HP 3000 MPE/iX Release 6.5 System Software Maintenance Manual (Release C.65.00)

HP 3000 MPE/iX Computer Systems

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Preface

This manual describes how to install, update, add-on purchased subsystems, or apply patches to Release 6.5 of the MPE/iX Operating System using either tape or CD-ROM source media.

It is an update to the following manual from release 6.0:

- *HP 3000 MPE/iX System Software Maintenance Manual Release 6.0*

This document replaces the following three manuals from release 5.0:

- *HP 3000 MPE/iX Installation, Update, and Add-On Manual MPE/iX Release 5.0* (General)
- *Using CD-ROM to Update Your HP 3000 System Software*
- *HP 3000 MPE/iX PowerPatch Installation Manual MPE/iX Release 5.0* (C.50.02)

This manual is written for experienced MPE/iX system managers. In writing this book we assume that you are familiar with day-to-day system management tasks such as configuring the system, managing system resources, developing and following backup procedures, resolving system problems, and supporting system users.

About MPE/iX

MPE/iX, Multiprogramming Executive with Integrated POSIX, is the latest in a series of forward-compatible operating systems for the HP 3000 line of computers.

In HP documentation and in talking with HP 3000 users, you will encounter references to MPE XL, the direct predecessor of MPE/iX. MPE/iX is a superset of MPE XL. All programs written for MPE XL will run without change under MPE/iX. You can continue to use MPE XL system documentation, although it may not refer to features added to the operating system to support POSIX (for example, hierarchical directories).

Finally, you may encounter references to MPE V, which is the operating system for HP 3000s not based on the PA-RISC architecture. MPE V applications can be run on PA-RISC (Series 900) HP 3000s in what is known as compatibility mode.

Organization of This Manual

This manual contains the following chapters and appendices:

Chapter 1 , “Introduction,” provides basic concepts and describes how to use this manual.

Chapter 2 , “Task Checklists,” provides checklists for performing the processes described in this manual. These are not keystroke summaries, instead the checklists list what sections in the manual you do to accomplish any system modification task. There are four main parts to the modification task; each part is described in the following chapters.

Chapter 3 , “Planning for Your Task,” lists prerequisite information for performing your task.

Chapter 4 , “Preparing Your System,” describes how to create the CSLT using the CD-ROM

source media tool (HPINSTAL) and the patch tool (Patch/iX). This chapter also describes how to create a staging area.

Chapter 5 , “Modifying Your System,” describes how to create the CSLT using the tape source media tool (AUTOINST), and how to install, update, add-on purchased subsystems and products, or apply patches to your system using the CSLT. This chapter also describes how to apply patches to your system using staging areas. This chapter includes shutting down your system.

Chapter 6 , “Finishing the Process,” describes the closing steps required to bring your system back to full operating condition.

Appendix A , “Manually Installed Products.”

Appendix B , “Configuration Tables.”

Appendix C , “Managing Disk Space.”

Appendix D , “Backdating Your System.”

Appendix E , “CD-ROM Resources.”

Appendix F , “HP Patch/iX Reference.”

Appendix G , “HP Stage/iX Reference.”

Appendix H , “Error Messages and Warnings.”

Glossary defines terms used in this manual.

Additional References

This section contains a cross reference to the documentation of products and tools called out in this book.

Table 1. Cross Reference to Documentation Products

System Software Subject	Recommended Manuals	Type of Installation			
		Power -Patch Only	Add-On, Power -Patch	Update , Power -Patch	Install, Power -Patch
For the UPDATE utility, system activities, system startup functions, and SYSGEN information.	*System Startup, Configuration, and Shutdown Reference Manual*	x	x	x	x
For reviewing accounts, checking passwords, and security information.	*Performing System Management Tasks* and *Manager's Guide to MPE/iX Security*	x	x	x	x
For Security Monitor security information	*HP Security Monitor/iX Managers Guide*	x	x	x	x
For the VOLUTIL utility.	*Volume Management Reference Manual*		x	x	x

Table 1. Cross Reference to Documentation Products

System Software Subject	Recommended Manuals	Type of Installation			
		Power -Patch Only	**Add-On, Power -Patch**	**Update , Power -Patch**	**Install, Power -Patch**
For systems with NS3000/iX.	*HP3000/iX Network Planning and Configuration Guide* and *Using the Open View DTC Manager Manual*	x	x	x	x
For DTS (Terminal I/O) and DTCs and PC-based networks.	*Configuring Systems for Terminals, Printers, and Other Serial Devices* and *DTC Network Planning and Configuration Guide*		x	x	x
For OpenView Console or OpenView System Manager	*HP OpenView Console Manager's Guide* and *HP OpenView System Manager Manager's Guide*		x	x	x
For the NMMGR utility.	*Using the Node Management Services (NMS) Utilities*	x	x	x	x
For HP PowerTrust UPS Monitor/iX for system power failure protection on HP 3000 models 9x8LX, 9x8RX, 991, and 995.	*Performing System Management Tasks*		x	x	x
For AutoRestart/iX.	*AutoRestart/iX Reference Manual*		x	x	x
For HP ALLBASE/SQL developer systems.	*ALLBASE/SQL Database Administration Guide*		x	x	x
For HP Predictive Support.	*HP Predictive Support User's Guide* and *HP Predictive Support User's Guide Addendum*	x	x	x	x

1 Introduction

This manual describes how to install or update the operating system, add-on purchased sub-system products, and/or apply patches to your HP 3 system software using either CD-ROM or tape as source media and tape or stage (disk) media to apply the changes to your system. Starting with MPE/iX release 5.5, this manual has a completely new format and structure. It replaces these previous installation, update, add-on, and PowerPatch manuals:

- *HP 3000 MPE/iX Installation, Update, and Add-On Manual*
- *Using CD-ROM to Update Your HP 3000 System Software*
- *HP 3000 MPE/iX PowerPatch Installation Manual*

In addition to the consolidation of three manuals into one, the major changes are in the layout, task descriptions, and checklists.

Manual Layout

Each chapter is divided into sections, and each section was designed to deliver the information you need quickly and easily. Task checklists provide the sequence of sections that you need to complete for your task.

Task Process

This manual combines all the system software modification tasks into one process. The basic process is divided into four parts:

1. Chapter 3 , “Planning for Your Task.”
2. Chapter 4 , “Preparing Your System.”
3. Chapter 5 , “Modifying Your System.”
4. Chapter 6 , “Finishing the Process.”

You will no longer be able to find a single chapter that describes, for example, updating your system software and applying PowerPatch. Instead you will selectively perform the actions that apply to your specific task. Use your task checklist to guide you through this process.

Task Checklists

The checklists are **required** in order to complete your system modification task correctly. Do not perform all the sections in this manual. Do not skip around the manual. Follow the checklist and perform the sections listed, and only the sections listed, in the order listed. Refer to Chapter 2 , “Task Checklists.”

NOTE Experienced users! You must follow the checklist for your task to ensure that your system will not be put into an unknown state.

The checklists have been designed to provide:

- A list of the specific sections you need to complete to perform your task.
- A worksheet for recording information about your task.
- A reference to the sequence of sections.
- A scheduling tool.

Each checklist is divided into preparation tasks which you can perform while the system is up, and tasks that require exclusive access. Review the activities for your checklist and schedule your system downtime as appropriate.

Exceptions

Decision and exception steps are used in the sections. A decision step directs you to another step or to another section in the manual. Review the decision step and determine which choice applies to your task. If the exception **does** apply to your task, perform the

actions described in the exception step. If the exception **does not** apply to your task, skip the actions described in the exception and proceed to the next step for your task.

HP Patch/iX

HP Patch/iX is a tool for managing your patches. Use it to apply the following to your system:

- Reactive patches
- PowerPatches
- Express Add-on SUBSYS products with PowerPatches

The HP Patch/iX tool allows you to:

- Qualify all patches in a set of patches, including Reactive patches. This reduces the chance of a patch removing a previously installed patch.
- Install Reactive and PowerPatch patches simultaneously.
- Selectively apply patches from a PowerPatch.
- Create the patch installation tape while users are still on the system.

HP Patch/iX is a screen-based, menu-driven tool. Use arrow keys and functions keys to select and perform activities. Refer to Appendix F , “HP Patch/iX Reference,” for procedures on using menus and the screen-based tool.

HP Stage/iX

HP Stage/iX is an operating system facility for applying and managing MPE/iX patches on your system. Using HP Stage/iX reduces system downtime and provides an easy and reliable method for backing out patches. Refer to Appendix G , “HP Stage/iX Reference,” for information on HP Stage/iX commands and staging area handling.

Use HP Stage/iX to place Reactive patches into staging areas on disk while the system is up, then choose a staging area to use at boot time to apply the patches. After the patches are applied, they can be backed out at any time through a reboot to the Base (the version applied by the last tape update). Once you are satisfied with the patches on the running system, you can commit the staging area to form a new Base while the system is running (no reboot is needed).

HP Stage/iX has the following three interfaces:

HP Patch/iX menus allow you to stage patches to staging areas after HP Stage/iX is initialized (as well as create CSLT/STORE tapes in the usual fashion). Refer to Appendix F , “HP Patch/iX Reference,” for information about HP Patch/iX.

STAGEMAN utility allows you to manage your HP Stage/iX environment, and obtain information about the environment and individual staging areas.

STAGEISL utility is an ISL utility available when the system is down. It contains a subset of the STAGEMAN functionality, and allows you to recover from most errors or mistakes.

HP Stage/iX Concepts

Your Operating System (OS) resides in what HP Stage/iX refers to as the Base.

This is the set of files laid down by the last system installation or update (from tape). HP Stage/iX creates and manages staging areas, which are file containers on disk that hold versions of files that are different from the Base. A staging area is actually an HFS directory which holds all the files associated with that staging area. More than one staging area can exist at a time. Each staging area contains the difference, or delta, between the Base Operating System and a patched OS.

When a staging area is activated on the next boot, the files in the staging area directory are moved (renamed) into their natural locations. For example, the staged version of the NL is moved into NL.PUB.SYS. At the same time, the Base versions of the files are saved in an HP Stage/iX archive directory. When the staging area is backed out (when the system is booted back to the Base), the converse takes place, and the system is restored to its original state.

When an active staging area is committed to the Base, the staging area directory is deleted, and all archived Base files are purged. The files that were switched into their natural locations when the staging area was activated remain there as part of the new Base. This releases any disk space that was used by the staging area.

HP Stage/iX (with the help of HP Patch/iX) allows new patches to be staged and applied in

a cumulative fashion. This means that if you create a new staging area while a staging area is active, the new staging area will contain all the changes between the Base and the active staging area, *plus* the new patches applied to the new staging area.

HP Stage/iX Task Overview

The following is a summary of the HP Stage/iX process. Refer to Appendix G , "HP Stage/iX Reference," for information on the full HP Stage/iX command set and staging area handling.

1. HP Stage/iX is automatically installed with your 6.0 version of the system software.
2. You initialize HP Stage/iX.
3. Use HP Patch/iX to select the patches you want to apply to your system and specify that the patches are applied to a staging area.
4. HP Stage/iX, through HP Patch/iX:
   a. Creates a staging area.
   b. Fills the staging area with the patches, that is, the changed files from the base operating system that result from the patches.
   c. Validates the staging area.
5. When it is convenient, activate HP Stage/iX to boot your system from the staging area with the patched changes and complete the normal system modification procedures.
   a. Use the SET command to specify the staging area.
   b. Shutdown and boot your system.

      The system boots using the files from the staging area.
   c. HP Stage/iX archives an original version of the changed files of the base operating system.
6. If you want to reverse the patched changes, set HP Stage/iX to boot from the Base OS.
   a. Use the SET command to specify the Base.
   b. Shutdown and boot your system.

      The system boots using the files from the archive area for the Base OS.
7. If you want to keep the patched changes, use the COMMIT command.

   HP Stage/iX deletes the staging area and removes the archived version of the original operating system files. The files are already in their natural locations because the staging area is active. The patched changes are incorporated into your base operating system.

NOTE You can only use the EXPORT and IMPORT commands of Stage/iX for applying patches to systems that are on the identical base. Stage/iX will not verify whether or not your machines are on the same base release.

Removal of Support for Servers and HP-IB in MPE/iX

In order to streamline the development and test of future MPE/iX releases, the PBA-IB HP-IB Device Adapter (A1747A) and old CIB I/O based HP 3000 Servers will not work with MPE/iX Release 6.5 and later releases.

The PBA-IB HP-IB Device Adapter was discontinued in May 1999 and has an end of support date of November 1, 2001. The following old CIB I/O (also known as CIO) based HP 3000 Servers will have completed their end-of-support well before November 1, 2001:

- the 925/935/949 family
- the 920/922/932/948/958
- the 950/955/960/980 family

HP-IB and the above HP 3000 Servers will continue to be supported through their end-of-support date on MPE/iX Release 5.5 (which has a projected end-of-support date of November 1, 2000) and Release 6.0 (which has a projected end-of-support of November 1, 2001).

NOTE If you are running MPE/iX on one of these older systems, or on a system with any of these older cards or peripherals, you must **not** update that system to Release 6.5.

Customers wishing to replace their HP-IB I/O cards and peripherals should consider SCSI or LAN connected peripherals. Customers wishing to replace the above older HP 3000 Servers as they complete their support life should consider the 9x8 or 9x9KS HP 3000 Servers.

Discontinuance of High Availability Fiber Link Disk Drives

In May 1993, Hewlett-Packard Company introduced a family of High Availability Fiber Link disk arrays. Those Fiber Link (HP-FL) disk arrays were discontinued in August of 1997, along with other standalone Fiber link disk drives. The Fiber Link disk arrays were HP's first RAID devices built for high availability, high performance, high capacity and distances up to 500 meters. Since 1993, HP has embraced new disk array technologies, EMC disk arrays, High Availability Model 10 and 20 disk arrays and AutoRAID.

CSY is also moving to new processor technologies, like the N-class computers. These new computers call for new I/O cards, devices drives and I/O backplanes. MPE/iX is also changing. MPE/iX 6.5 is the first HP 3000 operating system to support these new I/O requirements. Therefore, MPE/iX 6.5 will not support Fiber Link disk I/O system drivers, I/O cards, and Fiber Link disks. The last release of MPE/iX to support HP-FL drivers and disk is MPE/iX 6.0.

The following is a partial of products not carried forward in MPE/iX 6.5:

Part #	Description of Obsolete Part
C2258HA	1/02 High Availability FL disk array
C2254HA	4/99 High Availability FL disk array
C2252B	4/99 High Availability FL disk array
C2258B	1/02 High Availability FL disk array
C2252HA	4/00 High Availability FL disk array
C2254B	4/99 High Availability FL disk array
C2259B	1/02 High Availability FL disk array
C2259HA	1/02 High Availability FL disk array
C2201A	8/97 FL disk
C2204A	8/97 FL disk
A1748A	PBA FL Chan-span card with HP-FL adapter
A28616A	PBA FL NIO Optic interface card
A27115A	CIO Fiber Optic interface card

Summary of Changes to This Manual

Changes made since the last version of this manual are as follows:

- Revisions were made in response to customer feedback.
- Edits were based on Service Requests for documentation changes.
- “Jump Tables” were removed.
- A capital letter now identifies each checklist for easier reference.
- Checklists were simplified to make it easier to track your way through the instructions.
- New checklists using `AUTOINST` were added for use by experienced system installers.
- Sections were numbered and the checklists refer to a section number instead of a page number.

2 Task Checklists

This chapter describes how to select your task checklist and contains each possible task checklist. Each checklist is a list of the specific sections in this manual that you need to read and follow to complete your task. **All tasks** require one or more of the checklists in this chapter:

- Checklist A. Manage Patches
- Checklist B. Manage Patches by Staging Area
- Checklist C. Distributing Staging Areas to Remote Systems
- Checklist D. Add-on with Tape
- Checklist E. Add-on with Tape and Manage Patches
- Checklist F. Add-on with CD-ROM
- Checklist G. Update with Tape
- Checklist H. Update with CD-ROM
- Checklist I. Modify Remote System
- Checklist J. Reinstall Using a CSLT
- Checklist K. Install a New System
- Checklist L. Using `AUTOINST` to Apply PowerPatch Only
- Checklist M. Using `AUTOINST` to Add-on and Apply PowerPatch

Patch/iX is the recommended method for installing patches because Patch/iX will qualify patches for you. Checklists L and M are provided only for experienced system installers who elect to use `AUTOINST` to install PowerPatches.

Selecting Checklists

To perform your task correctly, you must do the following:

1. Select your task checklist(s).

   Use Table 2-1 to identify which checklist(s) you need. If you see two or three checklist titles at the end of the row for your task, media, and patching situation in Table 2-1 with “and” separating them, perform the activities on the checklists in the order listed.

   For example, if you are applying only a **patch** on a **remote system**, and you are using a **tape** as the source, but the modifying media is **disk**, first complete the tasks on Checklist B, “Manage Patches by Staging Areas,” then complete tasks on Checklist C, “Distributing Staging Areas to Remote Systems.” Applicable only to Reactive NOT for Powerpatch.

2. Find your checklist(s) and print a copy for each system that you are updating.
3. Read and perform the steps in each section listed on the checklist, and only the sections listed. The sections are referenced by section number, not page number. You will skip many sections.
4. Use the checklist to determine the order of the sections and tasks.
5. Use the checklist to record your task progress and other information

   .

Table 2-1. Select Your Task Checklist

Task Option	Target System	Source Media[a]	Modifying Media	Patch Option	Checklist(s) to Use
Patch Only	Local System	Tape	Tape	PowerPatch	A. Manage Patches or L. Using AUTOINST to Apply PowerPatch
				Reactive	A. Manage Patches
				PowerPatch & Reactive	A. Manage Patches
		Tape	Disk	PowerPatch	
				Reactive	B. Manage Patches by Staging Area
				PowerPatch & Reactive	
	Remote system	Tape	Disk	PowerPatch	B. Manage Patches by Staging Area and C. Distributing Staging Areas to Remote
				Reactive	

Table 2-1. Select Your Task Checklist

Task Option	Target System	Source Media[a]	Modifying Media	Patch Option	Checklist(s) to Use
				PowerPatch & Reactive	
Add-on SUBSYS products	Local system	Tape	Tape	None	D. Add-on with Tape
				PowerPatch	E. Add-on with Tape and Manage Patches or M. Using AUTOINST to Add-on and Apply PowerPatch
				Reactive	D. Add-on with Tape and A. Manage Patches
				PowerPatch & Reactive	E. Add-on with Tape and Manage Patches
		CD-ROM	Tape	None	F. Add-on with CD-ROM
				PowerPatch	
				Reactive[b]	F. Add-on with CD-ROM and A. Manage Patches
				PowerPatch & Reactive	
Update OS and Add-on SUBSYS products	Local system	Tape	Tape	None	G. Update with Tape
				PowerPatch	
				Reactive	G. Update with Tape and A. Manage Patches
				PowerPatch & Reactive	
		CD-ROM	Tape	None	H. Update with CD-ROM
				PowerPatch	
				Reactive	H. Update with CD-ROM and A. Manage Patches

Table 2-1. Select Your Task Checklist

Task Option	Target System	Source Media[a]	Modifying Media	Patch Option	Checklist(s) to Use
				PowerPatch & Reactive	
	Remote system	CD-ROM	Tape	None	H. Update with CD-ROM & I. Modify Remote Systems
				PowerPatch	
				Reactive	H. Update with CD-ROM & I. Modify Remote Systems & A. Manage Patches
				PowerPatch & Reactive	
Reinstall OS	Local system	CSLT	Tape	None	J. Reinstall Using a CSLT
New Install OS	Local system	Tape	Tape	None	K. Install a New System
				PowerPatch	
				Reactive	K. Install a New System & A. Manage Patches
				PowerPatch & Reactive	

a. Source media applies to SLT, FOS, and SUBSYS components. PowerPatches are shipped on tape media. Reactive patches can be received through electronic downloading.
b. You cannot apply Reactive patches at the same time you are updating the system. You must first update the system, then apply Reactive patches. To apply Reactive patches after you update your system, refer to checklist A. Manage Patches.

Checklist A. Manage Patches

Use this task checklist if your source material is on **tape** and/or electronically downloaded files, you are **managing** your **patches**, and you are using a tape to apply:

- **PowerPatch** patches
- **Reactive** patches
- **PowerPatch** and **Reactive** patches together

Print a copy of this checklist for each system that you are applying patches to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.1 Reserving Disk Space for Tape Tasks

— 4.7 Starting the Patch Management Tools

— 4.8 Selecting HP Patch/iX Activities

— 4.9 Viewing Patches-*Optional*

— 4.10 Qualifying Patches

— 4.11 Creating a Patch Tape or Staging Area

Record manually installed products:

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.11 Securing the System

Record any terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification

If the installer utility created a STORE *tape only, this section is*

not required; proceed to 5.17, "Rerunning HP Patch/iX."

*If the installer utility created a CSLT/*STORE *tape combined, perform the steps in this section.*

— 5.14 Restarting the System

If the installer utility created a STORE tape only, this section is not required; proceed to 5.17, "Rerunning HP Patch/iX."

If the installer utility created a CSLT/STORE tape combined, perform the steps in this section.

— 5.17 Rerunning HP Patch/iX

Chapter 6 , "Finishing the Process."

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist A tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist B. Manage Patches by Staging Area

Use this task checklist if your source material is on **tape** and/or electronically downloaded files, you are **managing** your patches, and you are using a **staging area** on **disk** to apply:

- **Reactive** patches

NOTE Not all patches are stageable. For more information, refer to item 19 in section 3.2, “General Planning Tasks.”

Print a copy of this checklist for each system that you are applying patches to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.1 Reserving Disk Space for Tape Tasks

— 4.4 Initializing HP Stage/iX

— 4.7 Starting the Patch Management Tools

— 4.8 Selecting HP Patch/iX Activities

— 4.9 Viewing Patches—*Optional*

— 4.10 Qualifying Patches

— 4.11 Creating a Patch Tape or Staging Area

Record manually installed products:

Chapter 5 , “Modifying Your System.”

— 5.10 Setting a Staging Area

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.12 Shutting Down the Remote System

— 5.14 Restarting the System

Chapter 6 , “Finishing the Process.”

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.10 Permanently Applying a Staging Area-*optional.*

— 6.11 Finishing Up

Checklist B tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist C. Distributing Staging Areas to Remote Systems

Use this task checklist if your source material was on **tape** and/or electronically downloaded files, you are **managing** your patches, and you are using an existing **staging area** on **disk** to apply:

- **Reactive** patches on your **remote** system software

NOTE

- You must have completed the activities on the checklist B, “Manage Patches by Staging Area,” before performing the activities in this checklist.
- You can only use the `EXPORT` and `IMPORT` commands of Stage/iX for applying patches to systems that are on the identical base. Stage/iX will not verify whether or not your machines are on the same base release.
- **For each** remote system you are modifying, complete the activities in this checklist on your remote system.

Print a copy of this checklist for each remote system that you are applying patches to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.2 Reserving Disk Space for Distributing Staging Areas

— 4.4 Initializing HP Stage/iX-*On the remote system.*

Chapter 5 , “Modifying Your System.”

— 5.8 Preparing a Staging Area for Remote Distribution-*Required only if you are planning to apply a staging area to a remote site.*

Record sa_name:

Record `EXPORT` option used:

— 5.9 Installing a Distributed Staging Area-*Required only if you are installing a staging area to a remote site.*

— 5.10 Setting a Staging Area

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.12 Shutting Down the Remote System

— 5.14 Restarting the System

Chapter 6 , “Finishing the Process.”

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.10 Permanently Applying a Staging Area

— 6.11 Finishing Up

Checklist C tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist D. Add-on with Tape

Use this task checklist if your source material is on **tape** and you are using a CSLT tape to:

- **Add-on** purchased products.

NOTE

- If you are adding-on purchased products and applying PowerPatch patches, or PowerPatch and Reactive patches, instead use Checklist E, “Add-on with Tape and Manage Patches.”
- If you are adding-on purchased products and applying Reactive patches:
  a. Perform the activities in this checklist D.
  b. Then perform the activities in Checklist A, “Manage Patches,” or Checklist B, “Manage Patches by Staging Area.”

Print a copy of this checklist for each system that you are applying add-on products to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.1 Reserving Disk Space for Tape Tasks

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.1 Securing and Backing Up the System for Tape Tasks

Record terminated logging processes:

Record system files with lockwords:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.7 Creating the CSLT Using AUTOINST—*Select option 5 Add-on (SUBSYS only).*

Record manually installed products:

Record data communication products:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist D tasks completed.

If you have Reactive patches to apply, proceed to one of these checklists:

- Checklist A, “Manage Patches”
- Checklist B, “Manage Patches by Staging Area”

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist E. Add-on with Tape and Manage Patches

Use this task checklist if your source material is on **tape** and/or electronically downloaded files, you are **managing** your **patches**, and you are using a CSLT tape to:

- **Add-on** purchased products and apply **PowerPatch** patches
- **Add-on** purchased products, apply **PowerPatch** and **Reactive** patches together

This checklist uses HP Patch/iX.

NOTE Reactive patches cannot be applied during the Add-on task without a PowerPatch. To add Reactive patches independently, follow Checklist A, “Manage Patches.”

Print a copy of this checklist for each system that you are applying add-on products to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.1 Reserving Disk Space for Tape Tasks

— 4.7 Starting the Patch Management Tools

— 4.8 Selecting HP Patch/iX Activities

— 4.9 Viewing Patches—*Optional*

— 4.10 Qualifying Patches

— 4.11 Creating a Patch Tape or Staging Area

Record manually installed products:

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.17 Rerunning HP Patch/iX

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist E tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist F. Add-on with CD-ROM

Use this task checklist if your source material is on **CD-ROM** and you are using CSLT tape to:

- **Add-on** purchased products
- **Add-on** purchased products and apply **PowerPatch patches**

NOTE You cannot apply Reactive patches at the same time you are using CD-ROM source material to add-on purchased products to your system. You must apply Reactive patches after you update the system. To apply Reactive patches (after you update the system), refer to the Checklist A, “Manage Patches,” or Checklist B, “Manage Patches by Staging Area.”

Print a copy of this checklist for each system that you are applying add-on products to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.3 CD-ROM Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.3 Preparing to Run `HPINSTAL`

Record CD *v.uu.ff* version level:

— 4.6 Creating the CSLT using `HPINSTAL`

Record manually installed products:

— 4.12 Reserving Disk Space for CD-ROM Tasks

Record contiguous disk space:

Record non-contiguous disk space:

Preparation Tasks completed.*Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.16 Rerunning HPINSTAL

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist F tasks completed.

If you have Reactive patches to apply, proceed to one of these checklists:

- Checklist A, “Manage Patches”
- Checklist B, “Manage Patches by Staging Area.”

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist G. Update with Tape

Use this task checklist if your source material is on **tape** and you are using a CSLT tape to:

- **Update** your system software version level
- **Update** your system software version level and apply **PowerPatch** patches

NOTE You cannot apply Reactive patches at the same time you are updating the system. You must apply Reactive patches after you update the system. To apply Reactive patches (after you update the system) refer to Checklist A, “Manage Patches,” or Checklist B, “Manage Patches by Staging Area.”

Print a copy of this checklist for each system that you are updating.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.5 Checking Peripherals

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.1 Reserving Disk Space for Tape Tasks

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.1 Securing and Backing Up the System for Tape Tasks

Record terminated logging processes:

Record system files with lockwords:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.2 Applying the SLT

— 5.4 Starting the System .

— 5.7 Creating the CSLT Using AUTOINST—*Select option 3 FOS, SUBSYS,*

PowerPatch if you have a PowerPatch tape, or if no PowerPatch, select option 4 FOS and SUBSYS.

Record manually installed products:

Record data communication products:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.15 Rerunning AUTOINST—*Required only if applying PowerPatch*.

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring and Updating Manually Installed Products

— 6.6 Setting Up the TAR Utility

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist G tasks completed.

If you have Reactive patches to apply, proceed to either one of these checklists:

- Checklist A, “Manage Patches”
- Checklist B, “Manage Patches by Staging Area”

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist H. Update with CD-ROM

Use this task checklist if your source material is on **CD-ROM** and you are using a CSLT tape to:

- **Update** your system software version level
- **Update** your system software version level and apply **PowerPatch** patches

NOTE You cannot apply Reactive patches at the same time you are updating the system. You must apply Reactive patches after you update the system. To apply Reactive patches (after you update the system) refer to the Checklist A, "Manage Patches," or Checklist B, "Manage Patches by Staging Area."

Print a copy of this checklist for each system that you are updating. Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , "Planning for Your Task."

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.3 CD-ROM Planning Tasks

— 3.4 Checking Tape Media

— 3.5 Checking Peripherals

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , "Preparing Your System."

— 4.3 Preparing to Run HPINSTAL

Record CD *v.uu.ff* version level:

— 4.6 Creating the CSLT using HPINSTAL

Record manually installed products:

— 4.12 Reserving Disk Space for CD-ROM Tasks

Record contiguous disk space:

Record non-contiguous disk space:

Preparation Tasks completed. *Schedule downtime for exclusive access.*

If you are not applying this update to a master system, and instead are only creating a CSLT on a master system to apply to a remote system, you can now proceed to the Checklist I, "Modify Remote System."

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.16 Rerunning HPINSTAL

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.6 Setting Up the TAR Utility

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist H tasks completed.

If you are also applying the CSLT onto a remote system, perform the steps on the following checklist:

- Checklist I, “Modify Remote System”

If you have Reactive patches to apply, proceed to one of these checklists:

- Checklist A, “Manage Patches”
- Checklist B, “Manage Patches by Staging Area”

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist I. Modify Remote System

Use this task checklist if your source material was on **CD-ROM** and you are now using a CSLT tape to:

- **Update** your **remote** system software version
- **Update** your **remote** system software version and applying **PowerPatch** patches

NOTE

- Before performing the activities in this checklist, you must have completed the appropriate activities on the checklist H, "Update with CD-ROM."
- **For each** remote system you are modifying, complete the activities in this checklist.
- You cannot apply Reactive patches at the same time you are updating the system. You must apply Reactive patches after you update the remote system. To apply Reactive patches (after you update the system) refer to Checklist A, "Manage Patches," or Checklist B, "Manage Patches by Staging Area."

Print a copy of this checklist for each remote system that you are updating.

Read and perform the steps only in the following sections on your remote system:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Log onto your remote system.

Chapter 3 , "Planning for Your Task."

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.5 Checking Peripherals

— 3.6 Estimating Disk Space

Chapter 4 , "Preparing Your System."

— 4.12 Reserving Disk Space for CD-ROM Tasks

Record contiguous disk space:

Record non-contiguous disk space:

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.16 Rerunning HPINSTAL

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.6 Setting Up the TAR Utility

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist I tasks completed.

If you have Reactive patches to apply, proceed to one of these checklists:

- Checklist A, “Manage Patches”
- Checklist B, “Manage Patches by Staging Area”

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist J. Reinstall Using a CSLT

If your system has a major system level problem or crash, and you need to reinstall the operating system, use this task checklist. Use your most recent CSLT tape to:

- **Reinstall** your current system software version level

CAUTION This reinstall process will **DESTROY** all existing files on the system.

A reinstallation is performed when you have had a major system level problem or crash, and you are replacing the current operating system with the same version of the system software.

If your system is running, perform a system backup before you start the reinstall process. You may need to use it to recover some of your files.

Print a copy of this checklist for each system that you are reinstalling.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 4 , “Preparing Your System.”

— 4.5 Backing Up Your System for Reinstall

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

Chapter 6 , “Finishing the Process.”

— 6.2 Restoring User Files

— 6.3 Recovering Staging Areas

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist J tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist K. Install a New System

Use this task checklist if your source material is on **tape** and you are using a CSLT tape to:

- **Install** your system software on new hardware
- **Install** your system software on new hardware and apply **PowerPatch** patches

NOTE

- Perform a new installation when new hardware has been shipped to you and the operating system software is not already installed. This is performed only once in the lifetime of a computer. Your system software is shipped to you on tape media.
- You cannot apply Reactive patches at the same time you are updating the system. You must apply Reactive patches after you install the system. To apply Reactive patches (after you install the system), refer to Checklist A, “Manage Patches,” or Checklist B, “Manage Patches by Staging Area.”

WARNING **Performing the activities in this task DESTROYS ALL FILES THAT EXIST on your system. Do not perform a new installation on an existing system.**

Print a copy of this checklist for each new system that you are installing.

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Read and perform the steps only in the following sections:

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

Chapter 4 , “Preparing Your System.”

No sections in this chapter

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.2 Applying the SLT

— 5.3 Listing the System Configuration

Record configuration Group name:

— 5.4 Starting the System

— 5.5 Configuring the System

— 5.6 Checking Volumes

— 5.7 Creating the CSLT using AUTOINST—*Select option 3 FOS, SUBSYS, PowerPatch if you have a PowerPatch tape, or if no PowerPatch, select option 4 FOS and SUBSYS.*

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.15 Rerunning AUTOINST—*Required only if applying PowerPatch.*

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.6 Setting Up the TAR Utility

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist K tasks completed.

If you have Reactive patches to apply, proceed to one of these checklists:

- Checklist A, “Manage Patches”
- Checklist B, “Manage Patches by Staging Area”

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist L. Using AUTOINST to Apply PowerPatch Only

Use this task checklist if your source material is on **tape** and/or electronically downloaded files, you are **managing** your **patches**, and you are using AUTOINST apply:

- **PowerPatch** patches only

Patch/iX is the recommended method for installing patches because Patch/iX will qualify patches for you. This checklist is provided only for experienced system installers who elect to use AUTOINST to install PowerPatches.

Print a copy of this checklist for each system that you are applying patches to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , "Planning for Your Task."

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , "Preparing Your System."

— 4.1 Reserving Disk Space for Tape Tasks

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , "Modifying Your System."

— 5.1 Securing and Backing Up the System for Tape Tasks

— 5.7 Creating the CSLT Using AUTOINST—*Select Option 1, "PowerPatch."*

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification *If* AUTOINST *created a STORE tape only, this section is not required; proceed to 5.15, "Rerunning AUTOINST."*

If AUTOINST *created a CSLT/STORE tape combined, perform the steps in this section.*

— 5.14 Restarting the System *If* AUTOINST *created a STORE tape only, this section is not required; proceed to 5.15, "Rerunning AUTOINST."*

If AUTOINST *created a CSLT/STORE tape combined, perform the steps in this section.*

— 5.15 Rerunning AUTOINST

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist L tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

Checklist M. Using AUTOINST to Add-on and Apply PowerPatch

Use this task checklist if your source material is on **tape** and you are using AUTOINST with a CSLT tape to:

- **Add-on** purchased products and apply **PowerPatch** patches

Patch/iX is the recommended method for installing patches because Patch/iX will qualify patches for you. This checklist is provided only for experienced system installers who elect to use AUTOINST to install PowerPatches.

Print a copy of this checklist for each system that you are applying add-on products to.

Read and perform the steps only in the following sections:

Begin Preparation Tasks. *Does not require exclusive access to the system.*

Chapter 3 , “Planning for Your Task.”

— 3.1 Verifying Required Materials

— 3.2 General Planning Tasks

— 3.4 Checking Tape Media

— 3.6 Estimating Disk Space

Record contiguous disk space:

Record non-contiguous disk space:

Chapter 4 , “Preparing Your System.”

— 4.1 Reserving Disk Space for Tape Tasks

Preparation Tasks completed. *Schedule downtime for exclusive access.*

Begin Exclusive Access Tasks.

Chapter 5 , “Modifying Your System.”

— 5.1 Securing and Backing Up the System for Tape Tasks

— 5.7 Creating CSLT using AUTOINST—*Select Option 2, “SUBSYS (Add-On) and PowerPatch.”*

— 5.11 Securing the System

Record terminated logging processes:

Record temporary filename for the COMMAND.PUB.SYS file:

— 5.13 Applying the CSLT Modification

— 5.14 Restarting the System

— 5.15 Rerunning AUTOINST

Chapter 6 , “Finishing the Process.”

— 6.1 Configuring Datacomm and UPS

— 6.4 Setting Passwords, Lockwords, and UDCs

— 6.5 Configuring Manually Installed Products

— 6.7 Performing the Final Reboot

— 6.8 Restarting Selected System Functions

— 6.9 Backing Up Your System

— 6.11 Finishing Up

Checklist M tasks completed.

Record system change:

System name:

System type:

Date change made:

Change performed by:

OS version from:

OS version to:

Comments:

3 Planning for Your Task

Before you modify your operating system software, you need to plan for the process. Planning includes collecting all the required materials, scheduling the modification, and notifying affected personnel. Perform the activities in this section **before** you begin to modify the system software.

CAUTION You must use a checklist to determine which tasks to perform. If you started without a checklist, return to Chapter 2 , “Task Checklists,” and select the checklist that is appropriate for your task. Perform only the steps in the sections that appear on your checklist.

3.1 Verifying Required Materials

Perform the activities in this section for all the checklists. Be sure to read all of these subsections:

- Source Material Components
- Tool Options
- Media Requirements
- Operating System Version Requirements

Verify that you have all the required materials. Each task has specific requirements including: source material and media, current system version, UPDATE utilities, and media for compiling and applying the changes to the system.

Source Material Components

When you apply a modification to the system software, the modification data is distributed to you through various components. You will need this source data to prepare for and apply the modification. The following are the source modification material components:

Factory SLT — contains the operating system (OS) base to perform basic functions. This includes the functions needed to boot the system, configure disks, and restore files. It does not contain any purchased products.

FOS — contains the utilities required, in addition to the Factory SLT, for a fully functioning OS. This includes editors, linkers, and minimum networking utilities.

SUBSYS — contains the purchased products you have ordered for your system.

PowerPatch — consists of a bundled set of patches for a specific version of the operating system. Used to avoid experiencing known problems and increase your system's reliability.

Reactive patch — fixes a specific problem that you are encountering. This patch is sent to you from the HP Response Centers or downloaded from HPSL.

Table 3-1. on page 56 lists source materials required for each task.

Table 3-1. System Software Media Requirements

Task	Source Media for Modification Components				
	Factory SLT	**FOS**	**SUBSYS**	**PowerPatch**	**Reactive Patch**
Apply Patches Only				Tape	Tape[a]
Add-on Purchased SUBSYS Products			Tape or CD		

Table 3-1. System Software Media Requirements

Task	Source Media for Modification Components				
	Factory SLT	**FOS**	**SUBSYS**	**PowerPatch**	**Reactive Patch**
Add-on Purchased SUBSYS Products and apply Patches			Tape or CD	Tape	Tape
Update OS and optionally Add-on Purchased SUBSYS Products	Tape or CD	Tape or CD	If ordered Tape or CD		
Update OS, apply patches, and Add-on Purchased SUBSYS Products	Tape or CD	Tape or CD	If ordered Tape or CD	Tape	
New Install	Tape or CD	Tape or CD	If ordered Tape or CD		
New Install and apply Patches	Tape or CD	Tape or CD	If ordered Tape or CD	Tape	
Re-Install	Tape or CD	Tape or CD	If ordered Tape or CD		
Re-Install and apply Patches	Tape or CD	Tape or CD	If ordered Tape or CD	Tape	

a. Optional, not required. Reactive patches can be electronically downloaded. For information, access Support Line to get a copy of *guide* and *mpeguide*. These documents describe how to use the Support Line interface and how to download patches from the Internet.

Tool Options

These are the tools are used to patch, add-on, update, or install your system:

`AUTOINST` used to create a CSLT when the SLT, FOS, SUBSYS and POWERPATCH are delivered on tape media.

`HPINSTAL` used to create a CSLT when the SLT, FOS, and SUBSYS are delivered on CD-ROM media. The CSLT created can be applied to either local or remote systems.

`HP Patch/iX` used to manage patch and add-on tasks. The recommended tool. This includes creating a CSLT or `STORE` tape. Applies `STORE` tape modifications to the operating system.

`HP Stage/iX` used to manage patching tasks, applying the patches through stage areas on disk to either local or remote systems.

`UPDATE` used to apply CSLT modifications to the operating system.

Media Requirements

When you apply a modification to the system software, you need specific media to prepare for and apply the modification. The media requirements are:

- For all tasks creating an SLT, CSLT, or STORE tape, you need two or more blank 2400 foot, 1/2 inch reel tapes or one DAT tape.
- For all CD-ROM tasks, the master keyword is included on your keyword certificate. Check the keyword certificate to ensure that:
  - — The list of products is what you expected.
  - — Check that the HPSUSAN number is correct by issuing the command:

    ```
    :SHOWVAR HPSUSAN
    ```
- For reinstall tasks, use a current SLT or CSLT and a current set of backup tapes of the MPEXL_*system_volume_set*.
- Staging areas may reside on local or remote system disks.

Operating System Version Requirements

The supported operating system (OS) version minimum requirements vary depending upon your task. Use the SHOWME command to check the version. Table 3-2. lists the version your operating system must currently be on in order to perform the listed task.

Table 3-2. OS Version Requirements

Task	Current Release Version	Release *v.uu.ff*
Patch only	6.5	C.65.00
Patch only on Staging Area	6.5	C.65.00
Add-on only	6.5	C.65.00
Add-on with Patch	6.5	C.65.00
Update only	5.5 or 6.0	C.55.00 or C.60.00
Update with Patch	5.5 or 6.0	C.55.00 or C.60.00
Update and Add-on	5.5 or 6.0	C.55.00 or C.60.00
Update and Add-on with Patch	5.5 or 6.0	C.55.00 or C.60.00
Re-installation	6.5	C.65.00
New Installation	no previous OS	--

If you are on a version older than 5.5, it is not supported; you must first upgrade to 5.5 or 6.0, then upgrade to 6.5.

If you are distributing a staging area to a remote system, the local and remote system must match exactly. Both systems must be on the same OS version, have the same set of relevant SUBSYS products, and have the same set of applied patches.

- **Verifying Required Materials completed. Go to the next section on your checklist.**

3.2 General Planning Tasks

If you are using any checklist, except K, perform the steps in this section. These steps are not required when installing a new system, Checklist K.

To plan for any change to your system software:

1. **Check and verify compatibility of third-party software.**

   Verify that any third-party software products you are running are compatible with the latest version of the operating system software. Do this *before* you modify the system.

2. **Review disk space requirements.**

   Plan to increase your disk space capacity, if necessary. Steps for checking disk space requirements are included in the task procedures.

3. **Review and plan your network, as required.**

   If you are using NetWare, refer to the NetWare documentation.

4. **Verify that you are starting with a compatible OS version.**

   If you are running a system version older than 5.5, you must perform two updates:

   a. Update to Release 5.5 or 6.0 using the release 5.5 or 6.0 media and the corresponding version of the *HP 3000 MPE/iX System Software Maintenance Manual*.

   b. Then update to version 6.5 system software using the 6.5 system software release media and this manual.

   Contact your HP support representative if you need more information.

5. **Perform a media check of all source material.**

   Steps are included in the task procedures.

6. **Review peripheral devices and plan to correct conflicts if necessary.**

   Steps for checking peripheral devices are included in the task procedures.

7. **Schedule a full system backup.**

   Perform a full system backup before applying any modifications. Use standard backup procedures or follow procedures included with the tasks.

8. **Ensure that an LP device class exists in your system configuration by using the SYSGEN utility.**

9. **Move files that you want to keep from the group, PATCHXL.SYS.**

   If you have old versions of the files from the tape in the group, PATCHXL.SYS, they will be purged by Patch/iX.

10. **Ensure that all HP supplied system files were not renamed.**

    In the SYSGEN utility, use the SHOW command in SYSFILE to ensure that all HP supplied MPE/iX HP 3000 system files have retained their original names. System filenames in both columns must be identical. If they are not identical, rename the files in the second

column to match the filename in the first column.

Do not use the SYSFILE> RSPROG command in the SYSGEN utility to rename HP supplied MPE/iX HP 3000 system files. A renamed system file can corrupt your system during an update. This problem can occur if you have third-party software installed on your system, and you have renamed some system files to run that software.

11. **Record and store customized HP configuration information.**

    The configuration groups listed in Appendix B , "Configuration Tables," are reserved for use by Hewlett-Packard. These groups contain sample configuration files and will be overwritten during a system installation. If you are using any of the group names for other than HP configuration files, store the files to tape before proceeding. HP recommends that you DO NOT use any of these groups for other than HP configuration files.

12. **Record and store customized HP files.**

    Updating or re-installing your system software removes any application customizing you may have performed on HP products. STORE, or make arrangements to migrate, any files you have customized for applications.

    The update process brings in a standard CATALOG.PUB.SYS file. If you want to keep your customization, you must copy the new CATALOG.PUB.SYS and make your needed changes to the INPUT file, and then run MAKECAT,BUILD after the update.

13. **Record any HP defined special accounts you have customized.**

14. These accounts are created or modified to Hewlett-Packard standards during the system software modification process. The accounts are listed in Table 3-3. .

Table 3-3. HP Defined Special Accounts

BIND	HPOFFICE	HPSKTS	JAVA	SYS
CLL	HPOPTMGT	HPSPOOL	RJE	SYSLOG
CONV	HPPL85	INDHPE	SAMBA	SYSMGR
HPLANMGR	HPPL87	INTSETUP	SNADS	TELESUP
HPNCS	HPPL89	ITF3000	SUPPORT	WWW

15. **Confirm that you have a terminal or a PC with a terminal emulator, if your checklist indicates that you will use HP Patch/iX.**

    HP Patch/iX is the recommended method for applying patches and is required for applying Reactive patches.You cannot use the console to run HP Patch/iX for Phase I, because console messages disrupt HP Patch/iX. If you cannot run HP Patch/iX, you can select alternate tasks using AUTOINST to install PowerPatches.

    Reflection is a separate third-party product that is a PC-based terminal emulator program. To use HP Patch/iX from a PC, install Reflection with the MPE/iX POSIX option. If this option is not used, HP Patch/iX will not work on your PC.

16. **Check SCSI device configuration.**

    All SCSI drivers must be configured with a transparent_mgr in its device path prior to

performing the Update or Install for 6.5. For further information, see the *Communicator 3000*.

17. **Document your current system configuration.**

    Keep a listing of output from:

    - `DSTAT ALL` command for volume set and volume names.
    - `DISCFREE C` for a percentage of permanent and transient space used on your system.
    - `SYSINFO` for your system configuration.

    If you have mirrored disks and users are logged on, do not run `SYSINFO`. When you can access the system, verify that you have a current version of `SYSINFO` on your system and keep your listing.

18. **Plan for downtime.**

    Most of the tasks described in this manual require that you shutdown your system. Plan for this downtime. DO NOT SHUTDOWN your system until it is necessary. Each task checklist indicates when the system will be shutdown. Perform all the other steps for the task while your system is up.

    To estimate the amount of downtime, review the steps you need to perform after the system is shutdown. Where possible, an estimate of time is provided. Record the amount of time for the individual steps and add it up. This will give you a very rough estimate of the amount of system downtime you will require.

    The amount of time listed is based on small and low-end machines. Actual time values can be about one-half of the time listed.

19. **If you are using HP Stage/iX, be aware that not all patches are stageable.**

    At the time of release 6.5, Stage/iX cannot handle patches which involve System configuration files, `MMSAVE.MPEXL.SYS`, nonsystem volume set files, and patches with files that contain jobs that are streamed during patch installation. During the process, Stage/iX will identify which patches are stageable.

20. **If you are using HP Stage/iX to apply patches to your system, remove old stages BEFORE applying the new release.**

    Since the process installs a new operating system, you must uninstall HP Stage/iX and/or remove all of the old stages BEFORE applying the factory SLT.

    Uninstalling HP Stage/iX deletes all staging areas and all files and directories that HP Stage/iX has built.

    To uninstall HP Stage/iX:

```
:STAGEMAN
STAGEMAN>UNINSTALL
```

    Reply `Y` to the prompt, `Are you sure?`

    - **General Planning Tasks completed. Go to the next section on your checklist.**

3.3 CD-ROM Planning Tasks

To plan for CD-ROM related tasks:

1. **Review** Appendix E , “CD-ROM Resources.”

   If you are using the CD-ROM media option and you are new to the process, refer to Appendix E , “CD-ROM Resources,” for reference information that will help simplify your task.

2. **Plan to log onto a console for Phase 2.**

   For some phases of the modification process, you can run `HPINSTAL` from any terminal. However, messages such as tape requests appear at the console instead of the terminal. After you shutdown and restart the system, you need to be on the system console.

3. **Verify the list of products.**

   Check your keyword certificate and verify the list of products received and ordered. Refer to Appendix E , “CD-ROM Resources,” for information on the keyword certificate.

   - **CD-ROM Planning Tasks completed. Go to the next section on your checklist.**

3.4 Checking Tape Media

Collect the tape media you will be using as source material to modify the system software. The tapes vary depending on your task, but may include PowerPatch, Reactive Patch, FOS, factory SLT, and CSLT tapes. Check your tapes to ensure they are not damaged.

If any files are not verified, or if you receive any errors or warnings, clean your tape drive. (Run the cleaning cartridge through your DDS drive at least three times.) Then repeat the tape verification procedure. If your media is bad, contact your local HP Support Agreement Specialist (SAS).

To verify the tape source media and contents:

1. Log on from the console with the following conditions:

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :OPENQ LP
   :STREAMS streams_device
   ```

   A common *streams_device* is 10. An LP device must be configured in SYSGEN. Already spooled and streamed messages might display.

2. Issue a file statement:

   ```
   :FILE TAPE;DEV=TAPE
   ```

3. Notice that you are logged onto the console, and you will need to enter CTRL-A in order to issue the reply to each tape request.

   Proceed to the section for each type of tape that you will be using.

PowerPatch Tape

4. Mount the PowerPatch tape.

   a. Issue the VSTORE command.

      ```
      :VSTORE *TAPE;@.@.@;SHOW
      ```

   b. Reply to the tape request.

      VSTORE displays a listing of verified files. These files are **not** being restored to disk.

   c. Proceed to the next type of tape that you will be using.

Reactive Patch Tape

5. Mount the Reactive tape.

   a. Issue the VSTORE command.

      ```
      :VSTORE *TAPE;@.@.@;SHOW
      ```

   b. Reply to the tape request.

      VSTORE displays a listing of verified files. These files are **not** being restored to disk.

   c. Proceed to the next type of tape that you will be using.

Add-on (SUBSYS) Tape

6. Mount the SUBSYS tape for your ordered products.

   a. Restore the T-file. This file contains the listing of files of the purchased products.

      ```
      :RESTORE *TAPE;T#####.PROD.SOFTREP;CREATE;SHOW
      ```

      RESTORE returns a T-file, note the T-file filename. If the T-file is not on the tape:

      ```
      :RESTORE *TAPE;PRODLIST.MITBLD.SUPPORT
      ```

   b. View the T-file using a text editor or word processor.

   c. Print the list of products on the SUBSYS tape.

      ```
      :FILE LP;DEV=LP
      :PRINT Tnnnnn.PROD.SOFTREP >*LP
      ```

      where **T***nnnnn* is the name of the file restored in Step a above.

   d. `:VSTORE *TAPE;@.@.@;SHOW`

   e. If you are doing an Update task proceed to Step 7.

      If you are not doing an Update, go to the next task on your checklist.

Update Tape

7. If you are on a remote system and applying a CSLT created from a CD-ROM, omit this step and proceed to Step 8.

   If you are performing an Update with Tape, mount the FOS tape and validate.

   ```
   :VSTORE *TAPE;@.@.@;SHOW
   ```

8. Mount the FOS tape, if it is not already mounted, and restore CHECKSLT.

   ```
   :RESTORE *TAPE; CHECKSLT.MPEXL.TELESUP, &
   CKCAT000.MPEXL.TELESUP;SHOW;CREATE
   ```

   For CKCAT000 the 000 are zeros.

9. Verify the Factory SLT or CSLT tape.

   a. Mount Factory SLT tape if you are updating the local system, or mount the CSLT if you are updating a remote system.

   b. Run CHECKSLT.

      ```
      :CHECKSLT.MPEXL.TELESUP

      **************************CHECKSLT 1.9************************
      ------------------------------
      L E V E L - N U M B E R S
      ------------------------------
      1 - Check the tape. Display errors and file names.
      2 - Check the tape. DIsplay errors, file names and size.
      3 - Check the tape and display all information for each section.
      4 - Recover a TAPE BOOT file. NOT AVAILABLE
      5 - Recover a DISK file from the tape and copy it to a disk file.
      ```

```
6 - Check the tape and display the contents of one file in hex.
7 - Check the tape and display summary of tape and disk use statistics.
8 - Information.
9 - Exit program.

Which level? __
```

c. Select level `1`.

d. Reply to tape request, as required.

`checkslt` displays a listing of verified files.

- **Checking Tape Media completed. Go to the next section on your checklist.**

3.5 Checking Peripherals

Proceed to the subsection for your device:

- CD-ROM Disk Drive
- SCSI Tape Devices

Then review the following subsections:

- LDEV1 Disk Minimum Capacity
- LDEV1 Disk Maximum Capacity

CD-ROM Disk Drive

To update or add-on to your system software using a CD-ROM, you must have a CD-ROM drive installed and configured. Refer to Appendix E , “CD-ROM Resources.” Verify that the CD-ROM drive you are using is one of the following:

- HP Series 6100 Model 700/S SCSI (A1999A)
- Toshiba XM-3401TA
- Toshiba XM-4101TA

An Upgrade Kit (C2293U) for the Series 6000 peripheral package allows you to use internal SCSI drives on some HP 3000 computer systems.

If you do not have one of these compatible drives, contact your HP representative to order one.

If you have a compatible CD-ROM disk drive, proceed to the subsection, “LDEV 1 Disk Minimum Capacity.”

SCSI Tape Devices

If you are already on version 5.5 of the system software, skip this section and proceed to “LDEV 1 Disk Minimum Capacity.”

If your system software version is earlier than 5.0, and you have a SCSI-DDS tape device, do the following as part of the update to 5.5 before this update to 6.5:

- Verify that your SCSI-DDS devices are using a compatible version of firmware.
- Check the SCSI-DDS devices on each remote system in addition to the local system. If you are modifying a Remote system, check the SCSI-DDS devices on each remote system in addition to the local system.
- See further instructions in the *5.5 System Software Installation Manual for Release 5.5*.

If you run `AUTOINST` from one of the listed devices with an incompatible firmware revision, `AUTOINST` will fail. The spoolfile output from the restore will include this message:

```
Unexpected end of file marker found (S/R 9060)
```

LDEV 1 Disk Minimum Capacity

LDEV 1 requires a minimum capacity of 500 MBytes. As of Release 5.0, you cannot use the older HP7933 or HP7935 disk drives as LDEV 1 (the system disk).

When you update to MPE/iX Release 6.5, you will be unable to use CIO or fiberlink drives anywhere on the system. It is recommended that you disconnect all unsupported devices before updating.

To identify your LDEV 1 device, use the DSTAT ALL command to determine the logical device numbers of configured devices.

1. From either the terminal or console for each system:

   ```
   :DSTAT ALL
   ```

2. If you are on an operating system older than 5.0, and if the device configured as your LDEV 1 is an unsupported device (such as HP7933 or HP7935), you **must** replace your LDEV 1 device with a supported device. Contact your HP representative to schedule installation of the replacement disk drive. See further instructions in the *5.5 System Software Installation Manual for Release 5.5*.
3. If the device configured as your LDEV 1 is supported, proceed with "LDEV 1 Disk Maximum Usage."

LDEV 1 Disk Maximum Usage

If you are using a disk drive with over 4 GBytes capacity as LDEV 1, any disk space over the 4 GBytes is not available for use. It cannot and will not be used for system or user files.

The 9 GB disk drive cannot be used as LDEV 1.

The predefined variable HPCPUNAME contains the name of your computer model.

```
:SHOWVAR HPCPUNAME
```

This is a sample reply:

```
HPCPUNAME = Series 957
```

See Table 3-4. for a list of NIO systems.

Table 3-4. NIO Systems

NIO Systems
Series 9x7RX, 9x7LX, 9x7SX, 9x8LX, 9x8RX, 9x9KS, 99x

- **Checking Peripherals completed. Go to the next section on your checklist.**

3.6 Estimating Disk Space

Read the subsections in this section:

- Non-Contiguous Disk Space Requirements
- Contiguous Disk Space Requirements
- Disk Space Error Messages

Before you begin to modify your system software make sure that you have enough disk space to update your system. Modifying system software includes: updating the version, reinstalling your system software, adding on purchased products from the SUBSYS tape, or applying patches. There are three types of disk space requirements that are referenced during the modification process:

- Permanent (net) amount of non-contiguous disk space

  required for the system software after it is modified.
- Maximum (peak) amount of non-contiguous disk space

  required during the system software modification process.
- Amount of contiguous disk space

  that the UPDATE tool requires to modify the system software.

NOTE The disk space values listed in this section are maximum estimated values only. The actual amount of disk space used on your system will vary.

Non-Contiguous Disk Space Requirements

Table 3-5. “Non-Contiguous Disk Space Sectors,” lists the amount of non-contiguous disk space sectors required for the three operating system components (SLT, FOS, SUBSYS) and PowerPatch of the currently supported versions of the operating system software.

During the modification process, some files are duplicated temporarily, and sometimes older versions of files are retained temporarily. This causes the “in process” (or peak) amount of disk space usage to be greater than the “final” (or net) amount of disk space usage when the modification is complete.

You must have the peak amount of disk space available on your system during the process to successfully modify your system.

The combined System Load Tape (SLT) and Fundamental Operating System (FOS) are the minimum requirements for any system software version. Ensure that you have enough

room on LDEV 1 for all the SLT files. The FOS files do not have to go onto LDEV 1.

Table 3-5. Non-Contiguous Disk Space Sectors

System Software Components	Version					
	5.5		C.60.00		6.5	
	Peak	Net	Peak	Net	Peak	Net
SLT only[a]	n/a	1,268,000	n/a	1,274.000	n/a	1,287,000
SLT and FOS	2,378,000	2,092,000	2,821,000	2,533,000	2,987,000	2,660,000
SLT, FOS, Full SUBSYS	3,637,000	3,170,000	3,926,000	3,489,000	4,111,000	3,689,000

a. Provided for reference only. An operational system requires the SLT and FOS files at a minimum.

IMPORTANT Values for Express and PowerPatch 6.5 versions are given in the *Read Before Installing* for each release after C.65.00.

There are several conditions under which you need additional non-contiguous disk space. Refer to the appropriate following subsection for information on estimating non-contiguous disk space for your specific task.

- Updating your system software.
- Adding-on new SUBSYS products to your system software.
- Applying PowerPatch to your system software.
- Applying Reactive patches to your system software.
- Distributing Staging Area to a remote system.

Disk Space Estimate for Updating

To estimate the amount of additional permanent (net) non-contiguous disk space required to update your system software, subtract the value for your current version from the value for the version you are updating to.

Record the disk space sectors required for the Update on your checklist.

Disk Space Estimate for Add-on

The values are listed in Table 3-1. on page 56 “Non-Contiguous Disk Space Requirements,” for the SUBSYS (purchasable subsystem products) are the maximum for all possible purchasable products.

Estimate purchased product (SUBSYS) disk space based on the number and kind of software subsystem products that you purchased.

If you are not adding-on any new purchased products, the disk space sectors currently being used by your existing products will remain the same.

Record the estimated disk space required for SUBSYS products on your checklist.

Disk Space Estimate for PowerPatch or Express

The disk space required is listed in *the section, "Disk Space Requirements," in the Read Before Installing* that comes with the PowerPatch or Express media.

Record the disk space required for the PowerPatch or Express on your checklist.

Disk Space Estimate for Reactive Patch

Reactive patches vary extensively in the amount of disk space they require. Reactive patches usually replace existing files, and the increase in disk space is very little. If you want to make a worst case estimate for disk space, use the amount of disk space used by the reactive patch and add that to the disk space requirement for LDEV 1.

Record the estimated disk space required for Reactive patches on your checklist.

Disk Space Estimate for Staging Areas

When you have created a staging area on your local system, you can distribute that staging area to a remote system, provided the two systems match. Both systems must match OS versions, relevant SUBSYS products, and applied patches.

To estimate the amount of disk space required on the remote system for a staging area that resides on your local system:

1. Log onto the local system.
2. Start HP Stage/iX.

   ```
   :STAGEMAN
   STAGEMAN>
   ```

3. Execute the disk use command.

   `STAGEMAN>DU` *`staging_area_name`*

   where `staging_area_name` is the name of the staging area you want to distribute.

   The return lists the amount of non-contiguous disk space used by the staging area.

   Record the estimated disk space required for the staging area on your checklist.

Converting Between Disk Sectors and MBytes

If your products are listed in MBytes, particularly third-party products, calculate the disk space sectors by performing this conversion:

n Mbytes × 1,000,000 sectors/256 bytes = *m* sectors

where:

n-the number of Mbytes

m-the number of sectors

- Example of MBytes to sectors:

  If VALIDATE reports 20 Mbytes total on a tape:

$$\frac{(20 \times 1{,}000{,}000)}{256} = 78{,}125 \text{ sectors}$$

- Example of sectors to MBytes:

  If a disk has a device size of 7,824,336:

$$\frac{7{,}824{,}336 \times 256}{1{,}000{,}000} = 2{,}003 \text{ megabytes}$$

Therefore the disk is a 2,000 Mbyte disk, (also known as 2 GByte disk).

For a closer estimate, use the value 1,048,576 instead of 1,000,000.

For a quick estimate, use the value 4,000 instead of 1,000,000/256.

Contiguous Disk Space Requirements

The maximum amount of contiguous disk space sectors required to complete a system modification on any system is approximately:

120,000 sectors

Use CHECKSLT to estimate the amount of contiguous disk space sectors required to complete a system modification on **your** system.

Use DISCFREE to see how much free space you have on your system.

If you are performing an Update with Tape or Modify Remote System task, and you want to have a closer determination of contiguous disk space for AXLDEV1, proceed to Step 1 to determine the disk space required by the UPDATE tool.

Otherwise, proceed to the subsection, “Disk Space Error Messages.”

Update with Tape, Modify Remote System

To determine the amount of contiguous disk space sectors required by the UPDATE tool:

1. Log on as MANAGER.SYS:

   ```
   :HELLO MANAGER.SYS,PUB;HIPRI
   ```

2. Mount the FOS tape.

3. Restore the CHECKSLT program files, if they were not restored previously:

   ```
   :FILE TAPE;DEV=TAPE
   :RESTORE &
   *TAPE;CHECKSLT.MPEXL.TELESUP,CKCAT000.MPEXL.TELESUP;SHOW
   ```

   where the 000 are zeros in CKCAT000.

4. Estimate contiguous disk space required to update your system.

   Mount the Factory SLT or remote installation CSLT, as appropriate and run CHECKSLT.

   ```
   :CHECKSLT.MPEXL.TELESUP
    **************************CHECKSLT 1.9************************
   ```

```
-------------------------------
L E V E L - N U M B E R S
-------------------------------
1 - Check the tape. Display errors and file names.
2 - Check the tape. Display errors, file names and size.
3 - Check the tape and display all information for each section.
4 - Recover a TAPE BOOT file. NOT AVAILABLE
5 - Recover a DISK file from the tape and copy it to a disk file.
6 - Check the tape and display the contents of one file in hex.
7 - Check the tape and display summary of tape and disk use
statistics.
8 - Information.
9 - Exit program.

Which level? __
```

Select option 7.

Record sectors required for `axldev1` on your checklist.

Disk Space Error Messages

The update tools (`UPDATE`,`AUTOINST`, `HPINSTAL`, and `Patch/iX`) that modify your system require a minimum amount of contiguous sectors of disk space on LDEV 1 and non-contiguous sectors on the system volume set to ensure a successful modification process. These disk space sectors are a subset of, and are included in, the peak usage disk space requirements. The default disk space requirements are listed below.

Type	Sectors
Contiguous	120,000
Non-contiguous	787,000

The tools search for the default disk space during the modification process. At any point in the process, if the tool does not find the disk space it requires, you may see an error message. The error messages and responses required vary depending upon when they occur in the modification process. For additional information, refer to Appendix C , “Managing Disk Space,” and Appendix H , “Error Messages and Warnings.”

- Estimating Disk Space completed. Go to the next section on your checklist.

4 Preparing Your System

This chapter describes preparing the modification tools and the data that is going to be applied to your system. There are three methods for applying the modification to your system:

- Create a Customized System Load Tape (CSLT).
- Create a STORE tape.
- Create a staging area.

You must use a checklist to determine which tasks to perform. If you started without a checklist, return to Chapter 2 , “Task Checklists,” and select the checklist that is appropriate for your task. Perform only the steps in the sections that appear on your checklist.

4.1 Reserving Disk Space for Tape Tasks

The update and add-on process requires a minimum number of contiguous and non-contiguous disk space sectors. Ensure that you have enough contiguous disk space on LDEV 1 to complete your task. The total amount of non-contiguous disk space does not need to fit entirely on LDEV 1. Refer to Chapter 3 , “Planning for Your Task.”

To reserve disk space:

1. Log onto the **console**:

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   An LP device must be configured in SYSGEN. A common *streams_device* value is 10. Already spooled and streamed messages might display.

2. Reserve contiguous and non-contiguous disk space using the following default values or the estimate you made in Chapter 3 , “Planning for Your Task.”

   ```
   :BUILD AXLDEV1.PUB.SYS;DISC=120000,1,1;DEV=1
   :BUILD AXLSPACE.PUB.SYS;DISC=787000,32,32
   ```

   If a colon (:) prompt is returned, the files were built, and you have enough disk space.

   If you receive a message, `Out of disk space,` make more space available on your system before you perform an update or add-on. Refer to Appendix C , “Managing Disk Space.”

3. Purge the AXLSPACE file. The AXLDEV1 file is automatically purged by the UPDATE tool.

   ```
   :PURGE AXLSPACE.PUB.SYS
   ```

   - **Reserving Disk Space for Tape Tasks completed. Go to the next section on your checklist.**

4.2 Reserving Disk Space for Distributing Staging Areas

A staging area requires a minimum amount of non-contiguous disk space sectors. Ensure that you have enough non-contiguous disk space on LDEV 1 to complete your task.

To verify the remote system has enough disk space:

1. **Log onto the console on the remote system** with the following conditions:

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   An LP device must be configured in SYSGEN. A common *streams_device* value is 10. Already spooled and streamed messages might display.

2. Verify disk space availability on your remote system.

   a. Log onto the remote system.

   b. Check for available disk space on LDEV1 using DISCFREE.

      ```
      :RUN DISCFREE.PUB.SYS;INFO= "C,1,mpexl_system_volume_set"
      ```

      where *mpexl_system_volume_set* is the name assigned to the system volume set.

   If the AVAIL TO PERM SPACE on LDEV 1 is greater than the staging area disk space calculated in "Estimating Disk Space," proceed with your task.

   If the AVAIL TO PERM SPACE is not greater than the staging area disk space calculated in "Estimating Disk Space," you need to make more space available on your system before you continue with your task. Refer to Appendix C , "Managing Disk Space," for information on finding additional disk space.

   - **Reserving Disk Space for Distributing Areas completed. Go to the next section on your checklist.**

4.3 Preparing to Run HPINSTAL

This section lists procedures for preparing to use the CD-ROM update and add-on tool, HPINSTAL. Refer to Appendix E , “CD-ROM Resources,” for additional CD-ROM set up information.

To prepare your local system to create a CSLT using HPINSTAL:

1. Log on.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   ```

   If you are not working at the console, allow yourself the VSCLOSE and VSOPEN commands.

   ```
   :ALLOW MANAGER.SYS;COMMANDS=VSCLOSE,VSOPEN
   ```

2. Start the LP and *streams_device*.

   ```
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   An LP device must be configured in SYSGEN. A common *streams_device* value is 10. Already spooled and streamed messages might display.

3. Load the CD-ROM disk labelled MPE_*v.uu.ff_1 into the CD-ROM disk drive*.

   v.uu.ff is the *version.update.fix* level of the software. Write the *v.uu.ff* level on the checklist.

   HPINSTAL prompts for the second disk when required.

4. If you have SCSI CD-ROM drives, manually mount the disk.

   ```
   :AVRSCSI “MOUNT ldev#”
   ```

   where *ldev#* is the logical device number of the SCSI CD-ROM disk drive.

   When the CD-ROM disk is loaded, AVRSCSI returns the message:

   ```
   Successfully mounted LDEV n
   ```

5. Verify that the CD-ROM drive status indicates MASTER-RO.

   ```
   :DSTAT
   ```

   This is a sample DSTAT response:

   ```
   LDEV-TYPE STATUS VOLUME (VOLUME SET - GEN)
   11-CD-ROM MASTER-RO HPINSTAL (MPE_C.55.00_1-0)
   12-CD-ROM MASTER-RO HPINSTAL (MPE_C.55.00_2-0)
   ```

6. If the DSTAT status shows LONER, put the CD-ROM disks on-line.

   ```
   :VSOPEN MPE_v.uu.ff_1
   :VSOPEN MPE_v.uu.ff_2
   ```

   If you have only one CD-ROM drive, put only the first CD-ROM disk on-line now.

   Run the DSTAT command again to verify the drives have a status of MASTER-RO.

7. Create directory entries to enable access to group INSTUTIL on volume set

MPE_v.uu.ff_1.

```
:LISTGROUP INSTUTIL
```

8. If the INSTUTIL group is non-existent, create the INSTUTIL group and set home volume set.

   ```
   :NEWGROUP INSTUTIL;HOMEVS=MPE_v.uu.ff_1
   ```

9. If the home volume set field displays a different *v.uu.ff* than the new version:

   ```
   :ALTGROUP INSTUTIL.SYS;HOMEVS=MPE_v.uu.ff_1
   ```

10. If you are performing an Update task, proceed to Step 11.

    If you are performing an Add-On task, proceed to Step 12.

Update Tasks

11. This step is optional. Create files for product and keyword references.

    a. If you have an old PRODLIST.PUB.SYS file, purge it or verify all products.

    b. Create PRODLIST.PUB.SYS file. This file lists all the products that are on your support contract. The list should match the list on your keyword certificate. Refer to "Creating a Product List" in Appendix E , "CD-ROM Resources," for directions on creating a PRODLIST file.

       HPINSTAL references this file to determine automatically which products will be applied to your system.

    c. Create KEYFILE.PUB.SYS file. this file contains the keyword necessary to unlock the products in PRODLIST.PUB.SYS on the CD-ROM. Refer to Appendix E , "CD-ROM Resources," for directions on creating a keyfile file.

    d. If you are adding-on new products, the new product numbers and keyword will only be requested interactively as part of the HPINSTAL process.

    e. Proceed to Step 13.

12. If you are creating a CSLT for applying to a Remote system, proceed to Step 13.

    If you are performing a Add-on or Update task for the local system only, proceed to Step 14.

Remote Tasks

13. This step is optional. If you are creating a CSLT on the local system, for applying to a remote system, and you have additional files you want to include on the STORE portion of the CSLT:

    a. Create a file, *addfile*, that lists any files you want to include on the CSLT, such as third-party or in-house product files.

    b. Set up a file equation to equate *addfile* to indirlst. hpinstal checks the indirlst file for additional files and adds them to the CSLT.

       ```
       :FILE INDIRLST=addfile.group.account
       ```

    c. Proceed to Step 14.

14. Set up the HPINSTAL environment by invoking the SETUP script.

```
:SETUP.INSTUTIL
```

Execute SETINIT command to cleanup any previous HPINSTAL accounting structure, if prompted.

```
:SETINIT
```

A series of messages display. The process takes about five minutes. The final message is:

```
setup is complete
```

15. If you are performing a PowerPatch task, proceed to Step 16.

    If you are performing an Add-on or Update task without a PowerPatch, proceed to the next section on your checklist.

PowerPatch Tasks

16. Mount the PowerPatch tape and restore the latest version of the HPINSTAL tool.

```
:FILE TAPE;DEV=TAPE
:RESTORE *TAPE;H@.INSTALL;SHOW;DEV=1
```

Two files, HPINSTAL and HICAT000, are added to the INSTALL.SYS group.

- **Preparing to Run HPINSTAL completed. Proceed to the next section on your checklist.**

4.4 Initializing HP Stage/iX

HP Stage/iX is part of the FOS. It is installed when the system software is updated to version 5.5 or 6.0. You must be on version 5.5 or greater **before** you can use HP Stage/iX. You cannot use HP Stage/iX to update from version 5.5 to 6.0.

NOTE Not all patches are stageable. At the time of release 6.5, Stage/iX cannot handle patches which involve System configuration files, `MMSAVE.MPEXL.SYS`, nonsystem volume set files, and patches with files that contain jobs that are streamed during patch installation. Patches will be identified as stageable or not stageable during the installation process.

To initialize HP Stage/iX:

1. Determine if HP Stage/iX is already initialized.

   ```
   :STAGEMAN STATUS
   ```

   The following message displays if HP Stage/iX is not initialized:

   ```
   The HP Stage/iX environment is not initialized.
   ```

2. If it is not initialized, type at the MPE/iX colon prompt:

   ```
   :STAGEMAN INITIALIZE
   ```

   The following message displays when HP Stage/iX initializes:

   ```
   Successfully initialized the HP Stage/iX environment.
   ```

   - **Initializing HP Stage/iX completed. Proceed to the next section on your checklist.**

4.5 Backing Up Your System for Reinstall

If you are using checklist J, and if you are performing a reinstall because your system is not operating, it is in a “crash” state, and you do not want a backup in this state, then proceed to “Applying the Modification.”

If you are using checklist J, and if you are planning to reinstall your system software, proceed with this section.

Before you reinstall your system software, perform a full system backup because reinstalling your system software **DESTROYS** all existing files.

You can run the BULDACCT utility prior to creating the backup. Running BULDACCT puts the BULDJOB1 and BULDJOB2 files in PUB.SYS. Using BULDACCT is the preferred method because later you can use the BULDJOB1 jobstream to rebuild the entire accounting structure and the BULDJOB2 jobstream to reset all UDCs that were previously on the system.

To backup using the BULDACCT utility and the STORE command with the DIRECTORY option:

1. From the console at the MPE/iX prompt, log on.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   An LP device must be configured in SYSGEN. A common *streams_device* value is 10. Already spooled and streamed messages might display.

2. Mount blank tape.

   ```
   :FILE T;DEV=TAPE
   ```

3. Run the buldacct utility to archive your current accounting structure and security restrictions.

   ```
   :RUN BULDACCT.PUB.SYS;INFO="@"
   ```

4. Store files.

   ```
   :STORE @.@.SYS,@.@.@-@.@.SYS;*T;DIRECTORY;SHOW
   ```

   or

   ```
   :STORE /SYS/, / - /SYS/;*T;DIRECTORY;SHOW; &
   ONVS=volume_set_name1, volume_set_name2, ..
   ```

   where *volume_set_name* is the name for each user volume set you want to backup.

5. Dismount tape, label as backup with date, time and system version.

6. If you cannot locate a current SLT, make one now:

   ```
   SYSGEN
   sysgen> TAPE
   ```

NOTE The BULDJOB1 contains system passwords. Do not keep this file on the system for longer than necessary.

- **Backing Up Your System for Reinstall completed. Proceed to the next section on your checklist.**

4.6 Creating the CSLT using HPINSTAL

This section describes how to create your Customized System Load Tape (CSLT) from CD-ROM source media using the CD-ROM tool, hpinstal.

To create the CSLT using hpinstal

1. Start HPINSTAL.

   ```
   :RUN HPINSTAL.INSTALL.SYS
   ```

2. Select the appropriate option. If you select a subsys option, your system software must be on the same release level as the subsys product.

   ```
   Please enter the number corresponding to the
   software you want to install.

   1 Update this system
   2 Update this system and install patches from a PowerPatch tape
   3 Create a CSLT for another system
   4 Create a CSLT with PowerPatch patches for another system
   5 Complete the update of this system using a CSLT created on
     another system
   6 Add SUBSYS products to this system
   7 Add SUBSYS products and install patches from a Powerpatch
     tape
   8 Exit
   ? Help on the above actions

   Enter your choice >>_
   ```

3. Reply to the prompt for the LDEV number. Press **[Return]** to use the default of device class TAPE, or enter the LDEV number of the device where you want the CSLT to be created. The device you specify applies to all tape requests.

   ```
   The file equation for the output device (where the CSLT is
   created) defaults to DEV=TAPE. If you prefer to designate a
   specific tape device, please enter its LDEV number now (RETURN
   for default) >>
   ```

4. If you are creating a CSLT on a local system to apply to a Remote system, proceed to Step 5.

   If you are performing an Add-on or Update task for a local system only, proceed to Step 6.

Remote Tasks

5. Respond to the prompt to specify a Base Group.

   a. If you **have not** added customized files or a different configuration to your CSLT, press **[Return]**. This is the typical condition.

   b. If you **have** added customized files or a different configuration to your CSLT through the use of a Base Group, specify that Base Group name now. (Refer to Appendix E ,

"CD-ROM Resources," for directions on creating a Base Group.)

```
When ready to create the CSLT, HPINSTAL will
copy your current configuration group to HPCONFIG.SYS and use that
as the base group. If you have customized a configuration group
that you would like HPINSTAL to use as the base group while creating
the CSLT, please provide it now.

Base group (RETURN for default) >>
```

c. Proceed to Step 6.

6. If needed, edit or create a PRODLIST.PUB.SYS file.

   A master product list was included with the CD-ROM. This list shows all products available to be installed, and needs to be checked against your keyword certificate now.

   a. Enter all numbers from the master list of products included with your keyword certificate.

      If your product list contains many of the over 200 subsystems, you can enter ALL as your product number and then edit the list as necessary.

      hpinstal can also automatically read the keyword for your products from the KEYFILE.pub.sys file. (Refer to Appendix E , "CD-ROM Resources," for directions on creating and using the file KEYFILE.pub.sys.)

   b. Add or delete product numbers as required.

NOTE Add-on product numbers can only be entered interactively.

   c. When all product numbers have been entered, type two slashes (//) or **[Return]**.

7. Respond YES to accept the master list of products at the prompt.

```
Begin validation of the master product list...
Reading PRODLIST.PUB.SYS...
DONE
Your master list contains the following n subsystems:
[The subsystems included in the PRODLIST file are listed here.]
Is the master list of products correct (Y/N)?>
```

8. Type or verify the master product keyword at the prompt. Your keyword validates the master product list.

   The keyword is included on the keyword certificate that comes with the CD-ROM disks. The keyword is **not** case sensitive. But you must enter it exactly as it appears including the alphanumerics, slash (/), and hyphen (-).

   If you have a keyfile.pub.sys file, hpinstal automatically reads the keyword for your products from the keyfile.pub.sys file. (Refer to Appendix E , "CD-ROM Resources," for directions on creating and using the keyfile.pub.sys file.)

```
Please enter your keyword. The keyword accompanies the CD-ROM. It is made
up of fourteen (14) characters including alphanumerics, the slash(/) and
the hyphen (-). You must enter your keyword EXACTLY AS IT APPEARS:
```

```
Your keyword >>
```

NOTE Add-on product keyword can only be entered interactively.

9. Select to install all or a portion of the listed products:

   Enter `Y` to select all products on the list.

   Enter `N` to select a subset of the products, proceed to Step 10.

   ```
   Do you want to install
   all of the above products? (YES/NO)>>
   ```

   If you accidentally type `N`, are viewing the list of products, and you do not wish to make any changes to the list:

   a. Type two slashes (//) or **[Return].**

   b. Confirm the products as you did in Step 7.

10. Optionally, create a subset list of products from the full list of products.

    This is typically done to create a CSLT for use on a remote system, but can be done for your local system as well.

CAUTION If you customize the list of products, and if you selected `HPINSTAL` option 1 or 2, it will create a CSLT with, and install, a **subset** of the master list of entitled products.

If you update your local system with a subset of the master list of products, you cannot use `HPINSTAL`, option 6 or 7, to add products to the local system.You must use `HPINSTAL`, option 1 or 2, and customize the subset list of products.

To create a subset list of products:

a. Enter `N` to the prompt in Step 9.

   The `N` option puts `HPINSTAL` into customization mode. `HPINSTALL` displays the list of products in the current `PRODLIST.install.sys` file.

b. Review this list and make changes as needed.

   Edit the file to create the list of products that will be installed using the CSLT. Use the CSLT created in this section to modify your remote system.

11. If you are performing a PowerPatch task, proceed to Step 12.

    If you are performing an Add-on or Update task without a PowerPatch, proceed to Step13.

PowerPatch Tasks

12. Restore patch information, qualify patches, and restore the patch files.

    a. Mount the PowerPatch tape, as prompted.

    b. Reply to the tape request.

c. Respond Y to accept the list of qualified patches, as prompted:

```
Do you want to incorporate these patches (Y/N)?
```

d. Remount the PowerPatch tape, as prompted;

```
Please remount the PowerPatch tape and put it on
line so that HPINSTAL can retrieve the patch files selected.
```

e. Reply to the tape request.

f. Proceed to Step 13.

