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# Unicenter

## Mainframe Network Management Maintenance Instructions for Product Delivery Level NM500 Issue 3

P01- 242



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# Table of Contents

<b>Chapter 1</b>	<b>Introduction .....</b>	<b>1-1</b>
	Purpose of the Maintenance Tape.....	1-2
	Contents of the Maintenance Tape .....	1-2
	SMP Fixes .....	1-2
	Non-SMP Fixes .....	1-3
	MPO Fixes .....	1-3
	Tape Volume Serial Number Format.....	1-4
	File Structure of the Maintenance Tape.....	1-5
	File 1: Maintenance JCL .....	1-5
	File 2: Install Information .....	1-7
	Files 3 – n: SMP Fixes, SMP RELFILEs, Non-SMP Fixes, MPO Fixes, Associated Files .....	1-8
	About This Manual .....	1-8
	What You Should Know Already.....	1-9
	Notational Conventions .....	1-9
	Variables Representing Data Sets .....	1-9
	Variables in JCL Jobs.....	1-9
	? Symbol .....	1-9
	Italics.....	1-9

<b>Chapter 2</b>	<b>Maintaining Products With the Install Utility ...</b>	<b>2-1</b>
	Maintenance Steps .....	2-2
	Task 1—Determine the Version of the Install Utility You Should Use .....	2-3
	Where to Next? .....	2-3
	Task 2—Unload Maintenance Control Information .....	2-4
	Task 3—Generate Maintenance JCL .....	2-5
	Subtask 3.1—Execute Maintenance Software .....	2-5
	Subtask 3.2—Generate Maintenance JCL .....	2-6
	Subtask 3.3—Complete Generation of Maintenance JCL .....	2-8
	Task 4—Review Maintenance JCL .....	2-9
	Task 5—Run Maintenance JCL .....	2-9
	Task 6—Review Non-SMP Fix Information for a Single Product Component .....	2-10
	Checkpoint .....	2-10
	Task 7—Apply SMP Fixes From a Non-maintenance Tape Source ....	2-11
	Subtask 7.1—Maintain Product .....	2-11
	Subtask 7.2—Generate SMP Maintenance JCL .....	2-11
	Subtask 7.3—Complete the Generation of SMP Maintenance JCL .....	2-13
	Subtask 7.4—Run SMP Maintenance JCL .....	2-13
	Checkpoint .....	2-13
<b>Chapter 3</b>	<b>Maintaining Products Manually .....</b>	<b>3-1</b>
	Task 1—Unload the Maintenance JCL .....	3-2
	Task 2—Prepare to Install Fixes .....	3-3
	Task 3—SMP RECEIVE Fixes .....	3-4
	Task 4—SMP APPLY CHECK Fixes .....	3-4
	Task 5—SMP RESTORE Fixes .....	3-5
	Task 6—SMP APPLY Fixes .....	3-5
	Task 7—SMP ACCEPT Fixes .....	3-6
	Task 8—Unload Non-SMP Fixes .....	3-6
	Task 9—Review Non-SMP Fix Information .....	3-7
	Task 10—Unload Replacement MPO Data Sets .....	3-7
	Task 11—Install MPO Fixes .....	3-7

<b>Appendix A</b>	<b>Products and Their Components.....</b>	<b>A-1</b>
	Unicenter NetMaster File Transfer Management 5.0 .....	A-2
	Unicenter NetMaster Network Automation 5.0.....	A-2
	Unicenter NetMaster Network Management for SNA 4.0 .....	A-3
	Unicenter NetMaster Network Management for TCP/IP 6.2 .....	A-3
	Unicenter NetMaster Network Operations for TCP/IP 6.2 .....	A-4
	Unicenter NetSpy Network Performance 6.0 .....	A-4
	Unicenter SOLVE:Operations Automation 4.1 .....	A-5
	Unicenter SOLVE:Operations Automation for CICS 4.1 .....	A-5
	NetMaster Reporter 2.0 .....	A-5
<b>Appendix B</b>	<b>RAMDB Maintenance .....</b>	<b>B-1</b>
	Applying Maintenance to the RAMDB .....	B-2
	Task 1. Backing up the RAMDB .....	B-2
	Task 2. Applying RAMDB Maintenance.....	B-3
	Task 3. Restoring RAMDB Maintenance (Optional) .....	B-4
	\$RMDB04D OPT=APPLY .....	B-4
	\$RMDB04D OPT=RESTORE .....	B-6
	<b>Index</b>	



# 1

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## Introduction

This chapter introduces the installation process for a maintenance tape (also known as service pack).

**The topics in this chapter are:**

- Purpose of the Maintenance Tape
- Contents of the Maintenance Tape
- File Structure of the Maintenance Tape
- About This Manual
- What You Should Know Already
- Notational Conventions

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## Purpose of the Maintenance Tape

A maintenance tape allows you to apply maintenance to selected product components.

It does *not* replace the functions of the standard product tapes.

Products are released at particular delivery levels. Similarly, maintenance tapes are tied to the product delivery level. The tapes are distributed as service packs. The service pack for a particular product delivery level may contain one or more maintenance tapes, accompanied by a *Maintenance Instructions* manual. This manual applies to products released at the **NM500** product delivery level.

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## Contents of the Maintenance Tape

Each maintenance tape includes fixes for the currently supported product components at a particular delivery level.

Maintenance tapes currently support OS/390 and z/OS fixes only.

A maintenance tape contains, for each supported product component, an amalgamation of every fix available *since* the last product release.

Fixes on a maintenance tape include program temporary fixes (PTFs) that supersede all authorized program analysis reports (APARs) that had been created to that time. Details of the superseded APARs are available as comments within the PTFs.

The following types of product maintenance are provided on the maintenance tape:

- SMP fixes
- Non-SMP fixes
- MODS, Panels, and OSCNTL (MPO) fixes

### SMP Fixes

The SMP fixes consist of PTFs applied to product components using IBM's System Modification Program Extended (SMP/E) tool.

## Non-SMP Fixes

The non-SMP maintenance is provided as information that details the steps you take to update the product components. Non-SMP fixes consist of documentation fixes and information fixes that contain step-by-step instructions to perform the fixes, for example, RAMDB fixes.

The maintenance software creates a job that unloads non-SMP fix information from the maintenance tape into a partitioned data set. You can then access this data set, review the members, and follow the instructions to update the relevant components.

## MPO Fixes

The MPO maintenance is provided through three replacement data sets (MODSDIS, PANLDIS, and OSCNTL) for each product component that supports the MPO maintenance type.

The maintenance software creates jobs to unload the replacement MPO data sets into sequential staging data sets and to refresh the VSAM data sets.

A replacement MPO data set is a sequential data set that contains (in unloaded format) a MODSDIS, PANLDIS, or OSCNTL data set. Three replacement MPO data sets (one each for MODSDIS, PANLDIS, and OSCNTL) are always provided for every component that has MPO fixes. Each data set is complete as at the last product release and contains all cumulative maintenance since the last product release.

When MPO maintenance is performed, *all* elements contained in the set of three replacement MPO data sets are replaced on your system. Individual elements within a data set cannot be selected.

