900 Series HP 3000 Computer Systems

HP 3000 MPE/iX System Software Maintenance Manual

Release 5.5 (C.55.00)

Using Tape, CD-ROM, and Staging Areas to Install, Update, Add-on, and /or apply PowerPatch, and/or Reactive Patch

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Printing History

This document replaces the following three manuals:

- *HP 3000 MPE/iX Installation, Update, and Add-On Manual MPE/iX Release 5.0* (General) (36123-90001)
- *Using CD-ROM to Update Your HP 3000 System Software* (B3159-90001)
- *HP 3000 MPE/iX PowerPatch Installation Manual MPE/iX Release 5.0* (C.50.02) (30216-90185)

The following table lists the printings of this document, together with the respective release dates for each edition. The software version indicates the version of the software product at the time this document was issued. Many product releases do not require changes to the document. Therefore, do not expect a one-to-one correspondence between product releases and document editions.

Edition	Date	SUBSYS Software Version	PowerPatch Software Version	Purpose
First Edition	July 1996	C.55.00	n/a	OS release

Preface

This manual describes how to install, update, add-on purchased subsystems, or apply patches to Release 5.5 of the MPE/iX Operating System using either tape or CD-ROM source media.

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 “Read Me!”, provides basic concepts, describes how to use this manual.

Chapter 2 “Selecting Your Task Checklist”, provides checklists for performing the processes described in this manual. These are not keystroke summaries, rather the checklists list what sections in the manual you do and DO NOT 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.

In addition, this manual contains the following appendices:

Appendix A “Manually Installed Products”

Appendix B “Configuration Tables”

Appendix C “Reserving 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”

Additional References

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

System Software Subject	Required and 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* (32650-90042).	x	x	x	x
For reviewing accounts, checking passwords, and security information.	*Performing System Management Tasks* (32650-90004) and *Manager's Guide to MPE/iX Security* (32650-90474).	x	x	x	x
For Security Monitor security information	*HP Security Monitor/iX Managers Guide* (32650-0455)	x	x	x	x
For the VOLUTIL utility.	*Volume Management Reference Manual* (32650-90045).		x	x	x
For systems with NS3000/iX.	*HP3000/iX Network Planning and Configuration Guide* (36922-90033) and *Using the Open View DTC Manager Manual* (D2355-90001).	x	x	x	x
For DTS (Terminal I/O) and DTCs and PC-based networks.	*Configuring Systems for Terminals, Printers, and Other Serial Devices* (32022-61000) and *DTC Network Planning and Configuration Guide* (D2355-90012).		x	x	x
For OpenView Console or OpenView System Manager	*HP OpenView Console Manager's Guide* (B3118-90002) and *HP OpenView System Manager Manager's Guide* (36936-61002).		x	x	x
For the NMMGR utility.	*Using the Node Management Services (NMS) Utilities* (32022-90041).	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* (32650-90004)		x	x	x
For HP Resource Sharing and the installation of either the software certificate or temporary license code.	*HP Resource Sharing for MPE/iX* (B1718-90002).		x	x	x
For Information Access.	*HP Information Access Server Management Manual* (B1716-90018).		x	x	x
For AutoRestart/iX.	A*utoRestart/iX Reference Manual* (36375-90001).		x	x	x
For HP ALLBASE/4GL developer systems.	*Localizing and Customizing System Information Reference Manual* (32650-90046), *HP ALLBASE/4GL Developer Administration Manual* (30601-64001), and *HP ALLBASE/4GL Run-Time Administration Manual* (30602-64001).		x	x	x

System Software Subject	Required and Recommended Manuals	Type of Installation			
		Power-Patch Only	Add-On, Power-Patch	Update, Power-Patch	Install, Power-Patch
For HP ALLBASE/SQL developer systems.	*ALLBASE/SQL Database Administration Guide* (36216-90005)		x	x	x
For HP4STOA.	*HP ALLBASE/4GL Developer Reference Manual Volume 2* (30601-64204).		x		x
For HP Telex II.	*Administrator's Guide to HP Telex II* (36571-90013).		x	x	x
For HP Predictive Support.	*HP Predictive Support User's Guide* (50779-90012) and *HP Predictive Support User's Guide Addendum* (50779-90018).	x	x	x	x

Conventions

This section lists the typographic conventions used in this manual.

`COURIER`

In a syntax statement, commands and keywords are shown in courier font characters. The characters must be entered in the order shown; however, you can enter the characters in either uppercase or lowercase. For example:

`COMMAND`

can be entered as any of the following:

`command Command COMMAND`

It cannot, however, be entered as:

`COMM COM_MAND COMAMND`

`courier italics`

In a syntax statement or an example, a word in italics courier font represents a parameter or argument that you must replace with the actual value. In the following example, you must replace filename with the name of the file:

`COMMAND` *`filename`*

bold italics

In paragraphs, a word in bold italics represents a new term.

punctuation

In a syntax statement, punctuation characters (other than brackets, braces, vertical bars, and ellipses) must be entered exactly as shown. In the following example, the parentheses and colon must be entered:

(*`filename`*):(*`filename`*)

<u>UNDERLINING</u>

Within an example that contains interactive dialog, user input and user responses to prompts are indicated by underlining. In the following example, yes is the user's response to the prompt:

`Do you want to continue? >>` <u>YES</u>

{ }

In a syntax statement, braces enclose required elements. When several elements are stacked within braces, you must select one. In the following example, you must select either `ON` or `OFF`:

$$\texttt{COMMAND}\left\{\begin{array}{c}\texttt{ON}\\ \texttt{OFF}\end{array}\right\}$$

[ ]

In a syntax statement, brackets enclose optional elements. In the following example, *`option`* can be omitted:

`COMMAND` *`filename`* [*`option`*]

When several elements are stacked within brackets, you can select one or none of the elements. In the following example, you can select *`option`* or *`parameter`* or neither. The elements cannot be repeated.

$$\texttt{(command)}\,\textit{filename}\left[\begin{array}{c}\textit{option}\\ \textit{parameter}\end{array}\right]$$

[…]	In a syntax statement, horizontal ellipses enclosed in brackets indicate that you can repeatedly select the element(s) that appear within the immediately preceding pair of brackets or braces. In the example below, you can select parameter zero or more times. Each instance of parameter must be preceded by a comma: [,*parameter*][...] In the example below, you only use the comma as a delimiter if parameter is repeated; no comma is used before the first occurrence of parameter: [*parameter*][,...]
| … |	In a syntax statement, horizontal ellipses enclosed in vertical bars indicate that you can select more than one element within the immediately preceding pair of brackets or braces. However, each particular element can only be selected once. In the following example, you must select A, AB, BA, or B. The elements cannot be repeated. { A / B }|…|
…	In an example, horizontal or vertical ellipses indicate where portions of an example have been omitted.
Δ	In a syntax statement, the space symbol Δ shows a required blank. In the following example, parameter and parameter must be separated with a blank: (*parameter*)Δ(*parameter*)
⬭	The symbol ⬭ indicates a key on the keyboard. For example, RETURN represents the carriage return key or Shift represents the shift key.
CTRL character	CTRL character indicates a control character. For example, CTRL Y means that you press the control key and the Y key simultaneously.
➦	The ➦ arrow symbol indicates where you begin the steps for an activity.
Note:	Notes provide information that explain something beyond the surrounding text. Frequently, notes explain options and choices.
Caution:	Cautions explain about something that, if they are not followed, will result in an error.
Warning!	Warnings explain about something that, if they are not followed, will result in damage to your computer system.

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Read Me! 1

This book, the *HP 3000 MPE/iX System Software Maintenance Manual* manual, describes how to install or update the operating system, add-on purchased sub-system products, and/or apply patches to your HP 3000 system software using either CD-ROM or tape as source media and tape or stage (disk) media to apply the changes to your system. This manual replaces the previous installation, update, add-on, and PowerPatch manuals. The old manual names are:

- *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*

Warning!

Experienced users! This manual has changed **significantly**. You must follow the checklist for your task to ensure that your system will not be put into an unknown state. Refer to Chapter 2 “Selecting Your Task Checklist”.

Introducing the New Manual

This manual has a completely new format and structure. The major changes are in the following:

- Layout
- Task descriptions
- Checklists

New Layout

This manual is divided into chapters. Each chapter is divided into sections. Section components are illustrated in Figure 1-1.

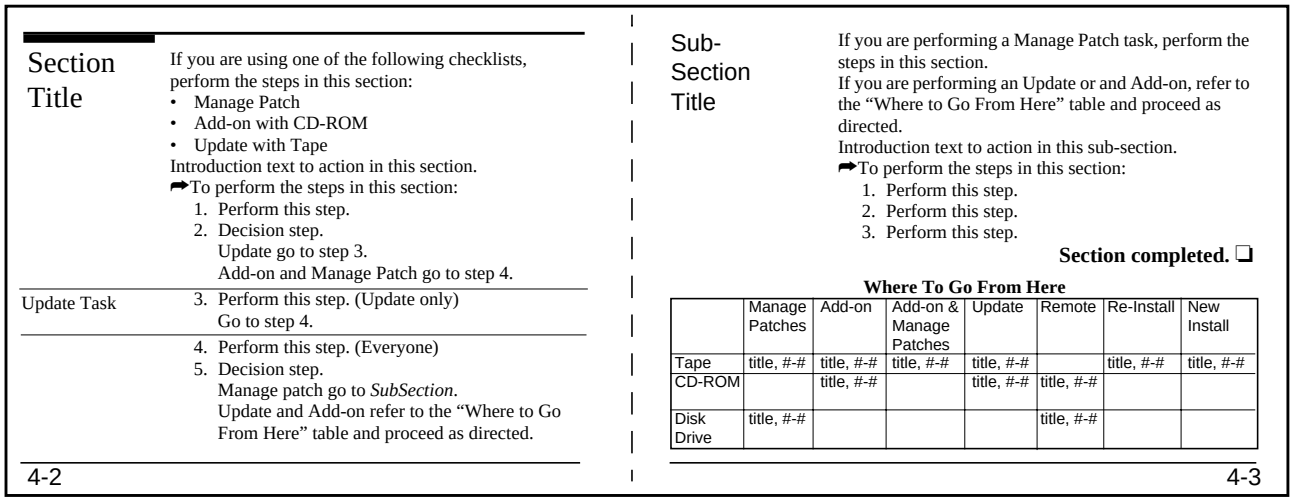


Figure 1-1 Sample Parts of a Section

Each section in this manual has been designed to deliver the information you need quickly and easily. All the sections follow the same pattern for presenting information. Each section has the following components:

- **Section title**

  A description of the activities performed within the section. The title matches the section titles on the task checklist.

- **Introduction**
  - Lists which tasks the section applies to
  - Describes the activity performed in the section
  - Define terms that are required to understand the steps in the section.

- **Steps**

  An arrow (➦) marks the beginning of each set of steps to be performed.

- **Subsection title**

  A division of the information and activities in a section.

  In some cases, you need to read and perform the steps in each subsection. In other cases, you need to determine which subsection applies to your task. The introduction of the main section will tell you which actions you need to take.

- **Checkbox**

  An check box (☐) marks the end of each section. Use this as you complete each section to verify which sections in the manual you followed. You can optionally date and initial the check box for tracking purposes, too.

- **Exceptions**

  Because the total process is a blend of several tasks, occasionally, selected steps in one section will not apply to all tasks. These exceptions apply to individual steps.

- **Jump table**

  Titled “Where To Go From Here”, it lists the title and page of the next section you need to read. Refer to “Using the Jump Tables” on page 1-3 for more information.

Understanding the Exceptions

To note the difference between various aspects of the tasks, we use decision and exception steps. Decision steps state the condition of a deviation in the process. Exception steps describe the action to be performed.

Typically, a decision step directs you to another step. Sometimes a decision step directs you to another section in the manual. In all cases, you are directed where to proceed with your task. Refer to Figure 1-2 for an illustration of decision and exception steps.

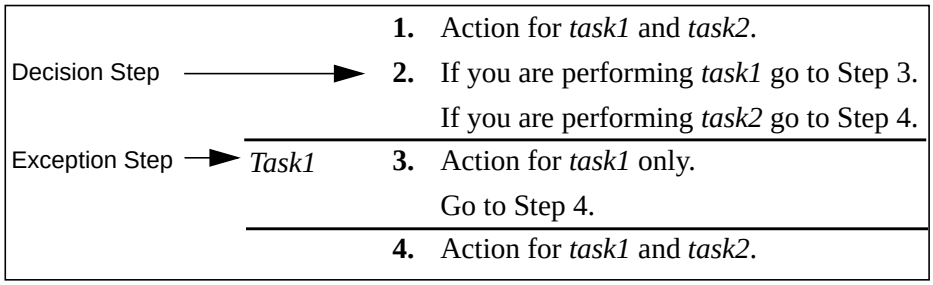


Figure 1-2 Sample Task Exception

To use exception markers:

1. Review the decision step and determine if the exception applies to your task.
2. Proceed to the step or location listed in the decision step.

   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.
3. Proceed to the next step or location for your task as listed.

Using the Jump Tables

The jump table provides a quick reference to the next section for your task process. Jump tables represent only forward progression through your task. If you need to backtrack to where you were previously, refer to your task checklist.

To use the "Where To Go From Here" jump table:

1. Lookup the task that you are performing.

   Tasks are: Manage Patches, Add-on, Add-on and Manage Patches, Update, Remote, New Install, Re-install.
2. Lookup the media you are using.

   Media options are: Tape, CD-ROM, or Disk Drive.
3. Proceed to the section indicated in the corresponding table cell.

The table below is a sample "Where To Go From Here" table.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	Section Title on page #-#	Section Title on page #-#	Section Title on page #-#	Section Title on page #-#		Section Title on page #-#	Section Title on page #-#
CD-ROM		Section Title on page #-#		Section Title on page #-#	Section Title on page #-#		Section Title on page #-#
Disk Drive	Section Title on page #-#				Section Title on page #-#		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Describing the Task Process

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

1. Planning for Your Task (Chapter 3)
2. Preparing the Modification (Chapter 4)
3. Modifying Your System (Chapter 5)
4. Finishing Up (Chapter 6)

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 described in chapters and sections that apply to your specific task. To guide you through this process, use your task checklist.

Using the Task Checklist

The checklists in this manual are **required** in order to complete your system modification task correctly. The checklists have been designed to provide:

- A list of the specific sections you need to complete to perform your task.

  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.
- A worksheet for recording information about your task.

  Blank spaces are provided to log filenames, disk space values, start and ending times, plus system specific, change specific information. Place a check on the line in front of each section title as you complete the section.
- A reference to the sequence of previous as well as next sections.

  If you want to double check what you did previously, read your checklist and refer to the section(s) listed.
- A scheduling tool.

  Each task is divided into Phase 1 and Phase 2. Phase 1 activities typically occur during working hours, while the system is up. Phase 2 activities typically occur during off-hours, and require that the system is down. Review the activities for each Phase and schedule your task as appropriate.

Introducing HP Patch/iX

HP Patch/iX is a new tool that has been added to your system software. This tool was developed to answer your need for managing your patches. Use this tool 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 Components

HP Patch/iX is a screen-based, menu-driven tool. You 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 Patch/iX has the following types of screens:

Menu Screen—The menu screen displays activity options.

Selection Screens—Selection screens display a list of items with a mark-box next to each item.

Help Screen—Help screens provide information about HP Patch/iX activity screens. If an error has occurred, Help screens list cause and action information for the current error.

Figure 1-3 is a sample screen.

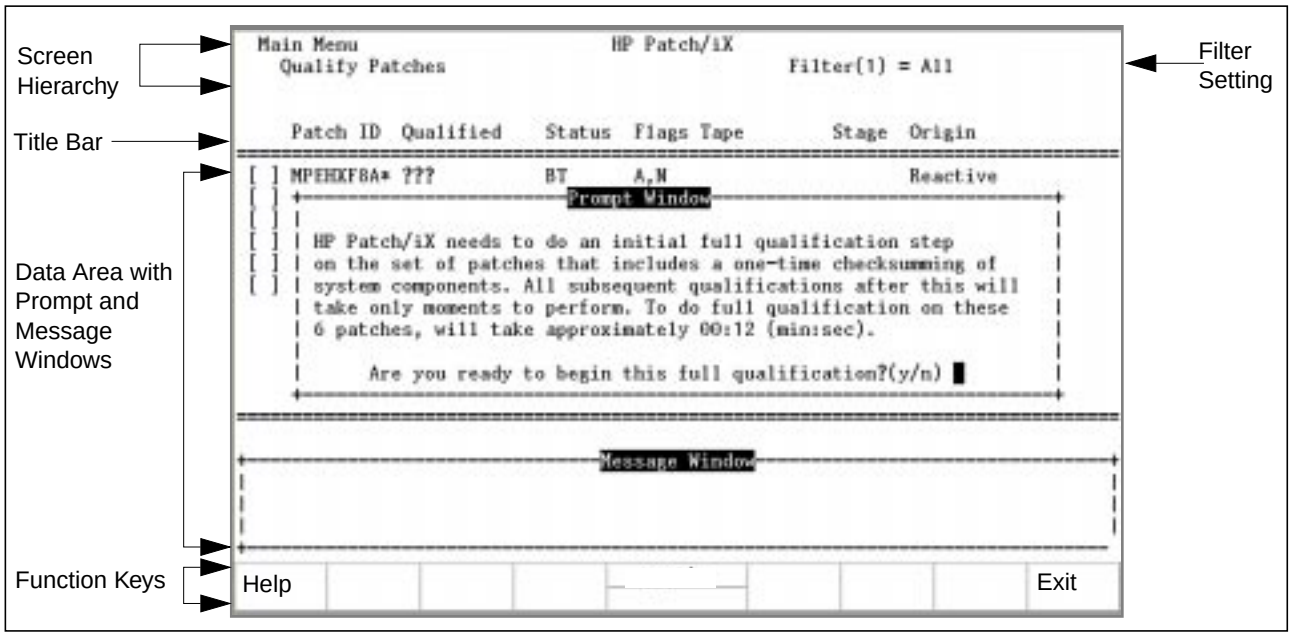


Figure 1-3 HP Patch/iX Screen Components

Each screen has:

Screen Hierarchy—This area displays the tree of options you selected from the Main menu.

Filter Setting—This area lists the current Filter option. Filter settings apply to viewing lists of patches only.

Title Bar—This area provides heading titles for the contents of the listed data in the screen.

Data Area—This area displays the content and purpose of the screen. Lists for selection and highlighting display in this area. Prompt windows requiring response display in this area. The Message (shown), Information, and Error windows are informational windows and clear automatically.

Function Keys —This area provides activity-specific action choices. The Help (F1) and Previous/Exit (F8) function keys are always available.

HP Patch/iX also has pop-up windows, they are as follows:

Information Windows—Information windows display scrollable status information as activities are processing.

Prompt Windows—Prompt screens require a response to continue in an activity. Typically, these screens request confirmation for continuing or specific information such as LDEV numbers.

Message Windows—This window displays a few line description of activities, processes, options, and choices. While certain activities are progressing, message windows display either a series of dots <.....> which indicates activity, or bars [||||||||||] which indicate percent compete.

Error Windows—This window displays error messages. Press the Help (F1) function key to display error cause and action information.

Introducing HP Stage/iX

HP Stage/iX is a new 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 "HP Stage/iX Reference" for reference information on HP Stage/iX commands and staging area handling.

Use HP Stage/iX to place PowerPatch and/or 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 three interfaces:

HP Patch/iX menus—Once HP Stage/iX is initialized, HP Patch/iX allows you to stage patches to staging areas (as well as create CSLT/`STORE` tapes in the usual fashion). Refer to "Introducing HP Patch/iX" on page 1-4 for information about HP Patch/iX.

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

The `STAGEISL` utility—This 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's 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 into 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's 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 "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 5.5 version of the system software.
2. You initialize HP Stage/iX.
3. Through HP Patch/iX you:
   a. Select the patches you want to apply to your system.
   b. Specify that you want the patches 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 to 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 and 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.

Summary of Changes to This Manual

Directions and content that have changed since the last version of the Installation, Update, and Add-on or PowerPatch manuals.

- Installation instructions for the manually installed product ALLBASE/SQL have been replaced. Refer to “Installing ALLBASE/SQL” on page A-7.
- A new tool has been added, HP Patch/iX. Refer to “Manage Patches” on page 2-3 and “Add-on with Tape and Manage Patches” on page 2-11 for instructions on using this tool to perform your system changes.

  Use HP Patch/iX to:
  - ❏ Manage all the patches you apply to your system.
  - ❏ Apply Reactive patches as well as PowerPatches to your system.
  - ❏ Add-on purchased products, PowerPatches, and Reactive patches at the same time.
- A new tool has been added, HP Stage/iX. Refer to “Manage Patches by Staging Area” on page 2-5 for instructions on using this tool to apply patches to your system.

  Use HP Stage/iX to:
  - ❏ Create staging areas on disk to apply, test, and easily (through a re-boot) backout patching solutions.

List of Terms

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.
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.
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.
DDS	Digital Data Storage form of tape media.
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.
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.
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.
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.
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.
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.
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.
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.
Phase 1	A logical, more than physical, split of the modification process. Depending upon source media and tools used, during this phase the users can still be logged on the system. This phase typically takes you through creating a CSLT or `STORE` tape for applying changes to the system software.

Phase 2	A logical, more than physical, split of the modification process. During this phase, typically, you need to log the users off and shutdown the system. This phase includes applying the modification to the system and bringing the system up.
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.
Re-Install	Installing the system software over the existing system software. This process DESTROYS all existing files, unless you have your files on backup, then you can restore them. You 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.
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.
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.
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.

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.
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 products

Selecting Your Task Checklist 2

Begin Here

This chapter describes how to select your task checklist and contains a copy of each possible task checklist. **All tasks** require the information and steps in this chapter.