13. Create the CSLT.

Mount a write-enabled tape on the appropriate tape drive and reply to the tape request, as prompted. This can take up to two and a half hours.

a. `hpinstal` determines the files that belong to your selected list of products.

```
Resolving product-level dependencies... DONE

Determining the subsystem files to be installed
... DONE
```

b. `hpinstal` stages system libraries and creates the CSLT. This can take from one up to two and a half hours.

```
Making a temporary copy of the SL... DONE

Making a temporary copy of the XL... DONE

Making a temporary copy of the NL... DONE

The installer will next update staged copies of
the System SL, XL, and NL
```

c. HPINSTAL updates the temporary copies of the system libraries and displays status messages:

```
Installing the SUBSYS and patch code, if any . . .
   Modifying SL.INSTALL.SYS ... done
   Translating SL.INSTALL.SYS ... done
   Modifying XL.INSTALL.SYS ... done
   Modifying NL.INSTALL.SYS ... done
   Modifying System Intrinsics ... done
   Creating a new START PME ... done
   Creating the CSLT ...
```

Insert the second CD-ROM disk if prompted, then press **[Return]**.

```
The installer is done with the CD-ROM currently mounted.

Please remove the CD-ROM and insert the second CD-ROM, marked
MPE_v.uu.ff_2.

When the second CD-ROM volume is mounted, press RETURN to
continue >>

Thank You
```

```
Verifying the second CD-ROM . . . Done.

The second CD-ROM volume has been mounted.
Continuing with installing from the CD-ROM volume MPE_v.uu.ff_2.
```

14. After the CSLT is created, dismount the tape, label it CSLT *v.uu.ff*, and set it to read only.

    The final response messages vary depending upon the CSLT option you selected. Basically, the response is:

    ```
    Phase I of HPINSTAL is now complete:
    ```

15. A warning message displays, if applicable.

    ```
    WARNING -- This program cannot install the products listed below.
    (INSTWARN #1)
    ```

    Record on your checklist any products HPINSTAL cannot completely install.

    HPINSTAL will automatically cleanup files, exit, and return you to the MPE/iX prompt.

    ```
    Purging temporary files and cleaning up...
    ```

16. If you are creating a CSLT on a local system to apply to a Remote system, proceed to Step 17.

    If you are performing an Add-on or Update task for a local system only, omit Step 17, and go to the next section on your checklist.

Remote Tasks

17. Refer to Appendix E , “CD-ROM Resources,” for directions on creating multiple copies of the CSLT with the SLTCOPY command for use at remote systems.

    If you are creating additional modified CSLTs for use on remote systems, reinvoke HPINSTAL and select option 3, “Create a CSLT for another system,” for each CSLT you need. If each remote system is unique, you will need to modify the PRODLIST file for each system. Refer to Appendix E , “CD-ROM Resources,” for directions on creating additional PRODLIST files.

- **Creating the CSLT using HPINSTAL completed. Go to the next section on your checklist.**

4.7 Starting the Patch Management Tools

Overview

HP Patch/iX is the recommended method for applying patches and is required for applying Reactive patches. It is delivered with each PowerPatch tape set and each Reactive patch. Hewlett-Packard recommends that you always restore HP Patch/iX from the patch tape. This ensures that you are using the most recent version of HP Patch/iX.

HP Patch/iX is a screen-based, menu-driven patch management tool. Refer to Chapter 1 for an introduction to HP Patch/iX. For an user's guide, refer to Appendix F , “HP Patch/iX Reference.”

NOTE Patch/iX requires that the HPPATH system variable be set to “!HPGROUP,PUB,PUB.SYS,ARPA.SYS”, the system default.
To check the path. :SHOWVAR HPPATH.
To set the path. SETVAR HPPATH: “!HPGROUP,PUB,PUB.SYS,ARPA.SYS”.

HP Stage/iX is another patch management tool. It uses the HP Patch/iX interface for creating staging areas, then uses a command line interface for applying the staging areas to your system software. Refer to Chapter 1 for an introduction to HP Stage/iX. For an user's guide, refer to Appendix G , “HP Stage/iX Reference.”

For Phase I of HP Patch/iX, log on from a terminal, not the console; otherwise the console messages interfere with Patch/iX. If you are using a PC as a terminal, it must have Reflection installed with MPE/iX option. When you are ready for Phase II of Patch/iX, you must log onto the console.

Installing HP Patch/iX

To install the current version of HP Patch/iX:

1. Issue the following restore commands.

```
:FILE PPT;DEV=TAPE
:RESTORE *PPT;PATCH@.INSTALL.SYS;SHOW;DEV=1
```

2. Mount the PowerPatch or Reactive tape and reply to the tape request.
3. Check the version of HP Patch/iX:

```
:PATCHIX VERSION
```

Starting HP Patch/iX

To start HP Patch/iX:

1. **Log on from a terminal, not a console:**

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
```

2. Optionally, adjust the screen length to view more or less of the HP Patch/iX screen. The

following command works for window terminal emulators, but is not required for standard HP terminals.

```
:SETVAR LINES #
```

where # is the number of lines per screen.

There is no option for adjusting screen width.

3. Type at the MPE/iX prompt.

   ```
   :PATCHIX
   ```

   The Logon screen displays.

4. Type your HP Patch/iX logon name at the prompt.

   The text entered in this field (25 characters, no spaces) is referenced in the Installed Patches filter of the View Patches screen. You may use this field to identify individuals from the generic `manager.sys` logon.

   The Main menu displays the HP Patch/iX process options:

   - Select Activities
   - View Patches
   - Qualify Patches
   - Create [Tape]
   - Exit HP Patch/iX

   If HP Stage/iX is initialized, Create [Stage] [Tape] replaces Create [Tape].

NOTE If you need to stop HP Patch/iX for any reason, you are allowed to return and continue. See the following instructions.

To exit HP Patch/iX:

1. Select *`Exit HP Patch/iX`* from the main menu and press **[Return]**.

   Do not use only the **[F8]** key.

To return to a partially completed Phase I process in HP Patch/iX with the files and settings intact:

1. Type at the MPE prompt:

   ```
   :PATCHIX
   ```

   A prompt allows you to continue where you stopped, in the event that you started the HP Patch/iX process but exited prior to completing the CSLT creation (Phase I).

2. To resume, respond `YES` to the prompt:

   ```
   Should the installer resume with the previous installation?_
   ```

   If you respond `NO`, HP Patch/iX purges all audit files and rebuilds them. You will have to start your patching process from the beginning, unless you have completed Phase I, the CSLT creation.

- **Starting the Patch Management Tools completed. Go to the next section on your checklist.**

4.8 Selecting HP Patch/iX Activities

Review all subsections in this section:

- Overview
- Selecting Type of Patching Task
- Preparing Your System with HP Patch/iX

Overview

On the HP Patch/iX Main menu, *Select Activities* is the first option. This is a required action for patch installation. This option provides two functions:

- Allows you to select the type of patching activity you are planning to perform.
- Prepares the system for the patch management activity you selected.

There are three types of patch processes that HP Patch/iX supports:

Adding a PowerPatch can be done alone or with a reactive patch or with adding-on SUBSYS products.

Adding a Reactive Patch can be done alone, or with PowerPatch, or with adding-on SUBSYS products and PowerPatch.

Adding (SUBSYS) Products cannot be done alone; it requires PowerPatch. You can also apply Reactive patches in addition to the PowerPatch. This activity is not a HP Stage/iX option.

Refer to Appendix F, "HP Patch/iX Reference," for detailed descriptions of the patch activity options.

Selecting Patching Task

To select the type of patch activity:

1. From the Main menu, highlight *Select Activities*.

   To select from HP Patch/iX lists, use the arrow keys (or the **[j]** and **[k]** keys) to move up and down the list and press the **[Return]** key.

   The Select Activities screen displays.

2. From the Select Activities screen, highlight the appropriate options. You may select one or more options. Press **x** or **[F2]** Mark. An **x** appears in front of the selection. (Press **[F2]** again to unmark a selection.)

NOTE You cannot stage add-on products. If you select *Adding (SUBSYS) Products*, the Main menu will display *Create [Tape]*; you will no longer be able to select *Create [Stage] [Tape]*.

3. Press **[F4]** Process List, when you have marked all the activities you plan to perform. HP Patch/iX proceeds to prepare the system for creating the CSLT or `store` tape, or staging area.

Preparing Your System With HP Patch/iX

Preparing the system for creating the CSLT is tailored to the specific type of patch processes selected. Depending upon the patch activities selected, preparing the system consists of:

- Purging old patch and installation files that may interfere with the successful completion of HP Patch/iX or the installer `AUTOINST`.
- Restoring patches, patch information, and product information files from tape.
- Copying relevant libraries.

You have the option to implement default patch preparation or customized patch preparation.

CAUTION If you have downloaded patch and information files from the HP SupportLine web site and placed these files in the `patchxl.sys` group, use the Customized Patch Preparation process.

If you want to accept the default patch preparation, proceed to "Default Patch Preparation."

If you have downloaded patches from the HP SupportLine web site or need to customize your patch preparation for another reason, proceed to "Customized Patch Preparation."

Default Patch Preparation

When you process your selections, HP Patch/iX performs the default preparation operations for that patching activity.

To accept the default patch preparation process:

1. After you mark your patch activities on the Select Activities screen and press **[F4]**, you will get a prompt to accept defaults.

   Respond Y to the prompt:

   ```
   HP Patch/iX can perform the default setup operations for
   you or you can choose to customize what setup operations
   are to be performed.
   Do you wish to accept the defaults? (y/n)
   ```

2. The prompts that display are specific to the patch activities you selected. Respond to the prompts as appropriate.

   HP Patch/iX prompts for the LDEV of tapes as appropriate for your task:

   - Reactive tape
   - PowerPatch tape
   - SUBSYS tape

Insert tapes and reply to the tape requests as required.

HP Patch/iX restores files and displays the status as the preparation phase progresses.

When all setup activities are completed, HP Patch/iX automatically returns you to the Main menu. The status area indicates the type of patch activity that you selected.

If you selected *Adding (SUBSYS) Products*, the Main menu displays *Create [Tape]*; you will not be able to select *Create [Stage] [Tape]*.

3. If you accepted the default patch preparation, skip "Customized Patch Preparation" and go to the next section on your checklist.

   To customize your list of patches, proceed with "Customized Patch Preparation."

Customized Patch Preparation

You have the option to select which preparation operations you want HP Patch/iX to perform; this is customized patch preparation.

If you downloaded patch files from the HP SupportLine web site, you must deselect both "Purge all files in the PATCHXL.SYS group" and "Restore files from Reactive patch tape." Also if you downloaded files from the web site, confirm that you have the following files in the INSTALL.SYS group:

```
PATCHIX, PATCH000, ABLDINTX, ALKEDCAT, ALKEDHLP, AUTOCM,
AUTOLED, AUTOSPTH
```

If the patch files are not in the PATCHXL.SYS group, or the A-files are not in the INSTALL.SYS group, Patch/iX will not allow you to unmark the item, "Restore files from Reactive patch tape."

The possible patch preparation operations are:

- Purge unneeded files in INSTALL.SYS group.
- Purge all files in PATCHXL.SYS group.

  Unmark this item if you have intentionally placed new patch files in the PATCHXL.SYS group.
- Purge all files in USL.SYS group.
- Purge all files in UXL.SYS group.
- Purge all files in UNL.SYS group.
- Restore files from Reactive patch tape.

  Unmark this item if you have downloaded Reactive patch files to the PATCHXL.SYS group.
- Restore Product (SUBSYS) information files.
- Restore PowerPatch information files.
- Copy System Libraries.

Refer to Appendix F , "HP Patch/iX Reference," for detailed descriptions of the patch preparation options.

CAUTION When you select customized patch preparation, and alter from the defaults, you are overriding the Hewlett-Packard recommended operations unless you are applying patches downloaded from the HP SupportLine web site.

To customize the patch preparation process:

1. After you mark your patch activities on the Select Activities screen and press **[F4]** Process, you will get a prompt to accept defaults.

   Respond N to the prompt:

   ```
   HP Patch/iX can perform the default setup operations for
   you or you can choose to customize what setup operations
   are to be performed.
   Do you wish to accept the defaults? (y/n)
   ```

2. From the Customize Activities screen, highlight the appropriate options. Press **[F2]** to mark a selection to be performed. **X** is added to the mark column. (Press **[F2]** again to unmark a selection.)

3. Press **[F3]** to verify Purge steps. **V** is added to the mark column. A prompt will request confirmation to purge each file prior to purging the file.

   If a purge operation is not marked for verification, no confirmation prompt will appear.

4. Press **[F4]** Process List.

5. The prompts that display are specific to the patch activities you selected. Respond to the prompts as appropriate.

   HP Patch/iX prompts for the LDEV of:

   - Reactive tape
   - PowerPatch tape
   - SUBSYS tape

   HP Patch/iX restores files and displays the status as the preparation phase progresses.

   When the setup operations are complete, HP Patch/iX automatically returns you to the Main menu. The status area indicates the type of patch activity that you selected.

   If you selected *Adding (SUBSYS) Products*, the Main menu displays *Create [Tape]*; you will no longer be able to select *Create [Stage] [Tape]*.

   - **Selecting HP Patch/iX Activities completed. Go to the next section on your checklist.**

4.9 Viewing Patches

Overview

On the HP Patch/iX Main menu, *View Patches* is the second option. It is an **optional** step for patch installation.

The list of patches displayed in the View Patches screen varies depending upon the filter selected. The default View Patches filter displays installed patches. The current View Patches filter setting is displayed at the top right corner of the View Patches window. There are three filters:

- *Installed Patches*—are already on the system.
- *Available Patche*s—are on the PowerPatch or Reactive patch tapes. From this filter you can view detailed information about each patch.
- *Available Products*—are the products on the SUBSYS tape.

Viewing Patches (optional)

To view the list of patches:

1. From the Main menu, highlight *View Patches* and press **[Return].**

   It displays the View Patches screen.

   If this is the first time you are using HP Patch/iX, there will not be any patch history. The screen will display the message:

   `No patches match this filter.`

2. To change the View Patches filter from the View Patches screen, press **[F5]** Previous Filter or **[F6]** Next Filter (or enter the number that corresponds to the filter view).

   The View Patches screen displays showing Patch ID, Origin, Date, and Installed By columns. If you have not completed the Select Activities portion of the HP Patch/iX process, the screen will be blank.

To display detailed patch information:

1. From the View Patches screen, Available Patches filter, highlight the patch and press **[Return]**.

   The Patch Detail Summary screen displays.

2. Press **[F5]** Previous View or **[F6]** Next View (or press the number on the keyboard that corresponds to the filter view).

   It displays the selected detailed information about the selected patch.

3. Press **[F2]** Previous Patch or **[F3]** Next Patch (or Tab and Shift-Tab) to scroll through the list of patches from the View Patches list and display the selected detailed information about the selected patch in the View Patch Detail screen.

To return to the Main menu, press **[F8]** Previous Menu until the Main menu displays.

NOTE Patch/iX will NOT have a record for any patches installed by AUTOPAT.

- **Viewing Patches tasks completed. Go to the next section on your checklist.**

4.10 Qualifying Patches

Overview

Qualify Patches is the third option on the HP Patch/iX Main menu. It is a **required** step for patch installation when using HP Patch/iX. This option provides three functions:

- Automatically reviews the available patches and determines which patches are compatible with your system.
- Allows you to *force* or *veto* individual patches. Forcing a patch tells HP Patch/iX to include (add) the selected patch in the patch installation. Vetoing a patch tells HP Patch/iX to not include (to remove) the selected patch from the set of patches to be installed.
- Establishes the list of patches that will be included in creating the patch installation tape (CSLT or `store` tape or staging area on disk).

This part of the process is where you choose which patches you want to install. HP Patch/iX evaluates all the proposed patches and determines if each patch qualifies for installation. A patch qualifies for installation if:

- It is compatible with your current software.
- All patch and product dependencies are resident.
- You do not have a more recent version of the patch already installed on your system.

NOTE When Patch/iX detects patches which are enhancements rather than a “must install,” it marks these patches as “Not Qualified.” To install these patches, you must FORCE these patches.

NOTE Patch/iX may disqualify a patch as “Naturally Disqualified” due to checksum mismatches. In such cases, the patch should not be FORCED without first consulting with the HP Response Center.

NOTE Now Patch/iX will ask: “Automatically qualify FOS enhancements (Y/N)?” Reply “Y” will qualify; no FORCE will be required.

The patch qualification process is as follows:

- Select and confirm the Qualify Patches option from the Main menu.
- View the list of approved patches. (Optional)
- Modify the list of approved patches. (Optional)
- Requalify the list of approved patches. (**Required**, if you modify the list of approved patches.)

- Return to the Main menu.

Qualifying Patches Steps

To qualify patches:

1. From the HP Patch/iX Main menu, highlight *Qualify Patches* and press **[Return]**.

   The Qualify Patches prompt displays.

2. Respond Yes to the prompt:

   ```
   Are you ready to begin this full qualification?
   (y/n) _
   ```

   An information window lists the types of patches, number of patches, and an estimate of time to perform the qualification. For example:

   ```
           Patch Qualification in Progress
   PowerPatch Patches: 17     Estimated Time: 15.04
   Reactive Patches:   06     Elapsed Time:   00.05
   ```

   Upon completion, HP Patch/iX displays the list of patches with their qualification status. The columns displayed are Patch ID, Qualified, Status, Flags, Tape, Stage, and Origin.

   Patches that have already been applied to your system by HP Patch/iX will have an asterisk (*) displayed after the Patch ID number.

   - A CSLT can be created if *any* patch with YES in the Qualified column also has CSLT/Store in the Tape column.
   - A store tape can be created if *all* of the patches with YES in the Qualified column have Store-Only in the Tape column.
   - A Staging area on disk can be created if *all* of the patches with YES in the Qualified column also have YES in the Stage column.

     If HP Stage/iX is not initialized, the Stage column does not display.

     The status of the Tape column does not affect whether patches can be staged or not.

NOTE If you accept patches that are not stage compatible (No in Stage column), you will no longer be able to select *Create [Stage] [Tape]* from the Main menu.

3. If you need to modify the list of approved patches, proceed to the following subsection, “Modifying the List of Qualified Patches.”

   If the list of qualified patches is acceptable, press **[F8]** Previous Menu.

   All patches with a Yes in the Qualified column will be applied to your system; those patches with a No will not be applied to your system.

4. To return to the Main menu, press **[F8]** Previous Menu. The status indicates the number of patches that have qualified.

5. If you accepted the list of qualified patches, proceed to the next section on your checklist.

Modifying the List of Qualified Patches

HP Patch/iX allows you to change the list of qualified patches that will be applied to your system through the patch process.

CAUTION Forcing a patch that does not automatically qualify for your system is strongly discouraged by Hewlett-Packard, *EXCEPT* if it is an enhancement or under the recommendation of the HP Response Center.

To modify the list of qualified patches:

1. From the Qualified Patches screen, highlight each patch whose status you wish to change. Press **[F2]** Veto or **[F3]** Force.

   An **V** or **F** is added next to the Patch ID. (Press **[F2]** or **[F3]** again to remove the Veto or Force choice. The Veto and Force buttons toggle to Undo Veto and Undo Force, respectively.

   The comment in the Qualified column does not change at this time.

2. Repeat this for each patch, as needed.
3. Optionally, to view different subset lists of patches, press **[F5]** Previous Filter or **[F6]** Next Filter.

   It toggles through the filter screens and displays different subset lists of the patches.

4. Optionally, view detailed patch information.

CAUTION Not all patches can be Forced or Vetoed. This is system dependent.

You must requalify the patches you customize. If you choose not to requalify the patches you customize, HP Patch/iX will install the list of patches based on the last successful qualification.

---

5. Requalify the modified list of patches. This is **required** each time you modify the list of patches in order to implement your changes.

   Press **[F4]** Process Changes.

   HP Patch/iX requalifies the patches and displays the requalified list of patches.

   Forced patches show `Yes` (Forced) in the Qualified column. Vetoed patches show `No` (Vetoed) in the Qualified column. Patches that are dependent upon or have dependencies will also show a change in Status.

   To view the patches with changed status, press **[F5]** Previous Filter or **[F6]** Next Filter (or the number **4** key to display the Difference filter).

   Use the Changed filter to see the patches that have changed since the last qualification.

   If you accept patches that are not stage compatible (No in Stage column), you will no longer be able to select *`Create [Stage] [Tape]`* from the Main menu.

6. If the list of qualified patches is acceptable, press **[F8]** Previous Menu to complete this section.

When you press **[F8]** you automatically return to the Main menu. The status lists the number of patches that have qualified.

All patches with a Yes in the Qualified column will be applied to your system; this includes Forced patches. Those patches with a No in the Qualified column will not be applied to your system.

- **Qualifying Patches Tasks completed. Go to the next section on your checklist.**

4.11 Creating a Patch Tape or Staging Area

Overview

On the HP Patch/iX Main menu, the *Create [Stage] [Tape]* option displays if HP Stage/iX is initialized. If HP Stage/iX is not initialized or, if one or more qualified patches is not stageable, the *Create [Tape]* option displays. This is a required action for patch installation and provides the following patch installation options:

- Creates a **staging area** that contains a set of system software files that are modified by the patches you are applying to your system.
- Creates a CSLT/STORE of patches and (optionally) SUBSYS products that you are applying to your system.

  The **CSLT/STORE tape** created at the end of this section contains all the SUBSYS library components. The balance of the files are restored and applied during Phase II of the modification process.
- Creates a **STORE tape** of patches that you are applying to your system.

HP Patch/iX determines which option is appropriate and/or possible for your system and set of patches:

- A CSLT can be created if any patch with YES in the Qualified column also has CSLT/Store in the Tape column.
- A store tape can be created if all of the patches with YES in the Qualified column have Store-Only in the Tape column.
- A Staging area on disk can be created if all of the patches with YES in the Qualified column also have YES in the Stage column.

  If HP Stage/iX is not initialized, the Stage column does not display.

  The status of the Tape column does not affect whether patches can be staged or not.
- If HP Stage/iX is initialized, HP Patch/iX prompts you to specify if you want to create a CSLT/STORE tape, a staging area, or both.

Once the CSLT or STORE tape, or staging area on disk, is created, it can then be used to modify the system.

Creating Patch or Stage Tape Steps

To create your patch installation stage and/or tape:

1. From the HP Patch/iX Main menu, highlight *Create [Stage] [Tape]* or *Create [Tape]* and press **[Return]**.
2. If HP Stage/iX is initialized, select the appropriate option:

S	Create a staging area.
T	Create a CSLT/STORE tape.

B Create both a staging area and a CSLT/STORE tape.

Hewlett-Packard recommends that you select T to create a CSLT/STORE tape for backup purposes.

```
HP Patch/iX allows you to create a patch installation
(S)taging area, (T)ape, or (B)oth.
What is your selection? (S, T, B)
```

3. If you are creating a staging area, respond to the prompt for a staging area name. The staging area name can be up to 16 characters. The characters can be alphanumeric, including underbar (_), dash (-), and period (.).

   ```
   Please enter the name for the new staging area. It can be 16
   characters using HFS naming syntax conventions.
   What is the name for the staging area?
   ```

4. Respond to the HP Patch/iX prompts that display. They are specific to the patch activities you selected.

   HP Patch/iX prompts for the LDEV as appropriate for your task:

   - PowerPatch tape
   - SUBSYS tape
   - Write-enabled blank tape that will become the CSLT/STORE tape, if the CSLT/STORE tape option is selected.

   If you have two tape drives, you can specify different LDEVs for the PowerPatch and CSLT/STORE tape. This way you will not need to wait for HP Patch/iX to restore the necessary files from the PowerPatch tape and then respond to the prompt for the CSLT/STORE tape.

5. When prompted, insert the appropriate tape and reply to any tape request on the console. HP Patch/iX then restores patch files.

   Wait for the staging area and/or patch installation tape to be created.

   The Start Time and Elapsed Time are updated as activities are processed, but it may take much less than the estimated time.

   HP Patch/iX performs the following:

   - Restores PowerPatch files, if a PowerPatch is being added.
   - Modifies the libraries, if needed.
   - Creates a new START PME, if needed.
   - Creates the patch installation tape (CSLT/store), if selected.
   - Creates a staging area on disk, if selected.

6. A warning message displays and lists any manually installed products that HP Patch/iX cannot completely install, if applicable.

   ```
   WARNING -- This program cannot install the products listed
   below. (INSTWARN #1)
   ```

   Record on your checklist any products it cannot completely install.

7. HP Patch/iX automatically returns you to the Main menu. The status indicates "Stage Created," "CSLT/STORE Tape Created," or "Stage and Tape Created," as appropriate for your selection.

NOTE Exiting HP Patch/iX is a *required* action for patch installation.

To exit HP Patch/iX:

1. From the HP Patch/iX Main menu, highlight the fifth option, *Exit HP Patch/iX* and press **[Return]**. Do not just press **[F8]**.

   The messages displays:

   ```
   Patch Management completed successfully.
   **EXITING HP PATCH/iX**
   ```

   The MPE/iX prompt displays.

2. If you downloaded reactive patches from the HP SupportLine web site, respond to the prompt to remove those files from your disk.

   If you want to keep a copy of the downloaded patches, and you do not have a copy elsewhere, select N.

   If you respond Y, the PowerPatch and SUBSYS files are automatically cleaned up by HP Patch/iX.

   ```
   Do you want HP Patch/iX to automatically purge the reactive
   patch files stored in PATCHXL.SYS? (y/n)
   ```

This completes the creation phase. You have created one or more of the following:

- **Staging area** for applying patches to your system.
- **CSLT/ STORE tape** for applying patches and SUBSYS products to your system, and for archive purposes.
- **STORE tape** for applying patches to your system or for archive purposes.

— **Creating a Patch Tape or Staging Area completed. Go to the next section on your checklist.**

4.12 Reserving Disk Space for CD-ROM Tasks

Ensure that you have enough contiguous disk space on LDEV 1 to complete your task. The total amount of non-contiguous disk space does not need to fit entirely on LDEV 1.

To reserve disk space:

1. Estimate contiguous disk space required to update your system.

   Mount the CSLT created by HPINSTAL.

   ```
   :CHECKSLT.MPEXL.TELESUP

   ************************CHECKSLT 1.9************************
   -------------------------------
   L E V E L - N U M B E R S
   -------------------------------
   1 - Check the tape. Display errors and file names.
   2 - Check the tape. DIsplay errors, file names and size.
   3 - Check the tape and display all information for each section.
   4 - Recover a TAPE BOOT file. NOT AVAILABLE
   5 - Recover a DISK file from the tape and copy it to a disk file.
   6 - Check the tape and display the contents of one file in hex.
   7 - Check the tape and display summary of tape and disk use statistics.
   8 - Information.
   9 - Exit program.

   Which level? __
   ```

   Select option 7.

   Record sectors required for axldev1.

2. Reserve contiguous and non-contiguous disk space.

   ```
   :BUILD AXLDEV1.pub.sys;DISC=120000,1,1;DEV=1
   :BUILD AXLSPACE.pub.SYS;DISC=????,32,32
   ```

   If a colon (:) prompt is returned, the files were built and you have enough disk space.

   If you receive a message, "Out of disk space," make more space available on your system before you perform an update or add-on. Refer to Appendix C , "Managing Disk Space," for information on finding additional disk space.

3. Purge the AXLSPACE file. The AXLDEV1 file is automatically purged by the UPDATE tool.

   ```
   :PURGE AXLSPACE.PUB.SYS
   ```

   - **Reserving Disk Space for CD-ROM Tasks completed. Go to the next section on your checklist.**

5 Modifying Your System

This chapter describes tasks that require exclusive access to your system. Use only the sections on your checklist for the process of securing, shutting down, and applying the changes to your system.

CAUTION You must use a checklist to determine which tasks to perform. If you started without a checklist, return to Chapter 2 , “Task Checklists,” and select the checklist that is appropriate for your task. Perform only the steps in the sections that appear on your checklist.

5.1 Securing and Backing Up the System for Tape Tasks

To prepare and secure the system for updating:

1. F**rom the console**, log on with the following conditions, or if already logged on, change group to PUB.

   ```
   :HELLO MANAGER.SYS,PUB;HIPRI
   ```

   or

   ```
   :CHGROUP PUB
   ```

2. If you are performing an Update, go to Step 3.

   If you are performing an Add-on, go to Step 4.

Update Tasks

3. Run HP Predictive Support and turn it off.

   If you are using the HP Predictive Support software as part of your Hewlett-Packard hardware support contract, ensure that an HP Predictive Support run completes successfully.

   a. Issue the HP Predictive Support command:

      ```
      :RUN PSCONFIG.PRED.SYS
      ```

      This run of HP Predictive Support may include a transfer of files to the Hewlett-Packard Response Center. If a transfer is needed, *be sure it completes* because the system update overwrites the information in the file PSDCFILE.PRED.SYS.

   b. Select item 4, Configuration, from the Main menu.

   c. Select item 5, Schedule, from the Configuration Options menu.

   d. Select item 1, Schedule (ON/OFF), from the Schedule menu.

   e. Set the preference, at the prompt, type OFF:

      ```
      Type schedule preference (on/off) or // to cancel: __
      ```

   f. Exit the program, at the prompt, type EXIT:

      ```
      Type an item number, an item key, or a command: __
      ```

   g. Save the values, at the prompt, type YES:

      ```
      Do you wish to save these values (Y/N)?__
      ```

   h. Go to Step 4.

Update and Add-On Tasks

4. Lower session and job limits.

   ```
   :LIMIT0,0
   ```

5. Warn, then log users off.

   ```
   :WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
   ```

   Wait approximately five minutes. Make sure users have saved their work and logged off, then abort jobs or sessions still executing. Use the SHOWJOB command to determine session and job numbers. For each job and session still executing (except yours) type:

   ```
   :ABORTJOB #Jnn
   :ABORTJOB #Snnn
   ```

   where:

   Jnn — the ID number for each job to be aborted.

   Snnn — the ID number for each session to be aborted.

6. Deactivate NS 3000/iX, if applicable.

   ```
   :NSCONTROL STOP
   :NSCONTROL ABORT
   :NETCONTROL STOP
   ```

7. Terminate logging processes.

   a. Enter the following command to determine if user logging processes are running:

      ```
      :SHOWLOGSTATUS
      ```

   b. If logging processes are running on your system, a message similar to the following will be displayed:

      ```
      LOGID   CHANGE AUTO USERS STATE CUR REC MAX REC % USED CUR FSET
      SHPLOGID  YES   YES  1    ACTIVE  120   10016    1%     1
      ORBLOGID  YES   YES  9    ACTIVE  3812  10016   38%     1
      ```

      If no logging processes are running, go to Step 8.

   c. Terminate logging processes as shown below.

      ```
      :LOG logid,STOP
      ```

      where `logid` is the ID number for each logging process to be stopped.

      Record the names of the logging processes on your checklist, if you want to restart them later.

8. Prepare additional manually installed products.

   a. If you have ALLBASE/SQL already installed on your system, issue starts for each DBEnvironment before you back up the system. Refer to the *ALLBASE/SQL Database Administration Guide* for more information. Briefly, you need to:

      - Identify all your ALLBASE/SQL databases, type:

        ```
        :STORE @.@.@;;FCRANGE=-491/-491;SHOW
        ```

      - Run ISQL.PUB.SYS and issue a STARTDBE command. This ensures that the DBEnvironment is logically consistent in the event that it has not been accessed since a system failure occurred.

      - Run SQLUTIL.PUB.SYS and issue the STORE command to backup each

DBEnvironment.

- Log files are not stored using this command. In addition, you should use the SHOWDBE command to ensure that all parameters are OK.

b. If you have ALLBASE/4GL already on your system, unload all existing ALLBASE/4GL applications. For information on unloading ALLBASE/4GL applications, refer to the *HP ALLBASE/4GL Developer Administration Manual*.

c. If you are installing AutoRestart/iX for the first time, install AutoRestart/iX before you run AUTOINST. Refer to the *AutoRestart/iX Reference Manual* for installation instructions.

9. If you have a current full backup, you may proceed to Step 11.

   If you do not already have a current full backup, proceed to Step 10.

Backup the System

10. Back up the system, if you do not already have a current full backup.

a. Specify a class name.

```
:FILE SYSGTAPE;DEV=dev_number
```

where the dev_number is the DAT class name or LDEV number of the tape device. Specify this value if you are using a DAT or any device that has a class name other than TAPE.

b. Mount a write-enabled tape and create an SLT.

```
:SYSGEN
sysgen>TAPE
sysgen>EXIT
```

c. If you are prompted for lockwords on system files, record the names of each system file as prompted, then type the lockword and continue with the backup. You will need to restore these lockwords later in the section, “Setting Passwords and Lockwords.” Record the names on your checklist.

d. Dismount the tape, label as SLT with date, time and system version.

e. Mount another blank tape and backup your user files.

```
:FILE T;DEV=TAPE
:STORE @.@.SYS,@.@.@-@.@.SYS;*T;DIRECTORY;SHOW
```

or

```
:STORE /SYS/, / - /SYS/;*T;DIRECTORY;SHOW; &
ONVS=volume_set_name1, volume_set_name2, ...
```

where the volume_set_name is the name for each user volume set you want to backup.

f. Dismount the tape, label with date, time and system version.

g. Go to Step 11.

11. If it exists, purge HPINSTFL:

```
:PURGE HPINSTFL.INSTALL.SYS
```

12. Purge spool files.

```
:SPOOLF @;DELETE
```

13. Purge staging groups.

```
:PURGEGROUP UNL
:PURGEGROUP USL
:PURGEGROUP UXL
```

Verify each purge, type Y, at the prompt.

Do not purge the group `install.sys` or the file `supacct.pub.sys`; they are needed for future patch and add-on processes.

14. If you are performing an Update task, go to Step 15.

If you are performing an Add-on task, go to Step 16.

Update Tasks

15. Purge specified files and groups.

a. Purge the `PSIDNLD.DIAG.SYS` file.

```
:PURGE PSIDNLD.DIAG.SYS
```

This file may have been purged already. This file is used for diagnostic purposes and is overwritten by the new `PSIDNLD.DIAG.SYS` file. If you do not purge the existing file, and the new file is larger, you will receive errors.

b. Purge each `os`*xnn* and `xpt`*nnnn* group in the `telesup` account.

```
:REPORT OS?##.TELESUP
:PURGEGROUP OSxnn.TELESUP
:REPORT XPT####.TELESUP
:PURGEGROUP XPT@.TELESUP
```

where:

x — an alphabetic character

nn — the numeric release number (for example, `OSA10.TELESUP` and `OSB23.TELESUP`).

These files may not exist.

c. Go to Step 16.

16. Rename the `COMMAND.PUB.SYS` file.

```
:RENAME COMMAND.PUB.SYS,command_name
```

where `command_name` is a temporary name you are assigning the file. This preserves your UDC information for later use. Record the temporary name on your checklist.

- **Securing and Backing Up the System for Tape Tasks completed. Go to the next section on your checklist.**

5.2 Applying the SLT

In this section, you apply changes to the operating system kernel and start the system. The steps in this section do modify your system software. However, this section does not complete the modification task.

To apply the factory SLT to the system:

1. **From the console**, mount the factory supplied System Load Tape (SLT) and put the tape drive online.

   Wait until a message displays on the system console verifying that the tape mounted.

2. If you are using the AutoRestart product and AUTOBOOT is enabled, turn it off so the system won't automatically reboot from the primary boot path.

   ```
   :RUN BLDDUMP.HP36375.TELESUP
   blddump>AUTOBOOT OFF
   blddump>EXIT
   ```

3. If your system is up, shut it down now. The system is already down if you are performing a new install.

   ```
   CTRL-A
   =SHUTDOWN
   ```

4. Reset the system after the last shutdown message (SHUT6).

   a. If you have an HP 3000 Series 99x, connect to the service processor before you can restart the system. Type the following:

      ```
      CTRL-B
      CM>SP
      SP>RS
      ```

      Enter Y to HARD BOOT the computer system.

      Do not respond to the question:

      ```
      Press any key within 10 seconds to cancel boot with this
      configuration.
      ```

      There are 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

   b. For all other systems, enter the following commands to reset the system:

      ```
      CTRL-B
      CM>RS
      ```

      If the system does not respond to the CTRL-B entry within ten seconds, press the reset button, key switch, or on/off switch as appropriate for your system. The system will halt, and then restart automatically.

      Enter Y to confirm restarting the system.

5. Boot the system from the alternate boot path.

   a. Boot messages vary depending on the system model.

- If you have AUTOBOOT enabled, follow the instructions on the screen and strike any key within 10 seconds.

  If you do not override AUTOBOOT, the system boots from the primary boot path. If your system does boot from the primary boot path, return to Step 3 and reset the system with the CTRL-B and RS commands.

- If your system prompts, `Boot from primary boot path?`, enter N.
- When the system prompts, `Boot from alternate boot path?`, enter Y.
- If your system prompts to enter the boot path, enter the alternate boot path.
- For Model 9x8LX, 9x8RX, or 9x9KS systems, type `BO ALT` at the PDC screen to boot from the alternate boot path.

b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

The system boots from the alternate source (tape). After some tape activity, the ISL prompt displays.

6. If this is a new system, check FASTSIZE value.

```
ISL>DISPLAY
Fastsize value is 0000000n
. . .
```

If the value *n* is F, go to Step 7.

If the value *n* is not F:

a. Change it to F.

```
ISL>FASTSIZE F
```

b. Return to Step 4 and reset the system to set the new FASTSIZE value.

7. If you are performing an Update, go to Step 8.

   If you are performing an Install, go to Step 9.

Update Tasks

8. Update the system with the factory SLT.

```
ISL>UPDATE
```

Go to Step 10.

Install Tasks

9. Retrieve system clock and start installation.

a. `ISL>CLKUTIL`

Set clock to Greenwich Mean Time. This takes about six minutes.

CAUTION DO NOT DO THIS UNLESS YOU ARE PERFORMING A NEW INSTALL

TASK. IT DESTROYS ALL THE EXISTING SYSTEM AND USER FILES IN THE MPEXL_SYSTEM_VOLUME_SET!

b. Type at the prompt:

```
ISL>INSTALL
```

c. Go to Step 10.

10. Confirm the date and time.

If the date and time displayed are not correct, enter N, and enter the correct date and time. If you do not respond within 15 seconds, the system continues.

The install process displays an initialization message similar to:

```
MPE/iX launch facility
Install x.nn.nn Copyright (c) Hewlett-Packard 1987
Install -- MPE/iX Disk Image Builder -- version 1.0
Initialize_genesis - Version: <<870204.1552>>
TUE, APR 19, 1994, 10:20:03 AM (y/n)? Y/N
[TMUX_DAM] n n n n
Initialize memory manager completed.
Begin ...
```

The update and install processes display start-up and initialization messages. Until all the files are restored, monitor the process from the console and note any errors that are reported. The update or install process takes about 20–40 minutes.

If you receive an error message refer to Chapter H , “Error Messages and Warnings,” and Appendix C , “Managing Disk Space.”

11. Boot the system from the primary boot path.

a. Boot messages vary depending on the system model.

- If you have AUTOBOOT enabled, follow the instructions on the screen and strike any key within 10 seconds.
- If your system prompts to enter the boot path, enter the primary boot path.
- For Model 9x8LX, 9x8RX, or 9x9KS systems, type BO at the PDC screen to boot from the primary boot path.
- If your system prompts, Boot from primary boot path?, enter Y.

b. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

The system boots from disk. After some activity the ISL prompt displays.

- **Applying the SLT completed. Go to the next section on your checklist.**

5.3 Listing the System Configuration

This section describes how to determine your system configuration group.

The factory System Load Tape (SLT) does not contain a default I/O configuration. During an installation, you **must** specify the appropriate factory configuration group when booting the system immediately after installing the factory SLT. Listing the system configuration uses the off-line diagnostic tool, Mapper. To get help using MAPPER, type help at the MAPPER prompt, and see Figure 5-1. for a sample listing.

To list the system configuration:

1. Check that all hardware peripherals are attached and powered on.
2. Start ODE.

   ```
   ISL>ODE
   ```

3. Display hardware configuration.

   ```
   ODE>RUN MAPPER
   ```

   The figure on the following page is a sample of a MAPPER display.

4. Record the I/O configuration for your system.

   Find the MPE/XL Model String. Then refer to Appendix B , “Configuration Tables,” for the configuration group name for your HP 3000 model in the SCSI column. For example, for a Model 995, the SCSI group is CONFG995. It is very important to have the exact group name. Check carefully for numbers zero and 1 and letters O and I.

5. Exit mapper.

   ```
   ODE>EXIT
   ```

Figure 5-1. Sample Listing MAPPER Output

```
STARTING EXECUTION OF MAPPER


Processor Identification:

    Hardware Model:  590H, Revision: 0
    Software Model:  4H, Revision:  0
    Hardware ID:  0, Software ID:  250911381 (unsigned decimal)
    Software Cap:  0x10000031
    MPE/XL Model String: 979-400
    Processor Board Revisions:
        CPU - CPU Chip:                    769
        PDC - Processor Dependent Code:    38.29
    Cache and TLB Sizes:
        Instruction Cache:  1024 K bytes, Instruction TLB:  96 entries
        Data Cache:         1024 K bytes, Data TLB:         96 entries
    Co-processors:
        Floating Point Co-processor is installed
```

```
I/O Configuration:
                                                    Type  HW    SW    Revisions
Path       Component Name                           ID    Mod   Mod   Hdwr  Firm
--------- ---------------------------------- ----- ----- ----- ----- -----
8          I/O Adapter                              CH    580H  BH    15    1
8/63       GSC+ Port                                7H    501H  CH    1     3
10         I/O Adapter                              CH    580H  BH    15    1
10/4       Upper Bus Converter                      7H    500H  CH    0     0
10/4/0     HP-PB LAN/Console                        2H    5H    60H   0     1
10/4/4     HP-PB Fast Wide SCSI                     4H    4H    3BH   0     0
10/4/4.2.0    SEAGATE ST318275LC                    -     -     -     -     HP00
10/4/4.3.0    SEAGATE ST39175LC                     -     -     -     -     HP00
10/4/4.4.0    SEAGATE ST39175LC                     -     -     -     -     HP00
10/4/8     HP-PB SCSI                               4H    4H    39H   0     0
10/4/8.0.0    SEAGATEST32550N disk drive            -     -     -     -     HP10
10/4/8.1.0    SEAGATE ST34572WC                     -     -     -     -     HP01
10/4/8.2.0    SEAGATE ST32272WC                     -     -     -     -     HP01
10/4/9     HP-PB Centronics                         5H    4H    3AH   0     0
10/4/20    HP-PB SCSI                               4H    5H    39H   0     0
10/4/20.0.0    HPC1533A/C1530B tape drive           -     -     -     -     AN04
10/4/20.1.0    HPC1533A/C1530B tape drive           -     -     -     -     AN04
10/4/24    HP-PB Fast Wide SCSI                     4H    5H    3BH   0     0
10/4/24.3.0    SEAGATE ST34371W disk drive          -     -     -     -     HPM2
10/4/24.4.0    SEAGATE ST34371W disk drive          -     -     -     -     HPM2
10/4/24.5.0    Quantum XP34361WD                    -     -     -     -     HP10
10/4/24.6.0    SEAGATE ST34371W disk drive          -     -     -     -     HPM4
10/4/60    HP-PB Port                               7H    103H  CH    0     0
10/16      Upper Bus Converter                      7H    500H  CH    0     0
10/16/60   HP-PB Port                               7H    103H  CH    0     0
10/63      GSC+ Port                                7H    501H  CH    1     3
32         MoHawk Processor                         0H    590H  4H    0     0
34         MoHawk Processor                         0H    590H  4H    0     0
36         MoHawk Processor                         0H    590H  4H    0     0
38         MoHawk Processor                         0H    590H  4H    0     0
49         Memory (1024 M bytes)                    1H    32H   9H    0     0
             Extender 0
                slot 0A/0B   bank  3:  64MB
                             bank  8:  64MB
                slot 1A/1B   bank  7:  64MB
                             bank 12:  64MB
                slot 2A/2B   bank  4:  64MB
                             bank 15:  64MB
                slot 3A/3B   bank  0:  64MB
                             bank 11:  64MB
                slot 4A/4B   bank  5:  64MB
                             bank 14:  64MB
                slot 5A/5B   bank  1:  64MB
                             bank 10:  64MB
                slot 6A/6B   bank  2:  64MB
                             bank  9:  64MB
                slot 7A/7B   bank  6:  64MB
                             bank 13:  64MB
RUN COMPLETED.
```

- **Listing the System Configuration completed. Go to the next section on your checklist.**

5.4 Starting the System

When the update is complete, autoboot begins. Perform the following steps to ensure the system is up and running.

To start the system:

1. Start the system.

   ```
   ISL>START NORECOVERY NOSYSSTART
   ```

   If you are Installing a New System, add group=*configname* to the command string.

   ```
   ISL>START NORECOVERY NOSYSSTART GROUP=configname
   ```

   where *configname* is the configuration group for your system. Refer to Appendix B , "Configuration Tables," for a list of configuration groups.

2. Confirm the date and time.

   You are prompted to confirm the date and time. If the date and time displayed are not correct, enter N, and enter the correct date and time. If you do not respond within 15 seconds, the system continues.

   ```
   MPE/iX launch facility
   Initialize_genesis - Version: <<870204.1552>>
   TUE, APR 19, 1994, 10:20:03 AM (y/n)? Y/N
   [TMUX_DAM] n n n n
   Initialize genesis completed.
   ```

   The system displays start-up and initialization messages for 5 to 6 minutes. For example:

   ```
   Initialize genesis completed.
   Create Console Messages completed.
   Initialize memory manager completed.
   Initialize resident kernel completed.
   . . .
   Protection of system files has been completed.
   . . .
   SESSION Scheduling Initialized
   Initiate Operator Logon
   JOB Scheduling Initialized
   Successfully launched diagnostic monitor process.
   ```

   During the start-up process, the system makes several configuration checks and may display warning messages. This is normal for system start-up, and will not affect system operation.

3. Dismount the System Load Tape (SLT).

- **Starting the System completed. Go to the next section on your checklist.**

5.5 Configuring the System

You need to configure the following devices for AUTOINST to work properly:

- LP device class
- streams device (usually 10)
- tape drive (that matches the FOS and SUBSYS media type)

If you need information about hardware device IDs, print the file IODFAULT.PUB.SYS on your screen. This file contains ID numbers and associated parameters for hardware devices. You can display this file when the system is up and you have the system prompt.

To configure your I/O and save the customized set of configuration files, perform the following steps:

1. Log on at the console.

   ```
   :HELLO MANAGER.SYS
   ```

2. Modify or restore configuration files.

   ```
   :sysgen
   sysgen>IO
   IO>LPATH
   ```

3. Record configuration, compare, and change the configuration to match the configuration listed by ODE. Refer to "Listing the System Configuration," in this chapter. For information on SYSGEN refer to the *System Startup, Configuration, and Shutdown Reference Manual*.

4. Save changes.

   ```
   IO>HOLD
   IO>EXIT
   sysgen>KEEP CONFIG
   purge old configuration? YES
   sysgen>EXIT
   ```

   A warning message displays regarding nmconfig. Ignore it.

5. Shut down the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

6. Reset the system after the last shutdown message (SHUT6).

   a. If you have an HP 3000 Series 99x, connect to the service processor before you can restart the system. Type the following:

      ```
      CTRL-B
      CM>SP
      ```

```
SP>RS
```

Enter Y to HARD BOOT the computer system.

Do not respond to the question:

```
Press any key within 10 seconds to cancel boot with this configuration.
```

There are 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

b. For all other systems, enter the following commands to reset the system:

```
CTRL-B
CM>RS
```

If the system does not respond to the CTRL-B entry within ten seconds, press the reset button, key switch, or on/off switch as appropriate for your system. The system will halt, and then restart automatically.

Enter Y to confirm restarting the system.

7. Boot the system from the primary boot path.

a. Boot messages can vary, depending on the system model.

- If you have AUTOBOOT enabled, and you do not override AUTOBOOT, the system boots from the primary boot path automatically.
- If your system prompts to enter the boot path, enter the primary boot path.
- For Model 9x8LX, 9x8RX, or 9x9KS systems, type BO at the PDC screen to boot from the primary boot path.
- If your system prompts, `Boot from primary boot path?`, enter Y.

b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

The system boots from disk. After some activity the ISL prompt displays.

8. Start the system.

```
ISL>START NORECOVERY
```

- **Configuring the System completed. Go to the next section on your checklist.**

5.6 Checking Volumes

If necessary, use the VOLUTIL utility to add system volumes, that is, the system domain (MPEXL_SYSTEM_VOLUME_SET) disk drives (except LDEV1). For more information on VOLUTIL commands, refer to the *Volume Management Reference Manual*.

To check volumes:

1. **From the console**, log on with the following conditions (if you are not already logged on).

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   A common streams_device value is 10. An LP device **must** be configured in SYSGEN. Already spooled and streamed messages might display.

2. Enter a DSTAT ALL command to verify a status of member for the disk drives.

   ```
   :DSTAT ALL
   ```

   Sample output:

   ```
   LDEV-TYPESTATUSVOLUME (VOLUME SET - GEN)
   --------- -------------- ----------------------------
   1- 022040MASTERMEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
   2- 022040LONERMEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
   ```

3. All system volumes showing a status of LONER **must** be added using the VOLUTIL utility. Add system volumes using SCRATCHVOL and NEWVOL commands. For example:

   ```
   :VOLUTIL
   volutil: SCRATCHVOL 2
   Verify: Scratch volume on LDEV 2 [Y/N]? Y
   volutil: NEWVOL MPEXL_SYSTEM_VOLUME_SET:MEMBER2 2 100 100
   Initialize VOLUME mpexl_system_volume_set:MEMBER2 on LDEV 2 with PERMANENT
   SPACE = 100% and TRANSIENT SPACE = 100%? Y
   volutil: EXIT
   ```

4. Check all volumes to confirm they are configured correctly. Use the DSTAT command.

   ```
   :DSTAT ALL
   ```

   Sample output

   ```
   LDEV-TYPESTATUSVOLUME (VOLUME SET - GEN)
   --------- -------------- ----------------------------
   1- 022040MASTERMEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
   2- 022040MEMBERMEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
   ```

   - **Checking Volumes completed. Go to the next section on your checklist.**

5.7 Creating the CSLT Using AUTOINST

AUTOINST sets up the necessary environment, restores files, and creates the accounting structure for the installation.

To create the CSLT using AUTOINST:

1. **From the console**, log on and reset system utilities.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;OPENQ
   :STREAMS streams_device
   ```

   A common streams_device value is 10. An LP device **must** be configured in SYSGEN. Already spooled and streamed messages might display.

   Reset the outfence.

   ```
   :OUTFENCE 14
   ```

   Confirm that INSTALL.SYS has no limit on file size.

   ```
   :REPORT INSTALL.SYS
   ```

2. If you are applying PowerPatch patches, go to Step 3.

   If you are not applying PowerPatch patches, go to Step 4.

PowerPatch Tasks

3. Restore PowerPatch files.

   AUTOINST requires the AUTOINST fileset, its dependencies, and files from the PowerPatch tape to determine which patches qualify for your system.

   a. Mount the PowerPatch tape and put the tape drive online.

      ```
      :FILE PPT;DEV=TAPE
      ```

   b. Restore the files.

      ```
      :RUN STORE.PUB.SYS;INFO="RESTORE *PPT;A@,F@;SHOW;DEV=1"
      ```

   c. Reply to tape request.

   d. When the files are restored, dismount the PowerPatch tape.

4. Run AUTOINST.

   ```
   :RUN AUTOINST.INSTALL.SYS
   ```

5. If you receive a missing capabilities message, use ALTGROUP to add capabilities to the INSTALL group.

   ```
   :ALTGROUP INSTALL;CAP=BA,IA,PM,MR,DS,PH
   ```

   Run AUTOINST again.

6. The update tool checks for disk space. If you receive an error message:

   a. Refer to Appendix H , “Error Messages and Warnings,” and Appendix C , “Managing

Disk Space," for actions.

b. When you find the required disk space, run AUTOINST again.

7. Select the option that matches your task.

```
:run autoinst

MPE/iX AUTOINST E.11.02 (C) HEWLETT-PACKARD CO.

Please choose and enter the number corresponding to the software
you want to install.

1 PowerPatch
2 SUBSYS (Add-On) and PowerPatch
3 FOS, SUBSYS, PowerPatch
4 FOS and SUBSYS
5 Add-On (SUBSYS only)
6 Exit

Enter your choice_
```

8. Reply to the prompt for LDEV number.

Press **[Return]** to use the default device class TAPE or enter the LDEV number of the device where you want the Customized System Load Tape (CSLT) to be created. The device you specify applies to all tape requests.

CAUTION Failure to specify a valid tape LDEV number will result in a program hang while writing to tape. If this occurs, a tape request will keep reappearing and will not take the specified LDEV number as input.

```
The file equation from the tape device, which is used to
restore files and create the CSLT, defaults to `DEV=TAPE'.
If you prefer to designate a different device, enter its
LDEV number now (RETURN for default)>> _
```

9. If you are performing an Update or Install task, go to Step 10.

If you are performing an Add-on, go to Step 11.

Update and Install Tasks

10. Restore FOS files.

This step takes about 20–45 minutes.

a. Mount FOS tape and reply to tape request when the following message displays.

```
Mount the FOS tape and put the tape drive online. The
files from the FOS tape will now be restored.
```

b. Dismount the FOS tape when the restore complete message displays.

```
The files from the FOS tape were successfully restored.
```

11. Respond to the SUBSYS prompt:

```
Was a SUBSYS tape included in your installation package (y/n)?
```

If you do not have a SUBSYS tape, enter N and go to Step 14.

If you have a SUBSYS tape, enter Y.

AUTOINST creates the accounting structure. Progress messages display throughout this 5 minute process

Add-on and Update Tasks

12. Restore SUBSYS files.

    This step takes about 20–45 minutes.

    a. Mount SUBSYS tape and reply to tape requests when the following message displays:

    ```
    Mount the SUBSYS tape and put the tape drive online. The
    HP-Supported software files will be restored.
    ```

    b. Dismount the SUBSYS tape when the restore complete message displays:

    ```
    The SUBSYS tape has been successfully restored.
    ```

    AUTOINST automatically streams the installation jobs that complete the installation of most products. Progress messages are displayed indicating the completion of each job:

    ```
    Begin processing installation files.
    Processing n installation files.
    . . . * the number of dots equals n *
    ```

    The message may indicate zero installation files. This only means that the products you are installing do not require an installation file. AUTOINST continues with the product installation.

    When the installation jobs are complete, the following message displays:

    ```
    All product installation jobs were streamed successfully.
    ```

13. Monitor progress messages.

    AUTOINST creates a copy of the system libraries and displays messages.

14. If you are applying PowerPatch patches, go to Step 15.

    If you are not applying PowerPatch patches, go to Step 16.

PowerPatch Tasks

15. Restore PowerPatch information and patches.

    The step takes 20–45 minutes.

    a. Mount PowerPatch tape and reply to the tape request. AUTOINST evaluates the staged library and program files and displays messages.

    AUTOINST qualifies the patches, displays a list of approved patches, and prompts for acceptance of the patches.

    b. If it appears, reply to the prompt to continue processing patches.

Typing Y accepts the qualified patches. AUTOINST includes them in the CSLT, and continues with creating the CSLT.

Typing N rejects the qualified patches, AUTOINST does not include the patches in the CSLT, but does continue with creating the CSLT.

```
Do you wish to continue with installation of the patches
listed above (y/n)?
```

The final patch processing takes about 20–45 minutes. AUTOINST restores the patch files and displays:

```
The files from the POWERPATCH tape were successfully restored.
```

AUTOINST processes the patch files and displays:

```
Processing patch files . . .Creating CSLT
```

c. Dismount the PowerPatch tape.

16. Mount write-enabled tape to create the CSLT. Reply to the tape request if needed.

a. AUTOINST updates temporary copies of the system libraries then creates the CSLT. This can take up to 2 hours.

```
The installer will next update staged copies of the
System SL, XL, and NL. . .
```

b. Monitor progress messages.

The update tool checks for disk space. If you receive an error message refer to Appendix H , “Error Messages and Warnings,” and Appendix C , “Managing Disk Space,” for actions.

c. AUTOINST finishes creating the CSLT and displays:

```
Creating the CSLT ... done

Phase I of AUTOINST is now complete. Dismount and label the CSLT
AUTOINST CSLT HPVERSION v.uu.ff. Ensure that the write is now
DISABLED.
```

17. A warning message displays and lists manually installed products it cannot install, if applicable.

Record the product names that it cannot install on your checklist.

18. A warning message displays and lists data communications products that may require I/O configuration, if applicable.

```
WARNING -- The following data communication products may
require I/O configuration changes. However, this will not
affect the software installation for these products.
(INSTWARN #3)
```

Record on the checklist the communication product names.

AUTOINST displays the following message that indicates that the CSLT is created:

```
To complete the installation, perform an Update from CSLT.
```

19. When the CSLT is created, dismount the CSLT, write-disable it, and label it with the

v.uu.ff and include the **current date**. You can find the SUBSYS *v.uu.ff* on the FOS, SLT, and/or SUBSYS tape labels. You can find the PowerPatch *v.uu.ff* on the PowerPatch tape labels.

- **Creating the CSLT Using AUTOINST completed. Go to the next section on your checklist.**

5.8 Preparing a Staging Area for Remote Distribution

Perform the steps in this section only if you are planning to Distribute a Staging Area to a Remote system.

If you are performing a Manage Patch by Staging Area for only a Local system, skip sections 5.8 and 5.9, and proceed to "5.10 Setting a Staging Area."

NOTE You can only use the EXPORT and IMPORT commands of Stage/iX for applying patches to systems that are on the identical base. Stage/iX will not verify whether or not your machines are on the same base release.

To prepare for distributing staging areas:

1. **Log on from the console** (if you are not already logged on), start the spooler, and streams device.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   :SPOOLER print_device;START
   :STREAMS streams_device
   ```

   Common *print_device* values are LP or 6. A common *streams_device* value is 10.

   Ignore the GROUP OUT OF CONNECT TIME warning, if it displays.

2. Start HP Stage/iX.

   ```
   :STAGEMAN
   ```

3. Remove any old staging areas. Use UNINSTALL in stageman to accomplish this in the best way.

4. Prepare the staging area, execute the EXPORT command.

   ```
   STAGEMAN>EXPORT sa_name;option
   ```

   where *sa_name* is the name of the staging area to be distributed. Record your sa_name on your checklist.

   option specifies the export file mode. The default is NOPACK. The EXPORT options are:

TAPE	creates a regular STORE tape, which can be imported on the remote machine with the ;TAPE option. For the tape option, reply to the tape request.

PACK	creates a single packaged file in the directory /SYS/hpstage/export with the staging area name as the filename.
NOPACK	places all files related to the staging area in the /SYS/hpstage/export directory.

- **Preparing a Staging Area for Remote Distribution completed. Go to the next section on your checklist.**

5.9 Installing a Distributed Staging Area

Perform the steps in this section only if you are planning to Distribute a Staging Area to a Remote system.

If you are performing a Manage Patch by Staging Area for a Local system, skip this section and proceed to "5.10 Setting a Staging Area."

To install a distributed staging area on a remote system:

1. **Log onto the remote system console** (if you are not already logged on) and start the spooler and streams device.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   A common *streams_device* value is 10.

   Ignore the `group out of connect time` warning, if it displays.

2. Physically transport the staging area file(s).

   If you used a TAPE option, ship the tape to the remote location.

   If you use the UNPACK or NOUNPACK option, use whatever electronic mechanism is appropriate for you, for example FTP to transport the staging area file(s) to the remote location.

NOTE The file or files related to the staging area **must** be placed in the /SYS/hpstage/import directory.

3. Start HP Stage/iX.

   ```
   :STAGEMAN
   ```

4. Prepare the staging area, execute the IMPORT command.

   ```
   STAGEMAN>IMPORT sa_name;option
   ```

   where:

   sa_name-the name of the staging area to be distributed.

option-matches the option used to export the staging area. The default for EXPORT is NOPACK. The IMPORT options are:

TAPE—For the tape option, reply to the tape request.

UNPACK—For the pack option, specify the staging area name.

NOUNPACK–The distributed staging area is created on the remote system.

5. Validate the new staging area.

   ```
   STAGEMAN>VALIDATE sa_name
   ```

   - **Installing a Distributed Staging Area completed. Go to the next section on your checklist.**

5.10 Setting a Staging Area

In this section you set a staging area, that is, you select the staging area that the system will boot and operate from on the next reboot. This activity requires system manager capabilities.

To set a staging area:

1. **Log on from the console** (if you are not already logged on) and start the spooler and streams device.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   :SPOOLER print_device;START
   :STREAMS streams_device
   ```

   Common *print_device* values are LP or 6. A common *streams_device* value is 10.

   Ignore the group out of connect time warning, if it displays.

2. Start HP Stage/iX:

   ```
   :STAGEMAN
   ```

3. Remove any old staging areas. Use UNINSTALL in stageman.

4. Set the staging area the system will boot and operate from:

   ```
   STAGEMAN> SET STAGE=stage_name
   ```

   where *stage_name* is the name of the staging area that contains the patches and operating system changes you are making.

Refer to Appendix G , “HP Stage/iX Reference,” for additional information on the HP Stage/iX commands.

NOTE The changes do not take place until the next reboot. In other words, the staging area is not activated until boot time (section 5.14).

- **Setting a Staging Area completed. Go to the next section on your checklist.**

5.11 Securing the System

This section includes logging off users and shutting down the system.

To prepare and secure the system for updating:

1. If you are performing a Distributing Staging Area, or Modify Remote System task, **log on from the remote system console**.

   If you are performing a Manage Patch, Add-on, Update, or Re-Install task, **log on from the local system console**.

   ```
   :HELLO MANAGER.SYS,PUB;HIPRI
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   A common `streams_device` value is 10. An LP device **must** be configured in SYSGEN. Already spooled and streamed messages might display.

2. If you are performing an Add-on, Update, or Remote CD-ROM task, go to Step 3.

   If you are performing a Manage Patch, Staging Area, or Add-on tape task, go to Step 4.

CD-ROM Tasks

3. Remove and reinsert CSLT tape.

   a. If you are on the remote system, insert the CSLT tape for the first time.

      If you are using DDS tape and you are modifying the system on which you created the CSLT, be sure to remove the CSLT tape from the tape drive before performing the modification. Reinsert the CSLT tape.

   b. Go to Step 4.

4. If you are performing an Update task, go to Step 5.

   If you are performing an Add-on, Manage Patch, Staging Area, or Remote system task, go to Step 6.

Update Tasks

5. Run HP Predictive Support and turn it off.

   If you are using the HP Predictive Support software as part of your Hewlett-Packard hardware support contract, ensure that an HP Predictive Support run completes successfully.

   a. Issue the HP Predictive Support command:

      ```
      :RUN PSCONFIG.PRED.SYS
      ```

      This run of HP Predictive Support may include a transfer of files to the

Hewlett-Packard Response Center. If a transfer is needed, *be sure it completes* because the system update overwrites the information in the file PSDCFILE.PRED.SYS.

b. Select item 4, Configuration, from the Main menu.

c. Select item 5, Schedule, from the Configuration Options menu.

d. Select item 1, Schedule (on/off), from the Schedule menu.

e. Set the preference, at the prompt, type OFF:

```
Type schedule preference (on/off) or // to cancel: __
```

f. Exit the program, at the prompt, type EXIT:

```
Type an item number, an item key, or a command: __
```

g. Save the values, at the prompt, type YES:

```
Do you wish to save these values (Y/N)? __
```

h. Go to Step 6.

6. Lower session and job limits.

```
:LIMIT 0,0
```

7. Warn, then log users off.

```
:WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
```

Wait approximately five minutes, make sure users have saved their work and logged off, then abort job or sessions still executing. Use the SHOWJOB command to determine session and job numbers. Then, for each job and session still executing (except yours), type:

```
:ABORTJOB #Jnn
:ABORTJOB #Snnn
```

where:

J*nn*	the ID number for each job to be aborted.
S*nnn*	the ID number for each session to be aborted.

8. Deactivate NS 3000/iX, if applicable.

```
:NSCONTROL STOP
:NSCONTROL ABORT
:NETCONTROL STOP
```

9. Terminate logging processes.

a. Enter the following command to determine if user logging processes are running:

```
:SHOWLOGSTATUS
```

b. If logging processes are running on your system, a message similar to the following will be displayed:

```
LOGID    CHANGE AUTO USERS STATE CUR REC MAX REC % USED CUR FSET
SHPLOGID  YES    YES  1    ACTIVE  120   10016    1%     1
ORBLOGID  YES    YES  9    ACTIVE  3812  10016   38%     1
```

If no logging processes are running, go to Step 10.

c. Terminate logging processes as shown below.

```
:LOG logid,STOP
```

where *logid* — the ID number for each logging process to be stopped.

Record the names of the logging processes, if you want to restart them later. Record the names on your checklist.

10. Prepare additional manually installed products.

a. If you have ALLBASE/SQL already installed on your system, issue starts for each DBEnvironment before you back up the system. Refer to the *ALLBASE/SQL Database Administration Guide* for more information. Briefly, you need to:

- Identify all your ALLBASE/SQL databases, type:

```
:STORE @.@.@;;FCRANGE=-491/-491;SHOW
```

- Run ISQL.PUB.SYS and issue a STARTDBE command. This ensures that the DBEnvironment is logically consistent in the event that it has not been accessed since a system failure occurred.
- Run SQLUTIL.PUB.SYS and issue the STORE command to backup each DBEnvironment.
- Log files are not stored using this command. In addition, you should use the SHOWDBE command to ensure that all parameters are OK.

b. If you have ALLBASE/4GL already on your system, unload all existing ALLBASE/4GL applications. For information on unloading ALLBASE/4GL applications, refer to the *HP ALLBASE/4GL Developer Administration Manual*.

c. If you are installing AutoRestart/iX for the first time, install AutoRestart/iX before you run AUTOINST. Refer to the *AutoRestart/iX Reference Manual* for installation instructions.

11. If you have a current full backup, you may proceed to Step 13.

If you do not already have a current full backup, proceed to Step 12.

Backup the System

12. Backup the system using STORE with the DIRECTORY parameter.

a. Specify a class name.

```
:FILE SYSGTAPE;DEV=dev_number
```

where device_number is the DAT class name or LDEV number of the tape device. Specify this value if you are using a DAT or any device that has a class name other than TAPE.

b. Mount a write-enabled tape and create an SLT.

```
:SYSGEN
sysgen>TAPE
sysgen>EXIT
```

c. If you are prompted for lockwords on system files, record the names of each system file as prompted, then type the lockword and continue with the backup. You will need to restore these lockwords later in "Setting Passwords and Lockwords." Record the names on your checklist.

d. Dismount the tape, label as SLT with date, time and system version.

e. Mount another blank tape and backup your user files.

```
:FILE T;DEV=TAPE
:STORE @.@.SYS,@.@.@-@.@.SYS;*T;DIRECTORY;SHOW
```

or

```
:STORE /SYS/, / - /SYS/;*T;DIRECTORY;SHOW; &
  ONVS=volume_set_name1, volume_set_name2, ...
```

where volume_set_name is the name for each user volume set you want to backup.

f. Dismount the tape, label as backup with date, time and system version.

13. Purge spool files.

```
:SPOOLF @;DELETE
```

14. Purge staging groups if they exist.

```
:PURGEGROUP UNL
:PURGEGROUP USL
:PURGEGROUP UXL
```

Verify each purge, type Y, at the prompt.

Do not purge the group install.sys or the file supacct.pub.sys, they are needed for future patch and add-on processes.

15. If you are performing an Update, go to Step 16.

If you are performing an Add-on, Manage Patch, Staging Area, or Remote system task, go to Step 17.

Update Tasks

16. Purge specified files and groups, if you are moving from one MPE/iX version to another.

a. Purge the PSIDNLD.DIAG.SYS file.

```
:PURGE PSIDNLD.DIAG.SYS
```

This file may have been purged already. This file is used for diagnostic purposes and is overwritten by the new PSIDNLD.DIAG.SYS file. If you do not purge the existing file, and the new file is larger, you will receive errors.

b. Purge each OS*xnn* and XPT*nnnn* group in the telesup account, if they exist.

```
:REPORT @.TELESUP
:PURGEGROUP OSxnn.TELESUP
:PURGEGROUP XPT@.TELESUP
```

where:

x an alphabetic character

nn the numeric release number (for example, OSA10.TELESUP and 0SB23.TELESUP).

Go to Step 17.

17. Rename the COMMAND.PUB.SYS file, except checklists L and M which included this step in section 5.7

```
:RENAME COMMAND.PUB.SYS,command_name
```

where command_name is a temporary name you are assigning the file. This preserves your UDC information for later use. Record the temporary name on your checklist.

18. If you are performing a Remote system task or CD-ROM task, go to Step 19.

If you are performing an Add-on, Manage Patch, or Staging Area task with tape or disk on a local system, go to Step 20.

Remote Tasks CD-ROM Tasks

19. If you are preparing a CSLT tape on a central system for distribution to a remote system or if you are modifying the remote system:

a. Purge the HPINSTFL file.

```
:PURGE HPINSTFL.INSTALL.SYS
```

It removes old audit trails, if they exist.

CAUTION Do not purge HPINSTFL if you are updating the local system (the system your are currently logged on to). Also do not purge the HPINSTFL if you are installing additional SUBSYS products.

---

b. Go to Step 20.

20. If you are performing a PowerPatch task, go to Step 21.

If you are not performing a PowerPatch task, go to the next section on your checklist.

PowerPatch Tasks

21. Restore the AUTOINST file set and its dependencies, except for checklists L and M which included this step in section 5.7.

a. Log onto the INSTALL group, and enter the following at the system prompt:

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
:FILE PPT;DEV=TAPE
```

b. Mount the PowerPatch tape and put the tape drive online. Issue the following command to restore the files:

```
:RUN STORE.PUB.SYS;INFO="RESTORE *PPT;A@,F@;SHOW;DEV=1"
```

c. Dismount the tape when the restore is complete.

- **Securing the System completed. Go to the next section on your checklist.**

5.12 Shutting Down the Remote System

To shut down the remote system:

1. Log onto the remote system console.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   A common *streams_device* value is 10. An LP device **must** be configured in SYSGEN. Already spooled and streamed messages might display.

2. Shutdown the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

3. Reset the system after the last shutdown message (SHUT6).

   a. If you have an HP 3000 Series 99x, connect to the service processor before you can restart the system. Type the following:

      ```
      CTRL-B
      CM>SP
      SP>RS
      ```

      Enter Y to HARD BOOT the computer system.

      Do not respond to the question:

      ```
      Press any key within 10 seconds to cancel boot with this
      configuration.
      ```

      There are 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

   b. For all other systems, enter the following commands to reset the system:

      ```
      CTRL-B
      CM>RS
      ```

      If the system does not respond to the CTRL-B entry within ten seconds, press the reset button, key switch, or on/off switch as appropriate for your system. The system will halt, and then restart automatically.

      Enter Y to confirm restarting the system.

   - **Shutting Down the Remote System completed. Go to the next section on your checklist.**

5.13 Applying the CSLT Modification

This section is for applying the Customized System Load Tape (CSLT) created by AUTOINST, HPINSTAL, or HP Patch/iX. For Manage Patch tasks, this is the CSLT/STORE tape (not a STORE only tape). For re-installations, it is the CSLT created most recently in SYSGEN.

To apply the CSLT tape:

1. From the console, mount reel one of the CSLT tape on the tape drive, and put the tape drive online.

   Wait until a message displays on the system console verifying that the tape is mounted.

2. If you are using the AutoRestart product and AUTOBOOT is enabled, turn it off so the system won't automatically reboot from the primary boot path.

   ```
   :RUN BLDDUMP.HP36375.TELESUP
   blddump>AUTOBOOT OFF
   blddump>EXIT
   ```

3. Shutdown the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

4. Reset the system after the last shutdown message (SHUT6).

   a. If you have an HP 3000 Series 99x, connect to the service processor before you can restart the system. Type the following:

      ```
      CTRL-B
      CM>SP
      SP>RS
      ```

      Enter Y to HARD BOOT the computer system.

      Do not respond to the question:

      ```
      Press any key within 10 seconds to cancel boot with this
      configuration.
      ```

      There are 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

   b. For all other systems, enter the following commands to reset the system:

      ```
      CTRL-B
      CM>RS
      ```

   c. If the system does not respond to the CTRL-B entry within ten seconds, press the reset button, key switch, or on/off switch as appropriate for your system. The system will halt, and then restart automatically.

   d. Enter Y to confirm restarting the system.

5. Boot the system from the alternate boot path where the CSLT is mounted.

   a. Boot messages can vary, depending on the system model.

- If you do not override AUTOBOOT, the system boots from the primary boot path. If your system does boot from the primary boot path, return to Step 3 and reset the system with the CTRL-B and RS commands.
- If your system prompts `Continue with primary boot path?`, or `Boot from Primary Boot (y/n)?`, enter N.

  If your system prompts `Continue with alternate boot path?` or `Boot from Alternate Boot (y/n)?`, enter Y.
- If your system prompts to enter the boot path, enter the alternate boot path.
- For Model 9x8LX, 9x8RX, or 9x9KS systems, type BO ALT at the PDC screen to boot from the alternate boot path.

b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

The system boots from the alternate source (tape). After some tape activity, the ISL prompt displays.

6. If this is a new system, check FASTSIZE value.

```
ISL>DISPLAY
Fastsize value is 0000000n
  . . .
```

If the value (*n*) is F, then go to Step 8.

If the value (*n*) is not F:

a. Change it to F.

```
ISL>FASTSIZE F
```

b. Return to Step 3 again to set the new FASTSIZE value.

7. If you replace LDEV 1 and changed the primary boot path of the new LDEV 1, update the primary boot path:

```
ISL>PRIMPATH
Enter primary boot path: hardware_path
```

Where *hardware_path* is the path to your new LDEV 1.

8. If you are performing Manage Patch, Add-on, Update, Remote, or Install tasks, go to Step 9.

If you are performing a **Reinstall task only**, go to Step 10.

Manage Patch, Add-on, Update, Remote, or Install Tasks

9. Modify the system with the CSLT.

a. If you have AUTOBOOT enabled, turn AUTOBOOT OFF.

```
ISL>AUTOBOOT OFF
```

b. Type at the ISL prompt:

```
ISL>UPDATE
```

The system displays initialization and restore messages.

c. Go to Step 11.

Reinstall Tasks

10. Proceed with the re-installation.

CAUTION DO NOT DO THIS UNLESS YOU ARE PERFORMING A REINSTALL. IT **DESTROYS ALL** THE EXISTING SYSTEM AND USER FILES IN THE MPEXL_SYSTEM_VOLUME_SET!

---

a. Type at the ISL prompt:

```
ISL>install
```

The system displays initialization and restore messages.

b. Go to Step 11.

11. Confirm the date and time.

If the date and time displayed are not correct, enter N, and enter the correct date and time. If you do not respond within 15 seconds, the system continues.

The system displays an initialization message.

The system continues to restore the files from the CSLT. This process can take 10–25 minutes. During this process, the system displays initialization and restore messages.

If AUTOBOOT is ON, the system will boot from the AUTOBOOT file unless interrupted by you within ten seconds. If AUTOBOOT is OFF (as recommended), you do not have to watch for the reset prompt.

The system displays the following message regardless of whether or not AUTOBOOT is enabled.

```
Restoring system file "C0040000.DIAG.SYS"
END of LOAD (update).
Auto boot in progress.
```

When the Update or Install process completes, the SPU resets.

12. Remove the CSLT tape.

- **Applying the CSLT Modification completed. Go to the next section on your checklist.**

5.14 Restarting the System

If you just completed an update or install task, the system has reset itself. Otherwise, reboot the system.

To restart the system:

1. Boot the system from the primary boot path.

   a. Boot messages can vary, depending on the system model.

      - If you have AUTOBOOT enabled, the system boots from the primary boot path automatically unless you override AUTOBOOT.
      - If your system prompts to enter the boot path, enter the primary boot path.
      - For Model 9x8LX, 9x8RX, or 9x9KS systems, type BO at the PDC screen to boot from the primary boot path.
      - If your system prompts, `Continue with primary boot path?`, enter Y.

   b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen. After some activity the ISL prompt displays.

   c. If you want AUTOBOOT enabled and if it was turned off, turn it on now:

      ```
      ISL>AUTOBOOT ON
      ```

2. Start the system. If you are using Checklist B, omit the NOSYSSTART option.

   ```
   ISL>START NORECOVERY NOSYSSTART
   ```

3. Confirm the date and time.

   If the date and time displayed are not correct, enter N, and enter the correct date and time. If you do not respond within 15 seconds, the system continues.

   The system displays startup and initialization messages for 5 to 6 minutes.

   During the startup process, the system makes several configuration checks and may display warning messages or error messages (for example, error messages referencing the SPUINFOP file or DCC error messages). This is normal for system startup, and will not affect system operation.

4. Log on and issue the following commands.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   ```

5. For each automatically spooled network printer.

   :SPOOLER *print_device*;STOP;OPENQ

   where *print_device* is the LDEV or class of the network printer.

6. Continue log on commands

   ```
   :OPENQ LP
   :STREAMS streams_device
   ```

A common *streams_device* value is 10. An LP device **must** be configured in SYSGEN.

7. If you are performing a reinstall task, go to Step 8.

   If you are performing a staging area task, go to Step 9.

   If you are performing an Install, Update, Add-on, Manage Patch, Remote with CD-ROM, or Staging Area task for a local system only using the TAPE option, go to the next section on your checklist.

Reinstall Tasks

8. Configure additional disks as system volumes, if necessary.

   a. Use the DSTAT command to ensure that all disks are configured as MASTER or MEMBER.

   ```
   :DSTAT ALL
   ```

   Sample output:

   ```
   LDEV-TYPESTATUSVOLUME (VOLUME SET - GEN)
   --------- -------------- ----------------------------
   1- 022040 MASTER MEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
   2- 022040 LONER  MEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
   ```

   For more information about the VOLUTIL commands, refer to the *Volume Management Reference Manual*.

   b. If any disks are not configured as MASTER or MEMBER, add them to your system. All system volumes showing a status of LONER **must** be added using the VOLUTIL utility. Use scratchvol and newvol commands as in this example:

   ```
   :VOLUTIL
   volutil: SCRATCHVOL 2
   Do you wish to continue? Y
   volutil:NEWVOL MPEXL_SYSTEM_VOLUME_SET:MEMBER2 2 100 100

     INITIALIZE VOLUME MPEXL_SYSTEM_VOLUME_SET:
     MEMBER2 ON LDEV 2 WITH PERMANENT SPACE = 100% AND
     TRANSIENT SPACE = 100%? Y
   volutil: EXIT
   ```

   c. Check all volumes to confirm they are configured correctly. Use the DSTAT command.

   ```
   :DSTAT ALL
   ```

   Sample output:

   ```
   LDEV-TYPESTATUSVOLUME (VOLUME SET - GEN)
   --------- -------------- ----------------------------
   1- 022040 MASTER MEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
   2- 022040 MEMBER MEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
   ```

   d. Go to the next section on your checklist.

Distributed Staging Area

9. If you distributed staging areas **and** you used the PACK or UNPACK option with your EXPORT command, clean up the staging area files on your local system. (Refer to the

section, “Distributing a Staging Area Preparation,” in this chapter for information on the use of PACK and UNPACK.)

CAUTION Perform this on your local system only **after** you have imported the distributed staging area to your remote systems.

To clean up the staging area files on your local system.

a. Logon to the local system.

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
```

b. Purge the files in the EXPORT directory.

```
:PURGE /SYS/HPSTAGE/EXPORT/@
```

c. Return to your remote system.

- **Restarting the System completed. Go to the next section on your checklist.**

5.15 Rerunning AUTOINST

To rerun AUTOINST and finish applying the CSLT:

1. Remount the combined CSLT/store tape created during the first run of AUTOINST.

   If the CSLT is two reels, begin by loading the second reel because the STORE files are appended to the CSLT. The program will prompt you if the first reel is also required.

2. Reset the outfence.

   ```
   :OUTFENCE 14
   ```

3. Run AUTOINST to resume previous installation.

   ```
   :RUN AUTOINST.INSTALL.SYS
   ```

4. Respond YES to resume installation.

   If the system displays a message saying that is located an old audit trail of an incomplete installation (that is, HPINSTFL.INSTALL.SYS). You **must** respond Y and resume the installation to complete the task.

   ```
   MPE/iX AUTOINST D.10.11 (C) HEWLETT-PACKARD CO.
   An old audit trail of an incomplete installation has been found.
   If you would like to RESUME with that installation, respond
   `YES' to the following prompt. If you would like to RESTART
   from the beginning, respond `NO'.