## Tape Volume Serial Number Format

Each maintenance tape is uniquely identified by a volume serial number (VOLSER). The format of the VOLSER is as follows:

*Mvvifs*

where:

*vv* is a number that identifies the delivery level (for example, 50 for NM500).

*i* is a number (starting from 0) that identifies the issue of the delivery level. There may be multiple issues of the product tapes at the same delivery level, each subsequent issue containing additional products.

*f* is an alphanumeric character (A to Z, then 1 to 9) that identifies the maintenance tape issue. There may be more than one issue of the maintenance tape for a delivery level issue.

*s* is a single-digit number (starting from 1) that identifies the sequence of the tape in a maintenance issue. An issue may contain more than one maintenance tape.

For example, the M500C2 VOLSER indicates the following:

- It is the second maintenance tape volume (2)
- In the third maintenance tape issue (C)
- For the first product tape issue (0)
- At the NM500 delivery level (50)

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## File Structure of the Maintenance Tape

Each maintenance tape has standard labels and contains the following files:

- A single maintenance JCL file
- Install information
- A group of files for each supported product

These files are described below.

For each product component, there is a variable number of files in its group, depending on whether it has non-SMP fixes, MPO fixes, SMP fixes, or module replacement fixes requiring RELFILES. *ccvvv* identifies the component and its version (see *Appendix A, Products and Their Components*).

The \$TAPLIST member in the maintenance JCL file on a tape always lists the individual file numbers and file data set names for that tape.

### File 1: Maintenance JCL

The name of the data set is UNICENTR. <i>volser</i> .FIXJCL. This data set is used when maintenance is installed manually as described in Chapter 3, <i>Maintaining Products Manually</i> . This data set is <i>always</i> present and is file 1 on the tape. FIXJCL is an IEBCOPY-unloaded PDS containing the following members:	
\$FIXLIST	A list, sorted by product components, of all SMP, non-SMP, and MPO fixes on this tape and their summary descriptions.
\$PRDLIST	A list of all supported component versions.
\$TAPLIST	A list of all files on this tape.
<i>ccvvv</i> RCJ	JCL to invoke SMP to receive fixes from this tape. One such member is supplied for each component version that has SMP fixes.
<i>ccvvv</i> RCV	SMP RECEIVE statements for this single component version. One such member is supplied for each component version that has SMP fixes.
<i>ccvvv</i> AKJ	JCL to invoke SMP to apply check fixes that must be restored. One such member is supplied for each component version that has SMP fixes.
<i>ccvvv</i> APK	SMP APPLY CHECK statements for this single component version. One such member is supplied for each component version that has SMP fixes.

(Sheet 1 of 2)

<i>ccvvvRSJ</i>	JCL to invoke SMP to restore fixes discovered during SMP APPLY CHECK. One such member is supplied for each component version that has SMP fixes.
<i>ccvvvRES</i>	SMP RESTORE statements for this single component version. One such member is supplied for each component version that has SMP fixes.
<i>ccvvvAPJ</i>	JCL to invoke SMP to apply fixes from this tape. One such member is supplied for each component version that has SMP fixes.
<i>ccvvvAPP</i>	SMP APPLY statements for this single component version. One such member is supplied for each component version that has SMP fixes.
<i>ccvvvACJ</i>	JCL to invoke SMP to accept fixes from this tape. One such member is supplied for each component version that has SMP fixes.
<i>ccvvvACC</i>	SMP ACCEPT statements for this single component version. One such member is supplied for each component version that has SMP fixes.
<i>ccvvvAnn</i>	JCL to invoke either IEBCOPY or IEBGENER to unload non-SMP data sets associated with a particular APAR from this tape. One such member is present for each associated data set for each component version.
<i>ccvvvVSM</i>	JCL to invoke IEBCOPY to unload non-SMP fix information from this tape. One such member is applied for each component version that has non-SMP fixes, for example, RAMDB fixes.
<i>ccvvvV01</i>	JCL to unload the replacement MPO data sets.
<i>ccvvvV02</i>	JCL to rename the previous MPO staging data sets, and rename the unloaded replacement MPO staging data sets.
<i>ccvvvV03</i>	JCL to refresh the MPO VSAM data sets with the replacement MPO staging data sets.
<i>ccvvvNTE</i>	Important notes about individual fixes for this single component version. This member is not present if there are no notes.

(Sheet 2 of 2)

## File 2: Install Information

<p>The name of the data set is UNICENTR.NM.MAINT. This data set is used when maintenance is installed by using the Install Utility as described in Chapter 2, <i>Maintaining Products With the Install Utility</i>. This data set is <i>always</i> present and is file 2 on the tape. This data set contains maintenance control information that is used to generate the maintenance JCL.</p>	
\$FIXLIST	A list, sorted by product components, of all SMP, non-SMP, and MPO fixes on this tape and their summary descriptions.
#FIXTOC	A table of contents that lists fixes supplied on the maintenance tape. This table of contents is used by the Install Utility software when creating maintenance JCL.
ccvvvRCV	SMP RECEIVE statements for this single component version. One such member is supplied for each component version that has SMP fixes.
ccvvvAPK	SMP APPLY CHECK statements for this single component version. One such member is supplied for each component version that has SMP fixes.
ccvvvRES	SMP RESTORE statements for this single component version. One such member is supplied for each component version that has SMP fixes.
ccvvvAPP	SMP APPLY statements for this single component version. One such member is supplied for each component version that has SMP fixes.
ccvvvACC	SMP ACCEPT statements for this single component version. One such member is supplied for each component version that has SMP fixes.
ccvvvAnn	JCL to invoke either IEBCOPY or IEBGENER to unload non-SMP data sets associated with a particular APAR from this tape. One such member is present for each associated data set for each component version.
ccvvvNTE	Important notes about individual fixes for this single component version. This member is not present if there are no notes.

## Files 3 – n: SMP Fixes, SMP RELFILEs, Non-SMP Fixes, MPO Fixes, Associated Files

SMP fixes	The name of the data set is UNICENTR.volser.ccvvv.SMPMCS. One such data set is present for each product component that has SMP fixes.
SMP RELFILEs	The names of the data sets are <i>fixno.F1</i> , <i>fixno.F2</i> , and <i>fixno.F3</i> . These data sets, if any, are present after the SMPMCS that references them. They are in standard SMP RELFILE (unloaded IEBCOPY) format.
Non-SMP fixes	The name of the data set is UNICENTR.volser.ccvvv.NONSMP. One such data set is present for each component that has non-SMP fixes. This is an IEBCOPY-unloaded PDS. Each member of this PDS contains information about a non-SMP fix, for example, RAMDB fixes.
MPO data sets	The names of the data sets are UNICENTR.volser.ccvvv.MODSDIS, UNICENTR.volser.ccvvv.PANLDIS, and UNICENTR.volser.ccvvv.OSCNTL. One of each of these data sets is present for each component that has MPO fixes. These three data sets are sequential copies of VSAM data sets.
Associated files	The name of the data set is UNICENTR.volser.ccvvv.xxxxxxxx. Note that xxxxxxxx is usually the non-SMP fix number with which this data set is associated. This can be either an IEBCOPY-unloaded PDS or a sequential copy of a VSAM data set. The appropriate unload job contains the name of the correct program to use to unload this data set.

