed refer to Figure 19 on page 20 and Figure 17 on page 19. To allow for maintenance, the space allocations in allocation samples are larger than the actual minimum space required.

If you are installing the NetView program for the first time, the allocation sample, CNMALOCJ, can be used to create the target and distribution libraries which are used exclusively by Tivoli NetView for z/OS Version 5 Release 1.

Optionally, CNMALOCJ can also allocate your target HFS data set, 'hhhhhh.NETVIEW.V5R1J.HFS', that will be used to install NetView code.

Note: You are not required to allocate a target HFS data set, however, it is recommended. If you do not wish to allocate a target HFS data set for NetView, you can still install into either your root HFS data set or into another HFS data set. Currently, CNMALOCJ will not allocate a target HFS data set. If you wish to allocate one you must uncomment the ALLOC2 step before running the CNMALOCJ sample job.

The target library SCNMLPA1 must be cataloged in the master catalog so that it can later be concatenated to SYS1.LPALIB via the LPALSTxx member of SYS1.PARMLIB. The target library CNMLINK must also be cataloged in the master catalog if it is to be added to the linklist via the LNKLSTxx member of SYS1.PARMLIB. The LPALIB and LINKLIST concatenations are discussed further in the Tivoli NetView for z/OS Installation: Getting Started, SC31-8872.

6.1.8.2 Tivoli NetView for z/OS Version 5 Release 1 host components

If you are allocating new Tivoli NetView for z/OS Version 5 Release 1 libraries run CNMALOCJ. After running CNMALOCJ you should proceed to 6.1.9, "Create Hierarchical File System Mount Point Directory" on page 42.

CNMALOCJ:

Expected Return Codes and Messages: The CNMALOCJ job is considered successful if return code zero is received.

6.1.9 Create Hierarchical File System Mount Point Directory

If you allocated a new HFS data set with CNMALOCJ, then you can use CNMJMKPJ to create the HFS mount point directory, <PathPrefix>/usr/lpp/netview/, which will be used to mount your target HFS data set. If you did not allocate a new HFS then you can continue with step 6.1.11, "Create Hierarchical File System Directories" on page 43. CNMJMKPJ must be run by a userid that has superuser authority (for example, ROOT), and the UNIX System Services component of OS/390 must be active.

Note: CNMJMKPJ assumes that the <PathPrefix>/usr/lpp/ directories already exist. If these directories do not exist, manually create the <PathPrefix>/usr/lpp/ directories before submitting CNMJMKPJ.

Note: When editing sample CNMJMKPJ, be sure that you use the same <PathPrefix> value when you edit sample CNMDDEFJ. The default value that is shipped with Tivoli NetView for z/OS Version 5 Release 1 is null. Remember that pathnames in z/OS UNIX System Services are case sensitive.

CNMJMKPJ:

Expected Return Codes and Messages: The CNMJMKPJ job is considered successful if return code zero is received.

6.1.10 Mount The Target Hierarchical File System Dataset

If you chose to allocate a new HFS, as defined in sample CNMALOCJ, then use the following TSO/E command to mount the target HFS dataset that was allocated by sample CNMALOCJ at the mount point directory:

```
MOUNT FILESYSTEM('hhhhhh.NETVIEW.V5R1J.HFS')
      MOUNTPOINT('<PathPrefix>/usr/lpp/netview/')
      TYPE(HFS) MODE(RDWR)
```

'hhhhhh.NETVIEW.V5R1J.HFS' is the name of your target HFS dataset and <PathPrefix> is the high-level directory name that will be used in sample CNMDDEFJ. Be sure to mount the target HFS dataset in read/write mode. After the steps in this program directory have been completed, you should re-mount the target HFS dataset in read only mode in order to protect the data installed. This command must be entered by a userid that has superuser authority (for example, ROOT), and the UNIX System Services component of OS/390 must be active.

Note: If you re-ipl your target system, you will have to re-enter this command in order to re-mount the target HFS dataset. To automatically mount the target HFS dataset during the ipl process, modify your BPXPRMxx member of SYS1.PARMLIB. Instructions for modifying your BPXPRMxx member are provided in the Tivoli NetView for z/OS Installation: Getting Started, SC31-8872.

6.1.11 Create Hierarchical File System Directories

For Tivoli NetView for z/OS Version 5 Release 1, edit and submit sample CNMJMKXJ which creates HFS directories for z/OS UNIX System Services Related Components in NetView. CNMJMKXJ must be run by a userid that has superuser authority (for example, ROOT), and the UNIX System Services component of OS/390 must be active.

Note: When editing sample CNMJMKXJ, be sure that you use the same <PathPrefix> value in sample CNMDDEFJ.

CNMJMKXJ:

Expected Return Codes and Messages: The CNMJMKXJ job is considered successful if return code zero is received.

6.1.12 Create DDDEF Entries

Add the DDDEFs for Tivoli NetView for z/OS Version 5 Release 1 target libraries and distribution libraries (for SMP/E RESTORE processing) to the target zone into which Tivoli NetView for z/OS Version 5 Release 1 will be APPLYed. Also add the DDDEFs for distribution libraries to the distribution zone into which Tivoli NetView for z/OS Version 5 Release 1 will be ACCEPTed.

Run CNMDDEFJ before proceeding. You must make some modifications to CNMDDEFJ before running

Note: Because pathnames in z/OS UNIX System Services are case sensitive, be sure when you change <PathPrefix> in the DDDEF7 step not to change the case of any characters in the HFS pathname.

CNMDDEFJ:

Expected Return Codes and Messages: The CNMDDEFJ job is considered successful if return code zero is received.

