



Program Directory for NTuneMON

Version 2 Release 6

Program Number 5648-141

FMID HRA2602

for Use with
MVS/ESA

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GI10-6600-00

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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Contents

Notices	vii
Notice to Users of Online Versions of This Book	viii
Trademarks	viii
1.0 Introduction	1
1.1 NTuneMON V2R6 MVS Description	2
1.2 NTuneMON V2R6 MVS FMIDs	2
2.0 Program Materials	3
2.1 Basic Machine-Readable Material	3
2.2 Optional Machine-Readable Material	4
2.3 Program Publications	4
2.3.1 Basic Program Publications	4
2.3.2 Optional Program Publications	5
2.3.3 Softcopy Program Publications	5
2.4 Program Source Materials	6
2.5 Publications Useful During Installation	6
3.0 Program Support	7
3.1 Program Services	7
3.2 Preventive Service Planning	7
3.3 Statement of Support Procedures	7
4.0 Program and Service Level Information	9
4.1 Program Level Information	9
4.2 Service Level Information	9
4.3 Cumulative Service Tape	9
5.0 Installation Requirements and Considerations	11
5.1 Driving System Requirements	11
5.1.1 Machine Requirements	11
5.1.2 Programming Requirements	11
5.2 Target System Requirements	12
5.2.1 Operating System Requirements	12
5.2.2 Machine Requirements	12
5.2.3 Programming Requisites	12
5.2.3.1 Minimum Requisites	12
5.2.3.2 Functional Requisites	13
5.2.3.2.1 Softcopy-Enabling Programs	14
5.2.3.3 Compatibility Requisites	14
5.2.3.3.1 NCP and SSP	14
5.2.3.3.2 VTAM	15

5.2.3.4 Toleration/Coexistence Requisites	16
5.2.3.5 Incompatibility (Negative) Requisites	16
5.2.4 DASD Storage Requirements	16
5.3 FMIDs Deleted	18
5.4 Special Considerations	18
6.0 Installation Instructions	21
6.1 Installing NTuneMON V2R6 MVS	21
6.1.1 SMP/E Considerations for Installing NTuneMON V2R6 MVS	21
6.1.2 SMP/E Environment	21
6.1.3 Unload the Sample JCL from the Product Tape	22
6.1.4 Perform SMP/E RECEIVE	23
6.1.5 Allocate SMP/E Target and Distribution Libraries	24
6.1.6 Create DDDEF Entries	26
6.1.7 Perform SMP/E APPLY CHECK	28
6.1.8 Perform SMP/E APPLY	29
6.1.9 Perform SMP/E ACCEPT CHECK	30
6.1.10 Perform SMP/E ACCEPT	31
6.2 Post-Installation Information	31
Appendix A. NTuneMON V2R6 MVS Install Logic	33
A.1 SMP/E Modification Control Statements	33
Appendix B. APARs Incorporated into This Program	35
Reader's Comments	37

Figures

1. Basic Material: Program Tape	3
2. Program Tape: File Content	4
3. Basic Material: Unlicensed Publications	4
4. Optional Material: Licensed Publications	5
5. Softcopy Publications	5
6. Publications Useful During Installation	6
7. PSP Upgrade and Subset ID	7
8. Component IDs	7
9. Driving System Software Requirements	11
10. Operating System Software Requirements	12
11. Minimum Requisites	12
12. Functional Requisites: NTuneNCP	13
13. Functional Requisites: Peripheral SDLC Line	14

14.	APARs Required to Monitor 3746 Model 900 CSS Token-Ring Lines	14
15.	APAR Required to Display Information for the Last Beaconsing MAC Address.	15
16.	APARs Required to Display Information for Transmission Head Buffers	15
17.	VTAM APARs Required to Operate NTuneMON with NTuneNCP	15
18.	VTAM APAR Required for SDLC Lines to Modify VTAM USE Parameter	15
19.	Total DASD Tracks Required by NTuneMON V2R6 MVS	16
20.	Storage Requirements for NTuneMON V2R6 MVS Target Libraries	17
21.	Storage Requirements for NTuneMON V2R6 MVS Distribution Libraries	18
22.	JCL to Unload the Sample Installation JCL from the Product Tape	22
23.	JCL to Receive NTuneMON V2R6 MVS from the Product Tape	23
24.	JCL to Allocate the SMP/E Target and Distribution Libraries	24
25.	JCL to Create DDDEF Entries	26
26.	JCL to Perform SMP/E APPLY CHECK	28
27.	JCL to Update the NTuneMON V2R6 MVS Target Libraries	29
28.	JCL to Perform an SMP/E ACCEPT CHECK	30
29.	JCL to Perform SMP/E ACCEPT	31
30.	Portion of the SMP Installation Logic	33
31.	Sample Job to Print SMPMCS	34

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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 IBM Customer Support Center.

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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 NTuneMON. This publication refers to NTuneMON as NTuneMON V2R6 MVS. 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 3 identifies the basic and optional program materials and documentation for NTuneMON V2R6 MVS.
- 3.0, "Program Support" on page 7 describes the IBM support available for NTuneMON V2R6 MVS.
- 4.0, "Program and Service Level Information" on page 9 lists the APARs (program level) and PTFs (service level) incorporated into NTuneMON V2R6 MVS.
- 5.0, "Installation Requirements and Considerations" on page 11 identifies the resources and considerations for installing and using NTuneMON V2R6 MVS.
- 6.0, "Installation Instructions" on page 21 provides detailed installation instructions for NTuneMON V2R6 MVS.
- Appendix A, "NTuneMON V2R6 MVS Install Logic" on page 33 provides the install logic for NTuneMON V2R6 MVS.
- Appendix B, "APARs Incorporated into This Program" on page 35 lists the APARs incorporated into NTuneMON V2R6 MVS.

NTuneNCP is an optional feature offered with NTuneMON V2R6 MVS. The NTuneNCP Tuning Feature can be used in conjunction with NTuneMON V2R6 MVS to provide enhanced online interactive tuning capabilities.