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## About This Manual

This manual provides a step-by-step guide to installing fixes for products released at the NM500 product delivery level from a maintenance tape by using either of the following methods:

- Installing maintenance using JCL generated by the Install Utility.

**Note**

You can only use this method if you have *previously installed* products using JCL generated by the Install Utility. You must use the same Utility to apply maintenance.

- Installing maintenance manually by tailoring the distributed sample JCL.

Read this manual if you are responsible for installing fixes from maintenance tapes.

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## What You Should Know Already

You should be familiar with the use of the following:

- JCL
- IBM's TSO/ISPF
- IBM's SMP/E

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## Notational Conventions

This section explains the conventions used in this manual.

### Variables Representing Data Sets

This manual uses the following abbreviations in data sets:

*dsnpref*

Data set prefix

*vv0*

Three-digit number that identifies the product delivery level

*ccvvv*

Component and version ID

### Variables in JCL Jobs

This manual presents variables in different ways for different purposes.

#### ? Symbol

Variables prefixed by the ? symbol have values that must be entered by the user, for example:

```
//STEP1    EXEC  PGM=IEBCOPY
//SYSUT1   DD    DSN=UNICENTR.?tapeser.FIXJCL,DISP=OLD,
//          UNIT=?device-in,VOL=SER=?tapeser,
//          LABEL=(1,SL,EXPDT=98000)
```

#### Italics

Variables shown in *italics* represent the kind of value rather than the exact value required. For example, *dsnpref* represents a value for data set prefix.



# 2

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## Maintaining Products With the Install Utility

This chapter describes how to apply maintenance to products using the Install Utility.

The maintenance tasks are grouped as follows:

- Pre-maintenance
- Installing maintenance from the maintenance tape
- Installing maintenance from a non-maintenance tape source

**The topics in this chapter are:**

- Maintenance Steps
- Task 1—Determine the Version of the Install Utility You Should Use
- Where to Next?
- Task 2—Unload Maintenance Control Information
- Task 3—Generate Maintenance JCL
- Task 4—Review Maintenance JCL
- Task 5—Run Maintenance JCL
- Task 6—Review Non-SMP Fix Information for a Single Product Component
- Task 7—Apply SMP Fixes From a Non-maintenance Tape Source

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## Maintenance Steps

The tasks for installing maintenance by using the Install Utility are:

Pre-maintenance	Task 1—Determine the Version of the Install Utility You Should Use
Installing maintenance from the maintenance tape	Task 2—Unload Maintenance Control Information
	Task 3—Generate Maintenance JCL
	Task 4—Review Maintenance JCL
	Task 5—Run Maintenance JCL
	Task 6—Review Non-SMP Fix Information for a Single Product Component
Installing maintenance from a non-maintenance tape source	Task 7—Apply SMP Fixes From a Non-maintenance Tape Source

### Caution

If you need to maintain the NetMaster Reporter HFS, you must be defined as indicated in the *SMP/E for z/OS and OS/390 User's Guide*:

“The SMP/E user must be defined to the security class BPX.SUPERUSER  
...”

---

## Task 1—Determine the Version of the Install Utility You Should Use



### Key Concept

The Install Utility allows you to generate maintenance jobs automatically for products installed with the Utility.

The Install Utility software is unloaded as part of the product installation process. You have access to the Install Utility only if you have unloaded it from the product tape.

If you *have not* unloaded the Install Utility from the product tape, you *cannot* use it to generate maintenance jobs, and must manually customize your maintenance jobs, as described in Chapter 3, *Maintaining Products Manually*.

You *must* use an Install Utility that is at the same delivery level as your product to apply maintenance. Products are now released as part of a specific delivery level. Each delivery level has its own Install Utility. To apply maintenance to a product at a particular delivery level, you must use the correct Install Utility. The first release that uses this scheme is at delivery level NM500.

In general, if the product is at the NM $v$ v0 delivery level, you must use the *dsnpref.NM $v$ v0.INSTALL(INSTALL)* Install Utility. This manual applies to the NM500 product delivery level. You must use the following Install Utility:

***dsnpref.NM500.INSTALL(INSTALL)***

If you need a copy of the Utility, unload it from your NM500 product tape. For information about how to unload the Utility, see the *Unicenter Mainframe Network Management Installation and Setup Instructions*.

---

## Where to Next?

You have determined the version of the Install Utility that you should use. Depending on the source of your maintenance, do this:

### **If you want to apply maintenance ... Proceed to ...**

From the maintenance tape

*Task 2—Unload Maintenance Control Information* on page 2-4.

From a source other than the maintenance tape

*Task 7—Apply SMP Fixes From a Non-maintenance Tape Source* on page 2-11

Manually

Chapter 3, *Maintaining Products Manually*.

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## Task 2—Unload Maintenance Control Information

The following sample JCL unloads maintenance control information from the maintenance tape to DASD. This information is used by the Install Utility to create the maintenance jobs for the installed components.

To unload maintenance control information, do this:

Step 1. Create an unload job by copying the following JCL:

```
//jobname JOB .....
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD DSN=UNICENTR.NM.MAINT,
//          DISP=OLD,UNIT=?device-in,VOL=SER=?tapeser,
//          LABEL=(2,SL,EXPDT=98000)
//SYSUT2 DD DSN=?dsnpref.NM500.INSTALL,
//          DISP=OLD
//SYSIN DD *
COPY I=((SYSUT2,R)),O=SYSUT2
COPY I=((SYSUT1,R)),O=SYSUT2
/*
```

Replace the statements prefixed with ? with your own values as follows:

### **?device-in**

Specifies the tape drive unit to mount the tape.

### **?dsnpref**

Specifies the data set prefix you provided for the NM500.INSTALL library when you unloaded the Install Utility during product installation.

### **?tapeser**

Specifies the volume serial number of the maintenance tape, which should be of the form M502fs. For information about the VOLSER, see the section, *Tape Volume Serial Number Format*, on page 1-4.

Step 2. Submit and run the job.

Step 3. Check that the job completed successfully.

---

## Task 3—Generate Maintenance JCL

You have been supplied with a maintenance tape. To ensure that you are delivered fixes for your products as soon as possible, a maintenance tape is created regularly. Applying maintenance ensures that you have the latest version of product software installed.

It is recommended that you apply maintenance for all products you have installed that have fixes on the supplied maintenance tape.

### Subtask 3.1—Execute Maintenance Software

To execute maintenance software, do this:

- Step 1. Access the ISPF/PDF Primary Menu.
- Step 2. Select the COMMAND option. The ISPF Command Shell is displayed.
- Step 3. At the ==> prompt, enter and execute the following command:

```
EXEC 'dsnpref.NM500.INSTALL(INSTALL)'
```

- Step 4. At the Install title screen press ENTER.

#### Note

Press F1 to access online help at any displayed panel during the maintenance process.

- Step 5. At the Install Utility Database Details panel, enter the same data set prefix that you used (for example, SYS3.CAI) for the installation database when you installed your products.



#### Key Concept

The Install Utility creates an installation database during product installation (*dsnpref.NM500.INSTDB*). The database stores details of each product that you install. These details include the installation values that you specify and are used to apply maintenance.