6.1.13 Perform SMP/E APPLY

Edit and submit the sample job for your installation, CNMAPLYJ, to perform an SMP/E APPLY CHECK for Tivoli NetView for z/OS Version 5 Release 1. Consult the instructions in the sample job for more information. Note: There are two PTFs that must be applied either before or with JENV513. They are PTFs UW92582 and UW92583. It is mandatory that you apply these PTFs at this time.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the APPLY CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Once you have taken any actions indicated by the APPLY CHECK, remove the CHECK operand and run the jobs again to perform the APPLY.

Note: The GROUPEXTEND operand indicates that SMP/E apply all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

If you have previously installed NetView or NCCF into target libraries that you will continue to use with Tivoli NetView for z/OS Version 5 Release 1, you will need to let SMP/E remove the old NetView or NCCF from those target libraries at APPLY time. See section 6.1.13.1, "APPLYing Tivoli NetView for z/OS Version 5 Release 1 on a System Having NCCF or" on page 45 for more information.

The APPLY job, CNMAPLYJ will apply one or more FMIDs. You may choose to apply FMIDs individually, or all at once. Make the changes as indicated in the JCL comments contained in CNMAPLYJ (as well as any other changes required by your site) and submit the job. Remember, you must comment out any FMIDs that you will not be applying.

Note: It is strongly recommended that you APPLY the NetView components in the order listed in the sample apply job. This is because Tivoli NetView for z/OS Version 5 Release 1 has many dependencies between components. These dependencies will cause unresolved external reference messages to be generated during the APPLY. The correct order for applying is

- HENV510
- JENV512
- JENV513
- JENV515

Note: The CNMAPLYJ job must be run by a userid that has superuser authority (for example, ROOT), and the UNIX System Services component of OS/390 must be active.

Warning: Because Tivoli NetView for z/OS Version 5 Release 1 has been divided into several FMIDs this release, some load modules will be built with parts from multiple FMIDs. SMP/E will handle this automatically for you by keeping track of what parts are needed and adding them into load modules as they are applied. However, this means that some linkage editor steps will initially finish with a return code of 4. In order to keep the APPLY step from ending prematurely, you must set SMP/E to allow a return code of 4. (This is done automatically if you use the SMP/E sample installation jobs provided). This can also be done by using the SMP/E dialogs or UCLIN to set the return code for specific utilities such as IEWL, the linkage editor.

CNMAPLYJ:

Expected Return Codes and Messages from APPLY CHECK: The job is considered successful if return code zero is received.

Expected Return Codes and Messages from APPLY: The job is considered successful if return code zero is received.

6.1.13.1 APPLYing Tivoli NetView for z/OS Version 5 Release 1 on a System **Having NCCF or**

NetView Already Installed You should do either 6.1.13.1.1, "Deleting a Previous Release of NCCF or NetView" on page 45 or 6.1.13.1.2, "Running with a Previous Release of NCCF or NetView" on page 45, but not both.

6.1.13.1.1 Deleting a Previous Release of NCCF or NetView: If you have previously installed NetView or NCCF into system libraries and you will use those libraries again with Tivoli NetView for z/OS Version 5 Release 1, but you do not want to continue using this release after your Tivoli NetView for z/OS Version 5 Release 1 install, you will need to use SMP/E to remove the old NetView or NCCF from those libraries when SMP/E installs Tivoli NetView for z/OS Version 5 Release 1.

This is particularly important when the prior release of NetView or NCCF was installed into SYS1.LINKLIB and/or SYS1.LPALIB. If you do not remove the previous release of NetView or NCCF from SYS1.LINKLIB and SYS1.LPALIB, the newly installed system will be executing the previous NetView or NCCF modules instead of Tivoli NetView for z/OS Version 5 Release 1 modules.

For SMP/E to remove the previous release of NetView or NCCF from your system's libraries, you will have to take the following steps:

- You will have to run your APPLY job using your old NetView or NCCF libraries and SMP/E zone.
- During an APPLY, all the elements from a previous release are deleted from your target libraries. If you have previously deleted old libraries or elements within a library, the SMP/E entry for them will still exist. An attempt will be made to delete elements, and processing will continue whether or not they are found. However, if SMP/E cannot find the data sets, it will halt the APPLY until you provide access to them. In this case, allocate dummy libraries and delete them after the APPLY.
- Any old NetView data sets that are deleted should be removed from your SMP/E zone DDDEFs (CNMDDEFJ). If you have a previous version of MultiSystem Manager or AON/ANO installed you will need to delete those data sets as well.
- · Since the APPLY will have deleted BNJMTERM from SYS1.LPALIB, no IPLs should be performed with the CLPA option until the library SCNMLPA1 is concatenated to SYS1.LPALIB via a LPALSTxx member of SYS1.PARMLIB (refer to the Tivoli NetView for z/OS Installation: Getting Started, SC31-8872).

Warning: If an IPL is performed with the CLPA option before SCNMLPA1 is concatenated to SYS1.LPALIB, the target system will not IPL.

To lessen the exposure to this situation, you might want to add SCNMLPA1 to the LPALSTxx member (refer to Tivoli NetView for z/OS Installation: Getting Started, SC31-8872) before actually APPLYing Tivoli NetView for z/OS Version 5 Release 1.