   Should the installer resume with the previous installation? Y
   ```

   If you accidentally respond NO, you can continue by performing the following:

   a. Exit AUTOINST by selecting Option 6.

   b. Reinvoke AUTOINST using the recovery parameter:

      ```
      :AUTOINST RECOVERY
      ```

   AUTOINST begins to modify the system and displays progress messages.

   ```
   Mount the CSLT/STORE tape and put the tape drive online.
   ***** Please stand by *****
   The patched STORE files from the CSLT/STORE tape are being
   restored.
               .
               .
               .
   The STORE files from the CSLT/STORE tape were successfully
   restored.
   ```

5. Reply to the tape request.

   The time required to restore the STORE files depends on the number of files to restore, and may take up to 10 minutes (per 2400-foot reel).

   a. AUTOINST automatically streams the installation jobs that complete the installation of most products. The following progress messages are displayed:

```
Begin processing installation files.
Processing n installation files.
. . . * the number of dots equals n *
```

The message may indicate zero installation files. This only means that the products you are installing do not require an installation file. AUTOINST continues with the product installation.

b. When all installation jobs are complete, the following message displays:

```
All product installation jobs have been streamed successfully.
```

c. When AUTOINST successfully completes its processing, an END OF PROGRAM message displays.

In addition to streaming installation jobs, AUTOINST removes temporary files that were used during earlier phases of the process.

6. Dismount the CSLT.

- **Rerunning AUTOINST completed. Go to the next section on your checklist.**

5.16 Rerunning HPINSTAL

To rerun hpinstal and finish applying the CSLT:

1. Remount the CSLT created by HPINSTAL.
2. Reinvoke HPINSTAL and resume previous installation.

   ```
   :HPINSTAL
   ```

3. If you are performing an Add-on or Update task, go to Step 4.

   If you are performing a Modify Remote System task, go to Step 5.

Add-on Tasks, Update Tasks

4. Resume previous installation.

   a. Type YES at the prompt.

      If the CSLT was created on the system you are updating, the system displays a message saying it located an old audit trail of an incomplete installation (that is, HPINSTFL.INSTALL.SYS). You **must** respond YES and resume the installation to complete the task.

   b. Go to Step 5.

   However, if you accidentally responded NO, you can continue by performing the following:

   a. Exit hpinstal by selecting Option 8.

   b. Reinvoke HPINSTAL using the recovery parameter:

      ```
      :HPINSTAL RECOVERY
      ```

   c. Go to Step 5.

5. If you are applying a CSLT to a Remote system, go to Step 6.

   If you are performing an Add-on or Update task for the local system only, go to Step 8.

Remote Tasks

6. Deny any previous installation, if it exists.

   Type NO at the prompt.

   If you are modifying a remote system (the CSLT was created on a local system) and the following message displays, it indicates that HPINSTAL located an old audit trail of an incomplete installation (that is, HPINSTFL.INSTALL.SYS). You **must** respond NO to properly complete your remote installation task.

7. From the HPINSTAL menu, select option 5, “Complete the update of this system using a CSLT created on another system,” to start the update process on the remote system.

   ```
   1 Update this system
   2 Update this system and install patches from a PowerPatch tape
   ```

```
  3 Create a CSLT for another system
  4 Create a CSLT with PowerPatch patches for another system
  5 Complete the update of this system using a CSLT created on
    another system
  6 Add SUBSYS products to this system
  7 Add SUBSYS products and install patches from a Powerpatch
    tape

Enter your choice >>5
```

Go to Step 8.

8. Restore the STORE portion of the CSLT.

   Mount the CSLT tape and put the tape drive online. If using DDS tape, remove the tape and reinsert it now.

   ```
   Mount the CSLT and put the tape drive ONLINE.
   Skipping system files...
   The HP-supported software files will be restored.
   ```

   The system then restores files, processes STORE files, creates the accounting structure, and processes installation files.

   ```
   FILES RESTORED.
   The SUBSYS tape has been successfully restored.
   Processing STORE Files . . .
   DONE
   DONE
   ```

   The time it takes to restore the software files varies depending on which specific subsystems you have on your system.

9. Follow any additional instructions displayed on the screen, such as mounting other tape volumes (if using half-inch magnetic tapes). Reply to tape requests, if necessary.

   When HPINSTAL finishes the task, you will see the following message:

   ```
   The installation is now complete.
   ```

10. Install products that cannot be installed automatically.

    Refer to the list of products in Appendix A , “Manually Installed Products,” and follow the directions on installing these products.

- **Rerunning HPINSTAL completed. Go to the next section on your checklist.**

5.17 Rerunning HP Patch/iX

For Phase II of HP Patch/iX, you **must** log onto the system Console and have exclusive access to your system.

To rerun HP Patch/iX and finish applying the CSLT or STORE tape:

1. **Log onto the Console**.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   ```

2. Lower session and job limits.

   ```
   :LIMIT 1,1
   ```

3. Warn, then log off users.

   ```
   :WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
   ```

   Use the SHOWJOB command to determine session and job numbers. Then, for each job and session still executing (except yours), type:

   ```
   :ABORTJOB #Jnn
   :ABORTJOB #Snnn
   ```

   where:

J*nn*	the ID number for each job to be aborted.
S*nnn*	the ID number for each session to be aborted.

4. Ensure that the network is not running.

   ```
   :NSCONTROL STOP
   :NSCONTROL ABORT
   :NETCONTROL STOP
   ```

5. Reset the outfence.

   ```
   :OUTFENCE 14
   ```

6. Stop each automatically spooled network printer.

   ```
   :SPOOLER print_device;STOP;OPENQ
   ```

   where *print_device* is the LDEV or class of the network printer.

7. Make sure the LP and STREAMS device are up.

   ```
   :OPENQ LP
   :SPOOLER LP;START
   :STREAMS streams_device
   ```

   A common *streams_device* value is 10. An LP device **must** be configured in SYSGEN.

8. Rerun HP Patch/iX.

   ```
   :RUN PATCHIX.INSTALL.SYS
   ```

9. You **must** respond YES to resume the installation and complete the task at the prompt:

   ```
   HP Patch/iX has found a recovery file that indicates phase I
   completed successfully, are you ready to begin phase II of
   ```

```
HP Patch/iX (y/n)?
```

NOTE This prompt is provided to allow you to continue, in the event that you halted the HP Patch/iX process prior to completing the CSLT creation (Phase I).

If you accidentally type NO, HP Patch/iX purges all audit files and rebuilds them. If you did not complete the CSLT/STORE or STORE only creation (Phase I), you will have to start your patching process from the beginning. However, if you have completed the steps and procedures correctly up to now, you can go directly into Phase 2 of Patch/iX by typing: :PATCHIX PHASE2

10. If you are performing an Add-on (SUBSYS) task, proceed to Step 11.

    If you are performing a Manage Patch task only, proceed to Step 12.

Add-on Tasks

11. Mount the SUBSYS tape when prompted, put the tape drive online, and press **[Return]**.

    The time it takes to restore the software files varies depending on which specific subsystems you have on your system. Watch for this message that the files are restored:

    ```
    FILES RESTORED.
    The SUBSYS tape has been successfully restored.
    Processing STORE Files . . .
    DONE
    DONE
    ```

    Go to Step 12.

12. Mount the CSLT tape, put the tape drive online, and reply to the prompt.

    ```
    Mount the CSLT and put the tape/DDS drive ONLINE.
    The HP-supported software files will be restored.
    ```

    The system then restores files, processes STORE files, creates the accounting structure, and processes installation files.

13. Follow any additional instructions displayed on the screen, such as mounting other tape volumes (if using half-inch magnetic tapes).

    Reply to tape requests, if necessary.

    When HP Patch/iX finishes the task you specified, you will see the following message:

    ```
    The installation is now complete.
    ```

Manually Installed Products

14. If you need to install any products that cannot be automatically installed, install them now.

    Refer to the list of products in Appendix A , “Manually Installed Products,” and follow the directions for installing these products.

- **Rerunning HP Patch/iX completed. Go to the next section on your checklist.**

6 Finishing the Process

This chapter describes all the finishing steps to bring your system back up after applying the changes to your system.

6.1 Configuring Datacomm and UPS

No matter what your network configuration is, or even if you have no networked devices, you still must perform the activities described in this section if it is on your checklist.

You must convert the data communications configuration files after modifying a system (regardless of whether you use data communications products). The information contained in the data communication files is required by the Data communication Terminal Controller (DTC) and allows communication between the system and the Uninterruptible Power Supply (UPS). Refer to *Using the Node Management Services Utilities*.

To configure for data communications on a new or modified system, perform these procedures as explained on the following pages:

- Get an NMCONFIG file. Perform either of the following:
  - — Update an existing NMCONFIG file converting the file to the MPE 6.5 version level.
  - — Create an NMCONFIG file using NMMGR.
- Configure the HP Power/Trusts (UPS units), if you have any.
- Modify the configuration file and cross validate the NMCONFIG file, if needed.
- Restart data communications.

Converting Datacomm

To update/convert the NMCONFIG file:

1. Log on and determine if the file is on your system.

```
:HELLO MANAGER.SYS;HIPRI
:LISTF NMCONFIG.PUB.SYS
```

   a. If listed, proceed to Step 3.

   b. If the return message is non-existent file, obtain an NMCONFIG file from one of the following sources:

   - Create a new NMCONFIG file using NMMGR.

     Refer to *Using the Node Management Services (NMS) Utilities* for directions on creating an NMCONFIG file.

     If you are installing a UPS on a new system, or a new HP Power/Trust UPS device, proceed to Step 5.

     If you are not installing a UPS on a new system, or a new HP Power/Trust UPS device, proceed to Step 6.

   - Use a backup copy of the NMCONFIG file.

     Use the same method to recover the NMCONFIG file from the backup, that was used to create the backup.

     Proceed to Step 3.

- Copy the NMCONFIG file from another system. The other system must be on the same release as the system you are working on and must have a similar configuration.

  Proceed to Step 2.

2. If you are getting a copy of the NMCONFIG file from another system:

   a. Log onto the other system and store the file.

   ```
   :HELLO MANAGER.SYS;HIPRI
   :FILE T;DEV=TAPE
   :STORE NMCONFIG.PUB.SYS; *T;SHOW
   ```

   b. Return to the system you are modifying and restore the file.

   ```
   :HELLO MANAGER.SYS;HIPRI
   :FILE T;DEV=TAPE
   :RESTORE *T;NMCONFIG.PUB.SYS;OLDDATE;DEV=1;SHOW
   ```

   c. Note that you will need to update the copied NMCONFIG file with the system name, network addresses, DTC information, and other devices for your system as part of the Cross Validating Task.

   d. Proceed to step 3.

3. Run the NMMGRVER conversion utility.

   ```
   :RUN NMMGRVER.PUB.SYS
   ```

4. Enter the filename NMCONFIG.PUB.SYS at the prompt.

   ```
   FILESET TO BE SCANNED? NMCONFIG.PUB.SYS
   OK TO CONVERT NMCONFIG? Y
   ```

   - If you are installing a UPS on a new system, or a new HP Power/Trust UPS device, proceed to Step 5.
   - If the return message is `conversion completed successfully,` then NMMGRVER has converted your configuration file, and it needs to be cross validated. If you are not installing a UPS on a new system, or a new HP Power/Trust UPS device, proceed to Step 6.
   - If the return message is `no need to convert,` and you are not adding any network, datacomm, or UPS products, proceed to Step 14.

Configuring HP PowerTrust UPS Monitor/iX

5. HP PowerTrust UPS Monitor/iX software, together with the HP PowerTrust (UPS unit) hardware, provides system power failure protection on HP 3000 Models 9x9KS, 9x8LX, 9x8RX, 991, and 995.

   If this is a new installation, and you plan to use the HP PowerTrust Monitor/iX software to monitor your UPS devices, or if this is an existing system and you are changing (adding or deleting) your UPS configuration, you must configure the UPS devices after updating your system.

   You can configure UPS devices in two ways depending on your system setup:

- Through a LAN console card
- Through a DTC

Refer to *Performing System Management Tasks* for information on configuring UPS devices. *Configuring Systems for Terminals, Printers, and Other Serial Devices* also describes using NMMGR for configuring UPS devices.

Go to Step 6.

Cross Validating Task

6. If your files were not converted, you did not copy or create a new NMCONFIG file, and you are not changing your configuration file, proceed to Step 14.

   If the SYSGEN command RDCC was used previously, the network configuration file that was specified in that command is written to the CSLT that AUTOINST created. If this CSLT is used as a backup tape for a reinstallation, then the datacomm configuration file that will be restored will require conversion using the NMMGRVER.PUB.SYS utility after the installation.

   To validate data communication files:

7. Run NMMGR

   ```
   :NMMGR.PUB.SYS
   ```

8. Open the configuration file using the **[F1]** key.
9. Modify the configuration file, if required.

   If you need to add, delete, or change any item in the configuration file, do so now. For example, now is the time to add a DTC.

   If you copied and updated your NMCONFIG file from another system, you must update the network addresses and other devices for this system.

   a. If you have a PC-based network management configuration, follow the installation and configuration procedures in the *Using the OpenView DTC Manager Manual*.

   b. For information on NMMGR, refer to *Using the Node Management Services (NMS) Utilities*.

   c. For information on configuring UPS devices, refer to *Performing System Management Tasks*.

   d. If you need to configure new DTCs on your system, or if you need more information on host-based network management, refer to *Configuring Systems for Terminals, Printers, and Other Serial Devices*.

10. Display the Validate screen:

    - From the Main screen, press **[F5]** Utility.
    - Press **[F3]** Go to Validate.
    - Validate NETXPORT, validate DTS/LINK, and any installed subsystems. Refer to *Using the Node Management Services (NMS) Utilities* for more complete instructions.

When DTS/LINK is validated, NMMGR automatically invokes SYSGEN to cross-validate the system and datacomm configurations. You have the option to customize the cross-validation steps by modifying the commands in the file NMGRXVAL.PUB.SYS. Comment information is contained in braces, {}. Refer to *Performing System Management Tasks* and *Manager's Guide to MPE/iX Security*.

If inconsistencies are found during the validation or cross-validation process (such as two separate devices configured to the same LDEV), you need to do either of the following depending on the type of error:

- Resolve them by modifying the NMCONFIG file with NMMGR (if related to networking).
- Exit NMMGR, resolve inconsistencies using SYSGEN, then run NMMGR again to revalidate DTS/LINK.

When cross-validation is complete, you may see this message:

```
Do you want DTS changes to become active now (Y/N)? N
```

Answer **N** at the prompt, and press [Return]. Press [Return] again to view the Validate screen.

11. Exit NMMGR.
12. Shutdown the Datacommunication and Terminal Subsystem (DTS).

    ```
    :DTCCNTRL FUNC=SHUTDOWN;FORCED=Y
    ```

13. Restart the DTS.

    ```
    :DTCCNTRL FUNC=RESTART
    ```

14. For the network to work correctly, stream JCONFJOB.

    ```
    :STREAM JCONFJOB.NET.SYS
    ```

    The JCONFJOB.NET.SYS stream is required for all systems. It includes information files that describe the supported set of servers and services. These information files are used to build a configuration file called DADCONF.NET.SYS. Wait until the jobstream is complete before continuing with the next step.

    - **Configuring Datacomm and UPS completed. Go to the next section on your checklist.**

6.2 Restoring User Files

To restore your user files, perform either of these processes:

- If you ran BULDACCT.PUB.SYS and did NOT use the STORE command DIRECTORY option as part of your backup, proceed to "Restore with BULDACCT files."
- If you ONLY did the STORE command with the DIRECTORY option, proceed to "Restore without BULDACCT files."

DO NOT perform both processes.

Restore with BULDACCT Files

If you ran BULDACCT.PUB.SYS before your backup, rebuild the account structure and restore the user files from your backup tapes.

To restore user files and rebuild the directory structure:

1. Restore BULDJOB1 from the backup tape and stream the job.

   ```
   :FILE T;DEV=TAPE
   :RESTORE *T;BULDJOB1.PUB.SYS
   :STREAM BULDJOB1.PUB.SYS
   ```

   This job rebuilds the entire account structure.

2. Mount the backup tapes and restore them.

   ```
   :FILE T;DEV=TAPE
   :RESTORE *T;@.@.@;OLDDATE;KEEP;SHOW
   ```

3. If the COMMAND.PUB.SYS now on the system is incorrect, stream BULDJOB2 to rebuild it. First purge the incorrect UDC file.

   ```
   :PURGE COMMAND.PUB.SYS
   :STREAM BULDJOB2.PUB.SYS
   ```

   This job resets all system, account, and user UDCs that were previously on the system.

4. Purge both BULDJOB1 and BULDJOB2 when they have successfully completed to maintain the security of your system. These files contain passwords for all users, groups, and accounts on the system.
5. Proceed to the next section on your checklist.

Restore without BULDACCT Files

BULDACCT If you did not run the program, restore the backup files and restart the system.

To restore user files and create the directory structure:

1. Mount the backup tapes and restore them:

   ```
   :FILE T;DEV=TAPE
   :RESTORE *T;@.@.@;OLDDATE;KEEP;SHOW;DIRECTORY
   ```

   - **Restoring User Files completed. Go to the next section on your checklist.**

6.3 Recovering Staging Areas

Recover staging areas, if they existed and if you need the previously existing staging areas.

To recover your staging areas:

1. Check that HP Stage/iX is not already initialized.

   ```
   :STAGEMAN STATUS
   ```

   The following message displays if HP Stage/iX is not initialized:

   ```
   STAGEMAN A.00.00, (C) Hewlett-Packard Co., 1995. All Rights
   Reserved.
   *Warning: HP Stage/iX is not initialized (STAGEMAN 1090)
   STAGEMAN> status

   The HP Stage/iX environment is not initialized.
   ```

2. Type at the MPE/iX colon prompt:

   ```
   :STAGEMAN INITIALIZE
   ```

   The following message displays when HP Stage/iX initializes:

   ```
   STAGEMAN A.00.00, (C) Hewlett-Packard Co., 1995. All Rights
   Reserved.
   STAGEMAN> initialize

   Successfully initialized the HP Stage/iX environment.
   ```

3. Start HP Stage/iX.

   ```
   :STAGEMAN
   STAGEMAN>
   ```

4. For each staging area that existed:

   ```
   STAGEMAN>RECOVER sa_name
   ```

   where *sa_name* is the name of each staging area.

5. Validate each staging area.

   ```
   STAGEMAN>VALIDATE sa_name
   ```

   - **Recovering Staging Areas completed. Go to the next section on your checklist.**

6.4 Setting Passwords, Lockwords, and UDCs

To set passwords, lockwords, and UDCs:

1. Review account security.

   Refer to *Manager's Guide to MPE/iX Security* and the *HP Security Monitor/iX Managers Guide*.

2. Set passwords for HP recommended accounts, if these accounts do not have passwords, see Table 6-1..

   `:ALTACCT acctname;PASS=password`

   Password recommended accounts.

Table 6-1. Recommended accounts for passwords

BIND	HPOFFICE	HPSKTS	JAVA	SYS
CLL	HPOPTMGT	HPSPOOL	RJE	SYSLOG
CONV	HPPL85	INDHPE	SAMBA	SYSMGR
HPLANMGR	HPPL87	INTSEUP	SNADS	TELESUP
HPNCS	HPPL89	ITF3000	SUPPORT	WWW

3. Set passwords for users that were created or modified to have OP (System Supervisor) and/or PM (Privilege Mode) capabilities, see Table 6-1. on page 154.

   `:ALTUSER username;PASS=password`

   Password Recommended Users

MANAGER.SYS	FIELD. HPPL85	MGR.SNADS	MGR.JAVA
MGR.HPOFFICE	MGR.TELESUP	MGR.SYSMGR	

4. Confirm that passwords are set for SYS account and user MANAGER.SYS.
5. Identify system files.

   ```
   :SYSGEN
   sysgen>SYSFILE
   sysfile>SHOW
   ```

   Record the list of files.

   ```
   sysfile>EXIT
   sysgen>EXIT
   ```

6. Reapply or add lockwords to the system, as required. Refer to your list for the previously lockworded files.

   `:RENAME filename,filename/lockword`

7. Enable UDCs. Purge the COMMAND file created during the process and rename your

temporary COMMAND file.

```
:PURGE COMMAND.PUB.SYS
:RENAME command_name,COMMAND.PUB.SYS
```

8. If your users plan to use POSIX features on MPE/iX, and if it is not already set, set a special UDC.

   ```
   :SETCATALOG HPPXUDC.PUB.SYS;SYSTEM;APPEND
   ```

9. Log on to activate the UDCs.

   ```
   :HELLO MANAGER.SYS,PUB;HIPRI
   ```

   - **Setting Passwords, Lockwords, and UDCs completed. Go to the next section on your checklist.**

6.5 Configuring and Updating Manually Installed Products

Some products require additional configuration steps. Refer to your checklist for the products that were identified during previous procedures.

1. Refer to Appendix A , “Manually Installed Products,” and the appropriate product manual for these instructions. The products will not be operational until you perform the necessary configuration changes or update utilities. Manually installed products include:
   - HP ALLBASE/4GL
   - ALLBASE/SQL or IMAGE/SQL
   - OpenView Console/System Manager
   - SNA IMF/iX
   - HP Predictive Support
   - Java/iX
   - File Transfer Protocol (FTP)
   - Non-HP (Third Party) Software
2. Recustomize any necessary files.
   - **Configuring Manually Installed Products completed. Go to the next section on your checklist.**

6.6 Setting Up the TAR Utility

To perform the final steps:

1. Determine if the TAR utility is set up.

   ```
   :LISTFILE /dev/tape,2
   ```

   If the output is similar to this:

   ```
   PATH= /dev/
    CODE  ---------LOGICAL RECORD----------  ----SPACE---- FILENAME
      SIZE  TYP  EOF  LIMIT R/B   SECTORS  #X   MX
      128W  BBd    0     1  1          0     0    *    tape
   ```

   Then the TAR set up file already exists. Proceed to the next section on your checklist.

   If the output does not show a tape file, proceed to Step 2.

2. Setup the TAR utility.

   If you plan to use the tape archive utility (TAR) with the POSIX shell, create the default link file */dev/tape*:

   ```
   :MKNOD "/dev/tape c 0 n"
   ```

   where:

   /dev/tape is device link filename

   `c` and `0` are two parameters c (lowercase) and 0 (zero) required to create a device link file

   n is LDEV number of the tape device on the system that the device link file is linked to

   Straight quotes are required around all the parameters.

   - **Setting Up the TAR Utility completed. Go to the next section on your checklist.**

6.7 Performing the Final Reboot

To reboot and restart the system:

1. Shut down the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

2. Reset the system after the last shutdown message (SHUT6).

   a. If you have an HP 3000 Series 991, 995 or 99x, connect to the service processor before you can restart the system.

      Type the following:

      ```
      CTRL-B
      CM>SP
      CM>RS
      ```

      Enter **Y** to `HARD BOOT` the computer system.

      Do not respond to the question, `Press any key within 10 seconds to cancel boot with this configuration`. After 5 to 10 minutes of system activity, the Processor Dependent Code (PDC) screen displays.

   b. For all other systems.

      Enter the following commands to reset the system:

      ```
      CTRL-B
      SP>RS
      ```

      If the system does not respond to the `CTRL-B` entry within ten seconds, press the reset button, key switch, or on/off switch as appropriate for your system. The system will halt, and then restart automatically.

      Enter **Y** to confirm restarting the system.

3. Boot the system from the primary boot path. Boot messages can vary, depending on the system model.

   - If you have `AUTOBOOT` enabled, the system boots from the primary boot path automatically, if you do not override `AUTOBOOT`.
   - If your system prompts to enter the boot path, enter the primary boot path.
   - For Model 9x8LX, 9x8RX, or 9x9KS systems, type `BO` at the PDC screen to boot from the primary boot path.
   - If your system prompts, `Boot from primary boot path?`, enter `Y`.
   - Enter `Y` to the `Interact with IPL?` prompt, if it appears on your screen.

   The system boots from disk. After some activity the ISL prompt displays.

4. At the ISL prompt, enter:

```
ISL>START NORECOVERY
```

5. Confirm the date and time. If the date and time displayed are not correct, enter N, and enter the correct date and time. If you do not respond within 15 seconds, the system continues.

   ```
   MPE/iX launch facility
   Initialize_genesis - Version: <<870204.1552>>
   TUE, APR 19, 1994, 10:20:03 AM (y/n)? Y/N
   [TMUX_DAM] n n n n
   Initialize genesis completed.
   ```

   The system displays initialization and restore messages for 5 to 6 minutes.

   During the start-up process, the system makes several configuration checks and may display warning messages or error messages (for example, error messages referencing the SPUINFOP file or DCC error messages). This is normal for system start-up and will not affect system operation.

6. At completion, it logs on as OPERATOR.SYS.

   - **Performing the Final Reboot completed. Go to the next section on your checklist.**

6.8 Restarting Selected System Functions

To restart selected system functions:

1. Log on.

   ```
   :HELLO MANAGER.SYS;HIPRI
   ```

   On local systems power cycle the DTCs. If you are using OpenView DTC Manager, the DTCs do not need to be power cycled. On remote systems reset DTCs.

   To power cycle all DTCs:

   a. Turn DTC off.

   b. Turn DTC on.

   Power cycling each DTC enables the new download file and the DTC configurations to be downloaded to the DTC(s).

2. Purge groups.

   ```
   :PURGEGROUP USL
   :PURGEGROUP UXL
   :PURGEGROUP UNL
   ```

3. Start data communications.

   If you have NS 3000/iX configured, bring up the configured network interfaces. For more information, refer to the *HP 3000/iX Network Planning, and Configuration Guide*.

NOTE Use the same names for the network interfaces that were used in your configuration.

- For example, if you have configured network interfaces with the names LOOP and LAN1, enter:

  ```
  :NETCONTROL START;NET=LOOP
  :NETCONTROL START;NET=LAN1
  :NSCONTROL START
  ```

- If you have configured only the router network interface with the name ROUTER1, enter:

  ```
  :NETCONTROL START;NET=ROUTER1
  :NSCONTROL START
  ```

NOTE JFTPSTRT.ARPA.SYS is no longer part of the FTP product. It is no longer necessary to stream JFTPSTRT.ARPA.SYS. For FTP to work, you DO need to follow the instructions in Appendix A “Configuring File Transfer Protocol FTP”.

4. To reset DTCs on remote systems:

a. Type:

```
:cstm
cstm> ru termdsm
```

b. At the termdsm prompt, Type R:

```
Connect DIag DTc DUmp EEprom Help Reset Status Trace EXit ?R
```

c. For each DTC, Type:

(reset)

Ldev#
POrt#,#,#
SNp #,# (X.25 card in DTC)
VC #,#,#,
Slc #,# (multiplexer card in DTC)
DTc #

(carriage return to exit) ?DTCnn
where nn is the DTC number.

5. Start Internet Services.

If you have any Internet Services configured (telnet, ftp, etc.), stream the Internet Super Daemon job.

```
:STREAM JINETD.NET.SYS
```

For more information, refer to the *Configuring and Managing MPE/iX Internet Services* manual.

6. Turn HP Predictive Support back on.

If you are using the HP Predictive Support software as part of your Hewlett-Packard hardware support contract, ensure that an HP Predictive Support run completes successfully.

a. Issue the HP Predictive Support command:

```
:RUN PSCONFIG.PRED.SYS
```

This run of HP Predictive Support may include a transfer of files to the Hewlett-Packard Response Center. If a transfer is needed, *be sure it completes* because the system update overwrites the information in the file PSDCFILE.PRED.SYS.

b. Select item 4, Configuration, from the Main menu.

c. Select item 5, Schedule, from the Configuration Options menu.

d. Select item 1, Schedule (ON/OFF), from the Schedule menu.

e. Set the preference, at the prompt, type ON:

```
Type schedule preference (on/off) or // to cancel: __
```

f. Exit the program, at the prompt, type EXIT:

```
Type an item number, an item key, or a command: __
```

g. Save the values, at the prompt, type YES:

```
Do you wish to save these values (Y/N)? __
```

- **Restarting Selected System Functions completed. Go to the next section on your checklist.**

6.9 Backing Up Your System

To back up the system.

1. Mount a write-enabled tape to create a backup SLT.

```
:SYSGEN
sysgen>TAPE
sysgen>EXIT
```

2. Dismount the tape, label as SLT with date, time and system version.
3. We recommend that you stop running the STM diagnostics daemon in oreder to back up the files associatedd with it. To do this, call up cstm and execute the “stmshutdown” command (shortcut “ssd”).

```
:cstm
…
cstm>stmshutdown
--Support Tool System Shutdown--
The Support Toiol system will be shutdown.

If the local system is currently connected it will be disconnected prior to
attempting the shutdown.
…
The Support Tool system may only be shutdown and restarted by the root
user. Are you sure you want ot shutdown the Support Tool system?
Enter Cancel, Help, or OK: [Cancel] ok
```

4. Mount another blank tape and perform a full system backup.

```
:FILE T;DEV=TAPE
:STORE /;*T;DIRECTORY;SHOW
```

5. Dismount the tape, label as backup with date, time and system version.
6. Restart the STM daemon by calling up cstm and executing the “stmstartup” command (shortcut “ssu”).

```
:cstm
An unexpected error was encountered while attempting to retrieve the host
infor for hostname (hpdst2)
This could be due to either or the following conditions:

1)The support tool daemon “diagmond” may not be running on that system. Use
the STM Startup command (in the administration menu under the file menu.)
…
  (cstm will eventually come up)
…
cstm>stmstartup
cstm>exit
```

- **Backing Up Your System completed. Go to the next section on your checklist.**

6.10 Permanently Applying a Staging Area

You have these two options:

- If you want to continue testing the set of patches you applied with the booted staging area, proceed to “Finishing Up.”
- If you have tested and confirmed that you want to keep the set of patch changes, and if you have determined that you will not want to back out the patches, then proceed to Step 1 and commit to the staging area.

CAUTION You will no longer be able to re-create the original base system software without performing a backdate if you proceed to Step 1.

To permanently apply a staging area:

1. Start HP Stage/iX, type at the MPE/iX prompt:

   ```
   :STAGEMAN
   ```

2. Ensure that you are currently running from the desired staging area:

   ```
   STAGEMAN> STATUS
   ```

   The following is a sample HP Stage/iX return:

   ```
   Last booted with: stage_1
   Next boot will be with: BASE
   ```

3. Commit to the staging area.

   ```
   STAGEMAN> COMMIT stage_name
   ```

   HP Stage/iX permanently places the staging area changes onto the base, removes the archive of the previous base and removes the staging area. This releases the disk space taken by the archive and the staging area.

   - **Permanently Applying a Staging Area completed. Go to the next section on your checklist.**

6.11 Finishing Up

Perform the steps in this section for all checklists.

To perform the closing steps of your task:

1. The system is ready for normal production.
2. Display the first part of the HPSWINFO file to confirm the SUBSYS, PowerPatch, and Date code:

   ```
   :PRINT HPSWINFO
   ```

3. Record the date and release of the System Installation, Update, Add-on, and Patch in the system log book, as appropriate. If you added subsystem products, note them in the log book including the release.
4. Record system change information on your task checklist.

   - **Finishing Up completed.**

7 Support Tools Manager (STM) for MPE/iX

Support Tools Manager (STM) provides a set of support tools for troubleshooting computer system hardware, including CPUs, memory, interface cards, mass storage devices, etc.

This chapter introduces STM and covers the following topics:

- MPE/iX Version of STM
- Running STM (Summary)
- Two Interfaces
- System Map and Device Icons
- Menus and Commands
- Getting Result Information (Logs)
- Remote Execution
- Getting Help
- Common Problems

MPE/iX Version of STM

With MPE/iX 6.5, the Support Tools Manager (STM) will replace the sysdiag diagnostic system on HP 3000 computer systems. STM has been the diagnostic platform for HP-UX since 1996.

STM was ported to MPE/iX to provide a common diagnostics platform for MPE/iX and HP-UX systems. This common platform will reduce the cost to support new systems and peripherals, and make it possible to bring new tools to MPE/iX 6.5 and beyond. STM will not be provided on any previous MPE/iX release.

The first release of STM on MPE/iX will be based on the HP-UX 11.00 A.12.00 version of STM (June 1998, IPR 9806).

Distribution

STM will be distributed on the Fundamental Operating System (FOS) tape on MPE/iX 6.5 and subsequent releases. When MPE/iX is installed, the sysdiag diagnostic system will be removed and STM will be installed.

NOTE For STM to run, networking must be configured and enabled for remote access, for example by using the NMMGR and NETCONTROL commands. The reason is that STM has a dependency on Berkeley Socket/iX. For details, see “STM Dependencies on MPE/iX” on our Website (URL is given below).

Differences from HP-UX Version of STM

If you are already familiar with STM on HP-UX, you will feel at home with STM on MPE/iX. However, there are some differences to be aware of:

- Different distribution and installation process.
- Different file structure.
- No xstm (XWindows GUI) interace for MPE/iX.
- MPE/iX version initially contains a subset of the tools on the HP-UX version.
- An additional standalone version of logtool to handle MPE/iX system logs.

More Information

Most documentation on STM is provided via the Web. This chapter is only a small subset of the information available is (in particular, it is an adaptation of Chapter 4 of the manual *Support Plus: Diagnostics User's Guide*.)

After MPE 6.5 is released, you can see the most current released information on Support Tools at our Web site, “Systems Hardware, Diagnostics, and Monitoring,” at `http://docs.hp.com/hpux/systems/`. This Web site also contains additional documents, such as tutorials, quick reference guides, and release information.

For EARLY VERSIONS of the pages, refer to the internal HP site at
`http://wojo.rose.hp.com/bea/systems/`

Running STM (Summary)

To start STM and run support tools:

1. Enter the command for the desired interface. Enter `mstm` (menu-based version) or `cstm` (command-line version)
2. If you want to test a remote machine, select the computer system to test. The remote machine must be running a compatible version of STM (i.e., the version running on the system you wish to connect to must be identical to, or a later version than, the version running on the system you are connecting from).
3. Select one or more devices from the system map that is displayed.
4. Choose a support tool (for example a verifier) to run on the selected device(s).
5. Results appear on the system map. For example the entry for a tested device may say “Successful” or “FAILED.”.
6. If the device fails, see the device Failure Log for the cause of the failure and suggested actions.
7. If a test result is anything other than Successful or Failure, look at the Test Activity Log for the device.

The specific steps depend on whether you are running mstm or cstm. For example, in mstm, you traverse menus and select commands by pressing function keys. In cstm, you enter the command name (or its abbreviated form) at the prompt.

For detailed instructions, use the STM online help system. (See “Getting Help”later in this chapter.)

Two Interfaces

You can access the Support Tools Manager (STM) through either of two interfaces. Choose the interface appropriate for your needs, preferences, and resources.

mstm (menu-based)

— Non-graphics terminals

— Command: `mstm`

cstm (command line)

— For running scripts and non-graphics terminals.

— Command: `cstm`

Displays from the two interfaces are shown in the rest of this chapter.

System Map and Device Icons

When you first connect to a computer system, you see a system map showing all the hardware entities in the system (CPU, memory, device adapters, and I/O devices). In mstm, the map appears automatically. In cstm, you must enter the `map` command.

You use the system map to select the devices to test. After a test runs, the system map displays the results.

System Map in mstm

The following figure shows a system map in mstm:

Figure 7-1. mstm System Map

```
                                    hpdst199

File    System    Device   Tools   Options                      Help
====    ======    ======   =====   =======                      ====

                                    Last        Last Op
Path        Product                 Active Tool Status
=========== ======================= =========== ================
8           Bus Adapter             Information Successful
8/0         Bus Adapter             Information Successful
8/0/0       NIO Terminal Multiplexor Information Successful
8/4         Fast/Wide SCSI Interface Information Successful
8/4.3.0     SCSI Disk               Exercise    Aborted
8/4.4.0     SCSI Disk               Verify      Successful
8/4.10.0    SCSI Disk               FW Update   Successful
8/4.11.0    SCSI Disk               FW Update   Successful
8/16        Core I/O Adapter        Information Successful
8/16/0      Centronics Interface    Information Successful
8/16/5      SCSI Interface          Information Successful
8/16/5.1.0  SCSI Tape               Verify      Query Pending
8/16/5.2.0  SCSI Disk               Information Successful
8/16/6      LAN Interface           Exercise    Abort Pending
8/16/7      Built-in Keyboard/Mouse Information Successful
8/20        Core I/O Adapter        Information Successful
8/20/2      RS-232 Interface        Information Successful
8/20/5      EISA Adapter            Information Successful
10          Bus Adapter             Information Successful
32          CPU                     Exercise    Successful
34          CPU                     Exercise    Successful
49          MEMORY                  Exercise    Successful

-------------------------------------------------------------------------
       |        |Select/ | Menubar |  sys_name  |       |       |        |
  help |  Alt   |Deselect| on/off  |            |       |REFRESH|  EXIT  |
-------------------------------------------------------------------------
```

Navigation of the system map is done by using the Up/Down/Left/Right arrow keys and the Prev/Next or Page Up/Page Down keys.

To select a specific device for testing, place the cursor on the specific device and press Return; all other devices are unselected. (To select a device and leave all other selected devices in their current state, place the cursor on the specific device and press the space bar.):

You can use the TAB key to activate a pull down menu which allows you to select the specific tool that you want to run on the selected device(s).

System Map in cstm

To display the system map in cstm, enter the `map` command.

The cstm system map is almost identical to the mstm system map. The main difference is that cstm provides each device with a device number:

Figure 7-2. cstm System Map

```
                              /usr/sbin/stm/ui/bin/stm
                                      hpdst199

Dev                                                  Last        Last Op
Num  Path        Product                             Active Tool Status
===  ========== ========================= ========== ==================
1    8           Bus Adapter                         Information Successful
2    8/0         Bus Adapter                         Information Successful
3    8/0/0       NIO Terminal Multiplexor            Information Successful
4    8/4         Fast/Wide SCSI Interface            Information Successful
5    8/4.3.0     SCSI Disk                           Exercise    Aborted
6    8/4.4.0     SCSI Disk                           Verify      Successful
                      .
                      .
                      .
```

You select devices by using the `select` command with a device number or path modifier. A minus sign (-) in front of a parameter unselects it. Examples:

```
select device 1
select path 8/4.4.0
select device -1
select path -8/4.4.0
```

Kinds of Support Tools

To use the diagnostics and support tools, the user first invokes one of the user interface modules (`mstm` or `cstm`), selects one or more devices, and invokes one of the following tools to specify what type of operation is to be performed on the device(s):

NOTE Not all tool types are supported on all devices on all operating systems. For example, verifiers and exercisers are not available on the first release of STM for MPE/iX.

Information Creates a log of information specific to one device, including the product identifier, a description of the device, the hardware path to the device, the vendor, and the firmware revision code, if firmware is present in the device, and any other pertinent information, if any.

Verify If available, performs a simple test of component function, providing a “pass/fail” indication of device condition; typically, this is the first level test of a device's condition.

Diagnose If available, runs a diagnostic program on the device, which is designed to detect and isolate faulty hardware on that device. Diagnose tools require a Support Class or Node license.

Exercise If available, stresses the device or subsystem. This function is useful in providing very high confidence verification, and in detecting intermittent errors.

Firmware Update Initiates the firmware update process for a selected device. While the user interface to the firmware update tools is generic, the tools themselves are device-specific.

Expert Tools Are device specific troubleshooting utilities for use by sophisticated users. Their functionality varies from tool to tool, but they are intended to be interactive, and rely on you to provide information necessary to perform a particular task. Expert tools require a Support Class or Node license, or in some cases an HP-only license.

Utilities Are support tools which are not device specific. Current tools include logtool (for reading system logs), MODMUTIL, and TERMDSM utilities. Most utilities do not require a license.

Verifiers, exercisers and information tools require no license to run. Some of the other tools may require a license. To see the license level required for the tools available on a device, perform a “current device status” request on the device. For example in mstm, select the device, then select “Current Device Status” from the Device pull-down menu.In cstm the command is `currdevstatus` (`cds`).

Menus and Commands

The mstm and cstm interfaces have different ways to display menus and accept commands from the user.

The following subsections detail the mstm and cstm menus and commands.

mstm Menus and Commands

In mstm, you traverse screens and menus, and select commands from pulldown menus:

Figure 7-3. mstm Menu Bar and Softkeys

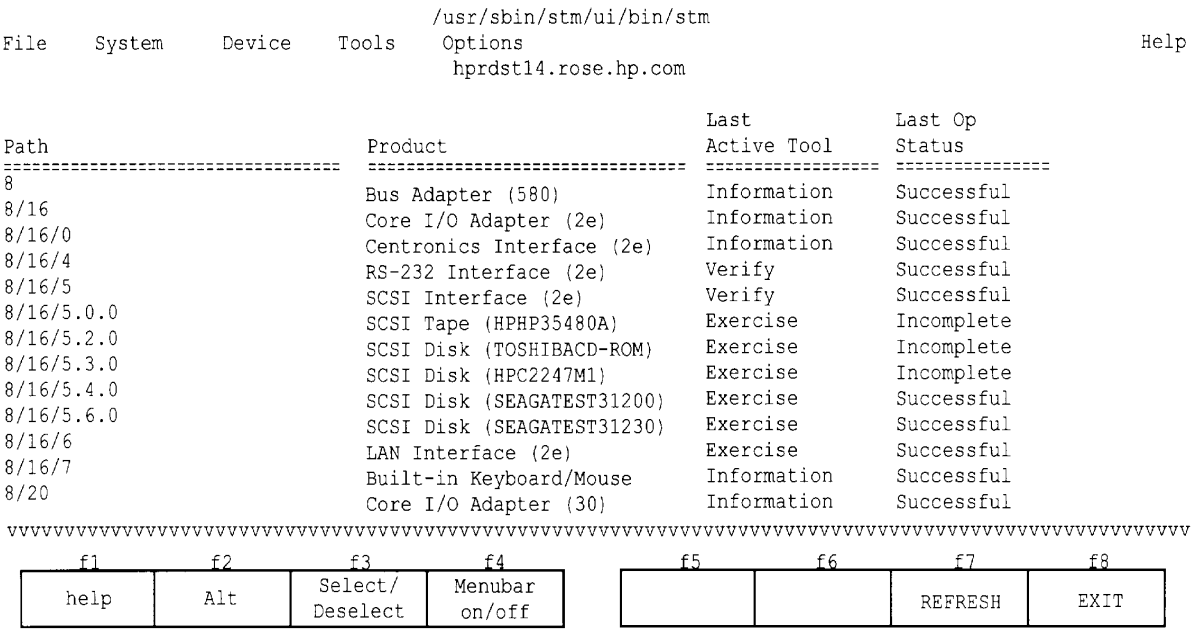
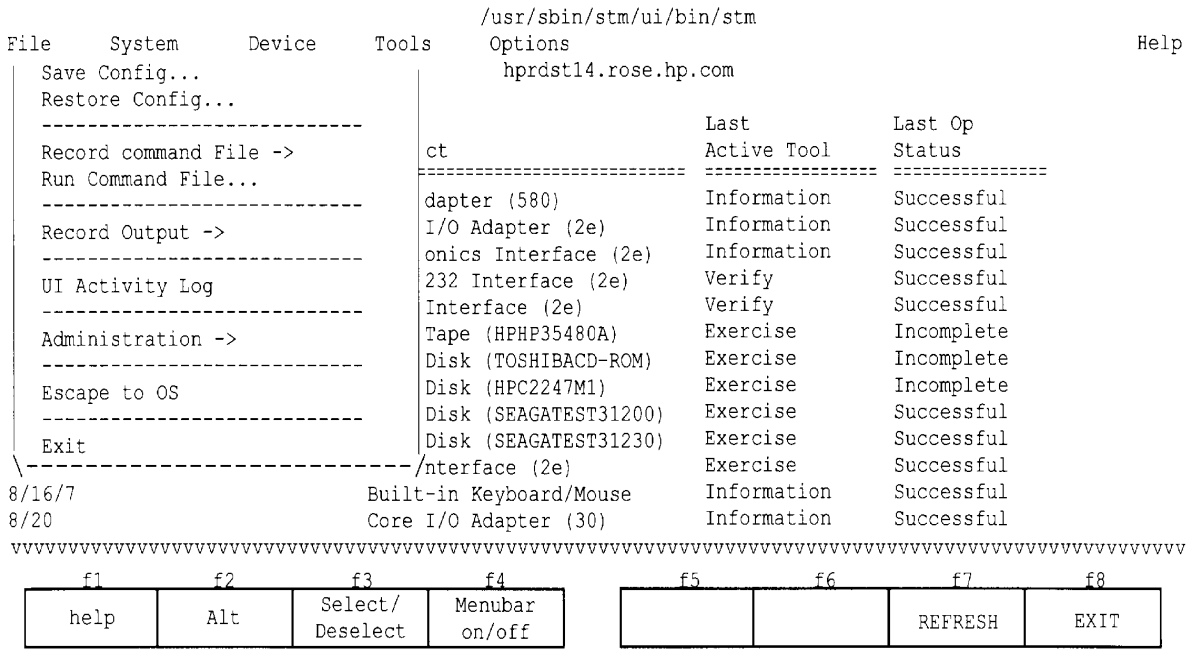


Figure 7-4. mstm Pulldown Menu Example



Screen Navigation

There are two types of screen navigation:

- Navigating between screens
- Navigating within screens

To navigate between one screen and another, use the Tab key.

To navigate from one portion to another portion of the same screen, use the Prev and Next keys (or, alternatively, the Cursor Up and Cursor Down keys).

Menu Bar

The following table summarizes the use of the menu bar.

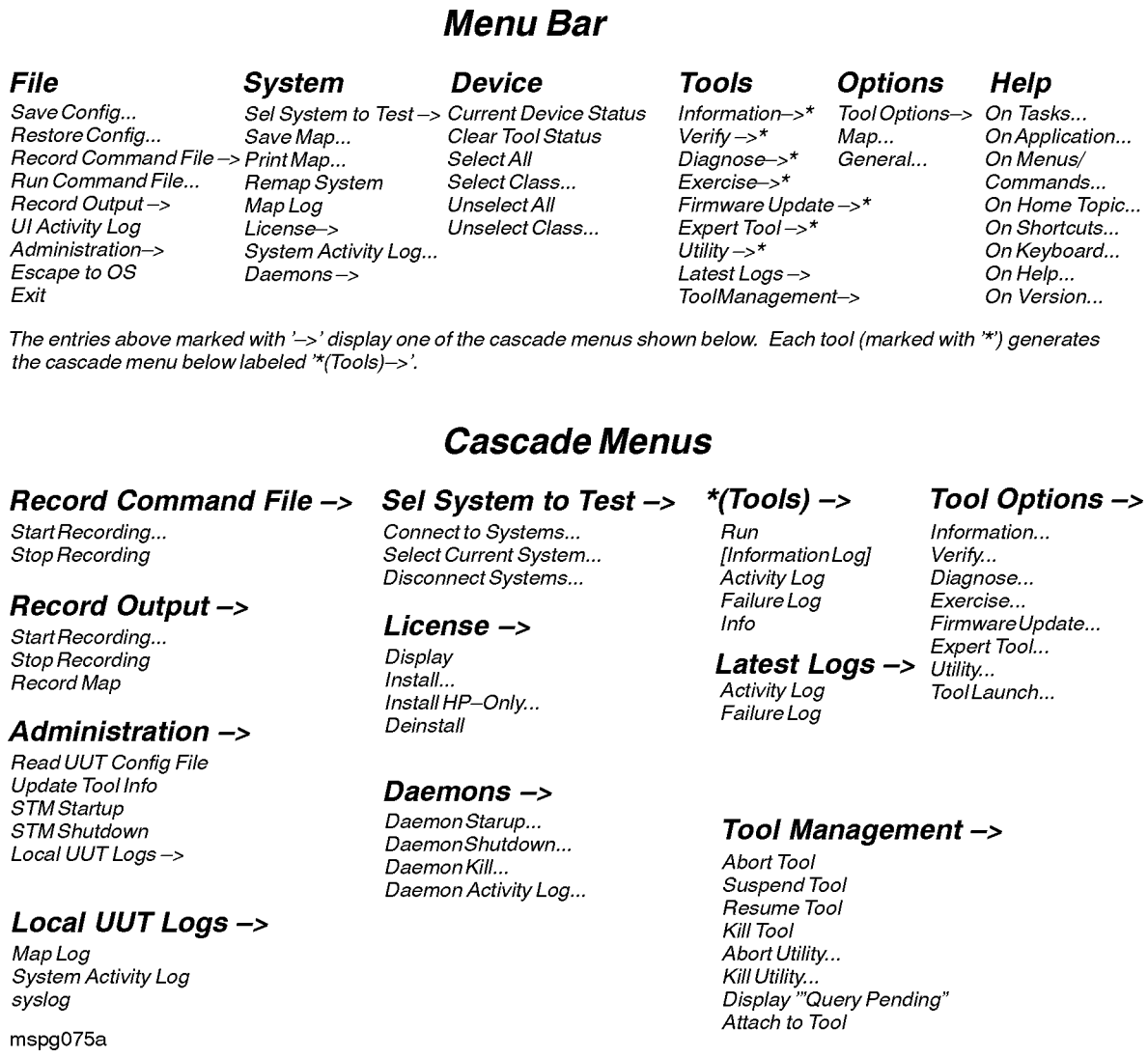
Table 7-1. Menu Bar Navigation

To do this:	Do this:
Position the cursor on the menu bar	Use the Tab key (or the Menu Bar on/off function key).
Move to a pulldown menu	Use the cursor arrow keys.
Expand a menu/sub-menu	Use the Return key.
Highlight a command or sub-menu	Use the cursor keys.

Table 7-1. Menu Bar Navigation

To do this:	Do this:
Perform a command	Use the Return key.
Invoke a menu directly:	Use Alt function key; then hit non-underlined character in menu title.
Activate a menu command/expand pulldown sub-menu:	Hit the letter which is underlined in the command or sub-menu.

Figure 7-5. mstm Menus and Commands



mstm Shortcut Keys

A new 'shortcuts' feature has been added to mstm which lets you do frequently performed operations quickly. For example, to select all disks and then run the verify tool on them, the user would hit the keys 'dv' then <RETURN> while the mstm map is displayed. For a list of the shortcut keys, hit the '?' key while the mstm map is displayed:

```
                                Shortcut Keys

 Device Selections              Device Tools                Utilities
  (a) all devices                (v) verify               (l) logtool
  (d) disks                      (e) exercise
  (m) memory                     (i) information
  (p) processors                 (s) current device status
  (t) tapes

 Other Shortcut Keys
  (?) this help page
  <cr> execute shorcut key commands and exit from this help page.
  <back-space> delete the last shortcut key entered and undo its selection.

 Notes
  - The first device selection will unselect all currently selected
    devices.
    Subsequent selections will be additive.
  - Only one tool or utility operation is allowed per shortcut operation.

 Shortcut Key Examples:
  "av<cr>"  Select all devices and run verifier.
  "l<cr>"   Run logtool.
  "dte<cr>" Select only disk and tapes and run exerciser.
```

cstm Menus and Commands

In cstm, you simply enter the command name (or its abbreviated form) at the prompt. There are no menus and you can enter any command at any time.

The following lists the cstm commands for the some HP-UX releases by category. The format is *command* (*abbreviation*):

```
File:                   System:               Device:
saveconfig (scfg)       connectsys (cs)       currdevstatus (cds)
restoreconfig (rcfg)    selcurrentsys (scs)   cleartoolstatus (cts)
recordcmdfile (rcf)     disconnectsys (ds)    select (sel)
stoprecordcmd (srcf)    savemap (smap)        selall (sall)
runcmdfile (rncf)       printmap (pmap)       selclass (scl)
recordoutput (ro)       remapsystem (rs)      unselall (usal)
stoprecordout (sro)     maplog (ml)           unselclass (uscl)
uiactlog (uial)         displaylic (dl)
readuutconfig (ruc)     license (lic)
updatetoolinfo (uti)    hplicense (hlic)
stmstartup (ssu)        deinstalllic (dlic)
stmshutdown (ssd)       sysactlog (sal)
resetsysactlog (rsa)    daemonstartup (dsu)
```

```
localmaplog (lml)          daemonshutdown (dsd)
localsysactlog (lsal)      daemonkill (dk)
syslog (sl)                daemonactlog (dacl)
os (os)                    map (map)
exit (ex)

Tools:                     Tools (Continued)       Options:
information (info)         fwupdatefaillog (ffl)   infooptions (iop)
infolog (il)               fwupdateinfo (finf)     veroptions (vop)
infoactlog (ial)           experttool (xt)         diagoptions (dop)
infofaillog (ifl)          expactlog (xal)         exeroptions (eop)
infoinfo (iinf)            expfaillog (xfl)        fwupdateoptions (fop)
verify (ver)               expinfo (xinf)          expoptions (xop)
veractlog (val)            runutil (ru)            utiloptions (uop)
verfaillog (vfl)           utilactlog (ual)        launchoptions (lop)
verinfo (vinf)             utilfaillog (ufl)       mapoptions (mop)
diagnose (dgn)             utilinfo (uinf)         generaloptions (gop)
diagactlog (dal)           lateactlog (lal)
diagfaillog (dfl)          latefaillog (lfl)
diaginfo (dinf)            aborttool (abt)
exercise (exc)             suspendtool (st)        Help:
exeractlog (eal)           resumetool (ret)        help
exerfaillog (efl)          killtool (klt)          help more
exerinfo (einf)            abortutil (abu)         help syntax
firmwareupdate (fwu)       killutil (klu)          help all
fwupdatelog (fal)          displayquery (dq)       help COMMAND (ACCEL)
                           attach (at)             help help
                           wait (wait)             version (vers)
```

For more information on the commands, type `help more` or `help syntax` or `help COMMAND_NAME` at the cstm prompt,

Getting Result Information (Logs)

Most of the time you will get the information you need by looking at the status of device icons on the system map. For example the entry for a tested device may say “Successful” or “FAILED.”

If a device has a Failure, consult the device Failure Log for a message identifying likely causes for the failure and suggesting possible actions. Figure 7-6. shows a sample Failure Log.

Figure 7-6. Sample Failure Log

```
                Information tool Failure Log for SCSI Disk on path 32.9.0

....hpdst2.cup.hp.com : 15.16.128.123 ...

--  Information tool Failure Log for SCSI Disk on path 32.9.0 --
```

```
Started: Tue Sep 28 08:31:05 1999
Failed: Tue Sep 28 08:31:05 1999

A UNIT ATTENTION was received as a result of the SCSI Read Capacity
command. This is not necessarily an error, but indicates the device was
undergoing built-in test or was previously reset.

Possible Causes(s)/Recommended Action(s):

       The disk drive has been reset or the Mode Select parameters have
       been changed.

       Rerun the information module.
```

If a test result is anything other than Successful or Failure, look at the Test Activity Log for the device. For example, if a test results in a Incomplete status, the Test Activity Log will explain whether the problems is due to missing device files or other possible errors.

Other logs are available with a record of STM system events (for example, a User Interface Log).

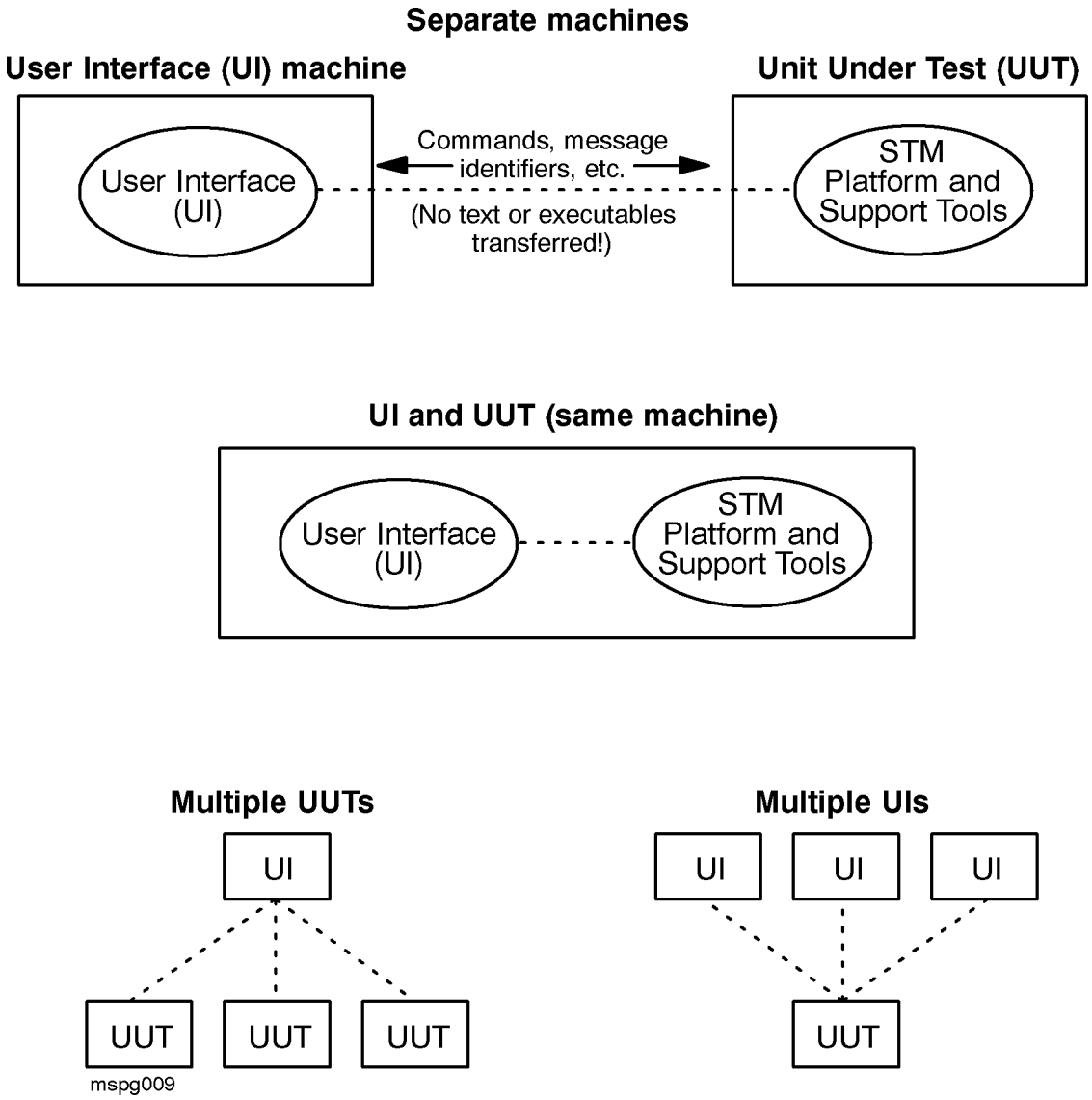
Remote Execution

You can run the STM user interface on one machine, and use it to run support tools on one or more remote machines. See Figure 7-7. for a display of possible connections.

The computer running the user interface is the *UI system* and the computer running the support tools is the *Unit Under Test* or *UUT*).

As always you can run the user interface and support tools on the same machine. In this case the UI machine and the UUT are one and the same.

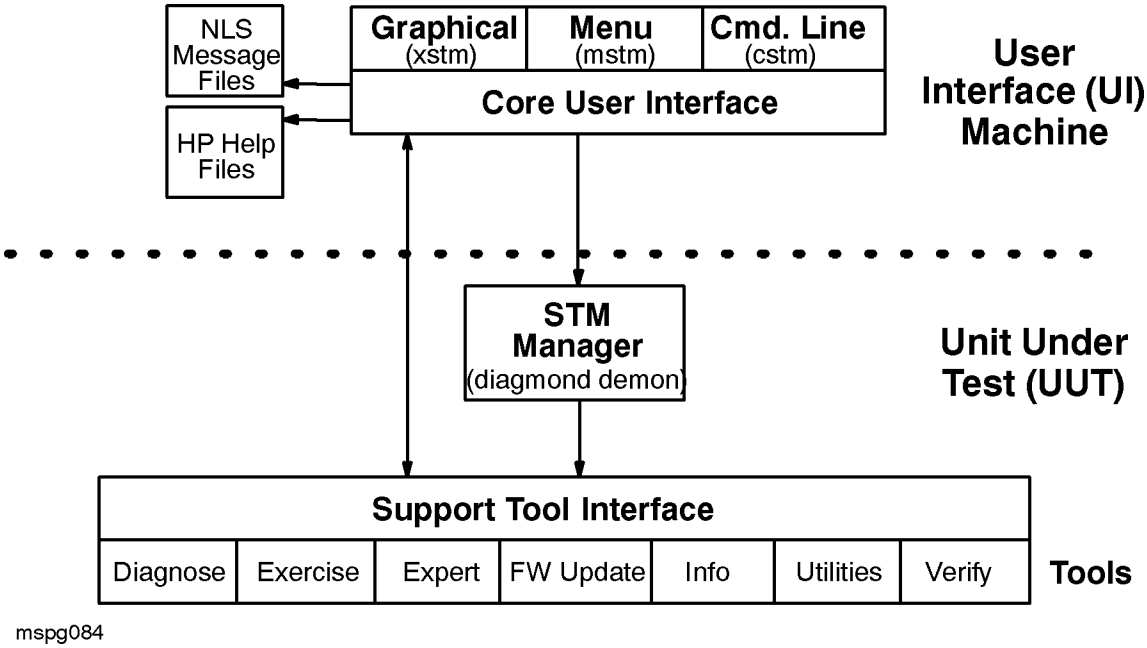
Figure 7-7. Possible UI and UUT Connections



Distributed Structure

Efficient remote execution is possible because STM has a distributed structure. Figure 7-8. shows how the parts of STM are distributed between the UI machine and the UUT. (This diagram also shows xstm, which is only available on HP-UX.)

Figure 7-8. Diagram of STM's Distributed Structure



The UI system contains the binaries for the graphical, menu, and command line interfaces, as well as for the Core UI which underlies them. The UI also contains the text to be displayed (message catalogs and help volumes).

The Unit Under Test (UUT) contains the binaries for the support tools (Diagnose, FW Update, Exercise, Expert, etc.) and the libraries which support them.

Improving Performance

This distributed design makes for good performance. This is because data and code reside on the machine that makes use of them. The UI system has code for the UI, and message text for both the UI and support tools. The UUT system has the support tool executables. Little text is passed between the two machines, usually only the information required to locate a message.

Getting Help

STM provides sophisticated and full-featured help systems for the main STM interface and for interactive tools such as Logtool. See Figure 7-9. for a sample help display in mstm.

To access an online help system:

- *mstm:* Press the “Help” function key.
- *cstm:* Enter the command `help`.

Figure 7-9. Sample Online Help

```
                        Help

Get Information on a Device

To get information about a hardware device(s), run an information tool:

     1. Select Device(s).
     2. If desired, Select/Deselect Test Options.
     3. Select the “tools” pulldown menu.
     4. Run Information and consult the Information Log.
     5. Go back to the top level menu, and select the “device” pulldown menu.
     6. Run Curr Dev Status to display the list of tools installed for a
device,
        in addition to obtaining information about the device
vvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv
vvv

Select a help topic
     Select Device(s)
     Select/Deselect Test Options
     Information
     Information Log

     vvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvvv
vvv

-------------------------------------------------------------------------------
       |  HOME  |       |  GO TO  |  sys_name  |       |       |  EXIT  |
       |  TOPIC |       |  LINK   |            |       |       |  HELP  |
-------------------------------------------------------------------------------
```

Kinds of Help

Help for the main STM user interface covers the following:

- *On Tasks*: Cookbook procedures for performing common system tasks using STM.
- *On Application*: General information about the Support Tool Manager
- *On Help*: Information about using the HP Help system.
- *On Version*: Copyright, version, and legal information about STM.

Common Problems

A device in the STM map is “Unknown” (MPE/iX)

Many MPE/iX systems are “over-configured,” that is, their configuration files have more entries than are physically present on the system. STM lists these phantom entries on the system map, but cannot get any information from the non-existent devices to which they point. Consequently STM has to label these entries as “Unknown.”

If having phantom entries in the system map is a problem for you, use the SYSGEN utility to remove the non-existent devices from the system configuration files.

Slow response to user commands.

When many tools are started simultaneously, STM may be slow to respond to user commands. This is due primarily to the messaging traffic between the tools and STM which is particularly heavy when tools are first run. During this time, one or more tools may enter a “Hung” state.

These problems should disappear once all of the tools have gotten through the start-up phase.

SCSI Tape and Disk Tools report SCSI commands as failed in the Test Activity Logs.

Some of the SCSI disk and tape tools log errors in their Test Activity logs indicating that commands such as LOG SENSE and INQUIRY failed. This is usually because the drive being tested is an older drive which did not implement these commands in the form they are being used. If this is the case, the Cause/Action text in the log message will suggest this as a possible cause of the problem.

No tools are available for a particular device.

Due to resource constraints, support tools for all device were not developed for this release. Tools for these devices will probably be available in subsequent releases.

Some tools may not be available because they require a license. Currently the only tools that require a license are expert tools. To see a list of the tools installed for a device and the license level, if any, required to run the tool, use the “Device — >Current Device Status...” command. The following is a display for a SCSI disk device:

```
Installed tools:
   Diagnostic      : None
   Verifier        : disk
   Exerciser       : disk
   Informaton      : scsi_disk
   Expert Tool     : scsi_disk (Licensed)
   Firmware Update : scsi_disk
```

The “Device — >Select Class” command did not work.

This is usually because the “Device Type” and “Qualifier Type” you selected don't both match a device in the system. For example, selecting a type of “Disk” and a qualifier of “SCSI” will not select any devices because SCSI disks use qualifiers of “Hard,” “Floppy,” etc. Use the “Device — >Current Device Status” command to determine the valid type and qualifier that apply to a specific device.

A Manually Installed Products

Some products that you have installed require additional steps to be performed before they are fully functional. These products are referred to as manually installed products. When you install or update a manually installed product, system messages inform you that additional steps are required.

The additional steps that are required for completing the installation of the following products are described in this chapter:

- HP ALLBASE/4GL
- ALLBASE/SQL
- OpenView Console/System Manager
- SNA IMF/iX
- HP Predictive Support
- Java/iX
- File Transfer Protocol (FTP)
- Non-HP (Third Party) Software

Your Hewlett-Packard representative will complete the installation of these products for you, if you prefer. Please contact HP for assistance.

Installing HP ALLBASE/4GL

To complete the installation of HP ALLBASE/4GL some additional steps must be performed.

You must complete these installation procedures on a terminal other than the system console. You cannot run HP ALLBASE/4GL on the system console.

First Time Install

To complete the installation of the HP ALLBASE/4GL Developer system or the HP ALLBASE/4GL Run-Time system, perform the following steps after updating the system with the CSLT.

1. Create the account in which you want to use HP ALLBASE/4GL. You can select any name for the account, but HP recommends that you use the names HP4GL for the HP ALLBASE/4GL Developer System and HP4GLR for the HP ALLBASE/4GL Run-Time System.

   Developer:

   ```
   :HELLO MANAGER.SYS;HIPRI
   :NEWACCT HP4GL,MGR;PASS= password &
     ;CAP=AM,AL,GL,ND,SF,BA,IA,PH
   ```

   or

   Run-Time:

   ```
   :HELLO MANAGER.SYS;HIPRI
   :NEWACCT HP4GLR,MGR;PASS= password &
     ;CAP=AM,AL,GL,ND,SF,BA,IA,PH
   ```

2. Log on to the new account and execute the following command file:

   Developer:

   ```
   :HELLO MGR.HP4GL
   :HP4BLD.HP4GL.SYS
   ```

   or

   Run-Time:

   ```
   :HELLO MGR.HP4GLR
   :HP4BLDR.HP4GLR.SYS
   ```

   HP4BLD (or HP4BLDR)will create several groups within the account. After the groups are created, the utility copies several files from the SYS account into the newly created groups.

3. Proceed to the section called “Install the Environment” and follow the steps to complete the installation.

Upgrade Existing Systems

This section describes how to update HP ALLBASE/4GL systems. Before attempting an update, you must understand the following precautionary conditions.

Developer System:

- If you are using the HP ALLBASE/4GL Developer system, you must save your applications and system definitions using HP4STOA before you upgrade to the new version of HP ALLBASE/4GL. Applications and system definitions will be lost if they are not saved.
- After upgrading the HP ALLBASE/4GL Developer system, you will be instructed to reload your applications and system definitions. You will also need to regenerate HP ALLBASE/4GL applications before any of the applications can be run.
- Before regeneration can occur, you may first need to migrate all of your ALLBASE/SQL databases. Check with the ALLBASE/SQL installation instructions to see if your databases need to be migrated.

Run-Time System:

- If you are using the Run-Time System, at the end of the upgrade procedures you must reload your applications from the tape or files supplied by your application supplier.
- If any of your applications use ALLBASE/SQL, check the HP ALLBASE/SQL installation instructions to see if your databases need to be migrated. After the database migration completes, use the ISQL VALIDATE command to recompile all of the SQL-stored sections (including SQL Logic Blocks). Applications that use HP ALLBASE/4GL need to be regenerated using the new version of HP ALLBASE/4GL before they can be run. Contact your application developer.

Developer Systems: Before Running AUTOINST

We recommend that you perform the steps described in this section before running AUTOINST.

NOTE The following steps save your HP ALLBASE/4GL applications so they can be reloaded at the end of the upgrade. If you do not save your applications before running HP4BLD or HP4BLDR, you will lose these applications.

Use HP4STOA instead of the HPALLBASE/4GL Administrator unload facility to save the applications. The HP4STOA utility must be invoked for each application you created in the environment. Although HP4STOA is slower than the unload facility, HP4STOA performs two functions that the unload facility does not. HP4STOA preserves the menu security defined for the application and extracts the system definitions including the following:

- User names and passwords
- Menu item security definitions
- System specifications
- Logic command and communication area synonyms

- Master titles

Once the upgrade is complete, each of the files created with HP4STOA must be input to HP4ATOS. The applications need to be fully regenerated before they can be run.

Refer to the *HP ALLBASE/4GL Developer Reference Manual Volume 2* for details on HP4STOA and HP4ATOS.

NOTE The following steps assume that your HP ALLBASE/4GL account is called HP4GL. If you used another name, substitute it for HP4GL in these instructions.

---

1. Log on to the HP4GL account.
2. Set the HP4SPATH environment variable:

   ```
   :SETVAR HP4SPATH “HP4S.HP4GL”
   ```

3. Use HP4STOA to extract each of your applications and the system definitions.

   For example, to extract the system definitions:

   ```
   :BUILD SYSTEM.PUB;REC=-1276,,V,ASCII;DISC=10000
   :HP4STOA.PUB.SYS -uadminist
   :password >SYSTEM.PUB"
   ```

   Only the administrator user (administ) and password are needed when extracting system definitions. You do not need to specify an application name.

   For example, to extract the application source:

   ```
   :BUILD APP1,PUB;REC=-1276,,V,ASCII;DISC=10000
   :HP4STOA.PUB.SYS “-U DEVELOPER-USER
   :PASSWORD -A APP1
   :SECURITY-CODE < APP1.PUB”
   :BUILD APPn.PUB;REC=-1276,,V,ASCII;DISC=10000
   :HP4STOA.PUB.SYS “-U DEVELOPER-USER
   :PASSWORD -A APPN
   :SECURITY-CODE < APP N.PUB”
   ```

   The record size and number of records allocated in the BUILD command is adequate for most cases. In some extreme case, HP4STOA fails because the file limits (record size or number of records allocated) are exceeded. If the limits are reached, purge the file and rebuild it with a larger limit. Then, repeat the HP4STOA command.

   The following applications do not need to be extracted from the environment because they are part of the base environment delivered with the new version of HP ALLBASE/4GL.

   - administ
   - developr
   - example
   - HPLIB000
   - hpqm
   - sqldemo

- tutorial

4. Use the following commands to create a new group and to copy any existing HP ALLBASE/4GL system files from the current S-file group to this new group. The S-file group is then purged so the updated S-files can be copied into the HP4S group. The existing S-files are saved in case you forget to save all your applications.

```
:NEWGROUP HP4OLDS
:HP4SCOPY.HP4GL.SYS HP4S HP4OLDS &
:PURGEGROUP HP4S
```

Developer Systems: After Running AUTOINST

Complete the following steps after running AUTOINST and after saving your ALLBASE/4GL applications. You will lose your HP ALLBASE/4GL applications if the following steps are performed before you run AUTOINST or save your HP ALLBASE/4GL applications.

1. Update the HP4GL account. You must be logged into the HP4GL account.

```
:HP4BLD.HP4GL.SYS
```

   HP4BLD creates several groups within the account. After creating the groups, the utility copies several files from the SYS account into the newly created groups.

2. Set the system variable HP4SPATH to point to the group containing the HP ALLBASE/4GL S files.

```
:SETVAR HP4SPATH “HP4S”
```

3. Load the system definitions:

```
:HP4ATOS.PUB.SYS “-U ADMINIST
:PASSWORD < SYSTEM.PUB”
```

4. Load the application source:

```
:HP4ATOS.PUB.SYS “-U DEVELOPER-USER
:PASSWORD -A APPLICATION1
:SECURITY-CODE < APP1.PUB”
. . .
:HP4ATOS.PUB.SYS “-U DEVELOPER-USER
:PASSWORD -A APPLICATIONN
:SECURITY-CODE < APP N.PUB”
```

5. Regenerate your applications by running ALLBASE/4GL; log in as the developer for each application and use the GENERATE ALL feature.

You may need to migrate all of your ALLBASE/SQL databases before you can use HP ALLBASE/4GL to regenerate your applications. Check with the ALLBASE/SQL installation instructions to see if your databases need to be migrated.

Run-Time Systems: Before Running AUTOINST

When you update to the new ALLBASE/4GL system, all existing administrator definitions for the system are overwritten by the defaults provided by the new ALLBASE/4GL system. As a result, the following definitions are lost during the update:

- User names and passwords
- Menu item security definitions
- System specifications for date and decimal number format, the currency float symbol, and the HP-UX environment specifications
- Logic command synonyms and communication area synonyms
- Master titles

NOTE You should perform the following step before running AUTOINST. If you do not print your system definitions before running HP4BLDR, you cannot recover any of the previously specified system definitions.

---

1. Print the reports of these items using the administrator documentation menu before you perform the update. It is not possible to save this information in the Run-Time System.

Run-Time Systems: After Running AUTOINST

The following steps assume that your HP ALLBASE/4GL account is called HP4GLR. If you used another name, substitute it for HP4GLR in the following instructions.

1. Log on to the HP4GLR account.
2. The following commands create a new group and copy any existing HP ALLBASE/4GL system files from the current S-file group to this new group. The S-file group is then purged so the updated S files can be copied into the HP4S group.

   ```
   :NEWGROUP HP4OLDSR
   :HP4SCOPY.HP4GL.SYS HP4SR HP4OLDSR
   :PURGEGROUP HP4SR
   ```

3. Execute the following command:

   ```
   :HP4BLDR.HP4GLR.SYS
   ```

   HP4BLDR creates several groups within the account. After the groups are created, the utility copies several files from the SYS account into the newly created groups.

4. Reenter your system definitions using the printout created before AUTOINST.

   ```
   :HP4GLR
   ```

5. Reload your HP ALLBASE/4GL applications from the tape or files supplied by your HP ALLBASE/4GL application supplier. For full instructions on loading applications, refer to the *HP ALLBASE/4GL Run-Time Administration Manual*.
6. If you are upgrading the HP ALLBASE/4GL Run-Time System and your applications use HP ALLBASE/SQL, check with the HP ALLBASE/SQL installation instructions to see if your databases need to be migrated.
7. Use the ISQL VALIDATE command to recompile all of the SQL-stored sections (including SQL logic blocks). You'll need to use the VALIDATE command on each of your ALLBASE/SQL databases. Both the modules and procedures need to be validated.

Following is an example of using VALIDATE:

```
:ISQL
isql> CONNECT TO 'DBEnvironmentName';
isql> VALIDATE ALL MODULES;
isql> VALIDATE ALL PROCEDURES:
```

Applications that use HP ALLBASE/4GL need to be regenerated using the new version of HP ALLBASE/4GL before they can be run. Contact your application developer.

Install the Environment

The default HP ALLBASE/4GL installation assumes that the MPE/iX system is configured to support the American version as well as the native computer language.

To run HP ALLBASE/4GL on a terminal that supports the line-drawing character set, set the MPE/iX variable HP4TERM as follows:

```
:SETVARHP4TERM "HPL"
```

Refer to the *HP ALLBASE/4GL Developer Administration Manual* or the *HP ALLBASE/4GL Run-Time Administration Manual* for further information on setting up the HP ALLBASE/4GL environment.

You can now run HP ALLBASE/4GL.

Installing ALLBASE/ SQL or IMAGE/SQL

This applies to IMAGE/SQL only if you have created SQL data using an earlier release of ALLBASE/SQL.

If you are updating from an earlier release of ALLBASE/SQL, you must perform the ALLBASE/SQL migration to migrate your DBEnvironments to the G.3 format. The method used depends upon the version of ALLBASE/SQL you are currently running. The version update options are:

- Updating from any version of G
- Updating from E.1 or F.0
- Updating from versions prior to E.1

CAUTION Execute SQLINSTL or SQLMigrate to migrate to the current version of ALLBASE/SQL.

Updating from Any G Version

If your old release of ALLBASE/SQL is G.0, G.1, G.2, or G.3, execute the SQLINSTL script to migrate to the current version. ALLBASE/SQL has added new views and modified some existing views to support TurboIMAGE indexes in IMAGE/SQL. The SQLINSTL script is provided in ALLBASE/SQL to make it easy for a database administrator to migrate between versions of a release (such as G2.01 to G2.03) or minor releases (such as G.2 to G.3). Using SQLINSTL ensures that you will have access to the most recent version of the SYSTEM and CATALOG views, and it also uses VALIDATE FORCE statements to revalidate all stored sections for the current version of ALLBASE/SQL.

If SQLINSTL is not executed on a DBEnvironment after installing a new version of ALLBASE/SQL, stored sections may not be properly revalidated causing run-time errors. Revalidating stored sections at run-time during production hours can also cause concurrency problems due to exclusive locks placed on the system catalog. You must execute SQLINSTL whenever a new version of ALLBASE/SQL is installed unless you need to use SQLMigrate. SQLINSTL does not need to be executed if SQLMigrate is being executed to migrate between major releases.

Run the SQLINSTL script as follows:

```
:RUN ISQL.PUB.SYS
isql=> START SQLINSTL.PUB.SYS (MYDBE);
isql=> EXIT;
```

Please read the SQLINSTL file on your system for more information.

Customers who are using ARCHIVE MODE logging must make a backup of the DBEnvironment after using SQLINSTL. This backup must be used if rollforward recovery is to be performed at some point in the future. Customers installing G.3 cannot apply rollforward recovery to a backup created using the G.2 version (or earlier) of ALLBASE/SQL.

Updating from Version E.1 or F.0

If your old release of ALLBASE/SQL is E.1 or F.0, use SQLMigrate to migrate to version G.3. Backup the DBEnvironment prior to running SQLMigrate. The steps listed below also appear in the *ALLBASE/SQL Database Administration Guide.*

Use the following procedure to convert a DBEnvironment from either an E.1 or F.0 format to the G.3 format:

1. Prior to updating the operating system and ALLBASE/SQL software, do the following for each DBEnvironment that will be migrated:

   a. Run ISQL.PUB.SYS and issue a START DBE command. This ensures that the DBEnvironment is logically consistent in the event that it has not been accessed since a system failure occurred.

   b. Run SQLUTIL.PUB.SYS and issue the STORE command to backup each DBEnvironment.

      Log files are not stored using this command. In addition, you should use the SHOWDBE command to ensure that all parameters are OK.

2. Backup the ALLBASE/SQL software. This can be done as part of the system backup.

3. Update the operating system. The ALLBASE/SQL software is updated as part of the SUBSYS add-on process.

4. Start SQLMigrate.

   ```
   :RUN SQLMIG.PUB.SYS
   ```

5. For each DBEnvironment that you are migrating, check for potential errors by using the PREVIEW command below:

   ```
   SQLMIGRATE=> PREVIEW 'DBEnvironmentName' FORWARD;
   ```

   The PREVIEW command is not a read-only command. Make sure that you have a backup of the DBEnvironment prior to issuing the PREVIEW command.

   During the PREVIEW check, you may receive messages indicating that there is insufficient disk space in the system DBEFileSet. If this occurs, use the following commands to create a new DBEFile and add it to the SYSTEM DBEFileSet:

   ```
   SQLMIGRATE=> CREATE DBEFILE dbefileName WITH PAGES
     = dbefilesize, NAME='systemfilename';
   SQLMIGRATE=> ADD DBEFILE dbefilename TO DBEFILESET SYSTEM;
   ```

   Note that the syntax of the above commands is the same as in ISQL.

   Repeat this step until no errors are encountered and SQLMigrate returns the following message:

   ```
   The proposed migration should be successful
   ```

6. Issue the MIGRATE command as follows:

   ```
   SQLMIGRATE=> MIGRATE 'dbenvironmentname' FORWARD;
   ```

   When the forward migration has successfully completed, SQLMigrate purges the old log files and performs a START DBE NEWLOG to create a new log file using the parameters

stored in the DBECON file.

The following is a sample listing.