## Subtask 3.2—Generate Maintenance JCL

To generate maintenance JCL, do this:

- Step 1. At the Install Utility Select Function panel, enter **2** to select the *Maintain Products* option.
- Step 2. At the MAINTENANCE Select Source panel, enter **1** to select to apply fixes from the maintenance tape.
- Step 3. At the MAINTENANCE Unit Information panel, specify the tape drive on which the maintenance tape will be mounted, the expiry date of the tape, and the work unit to be used for the allocation of temporary data sets.
- Step 4. At the Component Selection panel, enter **S** beside the components to which you want to apply maintenance. For information about the components that make up a product, see *Appendix A, Products and Their Components*.

The panel displays a list of all the components that have been installed by the Install Utility and that have maintenance available. The maintenance software creates maintenance jobs for the components you select. You run these maintenance jobs to apply the maintenance.

- Step 5. At the MAINTENANCE Component Confirmation panel, press ENTER to confirm your selection.
- Step 6. If the maintenance for the components you select has non-SMP fixes available, the MAINTENANCE Non-SMP Dataset Information panel is displayed. If this panel is not displayed, proceed to Step 7. (For information about non-SMP fixes, see the section, *Non-SMP Fixes*, on page 1-3.)

At the MAINTENANCE Non-SMP Dataset Information panel, enter the Non-SMP data set prefix and allocation parameters.

- Step 7. If the maintenance for the components you select has MPO maintenance available, the MAINTENANCE MPO Dataset Information panel is displayed. If this panel is not displayed, proceed to Step 10. (For information about MPO fixes, see the section, *MPO Fixes*, on page 1-3.)

At the MAINTENANCE MPO Dataset Information panel, enter the MPO data set prefix and allocation parameters.

- Step 8. (Complete this step if you have an existing region containing the components you selected at Step 4; otherwise, proceed to Step 10.) At the MAINTENANCE MPO Dataset Selection List panel, select a data set prefix for maintenance.

For each component that has MPO maintenance available, repeat your selection of data sets to receive maintenance for the specified component.

- Step 9. At the MAINTENANCE MPO Dataset Confirmation panel, either confirm or modify your selection.

Step 10. At the MAINTENANCE JOBCARD Information panel, specify your JOBCARD details.

At this stage, the maintenance software has collected the required values and is about to generate the maintenance jobs.

Step 11. At the MAINTENANCE JCL Library Creation panel, review your fix JCL library.

The default library name is *dsnpref*.NM500.FIX.JCL where *dsnpref* is the same data set prefix you used for the *dsnpref*.NM500.INSTALL data set.



**Key Concept**

Each time you apply maintenance, you must use a new output data set so that the only jobs in your maintenance JCL library are the jobs required for the maintenance you are installing now.

If your installation JCL library already exists, do *one* of the following:

- Delete the library by issuing a TSO DELETE command and the library name, at the Command ==> prompt.
- Specify a new data set name.

A confirmation panel is displayed to indicate that the system is ready to generate the maintenance JCL jobs.

### Subtask 3.3—Complete Generation of Maintenance JCL

To complete the generation of maintenance JCL, do this:

- Step 1. At the confirmation panel, press ENTER to proceed with the generation of the maintenance JCL.

When the JCL generation is complete, the screen displays a list of generated jobs and a description of what each member does.

The maintenance software has generated maintenance jobs that you run to apply maintenance to the components you have installed. The number of jobs generated depends on the number of components you selected at the Component Selection panel and the type of fixes available for those components.

The maintenance jobs generated are:

- **F01RCSMP**—This job SMP receives maintenance, unloads non-SMP fixes and replacement MPO data sets.
- **F02AKSMP**—This job checks for any APARs that must be restored.
- **F03RSSMP**—This job restores APARs. If the F02AKSMP job discovers any APARs, you must include them in this job.
- **F04APSMP**—This job SMP applies maintenance.
- **F05ACSMP**—This job SMP accepts maintenance.
- **F06RENAM**—This job renames the previous MPO staging data sets and replaces the previous data sets with the replacement MPO staging data sets unloaded by job F01RCSMP.
- **F07RFRSH**—This job executes the VSAM Installation Program to refresh the MPO VSAM data sets with the replacement MPO staging data sets.

- Step 2. Note the name of the data set into which the JCL was generated.

- Step 3. At the MAINTENANCE Generated Jobs panel, you are able to edit (E or S), browse (B) and submit (J) the JCL. The maintenance jobs can be run now or later. They should be reviewed and run in the order described later in Tasks 4 and 5.

- Step 4. At the MAINTENANCE Generated Jobs panel, press F3 to return to the Install Utility Select Function panel.

- Step 5. Either Press F4 to exit the Install Utility Select Function panel and return to the ISPF Command Shell, or continue with the other options.

---

## Task 4—Review Maintenance JCL

The \$FIXLIST member in the *dsnpref*.NM500.INSTALL data set lists all the fixes available on the tape.

If a product component has important maintenance requirements, they are detailed in a corresponding *ccvvv*NTE member. If such a member is present, review it. It also contains information about the contents of any associated files for the component. Do not unload any associated files in this step. Associated files are unloaded in *Task 6—Review Non-SMP Fix Information for a Single Product Component* on page 2-10.

---

## Task 5—Run Maintenance JCL



### Key Concept

The maintenance software generated a series of jobs to apply maintenance to the components you selected. These jobs are stored in the *dsnpref*.NM500.FIX.JCL data set, where *dsnpref* is the same data set prefix used for the *dsnpref*.NM500.INSTALL data set.

To apply maintenance to the components you installed, submit and run the generated maintenance jobs in the following order:

- Step 1. F01RCSMP—SMP receive maintenance, which also unloads non-SMP and MPO fixes.
- Step 2. F02AKSMP—SMP apply check, which checks for any APARs that must be restored before the maintenance can be applied.
- Step 3. F03RSSMP—SMP restore APARs. Before you run this job, include the APARs discovered by the F02AKSMP job in the corresponding step. If no APARs were discovered, you can skip this job.
- Step 4. F04APSMP—SMP apply.
- Step 5. F05ACSMP—SMP accept.

### Note

The job does not SMP accept the NetSpy SNA Services component.

- Step 6. F06RENAM—Rename previous MPO staging data sets and replace with the MPO staging data sets unloaded by job F01RCSMP.
- Step 7. F07RFRSH—Refresh the selected MPO VSAM data sets with the replacement MPO staging data sets.

---

## Task 6—Review Non-SMP Fix Information for a Single Product Component

(This task is required only if the maintenance tape has non-SMP fixes available for your component.)

One of the files unloaded in Step 1 of *Task 5—Run Maintenance JCL* on page 2-9, is a partitioned data set containing a non-SMP fix in each member:

- Step 1. Review each member in *dsnpref.tapeser.ccvvv.NONSMP*, and note which non-SMP fixes are critical to your installation and require action.  
  
For each non-SMP fix that you want to install, perform Step 2 and Step 3.
- Step 2. If this fix has associated files, as detailed in the *ccvvvNTE* member, review the *ccvvvAnn* members in the *dsnpref.NM500.INSTALL* data set. Then submit the *ccvvvAnn* members to unload these files from the maintenance tape.  
  