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

1. **Select Your 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.

   a. Review Table 2-1 on page 2-2.

   b. Find the row in the table that matches your task, media, and patching situation.

   c. Read across the table and find the title and page number of the checklist(s) you need to follow.

2. **Make a copy of the checklist(s) to prevent flipping backward through the manual.**

   Optionally, use the checklist as a record sheet for your task. Space is provided to record task reference information.

3. **Read and perform the steps in each section listed on the checklist and ONLY the sections listed on the checklist.**

   For each section:

   a. Complete the steps in the section.

   b. Sections include steps for performing multiple tasks.

      If a step applies to specific tasks and not to all tasks, it is marked as an exception. If you are not performing the task listed for the exception, ignore the step.

   If you see two checklist titles at the end of the row that matches your task, media, and patching situation in Table 2-1 on page 2-2:

   a. Follow and perform the activities in the first checklist.

   b. Then follow and perform the activities in the second checklist.

4. **Refer to either your task checklist or the "Where To Go From Here" jump table for the next section in your task process.**

   The referenced section in the table matches the task checklist. Refer to "Using the Jump Tables" on page 1-3.

Table 2-1 Select Your Task Checklist

Task Option	Target System	Source Media[1]	Modifying Media	Patch Option	• Checklist(s) to Use
Patch Only	Local system	Tape	Tape	PowerPatch	• "Manage Patches" on page 2-3
				Reactive	
				PowerPatch & Reactive	
		Tape	Disk	PowerPatch	• "Manage Patches by Staging Area" on page 2-5
				Reactive	
				PowerPatch & Reactive	
	Remote system	Tape	Disk	PowerPatch	• "Manage Patches by Staging Area" on page 2-5 • "Distributing Staging Areas to Remote Systems" on page 2-7
				Reactive	
				PowerPatch & Reactive	
Add-on SUBSYS products	Local system	Tape	Tape	None	• "Add-on with Tape" on page 2-9
				PowerPatch	• "Add-on with Tape and Manage Patches" on page 2-11
				Reactive	• "Add-on with Tape" on page 2-9 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	• "Add-on with Tape and Manage Patches" on page 2-11
		CD-ROM	Tape	None	• "Add-on with CD-ROM" on page 2-13
				PowerPatch	
				Reactive	• "Add-on with CD-ROM" on page 2-13 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	
Update OS & optionally, Add-on SUBSYS products	Local system	Tape	Tape	None	• "Update with Tape" on page 2-15
				PowerPatch	
				Reactive	• "Update with Tape" on page 2-15 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	
		CD-ROM	Tape	None	• "Update with CD-ROM" on page 2-17
				PowerPatch	
				Reactive	• "Update with CD-ROM" on page 2-17 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	
	Remote system	CD-ROM	Tape	None	• "Update with CD-ROM" on page 2-17 • "Modify Remote System" on page 2-19
				PowerPatch	
				Reactive	• "Update with CD-ROM" on page 2-17 • "Modify Remote System" on page 2-19 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	
Re-Install OS	Local system	CSLT	Tape & optionally, Disk	None	• "Re-Install Using a CSLT" on page 2-21
				PowerPatch	
				Reactive	• "Re-Install Using a CSLT" on page 2-21 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	
New Install OS	Local system	Tape	Tape	None	• "Install a New System" on page 2-23
				PowerPatch	
				Reactive	• "Install a New System" on page 2-23 • "Manage Patches" on page 2-3
				PowerPatch & Reactive	

1. Source data applies to SLT, FOS, and SUBSYS components. PowerPatches are shipped on tape media. Reactive patches can be received through electronic downloading.

Manage Patches

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

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

The path to follow in the "Where to Go From Here" jump table is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	Section Title on page #-#						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Patch Tape Media" on page 3-9

_____ "Estimating Disk Space" on page 3-20

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for Tape Tasks" on page 4-1

_____ "Installing HP Patch/iX" on page 4-9

_____ "Starting the Patch Management Tools" on page 4-20

Log onto a terminal.

_____ "Selecting HP Patch/iX Activities" on page 4-23

_____ "Viewing Patches" on page 4-29

_____ "Qualifying Patches" on page 4-32

_____ "Creating a Patch Tape or Staging Area Using HP Patch/iX" on page 4-37

Record Manually Installed Products:

_____

_____

_____ "Exiting HP Patch/iX" on page 4-42

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 “Modifying Your System”

Begin Phase 2. Exclusive access to the system required.

_____ “Securing the System” on page 5-32

Log onto the system console.

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

_____

_____

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

_____

_____ “Applying the Modification” on page 5-40

If a CSLT/`STORE` has been created, proceed with this section. This section is not required to apply a `STORE` tape only, proceed to “Rerunning HP Patch/iX” on page 5-53.

Shutdown the system.

_____ “Restarting the System” on page 5-44

If a CSLT/`STORE` has been created, proceed with this section. This section is not required to apply a `STORE` tape only, proceed to “Rerunning HP Patch/iX” on page 5-53.

_____ “Rerunning HP Patch/iX” on page 5-53

Chapter 6 “Finishing the Process”

_____ “Configuring Data Comm and UPS” on page 6-1

_____ “Cross Validating” on page 6-4

_____ “Preparing for Final Reboot” on page 6-6

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Performing the Final Reboot” on page 6-16

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Finishing Up” on page 6-24

Phase 2 completed.

Record system change:

System type: _____ System name: _____
Date change made: _____ Change performed by: _____
OS version from: _____ OS version to: _____
Comments:

Manage Patches by Staging Area

Follow 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:

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

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive	Section Title on page #-#						

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Patch Tape Media" on page 3-9

_____ "Estimating Disk Space" on page 3-20

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for Tape Tasks" on page 4-1

_____ "Installing HP Patch/iX" on page 4-9

_____ "Initializing HP Stage/iX" on page 4-10

_____ "Starting the Patch Management Tools" on page 4-20

Log onto a terminal.

_____ "Selecting HP Patch/iX Activities" on page 4-23

_____ "Viewing Patches" on page 4-29

_____ "Qualifying Patches" on page 4-32

_____ "Creating a Patch Tape or Staging Area Using HP Patch/iX" on page 4-37

Record Manually Installed Products:

_____

_____

_____ "Exiting HP Patch/iX" on page 4-42

Chapter 5 “Modifying Your System”

_____ “Activating a Staged Modification” on page 5-29

_____ “Distributing a Staging Area Preparation” on page 5-30, Required, only if you are planning to apply a staging area to a remote site.

Record sa_name: _____

Record `EXPORT` option used: _____

Phase 1 completed. Schedule downtime for Phase 2.

Begin Phase 2. Exclusive access to the system required.

_____ “Securing the System” on page 5-32

Log onto the system console.

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

_____

_____

_____

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

_____

_____ “Shutting Down the System” on page 5-38

Shutdown the system.

_____ “Restarting the System” on page 5-44

Chapter 6 “Finishing the Process”

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Permanently Applying a Staging Area” on page 6-22, optional

_____ “Finishing Up” on page 6-24

Phase 2 completed.

Record system change:

System type: _____ System name: _____
Date change made: _____ Change performed by: _____
OS version from: _____ OS version to: _____
Comments:

_____

_____

Distributing Staging Areas to Remote Systems

Follow 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:

- **PowerPatch** patches on your **remote** system software
- **Reactive** patches on your **remote** system software
- **PowerPatch** and **Reactive** patches together on your **remote** system software

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive					Section Title on page #-#		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Note:

- You must have completed the activities on the checklist "Manage Patches by Staging Area" on page 2-5 prior to performing the activities in this checklist.
- For **each** remote system you are modifying, complete the activities in this checklist on your remote system.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1. Perform on the Remote System.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Estimating Disk Space" on page 3-20

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for Distributing Staging Areas" on page 4-3

_____ "Initializing HP Stage/iX" on page 4-10

Chapter 5 "Modifying Your System"

_____ "Distributing a Staging Area Remotely" on page 5-27

_____ "Activating a Staged Modification" on page 5-29

Phase 1 completed. Schedule downtime for Phase 2.

Begin Phase 2. Exclusive access to the system required.

_____ “Securing the System” on page 5-32

Log onto the remote system.

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

_____

_____

_____

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

_____

_____ “Shutting Down the System” on page 5-38

Shutdown the system.

_____ “Restarting the System” on page 5-44

Chapter 6 “Finishing the Process”

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Permanently Applying a Staging Area” on page 6-22, optional

_____ “Finishing Up” on page 6-24

Phase 2 completed.

Record system change:

System type: _____ System name: _____

Date change made: _____ Change performed by: _____

OS version from: _____ OS version to: _____

Comments:

_____

_____

Add-on with Tape

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

- **Add-on** purchased products.

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape		Section Title on page #-#					
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Note:

- If you are adding-on purchased products and applying PowerPatch patches, or PowerPatch and Reactive patches use "Add-on with Tape and Manage Patches" on page 2-11.
- If you are adding-on purchased products and applying Reactive patches:
  a. Perform the activities in this checklist, "Add-on with Tape".
  b. Perform the activities in the checklist "Manage Patches" on page 2-3.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Add-on Tape Media" on page 3-11

_____ "Estimating Disk Space" on page 3-20

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for Tape Tasks" on page 4-1

Log onto the system console.

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ "Securing the System for Tape Tasks" on page 5-1

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

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

_____ "Creating the CSLT Using AUTOINST" on page 5-19

Record Manually Installed Products:

Record Data Communication Products:

_____ "Applying the Modification" on page 5-40

Shutdown the system.

_____ "Restarting the System" on page 5-44

Chapter 6 "Finishing the Process"

_____ "Configuring Data Comm and UPS" on page 6-1

_____ "Cross Validating" on page 6-4

_____ "Preparing for Final Reboot" on page 6-6

_____ "Setting Passwords and Lockwords" on page 6-10

_____ "Enabling UDCs" on page 6-12

_____ "Configuring Manually Installed Products" on page 6-14

_____ "Performing the Final Reboot" on page 6-16

_____ "Restarting Selected System Functions" on page 6-19

_____ "Backing Up Your System" on page 6-21

_____ "Finishing Up" on page 6-24

Phase 2 completed.

Exit Checks

_____ If you have Reactive patches to apply, proceed to "Manage Patches" on page 2-3 or "Manage Patches by Staging Area" on page 2-5 as desired.

Record system change:

System type: _____ System name: _____
Date change made: _____ Change performed by: _____
OS version from: _____ OS version to: _____
Comments:

Add-on with Tape and Manage Patches

Follow 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

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape			Section Title on page #-#				
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Note: Reactive patches cannot be applied during the Add-on task without a PowerPatch. To add Reactive patches independently, follow the Manage Patches checklist.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Patch Tape Media" on page 3-9

_____ "Checking Add-on Tape Media" on page 3-11

_____ "Estimating Disk Space" on page 3-20

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for Tape Tasks" on page 4-1

_____ "Installing HP Patch/iX" on page 4-9

_____ "Starting the Patch Management Tools" on page 4-20

Log onto a terminal.

_____ "Selecting HP Patch/iX Activities" on page 4-23

_____ "Viewing Patches" on page 4-29

_____ "Qualifying Patches" on page 4-32

_____ "Creating a Patch Tape or Staging Area Using HP Patch/iX" on page 4-37

Record Manually Installed Products:

_____

_____

_____ "Exiting HP Patch/iX" on page 4-42

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ "Securing the System" on page 5-32

Log onto the system console.

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

_____

_____

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

_____

_____ "Applying the Modification" on page 5-40

Shutdown the system.

_____ "Restarting the System" on page 5-44

_____ "Rerunning HP Patch/iX" on page 5-53

Chapter 6 "Finishing the Process"

_____ "Configuring Data Comm and UPS" on page 6-1

_____ "Cross Validating" on page 6-4

_____ "Preparing for Final Reboot" on page 6-6

_____ "Setting Passwords and Lockwords" on page 6-10

_____ "Enabling UDCs" on page 6-12

_____ "Configuring Manually Installed Products" on page 6-14

_____ "Performing the Final Reboot" on page 6-16

_____ "Restarting Selected System Functions" on page 6-19

_____ "Backing Up Your System" on page 6-21

_____ "Finishing Up" on page 6-24

Phase 2 completed.

Record system change:

System type: _____ System name: _____

Date change made: _____ Change performed by: _____

OS version from: _____ OS version to: _____

Comments:

_____

_____

Add-on with CD-ROM

Follow 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**

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM		Section Title on page #-#					
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

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 refer to the checklist "Manage Patches" on page 2-3.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "CD-ROM Planning Tasks" on page 3-8

_____ "Checking Patch Tape Media" on page 3-9

_____ "Estimating Disk Space" on page 3-20

Chapter 4 "Preparing Your System"

_____ "Preparing to Run HPINSTAL" on page 4-5

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

_____

_____

_____ "Creating the CSLT using HPINSTAL" on page 4-13

Record Manually Installed Products:

_____

_____

_____ "Reserving Disk Space for CD-ROM Tasks" on page 4-43

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 “Modifying Your System”

Begin Phase 2. Exclusive access to the system required.

_____ “Securing the System” on page 5-32

Log onto the system console.

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

_____

_____

_____

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

_____

_____ “Applying the Modification” on page 5-40

Shutdown the system.

_____ “Restarting the System” on page 5-44

_____ “Rerunning HPINSTAL” on page 5-50

Required only if applying PowerPatch.

Chapter 6 “Finishing the Process”

_____ “Configuring Data Comm and UPS” on page 6-1

_____ “Cross Validating” on page 6-4

_____ “Preparing for Final Reboot” on page 6-6

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Configuring Manually Installed Products” on page 6-14

_____ “Performing the Final Reboot” on page 6-16

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Finishing Up” on page 6-24

Exit Checks

_____ If you have Reactive patches to apply, proceed to “Manage Patches” on page 2-3 or “Manage Patches by Staging Area” on page 2-5 as desired.

Phase 2 completed.

Record system change:

System type: _____ System name: _____

Date change made: _____ Change performed by: _____

OS version from: _____ OS version to: _____

Comments:

_____

_____

Update with Tape

Follow 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

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape				Section Title on page #-#			
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

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 refer to the checklist "Manage Patches" on page 2-3.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Patch Tape Media" on page 3-9

_____ "Checking Update Tape Media" on page 3-13

_____ "Checking Peripherals" on page 3-15

_____ "Estimating Disk Space" on page 3-20

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for Tape Tasks" on page 4-1

Log onto the system console.

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ "Securing the System for Tape Tasks" on page 5-1

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

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

_____ "Applying the SLT" on page 5-6

Shutdown the system.

_____ "Starting the System" on page 5-12

_____ "Restoring AUTOINST File Set" on page 5-16

Required only if applying PowerPatch.

_____ "Creating the CSLT Using AUTOINST" on page 5-19

Record Manually Installed Products:

Record Data Communication Products:

_____ "Applying the Modification" on page 5-40

_____ "Restarting the System" on page 5-44

_____ "Rerunning AUTOINST" on page 5-48

Required only if applying PowerPatch.

Chapter 6 "Finishing the Process"

_____ "Configuring Data Comm and UPS" on page 6-1

_____ "Cross Validating" on page 6-4

_____ "Preparing for Final Reboot" on page 6-6

_____ "Setting Passwords and Lockwords" on page 6-10

_____ "Enabling UDCs" on page 6-12

_____ "Configuring Manually Installed Products" on page 6-14

_____ "Setting Up the TAR Utility" on page 6-15

_____ "Performing the Final Reboot" on page 6-16

_____ "Restarting Selected System Functions" on page 6-19

_____ "Backing Up Your System" on page 6-21

_____ "Finishing Up" on page 6-24

Phase 2 completed.

Exit Checks

_____ If you have Reactive patches to apply, proceed to "Manage Patches" on page 2-3 or "Manage Patches by Staging Area" on page 2-5 as desired.

Record system change:

System type: _____ System name: _____
Date change made: _____ Change performed by: _____
OS version from: _____ OS version to: _____
Comments:

Update with CD-ROM

Follow 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

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM				Section Title on page #-#			
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

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 refer to the checklist "Manage Patches" on page 2-3.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "CD-ROM Planning Tasks" on page 3-8

_____ "Checking Patch Tape Media" on page 3-9

_____ "Checking Peripherals" on page 3-15

_____ "Estimating Disk Space" on page 3-20

Chapter 4 "Preparing Your System"

_____ "Preparing to Run HPINSTAL" on page 4-5

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

_____

_____

_____ "Creating the CSLT using HPINSTAL" on page 4-13

Record Manually Installed Products:

_____

_____

_____ "Reserving Disk Space for CD-ROM Tasks" on page 4-43

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ "Securing the System" on page 5-32

Log onto the system console.

Record Terminated Logging Processes:

Backup the system.

Record System Files with Lockwords:

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

_____ "Applying the Modification" on page 5-40

Shutdown the system.

_____ "Restarting the System" on page 5-44

_____ "Rerunning HPINSTAL" on page 5-50

Required only if applying PowerPatch.

Chapter 6 "Finishing the Process"

_____ "Configuring Data Comm and UPS" on page 6-1

_____ "Cross Validating" on page 6-4

_____ "Preparing for Final Reboot" on page 6-6

_____ "Setting Passwords and Lockwords" on page 6-10

_____ "Enabling UDCs" on page 6-12

_____ "Configuring Manually Installed Products" on page 6-14

_____ "Setting Up the TAR Utility" on page 6-15

_____ "Performing the Final Reboot" on page 6-16

_____ "Restarting Selected System Functions" on page 6-19

_____ "Backing Up Your System" on page 6-21

_____ "Finishing Up" on page 6-24

Phase 2 completed.

Exit Checks

_____ If you are applying the CD-ROM based CSLT onto remote systems, proceed to "Modify Remote System" on page 2-19.

_____ If you have Reactive patches to apply, proceed to "Manage Patches" on page 2-3 or "Manage Patches by Staging Area" on page 2-5 as desired.

Record system change:

System type: _____ System name: _____
Date change made: _____ Change performed by: _____
OS version from: _____ OS version to: _____
Comments:

Modify Remote System

Follow 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

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM					Section Title on page #-#		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Note:

- You must have completed the activities on the checklist "Update with CD-ROM" on page 2-17 prior to performing the activities in this checklist.
- 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 refer to the checklist "Manage Patches" on page 2-3.

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

Chapter 3 "Planning for Your Task"

Begin Phase 1.

Log onto the remote system.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Update Tape Media" on page 3-13

_____ "Checking Peripherals" on page 3-15

_____ "Estimating Disk Space" on page 3-20

Chapter 4 "Preparing Your System"

_____ "Reserving Disk Space for CD-ROM Tasks" on page 4-43

Record Contiguous Disk Space: _____

Record Non-contiguous Disk Space: _____

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ “Securing the System” on page 5-32

Log onto the remote system.

Record Terminated Logging Processes:

_____

_____

Backup the system.

Record System Files with Lockwords:

_____

_____

_____

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

_____

_____ “Applying the Modification” on page 5-40

Shutdown the system.

_____ “Restarting the System” on page 5-44

_____ “Rerunning HPINSTAL” on page 5-50

Required only if applying PowerPatch.

Chapter 6 “Finishing the Process”

_____ “Configuring Data Comm and UPS” on page 6-1

_____ “Cross Validating” on page 6-4

_____ “Preparing for Final Reboot” on page 6-6

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Configuring Manually Installed Products” on page 6-14

_____ “Setting Up the TAR Utility” on page 6-15

_____ “Performing the Final Reboot” on page 6-16

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Finishing Up” on page 6-24

Phase 2 completed.

Exit Checks

_____ If you have Reactive patches to apply, proceed to “Manage Patches” on page 2-3 or “Manage Patches by Staging Area” on page 2-5 as desired.

Record system change:

System type: _____ System name: _____

Date change made: _____ Change performed by: _____

OS version from: _____ OS version to: _____

Comments:

_____

_____

Re-Install Using a CSLT

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

- **Re-install** your current system software version level
- **Re-install** your current system software version level and apply **PowerPatch** patches

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape						Section Title on page #-#	
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Note:

- A re-installation can be planned or unplanned. An unplanned re-install is performed when you have had a major system level crash and you are replacing the current operating system with the same version of the system software. Use your most recent CSLT to reinstall the system.
- You cannot apply Reactive patches at the same time you are updating the system. You must apply Reactive patches after you re-install the system. To apply Reactive patches refer to the checklist "Manage Patches" on page 2-3.

Read and perform the steps in the following sections:

- If you are performing a planned Re-install, proceed with Phase 1.
- If you are performing an unplanned Re-install, proceed with Applying the Modification in Phase 2.

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

_____ "General Planning Tasks" on page 3-5

_____ "Checking Patch Tape Media" on page 3-9

Chapter 4 "Preparing Your System"

_____ "Backing Up Your System For Re-Install Tasks" on page 4-11

Backup the system.

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ "Shutting Down the System" on page 5-38

Log onto the system console.

Shutdown the system.

_____ “Applying the Modification” on page 5-40

Start here if you are performing an unplanned Re-install.

_____ “Restarting the System” on page 5-44

_____ “Rerunning AUTOINST” on page 5-48

Required only if applying PowerPatch.

Chapter 6 “Finishing the Process”

_____ “Preparing for Final Reboot” on page 6-6

_____ “Restoring User Files” on page 6-7

_____ “Recovering Staging Areas” on page 6-9

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Configuring Manually Installed Products” on page 6-14

_____ “Setting Up the TAR Utility” on page 6-15

_____ “Performing the Final Reboot” on page 6-16

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Finishing Up” on page 6-24

Phase 2 completed.

Exit Checks

_____ If you have Reactive patches to apply, proceed to “Manage Patches” on page 2-3 or “Manage Patches by Staging Area” on page 2-5 as desired.