```
START DBE NEWLOG BEGINNING (MON, JUL 19, 1995, 4:12 PM)

START DBE 'DBENAME' NEWLOG
   BUFFER = (100,24),
   TRANSACTION = 2,
   MAXIMUM TIMEOUT = NONE,
   DEFAULT TIMEOUT = MAXIMUM,
   RUN BLOCK = 37

   LOG DBEFILE LOG1 WITH PAGES = 250,
      NAME = 'DBELOG1';

START DBE NEWLOG SUCCEEDED (MON, JUL 19, 1995, 4:13 PM)
```

7. Exit SQLMigrate:

   ```
   SQLMIGRATE=> EXIT;
   ```

8. If the START DBE NEWLOG (issued by SQLMigrate) should fail for any reason, you must run ISQL and issue the START DBE NEWLOG command from ISQL.

   Run ISQL and issue a START DBE NEWLOG command as follows:

   ```
   :RUN ISQL.PUB.SYS
   isql=> START DBE 'dbenvironmentname' NEWLOG
     [DUAL LOG] LOG DBEFILE dbelog1id [AND dbel2id]
     WITH PAGES = dbelogsize, NAME = 'systemfilename1'
       [AND 'systemfilename2'];
   ```

   This creates a new log file under the current SQL version. If you are using ARCHIVE MODE logging, issue the following commands:

   ```
   isql=> BEGIN ARCHIVE;
   isql=> COMMIT ARCHIVE;
   ```

   Exit ISQL:

   ```
   isql=> EXIT;
   ```

9. Run SQLUTIL and issue a SHOWDBE command to check the parameters of the new version of the DBEnvironment. To use archive mode logging, run SQLUTIL and use the STOREONLINE command. Issue the SHOWLOG command to verify that the ARCHIVE MODE is set properly.

10. Exit SQLUTIL.

    ```
    isql=> EXIT
    ```

    DBEnvironment is now ready for access.

Updating from Versions Prior to E.1

If your old release of ALLBASE/SQL is earlier than E.1, you must perform two updates:

1. Update to ALLBASE/SQL, release E.1 or F.0

2. Perform the ALLBASE/SQL migration update to release G.1 from E.1 or F.0.

Additional ALLBASE/SQL References

For additional information, please refer to the following ALLBASE/SQL reference materials.

- *Up and Running with ALLBASE/SQL*
- *ALLBASE/SQL Reference Manual*
- *ISQL Reference Manual for ALLBASE/SQL and IMAGE/SQL*
- *ALLBASE/SQL Database Administration Guide*
- *ALLBASE/SQL Message Manual*
- *ALLBASE/SQL Advanced Application Programming Guide*
- *ALLBASE/NET Users Guide*
- *ALLBASE/SQL Performance and Monitoring Guidelines*
- *ODBCLINK/SE Reference Manual*

Preparing OpenView Console/System Manager

The HP OpenView Console/System Manager (OVC/SysMgr) product uses a client/server design that includes software that resides on both the PC and HP3000. The software component on the HP3000 is MPE/iX version independent.

You will receive special patch updates when new OVC/SysMgr's HP 3000 software is released.

1. Please use standard patch procedures to update your OVC/SysMgr HP 3000 management node.
2. After this is done, use the remote software installation scripts on your OVC/SysMgr PC to upgrade your HP 3000 managed nodes.

The OpenView Console product provides a subset of the full System Manager's solution. It only manages a single HP 3000 machine, so the managed node is also the management node.

The System Manager product manages multiple HP 3000s on the network and powerful WRQ Reflection scripts allow you to update all the remote nodes automatically.

If you are using OpenView Console to manage a single MPE/iX machine:

1. Log on to the OVC PC.
2. Double-click the program icon.
3. In the HP OpenView group, double-click the Console Setup script icon.
4. Follow the instruction and answer the prompts that display.

   For questions regarding the prompts or OpenView Console refer to *HP OpenView Console Manager's Guide*.
5. On each managed node (PC), use the `VERCHECK.EMS.SYSMGR` program to verify that the managed node software version is A.01.03.

   ```
   :VERCHECK.EMS.SYSMGR
   ```
6. On the management node, use the `VERCHECK.PUB.SYSMGR` program to verify that the management node software version is A.01.03.

   ```
   :VERCHECK.PUB.SYSMGR
   ```

If you are using OpenView System Manager:

1. Log on to the SysMgr PC.
2. Double-click the program icon.
3. In the HP OpenView group, double-click the MgdNode Setup script icon.
4. Follow the instruction and answer the prompts that display.

   For questions regarding the prompts or OpenView Console refer to *HP OpenView System Manager Manager's Guide*.
5. On each managed node (PC), use the `VERCHECK.EMS.SYSMGR` program to verify that the

managed node software version is A.01.03.

```
:VERCHECK.EMS.SYSMGR
```

6. On the management node, use the VERCHECK.PUB.SYSMGR program to verify that the management node software version is A.01.03.

```
:VERCHECK.PUB.SYSMGR
```

Installing SNA IMF/iX

Follow the steps below using the TTSINST command file to complete the installation of SNA IMF/iX (HP30293). You can also access the online instructions by typing TTSINST.PUB.SYS at the colon prompt without specifying any parameters.

To install the English language option for the United States and European sites:

1. Type the following commands:

```
:HELLO MANAGER.SYS;HIPRI
:TTSINST 000
```

2. Confirm that you want to complete the installation:

```
SNA IMF> Begin installing the English option (Y/N)? Y
SNA IMF> The English language option is now installed.
```

To install the Asian Language Option:

1. Type the following commands:

```
:HELLO MANAGER.SYS;HIPRI
:TTSINST
```

2. Read the instructions that appear on your screen, then enter the following:

```
:TTSINST 221
```

   221 is the language option parameter

3. Confirm that you want to complete the installation:

```
SNA IMF> Begin installing the Japanese option (Y/N)? Y
SNA IMF> The Japanese language option is now installed.
```

Configuring HP Predictive Support

NOTE The job JPSMON.PRED.SYS needs to be running or Predictive Support will not perform its daily scheduled run to monitor your system.

The directions in this section only describes how to update an existing version of HP Predictive Support.

To configure HP Predictive Support for the first time, please contact your Hewlett-Packard Customer Engineer who will do the initial configuration and provide the *HP Predictive Support User's Guide* and the *HP Predictive Support User's Guide Addendum*.

To update HP Predictive Support:

After updating your system, you must start the HP Predictive Support run to ensure a complete update.

1. Log on as MANAGER of the SYS account.

   ```
   :HELLO MANAGER.SYS;HIPRI
   ```

2. Run HP Predictive Support's user interface (PSCONFIG).

   ```
   :RUN PSCONFIG.PRED;INFO= "RUN"
   ```

3. Review the Action Summary Report that may be generated by the run for any actions you must take.

   You may need to run PSCONFIG and enter coverage information for newly supported or additional devices. This run of HP Predictive Support automatically includes data transfer to the Response Center, as required.

For detailed information on configuring HP Predictive Support, see the *HP Predictive Support User's Guide*. For information on HP Predictive Support enhancements for MPE/iX 5.0, see the *HP Predictive Support User's Guide Addendum*.

Java/iX Installation Instructions

To install Java/iX after the update or install of MPE/iX 6.0:

1. Remove any passwords from MANAGER.SYS.
2. Read README.INSTALL.JAVA for any last-minute changes or additions to the installation process, and for general usage instructions.
3. Stream the installation job:

   ```
   :STREAM JINSTJDK.INSTALL.JAVA
   ```

   When the job completes, a console message will indicate successful completion; for example:

   ```
   Java Developer's Kit Version 1.1.5 Installed
   ```

   If the installation job logs off without displaying this message, examine the $STDLIST output of the job for any problems.
4. Set passwords on MANAGER.SYS.
5. Verify that installation was successful:

   ```
   :HELLO MGR.JAVA,DEMO
   :java HelloWorld
   ```

NOTE When running Java from the MPE Command Interpreter, the JAVA command can be in upper, lower, or mixed case; but the class names (in this case, HelloWorld) must exactly match the case of the actual class files. In the example above, HelloWorld must be capitalized exactly as shown.

When running Java from the POSIX shell, the java command must be entered in all lower case.

A detailed tutorial on Java/iX including installation, usage from the CI, and usage from the POSIX shell, is available online at this web site:

`http://jazz.external.hp.com/src/java/tutorial.html`

You can check the version of Java/iX on your system by typing:

```
:JAVA -VERSION
```

Check the version of Java/iX on this release by referring to the *Read Before Installing* that came with your installation media.

Configuring File Transfer Protocol (FTP)

To configure FTP so it is enabled after the update or install of MPE/iX 6.5:

1. Remove any passwords from MANAGER.SYS.
2. Stream FTPCNFJ.ARPA.SYS.

   ```
   :STREAM FTPCNFJ.ARPA.SYS.
   ```

   This will add FTP entries to the appropriate Internet Super Daemon files.

   For more information on the specifics of these entries, refer to the *Installing and Managing HP ARPA File Transfer Protocol Network Manager's Guide*, in the chapter "Starting FTP".
3. Reset any passwords on MANAGER.SYS that Step 1 removed.

ODBCLink Installation

Traditionally, ODBCLink/SE was included in patches for ALLBASE/SQL and IMAGE/SQL products. The product structure has been changed in MPE/iX 6.0 Express 1, so that ODBCLink/SE is delivered as a separate patch, resulting in more flexibility in upgrading the product.

When the ODBCLink/SE patch is applied, the following files are placed in `ODBCSE.SYS`:

`HFSFILES.ODBCSE.SYS`

`I00IODBC.ODBCSE.SYS`

`HPREADME.ODBCSE.SYS`

Stream `I00IODBC.ODBCSE.SYS` to install the new version of the product. The existing version of ODBCLink/SE will not be upgraded until this job is streamed. `I00IODBC.ODBCSE.SYS` purges files belonging to the existing version of the product from `ODBCSE.SYS` and installs new files. You may need to upgrade ODBCLink/SE drivers on your client PCs to work with the new version of the server. For information on how to upgrade your client PCs, see chapter 3 of *ODBCLINK/SE Reference Manual*.

Installing Non-HP (Third Party) Software

Consult the appropriate manuals for installation procedures for non-HP software products.

Problems can occur if you install third-party products on your system and rename system files to run the software. Do not use the `SYSFILE> RSPROG` command in the `SYSGEN` utility to rename HP-supplied MPE/iX system files. A renamed system file can corrupt your system during an update.

Use the `SHOW` command in `SYSFILE` to ensure that all HP-supplied MPE/iX system files retain their original names. In the `SHOW` command output, system file names in both columns should be identical. If they do not match, rename the files in the second column to the file names in the first column or use file equations to do so.

B Configuration Tables

Table B-1., “Configname,” on page 203 and Table B-2. on page 204 show the configuration names available for the models of the HP 3000 series. All the groups shown in Table B-2., “Configname,” on page 204 are in the SYS account.

Table B-1. Configname

System	SCSI Group
Model 920	--
Model 922 with 1 HP-IB	--
Model 922 with 2 HP-IB	--
Model 925/925LX without CIO Expander	--
Model 925 with Expander	--
Model 930	--
Model 932	--
Model 935	--
Model 948	--
Model 949	--
Model 950	CONFSCS0
Model 955	CONFSCS0
Model 958	--
Model 960	CONFSCS0
Model 980	CONFSCS0
Model 990	CONFG990
Model 991	CONFG991
Model 992	CONFG992
Model 995	CONFG995
Model 996	CONFG995
Model 997	CONFG997
Model 9x7LX or RX	CONF9x7*n*

Table B-1. Configname

System	SCSI Group
Model 9x8LX or RX	CONFG9x8
Model 9x9KS	CONFG9x9
Model 9x9KS with HP-PB I/O bus converter A3699A	CONFK9x9

All HP 3000 Model 9x8LX and 9x8RX systems use only one configuration.

For an HP 3000 Model 9x7LX or RX system, choose a configuration depending on the number of disks on your system. Table B-2. lists each configuration name and the number of disks.

Table B-2. Configname

Configname	Hardware
CONF9X71	One disk
CONF9X72	Two disks
CONF9X73	Three disks
CONF9X74	Four disks
CONF9X75	Three disks and two DDS devices
CONFF9X7	4 FW-SCSI disks
CONFGHPn	Reserved for HP use

Table B-3. contains configuration recommendations with NS 3000/iX and DTS.

Table B-3. Physical Path Values

System	DTSLINK\Phys. Path	SYSLINK\Phys. Path
Model 920[a]	4.3 4.3	4.3 4.3
Model 922 LX/RX/922	4.3 4.3	4.3 4.3
Model 925LX/925	4.3 4.2	4.4 4.3
EXPANDED Model 925	4.3 4.2	8.2 8.2
Model 930	8.2	16.2
Model 932	4.3 4.3	4.3 4.3
Model 935	4.3 4.2	4.4 4.3
EXPANDED Model 935	4.3 4.2	36.2 36.2
Model 948	4.1 4.1	4.1 4.1

Table B-3. Physical Path Values

System	DTSLINK\Phys. Path	SYSLINK\Phys. Path
Model 949	4.3 4.2	4.4 4.3
Model 950	2/4.2 2/4.2	6/4.2 6/4.2
Model 955	2/4.2 2/4.2	6/4.2 6/4.2
Model 958	4.1 4.1	4.1 4.1
Model 960	2/4.2 2/4.2	6/4.2 6/4.2
Model 980/100	2/4.2 2/4.2	6/4.2 6/4.2
Model 980/200	2/4.2 2/4.2	6/4.2 6/4.2
Model 990	0/44 0/44	0/44 0/44
Model 991	0/44 0/44	0/44 0/44
Model 992/100	0/44 0/44	0/44 0/44
Model 992/200	0/44 0/44	0/44 0/44
Model 992/300	0/44 0/44	0/44 0/44
Model 992/400	0/44 0/44	0/44 0/44
Model 995	0/44 0/44	0/44 0/44
Model 997	0/28/44 0/28/44	0/28/44 0/28/44
Model 9x7LX or 9x7RX	56	56
Model 9x8LX or 9x8RX	56/56	56/56
Model 9x9KS	10/4/0	10/4/0

a. Since `DTSLINK` and `SYSLINK` use the same card and slot, the link name is the same.

C Managing Disk Space

This chapter includes the following information:

- Determining Available Disk Space
- Recovery from “Out of Disk Space” during Update
- Using the ShowUSAGE Command
- Using the ALTERVOL Command
- Using Alternative Disk Space Allocation

If you are on release 5.0 or later and do not have sufficient contiguous disk space on LDEV 1, follow the instructions in this Appendix. If you are on a release earlier than 5.0, first upgrade to release 5.0 or 5.5 using the instructions in the appropriate manual for that release to check disk space.

Determining Available Disk Space

If you do not have enough disk space, determine how much disk space you do have available before you proceed with clearing more space.

1. Determine available contiguous disk space on your system.

   ```
   :run discfree.pub.sys;info="B,ldev,volume_set_name"
   ```

   Use option C to see each drive separately.

   where:

   ldev is the device number assigned to LDEV 1.

   volume_set_name is the name assigned to the MPE system volume set.

   ```
   :DISCFREE B

   DISCFREE A.50.01 Copyright (C) Hewlett-Packard 1992.
   All rights reserved.
   FRI, APR 21, 1995, 3:55 AM
   ------------------------------------------------------------
   TOTALS (IN SECTORS):

           DEVICE SIZE : 10479136
           TRANS SPACE :  30336            PERM SPACE : 7788944
        MAX TRANS SPACE : 9169232       MAX PERM SPACE : 9169232

             FREE SPACE : 2359856
   AVAIL TO TRANS SPACE : 2359856  AVAIL TO PERM SPACE : 1210624
   ```

   Verify that the amount following `avail to perm space` is greater than or at least equal to the `axldev1` value.

2. Make additional space on the system by storing files to tape using the PURGE option to purge the stored files from the system.

   Some files are scheduled to be stored and purged as part of the preparation process. These files include USL, UNL, UXL, spool files, and log files. Estimate the size of these files and determine if you will have enough disk space after they are purged.

Recovery from “Out of Disk Space” during Update

It is now possible to recover from “Out of Disk Space” during an Update. UPDATE will skip any file if it cannot be added to LDEV 1.

You will see error and status messages on the console at the point the file is skipped and at the end of UPDATE. At the end of the UPDATE, when the system normally boots, the system will stop. The operator must boot the machine manually. Messages will stay on the console including a form of the following message.

```
ERROR.

This UPDATE did not restore all files from the tape.(UPDERR
1001)
There were    # files not restored because of out of disk space.
There were      # files not restored for other than disk space
reasons.

There is more information about the error conditions in previous
messages.
START the system, create more free disk space and run this
UPDATE again.
Correct the problems and run this UPDATE again.
Correct the problems, START the system, create more free disk
space and run this UPDATE again.
END of LOAD(update).
```

What You Should Do

Follow these steps to correct the problem:

1. Determine the reason the files were skipped.
2. Start the system.
3. Correct the problem.
4. Shut the system down.
5. Do the UPDATE again.

Files Skipped because Out of Disk Space

If there were files skipped because of an “Out of Disk Space” error, look at the messages on the console to determine which files were skipped.

1. Confirm that these three files have been restored to disk:

   ```
   ISL.MPEXL.SYS, MMSAVE.MPEXL.SYS, START.MPEXL.SYS
   ```

2. Boot the system.
3. Free some disk space on LDEV 1.
4. Shut the system down.

5. Redo the UPDATE from the same tape.

(The files ISL.MPEXL.SYS and MMSAVE.MPEXL.SYS are small so there should not be a problem restoring them. The file START.MPEXL.SYS is large, but under reasonable conditions instead of just skipping it, the file DUMPAREA.MPEXL.SYS is purged by UPDATE to make room for START.MPEXL.SYS. If DUMPAREA.MPEXL.SYS is purged, it will be replaced by UPDATE when enough disk space is available.)

Files Skipped Because of Other Reasons

If files were skipped for other than disk space reasons, determine the cause. There will be error and status messages on the console. When a call to HPFOPEN returns an error status, that status is always displayed on the console. This is the key to the cause of the problem. Whatever the problem, it must be corrected.

1. Correct the problems that have been found.
2. If there are still problems to correct, start the system and correct them.
3. If you started the system, shut the system down.
4. UPDATE again from the same tape.

Missing Messages

If error messages have scrolled off the screen and you need the information, try the UPDATE again. The same conditions should exist and the same messages should be generated.

If This Does Not Work

If the steps above do not resolve the problem, contact your support representative. Trained Hewlett-Packard Response Center engineers can recover some systems.

When to Continue

If you have experienced problems during an Update, you can continue when the following conditions are met:

1. UPDATE has completed successfully.
2. All files from the SLT have been restored to disk.
3. The system is up and running.
4. There is some free space on LDEV 1.

Using the SHOWUSAGE Command

After you have updated your system to Release 5.0 or later, you should no longer use the CONTIGXL utility to locate contiguous disk space on LDEV 1. Instead use the SHOWUSAGE command in the VOLUTIL utility. SHOWUSAGE provides the same information as CONTIGXL.

To locate contiguous disk space using VOLUTIL:

1. Return to the ISL prompt. Enter the following to start the system from the disk:

   ```
   ISL> START NORECOVERY
   ```

2. When the system is up, log on as MANAGER.SYS:

   ```
   :HELLO MANAGER.SYS
   ```

3. Run the VOLUTIL utility to gain access to the SHOWUSAGE command:

   ```
   :VOLUTIL
   ```

4. Enter the following SHOWUSAGE command to identify files with extents on LDEV 1:

   ```
   VOLUTIL> SHOWUSAGE 1 60000 NONRESTRICT SUMMARY;PERM;FREE
   ```

   This command displays the groups of files that can be removed from LDEV1 and the total amount of contiguous disk space you can reserve by removing those files.

   In the command, the 1 indicates the logical device on which the volume to be examined is mounted. The value 60000 is the amount of contiguous disk space that is needed (in sectors). You can use the estimated amount or run CHECKSLT to determine how much contiguous disk space is required to update your system. Refer to “Estimating Disk Space” in Chapter 3 , “Planning for Your Task.”

   The NONRESTRICT option displays only those files that are not restricted to this volume. The SUMMARY option displays that are associated with permanent space.

NOTE SHOWUSAGE may list more than one group of files that can be purged. Select one group in the list and store then purge that group to locate the required number of sectors.

5. Exit VOLUTIL:

   ```
   VOLUTIL> EXIT
   ```

6. Store and purge the selected group of files:

   ```
   :FILE T;DEV=TAPE
   :STORE file.group.account,file1.group.account;*T;PURGE;SHOW
   ```

NOTE If you used SHOWUSAGE and still have trouble creating this disk space, contact your support representative.

7. When you have the required amount of contiguous disk space, build an empty file in PUB.SYS to reserve the space:

```
:BUILD AXLDEV1.PUB.SYS;DISC=n,1,1;DEV=1
```

Where *n* is the amount of contiguous disk space required on your system.

8. Refer to "Determining Available Disk Space" earlier in this Appendix to determine if you have enough disk space to continue with your task.

   If you do have enough disk space, return to the procedure you were working on and continue with the instructions.

   If you do not have enough disk space, proceed to "Using the ALTERVOL Command."

Using the ALTERVOL Command

Use ALTERVOL to clear additional disk space for use during the modification (patch, add-on, update, or install) process. The ALTERVOL command sets the percentage of allowable use for each disk.

CAUTION If you use the ALTERVOL command to increase the allowable percentage of use for LDEV 1, you **MUST** return the disk usage percentage back to its original settings after you perform the system modification. If you do not do this, you will not be able to reserve contiguous disk space in the future.

1. Log on to MANAGER.SYS.

   ```
   :HELLO MANAGER.SYS
   ```

2. Start VOLUTIL.

   ```
   :VOLUTIL
   ```

3. Show how much of the disk is currently in use. The following is a sample command and return output.

   ```
   VOLUTIL>SHOWVOL MPEXL_SYSTEM_VOLUME_SET:MEMBER1 VOLINFO

   Volume set index: 1
   Maximum permanent space: 75% (3970608 sectors).
   Maximum transient space: 75% (3970608 sectors).
   ```

   Record the values listed in your output. You will need these values later to reset the disk usage percentage.

4. Set the usage percentage to maximum for LDEV 1, 90%.

   ```
   VOLUTIL>ALTERVOL mpexl_SYSTEM_VOLUME_SET: MEMBER1 90 10
   ```

5. Confirm the change with the system response.

   ```
   Verify: Set maximum PERMANENT to 90% and maximum TRANSIENT to
   10%? [Y/N] _
   ```

6. Check the percentage usage again.

   ```
   VOLUTIL>SHOWVOL mpexl_SYSTEM_VOLUME_SET:MEMBER1 VOLINFO
   ```

   A typical system response is:

   ```
   Volume set index: 1
   Maximum permanent space: 90% (4764730 sectors).
   Maximum transient space: 10% (529414 sectors).
   ```

7. Return to the procedure you were working on and continue with the instructions.

8. After completing the system modification, reset the disk space usage percentage back to the levels found in Step 3. Repeat the steps in this section using the original percentages.

CAUTION You **MUST** reset the ALTERVOL values after you complete your system modification.

9. Refer to "Determining Available Disk Space" earlier in this appendix to determine is you have enough disk space to continue with your task.

   If you have enough disk space, return to the procedure you were working on and continue with the instructions.

   If you do not have enough disk space, proceed to "Using Alternative Disk Space Allocation."

Using Alternative Disk Space Allocation

Before starting UPDATE, reserve contiguous disk space in the file AXLDEV1.PUB.SYS. This amount is at least 60,000 sectors but may be larger. The prudent way to reserve this space is in one contiguous block. Reserving this space in more than one block introduces a risk that Secondary Storage Manager (SSM) will allocate space for files on LDEV 1 in a way that causes an "Out of contiguous disk space" condition during UPDATE. Always try to reserve this contiguous disk space for UPDATE in one block.

However, if you cannot reserve all the disk space in one file on LDEV 1, the additional disk space required beyond 60,000 sectors can be reserved in large contiguous sectors. The minimum size of any contiguous sector piece must be 30,000 sectors.

NOTE Consult your HP Representative or the Response Center before you use this method to allocate disk space. Your operating system is at risk of LDEV1 overflow while running. Performance will be impacted. The operating system requires room to work. If it does not have enough, the resource manager will start to shut your system down.

To reserve disk space sectors in sections:

1. For each section of 60,000 to 30,000 sectors:

   ```
   :build axldev1 disk = 60000
   :build axldev2 disk = 30000
   :build axldevn disk = 30000
   . . .
   ```

   The minimum number of sectors for at least one section is 60,000. All other sections must be at least 30,000 sectors each.

2. Purge each axldev file you created. For example:

   ```
   :purge axldev1
   :purge axldev2
   :purge axldev3
   ```

3. During the UPDATE, you will receive a disk space error message. Select OVERRIDE at the disk space warning to continue with the process.

   ```
   WARNING: UPDATE tried to find 60,000 sectors of contiguous disk
   space on LDEV1 for its work, but it could only find nnnnnnn
   sectors. Before continuing, refer to the Installation Manual for
   instructions on collecting enough contiguous space on LDEV1 for
   the update. If you still have questions after attempting the
   procedures outlined in the manual, call your HP support
   representative for help.

   You may override this warning and continue with the update, but
   HEWLETT-PACKARD STRONGLY DISCOURAGES THIS COURSE OF ACTION.

   DO NOT override this warning unless you have a full backup
   ```

```
available and the time to REINSTALL your system. If UPDATE runs
out of space on LDEV1, you risk having to REINSTALL.

Override this warning message [OVERRIDE/NO; default = NO]?
```

4. Return to the procedure you were working on and continue with the instructions.

D Backdating Your System

This appendix contains instructions for returning your system software to a previous release (backdating).This chapter describes general backdating methods that will work in most cases.

CAUTION Perform a backdate when you have updated your operating system version and have **serious** problems. Only do this under direction from your HP representative or Response Center.

Do not use the directions in this appendix to backout patches.

- If you applied patches using staging areas, refer to Appendix G , “HP Stage/iX Reference,” for directions on backing out of a staging area.
- If you applied patches separately from a system software update, refer to the HP Response Center, if you have a software support contract, or your HP representative for directions on backing out patches.
- If you applied patches as part of a system software update, follow the procedures in this appendix. The patches will be removed as part of the backdating process.

This appendix is divided into the following sections:

- Planning Your Backdate
- Securing Your System
- Performing the Backdate
  - — Method 1: Using a CSLT (Customized System Load Tape)
  - — Method 2: Using a Factory SLT (System Load Tape)
  - — Method 3: Using an FPT (Factory Preload Tape)
- Finishing Up

Planning Your Backdate

Planning can and should be done prior to performing your backdate. The backdate requires downtime and planning it ensures that all the requirements are met. The sections include:

- Determine Your Backdate Method
- Verify Your Requirements
- Compatibility Issues
- Patch Considerations
- Check Patch Tape Media
- Validate Your System Backup (Method 1)
- Check for Disk Space

Determine Your Backdate Method

There are essentially three methods for backdating your system software version level. The methods are as follows:

- Method 1: Using a Customized System Load Tape. See CSLT;CSLT:backdating>Customized System Load Tape (CSLT) together with the Fundamental Operating System (FOS) and Purchasable Products (SUBSYS) tapes from the earlier release.

  The CSLT you use to backdate your system could have been created under many different circumstance. For example:

  — During a system update (with no patches)

  — While installing patches from a PowerPatch tape

  — While updating and installing patches from a PowerPatch tape
- Method 2: Using Factory System Load Tape (SLT) and Fundamental Operating System (FOS) and Purchasable Products (SUBSYS) tapes from the earlier release.
- Method 3: Using a Factory Preload Tape (FPT). If your system was preinstalled at the factory, you must backdate using the FPT.

The system software version level options are:

- Backdate from 6.5 to 6.0
- Backdate from 6.5 to 5.5

NOTE Backdating from 6.5 to a release before 5.5 (General Release) is not supported.

To determine which method is optimal for your system and your situation, call the

Response Center, if you have a software support contract, or your HP representative, before deciding to backdate your system.

If your Hewlett-Packard representative and you both agree that backdating your operating system is necessary, follow the steps below. Please read all the instructions in this chapter before you begin your backdate. Determine what prior IO devices you will back date to.

Verify Your Requirements

To verify your requirements for backdating:

- Review and confirm the process you are going to perform with the HP Response Center or your representative.
- Table D-1. has a list of materials required for each of the possible backdating methods.

Table D-1. List of required materials

Requirement	Method 1	Method 2	Method 3
CSLT (for the release to which you want to backdate) from the system you want to backdate.	Required		
HP-provided factory SLT (for the release to which you want to backdate).		Required	
HP-provided factory preload tape (FPT) that came with the system.			Required
Fundamental Operating Software (FOS) tape from the release to which you want to backdate.	Required	Required	
SUBSYS tape from the release to which you want to backdate, if you installed or updated any optional products with that release.	Required	Required	Required
A STORE tape with HPSWINFO.PUB.SYS, NMCONFIG.PUB.SYS, and NMINIT.PUB.SYS from the release to which you want to backdate.	Required	Required	Required
A STORE tape with @.CONFIG.SYS from the release to which you want to backdate. If this is not available, run SYSGEN and customized the factory supplied configuration file for your system.	Recommended		Recommended
Current full system backup tapes.	Required	Required	Required
Patch tapes (to reapply patches) if you had installed patches onto the earlier release of the system.		Required	Required

Compatibility Issues

While backdating, you may encounter compatibility issues that arise from backdating

certain purchasable products. Before you proceed, we recommend that you read:

- The *Communicator 3000* for the release you are backdating to, as well as the copy you received with your new release. These documents provide additional information on backdating specific products.
- Check that any new disk drive in the configuration is supported on the release you are backdating to.

Patch Considerations

If you have applied patches to your level 6.0 or 5.5 system software, read the section appropriate to the backdating method you are using. The sections are:

- Method 1: Using a CSLT
- Method 2: Using a Factory SLT
- Method 3: Using an FPT

Method 1: Using a CSLT

The CSLT you use to backdate your system could have been created under many different circumstances. For example:

- During a system update (with no patches)
- While installing patches from a PowerPatch tape
- While updating and installing patches from a PowerPatch tape

---

NOTE If you installed patches using a PowerPatch tape, you must use the CSLT generated during the process.

If you installed patches from a PowerPatch tape on your system, you need to restore the STORE files that are appended to the CSLT created during the installation of the most recent PowerPatch tape. Refer to “Restore FOS and SUBSYS” for directions on restoring the `STORE` portion of the CSLT.

If you applied other patches to your system (such as reactive patches), you need to reapply them at the end of the process.

If you are not sure what patches have been applied to your system, be sure to call the Response Center or HP Representative before backdating your system.

Method 2: Using a Factory SLT

If any patches were applied to your 6.0 or 5.5 system, they must be reapplied from the PowerPatch tape(s) after the backdate. Follow the appropriate manual for the release you are backdating to.

To determine the patches that were applied to your system, restore the `HPSWINFO` file from a backup of the release you are backdating to.

Method 3: Using an FPT

If any patches were applied to your 6.0 or 5.5 system, they must be reapplied from the PowerPatch tape(s) after the backdate. Follow the appropriate manual for the release you are backdating to.

Check Patch Tape Media

To verify the patch tape source media and contents:

1. Log on from the console with the following conditions.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :OPENQ LP
   :STREAMS streams_device
   ```

   An LP device must be configured in SYSGEN. A common *streams_device* value is 10.

   Already spooled and streamed messages might display.

2. Collect the tape media you will be using as source material to modify the system software. This includes the PowerPatch and Reactive Patch tapes.

3. If you have a PowerPatch tape, check it to ensure the tape is not damaged.

   If you do not have a PowerPatch tape, proceed to Step 4.

   a. Mount PowerPatch tape.

      ```
      :FILE TAPE;DEV=TAPE
      :VSTORE *TAPE;@.INSTALL.SYS;SHOW
      ```

   b. Reply to the tape request.

      vstore displays a listing of verified files. These files are **not** being restored to disk.

4. If you have a Reactive patch tape, check it to ensure that it is not damaged.

   If you do not have a Reactive patch tape, proceed to Step 5.

   a. Mount Reactive tape.

      ```
      :FILE TAPE;DEV=TAPE
      :VSTORE *TAPE;@.@.@;SHOW
      ```

   b. Reply to the tape request.

      vstore displays a listing of verified files. These files are **not** being restored to disk.

5. If any files are not verified or if you receive any errors or warnings, ensure your tape drive is clean and repeat the procedure to be sure it is a media problem and not a dirty tape drive.

   Run the cleaning cartridge through your DDS drive at least three times to ensure that the drive is thoroughly cleaned.

   If your media is bad, contact your local HP Support Representative.

Validate Your System Backup (Method 1)

If you are using a CSLT (Method 1) to backdate your system, perform the steps in this section.

If you are using a Factory SLT (Method 2) or a Factory Preload Tape (Method 3), proceed to "Check for Disk Space."

Before you begin the process of backdating, log on and verify that your backup tape is valid.

1. From the console, log on with the following conditions.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :SPOOLER LP;OPENQ
   :STREAMS streams_device
   ```

   where *streams_device* is the device number. A common *streams_device* value is 10.

   An LP device must be configured in SYSGEN. Already spooled and streamed messages might display.

2. Validate the backup created before you started the update process that you are now backdating from. You need the valid backup to restore the NMCONFIG file.

   Use the VSTORE command to make sure that the full backup is readable.

   ```
   :FILE TAPE;DEV=tape_device
   :VSTORE *TAPE;@.@.@;SHOW=OFFLINE;DIRECTORY
   ```

   If your backup is not valid, you must use Method 2 or Method 3.

Check for Disk Space

Ensure you have sufficient disk space to backdate your system.

Refer to "Estimating Disk Space" in Chapter 3 , "Planning for Your Task," and Appendix C , "Managing Disk Space," for additional information about these steps.

1. Reserve contiguous and non-contiguous disk space.

   ```
   :BUILD AXLDEV1;DISC=n,1,1;DEV=1
   :BUILD AXLSPACE;DISC=m,32,32
   ```

   where:

n	AXLDEV1 number, determined in Chapter 3 , "Planning for Your Task," or use the default of 120,000 sectors.
m	AXLSPACE number, use the maximum value 1,084,000 (for 6.0 or 5.5 versions)

   If a colon (:) prompt is returned. The files were built and you have enough disk space.

   If you receive a message: Out of disk space, you need to make more space.

2. Purge the AXLSPACE file. The AXLDEV1 file is automatically purged by the UPDATE tool.

   ```
   :PURGE AXLSPACE
   ```

3. If you do not have enough disk space, either contiguous (AXLDEV) or non-contiguous (AXLSPACE):
   - Store files to tape. Purge the stored files from the system.
   - Purge the files and groups as directed in Steps 8 through 10 of the next section, “Securing Your System.”
   - Refer to Appendix C , “Managing Disk Space,” for directions on clearing space.

Securing Your System

Securing your system prepares it and your users for a shutdown. Refer to "Securing the System for Tape Tasks" in Chapter 5 , "Modifying Your System," for additional information about these steps.

1. If you are not already in the PUB group, change groups now.

   ```
   :CHGROUP PUB
   ```

2. Lower limits.

   ```
   :LIMIT 0,0
   :WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
   ```

3. Log users off.

   Wait approximately five minutes, make sure users have saved their work and logged off, then abort jobs or sessions still executing. Use the SHOWJOB command to determine session and job numbers of work that is still in progress. Then, for each job and session still executing, type:

   ```
   :ABORTJOB #Jnn
   :ABORTJOB #Snnn
   ```

   where:

J*nn*	the ID number for each job to be aborted.
S*nnn*	the ID number for each session to be aborted.

4. Deactivate NS 3000/iX, if applicable.

   ```
   :NSCONTROL STOP
   :NSCONTROL ABORT
   :NETCONTROL STOP
   ```

5. Terminate logging processes.

   a. Enter the following command to determine if user logging processes are running:

      ```
      :SHOWLOGSTATUS
      ```

      If logging processes are running on your system, a message similar to the following will be displayed:

      ```
      LOGID    CHANGE AUTO USERS STATE CUR REC MAX REC % USED CUR FSET
      SHPLOGID  YES    YES  1    ACTIVE  120   10016    1%     1
      ORBLOGID  YES    YES  9    ACTIVE  3812  10016   38%     1
      ```

      If no logging processes are running, skip to Step 6.

   b. Terminate logging processes as shown below.

      ```
      :LOG logid,STOP
      ```

      where *logid* is the ID number for each logging process to stop.

   c. Record the names of the logging processes, if you want to restart them later.

6. Prepare your manually installed products.

a. If you have ALLBASE/SQL, issue starts for each DBEnvironment that you want to migrate before you back up the system. Refer to the *ALLBASE/SQL Database Administration Guide* for more information.

b. If you have ALLBASE/4GL, unload all existing ALLBASE/4GL applications, if you have them on your system. Refer to the *HP ALLBASE/4GL Developer Administration Manual* for more information.

c. If you purchased and received AutoRestart/iX, install AutoRestart/iX before you run AUTOINST. Refer to the *AutoRestart/iX Reference Manual* for installation instructions.

7. For each lockworded system file, remove the lockwords.

```
:LISTFILE filename,  -3
:RENAME filename/lockword,filename
```

8. Purge spool files.

```
:SPOOLF @;DELETE
```

9. Purge staging groups, if they exist.

```
:PURGEGROUP UNL
:PURGEGROUP USL
:PURGEGROUP UXL
```

Verify each purge, type Y, at the prompt.

Do not purge the group install.sys or the file supacct.pub.sys, they are needed for future patch and add-on processes.

10. Purge specified files and groups.

a. Purge the PSIDNLD.DIAG.SYS file.

```
:PURGE PSIDNLD.DIAG.SYS
```

This file may have been purged already.

b. Purge each OS*xnn* and XPT*nnnn* group in the telesup account.

```
:report @.telesup
:PURGEGROUP OSxnn.TELESUP
:PURGEGROUP XPTnnnn.TELESUP
```

where:

x	an alphabetic character
nn	the numeric release number (for example, OSA10.TELESUP and OSB23.TELESUP).

These groups may not exist.

11. Rename the COMMAND.PUB.SYS file.

```
:RENAME COMMAND.PUB.SYS,command_name
```

Where *command_name* is a temporary name you are assigning the file. This preserves your UDC information for later use. Record the temporary name.

Performing the Backdate

In this section you backdate your system. The procedures vary depending upon the backdate method you are using. Refer to the appropriate section.

- Method 1: Using a CSLT
- Method 2: Using a Factory SLT
- Method 3: Using an FPT

Method 1: Using a CSLT

To backdate using a CSLT perform the steps in the following sections:

- Apply the CSLT
- Restore Account Information
- Restore FOS and SUBSYS

Apply the CSLT

Refer to “Applying the Modification” in Chapter 5 , “Modifying Your System,” for additional information about these steps.

1. From the console, mount the CSLT created during the last full backup of the release to which you want to backdate.

   Put the tape drive online.

   Wait until the tape is mounted. A message displays on the system console verifying that the tape mounted.

2. Shut down the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

3. Reset the system.

   As appropriate to your system, do either Step a or Step b:

   a. For HP 3000 Series 991, 995, 996 or 997:

      ```
      CTRL-B
      CM>SP
      SP>RS
      ```

      Enter **Y** to HARD BOOT the computer system.

   b. For all other systems:

      ```
      CTRL-B
      CM>RS
      ```

      If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

Enter **Y** to confirm restarting the system.

c. Boot the system from the alternate boot path, where the CSLT is mounted.

   a. Boot messages can vary, depending on the system model.

   b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

      The system boots from the alternate source (tape). After some tape activity, the ISL prompt displays.

d. Update with your backup CSLT.

```
ISL>UPDATE CONFIG
```

   If you are backdating with a CSLT, `UPDATE CONFIG` brings in the boot and system files from your previous release, as well as your previous configuration files.

e. Monitor progress messages.

   While the `UPDATE` process is taking place, it is important that you monitor the process at the console. Note any errors that may be reported to the screen for future action.

   If you modified your configuration after updating to Release 5.5, you may need to check the configuration when the backdated system is up and running normally. These changes may include I/O changes and other changes made to logging events or miscellaneous configuration changes.

   If configuration files reside in groups other than the `CONFIG` group, the system will not have the proper configuration when booted after updating from the CSLT. If your configuration files are in a group other than `CONFIG`, you must restore them now and reboot the system.

   Updating with your CSLT ensures that any patches that had been applied (from a PowerPatch tape) which changed `NL.PUB.SYS`, `XL.PUB.SYS`, or `SL. PUB.SYS` will still be in effect. Also, any additions made to these libraries as a result of SUBSYS products having been installed will be there as well. Contact the Response Center or your HP representative for information about applying patches to a backdated system.

f. Confirm the date and time.

g. Boot the system from the primary boot path.

   a. Boot messages can vary, depending on the system model.

   b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

      The system boots from disk. After some activity the ISL prompt displays.

4. Start the system.

```
ISL>START NORECOVERY NOSYSSTART
```

5. Confirm the date and time.

6. Dismount the CSLT.

7. Log on, start the spooler, and streams device.

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
:LIMIT 1,1
:SPOOLER LP;OPENQ
:STREAMS streams_device
```

where *streams_device* is the device number. A common *streams_device* value is 10.

An LP device must be configured in SYSGEN. Already spooled and streamed messages might display.

Restore FOS and SUBSYS

Refer to "Creating the CSLT Using AUTOINST" in Chapter 5 , "Modifying Your System," for additional information about these steps.

1. Run AUTOINST.

   ```
   :RUN AUTOINST.Install.SYS
   ```

2. Select option 4 FOS, SUBSYS and reply to the tape request.

   ```
   Please choose and enter the number corresponding to the software
   you want to install.

   1 PowerPatch Only
   2 SUBSYS (Add-On) and PowerPatch
   3 FOS, SUBSYS, and PowerPatch
   4 FOS, SUBSYS, (Installation only)
   5 SUBSYS only, (Add-on only)
   6 Exit

   Enter your choice 4
   ```

3. Reply to prompt for LDEV number.

   Press Return to use the default device class TAPE or enter the LDEV number of the tape device. The device you specify applies to all tape requests.

CAUTION Failure to specify an LDEV number will result in a program hang while writing to tape. If this occurs, a tape request will keep reappearing and will not take the specified LDEV number as input.

```
The file equation from the tape device, which is used to
restore files and create the CSLT, defaults to 'DEV=TAPE'.
If you prefer to designate a different device, enter its LDEV
number now (RETURN for default)>>
```

4. Restore FOS files.

   This step takes about 20–45 minutes.

   a. Mount FOS tape and reply to tape request when the following message displays.

      ```
      Mount the FOS tape and put the tape drive online. The files from
      the FOS tape will now be restored.

      **** PLEASE STAND BY ****
      ```

```
The FOS tape files are being restored.

`CREATE' OPTION DEFAULTING TO `CREATE=ACCOUNT,GROUP,CREATOR'
BASED ON YOUR CAPABILITIES (S/R 502)
STORE/RESTORE VERSION A.nn.nn (C) HEWLETT-PACKARD CO.
```

b. Dismount the FOS tape when the restore complete message displays.

```
The files from the FOS tape were successfully restored.
```

AUTOINST creates the accounting structure. Progress messages display throughout this 5 minute process.

```
Creating accounting structure #J1

13:36/#J1/43/LOGON FOR: “SUPACCT,MANAGER.SYS,PUB”...
13:36/#J1/26/FROM/MANAGER.SYS/
13:36/#J2/26/FROM/MANAGER.SYS/Now running SUPACCT job
13:36/#J2/26/FROM/MANAGER.SYS/
13:36/#J2/26/FROM/MANAGER.SYS/Finished running SUPACCT job
13:41/#J6/43/LOGOFF ON LDEV #10.

The accounting structure has been successfully created.
```

5. Respond to SUBSYS prompt.

If you have a SUBSYS, enter **Y** at the prompt. Proceed to Step 6.

If you do not have a SUBSYS, enter **N** at the prompt, Proceed to Step8.

```
Has a SUBSYS tape been included in your installation package
(y/n)?
```

6. Restore SUBSYS files.

This step takes about 20–45 minutes.

a. Mount SUBSYS tape and reply to tape request (for SUBSYS and PowerPatch tape, if applicable) when the following message displays.

```
Mount the SUBSYS tape and put the tape drive online.
The HP-Supported software files will be restored.

***** PLEASE STAND BY *****
The HP-Supported software files are being restored.

CREATE' OPTION DEFAULTING TO `CREATE=ACCOUNT,GROUP,CREATOR'
BASED ON YOUR CAPABILITIES (S/R 502)

STORE/RESTORE VERSION A.nn.nn (C) HEWLETT-PACKARD CO.
```

b. Dismount the SUBSYS tape when the restore complete message displays.

```
The SUBSYS tape has been successfully restored.
```

AUTOINST automatically streams the installation jobs that complete the installation of most products.

```
Begin processing installation files.
```

```
Processing n installation files.
...                                  *the number of dots equals n*
```

The message may indicate zero installation files. This only means that the products you are installing do not require an installation file. AUTOINST continues with the product installation.

When the installation files have been streamed, you will see a message similar to the following on the system console.

```
All product installation jobs have been streamed successfully.
```

When this message appears, break and abort AUTOINST immediately. If AUTOINST continues, it will create a new CSLT, like the copy you already have.

7. Purge the following groups.

```
:PURGEGROUP UNL.SYS
:PURGEGROUP USL.SYS
:PURGEGROUP UXL.SYS
:PURGE HPINSTFL.INSTALL.SYS
```

8. If you applied patches to your 6.0 or 5.5 system, you need to restore the patch files that may be appended to the CSLT created during the 6.0 or 5.5 patch install.

   a. Execute AUTOINST recovery.

```
:AUTOINST RECOVERY
```

   AUTOINST automatically begins to modify the system and restores the appropriate files. AUTOINST displays the following message during the restore:

```
Mount the CSLT/STORE tape and put the tape drive online.

***************Please stand by*********************
The patch STORE files from the CSLT/STORE tape are being restored.
...
The STORE files from the CSLT/STORE tape were successfully
restored.
```

   The time required to restore the files depends on the number of files, and may take up to 10 minutes (per 2400-foot reel).

   AUTOINST automatically streams the installation jobs that complete the installation of most products.

   If AUTOINST was successful, an END OF PROGRAM message is displayed.

   b. Ensure that the correct version of NMCONFIG and HPSWINFO are on your system, mount the backup tape that contains these files (from the prior release) or the STORE tape referenced in the section, “Patch Considerations,” earlier in this Appendix and restore them to your system:

```
:CHGROUP PUB
:FILE T;DEV=TAPE
:RESTORE *T;NMCONFIG,HPSWINFO;OLDDATE;DEV=1;SHOW
```

   c. Decide if you need to modify the configuration to configure devices not configured in the restored file.

9. Proceed to “Finishing Up.”

Method 2: Using Factory SLT

To perform a backdate using your Factory SLT (Method 2), perform the steps in this section.

Apply the SLT

Applying the SLT modifies your system and begins the backdate process. Refer to “Applying the SLT” in Chapter 5 , “Modifying Your System,” for additional information about these steps.

1. From the console, mount the factory supplied System Load Tape (SLT) and put the tape drive online.

   Wait until the tape is mounted. A message displays on the system console verifying that the tape mounted.

2. If your system is up, shut it down now.

   ```
   CTRL-A
   =SHUTDOWN
   ```

3. Reset the system.

   As appropriate to your system, do either Step a or Step b:

   a. For HP 3000 Series 991 or 995:

      ```
      CTRL-B
      CM>SP
      SP>RS
      ```

      Enter **Y** to HARD BOOT the computer system.

   b. For all other systems:

      ```
      CTRL-B
      CM>RS
      ```

      If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

      Enter Y to confirm restarting the system.

4. Boot the system from the alternate boot path.

   1. Boot messages can vary, respond as appropriate depending on the system model.
   2. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

      The system boots from tape. After some activity the ISL prompt displays.

5. Check FASTSIZE value:

   ```
   ISL>DISPLAY
   ```

   If the value is not F, then change it to F:

```
ISL>FASTSIZE F
```

If you changed the FASTSIZE value:

a. Reset the system again to set the new Fastsize value.

b. Reboot from the alternate boot path.

6. Update the system with the factory SLT.

```
ISL>UPDATE
```

7. Confirm the date and time.

8. Boot the system from the primary boot path.

   1. Boot messages can vary, respond as appropriate depending on the system model.

   2. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

      The system boots from disk. After some activity the ISL prompt displays.

Listing 6.0 or 5.5 System Configuration

Listing the system configuration uses the off-line diagnostic tool, Mapper. To get help using Mapper, type help at the mapper prompt. Refer to "Listing the System Configuration" in Chapter 5 , "Modifying Your System," for additional information about these steps.

To list the 6.0 or 5.5 system configuration:

1. Check that all hardware peripherals are attached and powered on.

2. Start ODE.

```
ISL>ODE
```

3. Display hardware configuration.

```
ODE>RUN MAPPER
```

4. Record I/O configuration.

   Note the MPE/XL Model String: value. Refer to Appendix B , "Configuration Tables," for the configuration group name.

5. Exit mapper.

```
ODE>EXIT
```

Start the System

When the update is complete, autoboot begins. Perform the following steps to ensure the system is up and running. Refer to "Starting the System" in Chapter 5 , "Modifying Your System," for additional information about these steps.

1. Start the system.

```
ISL>START NORECOVERY NOSYSSTART group=configname
```

configname—the configuration group for your system. Refer to Appendix B , "Configuration Tables," for a list of configuration groups.

2. Confirm the date and time.

   During the start-up process, the system makes several configuration checks and may display warning messages. This is normal for system start-up, and will not affect system operation.

3. Dismount the System Load Tape (SLT).

Restore Configuration Files

Restore your customized configuration group. This includes the configuration files: `nmconfig`, `nminit`, and `hpswinfo`.

1. Mount your 6.0 or 5.5 backup or `STORE` tape. Refer to "Planning Your Backdate" earlier in this appendix for additional tape information.
2. Type at the prompt.

```
:FILE T;DEV=TAPE
:RESTORE *T;@.CONFIG,NMCONFIG,NMINIT,HPSWINFO;OLDDATE;DEV=1
```

Configure the System

Refer to "Configuring the System" in Chapter 5 , "Modifying Your System," for additional information about these steps.

You need to configure the following devices for `AUTOINST` (the update tool) to work properly:

- an LP device class
- a streams device
- a tape drive (that matches the FOS and SUBSYS media type)

If you need information about hardware device IDs, print the file `IODFAULT.PUB.SYS` on your screen. This file contains ID numbers and associated parameters for hardware devices. You can display this file when the system is up and you have the system prompt.

To configure your I/O and save the customized set of configuration files, perform the following steps:

1. Verify the configuration files.

```
:SYSGEN CONFIG
sysgen>
```

   If you modified your configuration after updating to Release 6.5, you must reenter these modifications at this point. This includes I/O changes, and any modifications made to logging events, system files (`SYSFILE`), or miscellaneous (`MISC`) items.

```
sysgen> KEEP
Purge old config? YES
sysgen> EXIT
```

   If you do not have a backup of your old `CONFIG.SYS` group, modify your configuration manually as described in Step 2. Otherwise, skip to Step 3.

2. Modify or restore configuration files.

a. Type at the prompt.

```
:sysgen
sysgen>io
io>lpath
```

b. Record configuration and compare to the configuration listed by ODE. Refer to "Listing System Configuration" earlier in this appendix.

c. Change the configuration to match the ODE listing.

d. Save changes.

```
io>HOLD
io>EXIT
sysgen>KEEP CONFIG
purge old configuration? YES
sysgen>EXIT
```

A warning message displays regarding nmconfig. Ignore it.

3. Shutdown the system.

```
CTRL-A
=SHUTDOWN
```

4. Reset the system.

As appropriate to your system, do either Step a or Step b:

a. For HP 3000 Series 990-1-2 or 995-6-7:

```
CTRL-B
CM>SP
SP>RS
```

Enter Y to HARD BOOT the computer system.

b. For all other systems:

```
CTRL-B
CM>RS
```

If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

Enter **Y** to confirm restarting the system.

5. Boot the system from the primary boot path.

1. Boot messages can vary, depending on the system model.
2. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

The system boots from disk. After some activity the ISL prompt displays.

6. Start the system.

```
ISL>START NORECOVERY
```

Check Volumes

Refer to "Checking Volumes" in Chapter 5 , "Modifying Your System," for additional information about these steps. For more information on VOLUTIL commands, refer to the *Volume Management Reference Manual*.

If necessary, use the VOLUTIL utility to add system volumes, including the system domain (MPEXL_SYSTEM_VOLUME_SET) disk drives (except LDEV1).

1. Log on, start the spooler, and streams device.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   :SPOOLER LP;OPENQ
   :STREAMS streams_device
   ```

   where *streams_device* is the device number. A common *streams_device* value is 10.

   An LP device must be configured in SYSGEN. Already spooled and streamed messages might display.

   Ignore the `group out of connect time` warning, if it displays.

2. Enter a DSTAT command to verify a status of `master` for the disk drives. All system volumes showing a status of LONER must be added using the VOLUTIL utility.
3. Add system volumes. Use `scratchvol` and `newvol` commands.
4. Check all volumes to confirm they are configured correctly. Use the DSTAT command.

   ```
   :DSTAT ALL
   ```

Restore FOS and SUBSYS

Refer to "Creating the CSLT Using AUTOINST" in Chapter 5 , "Modifying Your System," for additional information about these steps.

AUTOINST sets up the necessary environment, restores files, creates the accounting structure for the installation, and creates a CSLT.

1. Change to group install.

   ```
   :CHGROUP INSTALL
   ```

2. Run AUTOINST.

   ```
   :RUN AUTOINST.INSTALL.SYS
   ```

3. If you receive a missing capabilities message:

   ```
   Program requires more capabilities than group is allowed.
   (LDRERR505)
   Native mode loader message 505 UNABLE TO LOAD PROGRAM TO BE
   RUN. (CIERR 625)
   ```

   a. Use CHGROUP to change to the PUB.SYS group.

      ```
      :CHGROUP PUB
      ```

   b. Use ALTGROUP to add the BA, IA, PM, MR, DS, and PH capabilities to the INSTALL group

```
:ALTGROUP INSTALL; CAP=BA,IA,PM,MR,DS,PH
```

c. Use CHGROUP to return to the INSTALL.SYS group.

```
:CHGROUP INSTALL
```

4. If you receive an out of disk space message.

   a. Refer to the action statement of the error message in Appendix H , "Error Messages and Warnings."

   b. When you find the required disk space, issue the command again.

   c. Purge staging groups UNL, USL, UXL

5. Select option 4 "FOS, SUBSYS" and reply to the tape request.

```
Please choose and enter the number corresponding to the software
you want to install.

1 PowerPatch Only
2 SUBSYS (Add-On) and PowerPatch
3 FOS, SUBSYS, and PowerPatch
4 FOS, SUBSYS, (Installation only)
5 SUBSYS only, (Add-on only)
6 Exit

Enter your choice 4
```

6. Reply to prompt for LDEV number.

   Press Return to use the default device class TAPE or enter the LDEV number of the device where you want the CSLT to be created. The device you specify applies to all tape requests.

CAUTION Failure to specify a valid tape LDEV number will result in a program hang while writing to tape. If this occurs, a tape request will keep reappearing and will not take the specified LDEV number as input.

---

7. If you receive an out of disk space message.

   a. Refer to the action statement of the error message in Appendix H , "Error Messages and Warnings."

   b. When you find the required disk space, issue the Autoinst command again.

8. Restore FOS files.

   This step takes about 20–45 minutes.

   a. Mount FOS tape and reply to tape request when the following message displays.

```
Mount the FOS tape and put the tape drive online. The files from
the FOS tape will now be restored.

**** PLEASE STAND BY ****
The FOS tape files are being restored.
`CREATE' OPTION DEFAULTING TO `CREATE=ACCOUNT,GROUP,CREATOR'
```

```
BASED ON YOUR CAPABILITIES (S/R 502)
STORE/RESTORE VERSION A.nn.nn (C) HEWLETT-PACKARD CO.
```

b. Reply to the tape request.

c. Dismount the FOS tape when the restore complete message displays.

```
The files from the FOS tape were successfully restored.
```

AUTOINST creates the accounting structure. Progress messages display throughout this 5 minute process. The ending message is:

```
The accounting structure has been successfully created.
```

9. Respond to SUBSYS prompt.

If you have a SUBSYS, enter **Y** at the prompt, and proceed to Step 10.

If you do not have a SUBSYS, enter **N** at the prompt, and proceed to Step 11.

```
Has a SUBSYS tape been included in your installation package
(y/n)?
```

10. Restore SUBSYS files, if you have purchased products to add-on to your system software.

This step takes about 20–45 minutes.

a. Mount SUBSYS tape and reply to tape request (for SUBSYS and PowerPatch tape, as applicable) when the following message displays.

```
Mount the SUBSYS tape and put the tape drive online.
The HP-Supported software files will be restored.

***** PLEASE STAND BY *****
The HP-Supported software files are being restored.

CREATE' OPTION DEFAULTING TO `CREATE=ACCOUNT,GROUP,CREATOR'
BASED ON YOUR CAPABILITIES (S/R 502)
STORE/RESTORE VERSION A.nn.nn (C) HEWLETT-PACKARD CO.
```

b. Reply to the tape request.

c. Dismount the SUBSYS tape when the restore complete message displays.

```
The SUBSYS tape has been successfully restored.
```

- AUTOINST automatically streams the installation jobs that complete the installation of most products.

  The message may indicate zero installation files. This only means that the products you are installing do not require an installation file. AUTOINST continues with the product installation.

- AUTOINST creates a copy of the system libraries and displays:
- AUTOINST processes the files.
- AUTOINST updates the temporary copies of the system libraries.

11. Create the CSLT.

Respond to tape request and mount a blank/scratch (write-enabled) tape.

AUTOINST updates temporary copies of the System Libraries then creates the CSLT. This can take up to 2 hours.

```
Creating the CSLT ... done

Phase I of AUTOINST is now complete. Dismount and label the CSLT
"AUTOINST CSLT HPVERSION %%v.uu.ff%%". Ensure that the write is
now DISABLED.

AUTOINST process Phase II requires exclusive access. To begin
Phase II, SHUTDOWN your system, UPDATE from the CSLT, then log on
as `MANAGER.SYS,INSTALL' and restart AUTOINST prior to allowing
users to log on.
```

12. List and record any manually installed products AUTOINST cannot completely install.

    A warning message displays and lists manually installed products, if applicable.

    ```
    WARNING -- This program cannot install the products listed
    below. (INSTWARN #1)
    ```

    Record any product names that the program cannot install.

13. List and record data communication products on the SUBSYS tape.

    A warning message will display and list data communications products, if applicable.

    ```
    WARNING -- The following data communication products may
    require I/O configuration changes. However, this will not affect the
    software installation for these products.
    (INSTWARN #10)
    ```

    Record any data communication product names listed.

14. When the CSLT is created, dismount the CSLT, write-disable it, and label it CSLT (*v.uu.ff*) and include the **current date**. You can find the *v.uu.ff* on the factory SLT label.

- If the SYSGEN command, RDCC, was used previously, the network configuration file that was specified in that command is written to the CSLT that AUTOINST created.
- If this CSLT is used as a backup tape for a reinstallation, then the datacomm configuration file that will be restored will require conversion using the NMMGRVER.PUB.SYS utility after the installation.

Apply the CSLT

Refer to “Applying the Modification” in Chapter 5 , “Modifying Your System,” for additional information about these steps.

To apply the CSLT:

1. From the console, mount the CSLT created from the factory SLT, FOS and SUBSYS of the release to which you want to backdate. Refer to “Restore FOS and SUBSYS”.

   Put the tape drive online.

   Wait until the tape is mounted. A message displays on the system console verifying that

the tape mounted.

2. Shut down the system.

```
CTRL-A
=SHUTDOWN
```

3. Reset the system.

   As appropriate to your system, do either Step a or Step b:

   a. For HP 3000 Series 991 or 995:

   ```
   CTRL-B
   CM>SP
   CM>RS
   ```

   Enter **Y** to HARD BOOT the computer system.

   b. For all other systems:

   ```
   CTRL-B
   CM>RS
   ```

   If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

   Enter **Y** to confirm restarting the system.

4. Boot the system from the alternate boot path, where the CSLT is mounted.

   a. Boot messages can vary, depending on the system model.

   b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

   The system boots from the alternate source (tape). After some tape activity, the ISL prompt displays.

5. Update with the CSLT created from your Factory SLT.

```
ISL>UPDATE
```

6. Monitor progress messages.

   While the UPDATE process is taking place, it is important that you monitor the process at the console. Note any errors that may be reported to the screen for future action.

   If you modified your configuration after updating to Release 5.5, you may need to check the configuration when the backdated system is up and running normally. These changes may include I/O changes and other changes made to logging events or miscellaneous configuration changes.

   If configuration files reside in groups other than the CONFIG group, the system will not have the proper configuration when booted after updating from the CSLT. If your configuration files are in a group other than CONFIG, you must restore them now and reboot the system.

   Updating with your CSLT ensures that any patches that had been applied (from a PowerPatch tape) which changed NL.PUB.SYS, XL.PUB.SYS, or SL. PUB.SYS will still be in effect. Also, any additions made to these libraries as a result of SUBSYS products

having been installed will be there as well. Contact the Response Center or your HP representative for information about applying patches to a backdated system.

7. Boot the system from the primary boot path.

   a. Boot messages can vary, depending on the system model.

   b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

      The system boots from disk. After some activity the ISL prompt displays.

8. Start the system.

   ```
   ISL>START NORECOVERY NOSYSSTART
   ```

9. Confirm the date and time.

10. Dismount the CSLT.

11. Log on, start the spooler, and streams device.

    ```
    :HELLO MANAGER.SYS,INSTALL;HIPRI
    :LIMIT 1,1
    :SPOOLER LP;OPENQ
    :STREAMS streams_device
    ```

    where *`streams_device`* is the device number. A common *`streams_device`* value is 10.

    An LP device must be configured in SYSGEN. Already spooled and streamed messages might display.

12. Proceed to, “Finishing Up.”

Method 3: Using an FPT

If you are performing a backdate using a Factory Pre-Load Tape (FPT), perform the steps in this section.

Apply the FPT

Refer to “Applying Modifications” in Chapter 5 , “Modifying Your System,” for additional information about these steps.

1. From the console, mount the Factory Preload Tape for this system. Place it into the DDS device.

   Put the tape drive online.

   Wait until the tape is mounted. A message displays on the system console verifying that the tape mounted.

2. Shut down the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

3. Reset the system.

   As appropriate to your system, do either Step a or Step b:

   a. For HP 3000 Series 991 or 995:

```
CTRL-B
CM>SP
SP>RS
```

Enter **Y** to HARD BOOT the computer system.

b. For all other systems:

```
CTRL-B
CM>RS
```

If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

Enter Y to confirm restarting the system.

4. Boot the system from the alternate boot path, where the FPT is mounted.

a. Boot messages can vary, depending on the system model.

b. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

The system boots from the alternate source (tape). After some tape activity, the ISL prompt displays.

5. Update with the FPT.

```
ISL>UPDATE CONFIG
```

If you are backdating with your factory SLT, UPDATE CONFIG brings in the boot, system, and the default factory configuration files from the previous release.

6. Monitor progress messages.

While the UPDATE process is taking place, it is important that you monitor the process at the console. Note any errors that may be reported to the screen for future action.

If you modified your configuration after updating to Release 5.5, you may need to check the configuration when the backdated system is up and running normally. These changes may include I/O changes and other changes made to logging events or miscellaneous configuration changes.

If configuration files reside in groups other than the CONFIG group, the system will not have the proper configuration when booted after updating from the FPT. If your configuration files are in a group other than CONFIG, you must restore them now and reboot the system.

Updating with your FPT ensures that any patches that had been applied (from a PowerPatch tape) which changed NL.PUB.SYS, XL.PUB.SYS, or SL.PUB.SYS will still be in effect. Also, any additions made to these libraries as a result of SUBSYS products having been installed will be there as well. Contact the Response Center or your HP representative for information about applying patches to a backdated system.

7. Confirm the date and time.

8. Boot the system from the primary boot path.

a. Boot messages can vary, depending on the system model.

b. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

The system boots from disk. After some activity the ISL prompt displays.

9. Start the system.

```
ISL>START NORECOVERY NOSYSSTART
```

10. Confirm the date and time.

11. Dismount the FPT.

12. Log on, start the spooler, and streams device.

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
:LIMIT 1,1
:SPOOLER LP;OPENQ
:STREAMs streams_device
```

where *streams_device* is the device number. A common *streams_device* value is 10.

An LP device must be configured in SYSGEN. Already spooled and streamed messages might display.

Configure the System

Refer to "Configuring the System" in Chapter 5 , "Modifying Your System," for additional information about these steps.

You need to configure the following devices for AUTOINST (the update tool) to work properly:

- an LP device class
- a streams device
- a tape drive (that matches the FOS and SUBSYS media type)

If you need information about hardware device IDs, print the file IODFAULT.PUB.SYS on your screen. This file contains ID numbers and associated parameters for hardware devices. You can display this file when the system is up and you have the system prompt.

To configure your I/O and save the customized set of configuration files, perform the following steps:

1. Verify the configuration files.

```
:SYSGEN CONFIG
sysgen>
```

If you modified your configuration after updating to Release 5.5, you must reenter these modifications at this point. This includes not only I/O changes, but any modifications made to logging events, system files (SYSFILE), or miscellaneous (MISC) items.

```
sysgen> KEEP
Purge old config? YES
sysgen> EXIT
```

If you do not have a backup of your old CONFIG.SYS group, you will have to modify your configuration manually as described in Step 3. Otherwise, skip to Step 3.

2. Modify or restore configuration files.

   a. Type at the prompt.

   ```
   :SYSGEN
   sysgen>IO
   io>LPATH
   ```

   b. Record configuration and compare to the configuration listed by ODE.

   c. Change the configuration to match the ODE listing.

   d. Save changes.

   ```
   io>HOLD
   io>EXIT
   sysgen>KEEP CONFIG
   purge old configuration? YES
   sysgen>EXIT
   ```

   A warning message displays regarding nmconfig. Ignore it.

3. Shutdown the system.

   ```
   CTRL-A
   =SHUTDOWN
   ```

4. Reset the system.

   As appropriate to your system, do either Step a or Step b:

   a. For HP 3000 Series 991 or 995:

   ```
   CTRL-B
   CM>SP
   SP>RS
   ```

   Enter **Y** to HARD BOOT the computer system.

   b. For all other systems:

   ```
   CTRL-B
   CM>RS
   ```

   If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

   Enter Y to confirm restarting the system.

5. Boot the system from the primary boot path.

   a. Boot messages can vary, depending on the system model.

   b. Enter Y to the Interact with IPL? prompt, if it appears on your screen.

   The system boots from disk. After some activity the ISL prompt displays.

6. Start the system.

   ```
   ISL>START NORECOVERY
   ```

Restore FOS and SUBSYS

Refer to “Rerunning HPINSTAL” in Chapter 5 , “Modifying Your System,” for additional information about these steps.

1. Remount the Factory Preload Tape (FPT).
2. Invoke HPINSTAL.

   ```
   :HPINSTAL;INFO="RECOVERY"
   ```

   The following is a sample system response:

   ```
   MPE/iX HPINSTAL B.10.00 (c) Hewlett-Packard CO.

   Mount the CSLT and put the tape/DDS drive online
   The HP-supported software files will be restore.
   **********Please stand by***************
   The HP-supported software files are being restored.
   ```

   The FPT is called the CSLT on the console screen. That is because the FPT is a type of CSLT created at the factory.
3. Mount the FPT and put the tape drive online. This restores the STORE portion of the FPT. If using DDS tape, you need to remove the tape and reinsert it now.

   - The system then restores files, processes STORE files, creates the accounting structure, and processes installation files.
   - HPINSTAL automatically streams the installation jobs that complete the installation of most products.

     The message may indicate zero installation files. This only means that the products you are installing do not require an installation file. HPINSTAL continues with the product installation.

     The time it takes to restore the software files varies depending on how many and which specific subsystems you have on your system.
4. Follow any additional instructions displayed on the screen, such as mounting other tape volumes (if using half-inch magnetic tapes).

   Reply to tape requests, if necessary.
5. List and record any manually installed products HPINSTAL cannot completely install.

   A warning message displays and lists manually installed products, if applicable.

   ```
   WARNING -- This program cannot install the products listed
   below. (INSTWARN #1)
   ```

   Record any product names that the program cannot install.
6. When HPINSTAL finishes the task you initially specified, you will see the following message:

   ```
   The installation is now complete.
   END OF PROGRAM
   ```

Finishing Up

To restart your system on the backdated version, perform all the sub-sections in this section.

Configure Data Communication

Refer to “Configuring Datacomm and UPS” and “Cross Validating” in Chapter 6 , “Finishing the Process,” for additional information about these steps.

CAUTION No matter what your particular networking configuration is, whether you even have networked devices, you still must perform the activities described in this section.

You must convert the data communications configuration files after modifying a system (regardless of whether you use data communications products). The information contained in the data communication files is required by the Data communication Terminal Controller (DTC) and allows communication between the terminal and the Uninterruptible Power Supply (UPS). Refer to *Using the Node Management Services Utilities*.

Convert Data Communications

To configure for data communications on a new or modified system, obtain an NMCONFIG file in either way:

- Convert an existing nmconfig file to the MPE 6.0 or 5.5 version level you are backdating to.
- Create an NMCONFIG file using NMMGR. Do this if you are using either Method 2, “Using a factory SLT” or Method 3, “Using an FPT.”

To convert data communications files:

1. Confirm that you have a copy of the NMCONFIG file on your system.

   ```
   :LISTF NMCONFIG.PUB.SYS
   ```

   - If listed, and you do not need to create a new NMCONFIG file, proceed to Step 2.
   - If the return message is non-existent file, obtain a copy of an NMCONFIG file using one of the following sources:

     — Create a new NMCONFIG file using nmmgr.

     Refer to *Using the Node Management Services (NMS) Utilities* for directions on creating an NMCONFIG file.

     Then proceed to “Cross Validate” in the next subsection.

     — Use a backup copy of the NMCONFIG file.

     Use the same method, to recover the NMCONFIG file from the backup, that was

used to create the backup.

Then proceed to Step2.

2. Run the NMMGRVER conversion utility.

   ```
   :RUN NMMGRVER.PUB.SYS
   ```

3. Enter NMCONFIG.PUB.SYS at the prompt:

   ```
   FILESET TO BE SCANNED? NMCONFIG.PUB.SYS
   OK TO CONVERT NMCONFIG? Y
   ```

   - If the return message is `no need to convert`, proceed to "Restart System Functions."
   - If the return message is `conversion completed successfully`, then AUTOINST has converted your configuration file and it needs to be cross validated with sysgen information. Proceed to "Cross Validate."

Cross Validate

Perform the steps in this section if you did either of the following:

- Completed the previous section, "Convert Data Communications," and your files were converted.
- Created a new NMCONFIG file using nmmgr.

If the SYSGEN command, RDCC, was used previously, the network configuration file that was specified in that command is written to the CSLT that AUTOINST created. If this CSLT is used as a backup tape for a reinstallation, then the datacomm configuration file that will be restored will require conversion using the NMMGRVER.PUB.SYS utility after the installation.

To validate data communication files:

1. Run NMMGR.PUB.SYS

   ```
   :NMMGR
   ```

2. Open the configuration file using the **[F1]** key.
3. Modify the configuration file, if required.

   If you need to add, delete, or change any item in the configuration file, do so now. For example, now is the time to add a DTC or change a UPS configuration.

   If you copied and updated your NMCONFIG file from another system, you must update the network addresses and other devices for this system.

   a. If you have a PC-based network management configuration, follow the installation and configuration procedures described in the *Using the OpenView DTC Manager Manual*.

   b. For information on NMMGR, refer to *Using the Node Management Services (NM S) Utilities*.

   c. For information on configuring UPS devices, refer to *Performing System Management Tasks*.

d. If you need to configure new DTCs on your system or if you need more information on host-based network management, refer to *Configuring Systems for Terminals, Printers, and Other Serial Devices*.

4. Display the Validate screen and validate the DTSLINK, NS links, and any other configurations you have changed.

   The specific method you use to view the Validate screen varies depending upon the procedures you used to modify the configuration file. Refer to the *Using the Node Management Services (NM S) Utilities* manual for more complete instructions.

   NMMGR automatically invokes SYSGEN to cross validate the system and datacomm configurations.

   If inconsistencies occur during the validation process (such as two separate devices configured to the same LDEV), do either of the following depending upon the type of error:

   - Resolve them using NMMGR (if related to networking).
   - Exit NMMGR, NMMGR to revalidate DTSLINK.

5. Exit NMMGR.

Preparing for Final Reboot

Before performing the final reboot, stream jconfjob and verify all activities for manually install products are complete.

To restart selected system functions:

1. If you purchased HP Resource Sharing and Information Access, install it now. Refer to Appendix A , “Manually Installed Products.”
2. Stream JCONFJOB.

   ```
   :STREAM JCONFJOB.NET.SYS
   ```

   The JCONFJOB.NET.SYS stream is required for all systems. It includes information files that describe the supported set of servers and services. These information files are used to build a configuration file called DADCONF.NET.SYS. Wait until the above jobstream is complete before continuing with the next step.

Set Passwords and Lockwords

Refer to “Setting Passwords and Lockwords” in Chapter 6 , “Finishing the Process.”

1. Set passwords for HP recommended accounts.

   :ALTACCT *acctname*;PASS=*password*

   AUTOINST does not require the removal of passwords. However, if these accounts and users do not have passwords, Hewlett-Packard recommends that you set them now.

BIND	HPOFFICE	HPSKTS	JAVA	SYS	HPX11
CLL	HPOPTMGT	HPSPOOL	RJE	SYSLOG	NETWARE

CONV	HPPL85	INDHPE	SAMBA	SYSMGR	SOFTREP
HPLANMGR	HPPL87	INTSETUP	SNADS	TELESUP	
HPNCS	HPPL89	ITF3000	SUPPORT	WWW	

2. Set passwords for HP recommended users.

   `:ALTUSER` *`username`*`;PASS=`*`password`*

   These users were created or modified to have OP (System Supervisor) and/or PM (Privilege Mode) capabilities. Hewlett-Packard recommends that you set passwords for these users.

MANAGER.SYS	FIELD. HPPL85	MGR.SNADS	MGR.JAVA
MGR.HPOFFICE	MGR.TELESUP	MGR.SYSMGR	

3. Set passwords for `MANAGER.SYS`

   ```
   :ALTACCT SYS;PASS=password
   :ALTUSER MANAGER;PASS=password
   ```

4. Identify system files.

   ```
   :SYSGEN
   sysgen>SYSFILE
   sysfile>SHOW
   ```

   Record the list of files

   ```
   sysfile>EXIT
   sysgen>EXIT
   ```

5. Reapply or add lockwords to the system, as required.

   If you removed any lockwords from the system earlier, reapply them now. **Do no**t apply lockwords to system files.

   `:RENAME` *`filename,filename/lockword`*

6. Review account security.

   Refer to *Controlling System Activity Manual* and the *HP Security Monitor/iX Managers Guide*.

7. Reenter customized changes to `CATALOG.PUB.SYS`.

Enable UDCs

Refer to “Enabling UDCs” in Chapter 6 , “Finishing the Process,” for additional information about these steps.

1. Purge the command file:

   `:PURGE COMMAND.PUB.SYS`

2. Enable UDCs.

   `:RENAME` *`command_name,`*`COMMAND.PUB.SYS`

Where *command_name* is a temporary name you assigned the file. Refer to your task checklist for the temporary name of this file.

3. Set special UDCs, if your users plan to use POSIX features on MPE/iX.

```
:SETCATALOG HPPXUDC.PUB.SYS;SYSTEM;APPEND
```

4. Log on to activate the UDCs.

```
:HELLO MANAGER.SYS,INSTALL
```

Configure Manually Installed Products

Refer to Appendix A , “Manually Installed Products,” and the appropriate product manual for instructions. The products will not be operational until your perform the necessary configuration changes. Manually installed products include:

- HP ALLBASE/4GL
- ALLBASE/SQL or IMAGE/SQL
- OpenView Console/System Manager
- SNA IMF/iX
- HP Predictive Support
- Non-HP (Third Party) Software
- Java/iX

Final Reboot

Refer to “Performing the Final Reboot” in Chapter 6 , “Finishing the Process,” for additional information about these steps.

1. Shutdown the system.

```
CTRL-A
=SHUTDOWN
```

2. Reset the system.

   As appropriate to your system, do either Step a or Step b:

   a. For HP 3000 Series 991 or 995:

```
CTRL-B
CM>SP
SP>RS
```

      Enter **Y** to HARD BOOT the computer system.

   b. For all other systems:

```
CTRL-B
CM>RS
```

      If the system does not respond, press the reset button, key switch, or on/off switch as appropriate for your system.

Enter **Y** to confirm restarting the system.

3. Boot the system from the primary boot path.

   a. Boot messages can vary, depending on the system model.

   b. Enter Y to the `Interact with IPL?` prompt, if it appears on your screen.

      The system boots from disk. After some activity the ISL prompt displays.

4. At the ISL prompt, enter:

   ```
   ISL>START NORECOVERY
   ```

5. Confirm the date and time.

6. Log on.

   ```
   :HELLO MANAGER.SYS;HIPRI
   ```

Restart System Functions

Refer to “Restarting Selected System Functions” in Chapter 6 , “Finishing the Process,” for additional information about any of these steps.

1. On local systems power cycle the DTCs. On remote systems reset DTCs.

   If you are using OpenView DTC Manager, the DTCs do not need to be power cycled.

   To power cycle all DTCs:

   a. Turn DTC off.

   b. Turn DTC on.

   Power cycling each DTC enables the new download file and the DTC configurations to be downloaded to the DTC(s). To reset DTCs:

   a. Type:

      ```
      :cstm
      cstm> ru termdsm
      ```

   b. At the termdsm prompt, Type R:

      ```
      Connect DIag DTc DUmp EEprom Help Reset Status Trace EXit ?R
      ```

   c. For each DTC, Type:

      (reset)

      Ldev#
      POrt#,#,#
      SNp #,# (X.25 card in DTC)
      VC #,#,#,
      Slc #,# (multiplexer card in DTC)
      DTc #

      (carriage return to exit) ?DTCnn

where nn is the DTC number.

2. Purge groups.

```
:PURGEGROUP USL
:PURGEGROUP UXL
:PURGEGROUP UNL
```

3. Start data communications.

   If you have NS 3000/iX configured, bring up the configured network interfaces. For more information, refer to the *HP 3000/iX Network Planning, and Configuration Guide*.

NOTE Use the same names for the network interfaces that were used in your configuration.

- For example, if you have configured network interfaces with the names LOOP and LAN1, enter:

```
:NETCONTROL START;NET=LOOP
:NETCONTROL START;NET=LAN1
:NSCONTROL START
:STREAM JFTPSTRT.ARPA.SYS
```

- If you have configured only the router network interface with the name ROUTER1, enter:

```
:NETCONTROL START;NET=ROUTER1
:NSCONTROL START
:STREAM JFTPSTRT.ARPA.SYS
```

Record the Backdate

The system is ready for normal production. Record the modification in the system logbook, noting the date and release to which you have modified the system. If you added subsystem products, note them in the log book including the release they are on.

If you need to add patches, contact your Response Center.

E CD-ROM Resources

This Appendix provides additional reference material for using CD-ROMs. It includes:

- Further background on the information required as you are updating MPE/iX.
- How to install a CD-ROM drive
- How to copy tapes for distribution

HP Release Version Numbers (v.uu.ff)

HP version numbers specify the exact version of the software with which you are working. Version numbers have the format:

v.uu.ff

where:

v	the version of the software used to represent significant changes.
uu	the update number.
ff	the fix level.

For example, Release 5.5 has the following version number:

C.55.00

Use the SHOWME command to check on the release version number when you are planning to update the system. You need to have Release 4.0, version number B.40.00, (including patches LNKFX62, MPEFX00, MPEFX25, and MPEFX37), or later to use CD-ROM disk drives for running HPINSTAL.

CD-ROM Disk Volume Set Names

HP sends you two CD-ROM disks containing the latest software. The release version numbers are used as part of the name for the CD-ROM volume sets that contain the software you will use to update a system. The volume set names for the disks appear on the label.

CD-ROM disk volume set names have the following form:

MPE_ *v.uu.ff_n*

where:

v.uu.ff the release version number such as C.55.00.

n the volume set number within the release.

For example, the two disks associated with Release 5.5 have the following volume set names:

MPE_C.55.00_1

MPE_C.55.00_2

Loading and Mounting CD-ROM Disks

HPINSTAL supports two types of CD-ROM drives: HP-IB and SCSI drives. SCSI drives are the only ones available for purchase at this time.

Loading CD-ROM Disks

The CD-ROM disk volumes are sent in a plastic case. If your system has a caddy, you need to remove the disk from the case and put it into the appropriate caddy for your CD-ROM drive. You can then load the CD-ROM disk into the drive.

Mounting CD-ROM Disks

Disks loaded into HP-IB drives are automatically recognized by the system and put online. When using an HP-IB drive, CD-ROM disks do not need to be mounted by mount commands.

If you are using a SCSI drive, you need to tell the system to put it online after inserting the CD-ROM. You need to mount CD-ROM disks onto SCSI drives by entering a mount command.

To mount a CD-ROM disk onto a SCSI drive, use the `AVRSCSI MOUNT` command from the `INSTALL` group:

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
:AVRSCSI "MOUNT ldev#"
```

Where *ldev#* is the LDEV number of the device on which you want to mount the CD-ROM disk. For example, to load a disk onto LDEV 11:

```
:AVRSCSI "MOUNT 11"
```

You normally do not have to explicitly dismount the disk. `HPINSTAL` handles this for you when it is done with the disk. If you need to specifically dismount the disk:

```
:AVRSCSI "DISMOUNT ldev#"
```

Dismounting CD-ROM Disks

At times, CD-ROM disks may need to be explicitly dismounted from the drive. For example, if you are running `HPINSTAL` from a terminal other than the system console and you didn't allow `VSCLOSE`, you'll have to explicitly dismount the first disk before you can load the second one into the CD-ROM drive. You may see the following message:

```
Unable to close CD-ROM volume volume_name (INSTWARN #8)
```

If so, you need to dismount the disk.

To dismount a CD-ROM disk from a SCSI drive:

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
:VSCLOSE volume_set_name
:AVRSCSI "DISMOUNT ldev#"
```

To dismount a CD-ROM disk from an HP-IB drive:

```
:VSCLOSE volume_set_name
```

Checking Volume Set Status

To check on the status of the CD-ROM disks, you can use the DSTAT command. For example:

```
: DSTAT
LDEV-TYPE STATUS VOLUME (VOLUME SET - GEN)
---------- -------- -------------------------
11- 017070 LONER HPINSTAL (MPE_C.55.00_1-0)
12- 017070 LONER HPINSTAL (MPE_C.55.00_2-0)
```

As shown in the example, the command output lists the logical device number and type, the drive status, the volume name (the program name), and the volume set name. The two disks in the example are not online because the status says LONER. When they are online, the status reads MASTER-RO.

Creating a Product List

To simplify the update process, you can manually create a product list. HPINSTAL uses the product list to determine which products to update.

Two types of product lists are useful when using HPINSTAL:

- **Master Product List** —PRODLIST.PUB.SYS—lists all products that are on your Hewlett-Packard Software Support contract. These products are also listed on the product list included with the keyword certificate that comes with the CD-ROM disks.
- **Local Product List** —PRODLIST.INSTALL.SYS—lists a subset of the master product list and reflects the set of products to be updated on a remote or central system.