6.1.13.1.2 Running with a Previous Release of NCCF or NetView: If you have previously installed NetView or NCCF and you plan to continue using this release after your Tivoli NetView for z/OS Version 5 Release 1 install, you MUST use separate SMP/E target zones for your Tivoli NetView for z/OS Version 5 Release 1 install. After your period of testing Tivoli NetView for z/OS Version 5 Release 1 is finished, you

should delete the previous release of NetView or NCCF. If the previous level of NetView is earlier than Version 2 Release 1 (or NetView Version 1 Release 3 MVS/ESA) then you must manually delete the old modules from SYS1.LPALIB and SYS1.LINKLIB since the new release uses modules which are placed in SCNMLPA1 rather than LPALIB and CNMLINK instead of LINKLIB. These modules in SCNMLPA1 are downward compatible with previous releases and the most recent version should be used.

When your migration is complete and you wish to delete your previous release of NCCF or NetView, you may run an SMP/E job using a dummy FMID to delete the previous release and its parts from the old libraries and the previous release's target and distribution zones. A UCLIN job is used to clean out references to the dummy FMID from the CSI zones. This assumes you have installed Tivoli NetView for z/OS Version 5 Release 1 in a separate CSI(s) or zone(s) from the previous release. Figure 24 lists the releases prior to Tivoli NetView for z/OS Version 5 Release 1.

Figure 24 (Page 1 of 2). NetView FMIDs to delete by Version/Release

Version/Release	MVS/370	MVS/XA	MVS/ESA
NetView V1R1	HNV1102	HNV1103	N/A1
NetView V1R2	HNV1202	HNV1203	N/A1
NetView V1R3	N/A ²	HNV1303	HVNW140
NetView V2R1	N/A ²	HVWW101	HXYZ101
NetView V2R2	N/A ²	HVWW200	HXYZ200
NetView V2R3	N/A ²	HVWW300	HXYZ300
NetView V2R4	N/A ²	N/A ³	HXYZ400
NetView V3R1	N/A ²	N/A ³	HPZ8100, HPZ8130
TME 10 NetView V1R1	N/A ²	N/A ³	HPZ8200
TME 10 NetView V1R2	N/A ²	N/A ³	HPZ8300
TME 10 NetView V1R3	N/A ²	N/A ³	HPZ8400
Tivoli 10 NetView V1R4	N/A ²	N/A ³	HPZ8500
MultiSystem Manager V1R1	N/A ⁴	N/A5	HFLC100
MultiSystem Manager V1R2	N/A ⁴	N/A5	HFLC200
MultiSystem Manager V2R1	N/A ⁴	N/A ⁵	HFLC300
MultiSystem Manager V2R2	N/A ⁴	N/A ⁵	HFLC400

Figure 24 (Page 2 of 2). NetView FMIDs to delete by Version/Release

Version/Release	MVS/370	MVS/XA	MVS/ESA
AON/ANO FMIDs	N/A6	N/A ⁷	HLR6110, HLR6200, HML6110, HML6111, H080100

Notes:

- 1. NetView was not shipped in MVS/ESA for this release.
- 2. NetView was not shipped in MVS/370 for this release.
- 3. NetView was not shipped in MVS/XA for this release.
- 4. MultiSystem Manager was not shipped in MVS/370.
- 5. MultiSystem Manager was not shipped in MVS/XA.
- 6. AON/ANO was not shipped in MVS/370 for this release.
- 7. AON/ANO was not shipped in MVS/XA for this release.

If you have not accepted all of your maintenance, you may have additional work to complete the cleanup of your global zones. You should use the REJECT command to delete any SYSMODs and HOLDDATA applicable to the dummy function and the old function. In addition, you should delete the FMIDs from the GLOBALZONE entry to prevent SMP/E from receiving any SYSMODs or HOLDDATA applicable to either of those functions. Here are examples of the commands you can use to do this:

```
*/.
SET
        BDY (GLOBAL)
                         /* Set to global zone.
REJECT HOLDDATA NOFMID
                         /* Reject SYSMODs, HOLDDATA */
       DELETEFMID
                         /* for the deleted functions.*/
       (nvdelet fmid2dl) /* Delete the FMIDs from the */
                         /* GLOBALZONE entry.
                                                       */.
```

Figure 25. Additional delete logic

6.1.13.2 Running and Verifying the APPLY of Tivoli NetView for z/OS Version 5 Release 1

Run the apply job CNMAPLYJ. It should end with a return code of 0. If the code is non zero then analyze the reports from the APPLY and take whatever action is necessary to resolve the errors. The analysis of APPLY reports is covered in detail in the SMP/E User's Guide.

Load module DSITCT will not be deleted during APPLY processing for customers who have the TCAM interface module, IEDQB1, installed with NCCF. This is not an error.

You should be aware that you may receive a return code of 0 and still find unresolved references in your APPLY output. This is normal and not a problem. With SMP/E R8 many modules are built twice. The first version is built without any references to HLL libraries resolved and stored in an SMP/E dataset, SMPLTS. This version will have unresolved external references. It is used by SMP/E to rebuild the module if you should update the level of any of your HLL's. SMP/E then builds the useable version of the module with the HLL libraries, resolving any external references. If the useable version builds correctly the APPLY job will end with a return code of 0. Please note that this is an explanation of how CALLLIBS works, not an

instruction to run REPORT CALLLIBS each time maintenance is applied to your high level language. This need was eliminated in Language Environment Version 1 Release 3 and is applicable to all OS/390 releases. You will still need to run REPORT CALLLIBS if your PL/I or C/390 products have maintenance applied, but not if your high level language source is LE V1R3 or higher which includes all levels of OS/390 Release 3 or higher.

Note: There are some load modules that will not have all their external references resolved by the APPLY. This is because they may need to be linked in with user code, because they are used by another FMID to build a larger load module, or because they need a part from an FMID that has not yet been applied. The ACTION column will indicate if and how the external references will be resolved. If the ACTION column says "NONE" then this module will never have its external references resolved. This is not a problem. It means that the load module is never executed by itself, but is used to build a larger load module in a different product.