After you have submitted the *ccvvvAnn* members, return to the member in *dsnpref.tapeser.ccvvv.NONSMP*.
- Step 3. Follow the step-by-step instructions in the member in the *dsnpref.tapeser.ccvvv.NONSMP* data set to make the corrections.

### Checkpoint

You have completed your maintenance tasks using the Install Utility and the maintenance tape.

---

## Task 7—Apply SMP Fixes From a Non-maintenance Tape Source

(This task is required only if you need to install SMP fixes other than those that were distributed on your maintenance tape.)



### Key Concept

Apart from the maintenance supplied by a current maintenance tape, you can receive fixes from other delivery mechanisms such as Customer Support mail or FAX, bulletin boards, web sites, fix diskette, or previous maintenance tapes. This can happen if, for instance, the fixes are too new to be included on a maintenance tape.

When you receive these fixes you should unload them to a partitioned data set on your system.

To apply fixes received by a mechanism other than the current maintenance tape, do the following tasks as described:

- Subtask 7.1—Maintain Product
- Subtask 7.2—Generate SMP Maintenance JCL
- Subtask 7.3—Complete the Generation of SMP Maintenance JCL
- Subtask 7.4—Run SMP Maintenance JCL

### Subtask 7.1—Maintain Product

- Step 1. At the Install Utility Select Function panel, enter **2** to select the Maintain Products option.
- Step 2. At the MAINTENANCE Select Source panel, enter **2** to select the SMP Fixes from a DASD Dataset option.

### Subtask 7.2—Generate SMP Maintenance JCL

- Step 1. Select the component to which you want to apply maintenance from the MAINTENANCE DASD Fixes Component Selection panel. To do this, enter **S** beside the relevant component.



### Key Concept

The MAINTENANCE DASD Fixes Component Selection Panel lists the components for which the Install Utility will generate maintenance JCL for fixes supplied by sources other than the maintenance tape. These fixes must reside in a partitioned data set on your system.

- Step 2. At the MAINTENANCE Component Confirmation panel, press ENTER to confirm your selection.

Step 3. At the MAINTENANCE DASD Fixes Dataset Name panel, specify the data set containing the SMP fixes.

**Note**

The data set you specify must be an existing partitioned data set, and must contain the SMP fixes.

Step 4. At the MAINTENANCE DASD Fixes panel, specify the fixes you want to apply to the components you selected at Step 1.



**Key Concept**

The maintenance software allows you to enter up to 10 APARs for the selected component. Maintenance jobs will be generated for the APARs you specify, which you run to apply maintenance.

Step 5. At the MAINTENANCE JOBCARD Information panel, specify your JOBCARD details.

Step 6. At the MAINTENANCE JCL Library Creation panel, review your fix JCL Library.



**Key Concept**

At this stage, the maintenance software has collected the required values and is about to generate the maintenance jobs.

Each time you perform maintenance, you must use a new output data set to ensure that the jobs in your maintenance JCL library are the only ones required for you to apply maintenance to the products you have installed. If the FIX.JCL library already exists, you can either delete the existing data set or specify a new data set name.

The default library name is *dsnpref*.NM500.FIX.JCL, where *dsnpref* is the same data set prefix you used for the *dsnpref*.NM500.INSTALL data set.

If your installation JCL library already exists, do *one* of the following:

- Delete the library by issuing a TSO DELETE command and the library name, at the Command ==> prompt.
- Specify a new data set name.

A confirmation panel is displayed to indicate that the system is ready to generate the maintenance JCL jobs.

### Subtask 7.3—Complete the Generation of SMP Maintenance JCL

- Step 1. Note the name of the data set into which the JCL was generated.
- Step 2. At the MAINTENANCE Generated Jobs panel, you are able to edit (E or S), browse (B), and submit (J) the JCL. The maintenance jobs can be run now or at a later stage. They should be run in the order described in Subtask 8.4.
- Step 3. At the MAINTENANCE Generated Jobs panel, press F3 to return to the Install Utility Select Function panel.
- Step 4. Either Press F4 to exit the Install Utility Select Function panel and return to the ISPF Command Shell, or continue with the other options.

### Subtask 7.4—Run SMP Maintenance JCL

The maintenance software generated a series of jobs to apply maintenance to your components.

To apply maintenance to a selected component from the DASD data set, run the generated maintenance jobs in the following order:

- Step 1. F11RCSMP—SMP RECEIVE and SMP LIST of existing HOLDDATA and SOURCEIDs already applied. If a job step returns a code of 04, there is no HOLDDATA present.

Review the information and, for any held APARs that you want to apply, add the correct BYPASS HOLD $x$  operands to the corresponding APPLY control statement for those APARs. Do this by manually editing the F12APSMP job that contains the SMP control statements. For information about the BYPASS HOLD $x$  operands, see the *SMP/E Commands* manual.

- Step 2. F12APSMP—SMP APPLY.

### Checkpoint

You have completed your tasks to install maintenance supplied by sources other than the maintenance tape.



# 3

---

## Maintaining Products Manually

To manually install maintenance, you must install fixes for one product component at a time. This chapter describes the steps you take to install fixes for a single component. The steps for the manual customization of jobs and installation of maintenance are grouped by task.

**The topics in this chapter are:**

- Task 1—Unload the Maintenance JCL
- Task 2—Prepare to Install Fixes
- Task 3—SMP RECEIVE Fixes
- Task 4—SMP APPLY CHECK Fixes
- Task 5—SMP RESTORE Fixes
- Task 6—SMP APPLY Fixes
- Task 7—SMP ACCEPT Fixes
- Task 8—Unload Non-SMP Fixes
- Task 9—Review Non-SMP Fix Information
- Task 10—Unload Replacement MPO Data Sets
- Task 11—Install MPO Fixes

---

## Task 1—Unload the Maintenance JCL

The following sample JCL unloads the maintenance JCL from the maintenance tape to DASD.

To unload the maintenance JCL from the supplied tape to your DASD, do this:

Step 1. Create an unload job by copying the following JCL:

```
//JOBNAME JOB .....
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//SYSUT1 DD DSN=UNICENTR.?tapeser.FIXJCL,DISP=OLD,
// UNIT=?device-in,VOL=SER=?tapeser,
// LABEL=(1,SL,EXPDT=98000)
//*
//SYSUT2 DD DSN=?dsnpref.UNICENTR.?tapeser.FIXJCL,
// DISP=(NEW,CATLG,DELETE),
// UNIT=?device-out,VOL=SER=?volser,
// DCB=(RECFM=FB,LRECL=80,BLKSIZE=6160),
// SPACE=(CYL,(1,1,50))
//SYSIN DD DUMMY
```

Replace the statements prefixed with ? with your own values as follows:

### **?device-in**

Specifies the tape drive unit to mount the tape.

### **?tapeser**

Specifies the volume serial number of the maintenance tape, which should be of the form M502fs. For information about the VOLSER, see the section, *Tape Volume Serial Number Format*, on page 1-4.

### **?device-out**

Specifies the DASD where you want to place the software.

### **?volser**

Specifies the volume serial number of the DASD device where you want to place the FIXJCL data set.