Every central system should have a master product list. You only need to create a local product list if you ever need to install a subset of the full product list purchased, such as when creating tapes for distribution to a remote system.

NOTE If you decide to customize the list of products when using option 1 or 2, you will install a subset of the master list of products to which you are entitled. You will not be able to use the Add Subsystems option of HPINSTAL after that to "add" any products from your master list of products that were not included in the subset list of products. You will have to use option 1 or 2 again and recustomize the list of products in order to install those products left out because of the original subset customization. Your master list of products will remain unaffected by this subset customization.

Creating a Master PRODLIST

When you first install a system, you must create a master product list. This is the full list of products that appears on your keyword certificate.

You can make the master product list in one of two ways:

- You can create a file listing product numbers using any editor.
- You can create a file listing product numbers by supplying the numbers to HPINSTAL.

To make the master product list by editing a file:

1. Use any text editor to create a text file.
2. List all products that appear on the master product list (part of your keyword certificate). Type only the product numbers, one per line. If you ordered all possible HP products, you can specify "ALL" in the file on a line by itself instead of typing all of the product numbers.
3. Save the file and call it PRODLIST.PUB.SYS.

If you add on SUBSYS products to your system, HPINSTAL prompts you for the names of new products to be added. The new product names are added to the PRODLIST.PUB.SYS file.

Figure E-1 shows a sample PRODLIST file.

Figure E-1. Sample PRODLIST File

```
B1710A
B1720A
B1721A
B1722A
B1723A
HP32106
HP36578
```

To make a product list using HPINSTAL, reply with the list of product numbers when prompted for them. After you finish entering the list, HPINSTAL asks you to verify that the list of products is correct and then saves the list in the file PRODLIST.PUB.SYS.

Creating a Local PRODLIST

A local product list is useful when you regularly use one production system to create CSLTs to be loaded onto other systems. Many large installations will purchase a large set of products and will install a subset of the products onto different customized systems. For this purpose, you can create a local product list that specifies the exact products you want to be on the CSLT.

NOTE The local product list in PRODLIST.INSTALL.SYS must be a subset of the products listed in PRODLIST.PUB.SYS.

To make the local product list:

1. Use any text editor to create a text file.
2. List the products to install. Type only the product numbers one per line.
3. Save the file and call it PRODLIST.INSTALL.SYS.

The contents of the local product list look the same as the master product list. It usually contains fewer product numbers.

HPINSTAL first looks for the local PRODLIST file in the INSTALL group. If located, the local PRODLIST file is used instead of the master file in PUB.SYS.

Including Additional STORE Files on the CSLT

HPINSTAL allows you to specify additional STORE files to be included on a CSLT to be distributed to another system. These files could be any files such as a third-party software package or data files required by an application. They must be STORE files because they are appended to the STORE portion of the CSLT.

You need to set up a file listing the additional files to be included on the CSLT. You must do this before creating the CSLT on the central HP 3000 system.

To specify additional files:

1. Create a text file using any editor.
2. Specify the names of additional files to be included on the CSLT, one per line.
3. Save the file using any name.
4. Set up a file equation so that INDIRLST points to the name of the file containing the list of additional files.

For example:

```
:FILE INDIRLST=INDLST1.MYGROUP.MYACCT
```

When creating the CSLT, the files that INDIRLST points to will be included on the CSLT.

Specifying the Base Configuration Group

MPE/iX provides default configuration groups for each hardware model. For example, names of some of the groups are confg950, confg930, and confg922 and they are located in the SYS account. When you set up your system, you normally use one of the default configuration groups to begin with and modify it so it matches the exact configuration of the system. This procedure is explained in detail in *Performing System Management Tasks*.

When using HPINSTAL to create a CSLT for another system, you can create a CSLT for a different configuration group to be used on the remote system. When HPINSTAL displays the following text, you are able to specify the configuration group of your choice.

```
You have chosen to create a CSLT for a remote system. You can
specify the configuration group that you want to be used to make
the tape. By doing so, system files that are part of that
configuration will be placed on the CSLT for the remote site.
Please realize that HPINSTAL will create the CSLT with the SYSGEN
command `TAPE NOCONFIG'.
When ready to create the CSLT, HPINSTAL will copy your current
configuration group to HPCONFIG.SYS and use that as the base
group. If you have customized a configuration group that you
would like HPINSTAL to use as the base group while creating the
CSLT, please provide it now.
Base group (RETURN for default) >> [[Return]]
```

You should press **[RETURN]**, unless you plan to add installation-specific files to the CSLT. Refer to “Preparing a Base Group for a Remote System” for how to set up the base group.

Preparing a Base Group for a Remote System

If you are creating a CSLT for distribution to another system, HPINSTAL allows you to include your own installation-specific system files on the CSLT. You can specify these files in a base group. The base group must be a valid configuration group created using SYSGEN.

You only need to create a base group if creating a CSLT for a remote system because if you are updating the system you are on, any system files you have added will remain there. The only way to add system files to a remote system would be to put them on the CSLT.

NOTE The procedure for preparing a base group is not required in all cases. Unless you are certain that you need to add your own system files to the CSLT, use the default configuration group specified by pressing **[RETURN]** at the prompt requesting the base group. Then HPINSTAL creates a default configuration group based on the current configuration group (of the system you are working on).

To create the base group:

1. Determine which group to use as a source for the base group. You'll probably want to choose the default factory configuration group corresponding to the model number of the target system. (For example, if the target system is a 995, start with confg995.)
2. Determine a name for the group to use as the base group on the remote system.

NOTE The remote system base group can never be used as a Release 4.0 configuration.

3. Use the Release 5.5 version of SYSGEN to create the base group for HPINSTAL to use:
   a. Set up file equations to point to the Release 5.5 SYSGCAT and CATALOG:

      ```
      :FILE SYSGCAT.PUB.SYS=SYSGCAT.INSTALL.SYS
      :FILE CATALOG.PUB.SYS=CATALOG.INSTALL.SYS
      ```

   b. Run the Release 5.5 SYSGEN to create the base group:

      ```
      :RUN SYSGEN.PUB.SYS
      ```

The following example shows using SYSGEN to create a base group. It uses CONFG995 as the source for the configuration group for the remote system, which is an HP 3000 Model 995. The base group for the remote system is called CUSTCONF. Note that CUSTCONF does not have to exist prior to running SYSGEN. The base group should be named a group name of your choosing that does not conflict with the names of the default configuration groups.

```
:RUN SYSGEN.PUB.SYS
SYSGEN version D.01.01: catalog version D.01.00 TUE, MAR 22,
1994, 1:32 PM
Copyright 1987 Hewlett-Packard Co. All Rights Reserved.

WARNING
```

```
no NMCONFIG file in this configuration.

WARNING
NMCONFIG.PUB.SYS is now the NMCONFIG file

First level command
   io log (lo)    misc (mi)    spu (sp)     sysfile (sy)
   basegroup (ba) keep (ke)    permyes (pe) show (sh)   tape (ta)
   clear (cl)(c)  exit (ex)(e) help (he)(h) oclose (oc)  redo
sysgen> BASEGROUP CONFG935
sysgen> sysfile

SYSFILE configurator commands
   aauto (aa)    aboot (ab)   acmsl (ac)   asprog (as)
   cmsl (cm)     dauto (da)   dboot (db)   dcmsl (dc)
   dsprog (ds)   lcmsl (lc)   rauto (ra)   rboot (rb)
   rcat (rc)     rcmsl (rcm)  rdcc (rd)    ripl (ri)
   rnmlib (rn)   rsprog (rs)  show (sh)
   clear (cl)(c) exit (ex)(e) help (he)(h) hold (ho)

sysfile> ASPROG sys_program_name sys_filename
At this point, you can use the ASPROG command to specify the
names of the system files to add to the CSLT. Use the DSPROG
command to delete files from the group.
...
sysfile> HOLD
sysgen> KEEP CUSTCONF
Be sure to keep the changes in a group name of your choosing.

configuration files successfully saved
sysgen> EXIT
END OF PROGRAM
```

Selecting an Output Device

HPINSTAL sets the output device where the CSLT is created to device class TAPE. If you use the default, HPINSTAL will write to any device of class TAPE. You can change the default when HPINSTAL requests the information. You need to know the LDEV number of the tape device where you want to create the CSLT.

If you are unfamiliar with the system on which you are working, you can use SYSGEN to look at the configuration of the system to determine the LDEV number of the appropriate tape device. Refer to *Performing System Management Tasks* for specific information on using SYSGEN to determine your system configuration.

Using the Default Output Device

If you use the default output device, HPINSTAL automatically writes to any device of class TAPE. If you have only one tape device, using the default will produce the desired results. If you have additional tape devices, using the default may not create the tape at the desired tape device.

Setting Tapes to Reply Automatically

If the tape device is not set up to automatically reply to tape requests, you need to reply manually to all tape requests at the system console.

To set up tapes to reply automatically:

1. Run SYSGEN:

   ```
   :SYSGEN
   sysgen>
   ```

2. Use the IO configurator:

   ```
   sysgen> IO
   ```

3. Look at the state of the device you want to reply to tape requests automatically. In place of 8 in the following example, use the number of the logical device you want to check.

   ```
   io> LDEV 8
    LDEV: 8 DEVNAME:         OUTDEV:   0    MODE:
      ID: HPC1501A            RSIZE: 128    DEVTYPE: TAPE
    PATH: 4.3.5             MPETYPE:  24    MPESUBTYPE: 6
   CLASS:  TAPE
   ```

   If there is no mode type of R after MODE, AUTOREPLY is not set for this device. You can exit SYSGEN without continuing to modify the file.

   To set AUTOREPLY to on, type the following. Replace the number 8 with the LDEV number of the tape device you want to automatically reply to tape requests.

   ```
   io> MDEV 8 MODE=AUTOREPLY
   ```

   Check that AUTOREPLY is now on:

   ```
   io> LDEV 8
   ```

```
  LDEV: 8 DEVNAME:         OUTDEV:    0    MODE: R
    ID: HPC1501A            RSIZE: 128    DEVTYPE: TAPE
  PATH: 4.3.5             MPETYPE:  24    MPESUBTYPE: 6
 CLASS:  TAPE
```

The R after MODE signifies that AUTOREPLY is on.

```
io> HOLD
io> EXIT
sysgen> KEEP
sysgen> EXIT
```

Locating Your Keyword

HP provides a keyword certificate with each release of the software. The keyword certificate includes the following information:

- Your keyword
- System handle
- System HPSUSAN
- Release version
- Instructions
- Entitlement certification that lists all products purchased

The system handle is a name used to identify the system. The system HPSUSAN is a number that specifies the hardware ID (for the system CPU). Realize that the HPSUSAN number will change if you get a CPU upgrade. You'll need a new HPSUSAN number and keyword at that time. The release version is the release of the software on the CD-ROM disks.

Understanding the Keyword

The keyword is made up of 14 characters that you need to specify during the HPINSTAL update process. The keyword is like a password; it validates the products that you purchased and allows you to install or update those products from the CD-ROM disks.

A new keyword is assigned for each new release of the software based on your master product list. Additionally, a new keyword is subsequently assigned specifically for the subsystem(s) you may want to add-on to your system.

Entering Your Keyword in a File

You can put your keyword into a file using any text editor. You need to call the file KEYFILE.PUB.SYS. Doing this is particularly useful if you are running HPINSTAL several times on one system such as to create tapes for other systems.

If you have a KEYFILE.PUB.SYS, when you run the HPINSTAL program, the program will not ask for your keyword. It automatically uses the keyword specified in KEYFILE.PUB.SYS. If the keyword specified in KEYFILE.PUB.SYS is verified against the master product list, HPINSTAL continues. If the keyword is invalid for the master product list, HPINSTAL terminates. You need to recheck the keyword and correct the keyfile or master product list before you can continue.

Because the keyword changes from release to release, you need to update the keyfile before running HPINSTAL to create a CSLT for a new release.

HPINSTAL does not check for the keyword in KEYFILE.PUB.SYS if you are performing an Add SUBSYS option on your system. In this case, you must enter the keyword (matched to the products being added on) interactively when HPINSTAL requests it.

Incorrect Keyword Entry

If you choose not to create KEYFILE.PUB.SYS, HPINSTAL gives you three interactive attempts to enter the keyword correctly. If you fail to enter the keyword correctly by the third try, HPINSTAL terminates. Double check that you have entered the correct keyword as shown on the keyword certificate and try again. If you are certain that the keyword is correct, check the master product list to be sure it corresponds exactly to the list of products on the keyword certificate.

If you are adding new subsystems to an existing system, realize that product number(s) and associated keyword are all input interactively (PRODLIST and KEYFILE are not used in the Add SUBSYS options). Ensure you have entered all product numbers correctly and you have entered the keyword from the add-on keyword certificate. If HPINSTAL still fails to accept the keyword under these conditions, you'll have to call your HP support representative.

Copying Tapes for Distribution

This Appendix describes how to use the SLTCOPY tool that allows you to copy CSLTs for distribution to other sites. SLTCOPY is intended only for copying CSLT/STORE tapes generated by HPINSTAL.

This Appendix comprises the following parts:

- Copying the CSLT from Tape to Tape
- Copying the CSLT from Tape to Disk
- Copying the CSLT from Disk to Tape
- Copying to or from Remote Files
- Copying to or from Remote Tape Drives
- Overriding Defaults

Refer to Appendix H , “Error Messages and Warnings,” for a description of error messages that may occur while using SLTCOPY.

Considerations

You can use SLTCOPY to copy from tape directly to half-inch magnetic tape or DDS tape, or you can copy to a disk file that can later be copied to tape. If you have multiple tape drives configured to your system, you can make multiple copies simultaneously (up to nine).

Copying from tape to disk then from disk to tape is useful if you need to make more CSLT copies than the number of tape drives available on your system.

NOTE You cannot use SLTCOPY to concatenate multiple volumes onto a single volume (for example, you cannot combine a multiple volume set of half-inch magnetic tapes onto a single DDS tape) or change the number of volumes of an SLT (for example, you cannot take a one volume DDS tape and copy it to multiple 1/2 inch tapes).

You can set up tapes drives to be used with SLTCOPY using the AUTOREPLY option so they reply automatically to tape requests. To do this, you must set up a file equation for the master tape (MASTER) or the copy (COPY *n*) to point to a specific LDEV number (where the tape will be mounted) that is configured with AUTOREPLY.

Accessing SLTCOPY

You normally do not need to specifically install SLTCOPY to use it. It is automatically installed in the INSTALL.SYS group when you prepare to run HPINSTAL. If SLTCOPY is unavailable on your system, you can install it by mounting the current CD-ROM disks and running the SETUP script:

```
:SETUP.INSTUTIL
```

SLTCOPY and other programs and files are copied into the INSTALL.SYS group. This takes

approximately 10 minutes. You will see a series of messages and finally the message:

```
SETUP IS COMPLETE
```

You can then run SLTCOPY.

Copying the CSLT from Tape to Tape

You can use SLTCOPY to copy the CSLT/STORE tapes created for distribution to another system. The number of tape volumes that make up the CSLT varies depending on the type of tape you are using and the size of the system. You have to copy each tape volume separately. Depending on the number of tape drives you have, you can make up to nine copies of each tape at a time.

When copying from tape to tape, you can copy magnetic and DDS tapes as follows:

- Half-inch magnetic tapes to half-inch magnetic tapes
- Half-inch magnetic tapes to DDS tapes
- DDS tapes to DDS tapes

You can also copy a tape to or from a remote tape device or remote disk file. Refer to the sections “Copying to or from Remote Disk Files” or “Copying to or from a Remote Tape.”

To copy each tape volume that makes up the CSLT:

1. Log on to the INSTALL group in the SYS account. For example:

   ```
   :HELLO MANAGER.SYS,INSTALL
   ```

2. Load the tape volume you want to copy from. Start with the first tape volume of the CSLT if you have more than one. Be sure that the write enable ring is removed from the tape or that the tape is otherwise write-protected. Note the LDEV number of the tape drive.
3. Load the tape or tapes on which you want to make the copy. (You can make up to nine copies.) Be sure that the tapes you are copying to are write-enabled. Note the LDEV number (or numbers) of the tape drive (or drives).

NOTE **For half-inch magnetic tape only:** When copying from a master tape to a copy, the copy tape must be the same length or longer than the master tape. Because magnetic tapes can vary in length by up to 200 feet, the following error may occur at the end of the tape copy process:

```
COPY# on LDEV # is bad. The tape may be too short or an I/O
error occurred.
```

You can consider recreating the master on a shorter tape. Otherwise, you can try the copy process using a different (longer) tape for the copy.

---

4. Invoke SLTCOPY on any terminal. You do not need to be on the system console. However, you may need to answer tape requests at the system console.

   ```
   :SLTCOPY
   ```

   The SLTCOPY menu is displayed:

```
Select mode (? = help):
1 Copy tape to disk file
2 Copy disk file to tape
3 Copy tape to tape
Which option do you wish to use < Enter 'E' to exit>?
```

5. Type 3 in response to the prompt about which option you want to use:

   ```
   Which option do you wish to use < Enter 'E' to exit>? 3
   ```

6. SLTCOPY asks for the number of copies. Type the number of copies you are making at this time.

   ```
   Enter the number of copies (1-9):
   ```

   You need to have more than one tape drive on the system to make more than one copy at a time. So to make six tape copies, you need to have seven tape drives connected to the system.

7. You will see the following message on the terminal where you ran SLTCOPY:

   ```
   Reply for MASTER is needed.
   ```

   On the system console, you need to reply with the PIN number and the LDEV number of the device from which you are copying.

   Following is an example tape reply performed at the system console. In the example, the PIN is 74 and the LDEV number is 7.

   ```
   ?15:19/#S2/74/LDEV# FOR “MASTER” ON TAPE (NUM)?
   CTRL A
   =reply 74,7
   ```

8. Next you will see the following message on the terminal where you ran SLTCOPY:

   Reply for COPY1 is needed.

   On the system console, you need to reply with the PIN number and the LDEV number of the device to which you are copying.

   Following is an example tape reply performed at the system console. In the example, the PIN is 74 and the LDEV number is 8.

   ```
   ?15:19/#S2/74/LDEV# FOR “COPY1” ON TAPE (NUM)?
   CTRL A
   =reply 74,8
   Reading tape.
   ```

   If you are making more than one copy at a time, you need to respond with the LDEV numbers of the rest of the tape devices as the messages appear. The copies will be named consecutively COPY1, COPY2, COPY3, etc. up to COPY*n*. Where *n* is the number of copies you are making.

9. When it finishes copying the tapes, SLTCOPY informs you how long it took to copy the tapes and provides other information about the tapes. It then redisplays the main SLTCOPY menu.

   ```
   CPU seconds 238
   Elapsed time 7:15
   ```

```
Number of records 9877
Number of tape marks 135

Select mode (? = help)
1 Copy tape to disk file
2 Copy disk file to tape
3 Copy tape to tape
Which option do you wish to use < Enter 'E' to exit>?
```

To copy another tape, select 3. If you are finished, type E to exit the program.

You need to repeat the above procedure for each tape volume that makes up the CSLT you want to copy.

Copying the CSLT from Tape to Disk

You can use SLTCOPY to copy the CSLT/STORE tape volumes to disk. You have to copy each tape volume to a separate disk file. You can only name the disk files using traditional MPE file names. SLTCOPY does not recognize HFS file names (such as /SYS/PUB/CSLTRel55).

You can also copy each tape to a remote disk file. Refer to the section “Copying to or from Remote Disk Files” on page E-16.

Before you start to copy the CSLT to disk be sure to log on to the INSTALL group in the SYS account. For example:

```
:HELLO MANAGER.SYS,INSTALL
```

To copy each CSLT tape volume into a separate disk file:

1. Load the tape you want to copy from. Start with the first tape volume of the CSLT if you have more than one. Be sure that the write enable ring is removed from the tape or that the tape is otherwise write-protected. Note the LDEV number of the tape drive.
2. Invoke SLTCOPY on any terminal. You do not need to be on the system console. However, you will need to answer tape requests at the system console.

   ```
   :SLTCOPY
   ```

   The SLTCOPY menu is displayed:

   ```
   Select mode (? = help):
   1 Copy tape to disk file
   2 Copy disk file to tape
   3 Copy tape to tape
   Which option do you wish to use < Enter 'E' to exit>?
   ```

3. Type 1 in response to the prompt about which option you want to use:

   ```
   Which option do you wish to use < Enter 'E'
   to exit>? 1
   ```

4. SLTCOPY requests the name of the disk file to which you want to copy the tape. You can specify any valid file name that conforms to MPE syntax.

   ```
   New disk file name? TAPE1R55
   ```

5. You can then specify a phrased description of the file and a version number. You can use these fields to best suit your particular needs.

After you enter the information, you are able to verify that it is correct.

```
Enter file description: FILE CONTAINS TAPE 1 RELEASE 5.5 CSLT.
Enter version number: 1
Description: FILE CONTAINS TAPE 1 RELEASE 5.5 CSLT.
Version: 1
Correct [YES]? [RETURN]
```

6. You will see the following message on the terminal where you ran SLTCOPY:

   ```
   Reply for MASTER is needed.
   ```

   On the system console, you need to reply with the PIN number and the LDEV number of the device from which you are copying.

   Following is an example tape reply performed at the system console. In the example, the PIN is 74 and the LDEV number is 7. SLTCOPY then begins to read the tape. It displays the create date of the CSLT tape.

   ```
   ?15:19/#S2/74/LDEV# FOR "MASTER" ON TAPE (NUM)?
   CTRL A
   =reply 74,7
   Reading tape.
   Create date: FRI, MAR 25, 1994, 5:58 PM MPE/iX SLT TAPE
   ```

7. It takes approximately 8-10 minutes to copy each 2400 ft. half-inch magnetic tape to a disk file; it takes approximately one hour to copy a DDS tape. SLTCOPY informs you how long it actually took to make the file. It then redisplays the main SLTCOPY menu.

   When you finish making a separate disk file for each tape volume in the CSLT tape set, you can copy each file to tape, making as many copies as you need to support additional systems.

   ```
   CPU seconds 238
   Elapsed time 7:15
   Select mode (? = help)
   1 Copy tape to disk file
   2 Copy disk file to tape
   3 Copy tape to tape
   Which option do you wish to use < Enter 'E' to exit>?
   ```

To make another disk file, select 1. To copy a disk file to tape, select 2. If you are finished, type E to exit the program.

Copying the CSLT Files from Disk to Tape

The disk files created by SLTCOPY can now be copied onto tape. You can make up to nine copies of each disk file at a time (depending on the number of tape drives attached to your system). Each disk file must be copied to a separate tape.

You can also copy a disk file to or from a remote tape device. Refer to the section "Copying to or from Remote Disk Files."

To copy each file that represents a volume of the CSLT:

1. Log on to the INSTALL group of the SYS account. For example:

   ```
   :HELLO MANAGER.SYS
   ```

2. Load the tape or tapes on which you want to make the copy. Be sure that the tapes you are copying to are write-enabled. Note the LDEV number or numbers of the tape drive or drives.

NOTE **For half-inch magnetic tapes only:** When copying from a master CSLT tape to a disk file then to another tape, the copy tape must be the same length or greater than the original master tape from which the disk file was made. Because magnetic tapes can vary in length by up to 200 feet, the following error may occur at the end of the copy process:

```
COPY# on LDEV # is bad. The tape may be too short or an I/O
error occurred
```

You can consider recreating the master on a shorter tape. Otherwise, you can try the copy process again using a different (longer) tape for the copy.

---

3. Invoke SLTCOPY on any terminal. You do not need to be on the system console. However, you will need to answer tape requests at the system console.

   ```
   :SLTCOPY
   ```

   The SLTCOPY menu is displayed:

   ```
   Select mode (? = help):
   1 Copy tape to disk file
   2 Copy disk file to tape
   3 Copy tape to tape
   Which option do you wish to use < Enter 'E' to exit>?
   ```

4. Type 2 in response to the prompt about which option you want to use:

   ```
   Which option do you wish to use < Enter 'E' to exit>? 2
   ```

5. SLTCOPY asks the name of the disk file you want to copy onto tape. In the following example text, the file name TAPE1R55 is used. In its place, specify the name you assigned to the disk file that you now want to copy to tape. The file description is then displayed.

   ```
   Old disk file name? TAPE1R55
   Description: File contains tape 1 Release 5.5 CSLT.
   Version: 1
   Create date: FRI, MAR 25, 1994, 5:58 PM MPE/iX SLT TAPE
   Correct [YES]? [RETURN]
   ```

   If you press **[RETURN]** in response to “Old disk file name?”, you will return to the main SLTCOPY menu.

6. SLTCOPY then asks for the number of copies. Type the number of copies you are making at this time. (This number must correspond to the number of tapes you have mounted on tape drives.)

   ```
   Enter the number of copies (1-9):
   ```

   You need to have more than one tape drive on the system to make more than one copy at a time. So to make six tape copies, you need to have six tape drives connected to the system.

7. You will see the following message on the terminal where you ran SLTCOPY:

   ```
   Reply for COPY1 is needed.
   ```

   On the system console, you need to reply with the PIN number and the LDEV number of the device to which you are copying.

   Following is an example tape reply performed at the system console.

   In the example, the PIN is 74 and the LDEV number is 8.

   ```
   ?15:19/#S2/49/LDEV# FOR “COPY1” ON TAPE (NUM)?
   CTRL A
   =reply 49,7
   Writing tape.
   ```

   If you are making more than one copy at a time, you need to respond with the LDEV numbers of the rest of the tape devices as the messages appear. The copies will be named consecutively COPY1, COPY2, COPY3, etc. up to COPY n where n is the number of copies you are making.

8. When it finishes making the tape, SLTCOPY informs you how long it took to make the tape and provides other information about the tape. It then redisplays the main SLTCOPY menu.

   ```
   CPU seconds 238
   Elapsed time 7:15

   Number of records 9877
   Number of tape marks 135

   Select mode (? = help)
   1 Copy tape to disk file
   2 Copy disk file to tape
   3 Copy tape to tape
   Which option do you wish to use < Enter 'E' to exit>?
   ```

   To copy another disk file to tape, select 2. If you are finished, type E to exit the program.

You need to repeat the above procedure for all of the disk files that make up the CSLT that you want to copy.

Copying to or from Remote Disk Files

You can use the procedures described in the sections “Copying the CSLT from Tape to Disk” and “Copying from Disk to Tape” when copying to or from a remote disk file. Your system must have access to networking software (such as NS 3000) to connect remotely with other systems. You need to know the node name of the remote system on which the disk file is or will be placed.

To copy to a remote file, set up a file equation to point to the name of the remote file:

:FILE *filename1 = filename2:nodename*

where:

filename1 The name following an asterisk to specify to SLTCOPY.

filename2 The name of the file on the remote system.

nodename The name used to specify the remote system.

The following example shows how to create a remote disk file called CSLTVOL1 on a remote system called REMSYS. Only the part of the procedure that differs from the normal procedure for copying a tape into a disk file is shown.

```
:DSLINE REMSYS
:REMOTE HELLO USERNAME.ACCOUNT,GROUP
:FILE CSLTVOL1=CSLTVOL1:REMSYS
...
:SLTCOPY
Select mode (? = help)
1 Copy tape to disk file
2 Copy disk file to tape
3 Copy tape to tape
Which option do you wish to use < Enter 'E' to exit>? 1
New disk file name? *CSLTVOL1
...
```

Notice that the remote disk file name must be preceded with an asterisk (*).

Copying to or from a Remote Tape

Your system must have access to networking software (such as NS 3000/iX) to copy tapes to or from other systems. You need to know the nodename where the tape or tapes are mounted.

To copy to or from a remote tape drive, set up a file equation to point to the nodename of the remote tape drive.

If the master tape is on the remote system, you need to copy from the remote system. Set up the following file equation:

```
:FILE MASTER=MASTER:nodename; DEV=TAPE
```

where *nodename* is the specification for the remote system.

The following example shows how to copy to a local tape drive from a master CSLT on a remote tape drive on a system called REMSYS. Only the part of the procedure that differs from the normal procedure for copying is shown.

```
:DSLINE REMSYS
:REMOTE HELLO username.account,group
:FILE MASTER=MASTER:REMSYS;DEV=TAPE
:SLTCOPY
Select mode (? = help) Select mode 1 or 3
1 Copy tape to disk file
2 Copy disk file to tape
3 Copy tape to tape
Which option do you wish to use < Enter 'E' to exit>? 3
...
SLTCOPY redirects MASTER according to the file equation.
```

If you are copying to the remote system, the master tape is on the local system. Set up a file equation for each copy you are making as follows:

```
:FILE COPYn =COPYn:nodename;DEV=TAPE
```

where:

n	number of copies.
nodename	name used to specify the remote system.

NOTE You can only copy to multiple remote tapes if you invoke SLTCOPY with the WAITIO option. Refer to "Overriding Defaults."

The following example shows how to copy from a master CSLT on a local tape drive to a remote tape drive on a system called REMSYS. Only the part of the procedure that differs from the normal procedure for copying is shown.

```
:DSLINE REMSYS
:REMOTE HELLO username.account,group
:FILE COPY1=COPY1:REMSYS;DEV=TAPE
:SLTCOPY
Select mode (? = help) Select mode 2 or 3
1 Copy tape to disk file
2 Copy disk file to tape
3 Copy tape to tape
Which option do you wish to use < Enter 'E' to exit>? 3
```

Copying CSLT Volumes in Batch Mode

You can also run SLTCOPY in batch mode. To do this, you must build a job stream that:

1. Logs in to a group with the appropriate capabilities (PM, ND, and SF)
2. Sets any required file equations
3. Invokes SLTCOPY
4. Provides responses to the SLTCOPY prompts for information. The responses will vary depending on which option is chosen. Each response must appear on a separate line in the job stream.

When you run the job stream, replies for the tape devices will still be required at the console. If an error occurs, SLTCOPY will write the cause of the error to the spoolfile, and the job will abort. The following is an example job stream called COPYJOB used for copying tape to tape:

```
!JOB COPYJOB, MANAGER.SYS,INSTALL
!COMMENT On the next two lines, 3 is the option (tape to tape)
!COMMENT and 2 is the number of tapes
!SLTCOPY
3
2
E
!EOJ
```

Overriding Defaults

Two options for SLTCOPY are provided to allow additional control over the utility. The options are INFO=NOWAITIO and INFO=WAITIO. You only need to use these options if you want to override the SLTCOPY defaults.

Table E-1. SLTCOPY Defaults

No. of Copies	Default Option
1	WAITIO
2-9	NOWAITIO

To override the defaults, you should be very familiar with MPE/iX I/O operations.

WAITIO causes SLTCOPY to wait to send the next buffer until it receives an acknowledgment from the system that the last buffer has been written to tape. NOWAITIO tells SLTCOPY not to wait for the acknowledgment before sending the next buffer. This option is useful (and is the default) when creating multiple output tapes. It allows SLTCOPY to create multiple tapes virtually simultaneously.

To override the defaults listed in Table E-1., you invoke SLTCOPY as follows.

If making one copy and wanting to use the NOWAITIO option, invoke SLTCOPY as follows:

```
:RUN SLTCOPY;INFO="NOWAITIO"
```

You then respond 1 when SLTCOPY requests the number of copies.

If making multiple copies all at once and wanting to use the WAITIO option, invoke SLTCOPY as follows:

```
:RUN SLTCOPY;INFO="WAITIO"
```

You then specify the number of copies you want to make when SLTCOPY requests the number of copies.

NOTE Remote file access is not permitted for output tapes if the NOWAITIO option is in effect.

Adding a CD-ROM Drive

This section describes how to configure HP-IB and SCSI CD-ROM drives as disk devices to an MPE/iX system. It describes software configuration only. Refer to the documentation supplied with your CD-ROM drive for information about the hardware. If you need further assistance, contact your HP representative.

Prerequisites

This section describes connecting the CD-ROM drives to an existing MPE/iX system. You need to know how to use SYSGEN to configure devices on your MPE/iX system. Complete information about system configuration is provided in the *System Start-up, Configuration and Shutdown Reference Manual*. You also need to be familiar with the specific configuration of your system.

To connect a CD-ROM drive to an HP 3000 computer, you need to have the appropriate card installed. This Appendix makes the following assumptions:

- You have contacted your HP representative to verify that the CD-ROM drive you have can be connected to the specific computer system.
- You have the appropriate cables to connect the CD-ROM drive to your system.
- The appropriate card or cards are installed and configured on your HP 3000. HP-IB devices require HP-IB cards; SCSI devices require SCSI cards.

Connecting and Configuring a CD-ROM Disk Drive

Generally, connecting and configuring a CD-ROM disk drive involves the following steps:

- Determining where to install the CD-ROM drive
- Using SYSGEN to configure the drive
- Power Off
- Connecting the drive
- Power On
- Rebooting the system

To configure a CD-ROM disk drive:

1. Determine where to attach the CD-ROM disk drive by identifying where the HP-IB or SCSI card is located. Note that you can daisy-chain an HP-IB CD-ROM onto an HP-IB tape drive or disk drive.
2. Determine the device number (also called HP-IB or SCSI address) for the CD-ROM drive. (The number must be unique for the cable to which it is attached.)
3. Set the device number on the back of the CD-ROM drive.
4. Log on to the system as MANAGER.SYS:

```
:HELLO MANAGER.SYS
```

5. Invoke the IO configurator in SYSGEN to modify the configuration:

```
:SYSGEN
sysgen>IO
```

Add the device:

```
io>AD LDEV= ldev PATH= path ID= prod#
```

where:

ldev	logical device number of the CD-ROM drive.
path	hardware path to the CD-ROM drive (e.g., 36.1.3 or 52.4).
prod#	identification number of the CD-ROM drive (i.e., for HP-IB: HPC1707A; for HP SCSI: HPA1999A; for Toshiba 3401 SCSI: CD-ROM-XM-3401TA or CD-ROM-XM-4101TA).

SCSI Example:

```
:SYSGEN
sysgen> IO
   (first verify that path 52 has SCSI-DAM as PMGR)
io> LPATH 52    ***SAMPLE DATA***
   (Add the path for the CD-ROM with a pseudo manager as
   the ID)
io> APATH PATH=52.3 ID=PSEUDO PMGR=TRANSPARENT_MGR
   (If you have a second CD-ROM to configure, then do
   the same for the other path:)
io> APATH PATH=52.4 ID=PSEUDO PMGR=TRANSPARENT_MGR
   (then add the devices; `.0' is appended to path
   identifier)
io> ADEVICE LDEV=11 PATH=52.3.0 CLASS=DISC ID=HPA1999A
    LMGR=LOGICAL_DEVICE_MANAGER PMGR=SCSI_DISC_DM
   (then do the same for LDEV 12)
io> ADEVICE LDEV=12 PATH=52.4.0 CLASS=DISC ID=HPA1999A
    LMGR=LOGICAL_DEVICE_MANAGER PMGR=SCSI_DISC_DM
```

6. Hold the changes you just made, exit the IO configurator, keep the new configuration, and exit SYSGEN:

```
io> HOLD
io> EXIT
sysgen> KEEP CONFIG
       (Keep the changes to the current config group.
        This assumes the group name is CONFIG.SYS.)
sysgen> EXIT
```

7. Shut down the computer system:

```
CTRL A
=SHUTDOWN
```

After you see the message SHUT 6, power off the computer.

8. Connect the CD-ROM drive to the card using the path you configured.
9. Set the voltage selector switch, if necessary, on the back of the CD-ROM drive. It should

be set correctly.

10. If installing a SCSI CD-ROM drive, be sure that the SCSI bus is terminated properly at each end of the bus.

11. Power on the CD-ROM drive.

12. Power on the computer and boot the system from the primary path. The boot message varies depending on the system model.

    If you system asks you to enter the boot path, enter the primary boot path.

    If your system asks "Boot from primary path?" respond Y.

    Enter Y to `Interact with IPL (or ISL)?` if it appears on your screen.

13. Verify the I/O configuration using ODE:

- If you are on a 5.0 or greater system:

```
ISL>ODE
ODE>RUN MAPPER
```

  Refer to "5.3 Listing the System Configuration" in Chapter 5 , "Modifying Your System," for procedural information. Also refer to the *Offline Diagnostics Environment (ODE) User's Manual*.

  The system displays the I/O configuration for the system. You need to check whether the CD-ROM drives have been configured correctly by seeing whether MPE/iX recognizes them. Example hardware configuration paths for HP-IB CD-ROM drives are shown below. Note the paths for your drives are likely to have different values, but the paths listed in your `MAPPER` output need to match the paths you entered with the `AD` command in the `SYSGEN` IO configurator.

```
                                Type
Path     Component Name          ID
------------------------------ ------
52.3.0    CD-ROM Drive        HPA1999A
52.4.0    CD-ROM Drive        HPA1999A
```

```
ODE>EXIT
```

- If you are on a 4.0 or 4.5 system:

  — Please ensure that all peripherals are powered on before you run `IOMAP`. If a peripheral is not powered on, it will not appear on `IOMAP` as an I/O component.

  — If you need information about hardware device IDs, print the file `IODFAULT.PUB.SYS` to your screen. This file contains ID numbers and associated parameters for hardware devices. You can display this file when the system is up and you have the system prompt.

```
ISL>IOMAP
```

  The system a screen similar to:

```
IOMAP Revision 2817 April 26, 1988
IOMAP Running:  ce81
```

```
This program has the capability to identify the configuration of
the system and its I/O paths and devices.  Many of the components
of the I/O system can be tested with selftest and loopback
diagnostics.
         .
         .
         .

Do you wish to modify any program parameters? N
```

Record or print the I/O configuration table displayed on the screen.

This display shows all path names of the I/O components. These pathnames will be needed later to add to the SYSGEN I/O configuration. This screen is a sample of an IOMAP from an HP 3000 Series 950 system. The IOMAP display on your screen may differ significantly from the one below.

```
Identify: Loop 1: All I/O components are being....
 Processor Identification:
         .
         .
         .
                                          Type    SW  Rev        Tests
 Path      Component Name                  ID     Mod Hdwr Firm  Avail
_______    ____________________________  ____    ___ ___  ___    ___
8          A1700-50005 Channel Adapter   8H      5H  10H    0     0 ST LB
12         28640-60001-802.3-LAN         2H      4H  52H    0     0 ST LB

16         HP-PB SCSI Card               4H      4H  39H    0     0 ST LB
               SCSI bus address for host adapter is 7
17     HP-PB Centronics Parallel Port    5H      4H  3AH    0     0
52          HP-PB SCSI Card              4H     14H  39H    0     0 ST LB
               Resetting SCSI Bus (Approx. 10 seconds) ....
               SCSI bus address for host adapter is 7
52.0.0         Unknown SCSI device type (C1533A          )
52.6.0         HPC2474S disc drive       -    -    -    -  0B11 ST
56  A1703-60003 HP-PB Console/LAN Card 2H     14H  60H    0     0 ST LB
               System Console is connected to this card
62          Native Processor             0H
63  Memory Controller (192 M bytes)     1H     14H   9H    0     0    LB
               Slot 1A - 32M
               Slot 1B - 32M
               Slot 2A - 32M
               Slot 2B - 32M
               Slot 3A - 32M
               Slot 3B - 32M
     Identify Loop 1 (1H) complete
```

Respond YES to the prompt.

```
     Do you want to exit this program and return to ISL? Y

      IOMAP Exiting.
      ISL>
```

14.Start the system:

```
ISL>START NORECOVERY
```

You can now proceed to use the CD-ROM drives on your system.

F HP Patch/iX Reference

This appendix provides a detailed description of the HP Patch/iX tool and options and includes these sections:

- Using HP Patch/iX
- HP Patch/iX Main Menu
- Selecting Activities
- Viewing Patches
- Qualifying Patches
- Creating a Patch or Stage Tape
- Exiting HP Patch/iX

Hewlett-Packard recommends that you always restore HP Patch/iX from the patch tape. This ensures that you are using the most recent version of HP Patch/iX. For installation instructions, refer to section 4.7, “Starting the Patch Management Tools.”

To check your version of HP Patch/iX, type at the MPE/iX prompt:

```
:PATCHIX VERSION
```

Refer to a checklist selected from the checklists in Chapter 2 , “Task Checklists,” for the procedures to follow and the order of those procedures for your task.

Using HP Patch/iX

This section describes how to move within HP Patch/iX.

To select a menu item:

1. From a HP Patch/iX screen or window, highlight an option.

   Use either the arrow keys or the **[j]** and **[k]** keys to move up and down the list.

2. Press **[Return]**.

Lists of patches display in the data area of screens. You can Mark or Unmark an item. Marked items are included in the processing activity. Unmarked items are not included in the processing activity.

To select items in a list for processing:

1. Highlight the item to select it. Select or deselect as many items as needed.

   Use either the arrow keys or the **[j]** and **[k]** keys to move up and down the list.

2. Press the Mark **[F2]** function key.

   A letter displays in the Mark column. For example, if the Patch Qualification screen is displaying, the Mark column shows V for Veto or F for Force, depending upon the qualification status of the patch. (Press **[F2]** again to unmark an item.)

3. Press the process function key **[F4]** to complete an activity.

Function Keys and Keyboard Alternates

Function keys display on the bottom of all screens. Only actions relevant to the current activity display. Table F-1. lists all the function keys, screen names, corresponding action, and standard keyboard equivalents for each function key action. Enter uppercase or lowercase letters.

Table F-1. Screen Function Key Assignments

Screen	Function Key	Action	Keyboard Alternate
All Screens	**[F1]**	Help	?
	[F8]	Exit/Previous Menu	E
Main Menu	**[F1]**	Help	?
	[F8]	Exit	E
Select Activities Menu	**[F1]**	Help	?
	[F2]	Mark/Undo Mark	X
	[F4]	Process List	P
	[F8]	Previous Menu	E

Table F-1. Screen Function Key Assignments

Screen	Function Key	Action	Keyboard Alternate
Customize Activities Menu	**[F1]**	Help	?
	[F2]	Mark/Undo Mark	X
	[F3]	Verify/Undo Verify	V
	[F4]	Process List	P
	[F8]	Previous Menu	E
View Patches Menu	**[F1]**	Help	?
	[F3]	Process List	P
	[F5]	Previous Filter	Filter number: 1, 2, or 3
	[F6]	Next Filter	Filter number: 1, 2, or 3
	[F8]	Previous Menu	E
Qualify Patches Menu	**[F1]**	Help	?
	[F2]	Veto/Undo Veto	V
	[F3]	Force/Undo Force	F
	[F4]	Process Changes	P
	[F5]	Previous Filter	Filter number: 1, 2, 3, 4, 5, or 6
	[F6]	Next Filter	Filter number: 1, 2, 3, 4, 5, or 6
	[F8]	Previous Menu	E
Viewing Detailed Patch Information	**[F1]**	Help	?
	[F2]	Previous Patch	[Shift]-[Tab]
	[F3]	Next Patch	[Tab]
	[F4]		
	[F5]	Previous View	View number: 1, 2, 3, 4, 5, 6, 7, or 8
	[F6]	Next View	View number: 1, 2, 3, 4, 5, 6, 7, or 8
	[F8]	Previous Menu	E

Selecting Filter and View Options

There are several filter and view options for viewing patch information. The current filter or view being displayed is listed in the upper right corner of the HP Patch/iX screen.

To select a specific filter or view, press the function key to toggle between the filter or view options, or press the number key that corresponds to the filter or view.

Information Windows

Information windows do not require a response from you. There are two types of Information windows.

Pop-up Information windows close themselves out when they are completed. They display to provide you with status information so you can judge your time and activities.

Scrollable Information windows display in the middle of selected screens when you are viewing patches. The top boundary of the scrollable information window has a +up if you are not at the top of the window. The bottom boundary has a +dn if you are not at the bottom of the window.

To scroll in an information window, use the following keys:

- Arrow keys or **[j]** and **[k]** keys to move up and down.
- Page Up or Page Down keys to scroll a page at a time.

Message Windows

Message windows display at the bottom of the screen. They provide information about the current activity and contents of the screen.Message windows also display activity status indicators:

Heart Beat series of dots that appear between angled brackets, <.... >. The dots only display activity and not progress, therefore the dots may fill the space between brackets many times.

Progress Meter series of horizontal bars contained within square brackets, [| | | |]. The progress of the bars reflects the percentage of completion of the activity. When the space between brackets is filled the activity is complete.

Responding to Error Messages

When HP Patch/iX displays an error message that gives a short description of the error, select from two options:

- Press **[Return]** to continue.
- Press **[F1]** to get the *Error Help* window.

Using Help

Help screens provide information about HP Patch/iX screens and error messages. If an error has occurred, Help screens list cause and action information for the current error.

- To use Help, press **[F1]**.

  A message displays with information about the current screen or error message.
- To exit Help, press **[F8]**.

HP Patch/iX Main Menu

The HP Patch/iX Main menu displays the following list of available activities:

Select Activities lists the type of patching options you can apply to your system using HP Patch/iX.

View Patches displays lists of patches. There are several filters defined that allow you to view selected patches.

Qualify Patches Evaluates the submitted patches for compatibility with your system.

Create [Tape] creates either a CSLT or a STORE tape of the patches and add-on products, (if applicable) that you are applying to your system.

Create [Stage] [Tape] creates a staging area for the patches you are applying to your system. This item is only available if Stage/iX is initialized.

Exit HP Patch/iX exits you from HP Patch/iX, if you are in mid-process.

If Stage/iX is initialized, the HP Patch/iX Main menu replaces *Create [Tape]* with the Stage/iX option *Create [Stage] [Tape]*.

Selecting Activities

The Select Activities menu allows you to select the type of patching activity you are planning to perform, and prepares the system for the patch management activity you selected. These are the options:

- Adding a PowerPatch
- Adding a Reactive patch
- Adding (SUBSYS) products

Adding a PowerPatch

Select *Adding a PowerPatch* if you have a PowerPatch tape to apply to your system. PowerPatch tapes contain a bundle of general release patches for a specific operating system version. Using HP Patch/iX to apply PowerPatch patches allows you to:

- Accept and apply a default list of patches that Hewlett-Packard determines are appropriate for your system.
- Add or remove selected patches from the default list of patches and apply these patches to your system.

Adding Reactive Patches

Select *Adding Reactive Patches* if the Hewlett-Packard Response Center has transmitted to you case specific patches. These patches may have been ordered in response to a problem, or may be installed to avoid a problem that you or the Response Center have determined has the potential of being experienced in the future.

Adding (SUBSYS) Products

Select *Adding (SUBSYS) Products* if you have a SUBSYS product tape that was shipped with your PowerPatch tape. SUBSYS products are subsystem products that you specifically order. This option can be used only when a new product is being added to the system at the same time a PowerPatch is applied. Applying SUBSYS products to your system is known as the Add-On process. When you select this option, HP Patch/iX restores product information from the SUBSYS tape that will be used in patch qualification.

If you are adding-on SUBSYS products with a PowerPatch, you can apply Reactive patches at the same time. You cannot add-on SUBSYS products and Reactive patches together without a PowerPatch.

If you are adding SUBSYS products, you cannot stage the modification. When this item is selected, the Main menu replaces the *Create [Stage] [Tape]* option with the *Create [Tape]* option.

Customizing Patch Preparation

When you select a patching activity, the default is to perform preparation operations for that patching activity. You can instead customize patch preparation. When you customize patch preparation, you are overriding the Hewlett-Packard recommended operations, unless you have downloaded patches from the HP SupportLine web site.

If you downloaded patch files, you must deselect both “Purge all files in the PATCHXL.SYS group” and “Restore files from Reactive patch tape.” Also if you downloaded files from the web site, confirm that you have the following files in the INSTALL.SYS group:

```
PATCHIX, PATCH000, ABLDINTX, ALKEDCAT, ALKEDHLP, AUTOCM,
AUTOLED, AUTOSPTH.
```

If the patch files are not in the PATCHXL.SYS group, or the A-files are not in the INSTALL.SYS group, Patch/iX will not allow you to unmark the item, “Restore files from Reactive patch tape.”

In the customized patch preparation activity, the possible patch preparation operations are the following:

- Purge unneeded files in INSTALL.SYS group.

  HP Patch/iX purges all unnecessary files found in the INSTALL.SYS group. These files are typically left over from a previous patch installation and can cause HP Patch/iX, AUTOINST, or HPINSTAL to fail.

  This operation is recommended for the PowerPatch, Reactive Patch, and Add-on activities.

- Purge all files in PATCHXL.SYS group.

  HP Patch/iX purges all files in the PATCHXL.SYS group. These are typically, files that are left over from a previous patching process. This operation is recommended for Reactive Patches unless you downloaded files from HP SupportLine.

  Unmark this item if you have intentionally placed new patch files in the PATCHXL.SYS group.

- Purge all files in USL.SYS, UXL.SYS, or UNL.SYS groups.

HP Patch/iX purges all files found in the groups as selected. These files are typically left over from a previous product installation and can cause either HP Patch/iX or AUTOINST to fail.

This is recommended for the Add-on activity.

- Restore files from reactive patch tape.

  HP Patch/iX restores the patch files from the mounted tape and copies them into the patchxl.sys group.

  Unmark this item if you have downloaded Reactive patch files to the PATCHXL.SYS group.

- Restore Product (SUBSYS) information files

  HP Patch/iX restores a file that lists the ordered products that are on the mounted tape. When used with information files delivered on the PowerPatch tape, HP Patch/iX will be able to qualify patches for those products without forcing you to first install them on the system.

  HP Patch/iX also restores library components from the tape. These are incorporated into the new libraries that are created by HP Patch/iX.

  This operation is recommended for the Add-on activity.

- Restore PowerPatch information files.

  HP Patch/iX restores the information files from the PowerPatch tape into the INSTALL.SYS group. These files are used to qualify patches for your system, and provide you with information about the patches that are on the Powerpatch tape. The actual patch files will be restored during *Create [Stage][Tape]/Create [Tape]* activity when HP Patch/iX has determined the subset that are applicable to your system. This saves time and disk space since the PowerPatch tape could potentially contain many megabytes of files that are not needed for your system.

  This operation is recommended for the PowerPatch activity.

- Copy System Libraries.

  HP Patch/iX copies the three MPE/iX system library files (sl.pub.sys, xl.pub.sys, and nl.pub.sys) into the INSTALL.SYS group.

  This operation is recommended for the PowerPatch, Reactive Patch, and Add-on activities.

Viewing Patches

When you select View Patches from the Main menu, the View Patches screen lists the following depending on the filter selected:

- All the patches that have been installed on your system using HP Patch/iX. This option allows you to view information about the patches that have previously been installed on the system. You can quickly determine if a patch has already been installed on your system.
- All the patches that are available for installation using this patch process. This option

displays only if you have completed the Select Activities portion of the patch process.

- Available SUBSYS products. If you are performing an add-on task, we recommend that you view the list of available products to confirm that you received what you ordered.

The list of patches displayed in the View Patches screen varies depending upon the filter selected for the viewer. The default View Patches filter displays Installed Patches. The current filter is displayed at the top right corner of the View Patches window.

View Patches Filters

There are three View Patches filter options:

Installed Patches (1) patches already on the system.

Available Patches (2) patches on the PowerPatch or Reactive patch tapes. From this filter you can view detailed information about each patch.

Available Products (3) products on the SUBSYS tape.

Qualifying Patches

The Qualify Patches option provides three functions:

- Automatically reviews the available patches and determines which patches are compatible with your system.
- Allows you to *force* or *veto* individual patches. Forcing a patch tells HP Patch/iX to include (add) the selected patch in the patch installation. Vetoing a patch tells HP Patch/iX to not include (remove) the selected patch from the set of patches to be installed.
- Establishes the list of patches that will be included in creating the patch installation tape (CSLT or store tape).

This part of the process is where you choose which patches you want to install. HP Patch/iX evaluates all the proposed patches and determines if each patch qualifies for installation. A patch qualifies for installation if:

- It is compatible with your current software.
- All patch and product dependencies are resident.
- You do not have a more recent version of the patch already installed on your system.

CAUTION Forcing a patch that does not automatically qualify for your system is strongly discouraged by Hewlett-Packard. Force patches only under the recommendation of the Hewlett-Packard Response Center.

Qualified Patch Filters

To view selected lists of patches there are six filter settings available:

All (1) Displays all patches available for the current patch process.

Qualified (2) Displays all patches that qualify for the system.

Disqualified (3) Displays all patches that failed to qualify for the system.

Difference (4) Displays the difference in the list of qualified patches between the two most recent qualifications.

Vetoed (5) Displays all patches marked for veto from the default qualification. They are marked with V.

Forced (6) Displays all patches marked for force from the default qualification. They are marked with F.

To change the View Patches filter, press **[F5]** Previous Filter or **[F6]** Next Filter (or press the number on the keyboard that corresponds to the filter view). HP Patch/iX toggles through the View Patches filter options and displays the selected list of patches.

Qualified Patch Detailed Views

From any of the filter options, you can view detailed information about each patch. These are the types of detailed views:

- Summary (1)
- General Release (GR) Text (2)
- Special Instructions (SI) Text (3)
- Product Numbers (4)
- Known Problem Report (KPR) Numbers (5)
- Patch Supersedes (6)
- Patch Components (7)
- Patch Dependencies (8)

To view detailed patch information.

1. From the Qualified Patches screen, highlight a patch and press **[Return]**.

   The Patch Detail Summary screen displays.

2. Press **[F5]** Previous View or **[F6]** Next View.

   HP Patch/iX toggles through the View Patch Detail options and displays detailed information about the selected patch.

3. Press **[F2]** Previous Patch or **[F3]** Next Patch**.**

   HP Patch/iX scrolls through the list of patches in the Qualified Patches screen and displays detailed information about the selected patch.

4. To return to the Main menu, press **[F8]** until the Main menu displays.

View (1) — Summary

The Summary view lists evaluation information about the selected patch.

Qualification Status—indicates why the patch qualifies or not.

Patch Installation Status—indicates whether the patch is installed already or not.

Patch Recommendation—indicates when a patch should be installed. An alphabetic code displays in the Flags column of the Qualify Patches screen. The code is expanded in the Detailed Summary view.

The Summary Detailed View Patch Recommendation Codes are:

A	FOS patch that is recommended for installation on all systems.
B	FOS patch that is recommended for installation if appropriate. There are special circumstances that are described in the General Release text.
C	FOS enhancements with hardware dependencies.
D	FOS enhancements with software dependencies.
E	Product (Subsystem) patch that should be applied if the product is installed.
F	Product (Subsystem) patch that should be applied if the product is installed and if appropriate. There are special circumstances that are describe in the General Release text.
G	Product (Subsystem) enhancement released as a patch.

The following three codes are for non-GR patches:

H	Limited release patch.
I	Site-specific patch.
J	Other.

Installation Method—Indicates whether installation will be by `CSLT` or `Store` tape.

Patch Criticality—A numeric code displays in the Flags column of the Qualify Patches screen. The code is expanded in the Detailed Summary view.

The Summary Detailed View Patch Criticality Codes are:

1. System may experience a system failure without this patch.
2. System may experience deadlock or hang without this patch.
3. Data loss or corruption may be experienced without this patch.
4. Program abort may occur without this patch.
5. Gradual loss of memory objects, virtual memory or other performance degradation may occur without this patch.
6. Other, see the GR text information for a description.

blank Not a critical patch.

View (2) — General Release (GR) Text

Displays all of the General Release text that is available for the patch as shown in the following figure.

View (3) — Special Instructions (SI) Text

Displays any special instructions or configuration requirements that have been included for the patch.

View (4) — Product Number

Displays a list of products that are affected by the selected patch.

View (5) — Known Problem Report (KPR) Numbers

Displays a list of the KPR (Known Problem Report) numbers that are referenced by the patch. This is provided as cross reference information to determine what known problems are fixed by this patch. These are also known as Service Request (SR) numbers.

View (6) — Patch Supersedes

Displays the history of this patch. What patches it supersedes. All patches in the Supersedes tree of the current patch are included in the patch.

View (7) — Patch Components

Displays the files and procedures that are modified by this patch. See the following figure.

View (8) — Patch Dependencies

Often a patch will have some dependency on another patch being installed on the system to work correctly. HP Patch/iX handles dependencies automatically, by disqualifying patches when their dependencies are not present. If you force a patch on the system, all of its dependencies will also be forced onto the system.

Creating a Patch Tape or Stage Tape

On the HP Patch/iX Main menu, the *Create [Stage] [Tape]* option displays if HP Stage/iX is initialized. If HP Stage/iX is not initialized or, if one or more qualified patches is not stageable, the *Create [Tape]* option displays. This is a required action for patch installation and provides the following patch installation options:

- Creates a **staging area** that contains a set of system software files that are modified by the patches you are applying to your system.
- Creates a CSLT/STORE of patches and (optionally) SUBSYS products that you are applying to your system.

  The **CSLT/STORE tape** created at the end of this section contains all the SUBSYS library components. The balance of the files are restored and applied during Phase II of the modification process.
- Creates a **STORE tape** of patches that you are applying to your system.

HP Patch/iX determines which option is appropriate and/or possible for your system and set of patches:

- A CSLT can be created if any patch with YES in the Qualified column also has CSLT/Store in the Tape column.
- A store tape can be created if all of the patches with YES in the Qualified column have Store-Only in the Tape column.
- A Staging area on disk can be created if all of the patches with YES in the Qualified column also have YES in the Stage column.

  If HP Stage/iX is not initialized, the Stage column does not display.

  The status of the Tape column does not affect whether patches can be staged or not.
- If HP Stage/iX is initialized, HP Patch/iX prompts you to specify if you want to create a CSLT/STORE tape, a staging area, or both.

Once the CSLT or STORE tape, or staging area on disk, is created, it can then be used to modify the system.

To create your patch installation stage and/or tape:

1. From the HP Patch/iX Main menu, highlight *Create [Stage] [Tape]* or *Create [Tape]* and press **[**Return**]**.
2. If HP Stage/iX is initialized, select the appropriate option:

S	Create a staging area.
T	Create a CSLT/STORE tape.
B	Create both a staging area and a CSLT/STORE tape.

   Hewlett-Packard recommends that you select T to create a CSLT/STORE tape for backup purposes.
3. Complete the steps as shown in Chapter 4 , “Preparing Your System.”

Exiting HP Patch/iX

To exit HP Patch/iX:

1. Use **[F8]** to return to the HP Patch/iX Main menu.
2. From the HP Patch/iX Main menu, highlight the fifth option, *Exit HP Patch/iX* and press **[**Return**]**.

   The messages displays:

   ```
   Patch Management completed successfully.
   **EXITING HP PATCH/iX**
   ```

   The MPE/iX prompt displays.
3. If you downloaded reactive patches from the HP SupportLine web site, respond to the prompt to remove those files from your disk.

   If you want to keep a copy of the downloaded patches, and you do not have a copy elsewhere, select N.

   If you respond Y, the PowerPatch and SUBSYS files are automatically cleaned up by HP Patch/iX.

NOTE Exiting HP Patch/iX is a *required* action for patch installation.

G HP Stage/iX Reference

This Appendix describes how to use HP Stage/iX in command mode and how to use STAGEISL. Most HP Stage/iX functions can be performed through the command line interface in addition to the HP Patch/iX interface.

Normally, to create, fill, and validate staging areas, use HP Patch/iX which performs these functions automatically in addition to qualifying patches. Then to use and permanently apply the files in a staging area, execute HP Stage/iX commands from the STAGEMAN prompt.

This Appendix contains these sections:

- HP Stage/iX Concepts
- Using HP Stage/iX
- HP Stage/iX Commands

HP Stage/iX Concepts

Your operating system normally resides in what HP Stage/iX calls the *Base*. The Base is the set of files laid down by the last UPDATE or INSTALL, and RESTORE from tape. The "base location" or "natural location" is where a file officially resides (for example, NL.PUB.SYS).

HP Stage/iX creates, fills, and validates *staging areas*. A staging area is an HFS directory: /SYS/hpstage/*stage_name*. It is located on disk and contains only the files of the OS that change as a result of applying a set of patches. As needed, using the HP Stage/iX SET command, you *activate* your system software to boot from either the Base or a designated staging area.

Creating and Activating a Staging Area

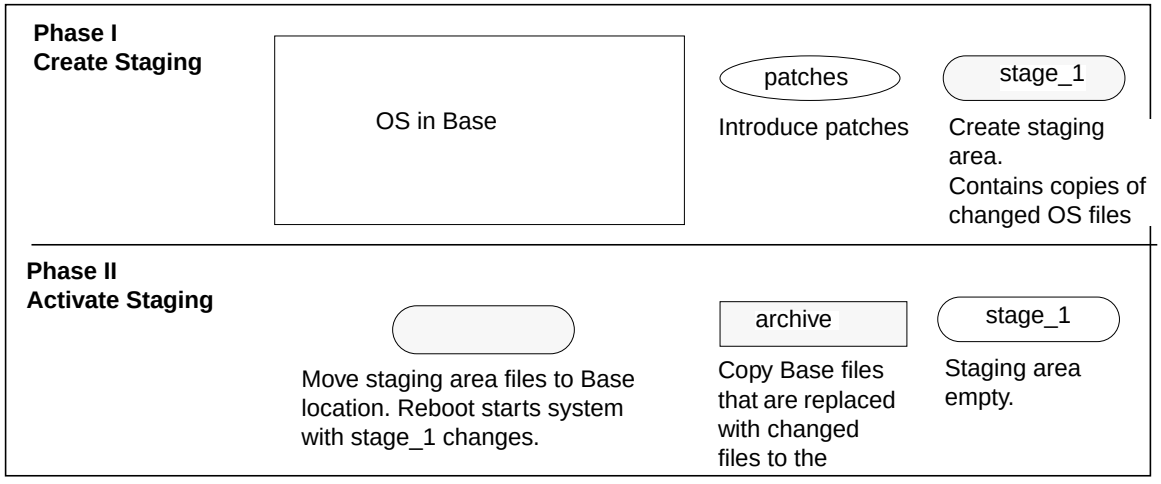
When you boot your system from a staging area, HP Stage/iX:

1. Creates a **Base** file archive.
2. Moves the affected **Base** files to the archive:

   /SYS/hpstage/*base_archive*.
3. Moves the **staging area** files to their **Base** location.
4. Boots the system using the **staging area** files.

Much of the disk space used by the staging area and the archive is on LDEV 1. When the system is booting from the Base files, the archive area is empty. When the system is booting from the staging area files, the staging area is empty. The amount of disk space used depends on the set of patched files. Refer to Figure G-1. for more information.

Figure G-1. Creating and Activating a Staging Area



Backing Out a Staging Area

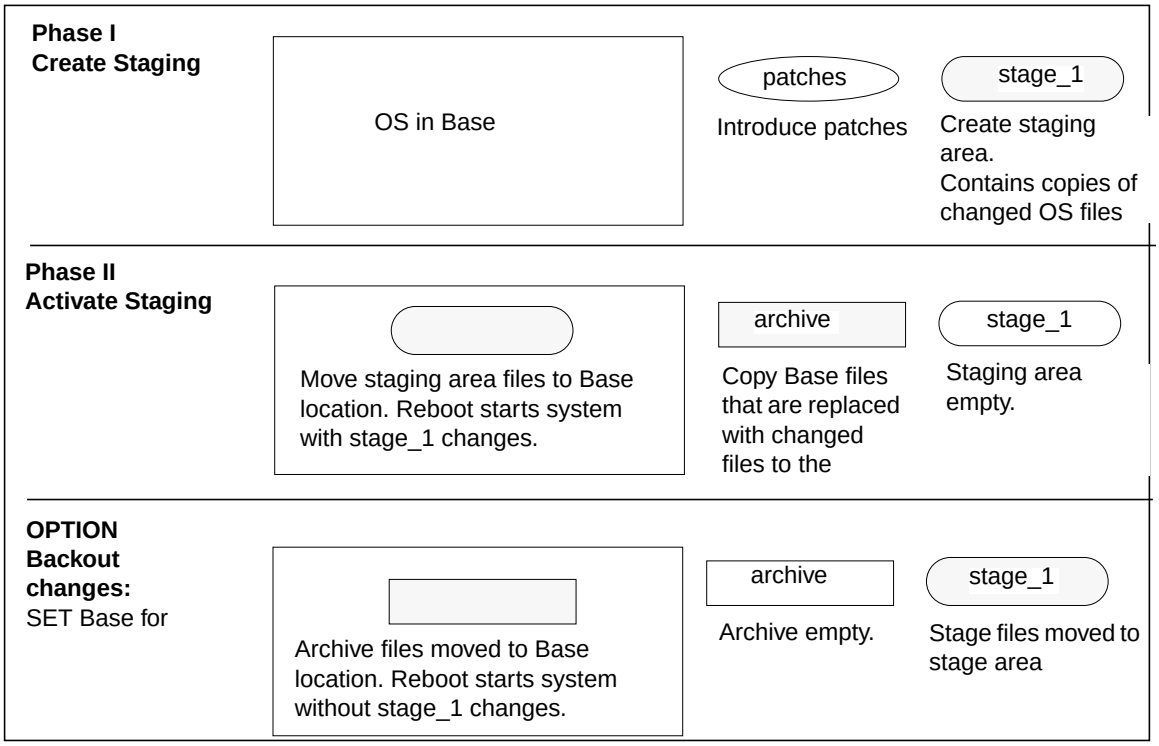
To backout the changes from a staging area, use the HP Stage/iX SET command to designate the Base instead of the staging area. When you use the SET command to backout

a staging area, HP Stage/iX:

1. Moves the **staging area** files back to the **staging area.**
2. Moves the **Base archive** files back to their **Base** location.
3. Boots the system using the **staging area** files.

Refer to Figure G-2. for more information.

Figure G-2. Backing Out Patch Changes



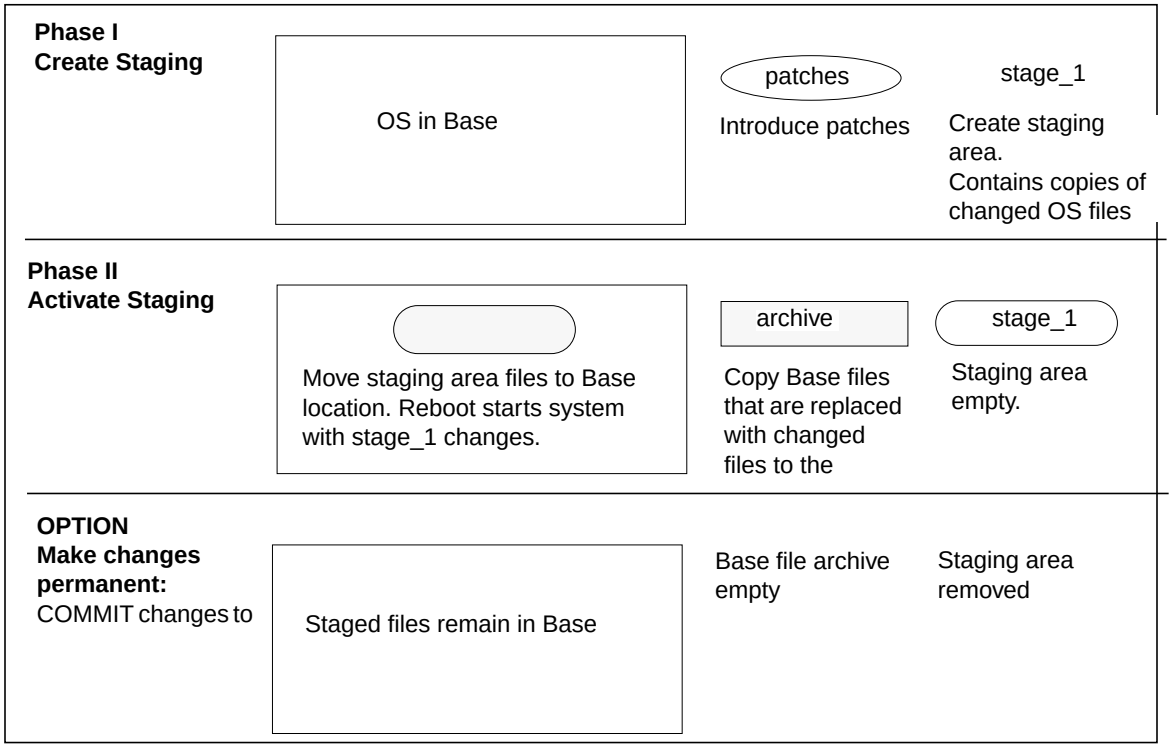
Applying the Changes

After you have tested and are satisfied with the changes from an active staging area, use the HP Stage/iX `COMMIT` command to permanently apply the changes to your system. This accomplishes the following:

1. Creates a new **Base**.
2. Frees up disk space by removing the archived Base files and the committed staging area.

Refer to Figure G-3. for more information.

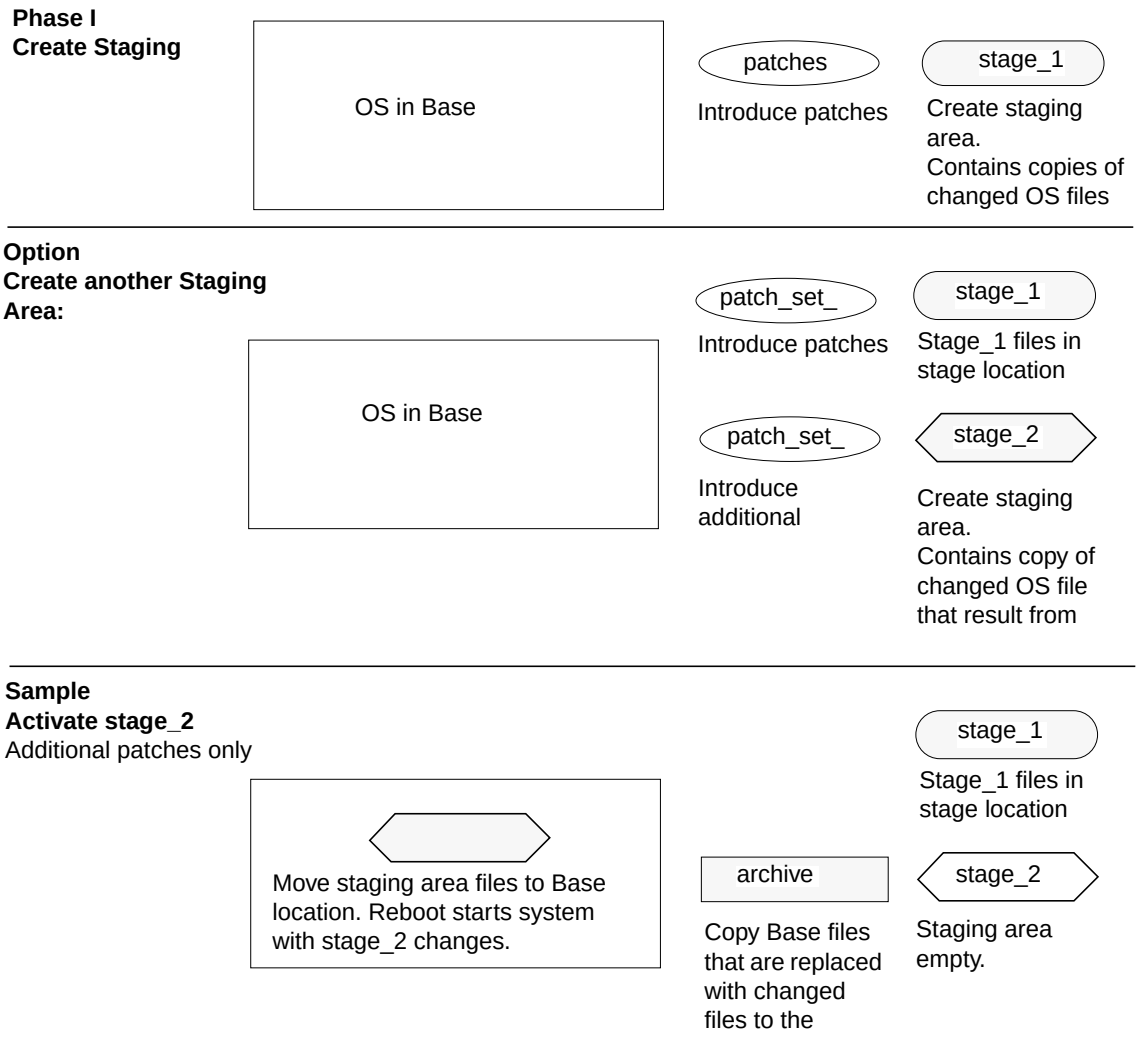
Figure G-3. Permanently Applying Patch Changes



Using Multiple Staging Areas

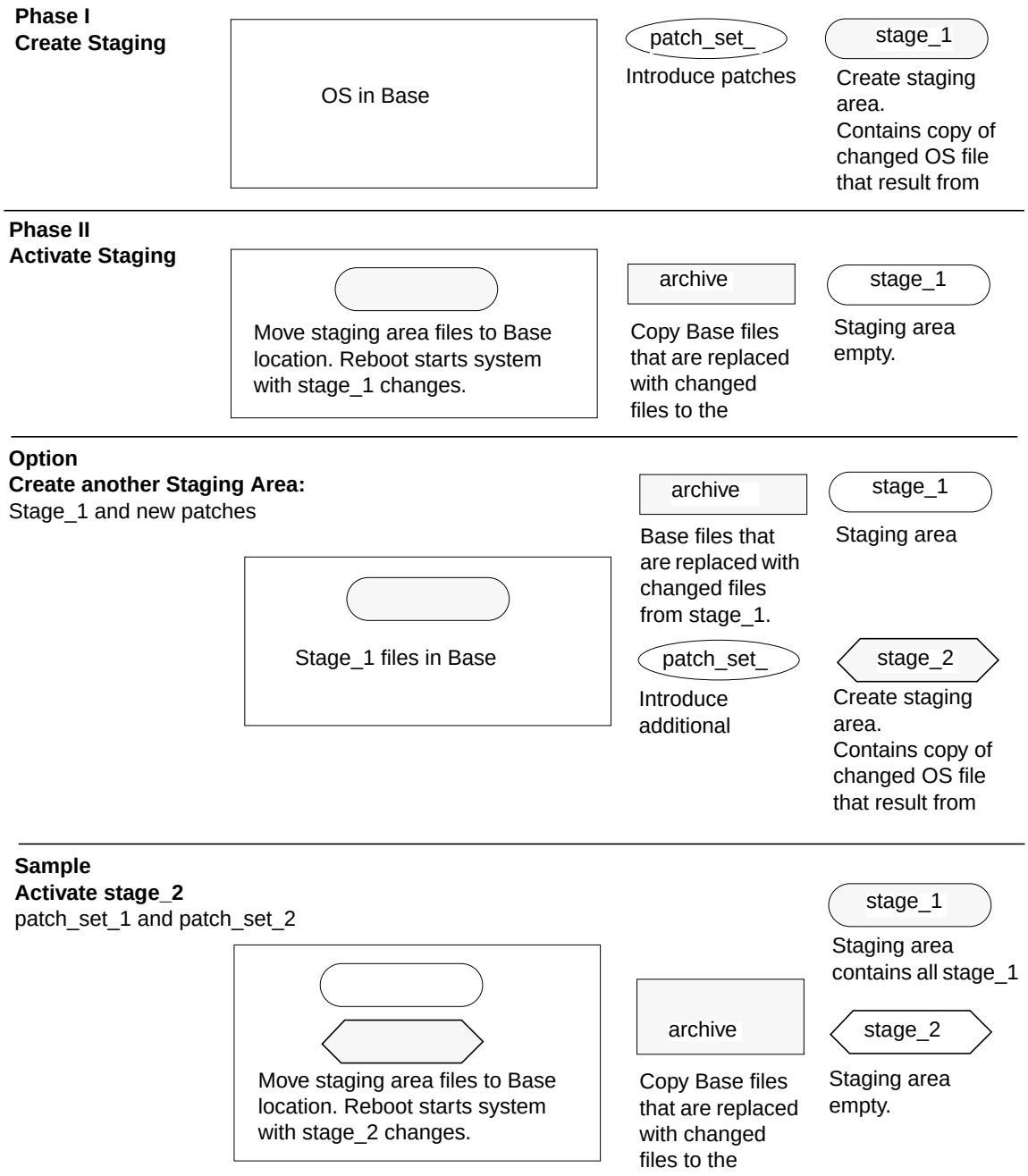
You can have more than one staging area at a time. Each staging area contains the difference, or delta, between the Base OS and a patched OS. Staging area `stage_1` contains the changes to the Base from `patch_set_1`. Staging area `stage_2` contains the changes to the Base from only `patch_set_2`. You can use the SET command and boot from either staging area `stage_1` or `stage_2`. Refer to Figure G-4. for more information.

Figure G-4. Creating Another Staging Area, from the Base Location



If you create an additional staging area, `stage_name2`, while operating from another staging area, `stage_name1`, the additional staging area, `stage_name2`, will contain all the changes to the Base from `patch_set_1` **plus** the new patches in `patch_set_2`. Refer to Figure G-5. for more information.

Figure G-5. Creating Another Staging Area from an Existing Staging Area



Using HP Stage/iX

This section describes typical HP Stage/iX processes and definitions.

- Installing and Initializing HP Stage/iX
- Staging Area Handling
- Using STAGEISL
- Uninstalling HP Stage/iX
- Using HP Stage/iX Help

Installing and Initializing HP Stage/iX

HP Stage/iX is automatically installed as part of your Fundamental Operating System (FOS) when you update to MPE/iX version 6.5. It is used in conjunction with HP Patch/iX. Refer to Appendix F , “HP Patch/iX Reference,” for information about HP Patch/iX. HP Stage/iX only needs to be initialized once, then when you run HP Patch/iX, HP Stage/iX capabilities are included.

To use HP Stage/iX:

1. Update or install your system software to version 6.5.

   Refer to Chapter 2 , “Task Checklists,” and follow the directions in this manual for updating and/or installing your system software.

2. Install HP Patch/iX.

   This step is required to manage your qualified patches and to use HP Stage/iX.

   Follow the directions in this manual for applying staged patches on your system software. Installing HP Patch/iX is included as part of the manage patches by staging area task.

3. Initialize HP Stage/iX.

   Refer to section 4.4, “Initializing HP Stage/iX,” for instructions.

Staging Area Handling

This section provides a sample sequence of events for performing selected HP Stage/iX functions through the HP Stage/iX command line.

1. Obtain the patches either by electronically downloading them or by requesting patch tapes from the Response Center.
2. If necessary, install and initialize HP Stage/iX. Refer to the previous subsection.
3. Qualify patches.

   Refer to Chapter 4 , “Preparing Your System,” for directions on using HP Patch/iX to qualify patches.

4. Create, fill, and validate a staging area.

Typically, this is done using HP Patch/iX. The following HP Stage/iX command line option is available, but should be used by **experienced users only!**

a. To start HP Stage/iX, type at the MPE/iX prompt:

```
:STAGEMAN
```

b. Create an empty staging area.

```
STAGEMAN> CREATE stagename
```

Where *stagename* is the name for the new staging area.

c. Change to expert mode.

```
STAGEMAN> EXPERT ON
```

d. Fill the staging area.

Refer to the Expert Mode commands `stagefile` and `deletefile`.

e. Validate the staging area.

Refer to the command `validate`.

5. Identify the current staging area and next boot staging area.

```
STAGEMAN> STATUS
```

The following is a sample status command response.

```
Last booted with: BASE
Next boot will be with: stage_1
```

6. Identify available staging areas and next boot staging area.

```
STAGEMAN> LIST
```

View the list of patches used to fill a specific staging area.

```
STAGEMAN> LIST stagename ;patches
```

This displays a cumulative list of patches that have been applied to the Base and the staging area.

View the list of files in a specific staging area.

```
STAGEMAN> LIST stagename ;files
```

7. Make changes to staging area. This can be a very destructive step, and should be used by **experienced users only**!

a. Make the changes to the staging area with `CHANGE`, `STAGEFILE`, and `DELETEFILE`.

b. Validate the staging area. After making any changes to a staging area, you must validate the staging area, or it will not be accepted in the `set` command.

Refer to the command `validate`.

8. Activate a staging area.

```
STAGEMAN> SET stagename
```

Where *stagename* is the name for the staging area or Base.

a. Specify base to change the booting location to the Base.

b. Reboot your system.

This activates the staging area.

9. Commit a staging area to the Base location.

a. Boot from the staging area to permanently apply it to the Base system software.

b. Execute the COMMIT command.

```
STAGEMAN> COMMIT
```

The current staging area becomes the new Base. The staging area itself is removed.

Using STAGEISL

STAGEISL contains a subset of the HP Stage/iX functions. It executes from the ISL prompt and enables you to:

- Change the next boot location to either a staging area or the Base.
- Check the previous and next boot staging area.
- List available staging areas.

The STAGEISL commands and their capabilities are: STATUS, LIST, SET, HELP, and EXIT. Not all STAGEISL commands share the full capabilities of the matching HP Stage/iX command.

To use STAGEISL:

1. Type from the console, at the ISL prompt.

```
ISL> STAGEISL
```

2. Type the commands as needed.

```
STAGEISL> command
```

3. Exit STAGEISL.

```
STAGEISL> EXIT
ISL>
```

Uninstalling HP Stage/iX

Uninstalling HP Stage/iX deletes all staging areas and any files and directories that HP Stage/iX has built.

WARNING **This activity does not just turn off HP Stage/iX; it completely removes any and all objects that HP Stage/iX created (files, directories, and staging areas).**

To uninstall HP Stage/iX:

1. At the MPE/iX prompt, type:

```
:STAGEMAN
```

2. At the STAGEMAN prompt, type:

   ```
   STAGEMAN> UNINSTALL
   ```

   All files, directories, and data structures created by HP Stage/iX are deleted.