Depending on the level of OS/390 used, you will receive additional warning and informational messages when you run the APPLY jobs. Most of these are not a problem. Figure 26 lists the messages, and the approximate number of times each message will occur, for each set of FMIDs. This is not meant to be an exact list, as the level of your operating system may cause variations in the results, but is meant to be used as a guide in assessing whether your APPLY ran correctly.

Figure 26. Warning and Informational Messages Received during APPLY			
Message Number	HENV510 JENV512	JENV513 JENV515	
GIM23913I	4825	1014	
GIM23913W	3	0	
GIM23914I	0	0	
IEW2454W	33	175	
IEW2646W	1	0	
IEW2651W	1	0	
IEW2650I	11	37	

6.1.14 Perform SMP/E ACCEPT

Edit and submit the sample job, CNMACPTJ to perform an SMP/E ACCEPT CHECK for Tivoli NetView for z/OS Version 5 Release 1. Consult the instructions in the sample jobs for more information. You may subdivide the ACCEPT job and process one FMID at a time.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the following on the ACCEPT CHECK: PRE, ID, REQ, and IFREQ. This is because the SMP/E root cause analysis identifies the cause only of ERRORS and not of WARNINGS (SYSMODs that are bypassed are treated as warnings, not errors, by SMP/E).

Before using SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. This will cause entries produced from JCLIN to be saved in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

Once you have taken any actions indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.

Note: The GROUPEXTEND operand indicates that SMP/E accept all requisite SYSMODs. The requisite SYSMODs might be applicable to other functions.

If PTFs containing replacement modules are being ACCEPTed, SMP/E ACCEPT processing will linkedit/bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder may issue messages documenting unresolved external references, resulting in a return code of 4 from the ACCEPT step. These messages can be ignored, because the distribution libraries are not executable and the unresolved external references will not affect the executable system libraries.

Edit and submit sample accept jobs to perform an SMP/E ACCEPT for Tivoli NetView for z/OS Version 5 Release 1. Consult the instructions in the sample job for more information.

The ACCJCLIN option tells SMP/E to save inline JCLIN in the distribution zone whenever a SYSMOD containing inline JCLIN is ACCEPTed. The ACCJCLIN option can be added by executing a UCLIN ADD job. For more information on the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E manuals.

If you have previously installed NetView or NCCF into distribution libraries that you will continue to use with Tivoli NetView for z/OS Version 5 Release 1, you will need to let SMP/E remove the old NetView or NCCF from those distribution libraries at ACCEPT time.

CNMACPTJ, supplied in HLQ.SLQ.INSTALL will accept one or more FMIDs. You will need to run this job for each FMID for which you did a RECEIVE and APPLY.

After choosing which FMIDs you should run, make the changes as indicated in the JCL comments contained in CNMACPTJ (as well as any other changes required by your site) and submit the job. Remember, you must comment out any FMIDs that you will not be accepting. The analysis of ACCEPT reports is covered in detail in SMP/E User's Guide.

CNMACPTJ:

Expected Return Codes and Messages from ACCEPT CHECK: The job is considered successful if return code 0 is received.

Expected Return Codes and Messages from ACCEPT: The job is considered successful if return code 0 is received.

6.1.14.1 ACCEPTing Tivoli NetView for z/OS Version 5 Release 1 on a System **Having NCCF or**

NetView Already Installed You should do either 6.1.14.1.1, "Deleting a Previous Release of NCCF or NetView" on page 50 or 6.1.14.1.2, "Running with a Previous Release of NCCF or NetView" on page 50, but not both.

6.1.14.1.1 Deleting a Previous Release of NCCF or NetView: If you have previously installed NetView or NCCF into system libraries and you will reuse those libraries with Tivoli NetView for z/OS Version 5 Release 1, but you do NOT want to continue using this release after your Tivoli NetView for z/OS Version 5 Release 1 install you will need to let SMP/E remove the old NetView or NCCF from those libraries when SMP/E installs Tivoli NetView for z/OS Version 5 Release 1.

To allow SMP/E to remove the old NetView or NCCF from your system's libraries, you will have to take the following steps:

- You will have to run your ACCEPT job using your old NetView or NCCF libraries and SMP/E zone.
- During an ACCEPT, all the elements from a previous release are deleted from your distribution libraries. If you have previously deleted old libraries or elements within a library, the SMP/E entry for them will still exist. An attempt will be made to delete them and processing will continue whether or not the element is found. However, if SMP/E cannot find the data sets, it will halt the ACCEPT until you provide access to them. In this case, allocate dummy libraries and delete them after the ACCEPT.
- Any old NetView data sets that are deleted should also be removed from your SMP/E zone DDDEFs. If you have a previous version of MultiSystem Manager or AON/ANO installed you will need to delete those data sets as well.

6.1.14.1.2 Running with a Previous Release of NCCF or NetView: If you have previously installed NetView or NCCF and you plan to continue using this release after your Tivoli NetView for z/OS Version 5 Release 1 install, you MUST use separate SMP/E distribution zones for your Tivoli NetView for z/OS Version 5 Release 1 install.

When your migration is complete and you wish to delete your previous release of NCCF or NetView, you may run the dummy SMP/E job to delete the old distribution libraries from the previous release's CSI zone. This assumes you have installed Tivoli NetView for z/OS Version 5 Release 1 in a separate CSI from the previous release. This process is described in 6.1.13.1.2, "Running with a Previous Release of NCCF or NetView" on page 45 and the jobs provided perform the receive, apply, and accept steps.