Before installing NTuneMON V2R6 MVS, read 3.2, "Preventive Service Planning" on page 7. This section tells you how to find any updates to the information and procedures in this program directory.

Before installing NTuneMON V2R6 MVS, read Section 5.4, "Special Considerations" on page 18 for information on using the ATUNELST CLIST.

Prior to NTuneMON V2R4, the NTuneNCP feature was packaged on separate media. The NTuneNCP feature of NTuneMON is now fully integrated into NTuneMON. There is no separate media to order and there is no separate installation process.

The NTuneNCP feature still remains a priced feature of NTuneMON. This feature must be licensed for every NCP image (1 for each 37xx) which will be tuned.

IBM recommends that you use an OS/390 ServerPac to install this level of NTuneMON. If you use a ServerPac, you get the service integrated in the product. ServerPac is available at no additional charge when you have an OS/390 license.

Do not use this program directory if you are installing NTuneMON V2R6 MVS with an MVS Custom-Built Installation Process Offering (CBIPO), 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 NTuneMON V2R6 MVS using the MVS Custom-Built Product Delivery Offering (CBPDO) (5751-CS3), use the softcopy program directory provided on the CBPDO tape. Your CBPDO contains a softcopy preventive service planning (PSP) upgrade for this product. All service and HOLDDATA for NTuneMON V2R6 MVS are included on the CBPDO tape.

To facilitate the installation of NTuneMON V2R6 MVS, all JCL statements that appear in this program directory are also in machine-readable format on the product tape. The JCL is contained in Relative File 1, DLIB=AATUSAMP, MEMBER=ATUINJCL. The JCL to unload the installation JCL is in Figure 22 on page 22.

In the JCL examples shown in this program directory, all occurrences of lowercase variables must be changed to the appropriate uppercase values in order for the JCL to execute properly.

At the end of this program directory you will find a Reader's Comment Form. Please take the time to complete this form and return it to the address shown on the form. Your comments and suggestions help improve this program directory and make installation easier.

1.1 NTuneMON V2R6 MVS Description

NTuneMON V2R6 MVS operates on the host processor and provides monitoring capabilities for ACF/NCP on the 3725, 3720, and 3745 communication controllers or 3745 with 3746 Model 900.

NTuneMON yields the potential for increased network and NCP availability by providing monitoring capabilities for NCP internal resources.

1.2 NTuneMON V2R6 MVS FMIDs

NTuneMON V2R6 MVS consists of FMID HRA2602.

2.0 Program Materials

An IBM program is identified by a program number and a feature number. The program number for NTuneMON V2R6 MVS is 5648-141.

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 NTuneMON V2R6 MVS. Ask your IBM 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 9-track magnetic tape (written at 6250 BPI), 3480 cartridge, or 4mm cartridge. The tape or cartridge contains all the programs and data needed for installation. It is installed using SMP/E, and is in SMP/E RELFILE format. See 6.0, "Installation Instructions" on page 21 for more information about how to install the program.

Figure 1 describes the tape or cartridge. Figure 2 on page 4 describes the file content of the program tape or cartridge.

Note: If you are installing NTuneMON V2R6 MVS using the MVS 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.

Medium	Feature Number	Physical Volume	External Label Identification	VOLSER
6250 tape	5801	1	MVSOBJ HRA2602	RA2602
3480 cart.	5802	1	MVSOBJ HRA2602	RA2602
4 mm cart.	6200	1	MVSOBJ HRA2602	RA2602

Figure 2. Program Tape: File Content

VOLSER	File	Name	Dist Library	RECFM	LRECL	BLK SIZE
RA2602	1	SMPMCS				6400
RA2602	2	IBM.HRA2602.F1	JCLIN AATFSAMP AATUPNL1 AATUSAMP AATULST1	FB	80	8800
RA2602	3	IBM.HRA2602.F2	AATFMOD1 ANCPMOD1	U	0	6144

2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for NTuneMON V2R6 MVS. NTuneNCP has been incorporated into the base code of NTuneMON V2R6 MVS. Please see 1.0, "Introduction" on page 1 for more information.

2.3 Program Publications

The following sections identify the basic and optional publications for NTuneMON V2R6 MVS.

2.3.1 Basic Program Publications

Figure 3 identifies the basic unlicensed program publications for NTuneMON V2R6 MVS. One copy of each of these publications is included when you order the basic materials for NTuneMON V2R6 MVS. For additional copies, contact your IBM representative.

Figure 3. Basic Material: Unlicensed Publications

Publication Title	Form Number
NTuneMON Licensed Program Specifications	GC31-6267
NTuneMON User's Guide	SC31-6266

There are no basic licensed program publications for NTuneMON V2R6 MVS.

2.3.2 Optional Program Publications

There are no optional unlicensed program publications for NTuneMON V2R6 MVS.

Figure 4 identifies the optional licensed program publications for NTuneMON V2R6 MVS. The first copy is available at no charge to licensees of the optional material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx Feature Number. A fee is charged for additional copies.

An asterisk (*) beside the Form Number indicates it contains “Restricted Material of IBM”.

<i>Figure 4. Optional Material: Licensed Publications</i>		
Publication Title	Form Number	Feature Number
NTuneNCP Feature Reference	LY43-0039*	7001-8008

2.3.3 Softcopy Program Publications

All NTuneMON V2R6 MVS manuals, licensed and unlicensed, except for *NTuneMON Licensed Program Specifications*, are offered in displayable softcopy form on the media listed in Figure 5. The first copy is available at no charge to licensees of the optional material by ordering the 7xxx Feature Number. Order additional copies using the 8xxx Feature Number. A fee is charged for additional copies.

An asterisk (*) beside the Form Number indicates it contains “Restricted Material of IBM”.

<i>Figure 5. Softcopy Publications</i>		
Title	Form Number	Feature Number
ACF/NCP, ACF/SSP, EP, NPSI, NTuneMON Softcopy Collection Kit (CD-ROM)	LK2T-0414*	7110-8110
Note: Order this collection kit under the NCP product. (It is not orderable under NTuneMON.)		