3. Respond to the prompt.

   ```
   Are you sure?
   ```

Using Help

Help is available for all HP Stage/iX Normal mode, Expert mode, and STAGEISL commands. The Help information that displays is specific to the tool and mode.

To use HP Stage/iX Help:

- For a list of commands, type HELP at the STAGEMAN prompt.
- For help on a specific command, type at the STAGEMAN prompt:

  STAGEMAN> HELP *command option*

  where:

command	the HP Stage/iX command you want information about.	
option	choices:	
	desc	show the command's description and syntax. (default)
	parms	show the command's parameters only.
	example	show command usage examples only.
	all	show all help text related to the command.

To use STAGEISL Help:

- For a list of STAGEISL commands, type HELP at the STAGEisl prompt.
- For help on a specific command, type at the STAGEISL prompt:

  STAGEISL> HELP *command*

HP Stage/iX Disaster Recovery

When staging area data is unrecoverable from disk, disaster recovery involves reloading the staging areas from backup tapes. This means that you must have a CSLT/STORE tape and backup of the OS version you want to reinstall.

If you do not have a backup of the staging areas, you will have to perform two tasks:

- A normal reinstall task to reinstall your operating system. If the OS is also damaged.
- A managing patches with staging area task to reinstall your patches and staging areas.

To perform a staging area disaster recovery, using backup tapes:

1. Identify whether your backup was made:

- After staging area was created, but prior to applying (SET and boot) a staging area.
- After applying (SET and boot) from a staging area.

2. Identify the staging area condition at the time of the disaster.
   - Staging area created but not booted.
   - Staging area created and applied (SET and boot) from the staging area.
3. Perform a reinstall of your current operating system. Refer to the checklist from Chapter 2 , “Task Checklists,” for directions on performing a reinstall task.

   Hewlett-Packard recommends performing the reinstall from the backup made after the staging area was created, but prior to applying (SET and boot) the staging area.
4. If you need to use the backup made after applying (SET and boot) from the staging area:
   a. Perform the normal reinstall process.
   b. You will not be able to RECOVER the staging area that the system was booted from. It becomes the new Base. The reinstall from this type of backup is treated as an implied COMMIT to the staging area.
   c. RECOVER all other staging areas.

HP Stage/iX Commands

This section lists and describes all the HP Stage/iX and STAGEISL commands.

- HP Stage/iX is executed from the MPE/iX prompt.
- STAGEISL is executed from the ISL prompt. STAGEISL is limited to the following commands:

`status`	same capabilities as HP Stage/iX
`list`	*nofiles/files* and *nopatches/patches* option not available
`set`	same capabilities as HP Stage/iX
`help`	*keyword* option not available. This Help only displays for STAGEISL specific commands, it does not display HP Stage/iX additional commands.
`exit`	same capabilities as HP Stage/iX

- HP Stage/iX has two command modes:

  Normal mode—used by either system operators or system managers. The HP Stage/iX normal mode prompt is:

  ```
  STAGEMAN>
  ```

  Expert mode—requires system manager capabilities. It expands the command set and expands the options of selected normal mode commands. It enables you to perform HP Stage/iX functions that are ordinarily performed from within HP Patch/iX. The HP Stage/iX expert mode prompt is:

  ```
  STAGEMAN$
  ```

  Expert mode additional commands are:

  ```
  STAGEFILE
  DELETEFILE
  SETDEFAULT
  SHOWDEFAULT
  ```

Table G-1. lists, by task, the commands and command capabilities that are available for each condition.

Table G-1. HP Stage/iX Commands by Interface

Activity	HP Patch/iX Menu/Option	STAGEISL Commands	HP Stage/iX Commands
Administrative Options			
Initialize HP Stage/iX			`STAGEMAN INIT`
Uninstall HP Stage/iX			`STAGEMAN UNINSTALL`

Table G-1. HP Stage/iX Commands by Interface

Activity	HP Patch/iX Menu/Option	STAGEISL Commands	HP Stage/iX Commands
Display Current Status Of Staging Areas		STAGEISL STATUS	STAGEMAN STATUS
Staging Area Management			
Create Staging Area	*Create [Stage][Tape]*		STAGEMAN CREATE
Delete Staging Area			STAGEMAN DELETE
Show Staging Area Name	Prompted during *Create [Stage][Tape]*	stageisl list	STAGEMAN LIST :LISTFILE /SYS/hpstage/...
Show Staging Area Description		STAGEISL LIST	STAGEMAN LIST
Show Staging Area Create Dates	Automatic	STAGEISL LIST	STAGEMAN LIST
Modify Staging Area Name			STAGEMAN CHANGE...
Modify Staging Area Description			STAGEMAN CHANGE...
Validate Staging Area	Automatic		STAGEMAN VALIDATE...
Invalidate Staging Area			STAGEMAN INVALIDATE...
Show Staging Area Files			STAGEMAN LIST;FILES :LISTFILE/SYS/hpstage/*stagename* /...
Show Staging Area Patches	*View Patches*		STAGEMAN LIST;PATCHES
Expert Mode			STAGEMAN EXPERT ON
Operating Environment Management			
Activate Staged Software		STAGEISL SET STAGE=*stagename*	STAGEMAN SET STAGE=*stagename*
Deactivate (Backout) Staged Software		STAGEISL SET STAGE=Base	STAGEISL SET STAGE=Base
Display Defaults For Next Boot		STAGEISL STATUS	STAGEMAN STATUS

Table G-1. HP Stage/iX Commands by Interface

Activity	HP Patch/iX Menu/Option	STAGEISL Commands	HP Stage/iX Commands
Display Current Staging Area		STAGEISL STATUS Displays staging area used in last boot.	STAGEMAN STATUS Displays staging area currently booted and running.
Commit To Current Stage			STAGEMAN COMMIT

HP Stage/iX Command Summary

Table G-2. lists the Staging Area management commands, general operation commands, and STAGEMAN Expert Mode commands. In all three tables, SM stands for System Manager and OP stands for System Operator.

Table G-2. Staging Area Management Commands

Required Command (Abbrev)	Capabilities	Description
INITIALIZE (INIT)	SM	Initialize the HP Stage/iX facility
UNINSTALL	SM	Uninstall HP Stage/iX completely from your system.
STATUS (ST)	SM | OP	Display current status of HP Stage/iX.
LIST (L)	SM | OP	List any staging areas on your system.
DISKUSE (DU)	SM | OP	Display the total disk space used by a staging area.
CREATE (CR)	SM	Create a staging area.
DELETE (DEL)	SM	Delete a staging area.
CHANGE (CH)	SM	Change the name or description for a staging area.
VALIDATE (VAL)	SM	Validate a staging area.
INVALIDATE (INVAL)	SM	Invalidate a staging area.
COMMIT	SM	Make the current staging area the Base.
SET	SM	Set the default staging area for the next boot.
DUPLICATE	SM	Copy one staging area to another.
IMPORT	SM	Import a staging area from another system.
EXPORT	SM	Prepare a staging area to be exported to another system.
RECOVER (REC)	SM	Recovers a staging area that is not recognized in the environment.

Table G-3. lists the general operating commands.

Table G-3. General Operation Commands

Required Command (Abbrev)	Capabilities	Description
HELP (H)	SM | OP	Get help for an STAGEMAN command.
ERRMSG	SM | OP	Display cause/action text for a STAGEMAN error.
EXIT (E)	(none)	Exit STAGEMAN.
LISTREDO	(none)	Display the STAGEMAN command history.
REDO	(none)	Re-execute (and edit) a previous STAGEMAN command.
DO	(none)	Re-execute a previous STAGEMAN command.
LOG	(none)	Log a copy of all STAGEMAN output to a file.
USE	(none)	Execute an STAGEMAN command file.
COMMENT (#)	(none)	Used to document a command file.
OPTION	(none)	Used to set options for command file processing.

Table G-4. lists the expert mode commands.

Table G-4. Expert Mode Commands

Required Command (Abbrev)	Capabilities	Description
STAGEFILE (SF)	SM	Put a file in a staging area.
DELETEFILE (DF)	SM	Delete a file from a staging area.
SETDEFAULT (SETD)	SM	Set the default attributes for a particular file.
SHOWDEFAULT (SHOWD)	SM	Display the default attributes for a particular file.
COMPLETE (COMP)	SM	Mark a staging area as complete.
EXPERT	SM	Put STAGEMAN in expert mode.

CHANGE (CH)

The CHANGE command will allow you to change various attributes of an HP Stage/iX staging area. Specifically, CHANGE will allow you to change:

- The name of the staging area.
- The description of the staging area.

The CHANGE command can be abbreviated CH.

Syntax

```
CHANGE [STAGE=]stage_name [[;NAME=]new_name]
                          [[;DESC=]quoted_string]
```

Parameters

[STAGE=]stage_name (required)

The current name of the HP Stage/iX staging area. This must be a valid staging area name for a pre-existing staging area. The staging area cannot be in use, or designated for use on the next boot (see the SET command).

Staging area names are case sensitive. “STAGE1” is not equivalent to “stage1” or “Stage1”.

[;NAME=]new_name (optional)

If this parameter is omitted then the current name of the staging area will be unchanged. Otherwise, this name will be used for the new name of the staging area.

This must be a valid HP Stage/iX staging area name and must be unique. The staging area name can be up to 16 characters in length. The name must be a valid MPE/iX directory name. For this reason, the name cannot contain a slash (/) character. It can contain letters (upper or lower case), numbers, and the special characters underscore (_), dash (-), and period (.).

Staging area names are case sensitive. “STAGE1” is not equivalent to “stage1” or “Stage1”.

[;DESC=]quoted_string (optional)

If this parameter is omitted then the current description for the staging area will be unchanged. Otherwise, this description will replace the old description for the staging area.

This parameter must be a quoted string if it contains any delimiter characters (like blanks, commas, semi-colons, or any other punctuation characters). The description can be any string up to 128 characters in length.

Example

To change the name of a staging area:

```
STAGEMAN> CHANGE old_stage;NAME=new_stage
```

To change the description associated with a staging area:

```
STAGEMAN> CHANGE old_stage;DESC="network reliability
patches"
```

COMMENT (#)

The COMMENT command can be used to document command files used by the USE command. STAGEMAN ignores the COMMENT command and any text following it.

The COMMENT command can be abbreviated #.

Syntax

```
COMMENT comment_text
```

Parameters

(none)

Example

STAGEMAN will ignore both of these comment lines:

```
STAGEMAN> COMMENT this is just a comment
STAGEMAN> # this is another comment
```

COMMIT

The HP Stage/iX subsystem allows system managers to activate patched system software without overwriting the pre-existing system software environment. Whenever the system is booted from an HP Stage/iX staging area, the system manager has the option of reverting to the previous system software environment by booting from the Base (see the SET command).

If the system manager has been using a particular HP Stage/iX staging area for a period of time, and is satisfied with the overall quality of the patched system software environment (including reliability and performance), then the system manager can make the patched software environment the new Base. The action of making the current staging area the new Base is not reversible. For this reason, HP Stage/iX refers to the action as "committing." The COMMIT command can be used to make the current staging area the new Base without re-booting the system or doing an UPDATE.

In order to use the COMMIT command, the system must be booted from an HP Stage/iX staging area, and there must not be an alternate staging area designated for the next boot.

The COMMIT command will perform several steps. It will first prompt you for confirmation to commit to the current software environment. (The ;NOCONFIRM option can be used to suppress the confirmation prompt.) The COMMIT command makes all of the necessary changes to the system software environment so that the current system software becomes the new Base. Finally, the COMMIT command deletes the HP Stage/iX staging area.

When you commit to a stage, any other stages that were created from the same Base, as the committed stage, may no longer be valid with respect to the *new* Base.

The COMMIT command cannot be abbreviated.

Syntax

```
COMMIT [;{ CONFIRM}]
          {NOCONFIRM}
```

Parameters

[;{ CONFIRM}] (optional) {NOCONFIRM}

The ;CONFIRM or ;NOCONFIRM option specifies whether or not the COMMIT command will prompt you for confirmation. If you specify ;NOCONFIRM, then STAGEMAN will *NOT* prompt you for confirmation. The default is ;CONFIRM.

Example

To “commit” to the current staging area (“stage1” in the example below):

```
STAGEMAN> STATUS
Currently active staging area: stage1
Staging area to be used for next boot: stage1.
STAGEMAN> COMMIT ;NOCONFIRM
```

COMPLETE

The COMPLETE command marks a staging area as complete. When a staging area is marked as complete, it tells STAGEMAN that all files that should belong to it have successfully been staged, and the staging area is now a complete unit. A staging area will not validate until it has been marked as complete.

Syntax

COMPLETE [STAGE=]*stage_name*

Parameters

[STAGE=]stage_name (required)

The name of the staging area to be marked as complete.

Example

To mark staging area “Stage_1” as complete:

```
STAGEMAN> COMPLETE STAGE_1
```

CREATE (CR)

The CREATE command will create an empty HP Stage/iX staging area. At the time the staging area is created, you are allowed to specify a brief description for the staging area.

Staging areas are normally created by HP Patch/iX. A default description is associated with the staging area at that time, but you can change that description using the CHANGE command.

When a staging area is initially created, it will be considered “invalid”. It will remain invalid until it is validated by the VALIDATE command.

You must specify a name for the staging area to be created. The staging area name must be a valid HP Stage/iX staging area name (see below), and cannot be the name of a staging area that already exists. The name “BASE” is reserved by HP Stage/iX to refer to the Base system software environment (see the SET command). You are not allowed to create a staging area named “BASE.” This includes all forms of the word BASE, Base, or base.

HP Stage/iX staging areas are created as sub-directories under the HP Stage/iX root directory. The HP Stage/iX root directory is /SYS/hpstage/. The staging area “stage_1” for example would be kept in the MPE directory /SYS/hpstage/stage_1/.

The CREATE command can be abbreviated CR.

Syntax

```
CREATE [STAGE=]stage_name [[;DESC=]quoted_string]
```

Parameters

[STAGE=]stage_name (required)

This parameter specifies the name to be given to the newly created staging area. The staging area name can be up 16 characters in length. The staging area name must be a valid MPE/iX directory name. For this reason, the staging area name cannot contain a "/" character. It may contain letters (upper or lower case), numbers, and the special characters "_", "-", and ".".

Staging area names are case sensitive. "STAGE1" is not equivalent to "stage1" or "Stage1".

[;DESC=]quoted_string (optional)

This parameter must be a quoted string if it contains any delimiter characters (like blanks, commas, semi-colons, or any other punctuation characters). The description can be any string up to 128 characters in length.

Example

To create a new staging area called "new_stage" with the description "misc. patches":

```
STAGEMAN> CREATE NEW_STAGE;DESC="MISC.PATCHES"
```

DELETE (DEL)

The DELETE command will delete an HP Stage/iX staging area and its contents. If the system is currently booted from an HP Stage/iX staging area, then that staging area cannot be deleted. In addition, if a staging area has been designated for the next boot (see SET command), then it cannot be deleted.

The DELETE command will prompt you for confirmation to delete the staging area before it is deleted. You will not be prompted if the ;NOCONFIRM option is specified.

It is acceptable to delete a staging area that another staging area was created from. Each staging area has all the information to function from the committed Base. A staging area created from another staging area incorporates all the information from the first staging area.

The DELETE command can be abbreviated DEL.

Syntax

```
DELETE [STAGE=]stage_name [;{ CONFIRM}]
                           {NOCONFIRM}
```

Parameters

[STAGE=]stage_name (required)

This parameter specifies the name of the staging area to be deleted.

Staging area names are case sensitive. "STAGE1" is not equivalent to "stage1" or "Stage1".

[;{ CONFIRM}] (optional) {NOCONFIRM}

The ;CONFIRM or ;NOCONFIRM option specifies whether or not the DELETE command will prompt you for confirmation. If you specify ;NOCONFIRM, then STAGEMAN will **NOT** prompt for confirmation. The default is ;CONFIRM.

Example

```
STAGEMAN> DEL OLD_STAGING_AREA;NOCONFIRM
```

DELETEFILE (DELETEF,DF)

The DELETEFILE command removes a file from a staging area. The file is physically purged from the staging area's directory, and all references to it are removed from the HP Stage/iX environment.

The DELETEFILE command can be abbreviated as DELETEF or DF.

Expert Mode Command:

Syntax

DELETEFILE [STAGE=]*stage_name* [FILE=]*file_name*

Parameters

[STAGE=]stage_name (required)

The name of the HP Stage/iX staging area from which the file (or files) is (are) to be deleted. This must be an existing staging area. The staging area cannot be in use, and cannot be designated for use on the next boot.

Staging area names are case sensitive.

[FILE=]file_name (required)

The name of the file to be deleted. The file name can be wildcarded.

The filename in this command is case sensitive.

Example

```
STAGEMAN> DELETEFILE stage1, SYSGEN.PUB.SYS
STAGEMAN> DF stage1, SYSG@
```

DISKUSE (DU)

The DISKUSE command can be used to determine how much disk space is currently being used by an HP Stage/iX staging area.

When a staging area is currently in use, the files that are normally in that staging area have been renamed into their natural locations. As a result, a staging area is virtually empty when it in use (only a few HP Stage/iX specific files remain). The DISKUSE command is misleading when a staging area is currently in use, since it cannot account for the disk space used by the files which have been renamed. The DISKUSE command prints a warning if you do a DISKUSE on the currently active staging area.

The DISKUSE command in STAGEMAN is really just an interface into the MPE/iX DISKUSE command. The output is therefore identical to the MPE/iX DISKUSE command. For

additional information on the MPE/iX DISKUSE command, use the MPE/iX help facility. This can be done with STAGEMAN by typing:

```
:HELP DISKUSE
```

The DISKUSE command can be abbreviated DU.

Syntax

```
DISKUSE [STAGE=]stage_name
```

Parameters

[STAGE=]stage_name (required)

This parameter designates which staging area will be displayed. The staging area name must be a valid HP Stage/iX staging area name. STAGEMAN will use this name to construct the full path name for the directory where the staging area is kept.

Example

To determine the disk space used by staging area “stage_area_5”:

```
STAGEMAN> DISKUSE stage_area_5
      SECTORS
 TREE            LEVEL     DIRECTORY
147888          147856     /SYS/hpstage/stage_area_5/
```

DO

The DO command is used to re-execute a command from the command history stack.

Syntax

```
DO [COMMAND=]command_id
```

Parameters

command_id:

The command from the redo stack which we want to re-execute. The command may be specified by its relative or absolute order in the command line history stack, or by name (as a string), in whole or in part. The default -1 is the most recent command. This parameter is optional.

Example

To re-execute a command by its absolute order in the command line history stack, enter:

```
STAGEMAN> DO 5
```

To re-execute a command by its relative order in the command line history stack, enter:

```
STAGEMAN> DO -3
```

To re-execute a command by its name, enter:

```
STAGEMAN> DO INIT
```

DUPLICATE

The DUPLICATE command copies one staging area to another. All files from the original staging area are copied, and the resulting staging area — except for the name — is an exact duplicate of the original. The EXCEPT parameter allows an indirect file to be passed that contains a list of files in the original staging areas that should not be duplicated.

The DUPLICATE command can be abbreviated DUP.

Syntax

```
DUPLICATE [FROM=]stage_name
          [;TO=]stage_name
          [[EXCEPT=]exception_file]
```

Parameters

[[FROM=]stage_name (required)

The name of the existing staging area to be copied.

[[TO=]stage_name (required)

The name of the new staging area. All the normal rules for staging area names apply (see CREATE).

[[EXCEPT=]exception_file]

The name of an ASCII file that contains a list of files in the FROM staging area that should not be moved to the TO staging area.

Example

```
STAGEMAN> DUPLICATE stage1, stage2
```

ERRMSG

The ERRMSG command allows you to display cause/action text related to a specific STAGEMAN error.

Syntax

```
ERRMSG [ERROR=]error_number
```

Parameters

[ERROR=]error_number (required)

The error number associated with the STAGEMAN error. This number is always displayed in parenthesis immediately following the error message text.

Example

```
STAGEMAN> status

*Error: The HP Stage/iX Globals file is temporarily in use by another &
process. Can't
complete command. (STAGEMAN 1170)
```

```
STAGEMAN> errmsg 1170

MESSAGE:

The HP Stage/iX Globals file is temporarily in use by another process. Can't
complete
command. (STAGEMAN 1170)

CAUSE:

STAGEMAN could not open the HP Stage/iX Globals file because it was held open
exclusively by another process at the time. The other process was most likely
STAGEMAN
(or HP Patch/iX) being run in another job or session (STAGEMAN always opens
the
Globals file for exclusive access).

ACTION:

Either terminate the additional STAGEMAN process, or allow the command being
executed
by that process to complete.
```

EXIT

The EXIT command (abbreviated E or EX) exits the STAGEMAN utility. You must have System Manager (SM) or System Operator (OP) capability to execute this command.

Syntax

```
EXIT
```

Parameters

(none)

Example

To exit from STAGEMAN, enter:

```
STAGEMAN> EXIT
```

EXPERT

The EXPERT command is used to put STAGEMAN into expert mode. There are several STAGEMAN commands that extend the basic STAGEMAN functionality which require you to be in EXPERT mode. All expert mode commands require SM capability. The EXPERT command itself requires SM capability to execute.

The following commands are allowed in expert mode only:

Table G-5. Commands Only Available in Expert Mode

Command	Description
STAGEFILE (SF)	Put a file in a staging area.
DELETEFILE (DF)	Delete a file from a staging area.
CHANGEFILE (CF)	Change the attributes of a staged file.
SETDEFAULT (SETD)	Set the default attributes for a particular file.
SHOWDEFAULT (SHOWD)	Display the default attributes for a file.

NOTE The STAGEMAN prompt will *always* indicate which mode STAGEMAN is currently executing in. When STAGEMAN is in normal mode, the prompt is STAGEMAN>. When STAGEMAN is in expert mode, the prompt is STAGEMAN$.

Syntax

```
EXPERT [[MODE=]{ ON}]
               {OFF}
```

Parameters

[[MODE=]{ ON} (optional)
{OFF}

If the MODE parameter is not specified then the EXPERT command will simply display the current mode for STAGEMAN. Otherwise the EXPERT command will explicitly set STAGEMAN into expert mode if ON is specified, and normal mode if OFF is specified.

Example

To see what mode STAGEMAN is currently executing in

```
STAGEMAN> EXPERT
STAGEMAN is currently operating in NORMAL (non-expert) mode.
```

To put STAGEMAN into expert mode

```
STAGEMAN> EXPERT ON
```

To put STAGEMAN into normal mode

```
STAGEMAN$ EXPERT OFF
```

EXPORT

The EXPORT command prepares a staging area to be exported to another system. EXPORT - together with IMPORT - provides a standardized method of patch/software distribution. Three EXPORT options are currently supported (see the Parameters description).

Syntax

```
EXPORT [STAGE=]stage_name [;{NOPACK}]
                           {TAPE }
                           {PACK }
```

Parameters

[STAGE=]stage_name (required)

The name of the staging area to be exported.

[;{NOPACK}] (optional)
{TAPE }
{PACK }

Default: NOPACK

The export option to be used. Three options are currently supported:

NOPACK—All files belonging to the staging area are simply copied to the Export directory (/SYS/hpstage/export/). From here the files can be moved to the Import directory (/SYS/hpstage/import/) on the target machine in any way you choose. The staging area can then be accepted into that HP Stage/iX environment via the IMPORT ;NOUNPACK command.

TAPE—The staging area directory is written to tape via STORE. The staging area can then be accepted into the target system's HP Stage/iX environment via the IMPORT ;TAPE command.

PACK—The staging area is packaged into a single file in the Export directory under the name of the staging area (/SYS/hpstage/export/stage_name). This file can then be moved to the Import directory (/SYS/hpstage/import/) on the target system using either tape or a network transport utility (for example, FTP) and accepted into the HP Stage/iX environment via IMPORT ;UNPACK.

Example

```
STAGEMAN> EXPORT STAGE1;PACK
```

HELP

The HELP command (abbreviated H or HE) displays information about a STAGEMAN command. You must have System Manager (SM) or System Operator (OP) capability to execute this command.

Syntax

```
HELP [command_name] [{DESC }]
                    {PARMS }
                    {EXAMPLE}
                    {ALL }
```

Parameters

command_name: (optional)

The name of the command. This parameter is optional. If you omit the command name, STAGEMAN displays information about all commands.

(keyword) : (optional)

Default: DESC

Defines which part of the help text you would like printed.

DESC — Show the command's description and syntax.

PARMS — Show the command's parameters only.

EXAMPLE- — Show command usage examples only.

ALL — Show all help text related to the command.

Example

To get information about the INITIALIZE command, enter:

```
STAGEMAN> HELP INITIALIZE
```

To get examples on how to use the LIST command, enter:

```
STAGEMAN> HELP LIST EXAMPLE
```

IMPORT

The IMPORT command accepts a staging area from another system into the HP Stage/iX environment on the local system. See the help discussion under EXPORT for more information.

Syntax

IMPORT [STAGE=]*stage_name* [;{NOUNPACK}] {TAPE } {UNPACK }

Parameters

[STAGE=]stage_name (required)

The name of the staging area to be imported.

[;{NOUNPACK}] (optional) {TAPE } {UNPACK }

The import option. The default is NOUNPACK.

Example

```
STAGEMAN> IMPORT STAGE1;TAPE
```

INITIALIZE (INIT)

The INITIALIZE command is used to set up the various data structures and directories that the HP Stage/iX facility requires to operate.

STAGEMAN always verifies that the HP Stage/iX facility is correctly initialized. If HP Stage/iX is not correctly initialize, STAGEMAN will print out a warning message.

The INITIALIZE command is non-destructive. It can be typed at anytime to re-initialize

HP Stage/iX should some file, directory, or data structure become corrupted. It will not delete any staging areas or affect the contents of any staging area in any way.

The INITIALIZE command can be abbreviated INIT.

Syntax

```
INITIALIZE
```

Parameters

(none)

Example

```
:STAGEMAN

STAGEMAN A.00.00, (C) Hewlett-Packard Co., 1995. All Rights Reserved.
*Warning: The HP Stage/iX environment is not initialized. (STAGEMAN 1090)

STAGEMAN> initialize
Successfully initialized the HP Stage/iX environment.

STAGEMAN>
```

INVALIDATE (INVAL)

The INVALIDATE command is used to mark a particular staging area as being invalid, preventing that staging area from being used (see the SET command).

The LIST command can be used to view the current status (valid or invalid) of a staging area. The VALIDATE command will set the valid flag, allowing a particular staging area to be used.

The INVALIDATE command can be abbreviated INVAL.

Syntax

```
INVALIDATE [STAGE=]stage_name
```

Parameters

[[STAGE=]stage_name (required)

The name of the HP Stage/iX staging area to be invalidated. This must be a legal staging area name for a pre-existing staging area. The staging area cannot be in use or designated for use on the next boot (see the SET command).

Staging area names are case sensitive. “STAGE1” is not equivalent to “stage1” or “Stage1”.

Example

```
STAGEMAN> INVAL FOO
```

LIST (L)

The LIST command will give you a list of HP Stage/iX staging areas. Wildcard characters

are accepted when listing staging areas.

By default the LIST command will display the name of the staging area, the last modified date, a flag indicating whether or not the staging area is valid or invalid (see VALIDATE/INVALIDATE commands), and the brief description associated with the staging area.

In addition, an asterisk (*) will be displayed at the end of the staging area name if the staging area is active (in use); a caret (^) will be displayed at the end of the staging area name if the staging area will be used for the next system boot (see the SET command).

The LIST command will also list more detailed information about the files that are in a particular staging area, and/or the patches that are staged in a particular staging area.

The LIST command can be abbreviated L.

Syntax

```
LIST [[STAGE=]stage_name] [;{NOFILES}] [;{NOPATCHES}]
                           {FILES}      {PATCHES}
```

Parameters

[[STAGE=]stage_name] (optional)

This parameter is used to designate a staging area to be viewed. The staging area name can be either a valid HP Stage/iX stage name, or a pattern with MPE wildcards. All of the usual MPE wildcard characters (@, ?, #, etc.) are allowed. The default value for this parameter is @ (which will list ALL staging areas).

Staging area names are case sensitive.

[;{NOFILES}] (optional)
{ FILES}

This parameter specifies whether or not the LIST command will display information about specific files within a given staging area. The default value for this parameter is ;NOFILES. If the ;FILES parameter is specified then the LIST command will display information for each file in the staging area(s) about disk restrictions (LDEV1, contiguous, or none), file disposition (add, replace, delete), and the file code, end-of-file, and limit values as they would appear in a LISTF(ILE) output.

{;{NOPATCHES}] (optional)
{ PATCHES}

This parameter determines whether or not the LIST command will display information on the specific patches in a given staging area. The default value for this parameter is ;NOPATCHES. If the ;PATCHES parameter is specified then the LIST command will display the patch ID, date and time installed by HP Patch/iX, and a brief description for each patch found in the staging area(s).

The ;PATCHES option will not be able to display any patch information if the file PMSWINFO.PUB.SYS is not in the given staging area. This file is normally staged by the HP Patch/iX product when the staging area is created. If this file does not exist in the staging area, a message stating that no patch information is available will be displayed.

The patches displayed will be the sum of all patches applied by HP Patch/iX, which

includes any patches installed in the Base, as well as in the staging area.

Example

To see a list of all staging areas type:

```
STAGEMAN> list

STAGING AREA NAME MOD DATE V DESCRIPTION
---------------- -------- - ---------------------------------------
stage1 *^         09/29/95 V PowerPatch 1 plus reactive patches
STAGE2 ^          09/30/95 I PowerPatch 2
       |
       | --- (staging area is active and set for next boot)
```

To see a list of all staging areas that begin with the string “st”, and information about all files and patches in each of those staging areas type:

```
STAGEMAN> l st@;files;patches

STAGING AREA NAME MOD DATE V DESCRIPTION
---------------- -------- - ---------------------------------------
stage1 *^         09/29/95 V PowerPatch 1 plus reactive patches

** FILE INFO FOR “mike1”:

FILE NAME                          REST   DISP FCODE EOF LIMIT
---------------------------------- ------ ---- ----- ------------------
NL.PUB.SYS                         LDEV1  REPL NMPRG 114519 4&
START.MPEXL.SYS                    CONTIG REPL       3791    & 8192

** PATCH INFO FOR “mike2”:

Patch      Date and Time     Description
--------- -----------------  ----------------------------------------
MPEQX999  02/20/96 11:08 AM  5.5 Dummy Patch for Beta Testing
```

NOTE: Staging area names are case sensitive, so the above command will display staging areas that start with “st”, but not staging areas that start with “ST”.

LISTREDO

The LISTREDO command is used to display the command history stack. The output order is from the least to the most recent command with absolute command reference numbers preceding each command.

Syntax

LISTREDO

Parameters

(none)

Example

STAGEMAN> LISTREDO

LOG

The LOG command is used to record the human/machine dialog as it appears to the user on the STDLIST. The log file is an exact snapshot of the session with STAGEMAN.

Syntax

LOG [FILENAME=]*filename*

Parameters

[FILENAME=]filename (required)

Any valid MPE/iX file to which you have READ and WRITE access. If the file doesn't exist, it is created.

Example

To enable logging and log all input and output to the file “logfilea”, enter:

STAGEMAN> LOG LOGFILEA

OPTION

The OPTION command is used to set various STAGEMAN options. These options effect how STAGEMAN handles command files (also see the USE command). There are currently two different options which can be set by the OPTION command.

The LIST option specifies whether or not the command and command output will be displayed when executing a command from a command file. If the list option is set to NOLIST, the command will not be echoed and the command output will be suppressed. If the option is set to LIST, then the command will be echoed and the output will be displayed to STDLIST (and to the log file if one is active — see the LOG command). The default for the

LIST option is NOLIST. To see the output of a command executed from a command file, either type OPTION
LIST prior to executing (via USE) that command file, or put an explicit OPTION LIST command inside the command file.

The CONTINUE option specifies whether or not STAGEMAN will continue to process commands within a command file if an error is encountered. The default value for the continue option is NOCONTINUE. If the continue option is set to NOCONTINUE, then STAGEMAN will abort the processing of a command file when an error occurs. To override this behavior, set the CONTINUE option to CONTINUE.

If you enter the OPTION command with no parameters, then the command will display the current value for the LIST and CONTINUE options.

The scope of the option command is for the duration of the command file, or until another option command is encountered (whichever comes first). For example: if you put an OPTION LIST command within a command file, the LIST option will remain in effect until STAGEMAN finishes processing the command file, or until it encounters an OPTION NOLIST command.

The OPTION command cannot be abbreviated.

Syntax

```
OPTION [{ LIST}] , [{ CONTINUE}] {NOLIST} {NOCONTINUE}
```

Parameters

[{ LIST}] (optional) {NOLIST}

If this parameter is omitted, the value of the LIST option is unchanged. Otherwise the value of the LIST option is set to the value specified.

[{ CONTINUE}] (optional) {NOCONTINUE}

If this parameter is omitted, the value of the CONTINUE option is unchanged. Otherwise the value of the CONTINUE option is set to the value specified.

Example

To see what options are currently set:

```
STAGEMAN> OPTION
The following options are currently set: NOLIST, NOCONTINUE.
```

To set the list option to NOLIST and the continue option to CONTINUE:

```
STAGEMAN> OPTION NOLIST CONTINUE
```

RECOVER

The RECOVER command recovers a staging area that is not currently recognized by the HP Stage/iX environment. This command is normally only necessary when recovering a system with an INSTALL/UPDATE, where the HP Stage/iX environment has to be re-initialized (INITIALIZE), and one or more staging areas have to be restored from tape. In this case, each previously existing staging area that is restored from a backup needs to be accepted into the HP Stage/iX environment with the RECOVER command. RECOVER

updates the system's HP Stage/iX Globals file with all appropriate information about the staging area.

Syntax

```
RECOVER [STAGE=]stage_name
```

Parameters

`[STAGE=]stage_name (required)`

The name of the existing staging area to be recovered.

Example

To recover staging area “stage_1”:

```
STAGEMAN> RECOVER stage_1
```

REDO

The REDO command is identical in function to the MPE/iX redo command. It allows a command in the command history stack to be edited and re-executed.

Syntax

```
REDO [COMMAND=]command_id
```

Parameters

command_id: (optional)

Specifies the command to re-execute. The command may be specified by its relative or absolute order in the command line history stack, or by name (as a string). The default is -1, the most recent command. This parameter is optional.

Example

To edit the most recent command beginning with the string `DIS':

```
STAGEMAN> REDO DIS
```

To edit command number 10 (absolute) on the command history stack, enter:

```
STAGEMAN> REDO 10
```

To edit the second-to-last command on the stack (one command before the most recent), enter:

```
STAGEMAN> REDO -2
```

SET

The SET command is used to designate a particular HP Stage/iX staging area for use on the next boot. When a staging area is in use, it is considered “active”. The process of “activating” a staging area requires that the system be re-booted (using the ISL> START command). The SET command is used to designate which staging area should be used on the next reboot. On each subsequent reboot (START) the system will automatically use the

same staging area as was used on the previous reboot, unless the system manager changes the default by using the SET command.

You must specify the name of a validated HP Stage/iX staging area to the SET command. The SET command will accept the string “BASE” to indicate that the system should be booted from the BASE on the next reboot.

The SET command cannot be abbreviated.

Syntax

```
SET [[STAGE=]stage_name]
```

Parameters

[[STAGE=]stage_name (required)

The name of the HP Stage/iX staging area to be used for the SET. This must be a legal staging area name for a pre-existing staging area.

Staging area names are case sensitive. “STAGE1” is not equivalent to “stage1” or “Stage1”.

Example

```
STAGEMAN> SET STAGE=new_staging_area
```

SETDEFAULT (SETD)

The SETDEFAULT command sets the default values for a particular file to be used by the STAGEFILE command. For example: the SETDEFAULT command can be used to the set the defaults for NL.PUB.SYS, so that whenever an NL is staged using the STAGEFILE command, the values for all of the STAGEFILE parameters can be omitted.

There is a file, STAGEDEF.PUB.SYS, that contains all of the default values for files that make up HP software products. This file contains multiple SETDEFAULT commands. The STAGEDEF file is implicitly executed whenever STAGEMAN is run.

The SETDEFAULT command can be abbreviated as SETD.

Expert Mode Command:

Syntax

```
SETDEFAULT [FILE=]file_name

           [;DISK={ NONE}]
                  {CONTIG}
                  { LDEV1}

           [;DISP={ IGNORE}]
                  {REPLACE}
                  { ADD}
                  { DELETE}

           [;ONERR={IGNORE}]
                   { WARN}
```

```
[;VAL={BASIC} ]
      {EXISTENCE}
      {CHECKSUM}

[;VALINFO="validation_info"]

[;LIFTYPE={NONE} ]
          {BOOT}
          {IPL}
          {DATA}
          {AUTOF}

[;OWNER="owner_name"]

[;FILEGROUP={LDEV1} ]
            {SLT}
            {OTHER}
```

Parameters

[FILE=]file_name (Required)

The fully qualified filename for the file which the subsequent defaults should be set.

[;DISK=disk_restrict] (Optional)

Values: CONTIG
(C), LDEV1 (1), NONE(N)

Default: NONE (see also SETDEFAULT)

CONTIG — Implies that the file must be on LDEV1 and that the file requires contiguous disk space. (MOST RESTRICTIVE)

LDEV1 — Implies that the file must be on LDEV1.

NONE — Implies that there are no disk space restriction on the file. Files with no restrictions can be placed anywhere within the MPEXL_SYSTEM_VOLUME_SET.

[;DISP=file_disp] (Optional)

Values: REPLACE (R), ADD (A), DELETE (D), IGNORE (I)

Default: REPLACE (see also SETDEFAULT)

REPLACEMENT—Indicates that this file will replace an existing file when the system is booted from this staging area.

ADD — Indicates that this is a new file.

DELETE — Indicates that this file will be deleted when the system is booted from this staging area.

IGNORE — Files with this disposition are placed in the staging area, but are ignored during system start.

[;ONERR=error_action] (Optional)

Values: WARN(W), IGNORE (I)

Default: WARN (see also SETDEFAULT)

If an error occurs while processing a file, the error_action for that file will dictate what the start code will do.

WARN — start will continue. An error message will be printed.

IGNORE — start will continue, no error message will be printed.

[;VAL=val_method] (Optional)

Values: BASIC (B), EXISTENCE (E), CHECKSUM (C)

Default: BASIC (see also SETDEFAULT)

This parameter describes which technique will be used to determine if a particular file is valid at validation time (see VALIDATE). All files in a staging area must be considered valid before HP Stage/iX will consider the staging area valid.

BASIC — Basic validation should be performed on this file. This includes insuring that the file exists in the staging area, and that the disk space restrictions match what they should be.

EXISTENCE — The file that the staged file corresponds to must exist in the Base.

CHECKSUM — The computed checksum for the file corresponding to the final target file name must be in the array of acceptable checksums (see: validation_info parameter).

The CHECKSUM option is not currently supported.

[;VALINFO="val_info"] (Optional)

This parameter is not currently supported.

[;LIFTYPE=lif_type] (Optional)

Values: NONE, BOOT, IPL, DATA, AUTOF

Default: NONE (see also SETDEFAULT)

Determines whether or not the file belongs in the system LIF Directory, and if so, what file type it should be placed in the directory as.

[;OWNER="owner_name"] (Optional)

Default: "MANAGER.SYS"

The owner name that should be assigned to the staged file.

[;FILEGROUP=] (Optional)

Values: LDEV1,
SLT, OTHER

Default: OTHER

Determines at what point in the start process the file actually gets switched (renamed) to its natural location. There are currently three supported switching "windows":

LDEV1—The file must be switched as early as possible in the start process because the correct version is needed early on (an example is SL.PUB.SYS). The file therefore must reside entirely on LDEV 1.

SLT—This is the normal file group for most of the files found on the System Load Tape. Files in this group are switched ahead of files in the OTHER group.

OTHER—This is the default file group. Files here are switched after the system is almost completely up and running.

Example

```
STAGEMAN$ SETDEFAULT
START.MPEXL.SYS;disk=C;disp=R;val=E;onerr=W
STAGEMAN$ SETD
USERFILE.PUB.SYS;disk=LDEV1;disp=ADD;val=B;onerr=IGNORE
```

SHOW DEFAULT (SHOWD)

Shows the defaults that were set for a file by the SETDEFAULT command.

The SHOWDEFAULT command can be abbreviated as SHOWD.

Expert Mode Command:

Syntax

```
SHOWDEFAULT [FILE=]file_name
```

Parameters

[FILE=]staged_file_name (Required)

The name of the file whose defaults you are checking. Wildcards are allowed.

Example

To show all defaults:

```
STAGEMAN$ SHOWDEFAULT
```

To show the defaults for all files in PUB.SYS type:

```
STAGEMAN$ SHOWD @.PUB.SYS
```

STAGEFILE (STAGEF,SF)

The STAGEFILE command is used to put a file into a staging area. The file can be anywhere initially (referred to as its pre-stage location). You are required to specify the final target filename for the file. This is the name that the file will ultimately have when the system is booted from the staging area. In addition, you can optionally specify several pieces of information about the file. This additional information will be used during boot-up when processing the file.

The STAGEFILE command can be abbreviated as STAGEF or SF.

Expert Mode Command:

Syntax

```
STAGEFILE [STAGE=]stage_name [FROM=]from_file_name
[TO=]to_file_name
```

```
[;DISK={NONE}]
       {CONTIG}
       {LDEV1}

[;DISP={IGNORE}]
       {REPLACE}
       {ADD}
       {DELETE}

[;ONERR={IGNORE}]
        {WARN}

[;VAL={BASIC}]
      {EXISTENCE}
      {CHECKSUM}

[;VALINFO="validation_info"]

[;LIFTYPE={NONE} ]
          {BOOT}
          {IPL}
          {DATA}
          {AUTOF}

[;OWNER="owner_name"]

[;{MOVE}]
  {COPY}
```

Parameters

[STAGE=]stage_name (Required)

The name of the HP Stage/iX staging area. This must exist, cannot be in use, and cannot be the staging area designated for use on the next boot.

[FROM=]from_file_name (Required)

The name of the file in its current (pre-staged) location. This can be expressed in either POSIX (HFS) or MPE syntax ((example: /SYS/PUB/NL and NL.PUB.SYS are equivalent).

[TO=]to_file_name (Required)

The final target name for the file. This must be expressed as a fully qualified filename. It can be expressed in either POSIX (HFS) or MPE syntax (example: /SYS/PUB/NL and NL.PUB.SYS are equivalent).

NOTE If the filename is expressed in POSIX syntax, but is expressible in MPE syntax, the filename will be converted to MPE syntax. This is to avoid the problem of the same file being stageable under two names.

[;DISK=disk_restrict] (Optional)

Values: CONTIG (C), LDEV1 (1), NONE(N)

Default: NONE (see also SETDEFAULT)

CONTIG — Implies that the file must be on LDEV1 and that the file requires contiguous disk space. (MOST RESTRICTIVE)

LDEV1 — Implies that the file must be on LDEV1.

NONE — Implies that there are no disk space restriction on the file. Files with no restrictions can be placed anywhere within the MPEXL_SYSTEM_VOLUME_SET.

[;DISP=file_disp] (Optional)

Values: REPLACE (R), ADD (A), DELETE (D), IGNORE (I)

Default: REPLACE (see also SETDEFAULT)

REPLACEMENT — Indicates that this file will replace an existing file when the system is booted from this staging area.

ADD — Indicates that this is a new file.

DELETE — Indicates that this file will be deleted when the system is booted from this staging area.

IGNORE — Files with this disposition are placed in the staging area, but are ignored during system start.

[;ONERR=error_action] (Optional)

Values: WARN(W), IGNORE (I)

Default: WARN (see also SETDEFAULT)

If an error occurs while processing a file, the error_action for that file will dictate what the start code will do.

WARN — start will continue. An error message will be printed.

IGNORE — start will continue, no error message will be printed.

[;VAL=val_method] (Optional)

Values: BASIC (B), EXISTENCE (E), CHECKSUM (C)

Default: BASIC (see also SETDEFAULT)

This parameter describes which technique will be used to determine if a particular file is valid at validation time (see VALIDATE). All files in a staging area must be considered valid before HP Stage/iX will consider the staging area valid.

BASIC — Basic validation should be performed on this file. This includes insuring that the file exists in the staging area, and that the disk space restrictions match what they should be.

EXISTENCE — The file that the staged file corresponds to must exist in the Base.

CHECKSUM — The computed checksum for the file corresponding to the final target file name must be in the array of acceptable checksums (see: *validation_info* parameter).

The CHECKSUM option is not currently supported.

[;VALINFO="val_info"] (Optional)

The VALINFO parameter is not currently supported.

[;LIFTYPE=lif_type] (Optional)

Values: NONE, BOOT, IPL, DATA, AUTOF

Default: NONE (see also SETDEFAULT)

Determines whether or not the file belongs in the system LIF Directory, and if so, what file type it should be placed in the directory as.

[;OWNER="owner_name"] (Optional)

Default: "MANAGER.SYS"

The owner name that should be assigned to the staged file.

[;{MOVE}]

The default behavior for the STAGEFILE command is {COPY} is to copy the file to the staging area, thus not deleting the FROM file. If you want the FROM file to be purged, use the MOVE option.

Example

```
STAGEMAN> STAGEFILE STAGE1, NL.INSTALL.SYS, NL.PUB.SYS
STAGEMAN> STAGEF STAGE1, START.INSTALL.SYS,
START.MPEXL.SYS;DISK=C
STAGEMAN> SF STAGE1, SL.INSTALL.SYS, SL.PUB.SYS;ONERR=WARN
```

STATUS (ST)

The STATUS command can be used to display the current status of the HP Stage/iX environment. If HP Stage/iX is initialized, then the STATUS command will give some basic information about the HP Stage/iX subsystem (including the name of the staging area that is currently in use, and the name of the staging area that is to be used on the next restart of the system). If the HP Stage/iX facility is not currently initialized, the STATUS command will only report that fact.

For additional information on a particular staging area use the LIST command. For additional information about designating a particular staging area to be used for the next reboot of the system see the SET command.

The STATUS command can be abbreviated ST.

Syntax

STATUS

Parameters

(none)

Example

To view basic HP Stage/iX information:

```
STAGEMAN> STATUS
Last booted with: BASE
```

```
Next boot will be with: stage_1
```

UNINSTALL

The UNINSTALL command **COMPLETELY** uninstalls the HP Stage/iX facility. If you type UNINSTALL, then **ALL** HP Stage/iX staging areas will be deleted. In addition **ALL** HP Stage/iX directories, files, and data structures will be deleted.

The HP Stage/iX facility will be considered uninitalized after doing an UNINSTALL command. It can be re-initialized using the INITIALIZE command, but any staging areas which were deleted will be lost.

The UNINSTALL command will always prompt for confirmation to UNINSTALL HP Stage/iX unless you explicitly specify the ;NOCONFIRM option.

To execute UNIINSTALL, you must be running from your Base location (SET to Base). All staging areas will be removed. You cannot execute UNINSTALL while you are running from a Staging Area (SET to *staging_area*).

The UNINSTALL command cannot be abbreviated.

Syntax

```
UNINSTALL [;{ CONFIRM}]
            {NOCONFIRM}
```

Parameters

[;{ CONFIRM}] (optional)
{NOCONFIRM}

The ;CONFIRM or ;NOCONFIRM option specifies whether or not the UNINSTALL command will prompt for confirmation. If you specify ;NOCONFIRM, then STAGEMAN will **NOT** prompt for confirmation. The default is ;CONFIRM.

Example

To uninstall HP Stage/iX:

```
STAGEMAN> UNINSTALL
This will destroy your HP Stage/iX environment. Are you sure
[Y/N]? y
Successfully uninstalled the HP Stage/iX environment.
```

To uninstall HP Stage/iX without prompting for confirmation:

```
STAGEMAN> UNINSTALL;NOCONFIRM
Successfully uninstalled the HP Stage/iX environment.
```

USE

The USE command is used to execute STAGEMAN commands from an ASCII command file. USE opens the specified file, executes all commands from the file, and then closes the file and returns to interactive user input. USE commands can be nested.

Syntax

```
USE [FILENAME=]filename
```

Parameters

[FILENAME=]filename (required)

Any valid MPE/iX file for which you have READ access.

Example

To use the USE command to process an ASCII file in STAGEMAN, enter:

```
STAGEMAN> VALIDATE
```

VALIDATE (VAL)

An HP Stage/iX staging area must be validated before it can be used. The VALIDATE command is used to validate a staging area. VALIDATE will verify the integrity of the staging area, and will report back any problems with the staging area. If there are no problems, a "valid" flag will be set stating that the staging area is ready for use.

The LIST command can be used to view the current status (valid or invalid) of a staging area. The INVALIDATE command will reset the valid flag, preventing a particular staging area from being used.

The VALIDATE command can be abbreviated VAL.

Syntax

Normal Mode:

```
VALIDATE [[STAGE=]stage_name]
```

Expert Mode:

```
VALIDATE [[STAGE=]stage_name] [;NOOVERRIDE]
                              [;OVERRIDE ]
```

Parameters

[[STAGE=]stage_name (required)

The name of the HP Stage/iX staging area to be VALIDATED. This must be a legal staging area name for a pre-existing staging area. The staging area cannot be in use or designated for use on the next boot (see the SET command).

Staging area names are case sensitive. "STAGE1" is not equivalent to "stage1" or "Stage1".

Expert Mode Parameter:

```
[;{NOOVERRIDE}] (optional)
{ OVERRIDE}
```

If ;OVERRIDE is specified, then STAGEMAN will set the valid flag without checking to see if the contents of the staging area are really valid. Otherwise, STAGEMAN will validate that each file is actually in the staging area, that each file is OK (for example, disk space restrictions are observed), and any additional checking that may be performed on a file by

file basis (see the STAGEFILE command).

The default value for this parameter is ;NOOVERRIDE.

Example

```
STAGEMAN> VALIDATE STAGE=stage_1
```

H Error Messages and Warnings

This Appendix provides suggested resolutions to error messages that can occur when running AUTOINST, HPINSTAL, Patch/iX, or Stage/iX. Some of the messages are common to both HPINSTAL and AUTOINST. In these cases, the installation program is referred to generically as “the installer.”

The messages are organized into the following sections and generally occur during different stages of the installation or update process:

- SETUP Error Messages (SETERR) — occur while SETUP script is being executed.
- Installer Error Messages (INSTERR) — occur while running HPINSTAL or AUTOINST.
- Warning Messages (INSTWARN) — occur while running HPINSTAL or AUTOINST.
- SLTCOPY Messages — occur while copying tapes.
- Stage/iX Messages (STAGEMAN) — occur while running HP Stage/iX).

If the messages have numbers assigned to them, they are listed in numerical order. The CAUSE section for each message explains what the installer is attempting when the error occurs and lists the known possible causes for the error. The ACTION section for each message outlines known corrective actions that you can try before calling the Response Center for support.

In addition, this Appendix lists common error issues for specific activities:

- Common Modification Process Errors
- HP Patch/iX and Stage/iX Error Handling

Common Modification Process Errors

Throughout the activities described in Chapter 5 , “Modifying Your System,” several types of messages may display. Below is a description of some of the more common error and warning messages and a general description of the appropriate response to those messages.

Disk Space Messages

At different stages, AUTOINST searches for required amounts of non-contiguous and contiguous disk space. In the section “3.6 Estimating Disk Space” in Chapter 3 , “Planning for Your Task,” you verified if you had sufficient disk space.

- If however, AUTOINST cannot find sufficient non-contiguous disk space, it displays an error message and terminates.
- If AUTOINST cannot find sufficient contiguous disk space, it will display an error message and prompt you whether to continue. You can continue while you are creating the CSLT, but you must find the required contiguous disk space prior to applying the CSLT. Refer to Appendix C , “Managing Disk Space,” for additional information on clearing disk space.

AUTOINST Disk Space Messages

The following messages are generated by AUTOINST. While the operating system is running, AUTOINST attempted to put files into a holding area in the install group prior to calling SYSGEN to create a SLT.

```
Warning -- The Installer cannot find enough contiguous disk space
on LDEV #1 for UPDATE to update with the CSLT created by the
Installer. (INSTWARN #5)

You must create 60000 sectors of contiguous disk space on LDEV #1
BEFORE updating with the CSLT created by the Installer.

If you wish to continue with this installation and create the
disk space after the Installer is done (but before updating with
the CSLT) respond with ``YES'' to the following prompt. If you
wish to stop the Installer now to create the disk space, respond
with a ``NO''

Continue with the installation now and create disk space later >>
Y/N


Warning -- The Installer cannot find enough contiguous disk space
on LDEV #1 for UPDATE to update with the CSLT created by the
Installer. (INSTWARN #5)

You must create 60000 sectors of contiguous disk space on LDEV #1
BEFORE updating with the CSLT created by the Installer.
```

To recover from the above two messages, ensure that you have sufficient disk space before proceeding with your modification task.

UPDATE Disk Space Message

The following message is generated by the UPDATE utility. UPDATE was not able to put all the files on disk. UPDATE skips non-critical files and exists.

```
WARNING: UPDATE tried to find 60,000 sectors of contiguous disk
space on LDEV1 for its work, but it could only find nnnnnnn
sectors. Before continuing, refer to the Installation Manual for
instructions on collecting enough contiguous space on LDEV1 for
the update. If you still have questions after attempting the
procedures outlined in the manual, call your HP support
representative for help.

You may override this warning and continue with the update, but
HEWLETT-PACKARD STRONGLY DISCOURAGES THIS COURSE OF ACTION.

DO NOT override this warning unless you have a full backup
available and the time to REINSTALL your system. If UPDATE runs
out of space on LDEV1, you risk having to REINSTALL.

Override this warning message [OVERRIDE/NO; default=NO]?
```

At the end of UPDATE, where the system normally boots, the system will stop. The operator must boot the machine manually. Messages will stay on the console. The console will have the following message on it.

```
ERROR.

This UPDATE did not restore all files from the tape.(UPDERR 1001)
There were # files not restored because of out of disk space. (1)
There were # files not restored for other than disk space
reasons. (2)

There is more information about the error conditions in previous
messages.
START the system, create more free disk space and run this UPDATE
again. (1)
Correct the problems and run this UPDATE again. (2)
Correct the problems, START the system, create more free disk
space and run this UPDATE again. (3)
END of LOAD (update).
```

INSTALL Group Capabilities

The INSTALL group is created with certain capabilities which AUTOINST needs to run. If these capabilities are not present, the following message is displayed:

```
Program requires more capabilities than group is allowed.
(LDRERR505)
Native mode loader message 505 UNABLE TO LOAD PROGRAM TO BE RUN.
(CIERR 625)
```

If this message appears on the console where AUTOINST is invoked, use CHGROUP to change to the PUB.SYS group, use ALTGROUP to add the BA, IA, PM, MR, DS, and PH capabilities to the INSTALL group. Use CHGGROUP to return to your original group.

Zero Installation Files

When installation files are streamed, progress messages display. The message may indicate zero installation files. This only means that the products you are installing do not require an installation file. AUTOINST continues with the product installation.

Qualified Patch List

When the patch evaluation is complete, each patch is listed with the result of its qualification process. Some patches are followed by one or more additional patches listed as dependencies. For a patch to qualify, all of its patch dependencies must also qualify.

The absence of a product, or the presence of a product that has been patched with a site-specific patch can cause a patch to not qualify.

Decide whether you want to install the patches that qualified for your system. For additional information on available patches, refer to *READ BEFORE INSTALLING* for PowerPatch Releases or *Communicator 3000* for Express Releases.

Manually Installed Products Warning

Manually installed products, have installation files that cannot be streamed automatically and require special attention. If there are products like this on your SUBSYS tape, a warning message is displayed with the product name(s).

These products must be installed after updating with the CSLT. Refer to Appendix A , “Manually Installed Products,” for installation instructions.

HP Patch/iX and Stage/iX Error Handling

Stage/iX errors that occur during Patch/iX display through the Patch/iX error handling system. For information on Stage/iX errors that occur outside of Patch/iX, refer to "Stage/iX Messages (STAGEMAN)."

There are three error levels in the HP Patch/iX utility.

- **Warning Level**—warnings are given if a condition exists that could hinder your ability to complete the task.

  If a warning is encountered HP Patch/iX will display a Warning window, but allow you to continue with the task.

  An example of a warning condition is if the patch reference file (REFxxxxx) is missing or corrupt. This file is not required for HP Patch/iX to complete successfully, but may hinder your ability to understand the purpose of the patch.

- **Error Level**—When HP Patch/iX encounters an error condition it displays an Error Window.

  This window provides a brief description of the error. Some errors are recoverable, while others are fatal.

  — An example of a *recoverable error* is the selection of an option that is not available at the time.

  — An example of a *nonrecoverable error* is insufficient disc space available to complete the activity.

  If an error is encountered HP Patch/iX will display an Error window, but allow you to continue with the task.

- **Fatal Error**—When HP Patch/iX experiences a fatal error it will terminate gracefully.

  It first provides the Error Window, then once you acknowledge the Error Window, it displays the Fatal Error window.

  The Fatal Error window informs you that HP Patch/iX will terminate and displays instructions on how to recover once you have resolved the problem.

To correct error conditions and return to Patch/iX:

If an error message displays indicating that the CSLT/STORE tape or staging area cannot be created, HP Patch/iX returns you to the MPE/iX prompt.

1. Exit Patch/iX.

   Depending upon the type of error you encountered, you will automatically be terminated from Patch/iX or you will have the option to Exit out of Patch/iX.

   - To exit from Patch/iX, select the Exit, **F8**, function key until you see the Main menu, then select the *Exit HP Patch/iX* menu option.
   - When a fatal error is encountered HP Patch/iX prompts with the fatal error prompt. Acknowledge the error, press the key.

HP Patch/iX exits gracefully and prints important error information to the terminal window. If HP Patch/iX experienced an installation tools library error it also prints the error message associated with that error. Below are sample messages:

```
************** INTERNAL ERROR MESSAGE ******************* HP
Patch/iX experienced the following library status RL
STATUS.SUBSYS = INSTALLATION TOOLS LIBRARY RL STATUS.ERROR = 643
The associated error from the catalog is as follows:
Unable to initialize environment for patch installation (INSTERR
#263)


 ************ HP Patch/iX ERROR MESSAGE ************** ERROR: HP
Patch/iX failed to setup for patch management (PMERR 74).

CAUSE: HP Patch/iX attempted to performed a number of setup tasks
that are required to successfully qualify a set of patches and
create a CSLT. One of these operations failed.

ACTION: Review PMLOG.INSTALL.SYS for errors. It will display the
errors that occurred, along with cause and action text. These
errors are written as they are encountered so they will become
more generic with each message.
Often failures during setup are related to either the failure to
restore a set of files from tape, or missing files that HP
Patch/iX expects to find. These types of error are often related
to an attempt to customize the setup activities. Rerun HP
Patch/iX and allow HP Patch/iX to perform the default setup
activities for the selected patching task.
Patch management was NOT successfully completed.
** EXITING HP Patch/iX **
```

2. Check the error log to identify the problem area and correct the problem. Refer to “Patch/iX Error Logs” on page H-7 for a listing and description of the Patch/iX error logs.
3. Return to HP Patch/iX.

   :PATCHIX

   In many cases HP Patch/iX allows you to recover from errors at a place close to where the error occurred. HP Patch/iX maintains a binary recovery file called PMRECOVR.INSTALL.SYS that contains information about the last run of the tool. When you restart HP Patch/iX, it looks for this file, and if found, asks you whether you want to recover.
4. Respond Yes to recover the existing process.

   If you respond Yes HP Patch/iX restores the environment from this file. It also tells you where you last left off.

   ```
   HP Patch/iX has found a recovery file.
   Do you wish to resume with the previous HP Patch/iX
   session?(y/n)y
   ```

   HP Patch/iX starts up and recovers the previous environment. When the recovery is

complete it displays a prompt window that describes how to continue.

5. Press the **[RETURN]** key to continue.

   HP Patch/iX displays the *Main Menu*, with the recommended menu action highlighted. HP Patch/iX allows you control over how to continue. You can choose to continue from where you left off or select any of the previous menu items to start at an earlier step.

6. If the error occurred while you were processing a patch, Hewlett-Packard recommends that you:

   a. Return to and select, the *Qualify Patches* Main menu option.

   b. Requalify the patches.

   c. Veto/Force required patches.

   d. Requalify the patches again.

   When you go back through qualification then all the steps in the *Create [Stage][Tape]* or *Create [Tape]* screen will be done again

7. If the problem was caused by a non-patch related concern, such as a bad tape that you have replaced, then you start where you left off, for example, in the *Create [Stage][Tape]* or *Create [Tape]* screen.

   When you go to *Create [Stage][Tape]* or *Create [Tape]* immediately then HP Patch/iX continues where it left off, since no changes were made.

8. Select the *Create [Stage][Tape]* or *Create [Tape]* Main menu option, return to "4.11 Creating a Patch Tape or Staging Area" to complete creating the staging area.

Patch/iX Error Logs

HP Patch/iX is built on a common installation tools library. This means that aside from its window handling routines it calls library routines and system utilities for qualifying patches, modifying system libraries, and creating the tape. HP Patch/iX logs information about the run including error messages to the file `PMLOG.INSTALL.SYS`. The error messages printed in this file may also point to other log files that are used by these other routines or utilities. The set of potential log files are as follows:

- **PMLOG.INSTALL.SYS** — This is the first place to look for information about the last run of HP Patch/iX. It contains the users choices, information about operations that were performed and errors that were experienced. The errors may point to some of the other log files if HP Patch/iX thinks that additional information may exist in the other file.
- **PATCHAUD.INSTALL.SYS** — This is the logfile for the common installation tools library routines used for patch qualification activities. It contains extensive (and often hard to understand) information about the patch qualification results.
- **AUTOLOG.INSTALL.SYS** — A log file of most of the activity carried out by calls to the common installation tools library from the *Create Tape* screen. This file has all OCT, LINK EDIT, SOMPATCH, BUILDINT, and ABLDINTX output. This file can be checked for error messages that occur during the *Create Tape* screen of HP Patch/iX. This file is used in conjunction with the log file `INTLOG.INSTALL.SYS`.

- **INTLOG.INSTALL.SYS** — A log file of most of the activity carried out by calls to the common installation tools library from the *Create Tape* screen. Whereas AUTOLOG contains the output of stand alone utilities, INTLOG contains the output from the common installation tools library itself. This file can be checked for error messages that occur during the *Create Tape* screen of HP Patch/iX. This file is used in conjunction with the log file AUTOLOG.INSTALL.SYS.
- **LOGFILE.INSTALL.SYS** — This is a generic logfile that is used for some of the more common installation tools library routines. It is also used for the library routines that handle any SUBSYS product processing.
- **STRLIST.INSTALL.SYS** — HP Patch/iX does a CREATEPROCESS on STORE under several circumstances. The output of the STORE/RESTORE operation will be logged in this file.
- **HPINSTFL.INSTALL.SYS** — This file is only used by the Phase II run of HP Patch/iX. This phase includes the restore of files from the (HP Patch/iX) created installation tape and the streaming of installation files.
- **TMPSCAUD.INSTALL.SYS** — This is also used for the logging of activities related to the creation of the TMPSTRxx files that occurs when the user first enters the *Create Tape* screen.
- **STAGELOG.INSTALL.SYS** — This is for errors that occurred while creating or modifying a staging area.

SETUP Error Messages (SETERR)

1

Message You must be logged on to MANAGER.SYS,INSTALL to set up for HPINSTAL. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #1)

Cause You have either logged on as someone other than MANAGER.SYS, or you are not in the INSTALL group.

Action
- Log on as MANAGER.SYS,INSTALL and execute SETUP.INSTUTIL.
- Contact the Response Center if further assistance is required.

2

Message The group CD vuuff containing the HPINSTAL fileset could not be initialized. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #2)

Cause SETUP was unable to access the group CD vuuff .SYS on the compact disk (CD-ROM) containing the HPINSTAL file set.

Action
- VSCLOSE the CD-ROM disk labelled volume 1 (MPE_C-45.00_1).
- PURGEGROUP CD vuuff
- VSOPEN the compact disk
- Execute SETUP.INSTUTIL
- If SETUP is still unable to initialize the CD vuuff .SYS group, contact the Response Center for further assistance.

3

Message The HPINSTAL data file, GRPNAMES, is non-existent. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #3)

Cause Either the file is non-existent, or SETUP is accessing the file in an invalid location.

Action
- Use the LISTEQ command to determine if a file equation exists. If it does exist, reset GRPNAMES.
- Execute SETUP.INSTUTIL.
- If GRPNAMES still cannot be located, contact the

Response Center.

4 **Message** `You must execute SETINIT to complete the SETUP. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #4)`

Cause An old accounting structure was encountered when executing SETUP. SETUP cannot process successfully, therefore, you will be required to execute an additional script, SETINIT. SETINIT will purge the old accounting structure, then automatically execute SETUP.INSTUTIL

Action
- Execute the script, SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

5 **Message** `GRPNAMES has an invalid format. It is less than four records. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #5)`

Cause The GRPNAMES data file contains all group, account, and volume set name entries to be created by SETUP.INSTUTIL for use by HPINSTAL. The file has a specific format of a blank line, an account name, the volume set name on which the account resides, and the groups to be created in the account.

Action
- Use the `CI` command `LISTEQ` to determine if a file equation exists.
- If it exists, reset GRPNAMES; then execute SETUP.INSTUTIL.
- If GRPNAMES still has an invalid format, contact the Response Center for further assistance.

6 **Message** `GRPNAMES has an invalid format for its first record. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #6)`

Cause The GRPNAMES data file has an invalid format. The first record in the file should always be blank.

Action
- Use the `CI` command `LISTEQ` to determine if a file equation exists.
- If it exists, reset GRPNAMES.
- Execute SETUP.INSTUTIL.

- If GRPNAMES still has an invalid format, contact the Response Center for further assistance.

7

Message `GRPNAMES has an invalid format. This account has no VOLUME ID. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #7)`

Cause The GRPNAMES data file on the compact disk has an invalid format. The specific format of the file is a blank line, followed by an account name, followed by the volume set name on which the account resides, followed by the groups within the account.

Action

- Use the CI command `LISTEQ` to determine if a file equation exists.
- If it exists, reset GRPNAMES.
- Execute SETUP.INSTUTIL.
- If GRPNAMES still an invalid format, contact the Response Center for further assistance.

8

Message `GRPNAMES has no groups for the specified account. (SETERR #8)`

Cause The GRPNAMES data file has an invalid format. An existing account in GRPNAMES has no associated groups.

Action

- Use the CI command `LISTEQ` to determine if a file equation exists.
- If it exists, reset GRPNAMES.
- Execute SETINIT.INSTUTIL.
- If GRPNAMES still an invalid format, contact the Response Center.

9

Message `A specified account was not successfully created. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #9)`

Cause One of the accounts in the GRPNAMES data file could not be successfully created.

Action

- Ensure that your log on, MANAGER.SYS,INSTALL has all MPE capabilities.
- Ensure that no other process has accessed the account.
- If so, instruct the user to log off.
- Execute SETINIT.INSTALL.

- Contact the Response Center if further assistance is required.

10 **Message** `Unable to successfully bind to the group group.account . SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #10)`

Cause SETUP was unable to create a group that was listed in the GRPNAMES data file.

Action

- Type the following command to ensure that the group does not exist.

  `:LISTGROUP GROUP.ACCOUNT`

- Execute the SETINIT script to continue the SETUP.INSTUTIL. If the group.account does not exist and you are unable to create it, ensure that your MANAGER.SYS,INSTALL (user.account,group) has full MPE capabilities.
- Contact the Response Center if further assistance is required.

11 **Message** `The file filename could not be successfully copied to INSTALL.SYS. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #11)`

Cause SETUP copies all files from the CD vuuff .SYS group on the compact disk to INSTALL.SYS group for use by HPINSTAL. The file set consists of HPINSTAL and all of its data files. This error is a result of the inability to copy one of the HPINSTAL files from the CD vuuff .SYS group into the INSTALL.SYS group.

Action

- Perform the following command to determine if the file exists and contains records.

  `:LISTF FILENAME. CD VUUFF .SYS,2`

- Perform the following command to determine if the file exists in INSTALL.SYS:

  `:LISTF FILENAME .INSTALL.SYS,2`

- Ensure that the file is not busy.
- Then execute SETINIT.INSTALL.
- If SETUP still terminates abnormally, contact the Response Center for further assistance.

12 **Message** `The file filename could not be purged from the`

```
INSTALL.SYS
group. SETUP will terminate. Follow the
instructions in your installation
manual to continue. (SETERR #12)
```

Cause SETUP was unable to purge a file from the INSTALL.SYS group prior to copying a newer version of the file from the CD vuuff .SYS group.

Action

- Perform the following command to determine if the file is busy:

  ```
  :LISTF FILENAME .INSTALL.SYS,2
  ```

- Determine the process accessing the file.
- Kill the process.
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

13 **Message**

```
Could not delete the temporary file LISTOUT or
OUTF. SETUP will terminate. Follow the
instructions in your installation manual
to continue. (SETERR #13)
```

Cause The temporary files, LISTOUT and OUTF, created by the SETUP process exist and could not be deleted.

Action

- Perform a listftemp,2 to determine if the files are busy.
- Log on again as MANAGER.SYS,INSTALL.
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

14 **Message**

```
volname is not a valid volume set name (name must
include MPE).
SETUP will terminate. Follow the instructions in
your installation manual
to continue. (SETERR #14)
```

Cause The disk from which SETUP.INSTUTIL is executing is not a valid Hewlett-Packard MPE formatted compact disk.

Action

- VSCLOSE the volume set containing SETUP.INSTUTIL.
- Purgegroup INSTUTIL.
- Insert a compact disk with the appropriate label.
- VSOPEN the volume_set_name.
- Bind to the new volume: ALTGROUP INSTUTIL.SYS;HOMEVS=VOLUME_SET.

- Execute SETUP.INSTUTIL.
- If you have no other compact disks, contact the Response Center for further assistance.

15 **Message** `volname is not a valid volume set name. ("_" must precede the VUF and vol ID). (SETERR #15)`

Cause The disk from which SETUP.INSTUTIL is executing is not a valid Hewlett-Packard MPE-formatted compact disk.

Action

- VSCLOSE the volume set containing SETUP.INSTUTIL.
- Purgegroup INSTUTIL.
- Insert a compact disk with the appropriate label.
- VSOPEN the volume_set_name.
- Bind to the new volume: ALTGROUP INSTUTIL.SYS;HOMEVS=VOLUME_SET.
- Execute SETUP.INSTUTIL.
- If you have no other compact disks, contact the Response Center for further assistance.

16 **Message** `volname is not a valid volume set name because of the V.UU.FF. (SETERR #16)`

Cause The disk from which SETUP.INSTUTIL is executing is not a valid Hewlett-Packard MPE-formatted compact disk.

Action

- VSCLOSE the volume set containing SETUP.INSTUTIL.
- Purgegroup INSTUTIL.
- Insert a compact disk with the appropriate label.
- VSOPEN the volume_set_name.
- Bind to the new volume: ALTGROUP INSTUTIL.SYS;HOMEVS=VOLUME_SET.
- Execute SETUP.INSTUTIL.
- If you have no other compact disks, contact the Response Center for further assistance.

17 **Message** `SETINIT will terminate. (SETERR #17) From the system console, VSCLOSE mpe_volsetname. If this a SCSI drive, run AVRSCSI.INSTALL dismount ldev to take the disk offline.`

Cause A CI error occurred during the SETINIT script while

attempting to VSCLOSE an open compact disk.

Action

- The associated CI error message is displayed. The disk can only be closed if no files on the disk are being accessed. If the disk cannot be closed, determine the files being used, kill any processes accessing the disk, then execute SETINIT again.
- Contact the Response Center if further assistance is required.

18

Message

```
This disk is in an invalid state for this
process.
SETINIT will terminate. (SETERR #18)
```

Cause

This message occurs in two instances. Either SETINIT is attempting to VSCLOSE a disk that is in an invalid state for the process, or SETINIT is attempting to VSOPEN a disk that is in an invalid state.

Action

- Manually VSCLOSE/VSOPEN the volume set from the system console.
- Contact the Response Center if further assistance is required.

19

Message

```
SETINIT will terminate. To continue, you must go
to
the system console and VSOPEN mpe_volsetname. If
necessary, run AVRSCSI.INSTALL
to put the volume set containing SETUP.INSTUTIL
online. (SETERR #19)
```

Cause

SETINIT is attempting to VSOPEN a volume set that is in the “LONER” state, but is unsuccessful.

Action

- Go to the system console and VSOPEN the volume set name.
- Execute SETUP.INSTUTIL.
- Contact the Response Center if further assistance is required.

20

Message

```
CD v.uu.ff.SYS has garbage in its last record.
SETUP
will terminate. Follow the instructions in your
installation manual
to continue. (SETERR #20)
```

Cause

The GRPNAMES data file is corrupted.

Action

- Ensure the no file equation exists for GRPNAMES.
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

21 **Message** `You must execute SETUP.INSTUTIL prior to executing SETINIT. (SETERR #21)`

Cause SETINIT uses a secondary CI script called OLDACCTS to establish MPE release-dependent variables. This script is built by SETUP.INSTUTIL, and is deleted by SETUP.INSTUTIL upon normal termination. Therefore, SETUP.INSTUTIL must be executed first, and it must fail prior to SETINIT.

Action

- Ensure that the CD containing the INSTUTIL.SYS group is online.
- From MANAGER.SYS,INSTALL, execute SETUP.INSTUTIL.
- If SETUP.INSTUTIL fails, execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

22 **Message** `Unable to set file equation for the file HPINSTAL.INSTALL. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #22)`

Cause SETUP.INSTUTIL forces the file HPINSTAL.INSTALL onto LDEV 1 by setting a file equation prior to copying the file from compact disk. However, SETUP.INSTUTIL failed when attempting to set the file equation.

Action

- Do a LISTEQ to determine the file equations that have been set.
- Reset the files for which you no longer need file equations. (If no file equations are needed, do a RESET @.)
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

23 **Message** `Unable to set file equation for the file HICAT000.INSTALL. Setup will terminate. Follow the instructions in your installation manual to continue. (SETERR #23)`

Cause SETUP.INSTUTIL forces the file HICAT000.INSTALL onto LDEV 1 by setting a file equations prior to copying the file from compact disk. However, SETUP.INSTUTIL failed when attempting to set the file equation.

	Action	• Do a LISTEQ to determine the file equations that have been set. • Reset the files for which you no longer need file equations. (If no file equations are needed, do a RESET @.) • Execute SETINIT.INSTALL. • Contact the Response Center if further assistance is required.
24	**Message**	`Unable to set file equation for the file PEXL.INSTALL. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #24)`
	Cause	SETUP.INSTUTIL forces the file PEXL.INSTALL onto LDEV 1 by setting a file equations prior to copying the file from compact disk. However, SETUP.INSTUTIL failed when attempting to set the file equation.
	Action	• Do a LISTEQ to determine the file equations that have been set. • Reset the files for which you no longer need file equations. (If no file equations are needed, do a RESET @.) • Execute SETINIT.INSTALL. • Contact the Response Center if further assistance is required.
25	**Message**	`PURGEGROUP command failed when attempting to purge the group PUB. curr_acct. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #25)`
	Cause	SETUP.INSTUTIL uses the data file GRPNAMES.CD vuuff .SYS to determine the accounting structure on the compact disk set. SETUP. INSTUTIL must purge the group PUB. curracct from the system domain prior to binding to it on the CD.
	Action	• Ensure the group is not busy. • Execute SETINIT.INSTALL. • Contact the Response Center if further assistance is required.
26	**Message**	`Unable to set file equation for OLDACCTS data file.`

		SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #26)
	Cause	SETUP.INSTUTIL failed when attempting to set a file equation for OLDACCTS.
	Action	• Do a LISTEQ to determine which file equations have been set. • Reset the files for which you no longer need file equations. (If no file equations are needed, do a RESET @.) • Contact the Response Center if further assistance is required.
27	**Message**	SETUP could not purge its old error log SETUPLOG. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #27)
	Cause	A SETUPLOG existed from a previous execution of SETUP.INSTUTIL, and it could not be purged.
	Action	• Ensure that the file is not busy. • Ensure that the file is not a temporary file. • Purge the SETUPLOG. • Execute SETUP.INSTUTIL. • Contact the Response Center if further assistance is required.
28	**Message**	Unable to set file equation for log file, SETUPLOG. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #28)
	Cause	SETUP.INSTUTIL failed when attempting to set a file equation for SETUPLOG.
	Action	• Do a LISTEQ to determine which file equations have been set. • Reset the files for which you no longer need file equations. (If no file equations are needed, do a RESET @.) • Contact the Response Center if further assistance is required.
29	**Message**	SETUP could not purge its old data file, INITCIVR.

		SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #29)
	Cause	A INITCIVR existed from a previous execution of SETUP.INSTUTIL, and it could not be purged.
	Action	• Ensure that the file is not busy. • Ensure that the file is not a temporary file. • Purge INITCIVR. • Execute SETUP.INSTUTIL. • Contact the Response Center if further assistance is required.
30	**Message**	Unable to set file equation for data file, INITCIVR. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #30)
	Cause	SETUP.INSTUTIL failed when attempting to set a file equation for INITCIVR.
	Action	• Do a LISTEQ to determine which file equations have been set. • Reset the files for which you no longer need file equations. (If no file equations are needed, do a RESET @.) • Contact the Response Center if further assistance is required.
31	**Message**	Unable to purge old initialization file, SETUPYES. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #31)
	Cause	A SETUPYES existed from a previous execution of SETUP.INSTUTIL, and it could not be purged.
	Action	• Ensure that the file is not busy. • Ensure that the file is not a temporary file. • Purge SETUPYES. • Execute SETUP.INSTUTIL. • Contact the Response Center if further assistance is required.
32	**Message**	Unable to purge old initialization file, SETINIT. SETUP will terminate. Follow the

		instructions in your installation manual to continue. (SETERR #32)
	Cause	A SETINIT existed from a previous execution of SETUP.INSTUTIL, and it could not be purged.
	Action	• Ensure that the file is not busy. • Ensure that the file is not a temporary file. • Purge SETINIT. • Execute SETUP.INSTUTIL. • Contact the Response Center if further assistance is required.
33	**Message**	Failed to copy initialization file SETUPYES. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #33)
	Cause	SETUP.INSTUTIL failed when attempting to copy SETUPYES.INSTUTIL to SETUPYES.INSTALL.
	Action	• Ensure that the file SETUPYES.INSTUTIL exists. • Ensure that no file equation exists for SETUPYES.INSTALL. • Purge SETUPYES.INSTALL in both the permanent and temporary domains. • Execute SETUP.INSTUTIL. • Contact the Response Center if further assistance is required.
34	**Message**	Failed to copy initialization file SETINIT. SETUP will terminate. Follow the instructions in your installation manual to continue. (SETERR #34)
	Cause	SETUP.INSTUTIL failed when attempting to copy SETINIT.INSTUTIL to SETUPYES.INSTALL.
	Action	• Ensure that the file SETINIT.INSTUTIL exists. • Ensure that no file equation exists for SETUPYES.INSTALL. • Purge SETINIT.INSTALL in both the permanent and temporary domains. • Execute SETUP.INSTUTIL. • Contact the Response Center if further assistance is required.

35 **Message** `35 Not used`

36 **Message** `Unable to purge the account mpe_hpslt. (SETERR #36)`

Cause SETINIT failed when attempting to purge the account mpe_hpslt.

Action
- Ensure that no files are open in the account.
- Purge the account from your terminal.
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

37 **Message** `Unable to purge the account mpe_hpupdate. (SETERR #37)`

Cause SETINIT failed when attempting to purge the account mpe_hpupdate.

Action
- Ensure that no files are open in the account.
- Purge the account from your terminal.
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

38 **Message** `Unable to purge the group mpe_cdgroup. (SETERR #38)`

Cause SETINIT failed when attempting to purge the group mpe_cdgroup .SYS.

Action
- Ensure that no files are open in the group.
- Purge the group from your terminal.
- Execute SETINIT.INSTALL.
- Contact the Response Center if further assistance is required.

39 **Message** `MPE release-dependent CI variables could not be created. SETINIT will terminate. (SETERR #39)`

Cause SETINIT was unable to successfully execute the CI script OLDACCTS to create the following MPE/iX release-dependent variables: mpe_vol_1, mpe_vol_2, mpe_hpslt, mpe_hpupdate, and MPE_cdgroup. SETINIT examines these variables to determine the MPE/iX software release version contained on the CD-ROM disks.

Action
- Record any error messages preceding this message.
- Attempt to manually execute the OLDACCTS scripts

from your terminal. If the script fails again, the CI variable table may be full. Delete user variables by entering DELETEVAR @ .

- Execute SETINIT.INSTAL again.

Installer Error Messages (INSTERR)

1 **Message** `Installation can only be performed by MANAGER.SYS,INSTALL. (INSTERR #1)`

Cause The installer verifies the user during start up using the WHO intrinsic. If the returned values for user name, local group, and account name do not match MANAGER, INSTALL and SYS, respectively, the installer terminates with this error.

Action Log on as follows, and run the installer again:

```
:HELLO MANAGER.SYS,INSTALL
```

2 **Message** `Unrecognizable INFO parameter entered. (INSTERR #2)`

Cause The user specified an INFO parameter which the installer does not allow.

Action
- Run the installer again without any INFO parameters.

3 **Message** `Creation of the accounting structure has failed. To continue with the installation, consult the customer installation procedures. (INSTERR #3)`

Cause The SUPACCT job aborted abnormally or the installer could not find the SUPACCT job spoolfile.