6.1.15 Installing the PTFs for CUM Maintenance

For information concerning PTF installation, refer to SMP/E User's Guide.

APPLY and ACCEPT any CUM tape received with this product.

6.1.15.1 Publications Useful During Installation

The publications listed in Figure 27 on page 51 may be useful during the installation of Tivoli NetView for z/OS Version 5 Release 1. To order copies, contact your IBM and/or Tivoli representative.

Figure 27. Publications Useful During Installation	
Publication Title	Form Number
Tivoli Management Framework for OS/390 Program Directory, Version 3.6.1	GI10-8039
Tivoli Management Framework for OS/390 Release Notes: Server, Gateway, and Endpoint, Version 3.6.1	GI10-9186
TME 10 Framework Release Notes, Version 3.6.1	GI10-8014
TME 10 Framework Release Notes, Version 3.6	GI10-3028
TME 10 Framework Planning and Installation Guide 3.6	SC31-8432
TME 10 Framework Reference 3.6	SC31-8434
TME 10 Framework User's Guide 3.6	GC31-8433
TME 10 Software Installation Service User's Guide 3.6	GC31-5121
TME 10 Software Installation Service Release Notes 3.6.1	GI10-8015
TME 10 Software Installation Service Release Notes 3.6	GI10-0512

6.1.16 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs

The following data sets, allocated and used by previous releases of this product, are no longer used in this release. You may choose to delete these obsolete data sets after you delete the previous release from your system.

- SEKGCAS1
- AEKGCAS1
- SEKGLUTB
- AEKGLUTB
- SEKGPNL1
- AEKGPNL1
- SEKGSMP1
- AEKGSMP1
- SEKGMOD1
- AEKGMOD1
- SEKGMOD2

- SEKGLNK1
- SEZLCLST
- AEZLCLST
- SEZLINST
- AEZLINST
- SEZLLINK
- AEZLLINK
- SEZLPNLU
- AEZLPNLU
- SEZLSAMP
- AEZLSAMP

The following HFS paths, created and used by previous releases of this product, are no longer used in this release. You may choose to delete these obsolete HFS paths after you delete the previous release from your system.

- /usr/lpp/netview/bin/IBM/
- /usr/lpp/netview/samples/IBM/
- /usr/lpp/netview/lib/IBM/
- /usr/lpp/netview/mibs/IBM/
- /usr/lpp/netview/doc/IBM/
- /usr/lpp/netview/man/C/cat1/IBM/
- /usr/lpp/netview/samples/properties/IBM
- /usr/lpp/netview/samples/properties/startup/IBM

The following DDDEF entries, created and used by previous releases of this product, are no longer used in this release. You may choose to delete these obsolete DDDEF entries after you delete the previous release from your system.

- SEKGCAS1
- AEKGCAS1
- SEKGLUTB
- AEKGLUTB
- SEKGPNL1
- AEKGPNL1
- SEKGSMP1

- AEKGSMP1
- SEKGMOD1
- AEKGMOD1
- SEKGMOD2
- SEKGLNK1
- SEZLCLST
- AEZLCLST
- SEZLINST
- AEZLINST
- SEZLLINK
- AEZLLINK
- SEZLPNLU
- AEZLPNLU
- SEZLSAMP
- AEZLSAMP
- SCNMUX01
- SCNMUX02
- SCNMUX05
- SCNMUX06
- SCNMUX07
- SCNMUX08

6.2 Activating Tivoli NetView for z/OS Version 5 Release 1

The publication Tivoli NetView for z/OS Installation: Getting Started, SC31-8872 contains the step-by-step procedures to activate the functions of Tivoli NetView for z/OS Version 5 Release 1.

The publication Tivoli NetView for z/OS Installation: Getting Started, SC31-8872 contains procedures for activating functions of Tivoli NetView for z/OS Version 5 Release 1. For additional information refer to the publications noted in Figure 4 on page 6.

Appendix A. Program Level Information

The following PTFs containing APAR fixes against this release of IBM TIVOLI NETVIEW FOR Z/OS 5.1.0 have been integrated into this release.

NOTE: COR-CLOSED PTFs are available for 'Corrective Service' and will be placed on the next available ESO Tape (Expanded Service Option, formerly known as PUT Tapes). The following sub-categories for COR-CLOSED PTFs have been provided by Software Delivery and Fulfillment (SDF), Poughkeepsie:

PUTyymm COR-CLOSED PTFs that are available on an ESO Tape, where 'yynn' indicates the year and the month that the ESO tape became available.

RSUyymm RSU (Recommended Service Upgrade) is a preventive service philosophy for all S/390 products that are serviced by IBM for the OS/390 and MVS platforms. RSU reduces the volume of PTFs customers need to apply for preventive maintenance. RSU became available at OS/390 Release 2 GA (9/96), and is identified via an additional SOURCEID of RSUyymm, where 'yymm' indicates the year and the month the PTF was assigned this SOURCEID.

SMCREC COR-CLOSED PTFs that are not yet available on an ESO Tape, but have been researched and recommended for installation by Software Delivery and Fulfillment (SDF) in Poughkeepsie.

SMCCOR COR-CLOSED PTFs that are not yet available on an ESO Tape and have no special recommendation for installation.