You can read the books on the Softcopy Collection Kit CD-ROM using any of the following products:

- IBM Library Reader, a limited-function BookManager product shipped on the CD.
- The full-function IBM BookManager product, available for a variety of platforms, including MVS. For more information, or to order BookManager for your platform, refer to the IBM BookManager home page at <http://booksrv2.raleigh.ibm.com>.
- Adobe Acrobat Reader, available for downloading at <http://www.adobe.com/prodindex/acrobat/readstep.html>. The Softcopy Collection Kit CD-ROM includes Acrobat Reader (PDF) book files for NCP V7R7 and later.

2.4 Program Source Materials

No program source materials or viewable program listings are provided for NTuneMON V2R6 MVS.

2.5 Publications Useful During Installation

The publications listed in Figure 6 may be useful during the installation of NTuneMON V2R6 MVS. To order copies, contact your IBM representative.

Publication Title	Form Number
MVS Software Manufacturing Offerings General Information	GC23-0351
MVS/ESA JCL Reference	GC28-1829
MVS/ESA JCL User's Guide	GC28-1830
MVS/ESA System Codes	GC28-1815
MVS/ESA System Messages, Volume 1	GC28-1812
MVS/ESA System Messages, Volume 2	GC28-1813
OS/390 MVS JCL Reference	GC28-1757
OS/390 MVS JCL User's Guide	GC28-1758
OS/390 MVS System Codes	GC28-1780
OS/390 MVS System Messages, Vol 1 (ABA-ASA)	GC28-1784
OS/390 MVS System Messages, Vol 2 (ASB-EWX)	GC28-1785
OS/390 MVS System Messages, Vol 3 (GDE-IEB)	GC28-1786
OS/390 MVS System Messages, Vol 4 (IEC-IFD)	GC28-1787
OS/390 MVS System Messages, Vol 5 (IGD-IZP)	GC28-1788
OS/390 SMP/E Commands	SC28-1805
OS/390 SMP/E Messages and Codes	SC28-1738
OS/390 SMP/E Reference	SC28-1806
OS/390 SMP/E User's guide	SC28-1740
SMP/E: Messages and Codes	SC28-1108
SMP/E: Reference	SC28-1107
SMP/E: User's Guide	SC28-1302

3.0 Program Support

This section describes the IBM support available for NTuneMON V2R6 MVS.

3.1 Program Services

Contact your IBM representative for specific information about available program services.

3.2 Preventive Service Planning

Before installing NTuneMON V2R6 MVS, you should review the current Preventive Service Planning (PSP) information. If you obtained NTuneMON V2R6 MVS as part of a CBPDO, there is HOLDDATA and PSP information included on the CBPDO tape.

If you obtained NTuneMON V2R6 MVS on a product tape, or if the CBPDO is more than two weeks old when you install it, you should contact the IBM Support Center or use S/390 SoftwareXcel to obtain the current "PSP Bucket".

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 NTuneMON V2R6 MVS are:

Figure 7. PSP Upgrade and Subset ID

UPGRADE	SUBSET	Description
NTM260	HRA2602	NTuneMON V2R6

3.3 Statement of Support Procedures

For help with problem determination and problem source identification, refer to *NTuneMON User's Guide*. Report any difficulties you have using this program to your IBM Support Center. If an APAR is required, the Support Center will provide the address to which any needed documentation can be sent.

Figure 8 identifies the component ID (COMPID) for NTuneMON V2R6 MVS.

Figure 8. Component IDs

FMID	COMPID	Component Name	RETAIN Release
HRA2602	564814100	NTuneMON V2R6	602

4.0 Program and Service Level Information

This section identifies the program and any relevant service levels of NTuneMON V2R6 MVS. The program level refers to the APAR fixes incorporated into the program. The service level refers to the PTFs integrated. Information about the cumulative service tape is also provided.

4.1 Program Level Information

See Appendix B, "APARs Incorporated into This Program" on page 35 for a list of APAR fixes against previous releases of NTuneMON incorporated into this release.

4.2 Service Level Information

No PTFs against this release of NTuneMON V2R6 MVS have been incorporated into the product tape.

4.3 Cumulative Service Tape

A cumulative service tape, containing PTFs not incorporated into this release, might be included with this program. Installation instructions for cumulative service tapes can be found in the SMP/E publications.

If you received this product as part of a CBPDO or a ProductPac, PTFs not incorporated into this release are provided on the tape, and a separate cumulative service tape will not be provided.

5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating NTuneMON V2R6 MVS. 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 NTuneMON V2R6 MVS.

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 9. Driving System Software Requirements

Program Number	Product Name and Minimum VRM/Service Level
5668-949	System Modification Program/Extended (SMP/E) Release 8.1 or Higher with IR40155
5647-A01	OS/390 V2R7 or Higher, or IR40155 on Prior Releases

5.2 Target System Requirements

This section describes the environment of the target system required to install and use NTuneMON V2R6 MVS.

5.2.1 Operating System Requirements

NTuneMON V2R6 MVS operates in any of the system environments shown in Figure 10.

<i>Figure 10. Operating System Software Requirements</i>	
5655-068 and 5655-069	MVS/ESA V5R1 or Later
5647-A01	OS/390 V2R4 or later
5645-001	OS/390 R1, R2, or R3

The SSPLIB data set for this program must be installed into an APF-authorized library.

5.2.2 Machine Requirements

This program operates with at least one IBM 3725, 3720, 3745, or 3745 with 3746 Model 900 Communication Controller.

5.2.3 Programming Requisites

5.2.3.1 Minimum Requisites:

A minimum requisite is defined as one of the following:

1. *Installation Requisite:* A product that is required at installation time. i.e. this product **will not install** successfully unless this requisite is met. This includes products that are specified as REQs, PREs, or CALLLIBs.
2. *Run Time Requisite:* A product that is **not** required for the successful installation of this product, but **is** needed at run time in order for this product to work.