Action Check the spoolfile of the SUPACCT job. Specific things to check for are:

- Any command which causes the Job Control Word (JCW) JCW to be set to a FATAL value without being reset will cause the installer to determine the job failed. Take appropriate measures to correct the error condition.
- Other jobs or sessions are logged on to the accounts that the SUPACCT job attempted to purge and rebuild. If so, abort these jobs/sessions and all deferred jobs.
- Some UDCs are still enabled at the system, account, or user levels. If so, disable them.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

4 **Message** `The files from the FOS tape were not successfully`

```
restored.
To continue with the installation, consult the
customer installation
procedures. (INSTERR #4)
```

Cause

The JCW STOREJCW was nonzero after the installer executed the following STORE command to restore the FOS tape:

```
:RUN STORE.PUB;info= RESTORE &
 FOS;!IFHPIBFS.PUB;CREATE;SHOW=OFFLINE
```

Action

- Ensure that a device with class LP is included in your configuration.
- Use an appropriate text editor to inspect the offline listing generated by RESTORE. Identify the spoolfiles having RESTORE status by using the command:

  ```
  :LISTSPF SELEQ=[FILEDES=OFFLINE]
  ```

  The last spoolfile displayed will contain the output listing from the RESTORE command. The error messages in this file will show the problems encountered in restoring files from the FOS tape.
- Missing files - Manually RESTORE missing files from the FOS tape.
- Out of disk space - There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files after installation.
- Transmission errors - Clean tape heads and check for hardware errors.
- Corrupt files - Manually RESTORE the corrupt files from the FOS tape.
- Unexpected end of file marker found (S/R 9060). This special case will not cause the entire Restore to fail. You may not see INSTERR #4, however, a later step will fail due to missing files. If the device is a DDS, specifically an HPC1503B or HPC1520B, it is likely that you have encountered a DDS firmware problem. Contact your HP representative for further assistance.
- Take appropriate corrective measures, and run the installer again.

- Contact the Response Center if further assistance is required.

5 **Message** The SUBSYS tape has not been successfully restored.
To continue with the installation, consult the customer installation
procedures. (INSTERR #5)

Cause The JCW STOREJCW was nonzero after the installer executed the following STORE command to restore the SUBSYS or ADDON tape:

```
:RUN STORE.PUB;INFO= RESTORE &
 SUBSYS;@.@.@;CREATE;SHOW=OFFLINE
```

Action

- Ensure that a device with class LP is included in your configuration.
- Use an appropriate text editor to inspect the offline listing generated by RESTORE. Identify the spoolfile having RESTORE status by using the command:

  ```
  :LISTSPF SELEQ=[FILEDES=OFFLINE]
  ```

  The last spoolfile displayed will contain the output listing from the RESTORE command. The error messages in this file will show the problems encountered in restoring files from the SUBSYS tape.
- Ensure that the RESTORE files are not being accessed by another process.
- Out of disk space — There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Transmission errors - Clean tape heads and check for hardware errors.
- Corrupt files - Manually RESTORE the corrupt files from the SUBSYS tape. If successful, this indicates there were transmission errors.
- Unexpected end of file marker found (S/R 9060). This special case will not cause the entire Restore to fail. You may not see INSTERR #4, however, a later step will fail due to missing files. If the device is a DDS, specifically an HPC1503B or HPC1520B, it is likely that you have

encountered a DDS firmware problem. Contact your HP representative for further assistance.

- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

6 **Message** `6 Not used`

7 **Message** `The files from the POWERPATCH tape were not successfully restored. To continue with the installation, consult the customer installation procedures. (INSTERR #7)`

Cause The JCW STOREJCW was nonzero after the installer executed the following STORE command to restore the PowerPatch tape:

```
:RUN STORE.PUB;INFO= RESTORE &
 PWRPATCH;!TMPSTR01;CREATE;SHOW=OFFLINE
```

Action

- Ensure that a device with class LP is included in your configuration.
- Use an appropriate text editor to inspect the offline listing generated by RESTORE. Identify the spoolfile having RESTORE status by using the command:

  ```
  :LISTSPF SELEQ=[FILEDES=OFFLINE]
  ```

  The last spoolfile displayed will contain the output listing from the RESTORE command. The error messages in this file will show the problems encountered in restoring files from the PowerPatch tape.
- Missing files - Manually RESTORE missing files from the PowerPatch tape. If successful, this indicates there were transmission errors.
- Ensure that the RESTORE files are not being accessed by another process.
- Out of disk space - There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Transmission errors - Clean tape heads and check for hardware errors.

- Corrupt files - Manually RESTORE the corrupt files from the PowerPatch tape. If successful, this indicates there were transmission errors.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

8 **Message** `Add-on cannot be done without an ADD-ON tape. (INSTERR #8)`

Cause Occurs in AUTOINST only: AUTOINST received a negative response to the query about a SUBSYS tape in the installation package while performing the ADD-ON option.

Action
- Do not select the ADD-ON option unless there is a SUBSYS tape in the installation package.
- Respond with YES to the SUBSYS tape query if there is a SUBSYS tape in the installation package.

9 **Message** `SUPACCT has been purged from system. (INSTERR #9)`

Cause The installer could not find SUPACCT.PUB.SYS.

Action
- Restore @ACCT.PUB.SYS from the FOS tape. Be sure to use the appropriate FOS tape.
- Run the installer again after restoring the file.
- Contact the Response Center if further assistance is required.

10 **Message** `STREAMS device not enabled. The installer cannot continue. (INSTERR #10)`

Cause The installer could not obtain the LDEV number for the STREAMS device.

Action
- Ensure that a STREAMS device is configured and is enabled.
- The STREAMS device no longer needs to be LDEV 10.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

NOTE INSTERR #12 applies only to AUTOINST, not HPINSTAL.

11 **Message** `11 Not used`

12 **Message** `This installer is supported on Release 2.2 or later ONLY. (INSTERR #12)`

Cause Occurs in AUTOINST only: the MPE version is pre-2.2, or AUTOINST cannot retrieve the current version number.

Action

- Ensure your system is on MPE release 2.2 (A.41.00) or later. Pre-2.2 or non-released versions of 2.2 are unsupported.
- Ensure you have updated with the factory SLT if you are performing an UPDATE.
- Ensure you have restored A@.INSTALL.SYS from the PowerPatch tape and that the PowerPatch tape is for the version of MPE you are running.
- Take appropriate corrective measures, and run the AUTOINST again.
- Contact the Response Center if further assistance is required.

13 **Message** `The installer failed to modify the JOBFENCE. (INSTERR #13).`

Cause The installer received a nonzero return from executing the CI command `JOBFENCE 8`.

Action

- Manually execute JOBFENCE to ascertain why the command is returning an error.
- If JOBFENCE can be executed manually, run the installer again.
- Contact the Response Center if further assistance is required.

14 **Message** `The installer failed to install the AIF user-id. (INSTERR #14).`

Cause The call to AIF_INSTALL_USER_ID has returned a nonzero status.

Action Attempt to determine why the AIF did not work. Possible items to check are:

- User, account and group capabilities for MANAGER.SYS,INSTALL. The user MANAGER and the account SYS should both have all capabilities. The group INSTALL should have the following capabilities: BA, IA, PM, MR, DS, PH.
- Capabilities of the HPINSTAL.INSTALL.SYS program. The program should have the following capabilities: IA, BA, DS, MR, PM, PH.

- LDEV 1 disk space could also be an issue since the AIFs create files on LDEV 1. Ensure that there was 60000 sectors of contiguous disk space reserved on LDEV 1.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

15 **Message** `FINDJCW failure on STOREJCW. (INSTERR #15)`

Cause The call to FINDJCW for getting the value of STOREJCW returned an error status after restoring the FOS, SUBSYS or POWERPATCH tapes or after creating the POWERPATCH store tape.

Action

- Ensure the JCW STOREJCW exists by issuing the following command:

  ```
  :SHOWJCW STOREJCW
  ```

- If STOREJCW has not been defined, try to set it by:

  ```
  :SETJCW STOREJCW OK
  ```

- If either of the commands are successful, run the installer again.
- Contact the Response Center if further assistance is required.

16 **Message** `The installer failed to checksum the SL. (INSTERR #16)`

Cause The checksum procedure failed to obtain checksums from the SL.

Action

- Enter LISTF SL.INSTALL.SYS to verify the copy of the SL exists.
- Verify that the SEGMENTER can access the SL outside of the installer:

  ```
  :SEGMENTER
  -SL SL.INSTALL.SYS
  -LISTSL
  ```

  Press **CTRL Y** to stop listing all the SL segments.
- Run the installer again.
- Contact the Response Center if further assistance is required.

17 **Message** `The installer failed to lock SL.PUB.SYS. (INSTERR #17)`

Cause The installer failed to execute the command `FILE SL.PUB.SYS;LOCK .`

Action

- Attempt the file command manually outside of the installer.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

18 **Message** `The installer failed to copy SL.PUB.SYS. (INSTERR #18)`

Cause The installer failed to execute the command `COPY SL.PUB.SYS, SL` to obtain a local copy of the SL.

Action

- Ensure the file equation `FILE SL.PUB.SYS;LOCK` exists with the `LISTEQ` command.
- Ensure `SL.PUB.SYS` exists with the `LISTF` command.
- Check for free disk space to copy file. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in `VOLUTIL` to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Check if target file SL.INSTALL.SYS already exists. Purge the SL.INSTALL.SYS file.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

19 **Message** `The installer failed to copy XL.PUB.SYS. (INSTERR #19)`

Cause The installer failed to execute the command `COPY XL.PUB.SYS, XL` to obtain a local copy of the XL.

Action

- Ensure XL.PUB.SYS exists with the `LISTF` command.
- Check for free disk space to copy file. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them.

Restore the files from tape at the end of the installation.

- Check if target file XL.INSTALL.SYS already exists. Purge the XL.INSTALL.SYS file.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

20 **Message** `The installer failed to copy NL.PUB.SYS. (INSTERR #20)`

Cause The installer failed to execute the command `COPY NL.PUB.SYS, NL` to obtain a local copy of the NL.

Action

- Ensure NL.PUB.SYS exists with the `LISTF` command.
- Check for free disk space to copy file. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Check if target file NL.INSTALL.SYS already exists. Purge the NL.INSTALL.SYS file.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

21 **Message** `Cyclic job call encountered. Job processing: ifilename (INSTERR #21)`

Cause The installer has detected a loop of JOB streams.

Action If the USL, UXL, UNL groups were not purged prior to starting the installation, purge them and restart the installation procedures. Type:

```
:LISTF I???????.USL.SYS.
```

- If the file INDIRECT exists, purge it.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

22 **Message** `Invalid job encountered. Job processing: ifilename (INSTERR #22)`

Cause An invalid JOB CARD has been detected.

An invalid `STREAM,#` command has been detected.

Action If the USL, UXL, UNL groups were not purged prior to starting the installation, purge them and restart the installation procedures. Type:

`:LISTF I???????.USL.SYS.`

- If the file INDIRECT exists, purge it.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

23 **Message** `An installation job stream has failed. Job streaming: ifilename (INSTERR #23)`

Cause An installation job aborted abnormally or the installer could not find the job's spoolfile.

Action

- Ensure the spooler has been started on the LP device. Start the spooler by entering:

  `:SPOOLER LP;START`

- Use an appropriate text editor and view the job's spoolfile to determine why the job failed (the `PRINT` command may also be used). If you need the job number, use an editor to view HPINSTFL. The job numbers are listed at the end of HPINSTFL. Any command which leaves the JCW JCW set to FATAL will cause the installer to determine the job failed.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

24 **Message** `24 Not used`

25 **Message** `Unable to build a temporary file. (INSTERR #25)`

Cause The installer failed to build a temporary file using the `BUILD` command.

Action

- Check for free temporary disk space to build file. There are two methods for obtaining additional disk space:

  — Use the `ALTERVOL` command in VOLUTIL to set the

permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.

— Store user files to tape and them purge them. Restore the files from tape at the end of the installation.

- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

26 **Message** `Unable to recover installation file processing. (INSTERR #26)`

Cause The installer was stopped and restarted during IFILE processing but could not find the last IFILE it was working when stopped.

Action

- A required installation file has been purged from the system. Restore I???????.USL.SYS from the SUBSYS tape:

```
:FILE T;DEV=TAPE
:RUN STORE.PUB.SYS;INFO=

 RESTORE &
T;I???????.USL.SYS;SHOW
```

- Be sure to use the appropriate SUBSYS tape. Run the installer again after the installation files have been restored. Contact the Response Center if further assistance is required.

27 **Message** `The installer does not support streaming external jobs from within installation files. Job processing: ifilename (INSTERR #27)`

Cause A JOB (SUPACCT or IFILE) includes a STREAM filename command which is not allowed by the installer.

Action

- If the USL, UXL, UNL groups were not purged prior to starting the installation, purge them and restart the installation procedures. Type:

```
:LISTF I???????.USL.SYS.
```

- If the file INDIRECT.USL.SYS exists, purge it.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

28 **Message** `Internal error encountered at: location (INSTERR`

#28)

Cause The installer was unable to find information on a streamed job. Either SUPACCT or one of the installation jobs failed to produce a spool file for the installer to find or the installer lost track of the JOB number. The location number specified in the error message is a location number within the installer code and should be included with all communications with the Response Center.

Action

- Ensure the spooler has been started on the LP device. Start the spooler by entering:

  ```
  :SPOOLER LP;START
  :LISTF I???????.USL.SYS.
  ```

- If the file INDIRECT.USL.SYS exists, purge it.
- Determine the current job from the HPINSTFL file and check the job's existence and/or termination. Use SHOWJOB to find if the job is still running and LISTSPF to find if there is a spoolfile.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

29 **Message** `Unable to obtain CONSOLE LDEV#. (INSTERR #29)`

Cause The installer assigns the value of the CI variable HPCONSOLE to the JCW TMPJCW1 and then gets the value of the JCW through the intrinsic FINDJCW. This error results when FINDJCW returns an error status.

Action

- Type SHOWJCW to determine whether the `SETJCW` command succeeded.
- If TMPJCW1 does not display, attempt to set it manually.
- If TMPJCW1 cannot be set manually, log on again:

  ```
  :HELLO MANAGER.SYS,INSTALL;HIPRI
  ```

- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

30 **Message** `The installer failed to create the AUTOPSTR process (INSTERR #30)`

Cause Occurs in AUTOINST only: The CREATEPROCESS intrinsic returned an error status when attempting to execute AUTOPSTR.INSTALL.SYS. Either the program

file is missing or the indirect store file, TMPSTR02.INSTALL.SYS, is missing or is empty.

Action

- Type LISTF TMPSTR02.INSTALL.SYS,2 to verify it exists and is not empty.
- Type LISTF AUTOPSTR.INSTALL.SYS to verify it exists. If not, restore AUTOPSTR from the SUBSYS tape.
- Contact the Response Center if further assistance is required.

31 **Message** `Installation can only be performed from the CONSOLE. (INSTERR #31)`

Cause For AUTOINST: The installer has determined the user's current logon LDEV is not the system console and the usage type is not PowerPatch.

For HPINSTAL: HPINSTAL determined that your current logon LDEV is not the system console, which is required for Phase II.

Action

- For AUTOINST: The installer must be executed from the system console only for all options except PowerPatch. Log onto the CONSOLE and run the installer again.
- For HPINSTAL: You must perform Phase II from the system console. Log on to the console and run HPINSTAL again.

32 **Message** `Failed to obtain passwords for the IFILE: ifilename (INSTERR #32)`

Cause The call to the AIFACCTGET intrinsic returned a nonzero status.

- If the USL, UXL, UNL groups were not purged prior to starting the installation, purge them and restart the installation procedures. Type:

  `:LISTF I???????.USL.SYS.`

- If the file INDIRECT.USL.SYS exists, purge it, and run the installer again.
- Take appropriate corrective measures, and run the installer again.
- Contact the Response Center if further assistance is required.

33 **Message** `CHKLSTSL.INSTALL.SYS does not exist. (INSTERR #33).`

Cause The file CHKLSTSL is created during patch selection, and

is accessed immediately. This error can occur if the file is purged, or its name is somehow corrupted.

Action
- Run the installer again to re-create the file.
- Contact the Response Center if further assistance is required.

34 **Message** `The installer failed while trying to sort filename (INSTERR #34)`

Cause An intrinsic failed while attempting to sort filename.

Action
- Record all error messages from the console and contact the Response Center for further assistance.

35 **Message** `The installer could not open filename file. (INSTERR #35)`

Cause The installer failed to open filename.

Action
- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

36 **Message** `The installer could not build filename file. (INSTERR #36)`

Cause The installer received an error status return while attempting to build filename.

Action
- Check for free disk space to build file. There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- If file present, examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

37 **Message** `The installer could not read filename file. (INSTERR #37)`

Cause This error occurs while trying to read the AUTOGEN, AUTODEP, or AUTORLNK files. The files may be corrupted.

Action
- For AUTOINST:
- Restore AUTOGEN, AUTODEP, and AUTORLNK from the correct PowerPatch tape.
- Run the installer again.
- Contact the Response Center if further assistance is required.
- For HPINSTAL: Restart HPINSTAL. If the error occurs again, contact the Response Center for assistance.

38 **Message** `Patch dependency error; PATCH ID = patchid. (INSTERR #38)`

Cause This error occurs when a patch listed as a dependency patch is not found on the PowerPatch tape.

Action
- Note the patchid in the error message.
- Save the PATCHAUD and INSTERRS files.
- Contact the Response Center.

39 **Message** `Error while getting records from AUTOGEN. (INSTERR #39)`

Cause This error may occur if the AUTOGEN file is corrupted.

Action
- For AUTOINST:
- Restore AUTOGEN@ from the correct PowerPatch tape.
- Run the installer again.
- Contact the Response Center if further assistance is required.
- For HPINSTAL: Restart HPINSTAL. It will restore the files again. If the error occurs again, contact the Response Center for further assistance.

40 **Message** `The installer failed to checksum SL. (INSTERR #40)`

Cause The Patch Selector is trying to checksum the segments in the local copy of the SL, and has failed to do so.

Action
- Enter LISTF SL.INSTALL.SYS to verify the copy of the SL exists.
- Verify that the SEGMENTER can access the SL outside of the installer:

```
:SEGMENTER
-SL SL.INSTALL.SYS
-LISTSL
Press [[CTRL]] [[Y]] to stop listing all the SL
segments.
```

- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

41 **Message** `AUTOGEN, AUTODEP VUF MISMATCH (INSTERR #41)`

Cause AUTOGEN and AUTODEP from the PowerPatch tape should have the same file VUF. This error can only be caused if two different PowerPatch tapes are in use.

Action For AUTOINST:

- Restore A@,F@ from the correct PowerPatch.
- Take appropriate corrective measures and run the installer to start installation again.
- Contact the Response Center if further assistance is required.

For HPINSTAL:

- Restart HPINSTAL; it will restore the files from the PowerPatch tape again. If the error occurs again, contact the Response Center for assistance.

42 **Message** `The installer failed to modify the JCW CIERROR. (INSTERR #42)`

Cause The installer could not modify the JCW CIERROR to within a legal range.

Action

- The inability to SETJCW CIERROR to a legal JCW range is an indication of a corrupt session-level variable table or another serious system problem.
- Document all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS. Report the problem to the Response Center.

43 **Message** `Error trying to RUN SOMPATCH.PUB.SYS. (INSTERR #43)`
`Could not create SOMPATCH process. Create process error: status`

Cause The CREATEPROCESS intrinsic returned an error status when attempting to execute SOMPATCH.PUB.SYS.

Action

- Verify sompatch_filename is on your system.
- Print file AUTOLOG.INSTALL.SYS to ascertain

CREATEPROCESS error or use the displayed error.

- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Perform corrective action for SOMPATCH.
- Ensure group for SOMPATCH has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

44 **Message** `Error occurred while executing SOMPATCH commands. (INSTERR #44)`

Cause The installer invoked SOMPATCH to binary patch the NL in the local group. SOMPATCH encountered an error and the installer trapped on the error condition.

Action

- Record all error messages on the screen.
- Check the JCW from SOMPATCH, PATCHJCW, with SHOWJCW.
- Print file AUTOLOG.INSTALL.SYS to view detailed error from SOMPATCH.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

45 **Message** `Error occurred while adding or deleting system programs (INSTERR #45)`

Cause The installer invoked SYSGEN to add or delete a system file. SYSGEN encountered an error and the installer trapped on the error condition.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from SYSGEN.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

46 **Message** `Error executing SYSGEN commands while building the CSLT. (INSTERR #46)`

Cause An error occurred while SYSGEN was producing the Customized System Load Tape (CSLT).

The installer invoked SYSGEN to build the CSLT. SYSGEN encountered an error and the installer trapped on the error condition.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from SYSGEN.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

47 **Message** `Error executing SAINT commands while building START IMAGE. (INSTERR #47)`

Cause SAINT encountered an error in building new START image. The installer invoked SAINT to build the new START image. SAINT encountered an error and the installer trapped on the error condition.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from SAINT.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

48 **Message** `The installer failed to modify the system jcw JCW. (INSTERR #48).`

Cause A command issued by the installer to SETVAR JCW to a legal jcw value failed.

Action

- If this error is produced, please document all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

49 **Message** `Error trying to RUN OCT.PUB.SYS. (INSTERR #49)`

Cause Could not create OCT process. Createprocess error: status

Action

- The CREATEPROCESS intrinsic returned an error status when attempting to execute oct_filename.
- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.
- Ensure group for OCT has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the

installer again.

- Contact the Response Center if further assistance is required.

50 **Message** `An error occurred in translating the SL. (INSTERR #50).`

Cause OCT encountered an error in translating the SL.

The installer invoked OCT to translate newly installed segments in the staged system SL. OCT encountered an error and the installer trapped on the error condition.

Action

- Print the file AUTOLOG.INSTALL.SYS to check OCT error.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

51 **Message** `Error trying to RUN AUTOCM.INSTALL.SYS. (INSTERR #51)`

Cause Could not create AUTOCM process. Createprocess error: status

- The CREATEPROCESS intrinsic returned an error status when attempting to execute autocm_filename.
- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.
- Ensure INSTALL group has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

52 **Message** `An error occurred while modifying SL. (INSTERR #52)`

Cause AUTOCM.INSTALL.SYS encountered an error in modifying the SL.

AUTOCM calls the SEGMENTER programmatically to first delete segments in the staged system SL and then adds new subsys or patched segments to the staged system SL.

Action

- Print the file AUTOLOG.INSTALL.SYS to ascertain

specific error.

- Check for additional errors in file SLOUTPUT.OUT.HPSPOOL.
- Take appropriate corrective measures and run the installer again.
- If you are patching an MPE/iX system release 4.0 or later, ensure that the version of AUTOINST you are running is D.00.05 or later. If the AUTOINST version is earlier than D.00.05, restore A@.F@ from the PowerPatch tape, and run AUTOINST again.
- Contact the Response Center if further assistance is required.

53 **Message** `Patching INTRINSIC without correct component type. (INSTERR #53)`

Cause The installer encountered an error in processing the file TMPSTR00. TMPSTR00 contains entries for both Compatibility Mode (CM) and Native Mode (NM) intrinsic files to be patched. The installer encountered an entry that was not a CM or NM intrinsic file.

Action
- If this error is produced, please document all messages prior to the error.
- Save the file AUTOLOG.INSTALL.SYS, and the file TMPSTR00.INSTALL.SYS. Report the problem to the Response Center for assistance.

54 **Message** `54 Not used`

55 **Message** `Setting file equation SYSINTR failed. (INSTERR #55)`

Cause Setting the SYSINTR file equation required by the NM intrinsic patcher ABLDINTX.INSTALL.SYS failed.

Action
- `FILE` Command Table is possibly full.
- Check if any further file commands can be entered with the `FILE` command.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required. The installer will reissue any needed file equations.

56 **Message** `Setting file equation SYSINTRN failed. (INSTERR #56)`

Cause Setting the SYSINTRN file equation required by the NM

intrinsic patcher ABLDINTX.INSTALL.SYS failed.

Action

- FILE Command Table is possibly full.
- Check if any further file commands can be entered with the FILE command.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

57 **Message** `Error trying to RUN ABLDINTX.INSTALL.SYS. (INSTERR #57)`

Cause Could not create ABLDINTX process. Createprocess error: status

Action

- The CREATEPROCESS intrinsic returned an error status when attempting to execute ABLDINTX.INSTALL.SYS.
- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.
- If ABLDINTX.INSTALL.SYS does not exist, restore ABLDINTX.@.@ from the Powerpatch tape.
- Ensure INSTALL group has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

58 **Message** `Error trying to RUN BUILDINT.PUB.SYS. (INSTERR #58)`

Cause Could not create BUILDINT process. Createprocess error: status

Action

- The CREATEPROCESS intrinsic returned an error status when attempting to execute BUILDINT.PUB.SYS.
- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.

- Ensure group for BUILDINT has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

59 **Message** `Setting file equation SPLINTR failed. (INSTERR #59)`

Cause Setting the SPLINTR file equation required by the CM intrinsic builder/patcher BUILDINT failed.

Action
- `FILE` Command Table is possibly full.
- Check if any further file commands can be entered with the `FILE` command.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

60 **Message** `Setting file equation INTDECL failed. (INSTERR #60)`

Cause Setting the INTDECL file equation required by the CM intrinsic builder/patcher BUILDINT failed.

Action
- `FILE` Command Table is possibly full.
- Check if any further file commands can be entered with the `FILE` command.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

61 **Message** `Error occurred while patching System INTRINSICS file. (INSTERR #61)`

Cause The installer checks the results of the calls to the CM intrinsic builder/patcher BUILDINT.PUB.SYS and the NM intrinsic patcher ABLDINTX.INSTALL.SYS by checking the status of the system JCW. A nonzero value (error) value was returned.

Action
- Print the file AUTOLOG.INSTALL.SYS to check for

possible detailed error from either BUILDINT or ABLDINTX.

- Take appropriate corrective measures and run the installer again.

If the error cannot be corrected, please document all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

62 **Message** `Resetting file equation SYSINTR failed. (INSTERR #62)`

Cause Resetting the file equation SYSINTR failed while patching NM intrinsics.

Action If this error is produced, please document the all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

63 **Message** `Resetting file equation SYSINTRN failed. (INSTERR #63)`

Cause Resetting the file equation SYSINTRN failed while patching NM intrinsics.

Action If this error is produced, please document the all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

64 **Message** `Resetting file equation SPLINTR failed. (INSTERR #64)`

Cause Resetting the file equation SPLINTR failed while patching CM intrinsics.

Action If this error is produced, please document the all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

65 **Message** `Resetting file equation INTDECL failed. (INSTERR #65)`

Cause Resetting the file equation INTDECL failed while patching CM intrinsics.

Action If this error is produced, please document the all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

66 **Message** `Purge of SYSINTR.INSTALL.SYS failed. (INSTERR #66)`

	Cause	The installer attempted to purge an old SYSINTR file before beginning to patch NM intrinsics.
	Action	• Examine file for accessors other than the installer. • If file is being accessed, free up file. • Take appropriate corrective measures and run the installer again. • Contact the Response Center if further assistance is required.
67	**Message**	`Purge of SPLINTR.INSTALL.SYS failed. (INSTERR #67)`
	Cause	The installer attempted to purge an old SPLINTR.INSTALL file before beginning to patch CM intrinsics.
	Action	• Examine file for accessors other than the installer. • If file is being accessed, free up file. • Take appropriate corrective measures and run the installer again. • Contact the Response Center if further assistance is required.
68	**Message**	`Copy of SYSINTR.PUB.SYS to SYSINTR.INSTALL.SYS failed. (INSTERR #68)`
	Cause	The installer was attempting to copy SYSINTR.PUB.SYS to SYSINTR.INSTALL.SYS.
	Action	• Examine file SYSINTR.INSTALL.SYS for accessors other than the installer. • If SYSINTR.INSTALL.SYS is being accessed, free up SYSINTR.INSTALL.SYS. • Check for free disk space to copy file, and if needed free up disk space. There are two methods for obtaining additional disk space: — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1. — Store user files to tape and them purge them. Restore the files from tape at the end of the installation. • Take appropriate corrective measures and run the installer again.

- Contact the Response Center if further assistance is required.

69 **Message** `Copy of SPLINTR.PUB.SYS to SPLINTR.INSTALL.SYS failed. (INSTERR #69)`

Cause The installer was attempting to copy SPLINTR.PUB.SYS to SPLINTR.INSTALL.SYS.

Action

- Examine file SPLINTR.INSTALL.SYS for accessors other than the installer.
- If file is being accessed, free up file.
- Check for free disk space to copy file, and if needed free up disk space. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

70 **Message** `A call to the LINKEDITOR by the installer failed. (INSTERR #70)`

Cause The link editor variables LKEDSTAT and/or LKEDCMD were checked after a call to the link editor by the installer. The variables were found to contain error values.

Action

- Record the error messages preceding this message.
- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

71 **Message** `The installer failed to purge TEMPNL when patching the OS SOM. (INSTERR #71)`

Cause The installer was attempting to purge an old work nl, TEMPNL.INSTALL used when patching the OS SOM.

Action
- Examine file TEMPNL.INSTALL.SYS for accessors.
- If accessors, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

72 **Message** `Copy of NL.INSTALL to TEMPNL failed when patching the OS SOM. (INSTERR #72)`

Cause The installer was attempting to copy NL.INSTALL to TEMPNL.INSTALL in preparation for replacing the OS SOM with a patched OS SOM.

Action
- Examine file TEMPNL for accessors other than the installer.
- If TEMPNL is being accessed, free up file, then purge TEMPNL.
- Check for free disk space to copy file, and if needed free up disk space. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

73 **Message** `Purge of NL.INSTALL failed when patching the OS SOM. (INSTERR #73)`

Cause The installer was attempting to purge the NL in preparation of rebuilding it while patching the OS SOM.

Action
- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.

- Contact the Response Center if further assistance is required.

74 **Message** `CLEANXL of TEMPNL failed in patching the OS SOM. (INSTERR #74)`

Cause The installer called the link editor to perform a CLEANXL on TEMPNL.INSTALL in preparation for replacing the OS SOM with a patched OS SOM.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

75 **Message** `Re-building NL.INSTALL.SYS failed when patching the OS SOM. (INSTERR #75)`

Cause The installer called the link editor to perform a BUILDXL of NL.INSTALL in preparation for replacing the OS SOM with a patched OS SOM.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

76 **Message** `COPYXL of the OS SOM patch to NL.INSTALL failed. (INSTERR #76)`

Cause The installer called the link editor to perform a COPYXL of the patched OS SOM to NL.INSTALL.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

77 **Message** `COPYXL from TEMPNL to NL.INSTALL.SYS failed when patching the OS SOM. (INSTERR #77)`

Cause The installer called the link editor to perform a COPYXL of all non-OS SOMs from TEMPNL.INSTALL to NL.INSTALL.

Action
- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.
- If you are patching an MPE/iX system release 4.0 or later, ensure that the version of AUTOINST you are running is D.00.05 or later. If the AUTOINST version is earlier than D.00.05, restore A@.F@ from the PowerPatch tape, and run AUTOINST again.
- Contact the Response Center if further assistance is required.

78 **Message** `Purge of TEMPNL.INSTALL.SYS failed when patching the OS SOM. (INSTERR #78)`

Cause The installer was attempting to purge the temporary work NL, TEMPNL.INSTALL.

Action
- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

79 **Message** `Purge of the RELINKER patch file RELINKFL.INSTALL.SYS failed. (INSTERR #79)`

Cause The installer was attempting to purge the file RELINKFL.INSTALL.SYS. RELINKFL will be passed to the link editor as a file of commands used to relink procedures in the local NL.

Action
- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is

required.

80 **Message** `Build of the RELINKER patch file RELINKFL.INSTALL.SYS failed. (INSTERR #80)`

Cause The installer was attempting to build the file RELINKFL.INSTALL.SYS, to then write the link editor relink procedure commands into the file.

Action

- If old RELINKFL.INSTALL.SYS exists, purge it.
- Check for enough free disk space to build files. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

81 **Message** `Purge of the RELINKER patch file NLLINK.INSTALL.SYS failed. (INSTERR #81)`

Cause The installer was attempting to purge the temporary work NL, NLLINK.INSTALL used when relinking patched procedures in the OS SOM.

Action

- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

82 **Message** `Purge of the RELINKER patch file INDIRREL.INSTALL.SYS failed. (INSTERR #82)`

Cause The installer was attempting to purge the file INDIRREL.INSTALL.SYS. INDIRREL will be passed to the link editor as an indirect file of procedure file names and the commands used to relink the patched procedures.

Action

- Examine file for accessors other than the installer.

- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

83 **Message** `Build of the RELINKER patch file INDIRREL.INSTALL.SYS failed. (INSTERR #83)`

Cause The installer was attempting to build the file INDIRREL.INSTALL.SYS, to then write the link editor relink procedure names into the file.

Action
- If old INDIRREL.INSTALL.SYS exists, purge it.
- Check for enough free disk space to build files. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

84 **Message** `BUILDXL of the RELINKER patch file NLLINK.INSTALL.SYS failed. (INSTERR #84)`

Cause The installer called the link editor to perform a BUILDXL of NLLINK.INSTALL, a temporary work nl, in preparation for relinking procedures in the OS SOM.

Action
- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual.*
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

85 **Message** `The installer encountered LINKEDITOR errors executing`

		the RELINKER PROCEDURE. (INSTERR #85)
	Cause	RELINKING of Procedures by the link editor failed.
	Action	• This error represents a problem with an internal link editor error while relinking procedures in the OS SOM. • If this error is produced, please document all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and the file INTLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.
86	**Message**	Purge of NL.INSTALL.SYS failed when applying RELINKER patch. (INSTERR #86)
	Cause	The installer was attempting to purge the NL in preparation of rebuilding it while relinking procedures in the OS SOM.
	Action	• Examine file for accessors other than the installer. • If file is being accessed, free up file. • Take appropriate corrective measures and run the installer again. • Contact the Response Center if further assistance is required.
87	**Message**	Rename of NLLINK.INSTALL.SYS to NL.INSTALL.SYS failed when applying a RELINKER patch. (INSTERR #87)
	Cause	The RENAME of the work nl, NLLINK.INSTALL.SYS, to NL.INSTALL.SYS failed while relinking procedures in the OS SOM.
	Action	• If file NL.INSTALL.SYS exists, purge it. • Take appropriate corrective measures and run the installer again. • If error persists, copy error messages from screen and please contact the Response Center for assistance.
88	**Message**	Error issuing file equations for the Customized System Load Tape. (INSTERR #88)
	Cause	Issuing the file equations in SLTFEQ failed. The installer issues file equations to equate new or patched system programs/opt drivers. SLTFEQ is a file of FILE commands that is executed by the installer to set the file equations prior to calling SYSGEN to create the CSLT.
	Action	• FILE Command Table is possibly full. Do a LISTEQ

command to determine which USER file equations can be RESET. RESET any USER file equations.

Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.

- HPPATH variable is a non-standard path. Issue the following command:

  :SETVAR HPPATH "!HPPATH,PUB,PUB.SYS,ARPA.SYS"

  Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.

- Contact the Response Center if further assistance is required.

89 **Message** `Error while issuing file equation for the NL library. (INSTERR #89)`

Cause The installer attempted to issue the file equation:

:FILE NL.PUB.SYS=NL

(NL being in the local group INSTALL.SYS), prior to calling SYSGEN to create the CSLT.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

90 **Message** `Error while issuing file equation for the XL library. (INSTERR #90)`

Cause The installer attempted to issue the file equation:

:FILE XL.PUB.SYS=XL

(XL being in the local group INSTALL.SYS), prior to calling SYSGEN to create the CSLT.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is

required.

91 **Message** `Error while issuing file equation for the SL library. (INSTERR #91)`

Cause The installer attempted to issue the file equation:

```
:FILE SL.PUB.SYS=SL
```

(SL being in the local group INSTALL.SYS), prior to calling SYSGEN to create the CSLT.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

92 **Message** `Error while issuing file equation for the START IMAGE. (INSTERR #92)`

Cause The installer attempted to issue the file equation:

```
:FILE START.MPEXL.SYS=START
```

(START being in the local group INSTALL.SYS), prior to calling SYSGEN to create the CSLT.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

93 **Message** `Error while issuing file equation for SYSGTAPE. (INSTERR #93)`

Cause The installer attempted to issue the file equation:

```
FILE SYSGTAPE;DEV= XXX
```

Where XXX is the LDEV number chosen at the start of the installation, as the LDEV number where SYSGEN would create the CSLT.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.

- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

94 **Message** `The current INSTALL file is blank or nil. (INSTERR #94)`

Cause An internal installer variable is corrupt. This error represents a serious problem with an internal variable passed to the module that updates the staged system libraries.

Action
- If this error is produced, please document all messages prior to the error. Save the file AUTOLOG.INSTALL.SYS, and the file INTLOG.INSTALL.SYS, and then report the problem to the Response Center for assistance.

95 **Message** `The installer encountered errors adding SOMs to NM Libraries. (INSTERR #95)`

Cause The installer called the link editor to add or copy a SOM to either the NL or the XL and the command failed.

Action
- Record the error messages preceding this message.
- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

96 **Message** `96 Not used`

97 **Message** `An error was encountered purging SOMs in the NM Library. (INSTERR #97)`

Cause The installer called the link editor with a `PURGEXL;ENTRY=xxx`, command, (where xxx is a SOM name), and the command failed.

Action
- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the

installer again.

- Contact the Response Center if further assistance is required.

98 **Message** `The installer encountered an error while monitoring a streamed job. Error status returned by JobInfo intrinsic: status . (INSTERR #98)`

Cause A call to the JOBINFO intrinsic failed while the installer was attempting to obtain the number of a given job name or to obtain the state of a job. The job in question should be the last job streamed.

Action

- If the USL, UXL, UNL groups were not purged prior to starting the installation, purge them and restart the installation procedures.
- Check the last streamed job's spoolfile, if it exists. The jobs streamed by the installer are listed in the HPINSTFL.INSTALL.SYS file.
- Ensure the spooler has been started for the LP device.
- Type LISTF I???????.USL.SYS.
- If the file INDIRECT.USL.SYS exists, purge it, and run the installer again.
- Determine the current job from the HPINSTFL file and check the JOB's existence and/or termination.
- If the ifilename identified by HPINSTFL exists, inspect that file for valid job commands. If this inspection shows that the file is not a valid job, either purge the file, or remove it from the USL.SYS group.
- If the ifilename identified by HPINSTFL exists and inspection of the file shows that the file is a valid job, the file may be corrupted. Purge the file, and restore it again from the SUBSYS tape.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

99 **Message** `Corrupt filename file. (INSTERR #99)`

Cause Format of filename is unusable by the installer. Each line should be a proper file equation format.

Action

- If the filename is SLTFEQ, purge SLTFEQ and HPINSTFL files.

- Restart the installer.

100 **Message** `The patched program and data files were not successfully stored. To continue with the installation, refer to the installation manual. (INSTERR #100)`

Cause The JCW STOREJCW contained an error value after execution of AUTOPSTR.INSTALL.SYS to store the patch program and data files. AUTOPSTR is run with the INFO string:

```
:STORE !TMPSTR02; STORTAPE;SHOW=OFFLINE;PROGRESS
```

Action

- Ensure that a device with class LP is included in your configuration.
- Check file equates, `STORE` command, etc.
- Reset STOREJCW to OK.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

101 **Message** `The installer failed setting the file equation for INTLOG. (INSTERR #101)`

Cause Setting the INTLOG file equation required by the installer for the file INTLOG failed.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

102 **Message** `The installer failed to purge AUTOLOG.INSTALL. (INSTERR #102)`

Cause The installer attempted to purge an old AUTOLOG file and failed.

Action

- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is

required.

103 **Message** `The installer failed to build AUTOLOG.INSTALL. (INSTERR #103)`

Cause The installer failed to build the file AUTOLOG.INSTALL.

Action

- Check for free disk space to build file. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

104 **Message** `The installer failed to open AUTOLOG.INSTALL with append access. (INSTERR #104)`

Cause The installer issued a file equation so that the file AUTOLOG can be used as $STDOUT for the subsystems called by the installer.

Action

- `FILE` Command Table is possibly full. Do a `LISTEQ` command to determine which USER file equations can be RESET. RESET any USER file equations.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

105 **Message** `A CLEANXL failed on an NM Library. The installer cannot continue. (INSTERR #105)`

Cause The installer called the link editor to perform a CLEANXL on either the stated XL or the staged NL after purging SOMs and in preparation for adding subsys or patched SOMs. The installer could have also called the link editor to perform a CLEANXL on either the stated XL or the staged NL prior to building the START IMAGE and then producing the CSLT.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor, and to determine where in the

installation/update/patch process the CLEANXL was issued.

- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.

106 **Message** `Error trying to RUN AUTOLED. (INSTERR #106) Could not create AUTOLED process. Createprocess error: status`

Cause The CREATEPROCESS intrinsic returned an error status when attempting to execute LINKEDIT.PUB.SYS or AUTOLED.INSTALL.SYS. If a special LINKEDITOR is used it is named AUTOLED.INSTALL.SYS.

Action

- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Ensure group for LINKEDIT has sufficient capabilities. (need CAP=PH).
- If performing a PowerPatch operation:
  - — Verify that AUTOLED.INSTALL.SYS exists, if it is the one used.
  - — Print file AUTOLOG.INSTALL.SYS to check for further errors.
  - — Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
  - — Ensure the INSTALL.SYS group for AUTOLED has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

107 **Message** `107 Not used`

108 **Message** `Error trying to RUN SAINT.MPEXL.SYS. (INSTERR #108)`

Cause Could not create SAINT process. Createprocess error: status

Action

- The CREATEPROCESS intrinsic returned an error status when attempting to execute SAINT.MPEXL.SYS.
- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.
- Perform corrective action for SAINT.
- Ensure ASAINTFL.INSTALL.SYS exists.
- Ensure group for SAINT has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

109 **Message** `Error trying to RUN SYSGEN.PUB.SYS. (INSTERR #109)`

Cause Could not create SYSGEN process. Createprocess error: status

- The CREATEPROCESS intrinsic returned an error status when attempting to execute SYSGEN.PUB.SYS.
- Check the returned CREATEPROCESS error in the *MPE/iX Intrinsics Reference Manual*.
- Print file AUTOLOG.INSTALL.SYS to check for further errors.
- Perform corrective action for SYSGEN.
- Ensure ASYSGNFL.INSTALL.SYS exists.
- Ensure group for SYSGEN has sufficient capabilities. (need CAP=PH).
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

110 **Message** `Invalid product number prod_number. (INSTERR #110)`

Cause Either an invalid product number was entered manually, or the local PRODLIST file contains an invalid entry.

Action

- If entering data from the terminal during HPINSTAL, run HPINSTAL again and enter the correct product number.

- If using a PRODLIST file, modify the incorrect product number.

111 **Message** `Unable to build file filename. (INSTERR #111)`

Cause CUSTOM was unable to build the specified file. This may be due to an existing file of the same name, or a lack of disk space to build the file.

Action

- Ensure that no file of that name exists.
- Ensure that there is sufficient disk space to build the file by issuing the `BUILD` command with the specified disc= filesize parameter. If you can successfully build the file, back up your system and purge unneeded files.
- Run HPINSTAL again.
- Contact the Response Center if further assistance is required.

112 **Message** `Error: Failed to purge filename. (INSTERR #112)`

Cause A call to the COMMAND or HPCICOMMAND intrinsic returned a nonzero command error while attempting to purge the indicated filename.

Action Check the security and accessors of the filename listed in the error message or simply purge the file manually. Take appropriate corrective measures and run the installer again.

113 **Message** `113 Not used`

114 **Message** `Unable to locate PRODLIST. (INSTERR #114)`

Cause There is no PRODLIST file in the local group

Action

- Create a PRODLIST file containing the list of products.
- Run HPINSTAL again.

115 **Message**

```
Please check the accuracy of this list against
the
product list supplied with your CD-ROM. Re-run
HPINSTAL, making
necessary changes to the product list.
Otherwise, please contact
the Response Center. (INSTERR #115)
```

Cause The key for the disk drive computed by HPINSTAL differs from the one entered.

Action

- Ensure the key entered matches the keyword certificate received from Hewlett-Packard.
- Ensure that the product list entered is correct.
- Run HPINSTAL again from the beginning.

		• Contact the Response Center for further assistance if required.
116	**Message**	`Error occurred while reading the PRODINFO file. (INSTERR #116)`
	Cause	CUSTOM failed while trying to access the appropriate PRODINFO.
	Action	• Initialize the system by using the SETUP initialization process. • Run HPINSTAL. • Contact the Response Center if further assistance is required.
	Message	`117-118 Not used`
119	**Message**	`Unable to open file filename. (INSTERR #119)`
	Cause	CUSTOM failed while trying to open the specified file.
	Action	• Check to see if the file exists. If it does not, initialize the system by using the SETUP initialization process. • Run HPINSTAL. • Contact the Response Center if further assistance is required.
120	**Message**	`120 Not used`
121	**Message**	`Unable to locate FOS STORE files. (INSTERR #121)`
	Cause	No files with the filetype of FOS STORE were located in the FILEINFO.INSTALL.SYS file.
	Action	• Check for the existence of FILEINFO.INSTALL.SYS. The file should be a KSAMXL file. • If the file does not exist, follow the instructions in the installation guide to perform initialization by using the SETUP process. • Run HPINSTAL. • Contact the Response Center if further assistance is required.
122	**Message**	`HPINSTAL_CUSTOM FATAL ERROR errorno. (INSTERR #122)`
	Cause	Fatal error encountered in CUSTOM.
	Action	Contact the Response Center for assistance.
	Message	`123-124 Not used`
125	**Message**	`Unable to obtain file information for filename. (INSTERR #125)`

	Cause	A call to the intrinsic FGETINFO failed from CUSTOM.
	Action	• Ensure that the specified file exists. • Document any error message text prior to the error. • Run HPINSTAL again. • Contact the Response Center for further assistance if required.
126	**Message**	`Unable to expand file filename. (INSTERR #126)`
	Cause	CUSTOM failed while copying an existing file for expansion.
	Action	• Ensure that no other process has the target file in use. • Document any error message text prior to the error. • Run HPINSTAL again from the beginning. • Contact the Response Center if further assistance is required.
127	**Message**	`Error occurred while reading the file filename. (INSTERR #127)`
	Cause	CUSTOM failed while reading a file.
	Action	• Ensure that the file exists. • Document any error message text prior to the error. • Run HPINSTAL again from the beginning. • Contact the Response Center if further assistance is required.
128	**Message**	`Unable to access the system information file. (INSTERR #128)`
	Cause	A call to one of the system intrinsics failed.
	Action	If this error is produced, please document all messages prior to the error. Save the file PATCHAUD.INSTALL and the file INSTERRS.INSTALL, and then report the problem to the Response Center for assistance.
129	**Message**	`Unable to update the filename file. (INSTERR #129)`
	Cause	A call to one of the file system intrinsics failed.
	Action	If this error is produced, please document all messages prior to the error. Save the file PATCHAUD.INSTALL and the file INSTERRS.INSTALL, and then report the problem to the Response Center for assistance.
130	**Message**	`Error occurred while reading FILEINFO file. (INSTERR #130)`

	Cause	Patch Selector failed while trying to access the appropriate FILEINFO.
	Action	• Document all messages prior to the error. • Note names of all F@.INSTALL.SYS files. • Save the HPSWINFO.PUB.SYS, PATCHAUD.INSTALL.SYS, and INSTERRS.INSTALL.SYS files. • Report the problem to the Response Center for assistance.
#	**Message**	`Failed to convert the CHECKSUM from FILEINFO file. (INSTERR #131)`
	Cause	A call to the intrinsic DBINARY failed.
	Action	If this error is produced, please document all messages prior to the error. Save the file PATCHAUD.INSTALL and the file INSTERRS.INSTALL, and then report the problem to the Response Center for assistance.
132	**Message**	`Failed to access the SLTFEQ file. (INSTERR #132)`
	Cause	CUSTOM failed either accessing a record from SLTFEQ, reading SLTFEQ, or updating SLTFEQ.
	Action	• Document any error message text prior to the error. • Purge SLTFEQ if it exists. • Run HPINSTAL again from the beginning. • Contact the Response Center if further assistance is required.
133	**Message**	`The SLTFEQ file does not contain the name record. (INSTERR #133)`
	Cause	CUSTOM failed when attempting to replace a SYSPROG file name in the SLTFEQ file with an OPT DRIVER file name.
	Action	• Document any error message text prior to the error. • Do a LISTF,3 on @INFO.INSTALL.SYS and FSLTFEQ.INSTALL.SYS. All of the files should have been created about the same time. If they were not, follow the instructions in the installation guide to perform initialization by using the SETUP process. • Run HPINSTAL again. • Contact the Response Center if further assistance is required.
134	**Message**	`Installation requires 787,000 sectors of disk`

		space on the System Volume set to stage the files for building a customized SLT. You do not have that space available. Please consult the Error messages section for alternatives to resolve this problem. (INSTERR #134)
	Cause	The installer verifies it has enough disk space for the creating the CSLT by building a 787,000 sector file. If the build fails, the installer prints this message and terminates.
	Action	• Ensure that there are 787,000 sectors of disk space for running the installer. There are two methods for obtaining additional disk space: • Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1. — Store user files to tape and them purge them. Restore the files from tape at the end of the installation. — Take appropriate corrective measures and run the installer again. • Contact the Response Center if further assistance is required.
#	**Message**	The file filename from the POWERPATCH tape was not successfully processed. To continue with the installation, consult the customer installation procedures. (INSTER #135)
	Cause	The installer failed to decrypt a file from the POWERPATCH tape.
	Action	• Check for tape errors, clean tape heads, etc. • Take appropriate corrective measures and run the installer again. • If the file still fails to decrypt, it must be corrupted on the tape -- Call the Response Center for further assistance.
136	**Message**	Invalid patchtype for binary patch, patch type = patchtype. (INSTERR #136)
	Cause	A Binary patch has been found with a patch type other than BA or BI.
	Action	Save PATCHAUD.INSTALL.SYS and contact the

		Response Center for assistance.
137	**Message**	`BA-BI count mismatch. (INSTERR #137)`
	Cause	Error while processing Binary patches.
	Action	Save PATCHAUD.INSTALL.SYS and contact the Response Center for assistance.
138	**Message**	`138 Not used`
139	**Message**	`The installer could not find filename in DLGINFO. (INSTERR #139)`
	Cause	The installer could not find filename in the DLGINFO file. This is typically caused by not purging the UNL.SYS, USL.SYS or UXL.SYS groups on an UPDATE prior to running the installer. Another possibility would be a corrupt DLGINFO.PUB.SYS file.
	Action	If the USL, UXL, UNL groups were not purged prior to starting the installation, purge them and restart the installation procedures. If there is still a problem, contact the Response Center for further assistance.
140	**Message**	`140 Not used`
141	**Message**	`The installer failed to STREAM SUPACCT. (INSTERR #141)`
	Cause	The installer received a nonzero return status when it attempted to stream SUPACCT.
	Action	• Ensure there are no STREAM UDCs. • Check the STREAMS and SPOOLER functionality by streaming SUPACCT.INSTALL.SYS manually (note that it should be a temporary file). • Check the file SUPACCT.PUB.SYS for a valid JOB card. • Take appropriate corrective measures and run the installer again. • Contact the Response Center if further assistance is required.
142	**Message**	`The installer was unable to build filename. (INSTERR #142)`
	Cause	The installer failed to build a permanent file using the `BUILD` command.
	Action	• Check for free disk space to build file. There are two methods for obtaining additional disk space: • Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments

to 100% on all system volumes except LDEV 1.

— Store user files to tape and them purge them. Restore the files from tape at the end of the installation.

— Take appropriate corrective measures and run the installer again.

- Contact the Response Center if further assistance is required.

143 **Message** `Rename of filename1 to filename2 failed. (INSTERR #143)`

Cause The installer attempted to rename filename1 file to filename2 and was unable to do so.

Action Check if a file named filename2 already exists. If so, purge it, and restart.

144 **Message** `Tape VUF and OS VUF do not match (INSTERR #144)`

Cause The PowerPatch tape being used is not meant for the current level of the Operating System.

Action

- Use the correct PowerPatch tape and restart the installer.
- Contact the Response Center if further assistance is required.

145 **Message** `The installer failed to build an ASAINTFL file. (INSTERR #145)`

Cause The installer was attempting to build a workfile: ASAINTFL, and failed.

Action

- Check and correct errors reported to terminal screen.
- Check for free disk space on system. There are two methods for obtaining additional disk space:
- Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.

— Store user files to tape and them purge them. Restore the files from tape at the end of the installation.

— Take appropriate corrective measures and run the installer again.

- Contact the Response Center if further assistance is required.

146 **Message** `The installer failed to build ASYSGNFL file. (INSTERR #146)`

Cause The installer was attempting to build a workfile: ASYSGNFL, and failed.

Action

- Check and correct errors reported to terminal screen.
- Check for free disk space on system. There are two methods for obtaining additional disk space:
- Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
  - — Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

147 **Message** `The installer failed to STREAM the job indicated as Current IFILE in the HPINSTFL file. (INSTERR #147)`

Cause The COMMAND intrinsic returned a nonzero command error when the installer attempted to stream an IFILE.

Action

- Ensure there are no STREAM UDCs.
- Check the STREAMS and SPOOLER functionality by streaming the indicated IFILE manually.
- Check the indicated IFILE for a valid JOB card.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

148 **Message** `Filename FREADLABEL failed. (INSTERR #148)`

Cause Patch Selector failed while trying to read the user label on the file.

Action For AUTOINST:

- The file filename may be corrupted. Restore it from the PowerPatch tape.
- Run AUTOINST again. If unsuccessful a second time, contact the Response Center for assistance.

For HPINSTAL:

- Restart HPINSTAL. It will restore files from the

PowerPatch tape again. If the error occurs again, contact the Response Center for further assistance.

149	**Message**	`Patch Selector internal error. (INSTERR #149)`
	Cause	Patch Selector encountered an internal error which is displayed prior to this message.
	Action	Note all displayed error messages. Save the files, PATCHAUD and INSTERRS. Contact the Response Center for assistance.
150	**Message**	`Patch Selector encountered non-installer error. (INSTERR #150)`
	Cause	Patch Selector encountered a non-installer error which is displayed prior to this message.
	Action	Note all displayed error messages. Save the files PATCHAUD and INSTERRS. Contact the Response Center for assistance.
151	**Message**	`The installer was unable to write to the last record of AXLDEV1.PUB.SYS (INSTERR #151)`
	Cause	The installer tried to write to the last record of AXLDEV1 and failed.
	Action	
152	**Message**	`Error resetting CSLT file equations. (INSTERR #152)`
	Cause	The file RESETFEQ, containing RESET statements, was not successfully executed.
	Action	• Examine the RESETFEQ file to see if the RESET statements are in the correct format. • Then execute RESETFEQ by hand, and restart the installer.
153	**Message**	`The installer could not purge filename file. (INSTERR #153)`
	Cause	The installer attempted to purge the old version of the file filename and failed.
	Action	• Examine the file for accessors other than the Installer. • If the file is being accessed, free it up. • Take appropriate measures and run AUTOINST again. • Contact the Response Center if further assistance is required.
154	**Message**	`AUTOGEN, AUTORLNK VUF MISMATCH (INSTERR #154)`

	Cause	AUTOGEN and AUTORLNK from the PowerPatch tape should have the same file vuuff. This error can only be caused if two different PowerPatch tapes are in use.
	Action	For AUTOINST: • Restore A@,F@ from the correct PowerPatch. • Take appropriate corrective measures and run AUTOINST to start installation again. • Contact the Response Center if further assistance is required. For HPINSTAL: • Restart HPINSTAL; it will restore the files from the PowerPatch tape again. If the error occurs again, contact the Response Center for assistance.
155	**Message**	`Error while getting information from filename (INSTERR #155)`
	Cause	A file system intrinsic failed on the named file.
	Action	If the file is an AUTOGEN, AUTODEP, or AUTORLNK file, restore the file from the PowerPatch tape and restart. If it fails again, save the displayed information files, patch and installation errors, and call the Response Center.
156	**Message**	`Relinker patch patch-id not found in AUTORLNK (INSTERR #156)`
	Cause	A relinker patch found in the AUTOGEN file is not found in the AUTORLNK file.
	Action	Save the PATCHAUD file, the INSTERRS file, and call the Response Center.
157	**Message**	`Error while creating AUXHDR. (INSTERR #157)`
	Cause	The installer is trying to get information from the auxiliary header in the OSSOM and failed while doing so.
	Action	Note the error messages, escape codes displayed, and contact the Response Center.
158	**Message**	`Failed to Createprocess on AUTOSPTH. (INSTERR #158)`
	Cause	Patch selector is trying to createprocess on AUTOSPTH to get relinker information and the CREATEPROCESS intrinsic has failed.
	Action	• Check the accompanying error message and the escape code displayed for CREATEPROCESS. • Take corrective action and run the installer again.

		• Contact the Response Center if further assistance is required.
159	**Message**	`File command error occurred for filename file. (INSTERR #159)`
	Cause	Setting a file equation required by Patch selector failed.
	Action	• `FILE` Command Table is possibly full. • Check if any further file commands can be entered with the file command. • RESET any USER file equations. • Take appropriate corrective measures and run the installer again. • Contact the Response Center if further assistance is required.
160	**Message**	`HPCIPUTVAR failed in create_AUXHDR. (INSTERR #160)`
	Cause	The installer issued the HPCIPUTVAR intrinsic, and it failed. The status returned for the intrinsic is displayed before this message.
	Action	• Check the error message from the HPCIPUTVAR intrinsic and based on the status value displayed, take corrective action. • Run the installer again. • Contact the Response Center for further assistance.
161	**Message**	`HPCIGETVAR failed in create_AUXHDR. (INSTERR #161)`
	Cause	The installer issued the HPCIGETVAR intrinsic and it failed. The status returned for the intrinsic is displayed before this message.
	Action	• Check the error message from the HPCIGETVAR intrinsic and based on the status value displayed, take corrective action. • Run the installer again. • Contact the Response Center if further assistance is required.
162	**Message**	`HPCIDELETEVAR failed in create_AUXHDR. (INSTERR #162)`
	Cause	The installer issued the HPCIDELETEVAR intrinsic and it failed. The status returned for the intrinsic is displayed before this message.
	Action	• Check the error message from the HPCIDELETEVAR

intrinsic and based on the status value displayed, take corrective action.

- Run the installer again.
- Contact the Response Center if further assistance is required.

163 **Message** `OSSOM replacement patch VUF is < or = the current OS id (INSTERR #163)`

Cause There is an OSSOM replacement patch on the PowerPatch tape, which has a vuuff that is older than the OSSOM on the system being patched.

Action This PowerPatch tape should not be used with your level of system. Contact the Response Center for a newer PowerPatch tape.

164 **Message** `Failed to retrieve the system HPSUSAN id. (INSTERR #164)`

Cause The system failed to retrieve the system CI variable HPSUSAN through the HPCIGETVAR intrinsic or the retrieved value was nonnumeric.

Action

- Record all messages received prior to this error.
- Attempt a `SHOWVAR HPSUSAN` command from the command interpreter.
- Contact the Response Center if you need additional assistance.

165 **Message** `Failed to obtain a valid keyword. (INSTERR #165)`

Cause One of four conditions generates this error message:

- The keyword calculated by HPINSTAL does not match the keyword you entered.
- The keyword extracted from the file KEYFILE.PUB.SYS does not match the keyword calculated by HPINSTAL.
- The KEYFILE.PUB.SYS does not exist, but is required for this HPINSTAL selection.
- The master product list, PRODLIST.PUB.SYS, includes products that are not valid for the keyword.

Action

- Document any error message text received prior to the error.
- If entering the keyword manually, consult the Keyword Certificate, and enter the keyword exactly as it appears on the certificate.
- If the file, KEYFILE.PUB.SYS, exists, recreate the file

with the keyword exactly as it appears on the certificate.

- Ensure that the products listed in PRODLIST.PUB.SYS matches the product list received from Hewlett-Packard.
- Run HPINSTAL again.
- Contact the Response Center if further assistance is required.

166 **Message** `Invalid product number in prodlist file: filename (INSTERR #166)`

Cause CUSTOM encountered a product number in the customized PRODLIST that does not appear in the master product list, PRODLIST.PUB.SYS and is not included in the product list received from Hewlett-Packard.

Action
- Correct the customized PRODLIST file.
- Run HPINSTAL again.

167 **Message** `Failed to rename TEMPPROD to filename. (INSTERR #167)`

Cause HPCICOMMAND intrinsic failed on the `RENAME` command attempting to rename TEMPPROD to PRODLIST.

Action
- Document any error message text that occurs prior to the error.
- If PRODLIST exists, purge it.
- Run HPINSTAL again.
- Contact the Response Center if further assistance is required.

Message 168-170 Not used

171 **Message** `Error purging the OS SOM from TEMPNL. (INSTERR #171)`

Cause The installer invoked the Link Editor to purge the OS SOM from the library TEMPNL in preparation for replacing it with a patched OS SOM.

Action
- Document any error message text prior to the error.
- Print file AUTOLOG.INSTALL.SYS to view detailed error from link editor.
- Check error message cause and action in the *HP Link Editor/iX Reference Manual*.
- Take appropriate corrective measures and run the installer again.

- Contact the Response Center if further assistance is required.

172 **Message** `Purge of Relinker option file failed. (INSTERR #172)`

Cause Purge of a file with relinker options failed.

Action

- Document any error message text prior to the error.
- Examine file for other accessors.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run installer again.
- Contact the Response Center if further assistance is required.

173 **Message** `Error setting the SOMPATCH jcw: PATCHJCW. (INSTERR #173)`

Cause The installer was attempting to set the SOMPATCH jcw: PATCHJCW to a legal value prior to invoking SOMPATCH to apply a binary patch.

Action

- Document any error message text prior to the error.
- Issue the command SHOWVAR to determine if the symbol table is full.
- Delete any user set variables or jcws.
- Run the installer again.
- Contact the Response Center if further assistance is required.

174 **Message** `The installer failed to build the ASYSUTIL file. (INSTERR #174)`

Cause Build of the ASYSUTIL file failed.

Action

- Document any error message text prior to the error.
- If on old ASYSUTIL file exists, then purge it.
- Check for free disk space to build file. There are two methods for obtaining additional disk space:
  - — Use the `ALTERVOL` command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the

installer again.

- Contact the Response Center if further assistance is required.

175 **Message** `The installer encountered a corrupt ASYSUTIL file. (INSTERR #175)`

Cause The installer encountered a corrupt ASYSUTIL file while reading the file.

Action

- If running the installer with a non-PowerPatch option, then purge the file and run the installer again.
- If running the installer with a PowerPatch option then: <list order>
  - — If ASYSUTIL is on the PowerPatch tape, then restore the file and run the installer again.
  - — If ASYSUTIL is not on the PowerPatch tape, then purge ASYSUTIL and run the installer again.

176 **Message** `The installer encountered an error copying a Library SOM. (INSTERR #176)`

Cause The installer was attempting to copy a library file from the CD-ROM.

Action

- Document any error message text prior to the error.
- Check for free disk space. There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

177 **Message** `The installer encountered an error decrypting the file filename. (INSTERR #177)`

Cause The file could not decrypt filename.

Action

- Purge the file and run the installer again.
- Contact the Response Center if further assistance is

required.

178 **Message** `The installer encountered an error purging a library file. (INSTERR #178)`

Cause The installer was attempting to purge a library SOM after adding or copying it to a library.

Action
- Document any error message text prior to the error.
- Purge the file and run the installer again.
- Contact the Response Center if further assistance is required.

179 **Message** `Error encountered setting SYSGEN file equation. (INSTERR #179)`

Cause The installer attempted to issue the file equation:

```
:FILE SYSGEN.PUB.SYS=SYSGEN.INSTALL.SYS
```

Action
- Document any error message text prior to the error.
- `FILE` Command Table is possibly full.
- Do a `LISTEQ` command to determine which USER file equations can be RESET.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

180 **Message** `Error encountered setting SYSGCAT file equation. (INSTERR #180)`

Cause The installer attempted to issue the file equation:

```
:FILE SYSGCAT.PUB.SYS=SYSGCAT.INSTALL.SYS
```

Action
- Document any error message text prior to the error.
- `FILE` Command Table is possibly full.
- Do a `LISTEQ` command to determine which USER file equations can be RESET.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

181 **Message** `Error encountered setting CATALOG file equation. (INSTERR #181)`

Cause The installer attempted to issue the file equation:

`:FILE CATALOG.PUB.SYS=CATALOG.INSTALL.SYS`

Action

- Document any error message text prior to the error.
- `FILE` Command Table is possibly full.
- Do a `LISTEQ` command to determine which USER file equations can be RESET.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

182 **Message** `Error keeping Base Group in the HPCONFIG.SYS group. (INSTERR #182)`

Cause An error occurred when the installer called SYSGEN to keep a configuration group to the HP reserved configuration group HPCONFIG.SYS.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from SYSGEN.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

183 **Message** `Error in applying Z02Z216A - AS/DS changes in SYSGEN. (INSTERR #183)`

Cause The installer invoked SYSGEN.PUB.SYS to add or delete a number of system files as described in the file Z02Z216A.INSTALL.SYS. SYSGEN encountered an error processing the file Z02Z216A.INSTALL.SYS and the installer trapped on the error condition.

Action

- Print file AUTOLOG.INSTALL.SYS to view detailed error from SYSGEN.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

184 **Message** `Error in making IDP file change in SYSGEN.`

(INSTERR #184)

Cause The installer invoked SYSGEN to make a modification to a SYSGEN internal file.

Action
- Print file AUTOLOG.INSTALL.SYS to view detailed error from SYSGEN.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

185 **Message** The installer encountered an error purging TARGVUF.
(INSTERR #185)

Cause The installer failed to purge the file TARGVUF.

Action
- Document any error message text prior to the error.
- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

186 **Message** Error accessing installer variable: MPE_TARG_VUF. (INSTERR #186)

Cause Could not retrieve the value of the indicated CI variable MPE_TARG_VUF.

Action
- Document any error message text prior to the error.
- Use SHOWVAR MPE_TARG_VUF to check the status of the variable.
- Print the INITCIVR.INSTALL. There should be a line with a SETVAR command for the indicated variable. If the line does exist, execute INITCIVR and run HPINSTAL again.
- If INITCIVR.INSTALL.SYS does not exist or does not contain the SETVAR command for the listed CI variable, VSCLOSE both CD-ROM volumes and follow the setup procedures in the HPINSTAL manual. Run HPINSTAL from the start.

187 **Message** The installer encountered a corrupt variable: MPE_TARG_VUF.
(INSTERR #187)

Cause The data retrieved from the variable MPE_TARG_VUF is

corrupt.

Action

- Document any error message text prior to the error.
- Use SHOWVAR MPE_TARG_VUF to check the status of the variable.
- Print the INITCIVR.INSTALL. There should be a line with a SETVAR command for the indicated variable. If the line does exist, execute INITCIVR and run HPINSTAL again.
- If INITCIVR.INSTALL.SYS does not exist or does not contain the SETVAR command for the listed CI variable, VSCLOSE both CD-ROM volumes and follow the setup procedures in the HPINSTAL manual. Run HPINSTAL from the start.

188

Message `Encountered an error building the file TARGVUF. (INSTERR #188)`

Cause The installer was attempting to build the file TARGVUF.

Action

- Document any error message text prior to the error.
- If old TARGVUF exists, purge it.
- Check for enough free disk space to build files. There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

189

Message `Error encountered purging the file SYSGLOG. (INSTERR #189)`

Cause The installer was attempting to purge the log file SYSGLOG.

Action

- Document any error message text prior to the error.
- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.

- Contact the Response Center if further assistance is required.

190 **Message** `The installer encountered an error building the file SYSGLOG. (INSTERR #190)`

Cause The installer was attempting to build the file SYSGLOG.

Action

- Document any error message text prior to the error.
- If old SYSGLOG exists, purge it.
- Check for enough free disk space to build files. There are two methods for obtaining additional disk space:
  - — Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes except LDEV 1.
  - — Store user files to tape and them purge them. Restore the files from tape at the end of the installation.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

191 **Message** `Error encountered while setting SYSGLOG file equation. (INSTERR #191)`

Cause The installer attempted to issue the file equation:

```
:FILE SYSGLOG;ACC=APPEND;MULTI
```

Action

- Document any error message text prior to the error.
- FILE Command Table is possibly full.
- Do a LISTEQ command to determine which USER file equations can be RESET.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

192 **Message** `Error encountered while purging the file SYSPROGF. (INSTERR #192)`

Cause The installer was attempting to purge the file SYSPROGF.

Action

- Document any error message text prior to the error.

- Examine file for accessors other than the installer.
- If file is being accessed, free up file.
- Take appropriate corrective measures and run the installer again.
- Contact the Response Center if further assistance is required.

193 **Message** `Error encountered while redirecting input to SYSPROGF. (INSTERR #193)`

Cause The installer attempted to issue the command:

`:LISTF MISCP.@.SYS,6; SYSPROGF`

Action

- Document any error message text prior to the error.
- Purge the file SYSPROGF.
- Reset the file equation SYSPROGF.
- Run the installer again.
- Contact the Response Center if further assistance is required

Message 194-196 Not used

197 **Message** `Error setting IODFDATA.PUB.SYS file equation. (INSTERR #197)`

Cause Setting the IODFDATA.PUB.SYS file equation required by the installer and SYSGEN failed.

Action

- The `FILE` Command Table is possibly full.
- Check if any further file commands can be entered with the FILE command.
- RESET any USER file equations.
- Take appropriate corrective measures and run the installer again. The installer will reissue any needed file equations.
- Contact the Response Center if further assistance is required.

198 **Message** `Error resetting STORECAT.PUB.SYS file equation. (INSTERR #198)`

Cause The installer encountered an error resetting the file equation: STORECAT.PUB.SYS

Action

- Document any error message text prior to the error.
- RESET STORECAT.PUB.SYS
- Run the installer again.

199 **Message** `199 Not used`

200 **Message** `Failed to retrieve the OS build ID. (INSTERR #200)`

Cause The installer failed to access the MPE/iX Operating System and Release IDs of your system.

Action
- Log on as MANAGER.SYS,INSTALL to your MPE/iX environment.
- Rerun the tool.
- Contact the Response Center if further assistance is required.

201 **Message**
```
Your system is currently running software newer
than
the release for which the CSLT was created. If
you want to continue,
match the build version of your system to the one
reflected in the
file TARGVUF.PUB.SYS. (INSTERR #201)
```

Cause Your system has been UPDATED with a newer MPE/iX release than the one for which this CSLT/SOTRE tape was created.

Action
- If your wish to backdate your system to the MPE/iX release contained on the CSLT/STORE tape, follow the instructions outlined in chapter entitled Backdating Your System of this manual.
- Contact the Response Center if further assistance is required.

202 **Message**
```
The build of your system suggests that you did
not
update from the CSLT before invoking HPINSTAL.
Please refer to the
installation manual. (INSTERR #202)
```

Cause HPINSTAL fails when an attempt is made to complete the update of a system by invoking HPINSTAL a second time prior to UPDATing the system with the combined CSLT/STORE tape created by HPINSTAL during Phase 1. HPINSTAL makes this determination by comparing the version of your current MPE/iX release with the version of the release on the combined CSLT/STORE tape.

Action
- Halt the system and perform an UPDATE with the CSLT/STORE tape created during Phase 1 of HPINSTAL.
- Start the system.

- Once the system is up, log on to the system as MANAGER.SYS,INSTALL, start the spooler, and enable the streams device.
- Run HPINSTAL again.
- Contact the Response Center if further assistance is required.

203 **Message** `The file TARGVUF.PUB.SYS is missing. (INSTERR #203)`

Cause This file is installed on a system as a result of performing an UPDATE with the CSLT/STORE tape created during Phase 1 of HPINSTAL. HPINSTAL looks for this file prior to completing the update with FOS, STORE, and SUBSYS components, to ensure the operating system has been UPDATEd to the appropriate level.

Action

- Halt the system and perform an UPDATE with the CSLT/STORE tape created during Phase 1 of HPINSTAL.
- Start the system.
- Once the system is up, log on to the system as MANAGER.SYS,INSTALL, start t he spooler, and enable the streams device.
- Run HPINSTAL again.
- Contact the Response Center if further assistance is required.

204 **Message** `Error while attempting to compare your system's build id with that of the release on the CSLT. (INSTERR #204)`

Cause HPINSTAL is unable to successfully compare the release v.uu.ff of your system with the release v.uu.ff for which this CSLT/STORE tape was created.

Action

- Halt the system an perform an UPDATE with the CSLT/STORE tape created during Phase 1 of HPINSTAL.
- Start the system.
- Once the system is up, log on to the system as MANAGER.SYS,INSTALL, start t he spooler, and enable the streams device.
- Run HPINSTAL again.
- Contact the Response Center if further assistance is required.

205	**Message**	`Failed to copy filename to the local group. (INSTERR #205)`
	Cause	HPCICOMMAND intrinsic failed on the `COPY` command.
	Action	• Document any error message text that occurred prior to the error. • If the target file exists, purge it. • Run HPINSTAL again. • Contact the Response Center if further assistance is required.
206	**Message**	`Failed to decrypt filename. (INSTERR #206)`
	Cause	CUSTOM failed to decrypt an encrypted file.
	Action	• Ensure that HPINSTAL copied the specified file to the local group. • Purge the file. • Run HPINSTAL again. • Contact the Response Center if further assistance is required.
207	**Message**	`Error trying to RUN SYSGEN.PUB.SYS. (INSTERR #207)` `Could not activate SYSGEN process, PIN = pin number`
	Cause	ACTIVATE failed on the newly created SYSGEN process.
	Action	Save all messages on the screen and check the messages in the bottom of AUTOLOG. Call the Response Center for further assistance.
208	**Message**	`Could not arm handler for switching the CD-ROM volumes. (INSTERR #208)  PEARM Error: info = number, subsys = number`
	Cause	The call to PEARM returned a nonzero status. Record the listed status values before contacting the Response Center.
	Action	• Ensure HPCDXL.INSTALL.SYS exists and has no file equations set on it. • Ensure NL.PUB.SYS exists and has no file equations set on it. • Take appropriate corrective actions and restart HPINSTAL.
209	**Message**	`Failed to initialize the CD-ROM volume names through` `the INITCIVR command file (INSTERR #209)`

	Cause	An attempt to set the HPINSTAL environment variables though the command script, INITCIVR.INSTALL.SYS, failed.
	Action	• Check the CI error message preceding the INSTERR #209 message and take appropriate corrective action. • If INITCIVR.INSTALL.SYS does not exist, VSCLOSE both CD-ROM volumes and follow the setup procedures in the HPINSTAL manual.
210	**Message**	`HPVOLINFO error while attempting to access volume name . (INSTERR #210)`
	Cause	A call to HPVOLINFO to determine whether the second CD-ROM volume is mounted has failed with an unexpected error status.
	Action	• Check the state of the CD-ROM volumes with the `DSTAT` command. • Ensure that all mounted CD-ROMs are listed as ONLINE and MASTER state. • Ensure that the listed CD-ROM volumes are physically mounted on the system. • If there is only one CD-ROM drive, ensure that the original CD-ROM volume has been VSCLOSED and is offline before inserting another volume. • HPINSTAL can be run again after the first CD-ROM volume has been mounted (ONLINE/MASTER). If there are two CD-ROM drives, both CD-ROM volumes should be mounted before running HPINSTAL.
211	**Message**	`Could not RESET file equation for NL.PUB.SYS (INSTERR #211)`
	Cause	An attempt to reset the file equation for NL.PUB.SYS through the hpcicommand intrinsic failed.
	Action	Document all the messages prior to the error. Save the file AUTOLOG and then report the problem to the Response Center for assistance.
212	**Message**	`Could not set FILE equation for NL.PUB.SYS=NL (INSTERR #212)`
	Cause	An attempt to set a file equation for NL.PUB.SYS through the hpcicommand intrinsic failed. `FILE` Command Table is possibly full.
	Action	• Check if any further `FILE` commands can be entered with the `FILE` command. • RESET any user file equations.

- Take appropriate corrective measures and run HPINSTAL again. HPINSTAL will reissue any required file equations.
- Contact the Response Center if further assistance is required.

213 **Message** `HPINSTAL failed to copy over filename from CD-ROM (INSTERR #213)`

Cause The installer attempted to copy filename from CD-ROM and was unable to do so.

Action
- See if filename already exists in the local group/account. If so purge it.
- See if there is a file equation in effect that affects the filename. If so, RESET it.
- Try to copy filename from the CD-ROM using the `COPY` command.
- Re-try.

214 **Message** `Internal error during SYSGEN process (INSTERR #214) escapecode = number`

Cause An unforeseen error occurred during the SYSGEN process creating the CSLT.

Action Document all messages prior to the error. Save AUTOLOG and then con tact the Response Center for assistance.

215 **Message** `Unable to MOUNT/DISMOUNT LDEV ldev (INSTERR #215) avr_ldev status: info = number, subsys = number`

Cause An unexpected error was returned while attempting to mount or dismount a CD-ROM volume mounted in a SCSI CD-ROM drive.

Action
- Document all messages prior to the error. Save AUTOLOG and then contact the Response Center for assistance.

216 **Message** `Cannot execute from groupname.SYS group. (INSTERR #216)`

Cause The installer was run from an invalid group with the ISS option.

Action
- Log in as MANAGER.SYS in some other group than INSTALL or PUB.
- Run the installer again.

217 **Message** `Failed to set file equations for link editor. (INSTERR #217)`

	Cause	An attempt to set a file equation for the link editor help and catalog files through the HPICICOMMAND intrinsic failed. The FILE Command Table is possibly full.
	Action	• Check if any further FILE commands can be entered with the FILE command. • RESET any user file equations. • Take appropriate corrective measures and run HPINSTAL again. HPINSTAL will reissue any required file equations. • Contact the Response Center if further assistance is required.
218	**Message**	MESSAGE patchid Too many dependent patches (INSTERR #218)
	Cause	Invalid data in AUTODEP file.
	Action	Note the displayed patchid, save the PATCHAUD and INSTERRS files, and call the Response Center for assistance.
219	**Message**	FREADLABEL failed on filename. (INSTERR #219)
	Cause	A call to the intrinsic FREADLABEL failed when CUSTOM attempted to read a file label of either FILEINFO.INSTALL.SYS or DEPINFO.INSTALL.SYS.
	Action	• Document any error message text that occurred prior to the error. • Ensure that the specified file exists in the INSTALL.SYS group. • If necessary, follow the instructions in your installation manual to initialize your system by using the SETUP process. • Run HPINSTAL again. • Contact the Response Center if further assistance is required.
220	**Message**	Verification of VUF failed on filename file. (INSTERR #220)
	Cause	The VUF in the file label of the specified file does not match the VUF of the compact disk as specified in the CI variable mpe_targ_vuf.
	Action	• Follow the instructions in your installation manual to initialize your system by using the SETUP process. • Run HPINSTAL. • Contact the Response Center if further assistance is

required.

221 **Message** `Encountered an error while retrieving the CI variable, variable name. (INSTERR #221)`

Cause Could not retrieve the value of the indicated CI variable.

Action

- Use SHOWVAR variable name to check the status of the variable.
- Print the INITCIVR.INSTALL. There should be a line with a SETVAR command for the indicated variable. If the line does exist, execute INITCIVR and run HPINSTAL again.
- If INITCIVR.INSTALL.SYS does not exist or does not contain the SETVAR command for the listed CI variable, VSCLOSE both CD-ROM volumes and follow the setup procedures in the HPINSTAL manual. Run HPINSTAL from the start.

222 **Message** `Invalid CI variable type, should be string type (INSTERR #222)`

Cause The retrieved CI variable was not a string type as expected. This error is usually issued in conjunction with INSTERR #221.

Action

- Use SHOWVAR variable name to check the status of the variable.
- Print the INITCIVR.INSTALL. There should be a line with a SETVAR command for the indicated variable. If the line does exist, execute INITCIVR and run HPINSTAL again.
- If INITCIVR.INSTALL.SYS does not exist or does not contain the SETVAR command for the listed CI variable, VSCLOSE both CD-ROM volumes and follow the setup procedures in the HPINSTAL manual. Run HPINSTAL again from the start.

223 **Message** `Could not get volume information on first CD-ROM volume name (INSTERR #223)`

Cause HPVOLINFO failed while attempting to get information on the first CD-ROM volume.

Action

- Ensure the CI variable MPE_VOL_1 contains the name of the first CD-ROM volume (in the form of MPE_ v.uu.ff _1 where v.uu.ff is the system VUF of the release contained on the CD-ROMs) that is mounted on the system.

		• VSCLOSE both CD-ROM volumes and follow the setup procedures in the HPINSTAL manual. Run HPINSTAL from the start. • Save all messages on the screen and check the messages in the bottom of AUTOLOG. Call the Response Center for further assistance.
224	**Message**	`Error reading from terminal with READX (INSTERR #224)`
	Cause	A physical I/O error occurred.
	Action	Logon again, make sure the first CD-ROM volume is mounted and restart HPINSTAL.
225	**Message**	`Failed to reset file equations for filename. (INSTERR #225)`
	Cause	An attempt to reset the file equation for filename using the HPCICOMMAND intrinsic failed.
	Action	Document all the messages received prior to the error and report the problem to the Response Center for assistance.
	Message	226-229 Not used
230	**Message**	`Incorrect password provided for Current IFILE indicated in HPINSTFL. (INSTERR #230)`
	Cause	You entered incorrect passwords for an I-file when MPE prompted for the passwords. This caused the Installer to fail.
	Action	• Restart the Installer. The failed I-file will be restreamed. • Contact the Response Center if further assistance is required.
231	**Message**	`Embedded passwords are not allowed due to password security. The Installer cannot continue. (INSTERR #231)`
	Cause	Embedded passwords are not allowed with the Security Monitor/iX product. The Installer cannot stream the I-files.
	Action	• Use the Security Monitor/iX configurator to disable this feature. • Restart the Installer.
	Message	232-234 Not used
235	**Message**	`PowerPatch tape is older than the current system powerpatch (INSTERR #235)`

Cause The PowerPatch tape being installed includes patches that are older than those that were included with the last PowerPatch installation.