HENV510

UA00103 - RSU0306	UA02944 - RSU0309	UA04359 - RSU0312
UA00276 - RSU0306	UA03413 - RSU0309	UA04526 - RSU0312
UA00571 - RSU0306	UA03553 - RSU0312	UA04842 - PUT0310
UA00893 - RSU0306	UA03554 - RSU0312	UA04891 - PUT0310
UA01204 - RSU0306	UA03721 - RSU0312	UA05086 - PUT0310
UA01369 - RSU0306	UA03833 - RSU0312	UA05087 - PUT0310
UA01372 - RSU0306	UA03841 - RSU0312	UA05088 - PUT0310
UA01398 - RSU0306	UA03849 - RSU0312	UA05348 - PUT0310
UA01401 - RSU0306	UA03863 - RSU0312	UA05828 - PUT0310
UA01711 - RSU0309	UA03868 - RSU0312	UA05902 - PUT0310
UA01839 - RSU0306	UA03881 - RSU0312	UA06006 - PUT0310
UA02130 - RSU0309	UA03885 - RSU0312	UA06014 - PUT0310
UA02163 - RSU0309	UA03942 - RSU0309	UA06488 - PUT0311
UA02380 - RSU0309	UA03944 - RSU0309	UA06524 - PUT0311
UA02382 - RSU0309	UA03964 - RSU0312	UA06619 - PUT0311
UA02569 - RSU0306	UA04098 - RSU0312	UA06683 - PUT0310
UA02570 - RSU0309	UA04104 - RSU0312	UA06684 - PUT0310
UA02615 - RSU0309	UA04111 - RSU0312	UA06785 - PUT0311
UA02683 - RSU0309	UA04123 - RSU0312	UA06786 - PUT0311
UA02688 - RSU0309	UA04199 - RSU0312	UA06787 - PUT0311
UA02740 - RSU0309	UA04356 - PUT0311	UA06898 - PUT0311

	UAU0900 - PU10401	UAU0401 - PU1U401	UW92011 - R3UU212
	UA07016 - PUT0311	UA08512 - PUT0402	UW92878 - RSU0212
	UA07109 - PUT0312	UA08660 - PUT0402	UW93064 - RSU0212
	UA07223 - PUT0401	UW87233 - RSU0204	UW93078 - RSU0212
	UA07299 - PUT0312	UW87920 - RSU0209	UW93234 - RSU0212
	UA07300 - PUT0312	UW87922 - RSU0209	UW93434 - RSU0212
	UA07328 - PUT0312	UW88078 - RSU0209	UW93440 - RSU0212
	UA07330 - PUT0312	UW88161 - RSU0209	UW93441 - RSU0212
	UA07331 - RSU0401	UW88233 - RSU0209	UW93538 - RSU0212
	UA07408 - PUT0312	UW88529 - RSU0209	UW93571 - RSU0212
	UA07692 - PUT0401	UW88530 - RSU0209	UW93572 - RSU0212
	UA07693 - PUT0401	UW89415 - RSU0209	UW93689 - RSU0212
	UA07712 - PUT0402	UW89416 - RSU0209	UW94458 - RSU0303
	UA07804 - PUT0401	UW89417 - RSU0306	UW94470 - RSU0303
	UA07807 - PUT0401	UW89466 - RSU0209	UW94564 - RSU0303
	UA07818 - PUT0401	UW89471 - RSU0212	UW95201 - RSU0303
	UA08026 - PUT0401	UW89800 - RSU0209	UW95221 - RSU0306
	UA08043 - PUT0402	UW92019 - RSU0212	UW95345 - RSU0303
	UA08054 - PUT0401	UW92291 - RSU0212	UW95347 - RSU0303
	UA08249 - PUT0402	UW92582 - RSU0212	UW95464 - RSU0309
	UA08346 - PUT0401	UW92672 - RSU0212	UW95630 - RSU0303
	UA08402 - PUT0401	UW92695 - RSU0212	UW95794 - RSU0303
	UA08460 - RSU0402	UW92849 - RSU0209	UW96439 - RSU0306
	0/100400 11000402	CW02040 11CC0200	2000000 NOCOCC
JENV5	512		
	UA00981 - RSU0306	UA03746 - RSU0312	UA07294 - PUT0402
	UA01400 - RSU0306	UA03843 - RSU0312	UA08045 - PUT0402
	UA01403 - RSU0306	UA03946 - RSU0309	UA08056 - PUT0401
	UA01713 - RSU0309	UA04097 - RSU0312	UA08662 - PUT0402
	UA02132 - RSU0309	UA04358 - PUT0311	UW93719 - RSU0306
	UA02617 - RSU0309	UA04844 - PUT0310	UW93723 - RSU0303
	UA02685 - RSU0309	UA06664 - PUT0402	UW94133 - RSU0306
	UA02946 - RSU0309	UA06990 - PUT0401	UW95223 - RSU0306
	UA03651 - PUT0310		
JENV5	513		
	UA00589 - RSU0306	UA02525 - RSU0309	UA04415 - RSU0312
	UA00599 - RSU0306	UA02871 - RSU0309	UA04522 - RSU0312
	UA00786 - RSU0306	UA02872 - RSU0309	UA04980 - PUT0310
	UA01302 - RSU0306	UA03184 - RSU0309	UA05845 - PUT0311
	UA01627 - RSU0305	UA03190 - RSU0309	UA05900 - PUT0310
	UA01944 - RSU0309	UA03234 - RSU0309	UA06015 - PUT0310
	UA02129 - RSU0309	UA03594 - RSU0309	UA06034 - PUT0311
	UMUZ 123 - MOUUOUS	0700034 - VQ00003	UMUDU34 = EU LU3
	11402133 - RSH0300	11004232 - RSH0342	
	UA02133 - RSU0309	UA04232 - RSU0312	UA06498 - PUT0311