### **?dsnpref**

Specifies the data set prefix for the maintenance JCL data set.

Step 2. Submit and run the unload job.

### **Note**

In the following tasks, the *dsnpref.UNICENTR.M502fs.FIXJCL* data set that you created in Step 1 will be referred to as FIXJCL.

---

## Task 2—Prepare to Install Fixes

To prepare to install fixes for a product, do the following:

- Step 1. Determine the product components by referring to *Appendix A, Products and Their Components*.
- Step 2. Determine the names of the FIXJCL members to receive, apply, and accept SMP fixes, or to unload non-SMP fixes, MPO fixes, and associated files for the component version that you wish to maintain. The types of FIXJCL members (and names) are:
- Receive SMP fixes (*ccvvvRCJ*)
  - Apply check SMP fixes (*ccvvvAKJ*)
  - SMP RESTORE statements (*ccvvvRES*)
  - Restore SMP fixes (*ccvvvRSJ*)
  - Apply SMP fixes (*ccvvvAPJ*)
  - Accept SMP fixes (*ccvvvACJ*)
  - Unload non-SMP fixes (*ccvvvVSM*)
  - Unload replacement MPO data sets (*ccvvvV01*)
  - Rename and replace previous MPO staging data sets (*ccvvvV02*)
  - Refresh MPO VSAM data sets (*ccvvvV03*)
  - Unload associated files (*ccvvvAnn*)

For example, to maintain the TCP/IP Services 6.2 component of the NetMaster for TCP/IP product, select the members IP620RCJ, IP620AKJ, IP620RES, IP620RSJ, IP620APJ, IP620ACJ, IP620VSM, and IP620A01 (for the first associated file).

### Note

If a maintenance tape does not contain SMP fixes for a particular component, the FIXJCL *ccvvvRCJ*, *ccvvvAPJ*, and *ccvvvACJ* members for that component version do not exist.

If a maintenance tape does not contain non-SMP or MPO fixes for a particular component, the FIXJCL *ccvvvVSM* member or *ccvvvV01* member for that component version does not exist.

- Step 3. Review the \$FIXLIST member in the FIXJCL data set. The member lists all the fixes available on the tape. If a product component has important maintenance requirements, they are detailed in a corresponding *ccvvvNTE* member. The member also contains information about the contents of any associated files for a component.

If a *ccvvvNTE* member is present, review it.

Do not unload any associated files here, this is done in *Task 9—Review Non-SMP Fix Information* on page 3-7.

---

### Task 3—SMP RECEIVE Fixes

You can now receive the fixes into the SMP environment for the component.

To SMP RECEIVE these fixes, use the FIXJCL member *ccvvvRCJ*. (To find the ID (*cc*) for the component you wish to maintain, see *Appendix A, Products and Their Components*.)

- Step 1. Modify *ccvvvRCJ* by following the comments in the member.
- Step 2. Run *ccvvvRCJ*.

**Note**

If you attempt to receive a fix that has already been received, the job returns a condition code of 08. This usually does not affect the processing of any other fixes.

---

### Task 4—SMP APPLY CHECK Fixes

Before you apply the received fixes, you must check for any previously applied fixes that must be restored for the component.

To SMP APPLY CHECK these fixes, use the FIXJCL member *ccvvvAKJ*. (To find the ID (*cc*) for the component you wish to maintain, see *Appendix A, Products and Their Components*.)

- Step 1. Modify *ccvvvAKJ* by following the comments in the member.
- Step 2. Run *ccvvvAKJ*.
- Step 3. Check the output. Note any discovered APARs. You need to identify these APARs in the next task. If no APARs were discovered, skip the next task.

---

## Task 5—SMP RESTORE Fixes

You must now restore the discovered APARs for the component.

To SMP RESTORE these fixes, use the FIXJCL member `ccvvvRSJ`. It uses the `ccvvvRES` member for the APARs to be restored. (To find the ID (*cc*) for the component you wish to maintain, see *Appendix A, Products and Their Components*.)

- Step 1. In the `ccvvvRES` member, include the discovered APARs.
- Step 2. Modify `ccvvvRSJ` by following the comments in the member.
- Step 3. Run `ccvvvRSJ`.

---

## Task 6—SMP APPLY Fixes

You can now apply the fixes into the SMP environment for the component.

To SMP APPLY these fixes, use the FIXJCL member `ccvvvAPJ`. (To find the ID (*cc*) for the component you wish to maintain, see *Appendix A, Products and Their Components*.)

**Note**

For NetSpy SNA Services, a successful completion returns condition code 4.

- Step 1. Modify `ccvvvAPJ` by following the comments in the member.
- Step 2. Run `ccvvvAPJ`.
- Step 3. Check your APPLY output carefully, investigating any nonzero condition codes.

---

## Task 7—SMP ACCEPT Fixes

**Note**

For NetSpy SNA Services, this task is not required.

You can now accept the fixes into the SMP environment for the component.

To SMP ACCEPT these fixes, use the FIXJCL member *ccvvvACJ*. (To find the ID (*cc*) for the component you wish to maintain, see *Appendix A, Products and Their Components*.)

- Step 1. Modify *ccvvvACJ* by following the comments in the member.
- Step 2. Run *ccvvvACJ*.
- Step 3. Check your ACCEPT output carefully, investigating any nonzero condition codes.

---

## Task 8—Unload Non-SMP Fixes

You can now unload the non-SMP fixes.

To do this, use the FIXJCL member *ccvvvVSM*. (To find the ID (*cc*) for the component you wish to maintain, see *Appendix A, Products and Their Components*.)

- Step 1. Modify *ccvvvVSM* by following the comments in the member.
- Step 2. Run *ccvvvVSM*.

---

## Task 9—Review Non-SMP Fix Information

The file unloaded in *Task 8—Unload Non-SMP Fixes* is a PDS that contains fix information in each member.

- Step 1. Review each member in *dsnpref.tapeser.ccvvv.NONSMP*, and note which non-SMP fixes are critical to your installation and require action.

For each non-SMP fix that you want to install, perform Step 2 and Step 3.

- Step 2. If this fix has associated files, as detailed in the *ccvvvNTE* member, review the *ccvvvAnn* members in the *FIXJCL* data set. Submit the *ccvvvAnn* members to unload these associated files from the maintenance tape.

After you have submitted the *ccvvvAnn* members, return to the member in *dsnpref.tapeser.ccvvv.NONSMP*.

- Step 3. Following the step-by-step instructions in the member in *dsnpref.tapeser.ccvvv.NONSMP* to make the corrections.

---

## Task 10—Unload Replacement MPO Data Sets

To unload the replacement MPO data sets from the maintenance tape, use the *ccvvvV01* *FIXJCL* member. (To find the ID (*cc*) for the product component you wish to maintain, see *Appendix A, Products and Their Components*.)

- Step 1. Modify *ccvvvV01* by following the comments in the member.

- Step 2. Run *ccvvvV01*.

---

## Task 11—Install MPO Fixes

You can now install the MPO fixes. In this task you rename the previous MPO staging data sets and replace these data sets with the replacement MPO staging data sets unloaded in *Task 10—Unload Replacement MPO Data Sets* on page 3-7. The MPO VSAM data sets are then refreshed with the replacement MPO staging data sets.