Record system change:

System type: _____ System name: _____
Date change made: _____ Change performed by: _____
OS version from: _____ OS version to: _____
Comments:

Install a New System

Follow 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

The path to follow in the "Where to Go From Here" jump tables is:

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							Section Title on page #-#
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Note:

- A new installation is performed 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 refer to the checklist "Manage Patches" on page 2-3.

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.

Read and perform the steps in the following sections:

Chapter 3 "Planning for Your Task"

Begin Phase 1.

_____ "Verifying Required Materials" on page 3-1

Phase 1 completed. Schedule downtime for Phase 2.

Chapter 4 "Preparing Your System"

No sections in this chapter

Chapter 5 "Modifying Your System"

Begin Phase 2. Exclusive access to the system required.

_____ "Applying the SLT" on page 5-6

Log onto the system console.

_____ "Listing the System Configuration" on page 5-10

Record Configuration Group Name:

_____

_____ "Starting the System" on page 5-12

_____ “Configuring the System” on page 5-14

_____ “Checking Volumes” on page 5-17

_____ “Creating the CSLT Using AUTOINST” on page 5-19

Record Manually Installed Products:

_____

_____

Record Data Communication Products:

_____

_____

_____ “Applying the Modification” on page 5-40

_____ “Restarting the System” on page 5-44

_____ “Rerunning AUTOINST” on page 5-48

Required only if applying PowerPatch.

Chapter 6 “Finishing the Process”

_____ “Configuring Data Comm and UPS” on page 6-1

_____ “Cross Validating” on page 6-4

_____ “Preparing for Final Reboot” on page 6-6

_____ “Setting Passwords and Lockwords” on page 6-10

_____ “Enabling UDCs” on page 6-12

_____ “Configuring Manually Installed Products” on page 6-14

_____ “Setting Up the TAR Utility” on page 6-15

_____ “Performing the Final Reboot” on page 6-16

_____ “Restarting Selected System Functions” on page 6-19

_____ “Backing Up Your System” on page 6-21

_____ “Finishing Up” on page 6-24

Phase 2 completed.

Exit Checks

_____ If you have Reactive patches to apply, proceed to “Manage Patches” on page 2-3 or “Manage Patches by Staging Area” on page 2-5 as desired.

Record system change:

System type: _____ System name: _____

Date change made: _____ Change performed by: _____

OS version from: _____ OS version to: _____

Comments:

_____

_____

Planning for Your Task 3

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.

Verifying Required Materials

If you are using one of the following checklists, perform the activities in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

Read all the sub-sections in this section:

Verify that you have all the required materials. Each task has specific requirements: source material and media, current system version, `UPDATE` utilities, and media for compiling and applying the changes to the system. Table 3-1 lists source material 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[1]
Add-on Purchased SUBSYS Products			Tape or CD		
Add-on Purchased SUBSYS Products and apply Patches			Tape or CD	Tape	Tape[1]
Update OS and optionally Add-on Purchased SUBSYS Products	Tape or CD	Tape or CD	If ordered		
Update OS, apply patches, and Add-on Purchased SUBSYS Products	Tape or CD	Tape or CD	If ordered	Tape	
New Install	Tape	Tape	If ordered		
New Install and apply Patches	Tape	Tape	If ordered	Tape	
Re-Install	Tape	Tape	If ordered		
Re-Install and apply Patches	Tape	Tape	If ordered	Tape	

1. 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.

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. Table 3-1 provides a list of what source material is used for what modification tasks. The source modification material components are:

Factory SLT—Contains the 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.

SUBYSYS—Contains the purchased products you have ordered for your system.

PowerPatch—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—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.

Tool Options

Various tools are used to patch, add-on, update, or install your system software. The options are:

AUTOINST—Used to create a CSLT when the SLT, FOS, and SUBSYS 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. 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 will 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.
  - The HPSUSAN number is correct.
- 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 operating system version minimum requirements vary depending upon your task. 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 OS Version	OS *v.uu.ff*
Patch only	5.5	C.55.00
Patch only on Staging Area	5.5	C.55.00
Add-on only	5.5	C.55.00
Add-on with Patch	5.5	C.55.00
Update only	4.0 or 5.0	C.40.00 or C.50.00
Update with Patch	4.0 or 5.0	C.40.00 or C.50.00
Update and Add-on	4.0 or 5.0	C.40.00 or C.50.00
Update and Add-on with Patch	4.0 or 5.0	C.40.00 or C.50.00
Re-installation	5.5	C.55.00
New Installation	no previous OS	--

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.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"General Planning Tasks" on page 3-5	"General Planning Tasks" on page 3-5	"General Planning Tasks" on page 3-5	"General Planning Tasks" on page 3-5		"General Planning Tasks" on page 3-5	"Applying the SLT" on page 5-6
CD-ROM		"General Planning Tasks" on page 3-5		"General Planning Tasks" on page 3-5	"General Planning Tasks" on page 3-5		
Disk Drive	"General Planning Tasks" on page 3-5				"General Planning Tasks" on page 3-5		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

General Planning Tasks

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT

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 for your system software modification. Plan to increase your disk space capacity, if necessary.

   Steps for checking disk space requirements are included in the task procedures.

3. Perform network planning as required. If you are using NetWare, refer to the NetWare documentation.

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

   If you are running a system version older than 4.0, such as 2.2 or 3.0, you must perform two updates:

   a. Update to Release 4.0 using the Release 4.0 tapes and the *HP 3000 MPE/iX Installation, Update, and Add-On Manual for Release 4.0* (36123-90001).

   b. Then update to version 5.5 system software using the 5.5 system software release media and this manual.

   If you are running system version 4.5 or 5.0 (Limited Release), you must perform two updates:

   a. Update to Release 5.0 (General Release) using the Release 5.0 media and documentation. The media options and corresponding documentation is as follows:

      - Tape using the *HP 3000 MPE/iX Installation, Update, and Add-On Manual Release 5.0 (General)* (36123-90001).
      - CD-ROM, *Using CD-ROM to Update Your HP 3000 System Software, MPE/iX Release 5.0 (General)* (B3159-90001)

   b. Then update to version 5.5 system software using the 5.5 system software release media and this manual.

   Contact your HP support representative if you need more information.

5. Review and plan to perform a media check of all source material.

   Steps for checking all source material media are included in the task procedures.

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

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

7. Plan to perform a full system backup.

   If your system is currently up and running, plan to perform a full system backup before applying any modifications. Steps for performing the backup are included in the task procedures.

8. Ensure that an LP device class exists in your SYSGEN configuration.

9. Ensure that proper procedure was followed for renaming HP supplied system files.

   Do not use the `SYSFILE> RSPROG` command in the `SYSGEN` utility to rename Hewlett-Packard 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.

   Use the `SHOW` command in `SYSFILE` to ensure that all Hewlett-Packard supplied MPE/iX HP 3000 system files have retained their original name. 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.

10. 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 Hewlett-Packard configuration files, store the files to tape before proceeding. Hewlett-Packard recommends that you DO NOT use any of the group names for other than Hewlett-Packard configuration files.

11. 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.

12. Record any Hewlett-Packard defined special accounts you have customized. They will be stored during the backup.

    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

CONV	HPPL85	HPSKTS	INDHPE	SNADS
CCL	HPPL87	HPSPOOL	ITF3000	SUPPORT
HPNCS	HPPL89	HPX11	NETWARE	SYS

Table 3-3 HP Defined Special Accounts

HPOFFICE	HPLANMGR	RJE	SYSMGR
HPOPTMGT		SOFTREP	TELESUP

13. To use HP Patch/iX from a PC with Reflections software, install Reflections with the MPE POSIX option (if available). Reflections is a separately purchasable third-party product that is a PC-based terminal emulator program. If the MPE POSIX option is not used, HP Patch/iX will not work on your PC.

14. 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 `SYSGEN` configuration.

15. 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 you will require:

- Review the steps you need to perform after the system is shutdown. Where possible, an estimate of time for individual steps 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.
- Also, the amount of time listed is based on small and low-end machines. Actual time values can be about 1/3 the time listed.

General Planning Tasks completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Checking Patch Tape Media" on page 3-9	"Checking Add-on Tape Media" on page 3-11	"Checking Patch Tape Media" on page 3-9	"Checking Patch Tape Media" on page 3-9		"Checking Patch Tape Media" on page 3-9	
CD-ROM		"CD-ROM Planning Tasks" on page 3-8		"CD-ROM Planning Tasks" on page 3-8	"Checking Update Tape Media" on page 3-13		
Disk Drive	"Checking Patch Tape Media" on page 3-9				"Estimating Disk Space" on page 3-20		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

CD-ROM Planning Tasks

If you are using one of the following checklists, perform the steps in this section:

- Add-on with CD-ROM
- Update with CD-ROM

To plan for CD-ROM related planning tasks:

1. Obtain CD-ROM required patches for 4.0 systems.

   If your system software version is Release 4.0 and you are using a CD-ROM to update to your system software, you need the following patches or their supersede, prior to updating to release 5.5:

   - ❑ MPEFX00
   - ❑ MPEFX25
   - ❑ MPEFX37

   If you have applied any 4.0 PowerPatch, you already have these patches on your system.

   You must install these patches on your 4.0 system prior to using CD-ROM media to modify your system software.

   Contact your HP support representative for a copy of these patches or obtain them from any 4.0 PowerPatch tape.

2. 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.

3. Plan to log on to a console for Phase 2.

   For certain phases of the modification process, you can run `HPINSTAL` from any terminal. However, certain messages appear at the console instead of the terminal, (for example, tape requests). After you have to shutdown and restart the system, you need to be on the system console.

4. 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. ❑

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM		“Checking Patch Tape Media” on page 3-9		“Checking Patch Tape Media” on page 3-9			
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Checking Patch Tape Media

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Re-Install Using a CSLT

To verify the patch tape source media and contents:

1. If you are not already logged on, from the console at the MPE/iX prompt, log on 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 are applying PowerPatch tape, proceed to Step 4.

   If you are not applying PowerPatch, proceed to Step 5.

PowerPatch Task

4. Check your PowerPatch tape to ensure the tape is not damaged.
   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.

   c. Proceed to Step 5.

5. If you have a Reactive patch tape, proceed to Step 6.

   If you do not have a Reactive patch tape, proceed to Step 7.

Reactive Patch Task

6. Check your Reactive patch tape to ensure that it is not damaged.
   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.

c. Proceed to Step 7.

---

7. 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.

Checking Patch Tape Media completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	Install
Tape	"Estimating Disk Space" on page 3-20		"Checking Add-on Tape Media" on page 3-11	"Checking Update Tape Media" on page 3-13		"Backing Up Your System For Re-Install Tasks" on page 4-11	
CD-ROM		"Estimating Disk Space" on page 3-20		"Checking Peripherals" on page 3-15			
Disk Drive	"Estimating Disk Space" on page 3-20						

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Checking Add-on Tape Media

If you are using one of the following checklists, perform the steps in this section:

- Add-on with Tape
- Add-on with Tape and Manage Patches

To verify the Add-on tape source media and contents:

1. If you are not already logged on, from the console at the MPE/iX prompt, log on 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 SUBSYS tape.
3. Check the SUBSYS tape to ensure the tape is not damaged.

   Mount SUBSYS tape.

   ```
   :FILE TAPE;DEV=TAPE
   :VSTORE *TAPE;@.@.@;SHOW
   ```
4. Check the contents of the SUBSYS tape for your ordered products.
   a. Mount the SUBSYS tape, if it is not already mounted.
   b. Restore the T-file. This file contains the listing of files of the purchased products.

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

      The RESTORE returns a T-file, note the T-file *filename*.
   c. View T-file using a text editor or word processor.
   d. Print list of products on SUBSYS.

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

      Where: T*nnnnn* is the name of the file restored in Step b above.
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.

   If your media is bad, contact your local HP Support Representative.

Checking Add-on Tape Media completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	Install
Tape		"Estimating Disk Space" on page 3-20	"Estimating Disk Space" on page 3-20				
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Checking Update Tape Media

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape
- Modify Remote System

To verify the update tape source media and contents:

1. If you are not already logged on, from the console at the MPE/iX prompt, log on with the following conditions.

   If you are modifying the remote system, log onto the remote system. If you are preparing the CSLT for modifying the remote system, log onto the local system.

   ```
   :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 to modify the system software. This includes FOS, factory SLT, and CSLT tapes.

   - ❏ If you are performing an Update with Tape proceed to Step 3.
   - ❏ If you are on a remote system and applying a CSLT created from a CD-ROM, verify the CSLT, proceed to Step 4.

3. Check FOS tape to ensure the tape is not damaged.

   Mount FOS tape and validate.

   ```
   :FILE TAPE;DEV=TAPE
   :VSTORE *TAPE;@.@.@;SHOW
   ```

4. Restore CHECKSLT.

   Mount the FOS tape, if it is not already mounted.

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

   For CKCAT000 the 000 are zeros.

5. Check Factory SLT or CSLT, as appropriate, to ensure the tape is not damaged.

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

```
: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? __
```

b. Select Level 1.

c. Reply to tape request, as required.

`CHECKSLT` displays a listing of verified files.

6. 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.

If your media is bad, contact your local HP Support Representative.

Checking Update Tape Media completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	Install
Tape				"Checking Peripherals" on page 3-15			
CD-ROM					"Checking Peripherals" on page 3-15		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Checking Peripherals

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape
- Update with CD-ROM
- Modify Remote System

The sub-sections in this section are as follows. If you do not have the listed device for a sub-section, skip that sub-section.

- "CD-ROM Disk Drive" on page 3-15
- "SCSI Tape Devices" on page 3-15
- "LDEV1Disk Minimum Capacity" on page 3-16
- "LDEV1 Disk Maximum Usage" on page 3-18

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 600/A HP-IB (C1707A)
- 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.

SCSI Tape Devices

If you are already on version 5.0 of the system software, skip this section and proceed to "LDEV1Disk Minimum Capacity" on page 3-16.

If your system software version is Release 4.0 and you have a SCSI-DDS tape device:

- You need to verify that your SCSI-DDS devices are using a compatible version of firmware.
- You **must** perform this activity **before** you update to 5.0 or greater. The diagnostic tools used to identify firmware version are password protected as of MPE/iX 5.0.

Note: If you are modifying a Remote system, check the SCSI-DDS devices on each remote system in addition to the local system.

Caution: 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 the following message.

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

The following is a list of the SCSI-DDS devices and the compatible firmware versions.

Table 3-4 SCSI Tape Devices Compatible Firmware Versions

C152x	10.7
C15x3	10.7
C15x4	10.7

If your SCSI-DDS device is using any version other than the one listed, you must update to the compatible firmware version before proceeding with the update. If you do not have compatible firmware for your SCSI-DDS devices and you attempt to update your system software, `AUTOINST` will fail.

To identify the firmware version of each of your DDS devices, for each device, perform the following:

1. Start the system diagnostic tool.

   ```
   :SYSDIAG
   dui>SCSIDDS;LDEV=dds_ldev;SECTION=50
   ```

   Where *dds_ldev* is the logical device number assigned to the SCSI-DDS device. A common *dds_ldev* value is 7.

2. Identify the firmware revision.

   ```
   scsidds> REV
   ```

   SCSIDDS displays the firmware revision. The following is a sample output.

```
Firmware Rev = 10.7
Servo Rev = 2.2
```

3. Exit the `SCSIDDS` and `SYSDIAG` utilities.

   ```
   scsidds> EXIT
   dui> EXIT
   ```

4. If the firmware revision displayed does not match the required firmware version, *do not proceed with the system modification until after the device firmware has been corrected*. To change the device firmware, contact your HP representative.

   If the firmware revision displayed matches the compatible version you will not encounter the problem.

LDEV1Disk Minimum Capacity

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

When you update to MPE/iX Release 5.5, you may still use HP7933 and HP7935 drives elsewhere on your system, but these drives do not have a large enough capacity to serve as the system disk.

Caution: As of Release 5.0, you can no longer use HP 7933 or HP 7935 disk drives as LDEV 1 (the system disk).

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

1. From either the terminal or console at each site:

   ```
   :DSTAT ALL
   ```

   - ❑ If the device configured as your LDEV 1 is one of the supported devices, proceed with your system modification (update, add-on, patch).
   - ❑ If the device configured as your LDEV 1 is not one of the supported devices, you **must** replace your LDEV 1 device with a supported device.

To replace your LDEV 1 device:

1. Contact your HP representative to schedule installation of the replacement disk drive.
2. Create a complete set of backup tapes (including a CSLT) containing all files residing on the system volume set.
3. Install the replacement disk drive for LDEV 1. Your Hewlett-Packard Customer Engineer performs this hardware installation.
4. Choose one of the following methods to rebuild your system and update your system software:

   Method 1:

   a. Reinstall the version of the system software that you are currently running.

      Follow the directions for a reinstallation in the installation manual that corresponds to your current system software version, *HP 3000 MPE/iX Installation, Update, and Add-On Manual, MPE/iX Release (4.0 or 5.0 General)* (36123-90001).

   b. Through SYSGEN, update the I/O configuration to:

      - Reflect the new LDEV 1 Hewlett-Packard device part number.
      - Reflect the new primary path of the LDEV 1 device, **if** the primary path of the hardware changed.

   c. Make the update, add-on, and/or patch modifications you originally planned to do to your system.

      Follow the directions in this manual, the *HP 3000 MPE/iX System Software Maintenance Manual, Release 5.5 (C.55.00)* (30216-90223R3628).

   Method 2:

   a. Install (not just update) the new version of the system software.

      Follow the directions for an installation in this manual, the *HP 3000 MPE/iX System Software Maintenance Manual, Release 5.5 (C.55.00)* (30216-90223R3628).

   b. Through SYSGEN, update the I/O configuration to:

      - Reflect the new LDEV 1 Hewlett-Packard device part number.
      - Reflect the new primary path of the LDEV 1 device, **if** the primary path of the hardware changed.

   To determine which method to use:

- Method 1 is the safest method. It clearly defines all the processes you need to complete to properly replace your LDEV1.
- Method 2 is a short-cut method. It essentially combines the reinstallation step and the update step into one step. Do not do this unless you are completely comfortable with the installation and update tasks.

5. In addition to the normal Installation task sections, also perform the steps in the sections “Restoring User Files” on page 6-7 and “Recovering Staging Areas” on page 6-9.

These activities:

- Ensure that your configuration file is cross validated with your SYSGEN information.
- Restore the user files and staging areas which had previously resided on the system volume set.

Note: Issue all RESTORE commands with the KEEP option to prevent a mismatch of two different operating system versions.

LDEV1 Disk Maximum Usage

If you have a CIO system and you are using a disk drive with over 2 Gbytes capacity as your LDEV 1, any disk space over the 2 Gbytes is not available for use. It cannot and will not be used for system or user files.

If you have an NIO system and 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 predefined variable *hp_cpu_name* contains the name of your computer model.

```
:SHOWVAR hp_cpu_name
```

The following is a sample reply.

```
HPCPUNAME = Series 957
```

The following is a list of NIO/CIO systems.

Table 3-5 NIO/CIO Systems

NIO Systems	CIO Systems (Support CIO and NIO Cards)	CIO Systems
Series 9*x*7RX, 9*x*7LX, 9*x*7SX, 9*x*8LX, 9*x*8RX, 9*x*9KS, 99*x*	Series 920, 922, 932, 948, 958	Series 925, 935, 949, 950, 955, 960, 980

Checking Peripherals completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	Install
Tape				"Estimating Disk Space" on page 3-20			
CD-ROM				"Estimating Disk Space" on page 3-20	"Estimating Disk Space" on page 3-20		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Estimating Disk Space

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System

Read the sub-sections in this section:

- “Non-Contiguous Disk Space Requirements” on page 3-20
- “Contiguous Disk Space Requirements” on page 3-23
- “Disk Space Error Messages” on page 3-24

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, or 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:

- The permanent (net) amount of non-contiguous disk space required for the system software after it is modified.
- The maximum (peak) amount of non-contiguous disk space required during the system software modification process.
- The amount of contiguous disk space 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 3-6 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, 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 on LDEV 1.

Table 3-6 Non-Contiguous Disk Space Sectors

System Software Components	Versionversion				
	4.0	5.0	5.5		5.5 Express or PowerPatch[1]
			Peak	Net	
SLT only[2]	1,101,000	1,318,000	n/a	1,268,000	
SLT and FOS	1,539,000	2,027,000	2,378,000	2,092,000	
5.0 SLT, 5.0 FOS, PowerPatch					n/a
SLT, FOS, Full SUBSYS	2,905,000	3,226,000	3,637,000	3,170,000	
5.0 SLT, 5.0 FOS, 5.0 Full SUBSYS, PowerPatch					n/a
5.0 SLT, 5.0 FOS, Express Full SUBSYS, PowerPatch					n/a

1. Express and PowerPatch values are listed for each Express and PowerPatch, as they are released.
2. Provided for reference only. An operational system requires the SLT and FOS files at a minimum.

There are several conditions under which you need additional non-contiguous disk space. Refer to the appropriate section below 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) amount of non-contiguous disk space required to update your system software, perform the following calculation:

1. Refer to Table 3-6 and find the disk space sectors value for the system software version you are updating to.
2. Refer to Table 3-6 and find the baseline amount of disk space you are using for your current system software version.
3. Subtract the two values. This is the amount of permanent additional disk space you need to update the system software.

Disk space new version		_____
Disk space current version	-	_____
Additional disk space required	=	_____

Record the disk space sectors required on your checklist for easy reference.

Disk Space Estimate for Add-on

The values listed in Table 3-6 for the SUBSYS (purchasable sub-system products) are the maximum possible. This value is the total disk space sectors required for all possible purchasable products. Typically, you will have ordered only selected SUBSYS products.

To estimate purchased product (SUBSYS) disk space:

You will need to estimate your disk space requirements based on the number and kind of software subsystem products purchased.

Record the estimated disk space required for SUBSYS products here and on your checklist for easy reference.

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.

Refer to “Converting Between Disk Sectors and MBytes” below for conversion equations, if needed.

Disk Space Estimate for PowerPatch or Express

When a PowerPatch tape, or Express tapes (SUBSYS and PowerPatch) are released, the disk space sectors required, if you apply all the patches to your system, are listed in Table 3-6. Perform the calculation described in “Disk Space Estimate for Updating” on page 3-21 to estimate the amount of additional disk space you will require apply a PowerPatch or Express.

1. Refer to Table 3-6 and find the disk space sectors value for the system software version you are patching to. Refer to the patching solution you are performing, for example, are you applying just PowerPatch or are you also applying the Express SUBSYS products as well?
2. Refer to Table 3-6 and find the baseline amount of disk space you are using for your current system software version.
3. Subtract the two values. This is the amount of permanent additional disk space you need to update the system software.

Disk space new version		_____
Disk space current version	-	_____
Additional disk space required	=	_____

Record the disk space sectors required on your checklist for easy reference.

Disk Space Estimate for Reactive Patch

Reactive patches vary extensively in the amount of disk space they require. Typically, reactive patches replace existing files, so though it may increase the disk space requirements of your system software, the total amount should be very little.

If you want to make an 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 here and on your checklist for easy reference.

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 here and on your checklist for easy reference.

Converting Between Disk Sectors and MBytes

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

$$n \text{ Mbytes} \times 1,000,000 \text{ sectors} / 256 \text{ bytes} = m \text{ sectors}$$

Where:

n = the number of Mbytes

m = the number of sectors

Example 1, MBytes to sectors:

VALIDATE reports 20 Mbytes total on a tape, so:

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

Example 2, sectors to MBytes:

A disk has a device size: 7,824,336, so:

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

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 the value 1,000,000.

For a quick estimate, use the value 4,000 instead of the conversion value 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:

120,000 sectors

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

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

1. If you are performing a Manage Patch, Staging Area, or CD-ROM task, proceed to “Disk Space Error Messages” on page 3-24.

If you are performing an Add-on with Tape, Update with Tape, or Modify Remote System task, proceed to Step 2.

2. Log on as MANAGER.SYS:

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

3. Mount the FOS tape.

4. Restore the CHECKSLT program files, if it was not restored previously:

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

   where in CKAT000, the 000 are zeros.

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

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

   ```
   :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:

_____

Disk Space Error Messages

The UPDATE tools (AUTOINST, HPINSTAL, and PATCH/IX) that modify your system require a minimum amount of contiguous and non-contiguous sectors of disk space on LDEV 1 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 sectors requirements are listed in Table 3-7.