This program is supported with the following licensed MVS programs at the function level of the version and release for as long as program services are available for the particular version and release:

<i>Figure 11 (Page 1 of 2). Minimum Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5697-B82	TME 10 NetView for OS/390 R1 or later, with REXX support	No
5655-007	NetView V3R1, with REXX support	No

<i>Figure 11 (Page 2 of 2). Minimum Requisites</i>		
Program Number	Product Name and Minimum VRM/Service Level	Install Req?
5685-111	NetView V2R4, with REXX support	No
5648-063	NCP V7R1 or later	Yes
5688-231	NCP V6R3	Yes
5668-738	NCP V5R4	Yes
5668-854	NCP V4R3.1	Yes
5685-025	Time Sharing Options Extensions (TSO/E) V2R5 or later	No

Following are NetView system considerations for NTuneMON. Complete the following steps:

1. Customize NetView for NTuneMON by modifying the NetView PROC statement or by copying the NTuneMON libraries into existing NetView libraries.

Perform Step 2 or Step 3:

2. Complete the following tasks to modify the NetView PROC to include the NTuneMON libraries:
 - a. Add the NTuneMON CLIST library to the DSICLD DD concatenation stream.
 - b. Add the NTuneMON panel library to the CNMPL1 DD concatenation stream.

OR

3. Copy the NTuneMON CLIST and panel libraries into the existing libraries referenced in the NetView PROC to avoid modifying the NetView PROC.

5.2.3.2 Functional Requisites:

A functional requisite is defined as a product that is *not* required for the successful installation of this product or for the base 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.

This program is supported with the following licensed programs at the functional level of the version and release for as long as program services are available for the particular version and release.

The following are required to use NTuneNCP.

<i>Figure 12 (Page 1 of 2). Functional Requisites: NTuneNCP</i>			
Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5647-A01	OS/390 V2R4 or later	VTAM	No
5645-001	OS/390 R1, R2, or R3	VTAM	No
5695-117	VTAM V4R3 or later MVS/ESA	VTAM	No

Figure 12 (Page 2 of 2). Functional Requisites: NTuneNCP

Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5685-085	VTAM V3R4.2 MVS/ESA	VTAM	No

Adding a peripheral SDLC line requires the following:

Figure 13. Functional Requisites: Peripheral SDLC Line

Program Number	Product Name and Minimum VRM/Service Level	Function	Install Req?
5648-063	NCP V7R3 or later	NCP	No
5648-141	NTuneNCP (must be licensed)	NTuneNCP	No
5647-A01	OS/390 V2R4 or later	VTAM	No
5645-001	OS/390 R1, R2, or R3	VTAM	No
5695-117	VTAM V4R3 or later MVS/ESA	VTAM	No

5.2.3.2.1 Softcopy-Enabling Programs:

See 2.3.3, "Softcopy Program Publications" on page 5 for a list of the programs that can access the books on the Softcopy Collection Kit CD-ROM.

5.2.3.3 Compatibility Requisites:

The following sections contain system considerations for NCP, SSP, and VTAM.

5.2.3.3.1 NCP and SSP:

The APARs listed in Figure 14 are required in order for NTuneMON to monitor 3746 Model 900 Connectivity Subsystem (CSS) token-ring lines.

Figure 14. APARs Required to Monitor 3746 Model 900 CSS Token-Ring Lines

Product Name	APAR
NCP V6R2	IR99864
SSP V3R8 MVS	IR22686
SSP V3R8 VM	IR22687

The APAR listed in Figure 15 is required in order for NTuneMON to display the time and date stamp for the last beaconing MAC address.

<i>Figure 15. APAR Required to Display Information for the Last Beaconing MAC Address.</i>	
Product Name	APAR
NCP V7R6	IR36907

The APARs listed in Figure 16 are required in order for NTuneMON to display and tune the number of transmission head buffers allocated for 3745 frame-relay physical lines.

<i>Figure 16. APARs Required to Display Information for Transmission Head Buffers</i>	
Product Name	APAR
NCP V7R6	IR36886
SSP V4R6 OS/390	IR36896
SSP V4R6 VM	IR36902
SSP V4R6 VSE	IR36903

5.2.3.3.2 VTAM:

The VTAM APARs listed in Figure 17 are required to operate NTuneMON in conjunction with NTuneNCP.

<i>Figure 17. VTAM APARs Required to Operate NTuneMON with NTuneNCP</i>	
Product Name	APAR
VTAM V3R4.2 for MVS/ESA	OW01987
VTAM V3R4.1 for MVS/ESA	OW06097
VTAM V3R4.2 for MVS/ESA	OW06755

The VTAM APAR listed in Figure 18 is required if you use spare or redefinable SDLC peripheral lines and want to modify the VTAM USE parameter.

<i>Figure 18. VTAM APAR Required for SDLC Lines to Modify VTAM USE Parameter</i>	
Product Name	APAR
VTAM V4R2 for MVS/ESA	OW06708

5.2.3.4 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.

There are no toleration/coexistence requisites.

5.2.3.5 Incompatibility (Negative) Requisites:

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

No incompatible products are associated with NTuneMON V2R6 MVS.

5.2.4 DASD Storage Requirements

NTuneMON V2R6 MVS libraries can reside on 3380 or 3390 DASD.

Space requirements for SMP/E libraries (data sets) must take into consideration other programs that must use these libraries. The following SMP/E library space requirements are designed to accommodate installation and initial maintenance of these products:

- NTuneMON V2R6 MVS
- NTuneNCP

Figure 19 lists the total space required for each type of library.

<i>Figure 19. Total DASD Tracks Required by NTuneMON V2R6 MVS</i>		
Library Type	3380 Tracks	3390 Tracks
Target	204	175
Distribution	206	177

Notes:

1. IBM recommends use of system determined block sizes for efficient DASD utilization for all non-RECFM U data sets. For RECFM U data sets, IBM 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:
 - U** Unique data set used by only the FMIDs listed. In order 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.