- Step 1. Modify *ccvvvV02* following the comments in the member.

- Step 2. Run *ccvvvV02*.

- Step 3. Modify *ccvvvV03* following the comments in the member.

- Step 4. Run *ccvvvV03*.



# A

---

## Products and Their Components

This appendix provides a list of product names and versions at the NM500 delivery level. It lists the components that make up the product, their version abbreviations (*ccvvv*), and applicable function modification identifiers (FMIDs).

---

## Unicenter NetMaster File Transfer Management 5.0

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Data Space	DI500	Not Applicable
File Transfer Services	FT500	NME00FT
Management Services	MS500	NME00MS
SOLVE Subsystem Interface	SI500	Not Applicable
TCP/IP Services	IP620	NMF20IP

---

## Unicenter NetMaster Network Automation 5.0

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Management Services	MS500	NME00MS
SNA Automation Services	AU500	NME00AU
SOLVE Subsystem Interface	SI500	Not Applicable

---

## Unicenter NetMaster Network Management for SNA 4.0

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Management Services	MS500	NME00MS
SNA Services	SN400	NMD00SN
SOLVE Subsystem Interface	SI500	Not Applicable

---

## Unicenter NetMaster Network Management for TCP/IP 6.2

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Data Space	DI500	Not Applicable
Management Services	MS500	NME00MS
SOLVE Subsystem Interface	SI500	Not Applicable
TCP/IP Services	IP620	NMF20IP

---

## Unicenter NetMaster Network Operations for TCP/IP 6.2

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Data Space	DI500	Not Applicable
Management Services	MS500	NME00MS
SOLVE Subsystem Interface	SI500	Not Applicable
TCP/IP Services	IP620	NMF20IP

---

## Unicenter NetSpy Network Performance 6.0

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Data Space	DI500	Not Applicable
Management Services	MS500	NME00MS
NetSpy SNA Services	NY600	CNT6000
SOLVE Subsystem Interface	SI500	Not Applicable
TCP/IP Services	IP620	NMF20IP

---

## Unicenter SOLVE:Operations Automation 4.1

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Management Services	MS500	NME00MS
Operations Services	SS410	NMD10SS
SOLVE Subsystem Interface	SI500	Not Applicable

---

## Unicenter SOLVE:Operations Automation for CICS 4.1

The product components are as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Automation Services	AS500	NME00AS
Management Services	MS500	NME00MS
Operations Services	SS410	NMD10SS
SOLVE Subsystem Interface	SI500	Not Applicable

---

## NetMaster Reporter 2.0

Reporter has a prerequisite of either NetMaster for File Transfer 5.0 or NetMaster for TCP/IP 6.2. It contains one component as follows:

<b>Component</b>	<b>ccvvv</b>	<b>FMID</b>
Reporter Services	WR200	C2B20WR



# B

---

## RAMDB Maintenance

This appendix describes how to apply maintenance to the Automation Services database (RAMDB) and details the command syntax of the \$RMDB04D maintenance utility.

---

## Applying Maintenance to the RAMDB

RAMDB is a NetMaster Database (NDB) and must not be updated with individual replacement records via IDCAMS REPRO.

When applying maintenance, you can request a differences report that details exactly what is being added, replaced, or deleted by the maintenance.

### Task 1. Backing up the RAMDB

**Note**

If you have just built your product region using the *Installation and Setup Instructions* there is no need to back up your RAMDB because your RAMDB has not been updated. You can bypass this task and proceed to Task 2.

If you are using an existing RAMDB with user data then you must back up your RAMDB.

To create the backup RAMDB (RAMDBd) do this:

- Step 1. Allocate RAMDBd in the same way that RAMDB was allocated. (The cluster definition can be found in *dsnpref.rname.JCL(S01LCALC)*).
- Step 2. Stop the product region.
- Step 3. Copy the data from RAMDB to RAMDBd using IDCAMS REPRO. (An example can be found in *dsnpref.rname.JCL(S04LDVSM)*).
- Step 4. Restart the product region.

## Task 2. Applying RAMDB Maintenance

You can apply maintenance directly to your RAMDB. It can then propagate to all connected regions, if any. If necessary, you can restore the maintenance using your RAMDBd as input (provided that the maintenance has not yet been applied to RAMDBd).

- Step 1. Log on to your product region and enter CMD to access the command entry window.

### Note

Step 2 can be performed for either of two reasons:

- To see what will happen when/if a fix is applied to a RAMDB
- To see if a fix has been applied to a RAMDB

- Step 2. To apply-check the RAMDB fix, enter the following command:

```
$RMDB04D OPT=APPLY FIX=NZnnnnn  
DATASET=?dsnpref.tapeser.AS500.NONSMP CHECK=YES
```

*?dsnpref.tapeser*—specifies the library that contains the non-SMP fixes for the selected product component.

This command applies the non-SMP fix *NZnnnnn* from the *dsnpref.tapeser.AS500.NONSMP* library to an active RAMDB. When the APPLY CHECK finishes, a report is displayed that shows whether an APPLY of the fix will or will not be successful, and also exactly what changes will result from the APPLY.

- Step 3. To apply the RAMDB fix, enter the following command:

```
$RMDB04D OPT=APPLY FIX=NZnnnnn  
DATASET=?dsnpref.tapeser.AS500.NONSMP
```

*?dsnpref.tapeser*—specifies the library that contains the non-SMP fixes for the selected product component.

This command applies the non-SMP fix *NZnnnnn* from the *dsnpref.tapeser.AS500.NONSMP* library to an active RAMDB.

Repeat Step 3 to apply each RAMDB fix to the product region.

### Note

If a RAMDB fix does not apply correctly or if you want to restore a fix, follow the steps in Task 3, Restoring RAMDB Maintenance.

### Task 3. Restoring RAMDB Maintenance (Optional)

The RESTORE option can be used to remove an applied fix from the RAMDB by using RAMDBd as input. The fix is effectively reversed; that is, any added objects are deleted and any deleted or replaced objects are copied from RAMDBd back to the RAMDB.

To restore the fix, enter the following command:

```
$RMDB04D OPT=RESTORE FIX=NZnnnnn DDBDSN=?RAMDBd-dataset-name  
DDB=?RAMDBd DATASET=?dsnpref.tapeser.AS500.NONSMP
```

*?dsnpref.tapeser*—specifies the library that contains the non-SMP fixes for the selected product component.

*?RAMDBd*—specifies the DD name for the backup RAMDB

*?RAMDBd-dataset-name*—specifies the full dataset name of the backup RAMDB

---

## \$RMDB04D OPT=APPLY

### Syntax

```
$RMDB04D OPT=APPLY  
FIX=fix-number  
[DDNAME=ddname | DATASET=dataset-name]  
[CHECK={NO | YES}]  
[DIFF={YES | NO}]  
[FORCE={NO | YES}]  
[CONFIRM={YES | NO}]  
[DB=file-id [DBDSN=db-dataset-name]]
```

### Use

Use this procedure to apply a fix to a RAMDB or check a fix against a RAMDB.

### Operands

#### **OPT=APPLY**

Specify APPLY to indicate that a fix is being applied to a RAMDB.