Table 3-7 Update Tool Disk Space Estimates Default Requirements

Type	Sectors
Contiguous	60,000
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. Refer to Appendix H “Error Messages and Warnings” for additional information.

Estimating Disk Space completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	Install
Tape	“Reserving Disk Space for Tape Tasks” on page 4-1	“Reserving Disk Space for Tape Tasks” on page 4-1	“Reserving Disk Space for Tape Tasks” on page 4-1	“Reserving Disk Space for Tape Tasks” on page 4-1			
CD-ROM		“Preparing to Run HPINSTAL” on page 4-5		“Preparing to Run HPINSTAL” on page 4-5	“Reserving Disk Space for CD-ROM Tasks” on page 4-43		
Disk Drive	“Reserving Disk Space for Tape Tasks” on page 4-1				“Reserving Disk Space for Distributing Staging Areas” on page 4-3		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Preparing Your System 4

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.

Reserving Disk Space for Tape Tasks

If you are using one of the following checklists, perform the activities in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Update with Tape

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.

To reserve disk space:

1. **From the console** at the MPE/iX prompt, log on 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. Reserve contiguous and non-contiguous disk space.

   :BUILD AXLDEV1.PUB.SYS;DISC=*n*,1,1;DEV=1

   :BUILD AXLSPACE.PUB.SYS;DISC=*m*,32,32

   where

   n = AXLDEV1 number, determined in “Estimating Disk Space” on page 3-20 or use the default of 120,000 sectors.

   m = AXLSPACE number, refer to Table 3-6, in “Estimating Disk Space” on page 3-20 for a listing of maximum disk space values for Update, Add-on, and PowerPatch.

   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 available on your system before you perform an update or add-on. Refer to Appendix C “Reserving 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 Tape Tasks completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	“Installing HP Patch/iX” on page 4-9	“Securing the System for Tape Tasks” on page 5-1	“Installing HP Patch/iX” on page 4-9	“Securing the System for Tape Tasks” on page 5-1			
CD-ROM							
Disk Drive	“Installing HP Patch/iX” on page 4-9						

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Reserving Disk Space for Distributing Staging Areas

If you are using one of the following checklists, perform the activities in this section:

- Distributing Staging Areas to Remote Systems

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. **From the console on the remote system**, log on 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 on to the remote system.

   b. Check for available disk space using DISCFREE.

      :RUN DISCFREE.PUB.SYS D, *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/XL system volume set.

```
:DISCFREE D,2

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
```

   If the AVAIL TO PERM SPACE on LDEV 1 is greater than the staging area disk space calculated in “Estimating Disk Space” on page 3-20, proceed with your task.

If the `AVAIL TO PERM SPACE` is not greater than the staging area disk space calculated in “Estimating Disk Space” on page 3-20, you need to make more space available on your system before you continue with your task. Refer to Appendix C “Reserving Disk Space” for information on finding additional disk space.

Reserving Disk Space for Distributing Staging Areas completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive					“Initializing HP Stage/iX” on page 4-10		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Preparing to Run HPINSTAL

If you are using one of the following checklists, perform the steps in this section:

- Add-on with CD-ROM
- Update with CD-ROM

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. From the console at the MPE/iX prompt, log on 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. Optionally, log on to a terminal at the MPE/iX prompt, log on with the following conditions.

   :HELLO MANAGER.SYS,INSTALL;HIPRI

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

   :ALLOW MANAGER.SYS;COMMANDS=VSCLOSE,VSOPEN

4. Load the CD-ROM disk labelled MPE_*v.uu.ff_1* into the CD-ROM caddy.

   v.uu.ff = *version.update.fix* level of the software. Write the *v.uu.ff* level on the line below.

   _____

5. Using the caddy, load the first CD-ROM disk (MPE_*v.uu.ff*_1) into the CD-ROM disk drive. HPINSTAL prompts for the second disk when required.

   If you have two CD-ROM drives. You can put the second CD-ROM into the second drive.

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

   :AVRSCSI “MOUNT *ldev#*”

   ldev# = 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*

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

   :DSTAT

   The following 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)
```

8. 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.

9. Create directory entries to enable access to group instutil on volume set MPE_*v.uu.ff*_1.

:LISTGROUP INSTUTIL

10. If the instutil group is non-existent, create the instutil group and set home volume set.

:NEWGROUP INSTUTIL;HOMEVS= MPE_*v.uu.ff_1*

11. 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*

12. If you are performing an Update task, proceed to Step 13.

If you are performing an Add-On task, proceed to Step 14.

Update Tasks

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

a. 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 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.

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

b. 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.

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

d. Proceed to Step 14.

---

14. If you are creating a CSLT for applying to a Remote system, proceed to Step 15.

If you are performing a Add-on or Update task for the local system only, proceed to Step 16.

Remote Tasks

15. 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 CSLT:

a. Create a file, *add_file*, 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 *add_file* 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 16.

16. 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
```

17. If you are performing a PowerPatch task, proceed to Step 18.

If you are performing an Add-on or Update task without a PowerPatch, proceed to the "Where To Go From Here" table and continue as directed.

PowerPatch Tasks

18. 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.

Proceed to the "Where To Go From Here" table and continue as directed.

Preparing to Run HPINSTAL completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM		“Creating the CSLT using HPINSTAL” on page 4-13		“Creating the CSLT using HPINSTAL” on page 4-13			
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Installing HP Patch/iX

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

HP Patch/iX is delivered with each PowerPatch tape set and with 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.

To install HP Patch/iX:

1. Restore HP Patch/iX from the patch (PowerPatch or Reactive) tape using the following restore commands.

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

Installing HP Patch/iX completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Starting the Patch Management Tools" on page 4-20		"Starting the Patch Management Tools" on page 4-20				
CD-ROM							
Disk Drive	"Initializing HP Stage/iX" on page 4-10						

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Initializing HP Stage/iX

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems

HP Stage/iX is part of the FOS. It is installed when the system software is updated to version 5.5. You must be on version 5.5 or greater **before** you can use HP Stage/iX.

This section describes how to initialize HP Stage/iX. If HP Stage/iX is already initialized on your system, then skip this section.

To initialize HP Stage/iX:

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.
```

Initializing HP Stage/iX completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive	"Starting the Patch Management Tools" on page 4-20				"Distributing a Staging Area Remotely" on page 5-27		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Backing Up Your System For Re-Install Tasks

If you are using one of the following checklists, perform the steps in this section:

- Re-Install Using a CSLT

If you are planning to re-install your system software, proceed with this section.

If you are performing a re-install because your system is not operating, it is in a "crash" state, then proceed to "Applying the Modification" on page 5-40.

When you are re-installing your system software, you should perform a full system backup. Reinstalling your system software **DESTROYS** all existing files.

If your system is inoperable due to a full system crash:

1. Re-install the system software. Use the most recent SLT. This is usually from the last time you applied patches or updated the system software version.
2. Restore files from the most recent full system backup.
3. Restore files from more recent partial backups.

You can create a full backup using either the `STORE` command with the directory option or by running 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 the `BULDJOB1` jobstream rebuilds the entire accounting structure and resets all UDCs that were previously on the system.

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

To backup with the `BULDACCT` utility:

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

   For Release 4.0:

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

   For Release 5.0 and 5.5:

```
: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.

Backing Up Your System For Re-Install Tasks completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape						"Shutting Down the System" on page 5-38	
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Creating the CSLT using HPINSTAL

If you are using one of the following checklists, perform the steps in this section:

- Add-on with CD-ROM
- Update with CD-ROM

This section describes how to create your 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.

```
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 >>_
```

   If you select a SUBSYS option, your system software must be on the same release level as the SUBSYS product.

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 Customized System Load Tape (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) >> ldev# OR RETURN
```

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.

```
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) >> type the configuration group
or RETURN
```

a. If you **have not** added customized files to your CSLT, press RETURN. This is the typical condition.

   If you **have** added customized files to your CSLT through the use of a Base Group, specify that Base Group name now.

b. Refer to Appendix E “CD-ROM Resources” for directions on creating a Base Group.

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 `PRODLIST.PUB.SYS` file. Refer to Appendix E “CD-ROM Resources” for directions on creating and using the `PRODLIST.PUB.SYS` file.

b. Add or delete product numbers as required.

c. When all product numbers have been entered, type two slashes (//) or a RETURN.

Note: Add-on product numbers can only be entered interactively.

---

7. 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)?> YES
```

8. Type or verify the master product keyword at the prompt.

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 >> keyword

Your keyword validates the master product list.
```

Note: Add-on product keyword can only be entered interactively.

9. Select if you want 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 .

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

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 a 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 choose to 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 products to which you are entitled.

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 re-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. HPINSTAL displays the list of products in the current PRODLIST.INSTALL.SYS file.

b. Review this list and make your changes as needed.

Edit the file to create the list of products that will be installed using the CSLT created by the end of this section.

Use this CSLT 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 Step 13.

PowerPatch Tasks

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

a. Mount the PowerPatch tape, as prompted.

```
Mount the POWERPATCH tape and put the tape drive online.
The files from the POWERPATCH tape will now be restored.

***** Please stand by *****

The POWERPATCH files are being restored.
```

Reply to the tape request.

b. Accept the list of qualified patches, as prompted.

```
Retrieving PowerPatch files . . . DONE
Determining patches to be integrated . . . DONE
The following patches qualified based on the products selected:

[List of patches here]

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

c. 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.

Retrieving patch files . . . DONE
```

d. Reply to the tape request.

e. 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.

If you plan to use `SLTCOPY` to copy tapes and you are using half-inch magnetic tape, consider using shorter tapes for the CSLT tape volumes.

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 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:

```
Installing the SUBSYS and patch code, if any . . .

   Modifying SL.INSTALL.SYS ... done
   Translating SL.INSTALL.SYS ... done
   Modifying XL.INSTALL.SYS ... done
   Modiying 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 >> (RETURN)

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:

```
... DONE
Phase I of HPINSTAL is now complete.

Phase II requires exclusive system access and should be
performed after a full system backup. To begin Phase II, you
must prepare your system for a SHUTDOWN, perform an UPDATE from
CSLT, then log on as 'MANAGER.SYS,INSTALL' and restart HPINSTAL.
```