- S** Shared data set used by more than the FMIDs listed. In order 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.

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 setup of the target and distribution libraries needed for NTuneNCP, please refer to the NCP V7R8 MVS program directory. NCP, EP, NTO, NRF, and NTuneNCP share target and distribution libraries (data sets). If you install these products you must allocate additional space for these data sets. Refer to the appropriate program directories for the storage requirements for these products.

For more information on the names and sizes of the required data sets, please refer to 6.1.5, "Allocate SMP/E Target and Distribution Libraries" on page 24.

The following figures list the target and distribution libraries (data sets) and their attributes required to install NTuneMON V2R6 MVS. The storage requirements of NTuneMON V2R6 MVS must be added to the storage required by other programs having data in the same data set (library).

Figure 20. Storage Requirements for NTuneMON V2R6 MVS Target Libraries

Library DDNAME	T Y P E	D S R G	R E C M	L R E C L	No. of Blks	BLK SIZE	No. of 3380/ Trks	No. of 3390 Trks	No. of DIR Blks
SATULST1	U	PO	FB	80	69	0	35	29	1
SATUPNL1	U	PO	FB	80	332	0	166	143	101
SATFMOD1	U	PO	U	0	1	32760	1	1	1
SNCPMOD1	S	PO	U	0	2	32760	2	2	2

Figure 21. Storage Requirements for NTuneMON V2R6 MVS Distribution Libraries

Library DDNAME	T Y P E	D S R G	R E C M	L E C L	No. of Blks	BLK SIZE	No. of 3380/ Trks	No. of 3390 Trks	No. of DIR Blks
AATULST1	U	PO	FB	80	69	0	35	29	1
AATUPNL1	U	PO	FB	80	332	0	166	143	101
AATUSAMP	U	PO	FB	80	2	0	1	1	1
AATFMOD1	U	PO	U	0	1	32760	1	1	1
AATFSAMP	U	PO	FB	80	2	0	1	1	1
ANCPMOD1	S	PO	U	0	2	32760	2	2	2

5.3 FMIDs Deleted

Installing NTuneMON V2R6 MVS will result in the deletion of FMIDs.

Please see the SMPMCS file in Appendix A for the FMIDs deleted by NTuneMON V2R6.

5.4 Special Considerations

Following are special considerations for this program:

- The **ATUNELST CLIST** file provided with NTuneMON must be installed. It contains the default values for various NTuneMON parameters and threshold values, as well as the correct format for authorizing NTuneNCP users. You should install this file in a protected data set so only designated users can access it.

Note: Even if you are not using the NTuneNCP Tuning Feature, you must install the ATUNELST CLIST because it contains required NTuneMON default values.

Make a working copy of the CLIST and save the original as backup before making your changes to the working copy. If a problem arises, you have the original CLIST to work from. IBM recommends testing everything before changing any values in ATUNELST.

There is a section in ATUNELST that indicates that no changes should be made below a certain point. If you change anything below this point, you might affect the operation of NTuneMON.

ATUNELST allows you to preset the NTuneMON threshold values and authorize users of NTuneNCP to change NCP parameters. For additional information, refer to the *NTuneMON User's Guide*.

- Because NTuneMON uses colors to highlight certain panel fields, you should use a color terminal to take full advantage of the information NTuneMON provides.

- MVS users can compile the ATUNEMON EXEC and execute it as a compiled REXX EXEC. To compile the ATUNEMON EXEC, delete the bottom five lines of the ATUNEMON EXEC, and compile it using the MVS REXX Compiler. For specific instructions about compiling a REXX EXEC, see *IBM REXX Compiler and Library/370: User's Guide and Reference* (SH19-8160).

If you use the compiled form of this program, the REXX/370 Library is required.

6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install NTuneMON V2R6 MVS.

Please note the following:

- If you want to install NTuneMON V2R6 MVS 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. The NCP V7R8 MVS Program Directory also contains sample jobs for 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.

6.1 Installing NTuneMON V2R6 MVS

6.1.1 SMP/E Considerations for Installing NTuneMON V2R6 MVS

This release of NTuneMON V2R6 MVS 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 NTuneMON V2R6 MVS. After the RECEIVE step has been completed, the sample jobs can be found in SMPTLIB: **IBM.HRA2602.F1**. Make a copy of these jobs in your own library and modify them to use during the installation of NTuneMON V2R6 MVS. The sample jobs are:

ATURECEV	Sample RECEIVE job
ATUALLOC	Sample job to allocate target and distribution libraries
ATUDDDEF	Sample job to define SMP/E DDDEFs
ATUAPPCK	Sample APPLY CHECK job

ATUAPPLY Sample APPLY job
ATUACCCK Sample ACCEPT CHECK job
ATUACCEP Sample ACCEPT job

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

6.1.3 Unload the Sample JCL from the Product Tape

Sample installation jobs are provided on the distribution tape to help you install NTuneMON V2R6 MVS. See Figure 22 for the sample JCL to copy the NTuneMON V2R6 MVS jobs from the tape.

```
//ATUINJCL JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* SAMPLE JCL TO UNLOAD THE NTUNEMON V2R6 SAMPLE INSTALLATION *
//* JCL FROM THE PRODUCT TAPE. *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE tape TO THE PRODUCT TAPE OR CARTRIDGE *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//COPY EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=A
//TAPEIN DD DSN=IBM.HRA2602.F1,VOL=SER=RA2602,
// UNIT=tape,DISP=OLD,LABEL=(2,SL)
//DISKOUT DD DSN=IBM.HRA2602.INSTALL.JCL,VOL=SER=xxxxxx,
// UNIT=SYSDA,SPACE=(CYL,(1,1,5)),
// DISP=(NEW,CATLG)
//SYSUT3 DD UNIT=SYSDA,SPACE=(80,(15,1))
//SYSIN DD *
COPY I=TAPEIN,O=DISKOUT
SELECT MEMBER=ATUINJCL
//*
```

Figure 22. JCL to Unload the Sample Installation JCL from the Product Tape

Expected Return Codes and Messages:

ATUINJCL job ends with return code equal zero (RC=0).