UW92877 - RSU0212

UA06529 - PUT0311	UA08025 - PUT0401	UW92850 - RSU0209
UA06601 - PUT0311	UA08516 - SMCCOR	UW92879 - RSU0212
UA06607 - PUT0311	UW87235 - RSU0204	UW93063 - RSU0212
UA06665 - SMCCOR	UW87850 - RSU0209	UW93080 - RSU0212
UA06682 - PUT0311	UW87933 - RSU0209	UW93418 - RSU0212
UA06686 - PUT0310	UW88002 - RSU0209	UW93419 - RSU0210
UA06741 - PUT0311	UW88082 - RSU0209	UW93433 - RSU0212
UA07098 - PUT0401	UW88669 - RSU0209	UW93500 - RSU0212
UA07224 - PUT0401	UW88672 - RSU0209	UW94134 - RSU0306
UA07379 - PUT0401	UW88695 - RSU0209	UW94225 - RSU0303
UA07787 - SMCCOR	UW89473 - RSU0209	UW94387 - RSU0303
UA07851 - SMCCOR	UW89562 - RSU0209	UW95224 - RSU0306
UA07955 - SMCCOR	UW92292 - RSU0212	UW95228 - RSU0303
UA08013 - SMCCOR	UW92583 - RSU0212	UW95346 - RSU0303
		UW95432 - RSU0303

JENV515

UA00376 - RSU0309	UA04346 - PUT0310	UA08015 - SMCCOR
UA00795 - RSU0309	UA04940 - PUT0310	UA08378 - SMCCOR
UA00879 - RSU0309	UA05844 - PUT0311	UA08518 - SMCCOR
UA01195 - RSU0309	UA07296 - SMCCOR	UA09159 - SMCCOR
UA03652 - PUT0310		

The following APAR fixes against previous releases of NetView have been incorporated into Tivoli NetView for z/OS Version 5 Release 1:

OW18382	OW24085	OW24559	OW25367	OW25927
OW21096	OW24098	OW24628	OW25444	OW25936
OW21358	OW24129	OW24667	OW25491	OW25942
OW21663	OW24130	OW24714	OW25504	OW25944
OW21665	OW24161	OW24782	OW25519	OW25968
OW22271	OW24166	OW24783	OW25591	OW26026
OW22747	OW24323	OW24807	OW25597	OW26048
OW23540	OW24351	OW24809	OW25607	OW26055
OW23587	OW24356	OW24810	OW25629	OW26056
OW23650	OW24414	OW24853	OW25630	OW26081
OW23683	OW24451	OW24926	OW25631	OW26083
OW23739	OW24457	OW25007	OW25639	OW26088
OW23806	OW24520	OW25015	OW25641	OW26117
OW23869	OW24544	OW25021	OW25680	OW26158
OW23954	OW24553	OW25042	OW25709	OW26165
OW23986	OW24555	OW25072	OW25760	OW26168
OW24010	OW24556	OW25087	OW25832	OW26189
OW24049	OW24557	OW25101	OW25852	OW26197
OW24053	OW24558	OW25319	OW25923	OW26268