15. 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)
product name
product name
...
```

Record the product names.

_____

_____

_____

HPINSTAL automatically cleanups files, exits, and returns 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, proceed to the "Where To Go From Here" table and continue as directed.

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 various 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.

Proceed to the "Where To Go From Here" table and continue as directed

Creating the CSLT using HPINSTAL completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM		"Reserving Disk Space for CD-ROM Tasks" on page 4-43		"Reserving Disk Space for CD-ROM Tasks" on page 4-43			
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Starting the Patch Management Tools

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

HP Patch/iX is a screen-based, menu-driven patch management tool. It provides menus that contain selectable options for each action to be performed. Refer to Chapter 1 “Read Me!” for an introduction to HP Patch/iX. Refer to “Installing HP Patch/iX” on page 4-9 for a description of how to install HP Patch/iX.

HP Stage/iX is also a patch management tool. It uses the HP Patch/iX interface for creating stage areas, then uses a command line interface for applying the stage areas to your system software. Refer to Chapter 1 “Read Me!” for an introduction to HP Stage/iX. Refer to Appendix G “HP Stage/iX Reference” for additional information about using HP Stage/iX.

To start HP Patch/iX:

1. **From a terminal**, log on.

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

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

   ```
   :SETVAR lines #
   ```

   SETVAR—an MPE command.

   lines—the variable to set the line length of your screen.

   #—the number of lines per screen.

   This works for window terminal emulators. There is no option for adjusting screen width.

3. Type at the MPE/iX command line prompt.

   ```
   :PATCHIX
   ```

   The HP Patch/iX Main menu displays with the Log On Prompt window. See Figure 4-1.

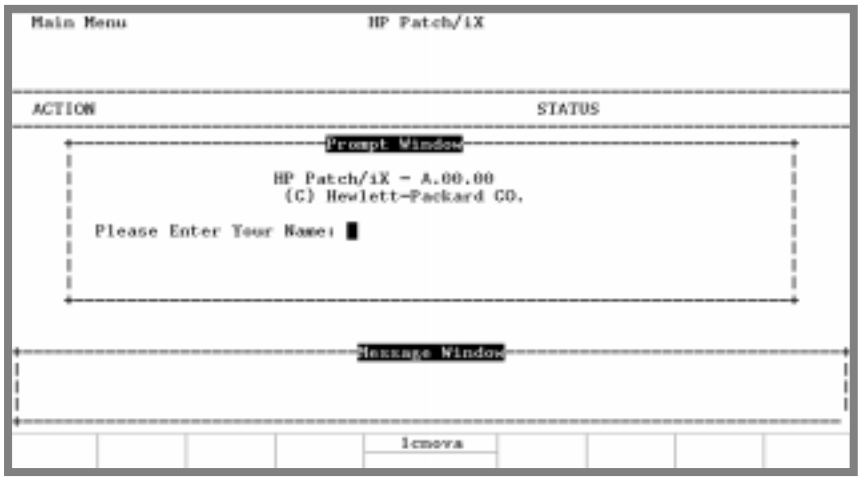


Figure 4-1 HP Patch/iX Log-On Screen

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

   ```
   Please Enter Your Name: _
   ```

   The text entered in this field (25 characters) is referenced in the Installed Patches filter of the View Patches screen. Use this field to identify individuals from the generic `MANAGER.SYS` log-on, if desired.

5. Confirm that the name you typed is correct.

   ```
   Please Verify is "name" Correct (y/n) _
   ```

   The HP Patch/iX Main menu displays the HP Patch/iX process options. Refer to Figure 4-2.

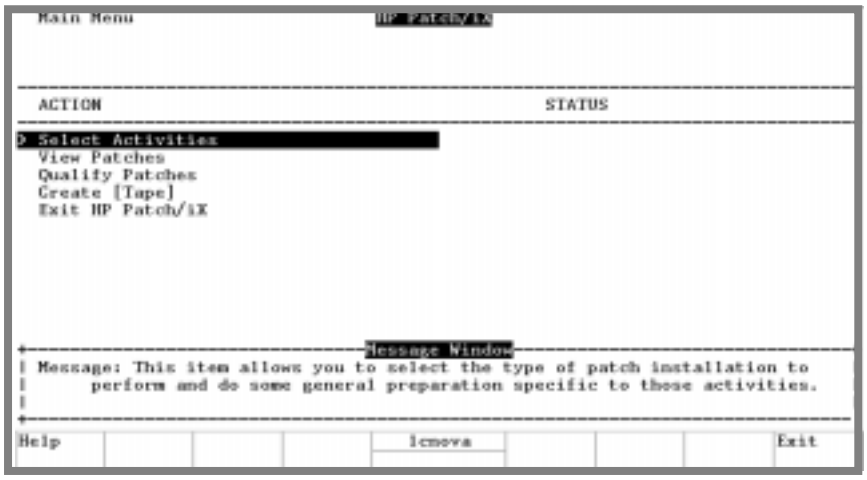


Figure 4-2 HP Patch/iX Main Menu

If HP Stage/iX is initialized, the HP Patch/iX Main menu replaces "Create [Tape]" with the HP Stage/iX option "Create [Stage] [Tape]]". Refer to Figure 4-3.

Figure 4-3 HP Patch/iX Main Menu, HP Stage/iX Initialized

Note: If you need to stop HP Patch/iX for any reason, you are allowed to return and continue.

To Exit HP Patch/iX:

- Use the HP Patch/iX menus.

To return to a partially completed Phase 1 process in HP Patch/iX with the files and settings intact:

1. Type at the prompt:

   `:PATCHIX`

   HP Patch/iX prompts:

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

2. Respond, `YES`.

   This prompt is provided to allow you to "pick-up where you left off," in the event that you halted the HP Patch/iX process prior to completing the CSLT creation (Phase 1).

   If you type `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 the CSLT creation phase (Phase 1).

Starting the Patch Management Tools completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Selecting HP Patch/iX Activities

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

Read all the subsections in this section:

- "Selecting Type of Patching Task" on page 4-23
- "Preparing Your System With HP Patch/iX" on page 4-24

On the HP Patch/iX Main menu, there are five options. *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

To select HP Patch/iX activities:

1. From the HP Patch/iX Main menu, highlight the Select Activities option.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list and press the (RETURN) key.

   The HP Patch/iX Patch Activity Selection screen displays. See Figure 4-4.

Figure 4-4 HP Patch/iX Patch Activity Selection Screen

Selecting Type of Patching Task

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

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

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

Adding (SUBSYS) Products—This 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.

To select the type of patch activity:

1. Check the labeling on your PowerPatch and SUBSYS tapes to confirm that they are from the same Express release.

   If they are not from the same express you must treat applying them as separate modification tasks. Refer to Chapter 2 “Selecting Your Task Checklist” to identify your correct process.
2. From the HP Patch/iX Select Activities screen, highlight the appropriate options. You may select one or more options.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list.

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

3. Press the Mark function key, ((F2)) or the ((x)) key.

   An (x) is added to the mark column.

   Press the Mark function key, ((F2)) again to unmark a selection.
4. Press the Process List function key, ((F4)) 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:

- If you want to accept the default patch preparation, proceed to “Default Patch Preparation” on page 4-25.
- If you want to customize your patch preparation, proceed to “Customized Patch Preparation” on page 4-26.

Caution: If you have intentionally placed new patch files in the `PATCHXL.SYS` group, you need to select the customize patch preparation process.

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. From the HP Patch/iX Patch Activity Selection screen, with the patch activities selected, press the Process List function key, (F4) after you mark your patch activities.
2. Respond Yes to the Prompt window. See Figure 4-5.

Figure 4-5 HP Patch/iX Accept Default Setup Operations Screen

3. Respond to the Prompt windows that display. They are specific to the patch activities you selected.

   HP Patch/iX prompts for the LDEV of:

   - Reactive tape. HP Patch/iX restores patch files.
   - PowerPatch tape. HP Patch/iX restores patch information files.
   - SUBSYS tape. HP Patch/iX restores product information files.

   Prompts to put the LDEV online for you.

   - Reply to the tape request as needed.

   HP Patch/iX displays an Information window that lists the status as the preparation phase progresses.

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

   Figure 4-6 is a sample of the Main menu with the Select Activities option completed.

Note: If you selected *Adding (SUBSYS) Products*, the Main menu will display the *Create [Tape]* menu option. You will no longer be able to select *Create [Stage] [Tape]]* from the Main menu.

Figure 4-6 HP Patch/iX Select Activities Completed

4. If you have accepted the default patch preparation, skip the following section, “Customized Patch Preparation” and proceed to the “Where To Go From Here” table.

   If you wish to customize your list of patches, proceed with “Customized Patch Preparation” on page 4-26.

Customized Patch Preparation

Each patch activity you select has associated preparation operations. HP Patch/iX determines the default operations for you. You have the option to select which preparation operations you want HP Patch/iX to perform, this is customized patch preparation. 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`, `UXL.SYS`, and `UNL.SYS` groups.
- Restore files from Reactive patch tape.
- Restore Product (SUBSYS) information file.
- Restore PowerPatch information files.
- Copy System Libraries.

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

To customize the patch preparation process:

1. From the HP Patch/iX Select Activities screen, with the patch activities selected, press the Process List function key, (F4) after you mark your patch activities.
2. Respond No to the Prompt window:

   ```
   Do you wish to accept the defaults? (y/n) _
   ```

Caution: When you select customized patch preparation, and alter from the defaults, you are overriding the Hewlett-Packard recommended operations.

HP Patch/iX displays a Customized Activities Selection screen. See Figure 4-7.

Figure 4-7 HP Patch/iX Customized Activities Selection Screen

3. From the HP Patch/iX Customize Activities screen, highlight the appropriate options.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list.

4. Press the Mark function key, ((F2)). Marked selection are performed. Unmarked selection are not.

   An X is added to the mark column.

   Press the Mark function key, ((F2)) again to unmark a selection.

5. Press the Verify function key, ((F3)) as desired.

   A V is added to the mark column. The Verify option applies to Purge steps only. As HP Patch/iX continues with the preparation activity, a Prompt window requests confirmation to purge each file prior to purging the file.

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

6. Press the Process List function key, ((F4)).

7. Respond to the Prompt windows that display. They are specific to the patch activities you selected.

   HP Patch/iX prompts:

   - For the LDEV of the Reactive tape. HP Patch/iX then restores patch files.
   - Do you want to restore patches from another Reactive patch tape? HP Patch/iX then restores patch files.
   - For the LDEV of the PowerPatch tape. HP Patch/iX then restores patch information files.

- ❑ For the LDEV of the SUBSYS tape. HP Patch/iX then restores product information files.
- ❑ Put the LDEV online. Reply to the tape request(s) as needed.

8. Preparation activity completes its process.

HP Patch/iX displays a Message window that lists the status as the preparation phase progresses.

When the setup operations are complete, HP Patch/iX automatically returns you to the Main menu. The *Select Activities* option status indicates the type of patch activity that you selected. See Figure 4-8.

Figure 4-8 HP Patch/iX Select Activities Completed

Note: If you selected *Adding (SUBSYS) Products*, the Main menu will display the *Create [Tape]* menu option. You will no longer be able to select *Create [Stage] [Tape]]* from the Main menu.

Selecting HP Patch/iX Activities completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Viewing Patches

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

On the HP Patch/iX Main menu, there are five options. *View Patches* is the second option. It is **not** a required step for patch installation. This option displays the View Patches screen that lists:

- 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. This will enable you to 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 options 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.

To view the list of patches:

1. From the HP Patch/iX Main menu, highlight the *View Patches* option.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list and press the (RETURN) key.

   HP Patch/iX displays the View Patches screen.

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

   ```
   No patches match this filter.
   ```

2. From the HP Patch/iX View Patches screen, press the Next Filter, (F6) or (2) keys, to view the available patches.

The HP Patch/iX View Patches screen displays. See Figure 4-9. If you have not completed the Select Activities portion of the HP Patch/iX process, the screen will be blank.

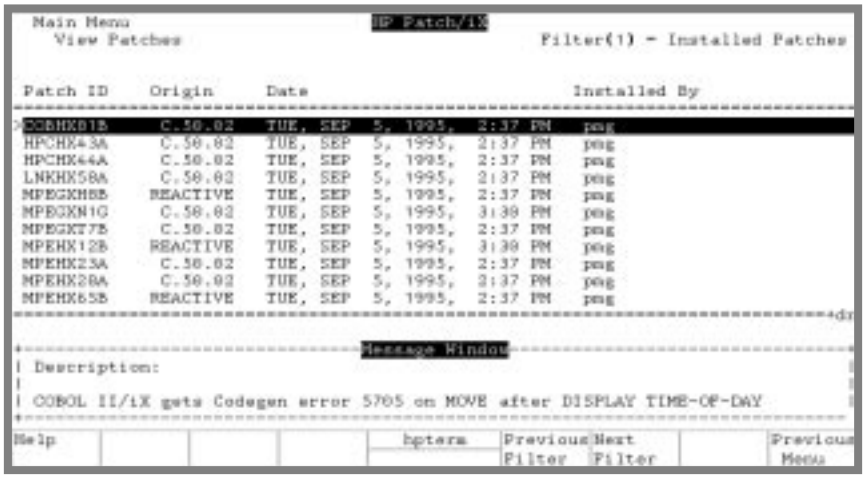


Figure 4-9 HP Patch/iX View Patches Screen

3. To return to the Main menu, press the (F8) key until the Main menu displays.

Filtering the List of Patches

The list of patches displayed in the HP Patch/iX 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 filter options:

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

To change the View Patches filter:

1. From the HP Patch/iX View Patches screen, press the Previous Filter or Next Filter function keys, ((F5) and (F6)) or press the number on the keyboard that corresponds to the filter view you desire.

   HP Patch/iX toggles through the View Patches filter options and displays the selected list of patches in the View Patches screen.

2. To return to the Main menu, press the (F8) key until the Main menu displays.

To display detailed patch information:

1. From the HP Patch/iX View Patches screen, Available Patches filter, highlight the desired patch.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list and press the (RETURN) key.

   The HP Patch/iX Patch Detail Summary screen displays.

2. Press the Previous View or Next View function keys, (F5 and F6) or press the number on the keyboard that corresponds to the filter view you desire. For more information on the different filter views refer to “Qualifying Patches completed.” on page 4-36.

   HP Patch/iX toggles through the View Patch Detail options and displays the selected detailed information about the selected patch from the View Patches screen.

3. Press the Previous Patch or Next Patch function keys, (F2 and F3) or the (Tab and Shift Tab) keys.

   HP Patch/iX scrolls through the list of patches from the View Patches list and displays the selected detailed information about the selected patch in the View Patch Detail screen.

4. To return to the Main menu, press the F8 key until the Main menu displays.

Viewing Patches completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Qualifying Patches

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

On the HP Patch/iX Main menu, there are five options. *Qualify Patches* is the third option. It is a required step for patch installation. 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.

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.

To qualify patches:

1. From the HP Patch/iX Main menu, highlight the Qualify Patches option.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list and press the (RETURN) key.

   The HP Patch/iX Qualify Patches Prompt window displays.

2. Respond Yes to the Prompt window:

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

HP Patch/iX displays a Qualify Patches Information window. This screen lists the types of patches, number of patches, and an estimate of time to perform the qualification. See Figure 4-10.

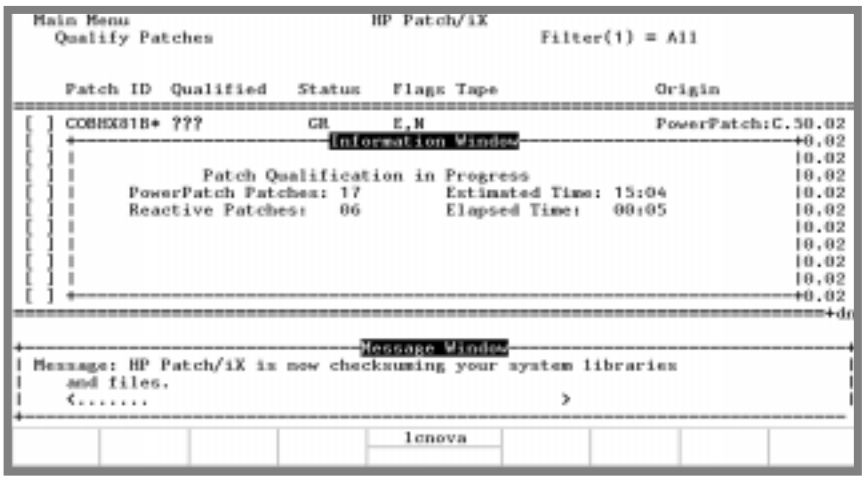


Figure 4-10 HP Patch/iX Qualify Patches Information Window

Upon completion, HP Patch/iX displays the list of patches with their qualification status. See Figure 4-11.

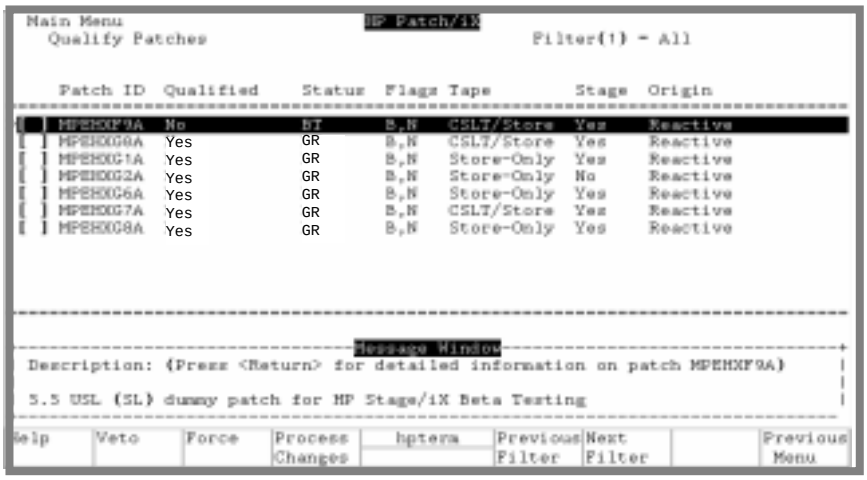


Figure 4-11 HP Patch/iX Qualified Patches Screen

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 Qualified patch (Qualified column = Yes) also requires an Update (Tape column = CSLT/Store).

A `STORE` tape can be created if:

All of the Qualified patches (Qualified column = Yes) do not require an Update (Tape column = Store-Only).

A Staging area on disk can be created if:

All the Qualified patches (Qualified column = Yes) also show Stage column (Stage= Yes). The status of the Tape column does not affect whether patches can be staged or not.

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

Refer to Appendix F “HP Patch/iX Reference” for information on viewing the list of patches.

3. If you wish to modify the list of approved patches, continue to the following section “Modifying the List of Qualified Patches” on page 4-34.
4. If the list of qualified patches is acceptable, press the Previous Menu function key, (F8).

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

Note: If you accept patches that are not stage compatible (Stage=No), the Main menu will display the *Create [Tape]* menu option. You will no longer be able to select *Create [Stage] [Tape]]* from the Main menu.

5. To return to the Main menu, press the Previous Menu function key, (F8). The *Qualify Patches* option status indicates the number of patches that have qualified.

   You accepted the list of qualified patches, proceed to the “Where To Go From Here” table.

Modifying the List of Qualified Patches

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

To modify the list of qualified patches:

Warning! Forcing a patch that does not automatically qualify for your system is strongly discouraged by Hewlett-Packard. Please do so only under the recommendation of the Hewlett-Packard Response Center.

1. From the Qualified Patches screen, scroll the list of patches and for each patch whose status you wish to change, highlight the desired patch.

   Use either the arrow keys or the j and k keys to move up and down the list.
2. Press the Veto or Force function keys, (F2 and F3).

   A V or F is added to the checkbox column next to the Patch ID. The comment in the Qualified column does not change at this time.

   Press the Undo Veto or Undo Force function keys, (F2 and F3) again to remove the Veto or Force choice. The Veto and Force buttons toggle to Undo Veto and Undo Force, respectively.

3. Repeat this for each patch, as needed.
4. Optionally, to view different subset lists of patches, press the Previous Filter or Next Filter function keys, (F5 and F6).

   HP Patch/iX toggles through the various filter screens and displays different subset lists of the patches. Refer to the section “Viewing Patches” for additional information.
5. Optionally, view detailed patch information. Refer to “Viewing Qualified Patches” below.
6. Requalify the modified list of patches. This is **required** each time you modify the list of patches in order to implement your changes.

   Press the Process Changes function key, (F4).

   HP Patch/iX requalifies the patches and displays the requalified list of patches. See Figure 4-12.

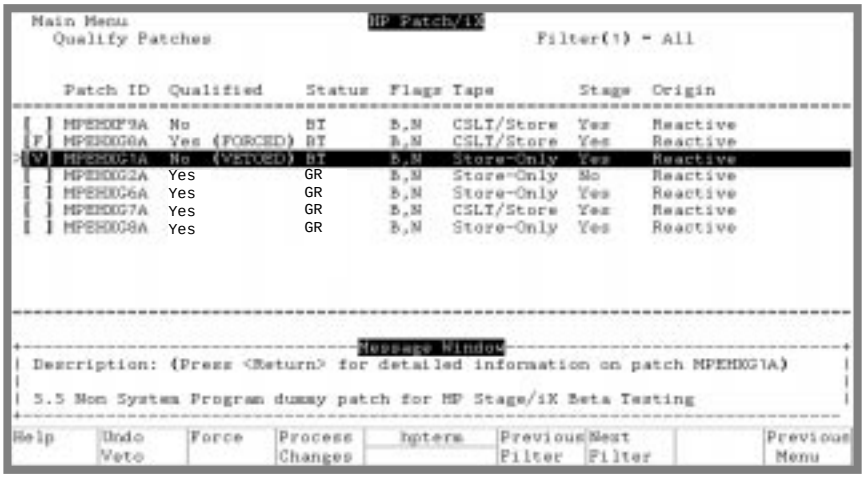


Figure 4-12 HP Patch/iX Re-qualified Patches Screen

Forced patches show a Yes (Forced) comment in the Qualified column. Vetoed patches show a No (Vetoed) comment 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 the Previous Filter or Next Filter function keys, (F5 and F6), or the number 4 key to display the Difference filter.

Caution: Not all patches can be Forced or Vetoed. This is a system dependent occurrence.

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

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

7. If the list of qualified patches is acceptable, press the Previous Menu function key, (F8) to complete this section.

Note: If you accept patches that are not stage compatible (Stage=No), the Main menu will display the *Create [Tape]* menu option. You will no longer be able to select *Create [Stage] [Tape]]* from the Main menu.

When you press (F8) HP Patch/iX automatically returns you to the Main menu. The *Qualify Patches* option 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 Yes (Forced) patches. Those patches with a No in the Qualified column will not be applied to your system.

Qualifying Patches completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Creating a Patch Tape or Staging Area Using HP Patch/iX

If you are following the below listed checklist, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

The HP Patch/iX Main menu, has five options. *Create [Stage] [Tape]]* or *Create [Tape]* is the fourth option. If HP Stage/iX is initialized, the *Create [Stage] [Tape]]* option displays. 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. This option 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. Reference the Qualified Patches screen to see which options are possible. Refer to Figure 4-11, “HP Patch/iX Qualified Patches Screen,” on page 4-33.

A CSLT can be created if:

Any Qualified patch (Qualified column = Yes) also requires an Update (Tape column = CSLT/Store).

A STORE tape can be created if:

All of the Qualified patches (Qualified column = Yes) do not require an Update (Tape column = Store-Only).

If a STORE tape can be used, you do not need to shutdown your system to apply the changes.

A Staging area on disk can be created if:

All the Qualified patches (Qualified column = Yes) also show Stage column (Stage= Yes). The status of the Tape column does not affect whether patches can be staged or not.

- If HP Stage/iX is not initialized, the Stage column does not display.
- 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 the *Create [Stage] [Tape]]* or *Create [Tape]* option.

Use either the arrow keys or the (j) and (k) keys to move up and down the menu list and press the (RETURN) key. See Figure 4-13.

Figure 4-13 HP Patch/iX Main Menu, HP Stage/iX Initialized

If HP Stage/iX is not initialized, *Create [Tape]* replaces the *Create [Stage] [Tape]]* menu option.

2. If HP Stage/iX is initialized, respond to the prompt to select the option desired.

```
HP 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)
```

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 create a CSLT/STORE tape for backup purposes.

3. If you are creating a staging area, respond to the prompt for a staging area name.

```
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?
```

The staging area name can be up to 16 characters. The characters can be alpha-numeric, including underbar (_), dash (-), and period (.).

4. Respond to the LDEV requests through the HP Patch/iX Prompt windows that display. They are specific to the patch activities you selected.

HP Patch/iX prompts:

- For the LDEV of the PowerPatch tape.

- ❏ For the LDEV of the SUBSYS tape. HP Patch/iX then restores product information files.
- ❏ For the LDEV of the 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. Reply to the tape requests on the system console. They are specific to the patch activities you selected.

When prompted:

- ❏ Insert the PowerPatch and reply to the tape request. HP Patch/iX then restores patch files.
- ❏ Insert the SUBSYS and reply to the tape request. HP Patch/iX then restores product files.
- ❏ Insert a blank tape for the CSLT/STORE tape and reply to the tape request.

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

HP Patch/iX displays a Stage and/or Tape Creation screen. The Start Time, Estimated Time, and Elapsed Time columns are continuously updated as activities are processed. See Figure 4-14.

Figure 4-14 HP Patch/iX Stage/Tape Creation Screen

The HP Patch/iX performs the following:

- Restores PowerPatch files from the tape drive, 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. List and record any manually installed products HP Patch/iX 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)
product name
product name
...
```

   Record the manually installed product names.

   _____

   _____

   _____

7. HP Patch/iX automatically returns you to the Main menu. The *Create [Stage] [Tape]]* or *Create [Tape]* option status indicates “Stage Created”, “CSLT/STORE Tape Created”, or “Stage and Tape Created”, as appropriate to your selection.

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

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

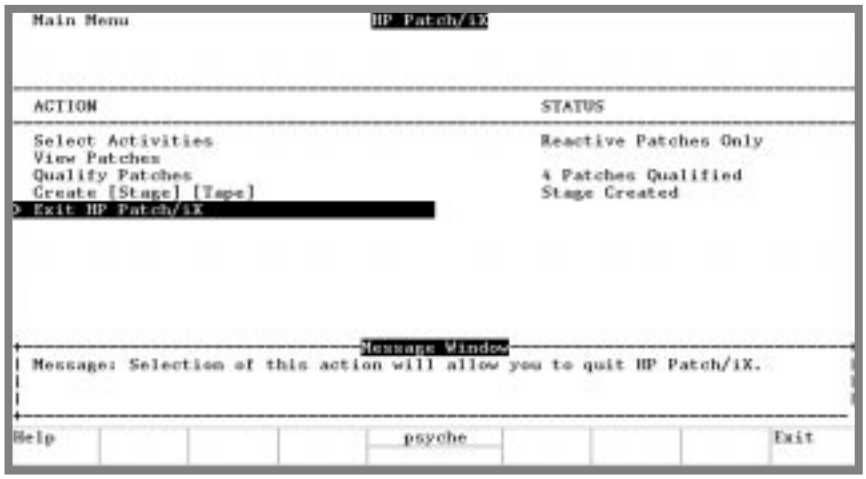


Figure 4-15 HP Patch/iX Main Menu, Stage Created

Creating a Patch Tape or Staging Area Using HP Patch/iX completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Exiting HP Patch/iX

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Add-on with Tape and Manage Patches

On the HP Patch/iX Main menu, there are five options. *Exit HP Patch/iX* is the fifth option. This is a required action for patch installation. This option exits you out of the HP Patch/iX tool:

To exit the HP Patch/iX tool:

1. From the HP Patch/iX Main menu, highlight the *Exit HP Patch/iX* option.

   Use either the arrow keys or the (j) and (k) keys to move up and down the list and press the (RETURN) key.

   The MPE/iX command line prompt displays.
2. Respond to the prompt to purge process files.

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

   If you electronically downloaded your reactive patches, this will 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`.

   PowerPatch and SUBSYS files are automatically cleaned up by HP Patch/iX.

Exiting HP Patch/iX completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Securing the System" on page 5-32		"Securing the System" on page 5-32				
CD-ROM							
Disk Drive	"Activating a Staged Modification" on page 5-29						

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Reserving Disk Space for CD-ROM Tasks

If you are using one of the following checklists, perform the steps in this section:

- Add-on with CD-ROM
- Update with CD-ROM
- Modify Remote System

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.

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=n,1,1;DEV=1
   :BUILD AXLSPACE.PUB.SYS;DISC=m,32,32
   ```

   where:

   n = AXLDEV1 number, determined in Step 1 or use the default of 120,000 sectors.

   m = AXLSPACE number, refer to Table 3-6, in “Estimating Disk Space” on page 3-20 for a listing of maximum disk space values for Update, Add-on, and PowerPatch.

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 available on your system before you perform an update or add-on. Refer to Appendix C “Reserving 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. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM		“Securing the System” on page 5-32		“Securing the System” on page 5-32	“Securing the System” on page 5-32		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Modifying Your System 5

This chapter describes Phase 2 of applying modifications to your system. During this phase of the process you secure and shutdown your system, and apply the changes to your system.

Securing the System for Tape Tasks

If you are using one of the following checklists, perform the steps in this section:

- Add-on with Tape
- Update with Tape

This section includes logging off users and shutting down the system.

To prepare and secure the system for updating:

1. If you are not already in the PUB group, **from the console**, change groups now.

   ```
   :CHGROUP PUB
   ```

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

   If you are performing an Add-on, proceed 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 5, 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. Proceed to Step 4.

---

4. Log users off.

```
:LIMIT 0,0
:WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
```

5. Wait approximately five minutes, then abort job or sessions still executing.

Make sure users have saved their work and logged off. 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:

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

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

6. Deactivate NS3000/iX, if applicable.

```
: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, proceed to Step 8.

c. Terminate logging processes as shown below.

```
:LOG logid,STOP
```

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 either here or on your checklist.

---

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* (36216-90005) 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* (30601-64001).

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* (36375-90001) for installation instructions.

9. 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:

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.

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

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

b. 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 (see “Setting Passwords and Lockwords” on page 6-10.) Record the names either here or on your checklist.

_____

_____

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

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

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

For Release 4.0:

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

For Release 5.0 and 5.5:

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

where:

volume_set_name is the name for each user volume setyou want to backup.

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

10. Purge spool files.

```
:SPOOLF;DELETE
```

11. 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.