The JCL is contained in Relative File 1, DLIB=AATUSAMP, MEMBER=ATUINJCL.

You can also access the sample installation jobs by performing an SMP/E RECEIVE for FMID HRA2602 and then copying the jobs from dataset **hlq.IBM.HRA2602.F1** to a work dataset for editing and submission.

6.1.4 Perform SMP/E RECEIVE

Edit and submit sample job ATURECEV to perform the SMP/E RECEIVE for NTuneMON V2R6 MVS. Consult the instructions in Figure 23 for more information.

```
//ATURECEV JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* RECEIVE NTUNEMON V2R6 FROM THE PRODUCT TAPE *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* 4. CHANGE tape TO THE PRODUCT TAPE OR CARTRIDGE *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//RECV EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPTLIB DD UNIT=SYSDA,DISP=OLD,VOL=SER=xxxxxx
//SMPPTFIN DD UNIT=tape,DISP=OLD,VOL=SER=RA2602,
// LABEL=(,SL),DSN=SMPMCS
//SMPCNTL DD *
// SET BDY(GLOBAL) .
// RECEIVE SELECT(HRA2602) SYSMODS LIST .
//*
```

Figure 23. JCL to Receive NTuneMON V2R6 MVS from the Product Tape

NOTE: if you obtained NTuneMON V2R6 MVS as part of a CBPDO, you can use the RCVPDO job found in the CBPDO RIMLIB data set to RECEIVE the NTuneMON V2R6 MVS 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.

Expected Return Codes and Messages:

ATURECEV job ends with return code equal zero (RC=0).

6.1.5 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job ATUALLOC to allocate the SMP/E target and distribution libraries for NTuneMON V2R6 MVS. Consult the instructions in Figure 24 for more information.

```
//ATUALLOC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* ALLOCATE THE SMP/E TARGET AND DISTRIBUTION LIBRARIES FOR *
//* NTUNEMON V2R6 *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE monzzzzz TO THE HIGH LEVEL QUALIFIER FOR YOUR *
//* NTUNEMON TARGET AND DISTRIBUTION LIBRARIES *
//* 3. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
//* DATA SET WILL RESIDE *
//* *
//* NOTE: THE ACTUAL DATA SET SIZES HAVE BEEN INCREASED *
//* SLIGHTLY TO ALLOW FOR MAINTENANCE. *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//ALLOCATE EXEC PGM=IEFBRI4
//SYSPRINT DD SYSOUT=A
//*****
//* DD STATEMENTS FOR THE DISTRIBUTION LIBRARIES *
//*****
//AATULST1 DD DSN=monzzzzz.AATULST1,VOL=SER=xxxxxx,
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
// UNIT=SYSALLDA,SPACE=(8800,(220,22,5)),
// DISP=(NEW,CATLG)
//AATUPNL1 DD DSN=monzzzzz.AATUPNL1,VOL=SER=xxxxxx,
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
// UNIT=SYSALLDA,SPACE=(8800,(460,46,112)),
// DISP=(NEW,CATLG)
//AATUSAMP DD DSN=monzzzzz.AATUSAMP,VOL=SER=xxxxxx,
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
// UNIT=SYSALLDA,SPACE=(8800,(15,2,3)),
// DISP=(NEW,CATLG)
```

Figure 24 (Part 1 of 2). JCL to Allocate the SMP/E Target and Distribution Libraries


```

//AATFMOD1 DD DSN=monzzzzz.AATFMOD1,VOL=SER=xxxxxx,
//           DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),
//           UNIT=SYSALLDA,SPACE=(32760,(30,3,9)),
//           DISP=(NEW,CATLG)
//AATFSAMP DD DSN=monzzzzz.AATFSAMP,VOL=SER=xxxxxx,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//           UNIT=SYSALLDA,SPACE=(8800,(25,2,3)),
//           DISP=(NEW,CATLG)
//*****
//* DD STATEMENTS FOR THE TARGET LIBRARIES *
//*****
//SATULST1 DD DSN=monzzzzz.SATULST1,VOL=SER=xxxxxx,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//           UNIT=SYSALLDA,SPACE=(8800,(220,22,5)),
//           DISP=(NEW,CATLG)
//SATUPNL1 DD DSN=monzzzzz.SATUPNL1,VOL=SER=xxxxxx,
//           DCB=(RECFM=FB,LRECL=80,BLKSIZE=0),
//           UNIT=SYSALLDA,SPACE=(8800,(460,46,112)),
//           DISP=(NEW,CATLG)
//SATFMOD1 DD DSN=monzzzzz.SATFMOD1,VOL=SER=xxxxxx,
//           DCB=(RECFM=U,LRECL=0,BLKSIZE=32760),
//           UNIT=SYSALLDA,SPACE=(32760,(25,3,2)),
//           DISP=(NEW,CATLG)
//*

```

Figure 24 (Part 2 of 2). JCL to Allocate the SMP/E Target and Distribution Libraries

Expected Return Codes and Messages:

ATUALLOC job ends with return code equal zero (RC=0).