Action

- Print the file HPSWINFO.PUB.SYS and refer to line 4 of the file to determine the V.U.F. of the last installed PowerPatch tape. Compare this V.U.F. to the V.U.F. on the tape label of the PowerPatch tape being installed.
- The V.U.F. from the tape label should indicate this powerpatch tape as being older than the last installed PowerPatch.
- Patches to be installed must come from a tape with a V.U.F. at least equal to the last installed tape. Restart the installation process from the beginning with the appropriate tape.
- Contact your Response Center if further assistance is required.

236 **Message**

```
The files from the CSLT/STORE tape were not
successfully restored.
To continue with the installation, consult the
customer installation procedures.
(INSTERR #236)
```

Cause The JCW STOREJCW was nonzero after AUTOINST executed the following STORE command to restore the STORE files from the CSLT/STORE tape:

```
:RUN STORE.PUB;INFO= RESTORE &
CSLT;@.@.@;CREATE;SHOW=OFFLINE
```

Action

- Ensure that a device with class LP is included in your configuration.
- Use an appropriate text editor to inspect the offline listing generated by the RESTORE. Identify the spoolfile having RESTORE status by using the command:

  ```
  :LISTSPF SELEQ=[FILEDES=OFFLINE]
  ```

  The last spoolfile displayed will contain the output listing from the RESTORE command. The error messages in this file will show the problems encountered in restoring files from the CSLT/STORE tape. Following are the types of errors that may occur:

  — Out of disk space - There are two methods for obtaining additional disk space:

  - Use the ALTERVOL command in VOLUTIL to set the permanent and transient space allocation assignments to 100% on all system volumes

except LDEV 1.

- Store user files to tape and then purge them. Restore the files from tape at the end of the installation.

— Transmission errors - Clean tape heads and check for hardware errors.

— Corrupt files - Manually RESTORE the corrupt files from the CSLT/STORE tape. If successful, this indicates there were transmission errors.

- Take appropriate corrective measures, and run AUTOINST again.
- Contact your Response Center if further assistance is required.

237 **Message** `PowerPatch Release VUF is older than Subsys Release VUF (INSTERR #237)`

Cause The PowerPatch tape being installed is older than the last Powerpatch tape installed on the system.

Action

- Print the file HPSWINFO.PUB.SYS and refer to line 4 of the file to determine the V.U.F. of the SUBSYS currently installed on the system.
- Refer to the accompanying *READ BEFORE INSTALLING* to determine the SUBSYS releases supported by this PowerPatch tape.
- Get a newer PowerPatch tape.
- Contact your Response Center if further assistance is required.

238 **Message** `Unable to open the AUTOINST message catalog (INSTERR #238)`

Cause Either the AUTOINST catalog, AICAT000.INSTALL.SYS is missing or it is not a valid catalog.

Action

- Ensure that the file AICAT000.INSTALL.SYS exists on the system.

— If it does not and you are installing a PowerPatch tape, RESTORE AUTOINST and AICAT000 from the PowerPatch tape. If you are not installing PowerPatch, UPDATE with the SLT provided by HP, and ensure that the file exists after the UPDATE.

— If the file does exist, do a LISTF,2 of the file and ensure the CODE is MGCAT.

— Run AUTOINST again.

- Contact your Response Center if further assistance is required.

239 **Message** `Invalid Catalog AICAT000 in the INSTALL.SYS group.`
`The Catalog VUF could not be recovered (INSTERR #239)`

Cause The catalog, AICAT000, is missing its VUF.

Action

- If you are installing a PowerPatch tape, RESTORE AUTOINST and AICAT000 from the PowerPatch tape. If you are not installing PowerPatch, UPDATE with the SLT provided by HP, and ensure that the file exists after the UPDATE.
- Do a LISTF,2 of the file and ensure the CODE is MGCAT.
- Run AUTOINST again.
- Contact your Response Center if further assistance is required.

240 **Message** `AUTOINST CATALOG VUF = v.uu.ff. Invalid Catalog AICAT000`
`in INSTALL.SYS group The Catalog does not match version expected`
`by AUTOINST. (INSTERR #240)`

Cause The AUTOINST V.U.F. does not match the V.U.F. found in its catalog, AICAT000.INSTALL.SYS.

Action

- If you are installing a PowerPatch tape, RESTORE AUTOINST and AICAT000 from the PowerPatch tape. If you are not installing PowerPatch, UPDATE with the SLT provided by HP, and ensure that the file exists after the UPDATE.
- Do a LISTF,2 of the file and ensure the CODE is MGCAT.
- Run AUTOINST again.
- Contact your Response Center if further assistance is required.

241 **Message** `Not used`

242 **Message** `The installer failed to modify the job and session`
`limits. (INSTERR #242)`

Cause The COMMAND intrinsic returned a nonzero command error when AUTOINST programmatically attempted to set the job and session limits to 1,1.

Action

- Manually execute the `LIMIT` command to ascertain why

		the command is returning an error. • If LIMIT can be set manually, run AUTOINST again. • Contact your Response Center if further assistance is required.
243	**Message**	`The Installer could not close filename. (INSTERR #243)`
	Cause	The Installer failed while trying to close the file filename.
	Action	• Make sure the file exists. • If the file exists, examine it for accessors other than AUTOINST. • If the file is being accessed, free up the file. • Take appropriate corrective measures and run AUTOINST again. • Contact the Response Center if further assistance is required.
	Message	244-249 Not used
250	**Message**	`The file id !1 is invalid for the temporary file TMPSTR04, TMPSTR05, or TMPSTR08. (INSTERR #250)`
	Cause	The installer is attempting to access an invalid file as an intermediate TMPSTR file.
	Action	• Run the installer again, and answer “no” when asked if you wish to continue with the previous run. • Contact the Response Center for further assistance.
251	**Message**	`The installer failed to read !1. Components may have not been successfully added to the !2 library. (INSTERR #251)`
	Cause	The installer encountered an error while reading the file.
	Action	• Ensure that the file is not being accessed by another process. • Run the installer again. • Contact the Response Center for further assistance.
252	**Message**	`The installer failed to properly access !1. No components have been added to the !2 library. (INSTERR #252)`
	Cause	The first record of the data file could not be accessed.
	Action	• Ensure that the file is not being accessed by another process.

- Ensure that the file is in the appropriate format. (Each record must contain the name of an MPE file that contains the library replacement, and a unique entry point into the library component. The file name and the entry point must be separated by a comma).
- Run the installer again.
- Contact the Response Center for further assistance.

253 **Message** `The installer failed to open !1. No components have been added to the !2 library. (INSTERR #253)`

Cause The installer failed when attempting to open the file.

Action

- Ensure that the file is not being accessed by another process.
- Ensure that the file is in the appropriate format. (Each record must contain the name of an MPE file that contains the library replacement, and a unique entry point into the library component. The file name and the entry point must be separated by a comma).
- Run the installer again.
- Contact the Response Center for further assistance.

254 **Message** `The file !1 is in an invalid format. Each record in the file should contain a file name and a library entry, separated by a comma. (INSTERR #254)`

Cause The specified input file is not in the appropriate format to be recognized by HPINSTAL. The file must be an ASCII file with a record size of 80 bytes. Each record must contain the name of an MPE file that contains the library replacement, and a unique entry point into the library component. The file name and the entry point must be separated by a comma, e.g: ESSRL.ISSIT.SYS,ESS2XREF. In this example, the name of the file is ESSRL.ISSIT.SYS. The entry point is ESS2XREF.

Action

- Print the file to the screen. Each record should be a maximum of 80 bytes as defined in the CAUSE text. Check the file for unprintable characters.
- Using any editor, correct the file format.
- Run the installer again.
- Contact the Response Center for further assistance.

255 **Message** `HPINSTAL failed. The CD-VERSION of OS is lower than system's`

		BASE-VERSION. You cannot continue with installation (INSTERR #255)
	Cause	The system OS version is newer than the CS OS version. HPINSTAL allows CSLT creation under this condition only for remote systems.
	Action	Use HPINSTAL to create CSLT for local systems with only newer versions OS CDs.
256	**Message**	HPCIGETVAR failed in create CSLT (INSTERR #256)
	Cause	The installer issued the HPCIGETVAR intrinsic and failed. The status returned for this message is displayed before this message.
	Action	Check the error message from the HPCIGETVAR intrinsic and based on the status value displayed, take corrective action. • Run the installer again. • Contact Response Center if further assistance is required.

Warning Messages (INSTWARN)

1	**Message**	`Warning -- This program cannot install the products listed below. (INSTWARN #1)`
	Action	The SUBSYS tape has non-AUTOINSTallable products. Install all of these products after updating with the CSLT created by the installer.
2	**Message**	`Expected a YES or NO. (INSTWARN #2)`
	Action	The input to the prompt is invalid. Respond YES or NO at the prompt.
3	**Message**	`Warning -- The following data communication products may require I/O configuration changes. However, this will not affect the software installation of these products. (INSTWARN #3)`
	Action	Data communication products exist on the system that may require changes to the system configuration. Consult the appropriate reference manual for that product after installation of the product is complete.
4	**Message**	`Invalid input (INSTWARN #4)`
	Action	Enter the appropriate number in response to the prompt.
5	**Message**	`Warning -- The installer cannot find enough contiguous disk space on LDEV #1 for UPDATE to update with the CSLT created by the installer. (INSTWARN #5)`
	Action	Store files to tape, and then purge them. If you have trouble creating this disk space, please contact the Response Center. They can help you identify files with extents on LDEV1.
6	**Message**	`Version mismatch with the old HPINSTFL in the local group. (INSTWARN #6)`
	Cause	An old HPINSTFL was found and deleted. The installer continues.
	Action	No corrective action is required.
7	**Message**	`Corrupt HPINSTFL file (INSTWARN #7)`
	Cause	A non-ASCII HPINSTFL file was found and purged. The installer continues.

	Action	No corrective action is required.
8	**Message**	`Unable to close CD-ROM volume name (INSTWARN #8)`
	Cause	VSCLOSE failed on a mounted CD-ROM volume.
	Action	• From the console, manually VSCLOSE and dismount the volume. If the drive is a SCSI drive, run AVRSCSI to dismount the volume. • Follow the instructions on the screen to continue with the installation.
9	**Message**	`The installer cannot verify that the second CD-ROM volume, volume name, is mounted on LDEV ldev. (INSTWARN #9)`
	Cause	The user pressed [[return]] at the continue prompt before the second CD-ROM volume was mounted.
	Action	• Follow the instructions on the screen and ensure the second volume has been mounted before pressing [[return]] again to continue. • Use DSTAT to verify that the second CD-ROM is mounted.
10	**Message**	`HPINSTAL is terminating on user's request. (INSTWARN #10)`
	Cause	The user entered QUIT at the prompt to continue after switching the CD-ROM volumes.
	Action	• Mount the first CD-ROM volume again and restart HPINSTAL. • HPINSTAL may be started again from the beginning or the current process may be resumed at the point of creating the CSLT.
11	**Message**	`Could not restructure PATCHAUD (INSTWARN #11)`
	Cause	FCOPY of PATCHAUD to a fixed record format file failed.
	Action	If it is necessary to convert the PATCHAUD file to fixed, ASCII then use the following commands: **`: FILE PAUD;REC=-80,,F,ASCII`** **`: FCOPY FROM=PATCHAUD;TO= PAUD;NEW;SUBSET  Reply Y`** **`: PURGE PATCHAUD`** **`: RENAME PAUD,PATCHAUD`**
	Message	12-19 Not used
20	**Message**	`Nonexistent product number. (INSTWARN #20)`
	Cause	A bad product number was entered.
	Action	Reenter the correct product number.

21	**Message**	`Keyword incorrect. Retype your keyword. (INSTWARN #21)`
	Cause	An invalid keyword was entered.
	Action	• Ensure the key entered matches the keyword certificate received from Hewlett-Packard. • Ensure that the product list entered is correct. • Run HPINSTAL again from the beginning. • Contact the Response Center for further assistance if required.
22	**Message**	`Exactly fourteen (14) characters must be entered. (INSTWARN #22)`
	Cause	An invalid keyword was entered.
	Action	• Ensure the key entered matches the keyword certificate received from Hewlett-Packard. • Ensure that the product list entered is correct. • Run HPINSTAL again from the beginning. • Contact the Response Center for further assistance if required.
23	**Message**	`23 not used.`
24	**Message**	`This product number is not part of the original list. (INSTWARN #24)`
	Cause	A product number was entered that does not appear in the master product list, PRODLIST.PUB.SYS.
	Action	Reenter the product number.

25	**Message**	`At least one encrypted password was found. You will`
		
		`be prompted for the password(s) that are encrypted. (INSTWARN #25)`

	Action	Some of the passwords needed by the I-files are encrypted. You will be prompted by MPE/iX for the passwords when the jobs are streamed.

SLTCOPY Messages

Message Invalid file name.

Cause The file name that you entered does not meet the MPE syntax requirements for file names. Note that you cannot use HFS syntax (such as /SYS/PUB/tapefile) for file names supplied to SLTCOPY.

Action Enter a different file name that meets MPE syntax requirements.

Message Undefined system file.

Cause File name entered is undefined to the system. Note that you cannot use HFS syntax (such as /SYS/PUB/tapefile) for file names supplied to SLTCOPY.

Action Enter a different file name that meets MPE syntax requirements.

Message Copy# on LDEV # is bad. The tape may be too short or an I/O error occurred.

Cause Most often, this means that the tape onto you tried to make the copy was shorter than the master tape.

Action Rerun SLTCOPY using a longer tape onto which to make the copy, or recreate the master on a shorter tape.

Message Purge failed on old file

Cause Unable to purge the disk file with the same name as the file name you entered. Occurs only with Option 1 (Copy tape to disk).

Action Purge the disk file and restart SLTCOPY.

Message Open failed for LDEV #

Cause SLTCOPY couldn't access the tape drive.

Action Check the tape drive cable connections, its configuration, and whether or not it's available to this process.

Message Open failed for COPY1 Operation inconsistent with access type (FSERR40)

Cause You attempted to copy to more than one remote tape, when NOWAITIO was in effect.

Action If you need to copy to multiple remote tapes, make sure the appropriate file equations are set (see Chapter 5 , “Modifying Your System,”), and reinvoke SLTCOPY using the WAITIO option:

```
:SLTCOPY; INFO="WAITIO"
```

Message Failed to read tape! No records processed.

Cause Error occurred while reading the master tape. This message only occurs after the tape drive has been open for reading.

Action Check the tape drive cable connections, its configuration, and whether or not the availability of the tape drive changed after the tape reply. When the error is found, restart SLTCOPY from the beginning.

Message Failed to read tape! The expected total number of the tape's EOF marks were encountered before the data.

Cause The format of the master tape is unknown to SLTCOPY. SLTCOPY expects three end of file (EOF) marks to indicate the end of data. Three EOF marks were encountered before any data was read.

Action SLTCOPY cannot copy this tape.

Message File already exists. Purge old?

Cause The disk file that you specified for the tape copy already exists on the system.

Action Reply “yes” if it is all right to overwrite the existing file.

Message That's not a multi-file type disk file.

Cause The disk file that you want SLTCOPY to copy to tape is not the correct file type.

Action To get the correct disk file format for SLTCOPY, first use SLTCOPY to copy a master tape to a disk file (using Option 1).

Message Can't handle file with # size records.

Cause The disk file that you want SLTCOPY to copy to tape has records that are too large for SLTCOPY to copy.

Action To get the correct disk file format for SLTCOPY, first use SLTCOPY to copy a master tape to a disk file (using Option 1).

Message Open failed on CATALOG.PUB.SYS.

Cause CATALOG.PUB.SYS is inaccessible to SLTCOPY.

Action Use the command “LISTFILE CATALOG.PUB.SYS,3” to verify that the file exists and that it's accessible as shared; also check its security (R,W,A,L,X:ANY). Also check that there is no file equation for CATALOG.PUB.SYS which is redirecting access to an inappropriate file. Then rerun SLTCOPY.

Message Error occurred while attempting to close the file. If you choose the “Copy tape to disk” mode again, you will get the

opportunity to enter a different file name.

Cause After you entered the disk file name for Option 1 (Copy tape to disk), the test closing of the file failed. The reason it failed is shown in a File Information Display.

Action You will see the main menu after receiving this message. You can then choose to exit the program (so you can adjust your capabilities), or choose Option 1 again and specify a different file that will not cause the same error.

Stage/iX Messages (STAGEMAN)

This section lists the Stage/iX Error Messages, cause and action.

1001 **Message** Unable to execute USE file "*name*". (STAGEMAN 1001)

	Cause	STAGEMAN was unable to open and/or execute the file that the user specified for the USE command.
	Action	Check the file system error message associated with the command, and take the appropriate action.
1002	**Message**	Missing required parameter in command. (STAGEMAN 1002)
	Cause	A required parameter for the command was not supplied.
	Action	Re-enter the command including the parameter. Do a HELP on the command if necessary.
1003	**Message**	Length of parameter exceeds maximum allowed. (STAGEMAN 1003)
	Cause	The string supplied for the parameter exceeded the maximum allowed length of the parameter.
	Action	Do a HELP on the command to determine the maximum length of the parameter, then re-enter the command.
1004	**Message**	Invalid option. (STAGEMAN 1004)
	Cause	An option was specified that is not allowed for this user.
	Action	Re-enter the command without the option.
1005	**Message**	Invalid parameter. (STAGEMAN 1005)
	Cause	An invalid parameter was specified.
	Action	Re-enter the command without the parameter.
1006	**Message**	Empty string not allowed for this parameter. (STAGEMAN 1006)
	Cause	An empty string was found in a parameter where an empty string is not allowed.
	Action	Re-enter the command with a valid string.
1007	**Message**	Value of this parameter must be between 0 and 65535. (STAGEMAN 1007)
	Cause	An integer value outside of the allowable range was provided for this parameter.
	Action	Re-enter the command with a value for the parameter between 0 and 65535.

1008 **Message** `Illegal value. (STAGEMAN 1008)`

Cause An unexpected and inappropriate value was supplied for this parameter.

Re-enter the command with an appropriate value for the parameter. Do a HELP on the command to determine appropriate values if necessary.

1009 **Message** `1009 not used.`

1010 **Message** `Transaction aborted per user request. (STAGEMAN 1010)`

Cause The user specified "No" to a confirmation of a command. This warning is printed for information purposes only.

Action None

1011 **Message** `No help available for this command. (STAGEMAN 1011)`

Cause This command is not recognized by STAGEMAN's HELP facility.

Action Check the spelling of the command.

1012 **Message** `Stage/iX is not initialized. Can't do command. (STAGEMAN 1012)`

Cause The HP Stage/iX environment has not been initialized with the `INITIALIZE` command. In this context, the command given would either cause an error or would produce unpredictable results, so the command was not done.

Action Initialize the HP Stage/iX environment with the `INITIALIZE` command (do a HELP on INITIALIZE for more information).

1013 **Message** `Initialize SORT/iX failed. SORT status: Subsys:` *`value`*`, Info:` *`value`* `(STAGEMAN 1013)`

Cause STAGEMAN received an error from the HPSORTINIT intrinsic of the SORT/iX subsystem.

Action Determine why the HPSORTINIT intrinsic failed. Contact your Hewlett-Packard Response Center for assistance.

1014 **Message** `Input to SORT/iX failed. SORT status: Subsys:` *`value`*`, Info:` *`value`* `(STAGEMAN 1014)`

Cause STAGEMAN received an error from the HPSORTINPUT intrinsic of the SORT/iX subsystem.

Action Determine why the HPSORTINPUT intrinsic failed. Contact your Hewlett-Packard Response Center for assistance.

1015 **Message** Output from SORT/iX failed. SORT status: Subsys: *value*, Info: *value* (STAGEMAN 1015)

Cause STAGEMAN received an error from the HPSORTOUTPUT intrinsic of the SORT/iX subsystem.

Action Determine why the HPSORTOUTPUT intrinsic failed. Contact your Hewlett-Packard Response Center for assistance.

1016 **Message** No staging areas exist. (STAGEMAN 1016)

Cause No staging areas were found in the HP Stage/iX environment.

Action None if this is an expected event. If one or more staging areas should exist, then a RECOVER command may be necessary (do a HELP on RECOVER for more information).

1017 **Message** The staging area does not exist or no match found. (STAGEMAN 1017)

Cause The staging area given for the LIST command was not found in the HP Stage/iX environment. If a wildcard was used for the staging area parameter, then no matches for that pattern were found.

Action Check the spelling on the staging area parameter (remember that staging area names are case-sensitive).

1018 **Message** No staging area contents file found in the IMPORT directory. (STAGEMAN 1018)

Cause An IMPORT command was done, but the HP Stage/iX Import directory (/SYS/hpstage/import/) did not contain a "contents" file needed for constructing the staging area to be imported (the contents file is called "stage_contents"). This most likely means that the staging area being imported was not moved correctly into the Import directory, or that the Import directory is empty.

Action Re-IMPORT the staging area using the appropriate import option (e.g., ;TAPE). If you are moving a staging area into the Import directory using your own transport method (and therefore importing with the ;NOUNPACK option), make sure the contents file for the staging area is moved in with the other files.

1019 **Message** Can't open the Import Staging Area contents file. (STAGEMAN 1019)

Cause STAGEMAN encountered a file system error while trying to open the contents file for the staging area to be imported (the contents file name is "/SYS/hpstage/import/stage_contents")

Action. Determine why the open of the contents file failed. Contact your Hewlett-Packard Response Center for assistance.

1020 **Message** "/" not allowed in staging area names. (STAGEMAN 1020)

Cause A slash ("/") was found in the staging area parameter. STAGEMAN uses the staging area name for building a directory under /SYS/hpstage/ (/SYS/hpstage/stage_name). Since the staging area must be confined to a single directory, slashes are not allowed.

Action Re-enter the command with a legal staging area name.

1021 **Message** Invalid staging area name "*name*". (STAGEMAN 1021)

Cause An illegal staging area name was provided as a parameter. STAGEMAN uses the staging area name for building a directory under /SYS/hpstage/ (/SYS/hpstage/stage_name). Since the staging area name must be valid as a directory name, the restrictions for HFS directory names apply.

Action Re-enter the command using a valid staging area name. Do a HELP on the CREATE command for information on how to name the staging area.

1022 **Message** Can't use reserved word "BASE" for a staging area name. (STAGEMAN 1022)

Cause The user attempted to use "BASE" as a staging area parameter. Since users must be able to do a SET BASE to move back to the Base, STAGEMAN does not allow this reserved word as a staging area parameter to any other command. To avoid confusion, the check for "BASE" is not case- sensitive ("Base"="BASE").

Action Choose another staging area name. You may use the string "BASE" within a staging area name (e.g., "Base_OS").

1023 **Message** Staging area "*name*" is active. Can't *command*. (STAGEMAN 1023)

Cause The user attempted a change operation on the active staging area. Since the files belonging to the active staging area are in use, STAGEMAN does not allow any changes to that staging area to avoid the possibility of corrupting the environment and/or the system.

Action To make changes to an active staging area you must boot from the Base so that the staging area is no longer active.

1024 **Message** Staging area "*name*" is set for next boot. Can't command. (STAGEMAN 1024)

Cause The user attempted a change operation on a staging area that is set to be used on the next system boot (i.e., a SET

was done to that staging area). Since critical changes have been made to the HP Stage/iX environment based on the structure of that staging area, STAGEMAN does not allow any changes to the staging area to avoid the possibility of corrupting the environment and/or the system.

Action To make changes to the staging area you must do a SET back to the Base (or another staging area), and execute the desired command(s). After the changes are made, you may re-VALIDATE (if necessary), and SET to the staging area again.

1025 **Message** Staging area "*name*" does not exist. Can't *command*. (STAGEMAN 1025)

Cause STAGEMAN does not recognize the staging area as part of the HP Stage/iX environment.

Action Check your spelling on the staging area parameter. If the staging area existed before and a DELETE was not done, the staging area may need to be recovered (do a HELP on RECOVER for more information).

1026 **Message** Staging area "*name*" is already set for next boot. No action taken. (STAGEMAN 1026)

Cause A SET command was already done to set this staging area to be used on the next system boot, therefore no action from STAGEMAN was needed. This warning is for information purposes only.

Action None

1027 **Message** The TO file name cannot reside under the HP Stage/iX Root Directory. (STAGEMAN 1027)

Cause The user attempted to stage a file whose natural location was under the HP Stage/iX Root Directory (/SYS/hpstage/). This action would potentially cause problems at bootup time, so it is not allowed.

Action Did you really want to do this, or were you just fooling around?

1028 **Message** Staging area "*name*" already exists. Can't *command*. (STAGEMAN 1028)

Cause A staging area that already exists in the HP Stage/iX environment was provided as a parameter to a command that would create a new staging area.

Action Check your spelling on the staging area parameter, choose a different staging area name, or delete the existing staging area.

1029 **Message** A directory by the name of "*name*" already exists. Can't *command*. (STAGEMAN 1029)

Cause STAGEMAN found a directory under /SYS/hpstage/ of the same name that was used for the staging area parameter. Since STAGEMAN uses the staging area name for building a directory under /SYS/hpstage/ (/SYS/hpstage/stage_name), it fails on this condition to avoid corrupting the user's environment. If an unexpected staging area directory exists that is not recognized as a staging area in the HP Stage/iX environment, it usually means one of two things: 1) the staging area was restored from backup and was not recovered into the HP Stage/iX environment, or 2) the directory was manually created by a user.

Action For Case 1 (above), do a RECOVER to pull the staging area into the HP Stage/iX environment (do a HELP on RECOVER for more information). For Case 2, purge the directory, or choose another staging area name. If neither of these cases applies, contact your Hewlett-Packard Response Center for assistance.

1030 **Message** Failed to purge an old copy of the EXPORT indirect store file "*name*". CIERROR = *value* (STAGEMAN 1030)

Cause STAGEMAN needed to remove an old copy of the indirect store file so it could create a new one, but could not purge the file.

Action Determine why the file could not be purged, fix the problem, and redo the command.

1031 **Message** Failed to create the EXPORT indirect store file "*name*". FSERR = *value (STAGEMAN 1031)*

Cause STAGEMAN got a file system error back while trying to create an indirect store file for storing a staging area.

Action Determine why the file could not be created, fix the problem, and redo the command.

1032 **Message** Failed to FWRITE to the EXPORT indirect store file "*name*". (STAGEMAN 1032)

Cause STAGEMAN got a file system error back from the FWRITE intrinsic while trying to build the indirect store file for storing a staging area. One possibility is that the file was full.

Action Contact your Hewlett-Packard Response Center for assistance.

1033 **Message** Failed to store the EXPORT indirect store file "*name*". CIERROR = *value* (STAGEMAN 1033)

Cause STAGEMAN got an error back from STORE while trying to store a staging area to tape. This error will always be reported if a REPLY ,0 was done to the tape request.

Action Determine why the STORE command failed, fix the problem, and redo the command.

1034 **Message** `Can't use reserved word "IMPORT" for staging area name. (STAGEMAN 1034)`

Cause The user specified the string "IMPORT" for the staging area parameter. STAGEMAN uses the staging area name for building a directory under /SYS/hsptage/ (/SYS/hpstage/stage_name). Since /SYS/hpstage/import is a reserved known directory in the HP Stage/iX environment, "IMPORT" cannot be used as a staging area name. To avoid confusion, the check for "IMPORT" is not case sensitive.

Action Choose another staging area name. You may you the string "IMPORT" within a staging area name (e.g., "Import_SA").

1035 **Message** `Can't use reserved word "EXPORT" for staging area name. (STAGEMAN 1035)`

Cause The user specified the string "EXPORT" for the staging area parameter. STAGEMAN uses the staging area name for building a directory under /SYS/hsptage/ (/SYS/hpstage/stage_name). Since /SYS/hpstage/export is a reserved known directory in the HP Stage/iX environment, "EXPORT" cannot be used as a staging area name. To avoid confusion, the check for "EXPORT" is not case sensitive.

Action Choose another staging area name. You may you the string "EXPORT" within a staging area name (e.g., "Export_SA").

1036 **Message** `Staging area "`*`name`*`" has not been validated. Can't `*`command`*`. (STAGEMAN 1036)`

Cause A command was done which expected a valid staging area, but the staging area was not valid. STAGEMAN does this check for operations for which the integrity of the staging area is critical.

Action Validate the staging area, then re-execute the command (do a HELP on VALIDATE for more information).

1037 **Message** `There is no active staging area. Can't commit. (STAGEMAN 1037)`

Cause A COMMIT command was attempted when no staging area was currently active. The command is meaningless unless

the system is booted from a staging area.

Action If a staging area is or should be active, contact you Hewlett-Packard Response Center for assistance.

1038 **Message** `The Stage/iX environment is in an inconsistent state.`
`Can't commit. (STAGEMAN 1038)`

Cause An error occurred during the last bootup, so that the state of the HP Stage/iX environment - as well as the integrity of the active staging area - is in question.

Action Print the file /SYS/hpstage/current_log to determine where the error occurred.

1039 **Message** `Failed to restore the IMPORT staging area files. CIERROR = value (STAGEMAN 1039)`

Cause STAGEMAN got an error back from STORE while attempting to restore staging area files from tape. This error will always be reported if a REPLY ,0 was done to the tape request.

Action Determine why the STORE command failed, fix the problem, and redo the command.

1040 **Message** `A SET was done to staging area "name". Can't commit. (STAGEMAN 1040)`

Cause A COMMIT command was attempted, but a SET command had previously been done to another staging area, so that the HP Stage/iX environment is in an inconsistent state for committing to the staging area.

Action Do a SET command back to the active staging area, then redo the COMMIT command.

1041 **Message** `A SET was done to the BASE. Can't commit (STAGEMAN 1041)`

Cause A COMMIT command was attempted, but a SET command had previously been done to the Base, so that the HP Stage/iX environment is in an inconsistent state for committing to the staging area.

Action Do a SET command back to the active staging area, then redo the COMMIT command.

1042 **Message** `Failed to generate a file equation. CIERROR = value (STAGEMAN 1042)`

Cause STAGEMAN encountered a Command Intepreter (CI) error while attempting to generate a file equation for STORE.

Action Determine the cause of the CI error, correct the problem,

then re-execute the command.

1043 **Message** Failed to unpack staging area "*name*". CIERROR = *value* (STAGEMAN 1043)

Cause STAGEMAN got an error while attempting to run the unpack utility, MOVER.PRVXL.TELESUP, to unpack the staging area files.

Action Determine the cause of the MOVER error. Contact your Hewlett-Packard Response Center for assistance.

1044 **Message** Failed to move to the staging area directory for "*name*". CIERROR = *value* (STAGEMAN 1044)

Cause STAGEMAN attempted a process-local CHDIR to the staging area's directory, and got an error back from the Command Interpreter (CI).

Action Determine the cause of the CI error, correct the problem, and re-execute the command.

1045 **Message** Failed to create a symbolic link for "*name*". CIERROR = *value* (STAGEMAN 1045)

Cause STAGEMAN attempted a NEWLINK command and got an error back from the Command Interpreter (CI).

Action Determine the cause of the CI error, correct the problem, and re-execute the command.

1046 **Message** Failed to remove a symbolic link for "*name*". CIERROR = *value* (STAGEMAN 1046)

Cause STAGEMAN attempted a PURGELINK command and got an error back from the Command Interpreter (CI).

Action Determine the cause of the CI error, correct the problem, and re-execute the command.

1047 **Message** The UNPACK import file "*name*" does not exist. (STAGEMAN 1047)

Cause STAGEMAN could not find the import file to be unpacked into the Import directory. The file it expects to unpack in the Import directory always has the same name as the staging area (e.g., /SYS/hpstage/import/stage_name).

Action Make sure that the "unpack" file is named properly and is in its proper location (see above), then re-execute the command.

1048 **Message** Can't use reserved word "BASE_ARCHIVE" for staging area name. (STAGEMAN 1048)

Cause The user specified the string "BASE_ARCHIVE" for the staging area. STAGEMAN uses the staging area name for

building a directory under /SYS/hsptage/ (/SYS/hpstage/stage_name). Since /SYS/hpstage/base_archive is a reserved directory in the HP Stage/iX environment, “BASE_ARCHIVE” cannot be used as a staging area name. To avoid confusion, the check for “BASE_ARCHIVE” is not case sensitive.

Action Choose another staging area name. You may you the string “BASE_ARCHIVE” within a staging area name (e.g., “Base_Archive_1”).

1049 **Message** `Failed to copy the contents file for staging area “`*`name`*`” to the Export directory. CIERROR = `*`value`* `(STAGEMAN 1049)`

Cause STAGEMAN encountered a Command Interpreter (CI) error while attempting to move the staging area “contents” file from the staging area directory to the Export directory for exporting.

Action Determine the cause of the CI error, correct the problem, and re- execute the command.

1050 **Message** `ADD file “`*`name`*`” exists in the Base. (STAGEMAN 1050)`

Cause The file was staged with a disposition of “ADD” — meaning the file is expected to be new to the Base - but a version of the file was found in the Base.

Action Remove the Base version of the file, or re-stage the file with a disposition of “REPLACE” (do an Expert Mode HELP on STAGEFILE for more information.

1051 **Message** `No entry for “`*`name`*`” was found in the contents file for “`*`name`*`”. (STAGEMAN 1051)`

Cause STAGEMAN could not find a record in the contents file in which the natural filename field match the filename specified by the user.

Action None

1052 **Message** `Found illegal disk restriction parameter. (STAGEMAN 1052)`

Cause A value was passed to a command's disk restriction parameter that STAGEMAN does not understand. This indicates a problem with the STAGEMAN utility.

Action If you encounter this error, report it to your Hewlett-Packard Response Center.

1053 **Message** `Found illegal file disposition parameter. (STAGEMAN 1053)`

Cause A value was passed to a command's file disposition

parameter that STAGEMAN does not understand. This indicates a problem with the STAGEMAN utility.

If you encounter this error, report it to your Hewlett-Packard Response Center.

1054 **Message** `Found illegal onerr parameter. (STAGEMAN 1054)`

Cause A value was passed to a command's ONERR parameter that STAGEMAN does not understand. This indicates a problem with the STAGEMAN utility.

If you encounter this error, report it to your Hewlett-Packard Response Center.

1055 **Message** `Found illegal validate type parameter. (STAGEMAN 1055)`

Cause A value was passed to a command's validation type parameter that STAGEMAN does not understand. This indicates a problem with the STAGEMAN utility.

Action If you encounter this error, report it to your Hewlett-Packard Response Center.

1056 **Message** `Found illegal LIF type parameter. (STAGEMAN 1056)`

Cause A value was passed to a command's LIF type parameter that STAGEMAN does not understand. This indicates a problem with the STAGEMAN utility.

Action If you encounter this error, report it to your Hewlett-Packard Response Center.

1057 **Message** `File(s) not found in staging area. (STAGEMAN 1057)`

Cause The file or file selected for this command was not found in the given staging area, so the operation could not be performed.

Action Check the spelling on the filename(s). Remember that filenames in this case are case-sensitive.

1058 **Message** `Illegal TO filename “`*name*`”. (STAGEMAN 1058)`

Cause The name specified in the TO parameter is an illegal filename. Filenames must be legal as either POSIX (HFS) or MPE filenames.

Action Check the filename for special characters.

1059 **Message** `Filename translated to > 255 characters. (STAGEMAN 1059)`

Cause When STAGEMAN translated the normal TO filename to a “flattened” filename suitable for staging (such as /lib/libc.a --> ._lib._libc.a), the translated (staged) filename

exceeded the maximum filename length.

Action The file under its present name cannot be staged. The only option is to shorten the name of the file.

1060 **Message** `Filename cannot be a directory. (STAGEMAN 1060)`

Cause The filename supplied to the parameter had a trailing "/", meaning that it is really a directory. STAGEMAN cannot stage directories, so the operation (command) failed.

Action Re-execute the command without the trailing "/".

1061 **Message** `Found illegal filegroup parameter. (STAGEMAN 1061)`

Cause A value was passed to a command's FILEGROUP type parameter that STAGEMAN does not understand. This indicates a problem with the STAGEMAN utility.

Action If you encounter this error, report it to your Hewlett-Packard Response Center.

1062 **Message** `Group or directory does not exist for file "`*name*`". (STAGEMAN 1062)`

Cause STAGEMAN encountered a staged file whose group and account (or directory if it is an HFS file) does not currently exist in the Base. This would cause an error on bootup while the HP Stage/iX facility tried to move a file to the non-existent group or directory.

Build the missing group (NEWGROUP/NEWACCT) or directory (NEWDIR).

1063 **Message** `STAGEDEF file not processed. Can't stage file. (STAGEMAN 1063)`

Cause STAGEMAN cannot stage the file because the file STAGEDEF.PUB.SYS, used by STAGEMAN to get default attributes of known system files, was not properly executed when STAGEMAN initialized itself. This is most likely the result of an error that occurred while STAGEMAN attempted to process the STAGEDEF file.

Action Determine why STAGEMAN did not execute the STAGEDEF file. You can process the file explicitly from the STAGEMAN prompt by doing the following:

STAGEMAN> EXPERT ON STAGEMAN> OPTION LIST STAGEMAN> USE STAGEDEF.PUB.SYS

1064 **Message** `The TO filename is not fully qualified. (STAGEMAN 1064)`

Cause The user supplied a non-fully qualified name for the TO file parameter. Because the HP Stage/iX facility requires fully qualified filenames for the file switching process at

system bootup time, STAGEMAN enforces this when files are staged.

Action Re-execute the command using the fully qualified filename.

1065 **Message** *Warning: Staged file as "*name*" (converted from a POSIX to an MPE name). (STAGEMAN 1065)

Cause The user specified the filename in POSIX (HFS) syntax when the filename is expressible in MPE syntax (an example is expressing NL.PUB.SYS as /SYS/PUB/NL). Whenever possible, STAGEMAN converts HFS filenames to MPE syntax to avoid the possibility of the same file being staged under two different names (for example, NL.PUB.SYS and /SYS/PUB/NL). This warning is for information purposes only.

Action None

1066 **Message** The FROM parameter is required. (STAGEMAN 1066)

Cause The FROM parameter in this context of the command is required, but was not supplied.

Action Re-enter the command with the FROM parameter.

1067 **Message** LIF files cannot be in POSIX name space. (STAGEMAN 1067)

Cause The file to be staged was designated to go into the System LIF Directory, but is only expressible in POSIX (HFS) syntax. Currently, POSIX files cannot be placed in the LIF Directory.

Action Rename the file so that it is expressible in MPE syntax, then re- execute the STAGEFILE command.

1068 **Message** Could not put read access ACD on "*name*". (STAGEMAN 1068)

Cause A call to the Command Interpreter (CI) ALTSEC command failed, so STAGEMAN could not assign read access to all users. This does not affect SM users, but means that OP-only users cannot perform any commands in STAGEMAN.

Once you have determined why the ALTSEC command failed and corrected the problem, you can manually perform the ALTSEC command on the file:

:ALTSEC file_name;reppair=(R,RACD:@.@)

1069 **Message** File "*name*" should be contiguous and is not. (STAGEMAN 1069)

Cause The file in the staging area is tagged as being a contiguous

file (meaning that the file exists as a single extent on disk), but the staged version of the file is not contiguous.

Action The file must be made contiguous in the staging area. The easiest way to do this is to re-stage the file with the STAGEFILE command (do an Expert Mode HELP on STAGEFILE for more information).

1070 Message Staging area "*name*" failed validation due to previous errors. (STAGEMAN 1070)

Cause STAGEMAN found one or more specific errors while attempting to validate the files in a staging area.

Action Refer to the errors that were displayed previous to this error for information on which files had problems.

1071 Message File "*name*" is missing from the staging area. (STAGEMAN 1071)

Cause The file should be part of the staging area but is missing from the staging area's directory (/SYS/hpstage/stage_name/).

Action Determine why the file is missing. If necessary re-stage the file to the staging area (do an Expert Mode HELP on STAGEFILE for more information).

1072 Message Owner of file "*name*" has changed since it was staged. (STAGEMAN 1072)

Cause The current owner (creator) of the staged file is different than it was when the file was originally staged. This warning is just to alert the user of a potential problem. The staging area will still validate under this condition.

Action None

1073 Message File "*name*" should be on LDEV1 but is not. (STAGEMAN 1073)

Cause The file in the staging area is tagged as being restricted to LDEV 1, but the staged version of the file is not.

Action Modify the file to be on LDEV 1. The easiest way to do this is to re-stage the file (do an Expert Mode HELP on the STAGEFILE command).

1074 Message The file attributes of "*name*" do not match those of the original staged file. (STAGEMAN 1074)

Cause STAGEMAN found a difference between the attributes of the file in the staging area and the attributes recorded at the time the file was originally staged. Specifically, STAGEMAN checks for record size, block size, file limit, and file code. If one or more of these has changed it suggests that the version of the file now staged is not the

same that was originally staged.

Action You can do a STAGEMAN LIST ;FILES on the staging area to determine what the attributes of the file should be, and compare this against the :LISTFILE /SYS/hpstage/stage_name/file_name,2 output to help find the discrepancy. An easy way to fix this problem is to re-stage the original file (do an Expert Mode HELP on STAGEFILE for more information).

1075 **Message** The staging area is empty. (STAGEMAN 1075)

Cause STAGEMAN found no known files in the staging area.

Action If the staging area was expected to be empty at validation time then this warning can be ignored.

1076 **Message** File "*name*" does not exist in the Base. (STAGEMAN 1076)

Cause The file was staged with a validation option of "EXISTENCE", which tells STAGEMAN to expect a version of the file to be in the current Base. STAGEMAN reports this error when it cannot find the file in the Base at validation time.

Action As a workaround, put a dummy version of the file in the Base, re- VALIDATE the staging area, then purge the dummy file. Another option is to re-stage the file with ;VAL=BASIC (do an Expert Mode HELP on STAGEFILE for more information).

1077 **Message** File "*name*" is not on the system volume set. (STAGEMAN 1077)

Cause The file was tagged as being restricted to LDEV1, but was not found on the System Volume Set.

Action Contact your Hewlett-Packard Response Center for assistance.

1078 **Message** File "*name*" is not on the system volume set. (STAGEMAN 1078)

Cause The staged version of the file was found on a volume set other than the System Volume Set. This warning is for information purposes only.

Action None

1079 **Message** The EOF of file "*name*" has changed since it was staged. (STAGEMAN 1079)

Cause The end-of-file on the staged version of the file does not match the end-of-file on the file that was originally staged. This is only a warning to alert the user of a possible problem.

Action None

1080 **Message** Indirect file "*name*" does not exist. (STAGEMAN 1080)

Cause The ;EXCEPT parameter was used on a DUPLICATE command, however the indirect file specified for the parameter does not exist.

Action Check your spelling on the indirect file name.

1081 **Message** Unable to open indirect file "*name*". (STAGEMAN 1081)

Cause The ;EXCEPT parameter was used on a DUPLICATE command, and STAGEMAN received a file system error from an HPFOPEN intrinsic call to open the indirect file.

Action Determine why the HPFOPEN intrinsic call failed, correct the problem, and re-execute the command.

1082 **Message** Unable to obtain information about indirect file "*name*" (STAGEMAN 1082)

Cause The ;EXCEPT parameter was used on a DUPLICATE command, and STAGEMAN received a file system error from an FFILEINFO intrinsic call for indirect file.

Action Determine why the FFILEINFO intrinsic call failed. Contact your Hewlett-Packard Response Center for assistance if necessary.

1083 **Message** Record size for indirect file "*name*" exceeds max () (STAGEMAN 1083)

Cause The ;EXCEPT parameter was used on a DUPLICATE command, however the record size of the indirect file specified exceeds the limit of 256 bytes.

Action Use an indirect file that has a record size of <= 256 bytes.

1084 **Message** File "*name*" has a disposition of DELETE, but a version of the file exists in the staging area. (STAGEMAN 1084)

Cause The file was staged with a disposition of DELETE (meaning the file should be deleted from its natural location when the staging area is activated), but a version of the file exists in the staging area.

Action Purge the file from the staging area's directory (/SYS/hpstage/stage_name/). If the file should not have a disposition of DELETE, then re-stage the file (do an Expert Mode HELP on STAGEFILE for more information) with a different disposition.

1085 **Message** Duplicate failed. Deleted incomplete staging area "*name*". (STAGEMAN 1085)

Cause A DUPLICATE operation failed, and to remove the possibility of leaving behind a corrupt target (TO) staging area, the target staging area was deleted. This error normally prints after an initial DUPLICATE error is printed, and is therefore issued for information purposes only.

Action Reference the DUPLICATE error that immediately preceded this one to help determine the cause of the problem.

1086 **Message** Failed to delete bad staging area "*name*". (STAGEMAN 1086)

Cause The DUPLICATE operation failed, and to remove the possibility of leaving behind a corrupt target (TO) staging area, STAGEMAN attempted to delete the target staging area. However, an error occurred during the delete operation. The status of the target staging area is unknown at this point.

Action Determine why the delete of the bad target staging area failed. Contact your Hewlett-Packard Response Center for assistance if necessary.

1087 **Message** Failed to rename staging area "*name1*" to "*name2*". Status: Subsys = *value, Info = value (STAGEMAN 1087)*

Cause The ;NAME= parameter of the CHANGE command was selected, but STAGEMAN received an error while trying to rename the staging area directory (/SYS/hpstage/old_name --> /SYS/hpstage/new_name).

Action Contact your Hewlett-Packard Response Center for assistance.

1088 **Message** The new staging area name is the same as the old one. (STAGEMAN 1088)

Cause The ;NAME= parameter of the CHANGE command was selected, but the new name supplied for the staging area was the same as the current staging area name.

Action None.

1089 **Message** No parameters were given. No action taken. (STAGEMAN 1089)

Cause A command was issued that expected one or more parameters, but no parameters were provided, so STAGEMAN did nothing.

Action None.

1090 **Message** The HP Stage/iX environment is not initialized. (STAGEMAN 1090)

Cause This is a warning issued by STAGEMAN at startup time to tell the user that the environment is not initialized. This is normal the first time STAGEMAN is run on a newly installed system.

Action None necessary. Do a HELP on INITIALIZE for more information.

1091 **Message** `One or more problems were encountered while processing the STAGEDEF file. (STAGEMAN 1091)`

Cause STAGEMAN could not process the file STAGEDEF.PUB.SYS at startup time. STAGEDEF is used by STAGEMAN to get default attributes of known system files. This is a warning because it will not interfere with most STAGEMAN commands or operations. However, if files need to be staged (for instance, if Patch/iX is creating staging areas), this is a serious error.

Action Determine why STAGEMAN did not execute the STAGEDEF file. You can process the file explicitly from the STAGEMAN prompt by doing the following:

```
STAGEMAN> EXPERT ON
STAGEMAN> OPTION LIST
STAGEMAN> USE STAGEDEF.PUB.SYS
```

1092 **Message** `Can't set the STAGEMAN CI variable "`*name*`". (STAGEMAN 1092)`

Cause STAGEMAN cannot set one or both of the STAGEMAN status CI variables (STAGESTAT and STAGERROR).

Action Determine why the CI variable cannot be modified. Contact your Hewlett-Packard Response Center for assistance if necessary.

1093 **Message** `User must have SM or OP capability to run STAGEMAN. (STAGEMAN 1093)`

Cause For security reasons, STAGEMAN requires the user to have SM (System Manager) or OP (System Operator) capabilities in order to run STAGEMAN.

Action Select a user that has SM or OP capability.

1094 **Message** `Incomplete staging area "`*name*`". Cannot validate. (STAGEMAN 1094)`

Cause STAGEMAN expects a staging area to be marked as "complete" before it allows it to be valid. "Complete" means that all files have been staged to the staging area, and it is now a whole unit. This error occurs when the staging area has not been marked as complete.

Action Mark the staging area as complete with the COMPLETE

command (do an Expert Mode HELP on COMPLETE for more information).

1095 **Message** `Import failed. Deleted incomplete staging area "name". (STAGEMAN 1095)`

Cause An IMPORT operation failed, and to remove the possibility of leaving behind a corrupt target (TO) staging area, the target staging area was deleted. This error normally prints after an initial IMPORT error is printed, and is therefore issued for information purposes only.

Action Reference the IMPORT error that immediately preceded this one to help determine the cause of the problem.

1096 **Message** `Failed to delete bad staging area "name". (STAGEMAN 1096)`

Cause An IMPORT operation failed, and to remove the possibility of leaving behind a corrupt target (TO) staging area, STAGEMAN attempted to delete the target staging area. However, an error occurred during the delete operation. The status of the target staging area is unknown at this point.

Action Determine why the delete of the bad target staging area failed. Contact your Hewlett-Packard Response Center for assistance if necessary.

1097 **Message** `Could not find error message "name" in the catalog. (STAGEMAN 1097)`

Cause STAGEMAN attempted to pull a message out of the STAGEMAN catalog file (STAGE000.PUB.SYS), but could not find a message that corresponded to the HP Stage/iX error or warning it encountered.

Action Report this problem to your Hewlett-Packard Response Center.

1098 **Message** `An HP Stage/iX related error occurred during the last system boot. See the HP Stage/iX log file "/SYS/hpstage/current_log" for more information. (STAGEMAN 1098)`

Cause This warning indicates that the STATUS command found an error from the last system boot relating to HP Stage/iX bootup routines. This usually means that one or more errors were encountered when HP Stage/iX tried to move files around while switching staging areas.

Action Read the HP Stage/iX log file, "/SYS/hpstage/current_log" (remember this name is case-sensitive) to find the exact error(s). Contact your Hewlett-Packard Response Center if

you need assistance.

1099 **Message** Encountered an unexpected error: Subsys = *value*, Info = *value*

Cause STAGEMAN encountered an error that is not recognized by the HP Stage/iX facility, and has no matching error message in the system catalog. This normally indicates a problem within the HP Stage/iX subsystem that should be reported to Hewlett-Packard.

Action Contact your Hewlett-Packard Response Center for assistance.

Message 1100 and 1101 not used.

1102 **Message** Attempted to add more than the maximum number of staging areas allowed. (Max =) (STAGEMAN 1102)

Cause The maximum number of staging areas supported by the HP Stage/iX facility has been reached, so STAGEMAN cannot add another staging area.

Action Delete one or more existing staging areas to make room, and re- execute the command.

1103 **Message** File "*name*" does not exist in the Base. (STAGEMAN 1103)

Cause The file was staged with a file disposition of either REPLACE or DELETE, which tells STAGEMAN that a version of the file should exist in the Base. STAGEMAN reports this warning when it cannot find the file in the Base at validation time.

Action None

1104 **Message** ADD file "*name*" exists in the Base. (STAGEMAN 1104)

Cause The file was staged with a file disposition of ADD, which tells STAGEMAN that no version of the file should exist in the Base. STAGEMAN reports this warning when it finds the file in the Base at validation time.

Action None

1105 **Message** Failed to find the staging area in the Globals file. (STAGEMAN 1105)

Cause STAGEMAN failed to find an entry for the staging area in the HP Stage/iX Globals file when it expected to find one. This indicates a problem with the HP Stage/iX facility, and should be reported to Hewlett-Packard.

Action Contact you Hewlett-Packard Response Center for assistance.

1106 **Message** Found a bad file disposition value for file "*name*". (STAGEMAN 1106)

Cause STAGEMAN found an unexpected file disposition value for the file (the file disposition should be ADD, REPLACE, or DELETE). This indicates a problem with the HP Stage/iX facility, and should be reported to Hewlett-Packard.

Action Contact you Hewlett-Packard Response Center for assistance.

1107 **Message** Found a bad error action value for file "*name*". (STAGEMAN 1107)

Cause STAGEMAN found an unexpected file error action value for the file (the error action should be WARN or IGNORE). This indicates a problem with the HP Stage/iX facility, and should be reported to Hewlett-Packard.

Action Contact you Hewlett-Packard Response Center for assistance.

1108 **Message** Failed to open file "*name*" in the staging area. (STAGEMAN 1108)

Cause STAGEMAN received a bad status from the HPFOPEN intrinsic during an attempt to open the file. There should be a file system error message associated with this one that explains why.

Action Determine why the file could not be opened, correct the problem, then re-execute the command.

1109 **Message** Could not find file "*name*" in the staging area. (STAGEMAN 1109)

Cause STAGEMAN expected the file to exist but could not find it.

Action Determine why the file does not exist, correct the problem, then re-execute the command.

1110 **Message** Failed to open file "*name*" in the staging area for purging. (STAGEMAN 1110)

Cause STAGEMAN received a bad status from the HPFOPEN intrinsic during an attempt to open the file. There should be a file system error message associated with this one that explains why.

Action Determine why the file could not be opened, correct the problem, then re-execute the command.

1111 **Message** Failed to purge file "*name*" in the staging area. (STAGEMAN 1111)

Cause STAGEMAN received a bad status from the FCLOSE intrinsic while attempting the purge the file from the

staging area (FCLOSE ,PURGE option).

Action Determine why the FCLOSE failed, correct the problem, then re- execute the command.

1112 **Message** Failed to close file "*name*" in the staging area. (STAGEMAN 1112)

Cause STAGEMAN received a bad status from the FCLOSE intrinsic while attempting the close the file.

Action Determine why the FCLOSE failed, correct the problem, then re-execute the command.

Message 1113 and 1114 not used.

1115 **Message** Failed to find the staging area in the Globals file. (STAGEMAN 1115)

Cause STAGEMAN failed to find an entry for the staging area in the HP Stage/iX Globals file when it expected to find one. This indicates a problem with the HP Stage/iX facility, and should be reported to Hewlett-Packard.

Action Contact you Hewlett-Packard Response Center for assistance.

Message 1116-124 not used.

1125 **Message** Could not find file "*name*" for getting LIF information. (STAGEMAN 1125)

Cause STAGEMAN was unable to find the file specified.

Action None

1126 **Message** LIF entry must be between 1 and *range*. Can't delete. (STAGEMAN 1126)

Cause Only 64 entries are allowed in the LIF Directory. Therefore STAGEMAN will not allow you to index outside of this range.

Action None

Message 1127-1129 not used.

1127 **Message** File equation "*name*" failed in moving file "*name*" to the staging area. CIERROR = *value* (STAGEMAN 1130)

Cause STAGEMAN received a Command Interpreter (CI) error in attempting to generate a file equation for moving the file a staging area.

Action Contact your Hewlett-Packard Response Center for assistance.

1128 **Message** COPY command failed in moving file "*name*" to the staging area. CIERROR = *value* (STAGEMAN

1131)

Cause STAGEMAN received a Command Interpreter (CI) error in attempting to copy the file into a staging area. The most likely reason for the copy to fail is an out of disk space condition (this is especially true if the file is restricted to LDEV1).

Action Determine why the COPY command failed, correct the problem, then re-execute the command (or Patch/iX process).

1129 **Message** Rename command failed in moving file "*name*" to the staging area. (STAGEMAN 1132)

Cause STAGEMAN received a Command Interpreter (CI) error in attempting to rename the file into a staging area.

Action Determine why the RENAME command failed, correct the problem, then re-execute the command (or Patch/iX process).

1130 **Message** Failed to purge file "*name*" after staging it. CIERROR = *value* (STAGEMAN 1133)

Cause STAGEMAN received a Command Interpreter (CI) error in attempting to purge a file after it was staged.

Action Determine why the PURGE command failed, then purge the file manually. There is no need to re-execute the command. However, if this failure occurred during a run of Patch/iX, the Patch/iX process may need to be restarted.

1131 **Message** Failed to do ALTFILE on file "*name*". CIERROR = *value* (STAGEMAN 1134)

Cause STAGEMAN received a Command Interpreter (CI) error in attempting to perform an ALTFILE command on the file to change its owner attribute.

Determine why the ALTFILE command failed. You can either re-execute the command after the problem is fixed, or just manually alter the owner with the ALTFILE CI command.

1132 **Message** FROM file "*name*" does not exist. (STAGEMAN 1135)

Cause The file specified in the FROM parameter does not exist.

Action Determine why the file does not exist, correct the problem, then re-execute the process. If this error occurred during a run of Patch/iX, then contact your Hewlett-Packard Response Center for assistance.

1133 **Message** FROM file "*name*" did not exist, but staged version did. No move done. (STAGEMAN 1136)

Cause This warning is issued when STAGEMAN discovers that

the file specified in the FROM parameter does not exist, but a version of the file does already exist in the staging area. This is a normal occurrence when Patch/iX is using STAGEMAN to stage files into a staging area while Patch/iX is in recovery mode (for instance, if it previously failed in the middle of staging files).

Action None

1134 **Message** Failed to set the ACD on file "*name*". CIERROR = *value* (STAGEMAN 1137)

Cause STAGEMAN received a Command Interpreter (CI) error in attempting to do an ALTSEC command to replace the current ACD on the staged file.

Action Contact your Hewlett-Packard Response Center for assistance.

1135 **Message** Failed to open staged file "*name*". (STAGEMAN 1138)

Cause STAGEMAN received a bad status from the HPFOPEN intrinsic while attempting to open a staged file for getting data on the file.

Action Determine why the file open failed. If you can determine and fix the problem re-execute the command (or restart the Patch/iX process). Otherwise, contact your Hewlett-Packard Response Center for assistance.

1136 **Message** Failed in FFILEINFO call for file "*name*". (STAGEMAN 1139)

Cause STAGEMAN received a bad status from the FFILEINFO intrinsic while attempting to get data on a staged file.

Action Contact your Hewlett-Packard Response Center for assistance.

1137 **Message** Failed to open file "*name*" for getting LIF information. (STAGEMAN 1140)

Cause STAGEMAN could not open the file. The reason is stated in the file system error message that appears above this one.

Action Determine why the file could not be opened, correct the problem, then re-execute the command or process.

1138 **Message** Failed in FFILEINFO call for file "*name*". (STAGEMAN 1141)

Cause STAGEMAN received a bad status from the FFILEINFO intrinsic while attempting to get data on the file (this data is needed for placing an entry for the file in the system LIF Directory so that the file is accessible from the ISL prompt).

Action Contact your Hewlett-Packard Response Center for assistance.

1139 Message Failed to get the sector address of file "*name*". (STAGEMAN 1142)

Cause STAGEMAN received a bad status from an internal routine while attempting to get the sector address of the file (this address is needed for placing an entry for the file in the system LIF Directory so that the file is accessible from the ISL prompt).

Action Contact your Hewlett-Packard Response Center for assistance.

1140 Message Got a bad sector address on file "*name*". Address = *value* (STAGEMAN 1143)

Cause STAGEMAN got a sector address on the file that was less than or equal to zero (this address is needed for placing an entry for the file in the system LIF Directory so that the file is accessible from the ISL prompt).

Action Contact your Hewlett-Packard Response Center for assistance.

1141 Message File "*name*" has a zero EOF. Can't place in bootable file directory (LIF). (STAGEMAN 1144)

Cause STAGEMAN attempted to place the file in the system LIF Directory (so that the file is accessible from the ISL prompt), but the file is empty.

Action Contact your Hewlett-Packard Response Center for assistance.

1142 Message File "*name*" is not contiguous. Can't place in bootable file directory (LIF). (STAGEMAN 1145)

Cause STAGEMAN attempted to place an entry for the file in the system LIF Directory (so that the file is accessible from the ISL prompt), but the file on disk is not contained within a single extent. Since ISL can only handle single-extent files, this is an error.

Action If possible, determine how the file ended up a multiple extent file (the number of extents can be displayed with the LISTF[ILE] ,2 command). To fix the problem, you can re-stage the file with STAGEFILE ;DISK=CONTIG (do an Expert Mode HELP on STAGEFILE for more information).

1143 Message Got a bad date string: "*name*". (STAGEMAN 1146)

Cause STAGEMAN encountered an internal error in trying to convert the date and time data for output.

Action Contact your Hewlett-Packard Response Center for assistance.

1144 **Message** `Failed to convert date with ALMANAC. (STAGEMAN 1147)`

Cause STAGEMAN received a bad status from the ALMANAC intrinsic while attempting to convert the date and time stamp for output.

Action Contact your Hewlett-Packard Response Center for assistance.

1145 **Message** `Failed to open the LIF Directory. (STAGEMAN 1148)`

Cause STAGEMAN received a bad status from the file system while attempting to open the system LIF Directory file, LIFDIREC.MPEXL.SYS. The reason why the open call failed should appear in a file system error message preceding this one.

Action Determine why the open call failed, correct the problem, then re-execute the command (or restart the Patch/iX process).

1146 **Message** `1149 not used.`

1147 **Message** `Failed to alter the security on file “`*`name`*`”. FALTSEC status = `*`value`*` (STAGEMAN 1150)`

Cause STAGEMAN received a bad status from an internal routine while trying to add or remove write/purge protection security on the file.

Action Contact your Hewlett-Packard Response Center for assistance.

Message 1151-1159 not used.

1160 **Message** `Failed to get file information for file “`*`name`*`”. FLABELINFO error code = (STAGEMAN 1160)`

Cause STAGEMAN received a bad status from the FLABLEINFO intrinsic while attempting to get file information on the file.

Action Contact your Hewlett-Packard Response Center for assistance.

Message 1161-1169 not used.

1170 **Message** `The HP Stage/iX Globals file is temporarily in use by another process. Can't complete command. (STAGEMAN 1170)`

Cause STAGEMAN was attempting to open the HP Stage/iX

Globals file (/SYS/hpstage/stage_globals), which stores critical information about the HP Stage/iX environment and all known staging areas. The Globals file could not be opened however because it was being held open exclusively by another process at the time. The other process was most likely STAGEMAN (or Patch/iX, which runs STAGEMAN) running in another job or session, since STAGEMAN always opens the Globals file for exclusive access during the execution of a command.

Action Either terminate the additional STAGEMAN process, or allow the command being executed by that process to complete. The command can then be re-executed (or the Patch/iX process restarted).

1171 Message Failed to open the HP Stage/iX Globals file. FSERR = *value* (STAGEMAN 1171)

Cause STAGEMAN received a bad status from the file system while attempting to open the HP Stage/iX Globals file (/SYS/hpstage/stage_globals), which stores critical information about the HP Stage/iX environment and all known staging areas.

Action Determine the cause of the file open failure, correct the problem, then re-execute the command (or restart the Patch/iX process).

1172 Message The contents file for "*name*" is temporarily in use by another process. Can't complete command. (STAGEMAN 1172)

Cause The staging area's contents file (/SYS/hpstage/stage_name/stage_contents), which contains critical information about the staging area, could not be opened because the file was being held open exclusively by another process at the time. The other process was most likely STAGEMAN (or Patch/iX, which runs STAGEMAN) in another job or session, since STAGEMAN always opens the relevant staging area contents file for exclusive access during the execution of each command.

Action Either terminate the additional STAGEMAN process, or allow the command being executed by that process to complete. The command can then be re-executed (or the Patch/iX process restarted).

1173 Message Failed to open the contents file for "*name*". FSERR = value (STAGEMAN 1173)

Cause STAGEMAN received a bad status from the file system while attempting to open the staging area's contents file (the name of the contents file is

/SYS/hpstage/stage_name/stage_contents).

Action Determine the cause of the file open failure, correct the problem, then re-execute the command (or restart the Patch/iX process).

1174 Message No contents file found in "*name*". Can't do command. (STAGEMAN 1174)

Cause STAGEMAN expected the staging area or directory to contain a contents file (for example, /SYS/hpstage/stage_name/stage_contents), which stores critical information about the corresponding staging area. However, the contents file was not found.

Action Check the spelling of the staging area name.

Message 1175-1179 not used.

error numbers are in the range 1001 - 1999. (STAGEMAN 1180 Message STAGEMAN error numbers are in the range 1001 - 1999. (STAGEMAN 1180)

Cause An ERRMSG command was issued with an error number that is out of the range of STAGEMAN's error messages.

Action Re-execute the command with a valid STAGEMAN error number. The error number is always displayed at the end of a STAGEMAN error message.

1181 Message DBINARY call failed in converting error number. (STAGEMAN 1181)

Cause STAGEMAN received a bad status from the DBINARY intrinsic call while attempting to convert the user's ERRMSG input to an integer.

Action Contact your Hewlett-Packard Response Center for assistance.

error number. (STAGEMAN 1182 Message "*name*" is not currently a STAGEMAN error number. (STAGEMAN 1182)

Cause The user entered a number for ERRMSG that currently does not correspond to a STAGEMAN error number.

Action Re-execute the command with a valid STAGEMAN error number. The error number is always displayed at the end of a STAGEMAN error message.

catalog. CATREAD Error = value (STAGEMAN 1183 Message CATREAD failed in reading text from the STAGEMAN catalog. CATREAD Error = value (STAGEMAN 1183)

Cause STAGEMAN received a bad status from the CATREAD intrinsic while attempting to read a message from the STAGEMAN catalog, STAGE000.PUB.SYS.

Action Contact your Hewlett-Packard Response Center for assistance.

1184 **Message** Found no cause/action text corresponding to "*name*". (STAGEMAN 1184)

Cause STAGEMAN expected to find cause/action text for the error number given with ERRMSG, but no corresponding text exists in the catalog.

Action Please report this problem to your Hewlett-Packard Response Center.

Message 1185-1302 not used.

1303 **Message** Invalid parameter length. (STAGEMAN 1303)

Cause The length of the parameter exceeds the maximum expected length.

Action Use a parameter with a shorter length.

1304 **Message** Command history stack is empty. (STAGEMAN 1304)

Cause There were no previous commands in the current run of STAGEMAN, so a DO or REDO command is meaningless.

Action None

1305 **Message** Command not found in command history stack. (STAGEMAN 1305)

Cause There was no previous command in the current run of STAGEMAN which matches the command the user has selected to DO or REDO.

Action None

1306 **Message** 1306 not used.

1307 **Message** Unrecognized command. (STAGEMAN 1307)

Cause STAGEMAN does not recognize this as a valid command.

Action Check your spelling on the command.

1308 **Message** This command is not yet supported. (STAGEMAN 1308)

Cause The user has selected a command which is not supported in this version of STAGEMAN, and therefore cannot be executed.

Action None

1309 **Message** This command has no associated functionality. (STAGEMAN 1309)

Cause The user has selected a command which should be valid, but is not internally recognized by STAGEMAN. This signifies a problem with the STAGEMAN utility.

	Action	Report this problem to your Hewlett-Packard Response Center.
1310	**Message**	`Error in accessing message catalog. (STAGEMAN 1310)`
	Cause	STAGEMAN could not access its message catalog file, STAGE000.PUB.SYS.
	Action	Make sure the catalog file exists and is not opened exclusively by another process.
1311	**Message**	`Invalid numeric index into command history stack. (STAGEMAN 1311)`
	Cause	The user has specified a value for the DO or REDO command which does not match a corresponding value in the command history stack.
	Action	None
1312	**Message**	`Command name length exceeds 16 characters. (STAGEMAN 1312)`
	Cause	The length of the command name specified by the user is greater than the maximum command length allowed by STAGEMAN (currently 16 characters).
	Action	None
1313	**Message**	`Insufficient capabilities to execute this command. (STAGEMAN 1313)`
	Cause	In order to execute commands which modify the HP Stage/iX environment, STAGEMAN requires users to have System Manager (SM) capability. To execute “read only” commands (LIST, for example) the user must have at least System Operator (OP) capability. This error indicates that one or both of these rules have been broken.
	Action	Alter the user to have the required capability, or run STAGEMAN under another user.
	Message	1314-1317 not used.
1318	**Message**	`Command only valid in interactive mode. (STAGEMAN 1318)`
	Cause	The command was issued in batch mode (in a file specified by USE, for example), but is only appropriate in interactive mode.
	Action	Execute the command in interactive mode.
1319	**Message**	`1319 not used.`
1320	**Message**	`Invalid command edit operation. (STAGEMAN 1320)`
	Cause	STAGEMAN is confused by the command edit operation

		attempted by the user.
	Action	Try editing the command in another way, or re-type the command.
	Message	1321-1501 not used.
1502	**Message**	`The HP Stage/iX Root Directory already exists. (STAGE 1502)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1503	**Message**	`The HP Stage/iX Base Archive directory already exists. (STAGE 1503)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1504	**Message**	`The staging area's directory already exists. (STAGE 1504)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1505	**Message**	`The staging area's directory does not exist. (STAGE 1505)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1506	**Message**	`Failed to create the Stage/iX Root Directory. (STAGE 1506)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1507	**Message**	`Failed to create the Stage/iX Base Archive Directory. (STAGE 1507)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard

Response Center for assistance.

1508 **Message** `Failed to create the HFS directory for the staging area. (STAGE 1508)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1509 **Message** `Failed to purge the HFS directory for the staging area. (STAGE 1509)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1510 **Message** `The HP Stage/iX Base Archive directory does not exist. (STAGE 1510)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1511 **Message** `Failed to purge the Stage/iX Base Archive Directory. (STAGE 1511)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1512 **Message** `The HP Stage/iX Root Directory does not exist. (STAGE 1512)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1513 **Message** `Failed to purge the HP Stage/iX Root Directory. (STAGE 1513)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1514 **Message** `The directory for staging area "`*`name`*`" is not empty.`

Couldn't purge. (STAGE 1514)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1515 **Message** The HP Stage/iX Import directory already exists. (STAGE 1515)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1516 **Message** Failed to create the Stage/iX Import Directory. (STAGE 1516)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1517 **Message** The HP Stage/iX Export directory already exists. (STAGE 1517)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1518 **Message** Failed to create the Stage/iX Export Directory. (STAGE 1518)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1519 **Message** ALTSEC command failed. (STAGE 1519)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1520 **Message** Contents file for staging area already exists. (STAGE 1520)

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1521 **Message** `Failed to create contents file for staging area. (STAGE 1521)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

If you get this error, contact your Hewlett-Packard Response Center for assistance.

1522 **Message** `Failed to open contents file for staging area. (STAGE 1522)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1523 **Message** `Failed to close contents file for staging area. (STAGE 1523)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1524 **Message** `Failed to purge contents file for staging area. (STAGE 1524)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1525 **Message** `Failed to read contents file header for staging area. (STAGE 1525)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1526 **Message** `The contents file for the staging area does not exist. (STAGE 1526)`

Cause This is an HP Stage/iX internal error which the user should not normally see.

Action If you get this error, contact your Hewlett-Packard Response Center for assistance.

1527 **Message** `Failed to write contents file header for staging area. (STAGE 1527)`

	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1528	**Message**	`Failed to clear write protection on the contents file.` `(STAGE 1528)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1529	**Message**	`Failed to clear store protection on the contents file.` `(STAGE 1529)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1530	**Message**	`Failed to set write protection on the contents file.` `(STAGE 1530)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1531	**Message**	`Failed to set store protection on the contents file.` `(STAGE 1531)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1532	**Message**	`Failed to FPOINT in contents file for staging area.` `(STAGE 1532)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1533	**Message**	`Failed to FREAD contents file for staging area.` `(STAGE 1533)`

	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1534	**Message**	`Failed to FWRITE to contents file for staging area. (STAGE 1534)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1535	**Message**	`Failed to append to the contents file description record. (STAGE 1535)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1536	**Message**	`Failed to replace the contents file description record. (STAGE 1536)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1537	**Message**	`Exceeded the maximum number of files allowed in a staging area. (STAGE 1537)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
	Message	1538-1539 not used.
1540	**Message**	`The HP Stage/iX Import directory does not exist. (STAGE 1540)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1541	**Message**	`Failed to purge the HP Stage/iX Import Directory. (STAGE 1541)`

	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1542	**Message**	`The HP Stage/iX Export directory does not exist. (STAGE 1542)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1543	**Message**	`Failed to purge the HP Stage/iX Export Directory. (STAGE 1543)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
	Message	1544-1549 not used.
1550	**Message**	`The LIF directory is full. (STAGE 1550)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1551	**Message**	`The Base Archive LIF area is full. (STAGE 1551)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
	Message	1552-1589 not used.
1590	**Message**	`FLABELINFO call failed on initialized check. (STAGE 1590)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
	Message	1591-1599 not used.
1600	**Message**	`HP Stage/iX refused to rename a file during bootup. (STAGE 1600)`
	Cause	This is an HP Stage/iX internal error which the user

		should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1601	**Message**	`A problem occurred switching a file during bootup. (STAGE 1601)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1602	**Message**	`A problem occurred switching a file during bootup. (STAGE 1602)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1603	**Message**	`Had to truncate a message to 80 characters. (STAGE 1603)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1604	**Message**	`START.MPEXL.SYS and NL.PUB.SYS do not match. (STAGE 1604)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1605	**Message**	`Internal Error: An invalid file group option was passed. (STAGE 1605)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1606	**Message**	`Failed to write to or read from the HP Stage/iX Globals file. (STAGE 1606)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.

	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1607	**Message**	`Failed to write to the XM post file. (STAGE 1607)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1608	**Message**	`Internal Error: FCONTROL of a file failed. (STAGE 1608)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1609	**Message**	`Internal Error: A bad file number was passed to a procedure. (STAGE 1609)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1610	**Message**	`Internal Error: FCLOSE of a file failed. (STAGE 1610)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1611	**Message**	`Internal Error: Record sizes do not match within the HP Stage/iX Globals file. (STAGE 1611)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1612	**Message**	`FALTSEC returned a bad status while protecting the HP Stage/iX Globals file. (STAGE 1612)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1613	**Message**	`Internal Error: Found an unexpected OTHERWISE`

		`case. (STAGE 1613)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1614	**Message**	`Internal Error: A string size of < 1 was passed to a procedure. (STAGE 1614)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
		If you get this error, contact your Hewlett-Packard Response Center for assistance.
1615	**Message**	`Internal Error: Failed to open the HP Stage/iX Globals file. (STAGE 1615)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1616	**Message**	`Internal Error: The HP Stage/iX Globals file unexpectedly exists. (STAGE 1616)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1617	**Message**	`The LIF Directory is full. (STAGE 1617)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1618	**Message**	`Internal Error: A bad LIF Directory pointer was passed. (STAGE 1618)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1619	**Message**	`Internal Error: Attempted to delete an already deleted LIF Directory entry. (STAGE 1619)`
	Cause	This is an HP Stage/iX internal error which the user

		should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1620	**Message**	`Internal Error: No START or STARTBASE entry was found in the LIF Directory. (STAGE 1620)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1621	**Message**	`Internal Error: Found an unexpected STARTBASE entry in the LIF Directory. (STAGE 1621)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.
1622	**Message**	`Internal Error: The staging area entry could not be found in the HP Stage/iX Globals file. (STAGE 1622)`
	Cause	This is an HP Stage/iX internal error which the user should not normally see.
	Action	If you get this error, contact your Hewlett-Packard Response Center for assistance.

Glossary

A

Activity A subset of steps performed for an individual task. For example, an activity would be qualifying patches using HP Patch/iX or Creating a CSLT. Activities are divided into steps.

Add-on Adding purchased sub-system products to the operating system. Purchased sub-system products are also know as SUBSYS products. Modifications to already installed SUBSYS products is called an Update.

AUTOINST Tool used to install, update, add-on, and apply patches to the operating system. This tool is used for processes that have tape as source media. Used to create a CSLT for modifying the operating system, operates while the system is shutdown.

B

Backdate To revert your system software to a previous version level than the one you have currently installed.

Base Set of files that were laid down by the most recent `INSTALL` or `UPDATE` operations. This represents the starting point from which all HP Stage/iX activities take place.

Base Location Where a file officially resides, for example, `NL.PUB.SYS`. Also called the Natural location.

C

CD-ROM One type of media used to ship the operating system components. A CSLT is created from the files of a CD-ROM. The CSLT is used to apply the changes to the system software.

CSLT Customized System Load Tape. You create this as a single entity and use it to install, update, add-on, or apply patches to your system.

CSLT/STORE Tape A Customized System Load Tape with a `STORE` portion of non-SLT files appended to the end. You create this as a single entity and use it to install, update, add-on, or apply patches to your system.

D

DDS Digital Data Storage form of tape media.

E

Express Process for distributing PowerPatch releases. Typically an express contains a PowerPatch tape and a SUBSYS tape. Expresses are cumulative and are specific to an operating system version level.

F

Factory Preload Tape If the system is delivered with the ordered software factory loaded onto the internal disk, a tape containing a copy of the loaded software is supplied with the system. This tape is referred to as a factory preload tape (FPT). The FPT is a CSLT/STORE backup of the system taken after pre-installation was completed. The FPT will not contain your custom configuration.

Factory SLT Factory supplied System Load Tape. One of the two minimum requirements for complete system software. This applies when the system software is shipped on tape media and is not pre-loaded. Contains the OS base to perform basic functions. The functions needed to boot the system, configure disks, and restore files. It does not contain any purchased products.

Force An option when using the HP Patch/iX patch management tool. Forcing a patch tells HP Patch/iX to include (add) the selected patch in the patch installation.

FOS Fundamental Operating System. One of the two minimum requirements for complete system software. Contains the utilities required, in addition to the Factory SLT, for a fully functioning OS. This includes editors, linkers, and minimum networking utilities.

FPT See Factory Preload Tape.

H

HPINSTAL Tool used to install, update, add-on, and apply patches to the operating system. This tool is used when CD-ROM is the source media. Used to create a CSLT for modifying the operating system, operates while the system is running.

HP Patch/iX Tool used to add-on, apply, and manage patches on the operating system. This tool is used when tape is the source media. Also works with electronically downloaded patch files (Reactive patches). Used to create a CSLT for modifying the operating system, operates while the system is running.

HP Stage/iX Tool used to apply and manage patches on the operating system through staging areas on disk. This tool is used when tape or disk is the source media. Also works with electronically downloaded patch files (Reactive patches). Used to create a CSLT for modifying the operating system, operates while the system is running.

HPSL Hewlett-Packard Support Line. An on-line source, it provides a complete database of problem solving information. This includes patches and patch information.

I

Install Installing the operating system. The install variations are: new install and re-install.

This process DESTROYS all existing files.

INSTALL An ISL utility that replaces all files on the system disk with files from the boot tape, typically an SLT.

L

LDEV Logical Device. Value that points to a hardware device address. LDEV 1 is the hard disk on which the system software is located. A typical value for LDEV 1 is 1.

M

Media There are three media options for performing operating system modification tasks: tape, CD-ROM, and disk drive. Reactive patches ship on tape or are electronically downloaded directly to your disk drive. PowerPatches are always shipped on tape. The SLT, FOS, and SUBSYS ship on tape or CD-ROM. CSLTs are always on tape. Staging Areas are on your disk drive.

N

Natural Location Where a file officially resides, for example, `NL.PUB.SYS`. Also called the Base location.

New Install Installing the operating system (OS) on new hardware that did not have the OS installed at the factory. This process DESTROYS all existing files. Do not perform this task on an existing system.

P

Patch Adding to and modifying existing files to enhance system software functions. Patches are shipped from the Response Center or in bundled packages called Expresses or PowerPatch tapes or they are downloaded from HPSL

Patch Only Task that may include applying either or both PowerPatch patches and Reactive patches.

Patch Qualification The process the patch tools go through to determine whether or not a particular patch should be installed on a system.

PowerPatch A bundled set of patches for a specific version of the operating system. By applying PowerPatch to your system proactively, you can avoid experiencing known problems and increase your system's reliability. PowerPatches are shipped on tape media.

Process The collection of steps required to perform the installation, update, add-on, and patch activities

- The Process is divided into Tasks.

- Tasks are divided into Activities.
- Activities are divided into Steps.

R

Re-Install Installing the system software over the existing system software. This process DESTROYS all existing files. If you have your files on backup, you can restore them. Do a re-install when a disk containing the *MPEXL_system_volume_set* is replaced.

Reactive Patch A patch that is sent to you from the Hewlett-Packard Response Centers or downloaded from HPSL. These patches fix a specific problem that you are encountering

Remote System A non-central (remote) system relative to the system you are currently on. When you've created a CSLT from a CD-ROM, you have the option to make multiple, site specific, CSLTs to apply to non-central systems.

S

SCSI Small Computer Systems Interface. A type of connecting device between the main system and peripherals.

SLT System Load Tape. See Factory SLT and CSLT.

Staging Area A directory location on disk in which files for patches and/or new product versions are kept.

Steps Individual actions contained within the sections and chapters of this book. You perform only the steps that apply to your specific activity. Steps contain a description of the action, the keystrokes required to complete the action, and usually, the response to the action.

Store Tape A `store` only tape contains non-SLT patches that you are applying to your system. See also CSLT/`store` Tape.

SUBSYS Sub-system products. One of the components used to add products you purchase in addition to the operating system. When you order purchased products you receive a customized SUBSYS tape that contains all the add-on products you have ordered, including updates to products you have already installed, and new or existing products you just ordered.

T

Tape One type of media used to ship the operating system components, and apply changes to the system software

Task A subset of steps performed for an individual process. For example, a task would be adding-on purchased products and reactive patches to your operating system. Tasks can be divided into activities depending upon the task and the section. A complete task is all of the steps required to perform that task.

U

Update Changing the current operating system version to a more recent operating system version.

UPDATE An ISL utility that replaces existing operating system files with files from tape, typically a CSLT. Primarily used to replace a current version of the operating system with another version.

V

Veto An option when using the HP Patch/iX patch management tool. Vetoing a patch tells HP Patch/iX to not include (remove) the selected patch from the set of patches to be installed. You can also veto an update to a previously installed product.

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