12. If you are performing an Update task, proceed with Step 13.

If you are performing an Add-on task, proceed with Step 14.

Update Tasks

13. 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 @.TELESUP
:PURGEGROUP OSxnn.TELESUP
:PURGEGROUP XPT@.TELESUP
```

where:

x—an alphabetic character

nn—the numeric release number (for example, `OSA10.TELESUP` and `0SB23.TELESUP`).

If you have not performed a system modification before, these files may not exist.

c. Proceed with Step 14.

---

14. 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 here or on your checklist.

_____

Securing the System for Tape Tasks completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches	Update	Remote	Re-Install	New Install
Tape		"Creating the CSLT Using AUTOINST" on page 5-19		"Applying the SLT" on page 5-6			
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.

Applying the SLT

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape
- Install a New System

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.

Warning!

Experienced Users! If this is the first time you are using this book and you started anywhere but where indicated on your checklist, you've gone too far. Return to the checklist for your task (see Chapter 2 "Selecting Your Task Checklist") and perform the steps in the sections as listed on your checklist.

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 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. The system is already down if you are performing a new install.

   Control A
   =SHUTDOWN

3. Reset the system.

   If you have an HP 3000 Series 99x, you must connect to the service processor before you can restart the system.

   a. Type the following:

      Control B
      CM>SP
      SP>RS

   b. 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 is 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

   For all other systems.

   a. Enter the following commands to reset the system:

      Control B
      CM>RS

      If the system does not respond to the Control 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.

   b. Enter Y to confirm restarting the system.

4. Boot the system from the alternate boot path.

a. Boot messages can 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 Control _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.

5. Check `FASTSIZE` value.

```
ISL>DISPLAY
```

```
ISL>DISPLAY
Fastsize value is 0000000n
.
.
.
```

If the value (*n*) is F, then proceed to Step 6.

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.

6. If you are performing an Update, proceed with Step 7.

   If you are performing an Install, proceed with Step 8.

Update Tasks

7. Update the system with the factory SLT.

   ```
   ISL>UPDATE
   ```

   Proceed to Step 9.

Install Tasks

8. Retrieve system clock and start installation.

   ```
   ISL>CLKUTIL
   ```

   Set clock to Greenwich Mean Time. This takes about six minutes.

Warning!

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!

   a. Type at the prompt:

   ```
   ISL>INSTALL
   ```

   b. Proceed to Step 9.

9. Confirm the date and time.

   If the date and time displayed are correct, enter `Y`. 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 assumes the time and date are correct and 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 displays startup 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 40 minutes.

   If you receive an error message refer to Appendix H “Error Messages and Warnings” for error handling and Appendix C “Reserving Disk Space” for disk space information.

10. Boot the system from the primary boot path.

    a. Boot messages can 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. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape				"Starting the System" on page 5-12			"Listing the System Configuration" on page 5-10
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Listing the System Configuration

If you are using one of the following checklists, perform the steps in this section:

- Install a New System

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. This section describes how to determine your system configuration group.

Listing the system configuration uses the off-line diagnostic tool, `MAPPER`. To get help using `MAPPER`, type `HELP` at the `MAPPER` prompt.

To list the system configuration:

1. Check all hardware peripherals are attached and powered on.
2. Start ODE.

   ```
   ISL>ODE
   ```

3. Display hardware configuration.

   ```
   ODE>RUN MAPPER
   ```

   Figure 5-1 is a sample of a `MAPPER` display.
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
   ```

```
STARTING EXECUTION OF MAPPER
Processor Identification:
  Hardware Model: 280H, Revision: 0
  Software Model: 4H, Revision: 0
  Hardware ID: 0, Software ID: 142828241 (unsigned decimal)
  Software Cap: 0x100000061
  MPE/XL Model String: 957SX
  Processor Board Revisions:
    CPU - CPU Chip:                3
    System Controller:             3
    PDC - Processor Dependent Code 1.5
  Cache and TLB sizes:
    Instruction Cache: 64 K bytes, Instruction TLB: 96 entries
    Data Cache:        64 K bytes, Data TLB:        96 entries
  Co-processors: None installed
I/O Configuration:
                                 Type HW     SW     Revisions
Path   Component Name             ID   Mod    Mod    Hdwr   Firm
8      CIO Adapter                8H   5H     10H    0      0
8.0    HP-IB card                 2H   -      -      6      2912
16     CIO Adapter                8H   5H     10H    0      0
16.0   HP-IB card                 2H   -      -      6      2912
52     HP-IB SCSI                 4H   14H    39H    0      0
         Resetting SCSI Bus ...
52.0.0  HPC1503 (X) /HPC1520B DDS tape - -    -      -    1009
52.2.0  HPA1999A CD-ROM drive         -  -    -      -    0272
52.5.0  HPC3010M1 disc drive         -  -    -      -    0B04
52.6.0  HPC2247M1 disc drive         -  -    -      -    0B04
56     HP-PB LAN/Console             2H 14H  60H    0    0
62     Processor                     0H 280H 4H     0    0
63     Memory (128 M bytes)          1H 14H  9H     0    0
Slot 1A - 32M
Slot 1B - 32M
Slot 5A - 32M
Slot 5B - 32M
Resetting the Boot Device . . .
Done.
RUN COMPLETED.
ODE>exit
ISL>
```

Figure 5-1 Sample Listing MAPPER Output

Listing the System Configuration completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							"Starting the System" on page 5-12
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Starting the System

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape
- Install a New 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* - the configuration group for your system. Refer to Appendix B “Configuration Tables” for a list of configuration groups.

2. Confirm the date and time.

   The system displays a series of startup messages, and you are prompted to confirm the date and time. If the date and time displayed are correct, enter Y. 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 assumes the time and date are correct and 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 startup 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 startup process, the system makes several configuration checks and may display warning messages. This is normal for system startup, and will not affect system operation.

3. Dismount the System Load Tape (SLT).

Starting the System completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape				"Restoring AUTOINST File Set" on page 5-16			"Configuring the System" on page 5-14
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Configuring the System

If you are using one of the following checklists, perform the steps in this section:

- Install a New System

You need to configure the following devices for AUTOINST 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. 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" on page 5-10. For information on SYSGEN refer to the *System Startup, Configuration, and Shutdown Reference Manual* (32650-90042).

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.

   ```
   (Control)A
   =SHUTDOWN
   ```

6. Reset the system.

   If you have an HP 3000 Series 991 or 995, you must connect to the service processor before you can restart the system.

   a. Type the following:

      ```
      (Control)B
      CM>SP
      SP>RS
      ```

   b. 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 is 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

For all other systems.

a. Enter the following commands to reset the system:

Control B

SP>RS

If the system does not respond to the Control 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.

b. 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, 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 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.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							"Checking Volumes" on page 5-17
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Restoring AUTOINST File Set

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape

PowerPatch Tasks

- If you are applying PowerPatch patches, proceed to Step 1.
- If you are not applying PowerPatch patches, proceed to the "Where To Go From Here" table and continue with your task as directed.

To restore the AUTOINST file set and its dependencies.

1. **From the console** at the MPE/iX prompt, log on 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. Mount the PowerPatch tape, put the tape drive on-line, and enter the following at the system prompt:

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :FILE PPT;DEV=TAPE
   ```
3. Restore the files:

   ```
   :RUN STORE.PUB.SYS;INFO="RESTORE *PPT;A@,F@;CREATE;SHOW"
   ```

   or

   ```
   :RESTORE *PPT;A@,F@;SHOW
   ```
4. Dismount the PowerPatch tape when the restore is complete.

Restoring AUTOINST File Set completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape				"Creating the CSLT Using AUTOINST" on page 5-19			
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Checking Volumes

If you are using one of the following checklists, perform the steps in this section:

- Install a New System

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* (32650-90045).

To check volumes:

1. If your are not already logged on, **from the console,** at the MPE/iX prompt, log on 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. Enter a DSTAT ALL command to verify a status of MEMBER for the disk drives. All system volumes showing a status of LONER must be added using the VOLUTIL utility.

   ```
   :VOLUTIL
   volutil: DSTAT ALL
   ```

   Sample output:

```
LDEV-TYPE STATUS VOLUME (VOLUME SET - GEN)
--------- -------------- ----------------------------
1- 022040 MASTER MEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
2- 022040 LONER  MEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
```

3. Add system volumes. Use SCRATCHVOL and NEWVOL commands.

   ```
   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
   ```

4. Check all volumes to confirm they are configured correctly. Use the DSTAT command.

   ```
   volutil: DSTAT ALL
   ```

   Sample output:

```
LDEV-TYPE STATUS VOLUME (VOLUME SET - GEN)
--------- -------------- ----------------------------
1- 022040 MASTER MEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
2- 022040 MEMBER MEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
```

```
volutil: EXIT
```

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							"Creating the CSLT Using AUTOINST" on page 5-19
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Creating the CSLT Using AUTOINST

If you are using one of the following checklists, perform the steps in this section:

- Add-on with Tape
- Update with Tape
- Install a New System

AUTOINST sets up the necessary environment, restores files, and creates the accounting structure for the installation.

Warning!

Experienced Users! If this is the first time you are using this book and you started anywhere but where indicated on your checklist, you've gone too far. Return to the checklist for your task (see Chapter 2 "Selecting Your Task Checklist") and perform the steps in the sections as listed on your checklist.

To create the CSLT using AUTOINST:

1. From the console at the MPE/iX prompt, log on 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. If you are applying PowerPatch patches, proceed to Step 3.

   If you are not applying PowerPatch patches, proceed 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.

      ```
      :RESTORE *PPT;A@,F@;SHOW;DEV=1
      ```

   c. Reply to tape request.

   d. Dismount the PowerPatch tape, as indicated.

   e. Proceed to Step 4.

4. Run AUTOINST.

   ```
   :RUN AUTOINST.INSTALL.SYS
   ```

5. 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 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

6. If you receive an out of disk space message.

The update tool checks for disk space. If you receive an error message refer to Appendix H “Error Messages and Warnings” for error handling and Appendix C “Reserving Disk Space” for disk space information.

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 RUN AUTOINST.INSTALL.SYS command again.

7. Select the option that matches your task and reply to tape request.

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

1 PowerPatch                      (PowerPatch only.
                                    Use HP Patch/iX,
                                    refer to your checklist)
2 SUBSYS (Add-On) and PowerPatch  (Add-on + PowerPatch)
                                    Use HP Patch/iX,
                                    refer to your checklist)
3 FOS, SUBSYS, PowerPatch         (Update + PowerPatch or
                                  Install + PowerPatch)
4 FOS and SUBSYS                  (Update only or Install only)
5 Add-On (SUBSYS only)            (Add-on only)
6 Exit

Enter your choice_
```

8. Respond to SUBSYS prompt.

```
Has a SUBSYS tape been included in your installation package
(y/n)?
```

If you have a SUBSYS, enter Y at the prompt.

If you do not have a SUBSYS, enter N at the prompt.

9. Reply to prompt for LDEV number.

```
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)>> _
```

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 update tool checks for disk space. If you receive an error message refer to Appendix H "Error Messages and Warnings" for error handling and Appendix C "Reserving Disk Space" for disk space information.

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

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

Update Tasks
Install Tasks

11. Restore FOS files.

This step takes about 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.
```

c. Proceed to Step 12.

12. Monitor progress messages.

AUTOINST creates the accounting structure. Progress messages display throughout this 5 minute process.

```
Creating accounting structure #Jnn

mm:ss/#Jn/xx/LOGON FOR: "SUPACCT,MANAGER.SYS,PUB"...
13:36/#Jn/xx/FROM/MANAGER.SYS/
13:36/#Jn/xx/FROM/MANAGER.SYS/ Now running SUPACCT job
13:36/#Jn/xx/FROM/MANAGER.SYS/
13:36/#Jn/xx/FROM/MANAGER.SYS/ Finished running SUPACCT job
13:41/#Jn/xx/LOGOFF ON LDEV #10.

The accounting structure has been successfully created.
```

13. If you are performing an Add-on task, proceed to Step 14.

If you are performing and Update or Install task, proceed to Step 15.

Add-on Tasks

14. Restore SUBSYS files.

This step takes about 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,GROUPCREATOR 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. The following 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 all installation jobs are complete, the following message displays.

```
All product installation jobs have been streamed successfully.
```

c. Proceed to Step 15.

---

15. Monitor progress messages.

AUTOINST creates a copy of the system libraries and displays:

```
Making a temporary copy of the SL . . . done
Making a temporary copy of the XL . . . done
Making a temporary copy of the NL . . . done
```

16. If you are applying PowerPatch patches, proceed to Step 17.

If you are not applying PowerPatch patches, proceed to Step 18.

PowerPatch Tasks

17. Restore PowerPatch information and patches.

This step takes about 90 minutes.

a. Reply to the tape request.

```
The installer will now evaluate each patch on the POWERPATCH
tape to determine the set of patches applicable to your system.
This process may take up to 30 minutes.

Determining patches to be installed . . . done
```

This takes about 45minutes.

AUTOINST evaluates the staged library and program files and displays:

AUTOINST qualifies the patches, displays a list of approved patches, and prompts for acceptance of the patches:

```
The result of the Patch qualification process is as follows:

Patch Qualification Status:
Patch ID Result
----- -- ----------------------
patch id qualified/not qualified
: : :
: : :
: : :

Dependencies:
Patch ID Result
-----   --- -----------------
patch id   qualified/not qualified
: : :
: : :
: : :
```

b. Reply to the prompt to continue processing patches.

```
Do you wish to continue with installation of the patches listed
above (y/n)?
```

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.

c. Mount the PowerPatch tape and reply to the tape request.

The final patch processing takes about 45 minutes.

`AUTOINST` restores the patch files and displays:

```
Proceeding with patch installation
DONE

Patch selection process is complete

Mount the patch tape and put the tape drive online. The files
from the PATCH tape will now be restored

***** PLEASE STAND BY *****
The POWERPATCH files are now being restored
...
The files from the POWERPATCH tape were successfully restored.
```

`AUTOINST` processes the patch files and displays:

```
Processing patch files . . .
```

d. Dismount the PowerPatch tape.

e. Proceed to Step 18.

---

18. Mount 2400 foot write enabled tape or DDS 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. AUTOINST updates the temporary copies of the system libraries and displays:

```
Installing the SUBSYS and patch code ...
Modifying SL.INSTALL.SYS ... done
Translating SL.INSTALL.SYS ... done
Modifying XL.INSTALL.SYS ... done
Modifying NL.INSTALL.SYS ... done
No patches to the OS_SOM in NL.INSTALL.SYS
Relinking patched procedures into the OS_SOM in NL.INSTALL.SYS
... done
No Binary Patches to NL.INSTALL.SYS
Creating a new START PME ... done
Setting file equations for SYSGEN ... done
```

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.

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.
```

19. 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)
product name
product name
...
```

Record the product names.

_____

_____

_____

20. 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)

product name
product name
. . .
```

Record the product names.

_____

_____

_____

21. Monitor progress messages.

The update tool checks for disk space.

If you receive an error message refer to Appendix H “Error Messages and Warnings” for error handling and Appendix C “Reserving Disk Space” for disk space information.

If the disk space is available, `AUTOINST` displays the following message that indicates that the CSLT is created.

```
END OF PROGRAM
```

22. When the CSLT is created, dismount the CSLT, write-disable it, and label it CSLT (*v.uu.ff*), the PowerPatch (*v.uu.ff*), if applicable, 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. ❑

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape		“Applying the Modification” on page 5-40		“Applying the Modification” on page 5-40			“Applying the Modification” on page 5-40
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Distributing a Staging Area Remotely

If you are using one of the following checklists, perform the steps in this section:

- Distributing Staging Areas to Remote Systems

To distribute a staging area on a remote system:

1. If you are not already, **log on to the remote system console**, start the spooler, and streams device.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   :SPOOLER LP;START
   :STREAM streams_device
   ```

   A common *streams_device* value is 10. Example:

   ```
   STREAM 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.

3. Start HP Stage/iX.

   ```
   :STAGEMAN
   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`—For the nounpack option, specify each filename in the staging area.

   The distributed staging area is created on the remote system.

5. Validate the new staging area.

   ```
   stageman>VALIDATE sa_name
   stageman>SET sa_name
   ```

Distributing a Staging Area Preparation completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive					“Activating a Staged Modification” on page 5-29		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Activating a Staged Modification

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems

In this section you activate a staging area, that is, you select the staging area that the system will boot and operate from. This activity requires system manager capabilities.

To activate a staged area:

1. At the MPE/iX colon prompt, type:

   ```
   :RUN STAGEMAN.PUB.SYS
   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.

   The following is a sample return screen.

```
STAGEMAN A.00.00, (C) Hewlett-Packard Co., 1995. All Rights
Reserved.
STAGEMAN> set stage_name

Set staging area for next boot to “stage_name”.
```

Refer to Appendix G “HP Stage/iX Reference” for additional in formation on the HP Stage/iX commands.

Activating a Staged Modification completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive	“Distributing a Staging Area Preparation” on page 5-30				“Securing the System” on page 5-32		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Distributing a Staging Area Preparation

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches by Staging Area

Remote Tasks

If you are planning to Distribute a Staging Area to a Remote system task, proceed to Step 1.

If you are performing a Manage Patch by Staging Area for a Local system, proceed to "Securing the System" on page 5-32.

To prepare for distributing staging areas:

1. If you are not already logged on, **from the console**, log on, start the spooler, and streams device.

   ```
   :HELLO MANAGER.SYS,INSTALL;HIPRI
   :LIMIT 1,1
   :SPOOLER print_device;START
   :STREAM streams_device
   ```

   Common *print_device* values are LP or 6. A common *streams_device* value is 10. Example:

   ```
   SPOOLER LP;START
   STREAM 10
   ```

   Ignore the `GROUP OUT OF CONNECT TIME` warning, if it displays.

2. Start HP Stage/iX.

   ```
   :STAGEMAN
   stageman>
   ```

3. Prepare the staging area, execute the `EXPORT` command.

   ```
   stageman>EXPORT sa_name;option
   ```

   where: *sa_name*—the name of the staging area to be distributed. Record your *sa_name*:

   _____

   option specifies the `EXPORT` file mode. The default is `NOPACK`. The `EXPORT` options are:

   `TAPE`–For the `TAPE` option, reply to the tape request.

   `PACK`—For the `PACK` option, specify the staging area name.

   `NOPACK`–For the `NOPACK` option, specify each filename in the staging area.

   Export only one staging area at a time. Record `EXPORT` option used:

   _____

Distributing a Staging Area Preparation completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive	“Securing the System” on page 5-32						

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Securing the System

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with CD-ROM
- Modify Remote 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
   ```

   An LP device must be configured in `SYSGEN`. A common *`streams_device`* value is 10.

   Already spooled and streamed messages might display.

2. If you are performing a Add-on, Update, or Remote CD-ROM task, proceed to Step 3.

   If you are performing a Manage Patch, Staging Area, or Add-on tape task, proceed 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. Proceed to Step 4.

4. If you are performing an Update task, proceed to Step 5.

   If you are performing an Add-on, Patch, Staging Area, or Remote system task, proceed 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 5, 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. Proceed to Step 6.

---

6. Log users off.

```
:LIMIT 0,0
:WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
```

7. Wait approximately five minutes, then abort job or sessions still executing.

Make sure users have saved their work and logged off. 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.

8. Deactivate NS3000/iX, if applicable.

```
: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, skip 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 either here or 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 back up the system. Refer to the *ALLBASE/SQL Database Administration Guide* (36216-90005) 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* (30601-64001).

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* (36375-90001) for installation instructions.

11. Backup the system, if you do not already have a current full backup.

a. Specify a class name.

`:FILE SYSGTAPE;DEV=dev_number`

where *device_number*—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`.

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

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

b. 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 (see "Setting Passwords and Lockwords" on page 6-10.) Record the names either here or on your checklist.

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

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

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

For Release 4.0:

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

For Release 5.0 and 5.5:

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

where:

volume_set_name is the name for each user volume setyou want to backup.

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

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, proceed with Step 15.