#### **FIX=*fix-number***

Specify the fix number to be applied. This number is used as the member name of the input partitioned dataset.

**[DDNAME=*ddname* | DATASET=*dataset-name*]**

Specify the DDNAME parameter if the dataset containing the fix is already allocated to the system. Specify the DATASET parameter if the dataset containing the fix is to be allocated by this NCL procedure and freed after the fix has been retrieved. These two parameters are mutually exclusive and cannot both be specified. If neither is specified, the COMMANDS DD concatenation in the region is used.

**[CHECK={NO | YES}]**

If you specify YES, the fix is only checked for compatibility with the database and is not actually applied to the database. The check phase is always performed regardless of the value specified. However, this parameter determines if the check phase is the only phase to be performed.

**[DIFF={YES | NO}]**

If you specify YES (the default), the difference between the attributes of the target object and the attributes of the new object are displayed for each object in the fix for which updates are required. This is for all SET (update) actions (provided that the target exists) and for CREATE actions where the target object already exists.

**[FORCE={NO | YES}]**

If you specify YES, the fix is applied regardless of the success or failure of the check phase. However, if CHECK=YES is specified, the FORCE parameter has no effect.

**[CONFIRM={YES | NO}]**

If you specify YES (the default), the fix is retrieved and the syntax checked before being presented as a panel for browsing. The panel enables you to view the fix and confirm the application. Once confirmed, the fix is applied. The message log is presented as another panel for browsing. If you specify NO, the fix is applied without presenting any confirmation panel and the message log is written to the terminal rather than being displayed as a panel.

**Note**

The message log is always written to the activity log regardless of the options specified.

**[DB=*file-id* [DBDSN=*db-dataset-name*]]**

To apply the fix to a database other than the currently allocated RAMDB, specify the DB parameter. This parameter specifies the file ID of the target database. If you also specify the DBDSN parameter, the specified dataset is allocated a DD name which is the same as the specified file ID, and is opened and started. The database is not freed after the fix is applied. If the database is already allocated, the specified dataset name is verified as being allocated to the DD name (that is the same as the specified file ID) and opened to the same file ID.

---

## \$RMDB04D OPT=RESTORE

### Syntax

```
$RMDB04D  OPT=RESTORE  
          FIX=fix-number  
          [DDNAME=ddname | DATASET=dataset-name]  
          [CONFIRM={YES | NO}]  
          [TDB=target-file-id [TDBDSN=target-dataset-name]]  
          [DDB=source-file-id [DDBDSN=source-dataset-name]]
```

### Use

Use this procedure to reverse the effect of a fix.

### Operands

#### **OPT=RESTORE**

Specify RESTORE to indicate that a fix, which has been applied to the target RAMDB, is being reversed.

#### **FIX=***fix-number*

Specify the fix number to back out of the RAMDB. This number is used as the member name of the fix dataset and is verified against the contents of the member for the correct fix.

#### **[DDNAME=***ddname* **| DATASET=***dataset-name***]**

Specify the DDNAME parameter if the dataset containing the fix is already allocated to the system. Specify the DATASET parameter if the dataset is to be allocated by this NCL procedure and freed after the fix has been retrieved. These two parameters are mutually exclusive and cannot both be specified. If neither are specified, the COMMANDS DD name of the region is used.

**[CONFIRM={YES | NO}]**

If you specify YES (the default), the fix is retrieved and the syntax checked before being presented as a panel for browsing. The panel enables you to view the fix and confirm the restoration process. Once confirmed, the fix is removed and the original data restored. The message log is presented as another panel for browsing. If you specify NO, the restoration process proceeds without presenting any confirmation panel and the message log is written to the terminal rather than being displayed as a panel.

**Note**

The message log is always written to the activity log regardless of the options specified.

**[TDB=*target-file-id* [TDBDSN=*target-dataset-name*]]**

To reverse a fix in a database other than the currently allocated RAMDB, specify the TDB parameter. This parameter specifies the file ID of the target database. If you also specify the TDBDSN parameter, the specified dataset is allocated a DD name which is the same as the specified file ID, and is opened and started. The database is not freed after the restoration process. If the database is already allocated, the specified dataset name is verified as being allocated to the DD name (that is the same as the specified file ID) and opened to the same file ID.

**[DDB=*source-file-id* [DDBDSN=*source-dataset-name*]]**

Restoration requires the specification of the distribution (source) database through the DDB parameter. This parameter specifies the file ID of the source database. The source database must be a copy of the original database. If you also specify the DDBDSN parameter, the specified dataset is allocated a DD name that is the same as the specified file ID, and is opened and started. The database is not freed after the restoration process. If the database is already allocated, the specified dataset name is verified as being allocated to the DD name (that is the same as the specified file ID) and opened to the same file ID.



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# Index

## D

data sets  
    replacement MPO, 1-3  
    variables representing, 1-9

## F

file structure of the maintenance tape, 1-5  
fixes  
    JCL library, 2-7  
    list, 2-9  
    MPO, 1-3  
    non-SMP, 1-3  
    SMP, 1-2

## I

Install Utility, 2-3  
    unload job, 2-4  
installation database, 2-5

## J

JCL jobs, variables in, 1-9

## M

maintenance  
    refresh MPO data sets, 2-9  
    replacement MPO data sets, 2-9  
    SMP apply, 2-9  
    SMP apply check, 2-9  
    SMP receive, 2-9  
    SMP restore, 2-9  
    unload MPO, 2-9  
    unload non-SMP, 2-9  
maintenance jobs, types, 2-8  
maintenance notes, 2-9  
maintenance steps, 2-2  
    manual, 3-1  
maintenance tape  
    contents, 1-2  
    file structure, 1-5  
        associated files, 1-8  
        install information, 1-7  
        maintenance JCL members, 1-5  
    purpose, 1-2  
MPO data set, replacement, 1-3  
MPO fixes, 1-3

## N

NetMaster Automation components, A-2  
NetMaster for File Transfer components,  
    A-2

- NetMaster for SNA components, A-3
- NetMaster for TCP/IP components, A-3
- NetMaster Network Operations for TCP/IP components, A-4
- NetMaster Reporter components, A-5
- NetSpy components, A-4
- non-maintenance tape sources, SMP fixes, 2-11
- non-SMP fixes, 1-3

## P

- product components
  - NetMaster Automation, A-2
  - NetMaster for File Transfer, A-2
  - NetMaster for SNA, A-3
  - NetMaster for TCP/IP, A-3
  - NetMaster Network Operations for TCP/IP, A-4
  - NetMaster Reporter, A-5
  - NetSpy, A-4
  - SOLVE:Operations Automation, A-5
  - SOLVE:Operations Automation for CICS, A-5
- product delivery level, 2-3

## S

- service pack. *See* maintenance tape
- SMP
  - accept, 2-9
  - apply, 2-9
  - apply check, 2-9
  - receive, 2-9
  - restore, 2-9
- SMP fixes, 1-2
  - non-maintenance tape sources, 2-11
- SOLVE:Operations Automation components, A-5
- SOLVE:Operations Automation for CICS components, A-5

## V

- variables
  - data sets, 1-9
  - JCL jobs, in, 1-9
- volume serial number format, tape, 1-4