6.1.6 Create DDDEF Entries

Edit and submit sample job ATUDDDEF to create DDDEF entries for the SMP/E target and distribution libraries for NTuneMON V2R6 MVS. Consult the instructions in Figure 25 for more information.

```
//ATUDDDEF JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
/** CREATE THE DDDEFS FOR NTUNEMON V2R6 *
/** *
/** BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
/** MODIFICATIONS: *
/** *
/** 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
/** 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
/** 3. CHANGE ncpdlib TO THE DISTRIBUTION ZONE FOR NCP *
/** 4. CHANGE monzzzzz TO THE HIGH LEVEL QUALIFIER FOR YOUR *
/** NTUNEMON TARGET AND DISTRIBUTION LIBRARIES *
/** 5. CHANGE xxxxxx TO THE VOLUME SERIAL OF THE DASD WHERE THE*
/** DATA SET WILL RESIDE *
/** 6. CHANGE ncptgt TO THE TARGET ZONE FOR NCP *
/** *
/** EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
/** ZERO. IF ANY OF THE DDDEF ENTRIES ALREADY EXIST, THE JOB *
/** WILL END WITH RETURN CODE EIGHT. YOU WILL HAVE TO EXAMINE *
/** THE OUTPUT TO DETERMINE THE CAUSE OF THE NON-ZERO RETURN *
/** CODE. *
/** *****
/** ADD THE DISTRIBUTION LIBRARY DD NAMES TO THE DISTRIBUTION *
/** ZONE *
/** *****
//DZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPLOG DD DSN=ncpzzzzz.SMPLOG,DISP=SHR
//SMPPTS DD DSN=ncpzzzzz.SMPPTS,DISP=SHR
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ncpdlib) .
UCLIN .
ADD DDDEF(AATULST1) DATASET(monzzzzz.AATULST1)
VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATUPNL1) DATASET(monzzzzz.AATUPNL1)
VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
```

Figure 25 (Part 1 of 3). JCL to Create DDDEF Entries

```

ADD DDDEF(AATUSAMP) DATASET(monzzzzz.AATUSAMP)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATFMD1) DATASET(monzzzzz.AATFMD1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATFSAMP) DATASET(monzzzzz.AATFSAMP)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ENDUCL
/*****
/* ADD THE DISTRIBUTION LIBRARY AND TARGET LIBRARY DD NAMES */
/* TO THE TARGET ZONE */
/*****
.
//TZONE EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//      TIME=1440
//SMPOUT DD SYSOUT=A
//SYSPRINT DD SYSOUT=A
//SMPLOG DD DSN=ncpzzzzz.SMPLOG,DISP=SHR
//SMPPTS DD DSN=ncpzzzzz.SMPPTS,DISP=SHR
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
SET BDY(ncptgt) .
UCLIN .
ADD DDDEF(AATULST1) DATASET(monzzzzz.AATULST1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATUPNL1) DATASET(monzzzzz.AATUPNL1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATUSAMP) DATASET(monzzzzz.AATUSAMP)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATFMD1) DATASET(monzzzzz.AATFMD1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(AATFSAMP) DATASET(monzzzzz.AATFSAMP)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(SATULST1) DATASET(monzzzzz.SATULST1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(SATUPNL1) DATASET(monzzzzz.SATUPNL1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ADD DDDEF(SATFMD1) DATASET(monzzzzz.SATFMD1)
                VOLUME(xxxxxx) UNIT(SYSALLDA) WAITFORDSN SHR .
ENDUCL .
//*

```

Figure 25 (Part 2 of 3). JCL to Create DDDEF Entries

Expected Return Codes and Messages:

ATUDDDEF job ends with return code equal zero (RC=0). If any of the DDDEF entries already exist, the NCPDDDEF job will end with return code of 8 (RC=8). Check the output to determine the cause of the non-zero return code.

6.1.7 Perform SMP/E APPLY CHECK

Edit and submit sample job ATUAPPCK to perform an SMP/E APPLY CHECK for NTuneMON V2R6 MVS. Consult the instructions in Figure 26 for more information.

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).

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

```
//ATUAPPCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* BEFORE UPDATING THE NTUNEMON TARGET LIBRARIES CHECK FOR      *
//* ERRORS, THE LIBRARIES AFFECTED, AND ANY SYSMODS THAT WOULD  *
//* BE REGRESSED                                                *
//*                                                                *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING  *
//* MODIFICATIONS:                                             *
//*                                                                *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS     *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP  *
//* 3. CHANGE ncptgt TO THE TARGET ZONE FOR NCP                  *
//*                                                                *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO                                                         *
//*****
//APPCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
//          TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
//          SET BDY(ncptgt) .
//          APPLY SELECT(HRA2602) CHECK .
//*
```

Figure 26. JCL to Perform SMP/E APPLY CHECK

Expected Return Codes and Messages:

ATUAPPCK job ends with return code equal zero (RC=0).

6.1.8 Perform SMP/E APPLY

Edit and submit sample job ATUAPPLY to perform an SMP/E APPLY for NTuneMON V2R6 MVS. Consult the instructions in Figure 27 for more information.

```
//ATUAPPLY JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* UPDATE THE NTUNEMON TARGET LIBRARIES *
//* * *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* * *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
//* 3. CHANGE ncptgt TO THE TARGET ZONE FOR NCP *
//* * *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//APPLY EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(ncptgt) .
// APPLY SELECT(HRA2602) .
//*
```

Figure 27. JCL to Update the NTuneMON V2R6 MVS Target Libraries

Expected Return Codes and Messages:

ATUAPPLY job ends with return code equal zero (RC=0).

6.1.9 Perform SMP/E ACCEPT CHECK

Edit and submit sample job ATUACCK to perform an SMP/E ACCEPT CHECK for NTuneMON V2R6 MVS. Consult the instructions in Figure 28 for more information.

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).

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

```
//ATUACCK JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* BEFORE UPDATING THE NTUNEMON DISTRIBUTION LIBRARIES CHECK *
//* FOR ERRORS, THE LIBRARIES AFFECTED, AND ANY SYSMODS THAT *
//* WOULD BE REGRESSED *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
//* 3. CHANGE ncpdlib TO THE DISTRIBUTION ZONE FOR NCP *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//ACCK EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(ncpdlib) .
// ACCEPT SELECT(HRA2602) CHECK .
//*
```

Figure 28. JCL to Perform an SMP/E ACCEPT CHECK

Expected Return Codes and Messages:

ATUACCK job ends with return code equal zero (RC=0).

6.1.10 Perform SMP/E ACCEPT

Edit and submit sample job ATUACCEP to perform an SMP/E ACCEPT for NTuneMON V2R6 MVS. Consult the instructions in Figure 29 for more information.