If you are performing an Add-on, Patch, Staging Area, or Remote system task, proceed with 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 @.TELESUP
:PURGEGROUP OSxnn.TELESUP
:PURGEGROUP XPT@.TELESUP
```

where:

x is an alphabetic character

nn is the numeric release number (for example, `OSA10.TELESUP` and `0SB23.TELESUP`).

If you have not performed a system modification before, these files may not exist.

c. Proceed with 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 here or on your checklist.

17. If you are performing a Remote system task or CD-ROM task, proceed to Step 18.

If you are performing an Add-on, Patch, or Staging Area task with tape or disk on a local system, proceed to Step 19.

Remote Tasks
CD-ROM Tasks

18. 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. Proceed to Step 19.

---

19. If you are performing a PowerPatch task, proceed to Step 20.

If you are not performing a PowerPatch task, proceed to the "Where To Go From Here" table and continue as directed for your task.

PowerPatch Tasks

20. Restore the `AUTOINST` file set and its dependencies.

a. Mount the PowerPatch tape, put the tape drive on-line, and enter the following at the system prompt:

```
:HELLO MANAGER.SYS,INSTALL;HIPRI
:FILE PPT;DEV=TAPE
```

Restore the files:

```
:RUN STORE.PUB.SYS;INFO="RESTORE *PPT;A@,F@;CREATE;SHOW"
```

or

```
:RESTORE *PPT;A@;F@;SHOW
```

Dismount the PowerPatch tape when the restore is complete.

b. Proceed to the "Where To Go From Here" table and continue as directed for your task.

Securing the System completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Applying the Modification" on page 5-40		"Applying the Modification" on page 5-40				
CD-ROM		"Applying the Modification" on page 5-40		"Applying the Modification" on page 5-40	"Applying the Modification" on page 5-40		
Disk Drive	"Shutting Down the System" on page 5-38				"Shutting Down the System" on page 5-38		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Shutting Down the System

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Re-Install Using a CSLT

To shutdown the system:

1. If your are not already logged on, **from the console,** at the MPE/iX prompt, log on 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. Shut down the system.

   Control A

   ```
   =SHUTDOWN
   ```

3. Reset the system after the last shutdown message (SHUT6)

   If you have an HP 3000 Series 99x, you must connect to the service processor before you can restart the system.

   a. Type the following:

      Control B

      ```
      CM>SP
      SP>RS
      ```

   b. 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 is 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

   For all other systems.

   a. Enter the following commands to reset the system:

      Control B

      ```
      CM>RS
      ```

      If the system does not respond to the Control 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.

   b. Enter `Y` to confirm restarting the system.

Shutting Down the System completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches	Update	Remote	Re-Install	New Install
Tape						"Applying the Modification" on page 5-40	
CD-ROM							
Disk Drive	"Restarting the System" on page 5-44				"Restarting the System" on page 5-44		

1. All tasks include, optionally applying PowerPatch.

Applying the Modification

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches, CSLT/STORE tape only
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

Warning!

Experienced Users! If this is the first time you are using this book and you started anywhere but where indicated on your checklist, you've gone too far. Return to the checklist for your task (see Chapter 2 "Selecting Your Task Checklist") and perform the steps in the sections as listed on your checklist.

Manage Patch Task

- If you are performing a Manage Patch task **and** HP Patch/iX created a **store tape only**, (not a CSLT/STORE tape), for your patching, proceed to "Rerunning HP Patch/iX" on page 5-53.
- If you are performing a Manage Patch task and HP Patch/iX created a CSLT/STORE tape, or you are performing an Add-on, Update, Modify Remote System, Re-Install, or Install, proceed with Step 1.

To apply the CSLT:

1. From the console, mount on the tape drive, the Customized System Load Tape (CSLT) created by AUTOINST, HPINSTAL, or HP Patch/iX. For re-installations, mount the CSLT created during the last full backup. Mount reel one of the CSLT. 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.

   (Control) A
   =SHUTDOWN

3. Reset the system after the last shutdown message (SHUT6)

   If you have an HP 3000 Series 99x, you must connect to the service processor before you can restart the system.

   a. Type the following:

      (Control) B
      CM>SP
      SP>RS

   b. 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 is 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

For all other systems.

a. Enter the following commands to reset the system:

Control B

```
CM>RS
```

If the system does not respond to the Control 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.

b. 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.

- 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 Control 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.

5. Check `FASTSIZE` value.

```
ISL>DISPLAY
```

```
ISL>DISPLAY
Fastsize value is 0000000n
.
.
.
```

If the value (*n*) is F, then proceed 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.

6. 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.

7. If you are performing a Manage Patch, Add-on, Update, Remote, or Install tasks, proceed to Step 8.

If you are performing a **Re-install task only**, proceed to Step 9.

Manage Patch Tasks, Add-on Tasks, Update Tasks, Remote Tasks, Install Tasks

8. Modify the system with the CSLT.

a. After the boot sequence, which takes a maximum of 6 minutes, the ISL prompt displays. Type at the prompt:

```
ISL>UPDATE
```

The system displays initialization and restore messages.

b. Proceed to Step 10.

Re-install Tasks

9. Proceed with the re-installation.

Warning!

DO NOT DO THIS UNLESS YOU ARE PERFORMING A RE-INSTALL TASK. IT DESTROYS ALL THE EXISTING SYSTEM AND USER FILES IN THE MPEXL_SYSTEM_VOLUME_SET!

a. After the boot sequence, which takes a maximum of 6 minutes, the ISL prompt displays. Type at the prompt:

```
ISL>INSTALL
```

The system displays initialization and restore messages.

b. Proceed to Step 10.

---

10. Confirm the date and time.

If the date and time displayed are correct, enter `Y`. 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 assumes the time and date are correct and continues.

The system 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 system continues to restore the files from the CSLT. This process can take up to 25 minutes. During this process, the system displays initialization and restore messages.

When the process completes, autoboot begins,

Applying the Modification completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	All Tasks Go To Next Page						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Restarting the System

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches, CSLT/STORE tape only
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

Manage Patch Task

- If you are performing a Manage Patch task **and** HP Patch/iX created a **store tape only**, (not a CSLT/STORE tape), for your patching, proceed to "Rerunning HP Patch/iX" on page 5-53.

Caution: If HP Patch/iX created a STORE tape for your patch or add-on task. You should **not** have performed the steps in the previous section, "Applying the Modification." If you did, proceed with this section. If you did not, proceed to "Rerunning HP Patch/iX" on page 5-53.

- If you are performing a Manage Patch task and HP Patch/iX created a CSLT/STORE tape, or your are performing an Add-on, Update, Staging Area, Modify Remote System, Re-Install, or Install, proceed with Step 1.

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, 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 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.

2. Start the system.

   ```
   ISL>START NORECOVERY NOSYSSTART
   ```

   If you are Managing Patches by Staging Area Only

3. Confirm the date and time.

   After some disk activity, you are prompted to confirm the date and time. If the date and time displayed are correct, enter Y. 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 assumes that the date and time are correct.

```
MPE/iX launch facility
Initialize_genesis - Version : <<870204.1552>>
TUE, AUG 13, 1994, 10:20:03 AM (y/n)? Y/N
[TMUX_DAM] n n n n
Initialize genesis completed.
```

The system displays startup 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 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
   ```

6. Continue log on commands

   ```
   :OPENQ LP
   :STREAMS streams_device
   ```

   An LP device must be configured in SYSGEN. A common *streams_device* value is 10.

7. If you are performing a re-install task, proceed to Step 8.

   If you are performing a manage patch, staging area, add-on, update, remote, or install task, proceed to Step 9.

Reinstall Tasks

8. Configure additional disks as system volumes, if necessary.

   a. Use the DSTAT command in the VOLUTIL utility to ensure that all disks are configured as MASTER or MEMBER.

   b. All system volumes showing a status of LONER must be added using the VOLUTIL utility.

      ```
      :VOLUTIL
      volutil: DSTAT ALL
      ```

      Sample output:

```
LDEV-TYPE STATUS VOLUME (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* (32650-90045).

   c. If the disks are not configured as MASTER or MEMBER, add them to your system. Use SCRATCHVOL and NEWVOL commands.

      ```
      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
      ```

   d. Check all volumes to confirm they are configured correctly. Use the DSTAT command.

      ```
      volutil: DSTAT ALL
      ```

      Sample output:

```
LDEV-TYPE STATUS VOLUME (VOLUME SET - GEN)
--------- ------------- ----------------------------
1- 022040 MASTER MEMBER1(MPEXL_SYSTEM_VOLUME_SET-0)
2- 022040 MEMBERSMEMBER2(MPEXL_SYSTEM_VOLUME_SET-0)
```

      ```
      volutil: EXIT
      ```

   e. Proceed to Step 9.

9. If you distributed staging areas **and** you used the PACK or UNPACK option with your EXPORT command, proceed to Step 10.

   Refer to your checklist or the section “Distributing a Staging Area Preparation” on page 5-30 for information on the use of PACK and UNPACK.

If you are performing an install, update, add-on, patch, re-install, remote with CD-ROM, or staging area task for a local system only using the TAPE option, proceed to the "Where To Go From Here" table and continue as directed.

Distributed Staging Area

10. Clean-up the staging area files on your local system.

Caution: Perform this only **after** you have imported the distributed staging area to your remote systems.

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.

d. Proceed to the "Where To Go From Here" table and continue as directed.

Restarting the System completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Rerunning HP Patch/iX" on page 5-53	"Configuring Data Comm and UPS" on page 6-1	"Rerunning HP Patch/iX" on page 5-53	"Rerunning AUTOINST" on page 5-48		"Rerunning AUTOINST" on page 5-48	"Rerunning AUTOINST" on page 5-48
CD-ROM		"Rerunning HPINSTAL" on page 5-50		"Rerunning HPINSTAL" on page 5-50	"Rerunning HPINSTAL" on page 5-50		
Disk Drive	"Setting Passwords and Lockwords" on page 6-10				"Setting Passwords and Lockwords" on page 6-10		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Rerunning AUTOINST

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape
- Re-Install Using a CSLT
- Install a New System

PowerPatch Tasks

- If you are performing a PowerPatch task, proceed to Step 1.
- If you are not performing a PowerPatch task, proceed to the "Where To Go From Here" table and continue as directed.

You need to run AUTOINST a second time to restore the STORE files from the combined CSLT/STORE tape and stream the patch installation jobs.

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. Reinvoke - and resume previous installation.

   ```
   :RUN AUTOINST.INSTALL.SYS
   ```

3. Respond YES to resume installation.

   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.
```

4. 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.

5. Dismount the CSLT.

Rerunning AUTOINST completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape				"Configuring Data Comm and UPS" on page 6-1		"Preparing for Final Reboot" on page 6-6	"Configuring Data Comm and UPS" on page 6-1
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Rerunning HPINSTAL

If you are using one of the following checklists, perform the steps in this section:

- Add-on with CD-ROM
- Update with CD-ROM
- Modify Remote System

PowerPatch Tasks

- If you are performing a PowerPatch task, proceed to Step 1.
- If you are not performing a PowerPatch task, proceed to the "Where To Go From Here" table and continue as directed.

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, proceed to Step 4.

   If you are performing a Modify Remote System task, proceed 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. HPINSTAL continues automatically, proceed to Step 5.

```
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 HPINSTAL by selecting Option 8.

b. Reinvoke HPINSTAL using the recovery parameter:

```
:HPINSTAL RECOVERY
```

c. HPINSTAL continues automatically, proceed to Step 5

5. If you are creating a CSLT to apply to a Remote system, proceed to Step 6.

   If you are performing an Add-on or Update task for the local system only, proceed to Step 8.

Remote Tasks

6. Deny any previous installation, if it exists.

   a. 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.

   b. Proceed to Step 7.

```
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? N
```

7. Select from `HPINSTAL` menu.

   a. Select the option to update the remote system, "Option 5 Complete the update of this system using a CSLT created on another system" to start the update process.

   b. Proceed to Step 8.

```
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
```

8. Restore the `STORE` portion of the CSLT.

   Mount the CSLT tape and put the tape drive online. If using DDS tape, you need to 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 how many and 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 initially specified, you will see the following message:

```
The installation is now complete.
```

10. Install products that cannot be streamed automatically.

Check the list of products in Appendix A “Manually Installed Products” and follow the directions on installing these products.

Rerunning HPINSTAL completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM		“Configuring Data Comm and UPS” on page 6-1		“Configuring Data Comm and UPS” on page 6-1	“Configuring Data Comm and UPS” on page 6-1		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Rerunning HP Patch/iX

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Add-on with Tape and Manage Patches

To rerun HP Patch/iX and finish applying the CSLT or STORE tape:

1. Remount the CSLT or STORE tape created by HP Patch/iX.
2. Restore remaining Patched files.

   ```
   :RUN PATCHIX.INSTALL.SYS
   ```
3. Type YES to resume installation.

   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 YES 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
```

Note: This prompt is provided to allow you to "pick-up where you left off", in the event that you halted the HP Patch/iX process prior to completing the CSLT creation (Phase 1).

If you accidentally type NO, HP Patch/iX purges all audit files and rebuilds them. **If** you did not complete the CSLT creation (Phase 1), 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 to Phase 2. Type at the prompt:

```
:PATCHIX PHASE2
```

4. Restore the STORE portion of the CSLT.

   Mount the CSLT tape and put the tape drive online. If using DDS tape, you need to 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 how many and which specific subsystems you have on your system.

5. 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 initially specified, you will see the following message:

```
The installation is now complete.
```

6. Install products that cannot be streamed automatically.

Check the list of products in Appendix A “Manually Installed Products” and follow the directions on installing these products.

Rerunning HP Patch/iX completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	“Configuring Data Comm and UPS” on page 6-1		“Configuring Data Comm and UPS” on page 6-1				
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Finishing the Process 6

This chapter describes all the finishing steps to bring your system back up after applying the changes to your system.

Configuring Data Comm and UPS

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Install a New System

Read all the subsections in this section:

- "Configuring HP PowerTrust UPS Monitor/iX" on page 6-1
- "Converting Data Comm" on page 6-2

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* (32022-61005).

Configuring HP PowerTrust UPS Monitor/iX

HP PowerTrust UPS Monitor/iX is software which together with the hardware (HP PowerTrust (UPS unit) provides system power failure protection on HP 3000 Models 9x9KS, 9x8LX, 9x8RX, 991, and 995.

If you plan to use the HP PowerTrust Monitor/iX software to monitor your UPS devices, you must configure the UPS devices after updating your system. For more information on configuring UPS devices, refer to *Performing System Management Tasks* (32650-90004).

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* (32650-90004) for information on configuring UPS devices. *Configuring Systems for Terminals, Printers, and Other Serial Devices* (32022-61000) also describes using NMMGR for configuring UPS devices.

Converting Data Comm

To configure for data communications on a new or modified system, you need an nmconfig file. When you update an existing nmconfig file, that is, convert the file to a format compatible with your current operating system, you perform one of the following:

- Update an existing nmconfig file, that is, convert the file to the MPE 5.5 version level.
  a. Convert the nmconfig file, proceed to Step 1.
  b. Cross validate the nmconfig file, refer to "Cross Validating" on page 6-4.
  c. Restart the data communications, refer to "Preparing for Final Reboot" on page 6-6.
- Create an nmconfig file using NMMGR.
  a. Create the nmconfig file. Refer to *Using the Node Management Services (NMS) Utilities* (32022-90041) for directions on creating an nmconfig file.
  b. Cross validate the nmconfig file, refer to "Cross Validating" on page 6-4. A file created by NMMGR will not need to be converted
  c. Restart the data communications, refer to "Preparing for Final Reboot" on page 6-6.

To update/convert the nmconfig:

1. Determine if you have a copy of the NMCONFIG file already on your system.

   ```
   :LISTF NMCONFIG.PUB.SYS
   ```

   - ❑ If the return message lists the file, proceed to Step 3.
   - ❑ If the return message is:

     ```
     non-existent file
     ```

     Obtain a copy of 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* (32022-90041) for directions on creating an nmconfig file.

       Then proceed to "Cross Validating" on page 6-4.
     - 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 Step 3.
     - Get a copy of the nmconfig file from another system.

       Proceed to Step 2.
2. If you are getting a copy of an nmconfig file from another system:

a. Log on to an existing system and store the NMCONFIG.PUB.SYS configuration 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 NMCONFIG.PUB.SYS.

```
:HELLO MANAGER.SYS;HIPRI
:FILE T;DEV=TAPE
:RESTORE *T;NMCONFIG.PUB.SYS;OLDDATE; DEV=1;SHOW
```

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 the return message is:

  ```
  no need to convert
  ```

  Proceed to “Preparing for Final Reboot” on page 6-6.

- If the return message is:

  ```
  conversion completed successfully
  ```

  Then NMMGRVER has converted your configuration file and it needs to be cross validated with SYSGEN information.

  Proceed to“Cross Validating” on page 6-4.

Configuring Data Comm and UPS completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Cross Validating

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Install a New System

Cross Validating Task

- I**f** you did either of the following, proceed to Step 1:
  - Completed the previous section "Configuring Data Comm and UPS" on page 6-1 and your files were converted.
  - Created a new `nmconfig` file using `NMMGR`.
- If your files were not converted in "Configuring Data Comm and UPS" on page 6-1 and you did not create a new `nmconfig` file, proceed to the "Where To Go From Here" table and continue as directed.

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, so do now. For example, now is the time to add a DTC.

   This is particularly relevant to those of you who copied and updated your `nmconfig` file from another system, things like network addresses must be updated.

   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* (D2355-90001).

   b. For information on `NMMGR`, refer to *Using the Node Management Services (NMS) Utilities* (32022-90041).

   c. For information on configuring UPS devices, refer to *Performing System Management Tasks* (32650-90004).

d. If you need to configure new DTCs on your system or if your need more information on host-based network management, refer to *Configuring Systems for Terminals, Printers, and Other Serial Devices* (32022-61000).

4. Display the Validate screen and validate the DTSLINK, NS links, and any installed subsystem.

Comment information is contained in braces, {}. You have the option of setting up your cross validation process in `nmgrxval.pub.sys`. Refer to *Performing System Management Task*s (32650-90004) and *Manager's Guide to MPE/iX Security* (32650-90474).

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 (NMS) Utilities* (32022-90041) 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), you need to do either of the following depending upon the type of error:

- Resolve them using `NMMGR` (if related to networking).
- Exit `NMMGR`, resolve inconsistencies using `SYSGEN`, then rerun `NMMGR` to revalidate DTSLINK.

`NMMGR` automatically cross validates the configuration file.

5. Exit `NMMGR`.

Cross Validating completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Preparing for Final Reboot

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

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 running NS300/iX. NS3000/iX 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.

Preparing for Final Reboot completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	“Setting Passwords and Lockwords” on page 6-10	“Setting Passwords and Lockwords” on page 6-10	“Setting Passwords and Lockwords” on page 6-10	“Setting Passwords and Lockwords” on page 6-10		“Restoring User Files” on page 6-7	“Setting Passwords and Lockwords” on page 6-10
CD-ROM		“Setting Passwords and Lockwords” on page 6-10		“Setting Passwords and Lockwords” on page 6-10	“Setting Passwords and Lockwords” on page 6-10		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Restoring User Files

If you are using one of the following checklists, perform the steps in this section:

- Re-Install Using a CSLT

To restore your user files, identify the backup method used to store your user files and perform one of the processes listed below. DO NOT perform both processes. The two possible processes are:

- Restore with BULDACCT files.—You ran `BULDACCT.PUB.SYS` and used the `STORE` command `DIRECTORY` option as part of your backup.
- Restore without BULDACCT files.—You did not run `BULDACCT.PUB.SYS` and use the `STORE` command `DIRECTORY` option as part of your backup.

Restore with BULDACCT Files

If you ran `BULDACCT.PUB.SYS` before your backup, re-build the accounting structure and restore the user files from your backup tapes.

To restore user files and re-build the directory structure:

1. Restore `BULDJOB1` from the backup tape and stream the job. At the system prompt, enter:

   ```
   :FILE T;DEV=TAPE
   :RESTORE *T;BULDJOB1.PUB.SYS
   :STREAM BULDJOB1.PUB.SYS
   ```

   This job re-builds the entire accounting structure.
2. Mount the backup tapes and restore them. At the system prompt, enter:

   ```
   :FILE T;DEV=TAPE
   :RESTORE *T;@.@.@;OLDDATE;KEEP;SHOW;DIRECTORY
   ```
3. Stream `BULDJOB2`. At the system prompt, enter:

   ```
   :STREAM BULDJOB2.PUB.SYS
   ```

   This job resets all system, account, and user UDCs that were previously on the system.
4. To maintain the security of your system, purge both `BULDJOB1` and `BULDJOB2` when they have successfully completed. These files contain passwords for all users, groups, and accounts on the system.
5. Proceed to the “Where To Go From Here” table and continue as directed.

Restore without BULDACCT Files

If you did not run the `BULDACCT` 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. At the system prompt, enter:

   ```
   :FILE T;DEV=TAPE
   :RESTORE *T;@.@.@;OLDDATE;KEEP;SHOW;DIRECTORY
   ```

2. Proceed to the “Where To Go From Here” table and continue as directed.

Restoring User Files completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Recovering Staging Areas

If you are using one of the following checklists, perform the steps in this section:

- Re-Install Using a CSLT

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. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Setting Passwords and Lockwords

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

To set passwords and lockwords:

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 are not passworded, Hewlett-Packard recommends that you set them now. The accounts are:

Table 6-1 Recommended Passworded HP Accounts

CONV	HPPL85	HPSKTS	INDHPE	SNADS
CCL	HPPL87	HPSPOOL	ITF3000	SUPPORT
HPNCS	HPPL89	HPX11	NETWARE	SYS
HPOFFICE	HPLANMGR		RJE	SYSMGR
HPOPTMGT			SOFTREP	TELESUP

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. The users are:

Table 6-2 Recommended Passworded Users

MANAGER.SYS	FIELD HPPL85	MGR.SNADS
MGR.HPOFFICE	MGR.TELESUP	MGR.SYSMGR

3. If you are performing and Install task, proceed to Step 4.

   If you are performing a Manage Patch, Staging Area, Add-on, Update, Remote system, or Re-install task proceed to Step 5.

Install Tasks

4. Set passwords for MANAGER.SYS

   a. Type at the prompt:

   :ALTACCT SYS;PASS=*password*

   :ALTUSER MANAGER;PASS=*password*;HOME=*pub*

```
:ALTGROUP PUB;PASS=password
```

b. Proceed to Step 5

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 "Securing the System for Tape Tasks" on page 5-1 or "Securing the System" on page 5-32 for a list of the previously lockworded files.

```
:RENAME filename,filename/lockword
```

7. Review account security

Refer to *Manager's Guide to MPE/iX Security* (32650-90474) and the *HP Security Monitor/iX Managers Guide* (32650-90455).

8. If you are performing a Manage Patch or Update task, proceed to Step 9.

If you are performing a Add-on, Staging Area, Remote system, Re-install, or Install task, proceed to the "Where To Go From Here" table and continue as directed.

Manage Patches Tasks
Update Tasks

9. Reenter customized changes to `CATALOG.PUB.SYS`.

Proceed to the "Where To Go From Here" table and continue as directed.

Setting Passwords and Lockwords completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Enabling UDCs

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

You must reenable the UDC filenames that were disabled earlier through the rename of the `COMMAND.PUB.SYS` file.