OW26272	OW27762	OW28777	OW30185	OW31019
OW26276	OW27810	OW28843	OW30186	OW31023
OW26282	OW27853	OW28958	OW30187	OW31070
OW26294	OW27903	OW28990	OW30223	OW31073
OW26310	OW27929	OW29020	OW30231	OW31092
OW26321	OW27943	OW29086	OW30262	OW31118
OW26332	OW27944	OW29094	OW30270	OW31141
OW26364	OW27992	OW29100	OW30279	OW31164
OW26388	OW27996	OW29120	OW30286	OW31165
OW26409	OW28000	OW29168	OW30296	OW31172
OW26420	OW28005	OW29197	OW30297	OW31182
OW26442	OW28006	OW29230	OW30302	OW31196
OW26447	OW28018	OW29270	OW30331	OW31219
OW26505	OW28040	OW29316	OW30364	OW31213
OW26642	OW28128	OW29365	OW30374	OW31302
OW26743	OW28162	OW29393	OW30374	OW31304 OW31386
			OW30429	OW31366
OW26754	OW28186	OW29454		
OW26789	OW28198	OW29459	OW30431	OW31468
OW26797	OW28222	OW29481	OW30438	OW31504
OW26798	OW28250	OW29489	OW30446	OW31505
OW26801	OW28273	OW29506	OW30448	OW31530
OW26803	OW28298	OW29571	OW30460	OW31555
OW26838	OW28359	OW29579	OW30462	OW31574
OW26868	OW28360	OW29621	OW30500	OW31587
OW26882	OW28402	OW29637	OW30509	OW31603
OW26932	OW28435	OW29679	OW30526	OW31604
OW26996	OW28453	OW29729	OW30533	OW31736
OW27075	OW28466	OW29754	OW30538	OW31740
OW27102	OW28487	OW29755	OW30539	OW31741
OW27158	OW28492	OW29780	OW30542	OW31747
OW27159	OW28499	OW29801	OW30547	OW31763
OW27222	OW28508	OW29802	OW30577	OW31769
OW27228	OW28530	OW29803	OW30817	OW31801
OW27288	OW28565	OW29804	OW30829	OW31826
OW27305	OW28566	OW29809	OW30834	OW31866
OW27381	OW28575	OW29828	OW30848	OW31910
OW27507	OW28577	OW29851	OW30857	OW31997
OW27509	OW28607	OW29894	OW30911	OW32034
OW27541	OW28652	OW29898	OW30917	OW32096
OW27542	OW28744	OW29907	OW30944	OW32153
OW27555	OW28745	OW29943	OW30946	OW32167
OW27556	OW28747	OW29958	OW30940 OW30982	OW32107 OW32185
OW27634	OW28747 OW28757	OW29936 OW30085	OW30985	OW32186
OW27695	OW28758	OW30107	OW31005	OW32282
OW27755	OW28771	OW30165	OW31006	OW32284
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OW32444	OW33331	OW34540	OW35432	OW36132
OW32483	OW33438	OW34543	OW35451	OW36184
OW32501	OW33475	OW34548	OW35497	OW36192
OW32502	OW33498	OW34552	OW35519	OW36193
OW32507	OW33503	OW34553	OW35520	OW36194
OW32552	OW33513	OW34561	OW35547	OW36195
OW32561	OW33563	OW34563	OW35552	OW36221
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OW32569	OW33666	OW34638	OW35559	OW36252
OW32575	OW33667	OW34656	OW35572	OW36255
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OW32818	OW33732	OW34758	OW35635	OW36336
OW32837	OW33804	OW34793	OW35636	OW36370
OW32842	OW33835	OW34831	OW35639	OW36388
OW32843	OW33836	OW34833	OW35661	OW36396
OW32855	OW33869	OW34834	OW35682	OW36400
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OW32945	OW33908	OW34906	OW35718	OW36451
OW32956	OW33953	OW34975	OW35721	OW36457
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OW32997	OW34139	OW35223	OW35859	OW36560
OW33013	OW34143	OW35249	OW35861	OW36572
OW33016	OW34153	OW35255	OW35863	OW36578
OW33081	OW34172	OW35262	OW35875	OW36593
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OW33139	OW34272	OW35267	OW35892	OW36610
OW33140	OW34283	OW35268	OW35898	OW36639
OW33163	OW34296	OW35278	OW35925	OW36661
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OW36994	OW37682	OW38323	OW39045	OW40063
OW37017	OW37697	OW38335	OW39074	OW40073
OW37019	OW37706	OW38349	OW39081	OW40142
OW37020	OW37707	OW38368	OW39095	OW40146
OW37045	OW37714	OW38389	OW39113	OW40193
OW37051	OW37715	OW38454	OW39133	OW40196
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OW41103	OW42221	OW42984	OW43955	OW44848
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OW41131	OW42250	OW43072	OW43989	OW44933
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OW41233	OW42337	OW43186	OW44035	OW45118
OW41268	OW42357	OW43187	OW44075	OW45135
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OW41337	OW42377	OW43321	OW44110	OW45218
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OW46120	OW46952	OW48103	OW49242	OW50118
OW46120 OW46140	OW46990	OW48144	OW49242 OW49266	OW50228
OW46148	OW47022	OW48144 OW48146	OW49271	OW50220
OW46164	OW47022 OW47023	OW48140	OW49271	OW50351
OW46176	OW47043	OW48277 OW48322	OW49314	OW50364
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OW46193	OW47099	OW48378	OW49323 OW49331	OW50369
OW46196 OW46228	OW47099 OW47113	OW48408	OW49366	OW50309
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OW46319	OW47193	OW48506		OW50456
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OW50562 OW50595 OW50633	OW51401 OW51427 OW51448	OW52171 OW52175 OW52190	PQ00547 PQ00656 PQ00829	PQ07988 PQ08401 PQ08751
OW50651 OW50685	OW51452 OW51486	OW52228 OW52299	PQ01363 PQ01535	PQ08905 PQ10205
OW50700	OW51531	OW52399	PQ01586	PQ10380
OW50758	OW51532	OW52401	PQ01944	PQ11102
OW50760	OW51535	OW52409	PQ02105	PQ11471
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OW50814	OW51669	OW52455	PQ02837	PQ11716
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OW50995	OW51927	PN91938	PQ04885	PQ19036
OW51014	OW51953	PN92148	PQ05013	PQ20383
OW51037	OW51986	PN92323	PQ05095	PQ23475
OW51238	OW51997	PN92474	PQ05145	PQ23523
OW51280	OW52002	PN92686	PQ05592	PQ27211
OW51298	OW52004	PQ00155	PQ05948	PQ32257
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OW51322	OW52137	PQ00417	PQ07227	
OW51335	OW52150	PQ00423	PQ07889	

Contacting Customer Support

For support for this or any Tivoli product, you can contact Tivoli Customer Support in one of the following ways:

Submit a problem management record (PMR) electronically at IBMSERV/IBMLINK.

Submit a problem management record (PMR) electronically from our Web site at http://www.tivoli.com/support.

Send e-mail to support@tivoli.com.

Customers in the United States can also call 1-800-TIVOLI8 (1-800-848-6548).

International customers should consult the Web site for customer support telephone numbers.

You can also review the *Customer Support Handbook*, which is available on our Web site at http://www.tivoli.com/support/handbook/.

When you contact Tivoli Customer Support, be prepared to provide identification information for your company so that support personnel can readily assist you. Company identification information may also be needed to access various online services available on the Web site.

The support Web site offers extensive information, including a guide to support services (the Customer Support Handbook); frequently asked questions (FAQs); and documentation for all Tivoli products, including Release Notes, Redbooks, and Whitepapers. The documentation for some product releases is available in both PDF and HTML formats. Translated documents are also available for some product releases.

You can order documentation by e-mail at **swdist@tivoli.com**. Please provide the publication number, part number, or order number of the desired document. Alternatively, you can provide the document title, version number, and date of publication.

We are very interested in hearing about your experience with Tivoli products and documentation. We also welcome your suggestions for improvements. If you have comments or suggestions about our documentation, please contact us in one of the following ways:

Send e-mail to pubs@tivoli.com.

Complete our customer feedback survey at http://www.tivoli.com/support/feedback.

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