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.

```
//ATUACCEP JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
//* UPDATE THE NTUNEMON DISTRIBUTION LIBRARIES *
//* *
//* BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
//* MODIFICATIONS: *
//* *
//* 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
//* 2. CHANGE ncpzzzzz TO THE HIGH LEVEL QUALIFIER USED BY NCP *
//* 3. CHANGE ncpdlib TO THE DISTRIBUTION ZONE FOR NCP *
//* *
//* EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
//* ZERO *
//*****
//ACCEPT EXEC PGM=GIMSMP,PARM='DATE=U',REGION=4096K,
// TIME=1440
//SMPCSI DD DSN=ncpzzzzz.GLOBAL.CSI,DISP=SHR
//SMPCNTL DD *
// SET BDY(ncpdlib) .
// ACCEPT SELECT(HRA2602) .
//*
```

Figure 29. JCL to Perform SMP/E ACCEPT

Expected Return Codes and Messages:

ATUACCEP job ends with return code equal zero (RC=0).

6.2 Post-Installation Information

If a PTF cumulative service tape is included with the order, install the maintenance now.

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 might 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.

Appendix A. NTuneMON V2R6 MVS Install Logic

A.1 SMP/E Modification Control Statements

The SMP/E Modification Control Statements (SMPMCS) for NTuneMON V2R6 MVS are contained in the SMPMCS file on the installation tape. The SMPMCS for each FMID in the product will be loaded to the SMPPTS dataset, with a member name matching the FMID, when the FMID is SMP/E RECEIVED. You may browse or print these members using TSO/E, ISPF, or IEBGENER (or IEBPTPCH).

Figure 30 provides a portion of the SMP installation logic for NTuneMON V2R6 MVS.

```
++FUNCTION(HRA2602) FESN(0502391) REWORK(1999210)
  RFDSNPFX(IBM)          /* TIME=13.47.17  DATE=07/29/99 */
  DESCRIPTION(NTUNEMON) FILES(2)
  /*****
  /* COPYRIGHT = LICENSED MATERIALS - PROPERTY OF IBM  */
  /* 5648-141 (C) COPYRIGHT IBM CORP. 1994, 1999.      */
  /* ALL RIGHTS RESERVED.                               */
  /* U.S. GOVERNMENT USERS RESTRICTED RIGHTS -        */
  /* USE, DUPLICATION OR DISCLOSURE RESTRICTED BY     */
  /* GSA ADP SCHEDULE CONTRACT WITH IBM CORP.         */
  /*****
  .
++VER(P004)
  DELETE(HRA1102,HRA1202,HRA2102,HRA2202,HRA2302,HRA2402,HRA2502)
  .
++JCLIN          RELFILE(1) .
```

Figure 30. Portion of the SMP Installation Logic

Figure 31 provides a sample job to print SMPMCS.

```
//ATULOGIC JOB (account info),'pgmrs name',MSGLEVEL=(1,1)
//*****
/** PRINT THE SMPMCS FILE FROM THE NTUNEMON V2R6 PRODUCT TAPE *
/** *
/** BEFORE USING THIS JOB, YOU WILL HAVE TO MAKE THE FOLLOWING *
/** MODIFICATIONS: *
/** *
/** 1. CHANGE THE JOB CARD TO MEET YOUR SYSTEM REQUIREMENTS *
/** 2. CHANGE tape TO THE PRODUCT TAPE OR CARTRIDGE *
/** *
/** EXPECTED RETURN CODE: THIS JOB SHOULD END WITH RETURN CODE *
/** ZERO *
//*****
//GENER EXEC PGM=IEBGENER
//SYSPRINT DD SYSOUT=A
//SYSUT1 DD UNIT=tape,DISP=OLD,VOL=SER=RA2602,
// LABEL=(1,SL),DSN=SMPMCS
//SYSUT2 DD SYSOUT=A
//SYSIN DD DUMMY
/**
```

Figure 31. Sample Job to Print SMPMCS

Expected Return Codes and Messages:

ATULOGIC job ends with return code equal zero (RC=0).

Appendix B. APARs Incorporated into This Program

The following NTuneMON V2R5 APARs are incorporated into this program:

IR38773
IR39003
IR39305
IR39326
IR39332
IR39383
IR39459
IR39523
IR39895
IR39918
IR40456
IR40888
IR40890

Reader's Comments

Program Directory for NTuneMON Version 2 Release 6 for MVS

You may use this form to comment about this document, its organization, or subject matter with the understanding that IBM may use or distribute whatever information you supply in any way it believes appropriate without incurring any obligation to you.

For each of the topics below please indicate your satisfaction level by circling your choice from the rating scale. If a statement does not apply, please circle N.

RATING SCALE					
very satisfied	<----->	very dissatisfied	not applicable		
1	2 3 4	5	N		

	Satisfaction					
Ease of product installation	1	2	3	4	5	N
Contents of program directory	1	2	3	4	5	N
Installation Verification Programs	1	2	3	4	5	N
Time to install the product	1	2	3	4	5	N
Readability and organization of program directory tasks	1	2	3	4	5	N
Necessity of all installation tasks	1	2	3	4	5	N
Accuracy of the definition of the installation tasks	1	2	3	4	5	N
Technical level of the installation tasks	1	2	3	4	5	N
Ease of getting the system into production after installation	1	2	3	4	5	N

Did you order this product as an independent product or as part of a package?

- Independent
- Package

If this product was ordered as part of a package, what type of package was ordered?

- CustomPac
- FunctionPac
- SystemPac
- System Delivery Offering (SDO)
- Other - Please specify type:

Is this the first time your organization has installed this product?

- Yes
- No

Were the people who did the installation experienced with the installation of these products?

- Yes
- No

If yes, how many years? ___

If you have any comments to make about your ratings above, or any other aspect of the product installation, please list them below:

Please provide the following contact information:

Name and Job Title

Organization

Address

Telephone

Thank you for your participation.

Please send the completed form to (or give it to your IBM representative who will forward it to the NTuneMON Development group):

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