To enable UDCs:

1. Enable UDCs.

   ```
   :RENAME command_name, COMMAND.PUB.SYS
   ```

   Where *command_name* is a temporary name you assigned the file. Refer to your task checklist "Securing the System for Tape Tasks" on page 5-1 or "Securing the System" on page 5-32, as appropriate, for the temporary name of this file.

2. Set special UDCs, if your users plan to use POSIX features on MPE/iX.

   ```
   :SETCATALOG HPPXUDC.PUB.SYS;SYSTEM;APPEND
   ```

3. Log on to activate the UDCs.

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

Enabling UDCs completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Performing the Final Reboot" on page 6-16	"Configuring Manually Installed Products" on page 6-14	"Configuring Manually Installed Products" on page 6-14	"Configuring Manually Installed Products" on page 6-14		"Configuring Manually Installed Products" on page 6-14	"Configuring Manually Installed Products" on page 6-14
CD-ROM		"Configuring Manually Installed Products" on page 6-14		"Configuring Manually Installed Products" on page 6-14	"Configuring Manually Installed Products" on page 6-14		
Disk Drive	"Restarting Selected System Functions" on page 6-19				"Restarting Selected System Functions" on page 6-19		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Configuring Manually Installed Products

If you are using one of the following checklists, perform the steps in this section:

- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

Certain special products require additional configuration steps. These products were identified and listed during the activities in "Creating the CSLT Using AUTOINST" on page 5-19, "Creating the CSLT using HPINSTAL" on page 4-13, or "Creating a Patch Tape or Staging Area Using HP Patch/iX" on page 4-37.

1. Refer to Appendix A "Manually Installed Products" and the appropriate manual for these instructions. The products will not be operational until your perform the necessary configuration changes. Manually installed products include:
   - ❑ HP ALLBASE/4GL
   - ❑ ALLBASE/iX HP SQL
   - ❑ OpenView Console/System Manager
   - ❑ HP Telex II
   - ❑ SNA IMF/iX
   - ❑ HP Predictive Support
   - ❑ HP Resource Sharing
   - ❑ HP Information Access
   - ❑ Non-HP (Third Party) Software
2. Recustomize any necessary files.

Configuring Manually Installed Products completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape		"Performing the Final Reboot" on page 6-16	"Performing the Final Reboot" on page 6-16	"Setting Up the TAR Utility" on page 6-15		"Setting Up the TAR Utility" on page 6-15	"Setting Up the TAR Utility" on page 6-15
CD-ROM		"Performing the Final Reboot" on page 6-16		"Setting Up the TAR Utility" on page 6-15	"Setting Up the TAR Utility" on page 6-15		
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Setting Up the TAR Utility

If you are using one of the following checklists, perform the steps in this section:

- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

To perform the final steps:

1. Determine if you have the TAR utility already set up.

   `:LISTTFILE /DEV/TAPE,2`

   If the output is:

```
PATH= /dev/
 CODE  ---------LOGICAL RECORD----------  ----SPACE---- FILENAME
   SIZE  TYP  EOF  LIMIT  R/B  SECTORS   #X   MX
   128W  BBd    0      1  1         0     0    *    tape
   128W  BBd    0      1  1         0     0    *    tape
```

   Then the TAR set up file already exists, proceed to the "Where To Go From Here" table and continue as directed.

   If the output is anything else, 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` - The device link filename

   n - The LDEV number of the tape device on the system that the device link file is linked to.

   `c` and `0` - The two parameters c (lowercase) and 0 (zero) are required to create a device link file.

   Quotes - Are required around all the parameters for the Command Interpreter (CI) to pass them as part of the `INFO=` string to the `MKNOD` program.

Setting Up the TAR Utility completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Performing the Final Reboot

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

To reboot and restart the system:

1. Shut down the system.

   Control A
   =SHUTDOWN

2. Reset the system after the last shutdown message (SHUT6).

   If you have an HP 3000 Series 991 or 995, you must connect to the service processor before you can restart the system.

   a. Type the following:

      Control B
      CM>SP
      CM>RS

   b. 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 is 5 to 10 minutes of system activity, then the Processor Dependent Code (PDC) screen displays.

   For all other systems.

   a. Enter the following commands to reset the system:

      Control B
      SP>RS

      If the system does not respond to the Control 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.

   b. 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, 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 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`.
- 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.

The system displays a series of start-up messages, and you are prompted to confirm the date and time. If the date and time displayed are correct, enter `Y`. 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 assumes the time and date are correct and 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. 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 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. Log on.

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

Performing the Final Reboot completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Restarting Selected System Functions

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

To restart selected system functions:

1. On local systems power cycle the DTCs. 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). If you are using OpenView System Manager, the DTCs do not need to be power cycled.

   To reset DTCs:

   a. Type:

   ```
   :SYSDIAG
   DUI>TERMDSM
   ```

   b. For each DTC, type:

   ```
   DUI>RESET DTCnn
   ```

   where *nn* is the DTC number.

2. Purge groups.

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

3. Start data communications.

   If you have NS3000/iX configured, bring up the configured network interfaces. For more information, refer to the *HP 3000/iX Network Planning, and Configuration Guide* (36922-61023).

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=ni_name
:NSCONTROL START
:STREAM JFTPSTRT.ARPA.SYS
```

where *ni_name* - is the network interface name. LAN1 is the default value.

- If you have configured only the router network interface with the name ROUTER1, enter:

```
:NETCONTROL START;NET=ROUTER1
:NSCONTROL START
:STREAM JFTPSTRT.ARPA.SYS
```

4. 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 5, 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.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**All Tasks Go To Next Page**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Backing Up Your System

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

1. Back up the system.

a. Mount a write-enabled tape to create a backup SLT.

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

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

c. Mount another blank tape and perform a full system backup.

```
:FILE T;DEV=TAPE
:STORE /;*T;DIRECTORY;SHOW
```

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

Backing Up Your System completed. 

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	"Finishing Up" on page 6-24	"Finishing Up" on page 6-24	"Finishing Up" on page 6-24	"Finishing Up" on page 6-24		"Finishing Up" on page 6-24	"Finishing Up" on page 6-24
CD-ROM		"Finishing Up" on page 6-24		"Finishing Up" on page 6-24	"Finishing Up" on page 6-24		
Disk Drive	"Permanently Applying a Staging Area" on page 6-22				"Permanently Applying a Staging Area" on page 6-22		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Permanently Applying a Staging Area

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems

Optional Task

This is an optional activity.

- If after testing and confirming 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, commit to the staging area, proceed to Step 1.

Caution: You will no longer be able to re-create the original base system software without performing a backdate.

- If you want to continue testing the set of patches you applied with the booted staging area, proceed to the "Where To Go From Here" table and continue as directed.

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:

   ```
   STAGEMAN> status

   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.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape							
CD-ROM							
Disk Drive	"Finishing Up" on page 6-24				"Finishing Up" on page 6-24		

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Finishing Up

If you are using one of the following checklists, perform the steps in this section:

- Manage Patches
- Manage Patches by Staging Area
- Distributing Staging Areas to Remote Systems
- Add-on with Tape
- Add-on with Tape and Manage Patches
- Add-on with CD-ROM
- Update with Tape
- Update with CD-ROM
- Modify Remote System
- Re-Install Using a CSLT
- Install a New System

To perform the closing steps of your task:

1. Record the System Installation, Update, Add-on, and Patch in the system log book, as appropriate.

   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 added patches from the PowerPatch tape, note the date and patch information in the logbook as well.

Record system change (record here or on your task checklist):

System type:_____ System name:
Date change made:_____ Change performed by:
OS version from: _____ OS version to:
Comments:

Finishing Up completed.

Where To Go From Here[1]

	Manage Patches	Add-on	Add-on & Manage Patches[2]	Update	Remote	Re-Install	New Install
Tape	**You Are Done!**						
CD-ROM							
Disk Drive							

1. All tasks include, optionally applying PowerPatch.
2. Requires PowerPatch.

Manually Installed Products A

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
- HP Telex II
- SNA IMF/iX
- HP Predictive Support
- HP Resource Sharing
- HP Information Access
- 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" on page A-6 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 HP ALLBASE/SQL databases. Check with the HP 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 HP ALLBASE/SQL, check the HP ALLBASE/SQL installation instructions to see if your databases need to be migrated. After the database migration is complete, use the new ISQL VALIDATE command available on HP ALLBASE/SQL F.0. VALIDATE recompiles 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 HP ALLBASE/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* (30601-64204) 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"
   ```

Note: 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, logging in as the developer for each application, and using the `GENERATE ALL` feature.

You may need to migrate all of your HP ALLBASE/SQL databases before you can use HP ALLBASE/4GL to regenerate your applications. Check with the HP 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* (30601-64201).
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 new `isql> VALIDATE` command available on HP ALLBASE/SQL F.0. `VALIDATE` will recompile all of the SQL-stored sections (including SQL logic blocks). You'll need to use the `VALIDATE` command on each of your HP 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:

```
:SETVAR HP4TERM "HPL"
```

Refer to the *HP ALLBASE/4GL Developer Administration Manual* (30601-64201) or the *HP ALLBASE/4GL Run-Time Administration Manual* (30601-64201) for further information on setting up the HP ALLBASE/4GL environment.

You can now run HP ALLBASE/4GL.

Installing ALLBASE/ SQL

ALLBASE/SQL is auto-installable. However, 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.1 format. The method used depends upon the version of ALLBASE/SQL you are currently running. The version update options are:

- Updating from G.0
- Updating from E.1 or F.0
- Updating from pre-E.1

Updating from Version G.0

If your release of ALLBASE/SQL is G.0, run `SQLINSTL` to migrate to version G.1. ALLBASE/SQL has added new views and modified some existing views to support TurboIMAGE indexes in IMAGE/SQL. The `SQLINSTL` script is provided in the G.1 version of ALLBASE/SQL to make it easy for a database administrator to move to a delta release, such as G.1. 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.

If you do not execute `SQLINSTL`, stored sections will be revalidated when they are accessed by end users of the database. Exclusive locks are obtained on system catalog tables during revalidation. Hewlett-Packard recommends that you use `SQLINSTL` when you install the delta release to avoid concurrence problems that may arise if revalidation occurs during production hours.

The following is a listing of `SQLINSTL` examples:

```
MPE/iX isql.pub.sys
       isql=> connect to 'mydbe';
       isql=> start sqlinstl.pub.sys;
       isql=> connect to 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 recover is to be performed at some point in the future. Customers installing G.1 cannot apply rollforward recovery to a backup created using the G.0 version (or earlier) of ALLBASE/SQL.

Updating from Version E.1 or F.0

If your release of ALLBASE/SQL is E.1 or F.0, use `SQLMIG` to migrate to version G.1. A backup of the DBEvnvironment should be done prior to running. The steps listed below also appear in the *ALLBASE/SQL Database Administration Guide* (36216-90005).

Use the following procedure to convert a DBEnvironment from either an E.1 or F.0 format to the G.1 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 STARTDBE 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 SQLMIG.

```
:RUN SQLMIG.PUB.SYS
```

5. For each DBEnvironment that you are migrating, check for potential errors during 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 debfilename WITH PAGES &
  = dbefilesize, NAME= systemfilename;
SQLMIGRATE=> ADD DBEFILE debfilename 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 successful completed, SQLMIG 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 = 'DEBLOG1';

START DBE NEWLOG SUCCEEDED (MON, JUL 19, 1995, 4:13 PM)
```

7. The DBEnvironment is ready to be accessed. If you desire archive mode logging, you must run SQLUTIL and issue the STOREONLINE command.
8. Exit SQLMIG:

   ```
   SQLMIGRATE=> EXIT;
   ```
9. If the START DBE NEWLOG (issued by SQLMIG) 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;
   ```
10. Run SQLUTIL and issue a SHOWDBE command to check the parameters of the new version of the DBEnvironment. If you wish 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.
11. Exit SQLUTIL.

    ```
    isql=> EXIT
    ```

    DBE is now ready for access.

Updating from Versions Prior to E.1

If you 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* (36389-90011)
- *ALLBASE/SQL Reference Manual* (36216-90001)
- *ISQL Reference Manual for ALLBAE/SQL and IMAGE/SQL* (36216-90096)
- *ALLBASE/SQL Database Administration Guide* (36216-90005)
- *ALLBASE/SQL Message Manual* (36216-90009)
- *ALLBASE/SQL Advanced Application Programming Guide* (36216-90100)
- *ALLBASE/NET Users Guide* (36216-90031)
- *ALLBASE/SQL Performance and Monitoring Guidelines* (36216-90102)
- *HP PC API Users Guide for ALLBASE/SQL and IMAGE/SQL* (36216-90104)

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 HP3000 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 HP3000 managed nodes.

The OpenView Console product provides a subset of the full System Manager's solution. It only manages a single HP3000 machine, so the managed node is also the management node.

The System Manager product manages multiple HP3000s 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* (B3118-90002).
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 (36936-61002).
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
```

Preparing HP Telex II

To complete the installation of HP Telex II, perform the following steps:

1. Log on:

```
:HELLO FIELD.HPPL85,HP36572
```

2. The American version of HP Telex is installed automatically. British users must stream an additional job, as follows:

```
:STREAM INTELEX1
```

   A message is displayed indicating completion of the job.
3. Enable UDCs for HP Telex users as follows:

```
:HELLO MGR.HPOFFICE,HPTELEX
:SETCATALOG TELUDC, OTHERUDCS,...
```

4. Refer to the *Administrator's Guide to HP Telex* (36572-90013) for configuration instructions.

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

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* (50779-90012) and the *HP Predictive Support User's Guide Addendum* (50779-90018).

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* (50779-90012). For information on HP Predictive Support enhancements for MPE/iX 5.0, see the *HP Predictive Support User's Guide Addendu*m (50779-90018).

Installing HP Resource Sharing

This section describes how to install HP Resource Sharing.

Note: If you attempt to connect a PC to shared resources before you complete the steps listed above, you will have to restart the system and perform these steps again. The message "Resource Sharing Registration Completed" must appear on the console before you can connect a PC to shared resource.

1. License information from the HP Resource Sharing software certificate must be recorded on the system before connections to shared resources can be allowed. You do not need to record this information again if you have recorded it previously, and it has not changed.

   If you need to update license information, or are recording it for the first time, please refer to the "Installation" chapter in *HP Resource Sharing for MPE/iX* (B1718-90002). The "Installation" chapter provides the instructions for recording license information from the software certificate with the `NWOLC.PPC.SYS` program.
2. Stream `JPDINSTL.PPC.SYS` to complete the installation. Watch for the console message:

   ```
   :STREAM JPDINSTL.PPC.SYS
   ```

   Return message is:

   ```
   Resource Sharing Registration Completed.
   ```

   This verifies that HP Resource Sharing is ready to receive connection requests from PCs.
3. Starting with the A.02.00 release of Resource Sharing, a modification to the services network communication method was made. This version may require network configuration changes on your system. Refer to the *HP Resource Sharing Software Update Notice* (B1718-90004).
4. The A.02.00 release requires the network loopback interface to be started:

   ```
   :NETCONTROL START;NET=LOOP
   ```

Installing HP Information Access

Please refer to the *Information Access Server: System Management Manual* (B1716-90018) for installation instructions.

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.

Configuration Tables B

Table B-1 and Table B-2 show the configuration names available for the various HP 3000 series. All the groups shown in both tables reside in the SYS account.

Table B-1 Configname Table I

System	SCSI Group	HP-IB Group	HP-FL (Alink) Group
Model 920	--	CONFG920	ALINK920
Model 922 with 1 HP-IB	--	CONFG922	ALINK922
Model 922 with 2 HP-IB	--	CONFG932	ALINK932
Model 925/925LX without CIO Expander	--	CONFG925	ALINK925
Model 925 with Expander	--	CONFE925	ALINE925
Model 930	--	CONFG930	--
Model 932	--	CONFG932	ALINK932
Model 935	--	CONFG935	ALINK935
Model 948	--	CONFG948	ALINK948
Model 949	--	CONFG949	ALINK949
Model 950	CONFSCS0	CONFG950	ALINK950
Model 955	CONFSCS0	CONFG955	ALINK955
Model 958	--	CONFG958	ALINK958
Model 960	CONFSCS0	CONFG960	ALINK960
Model 980/100	CONFSCS0	CONFG980	ALINK980
Model 980/200	CONFSCS0	CONFG980	ALINK980
Model 990	CONFG990	--	ALINK990
Model 991	CONFG991	--	ALINK991
Model 992/100	CONFG992	--	ALINK992
Model 992/200	CONFG992	--	ALINK992
Model 992/300	CONFG992	--	ALINK992
Model 992/400	CONFG992	--	ALINK992
Model 995	CONFG995	--	ALINK995
Model 995	CONFF995	--	--
Model 9x7LX or RX	CONF9X7*n*	--	--
Model 9x8LX or RX	CONFG9X8	--	--
Model 9x9KS	CONFG9X9	--	--

If you purchased an HP 3000 Model 9x7LX or RX system, you can choose from several configurations, depending on the number of disks on your system. All HP 3000 Model 9x8LX, 9x8RX, and 9x9KS systems use only one configuration.

Table B-2 lists each configuration name and the number of disks that each configuration contains.

Table B-2 Configname Table II

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
CONFGHP n	Reserved for HP use

Table B-3 contains configuration recommendations to be used with NS3000/iX and DTS.

Table B-3 Physical Path Values

System	DTSLINK\Phys. Path	SYSLINK\Phys. Path
Model 920[1]	4.3 4.3	4.3 4.3
Model 922 LX/RX/922[1]	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[1]	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[1]	4.1 4.1	4.1 4.1
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[1]	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[1]	0/44 0/44	0/44 0/44
Model 992/200[1]	0/44 0/44	0/44 0/44
Model 992/300[1]	0/44 0/44	0/44 0/44
Model 992/400[1]	0/44 0/44	0/44 0/44
Model 995	0/44 0/44	0/44 0/44
Model 9x7LX or 9x7RX	56/56	56/56
Model 9x8LX or 9x8RX	56/56	56/56
Model 9x9KS	10/4/0	10/4/0

1. Since DTSLINK and SYSLINK use the same card and slot, the link name is the same.

Reserving Disk Space C

This chapter includes the following information:

- Determining Available Disk Space
- Using the CONTIGXL Utility (while still on Release 4.0)
- Using the VOLUTIL Command
- Using the ALTERVOL Command
- Reserving Disk Space in Sections

If you do not have sufficient contiguous disk space on LDEV 1, follow the instructions in the sections listed in Table C-1. Which sections you follow depends upon which version level of the OS you are currently running.

Table C-1 Finding Disk Space

Current OS Version	Refer to Section
4.0	"Using the CONTIGXL Utility" on page C-2.
5.0	"Using the SHOWUSAGE Command" on page C-4
5.0, after tried SHOWUSAGE	"Using the ALTERVOL Command" on page C-5
4.0 or 5.0, after tried CONTIGXL, and/or SHOWUSAGE and ALTERVOL	"Using Alternative Disk Space Allocation" on page C-7

Determining Available Disk Space On Your System

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 D, *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/XL system volume set.

```
:DISCFREE D,2

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. If you do not have enough disk space, make additional space on the system.

   Store 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.

Using the CONTIGXL Utility

If your system is on version 5.0, you do not use the `CONTIGXL` utility. Proceed to "Using the SHOWUSAGE Command" on page C-4.

The `CONTIGXL` utility in the `TELESUP` account (`CONTIGXL.TELESUP`) can help you identify files with extents on LDEV1. The utilities in the `TELESUP` account are not classified as HP products. Therefore, no product number is assigned to this utility and no product manual is available. The documentation for this utility is located in the `TELESUP` file `CONTIGXL.DOCXL.TELESUP`.

The `UPDATE` program needs approximately 60,000 sectors (or the amount specified by running `CHECKSLT`; refer to "Estimating Disk Space" on page 3-20.) of contiguous disk space to update the system. If you received a message from the `UPDATE` program telling you that there was not enough contiguous disk space available, follow these instructions to locate and reserve the required disk space. If your system is up and running, start with step 3.

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. If desired, print the `CONTIGXL` documentation file:

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

```
:PRINT CONTIGXL.DOCXL.TELESUP>*LP
```

4. Run CONTIGXL to identify the files that need to be stored and then purged to obtain the required disk space.

   ```
   :CONTIGXL.TELESUP " -D1 -Cn "
   ```

   where *n* is the amount of contiguous disk space required on your system.

Note: CONTIGXL may list more than one group of files to be purged. Review each group of files to determine the group with the smallest number of files and the smallest impact on your system applications.

---

5. Store and purge the selected group of files.

   ```
   :FILE T;DEV=TAPE
   :STORE FILE.GROUP.ACCOUNT,FILE2.GROUP.ACCOUNT;*T;PURGE;SHOW
   ```

Note: If you have used CONTIGXL and still have trouble creating this disk space (and you have an HP software support contract), contact your HP Response Center. If you do not have a software support contract, contact your HP representative.

---

6. When you have reserved the required disk space, build the empty file, AXLDEV1.

   ```
   :BUILD AXLDEV1.PUB.SYS;DISC= n,1,1;DEV=1
   ```

   where n is the amount of contiguous disk space required on your system.

7. Shut down the system.

   ```
   (Control) A
   =SHUTDOWN
   ```

8. After the last shutdown message (SHUT 6), reset the system.

   If you have an HP 3000 Series 99x, you must connect to the service processor before you can restart the system. Enter the commands below and respond 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 will be 5 to 10 minutes of system activity before you see the Processor Dependent Code (PDC) screen.

   ```
   (Control) B
   CM> SP
   SP> RS
   ```

   On all other systems, enter the following to reset the system:

   ```
   (Control) B
   CM> RS
   ```

   If the system does not respond to the (Control) 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.

9. Mount the CSLT, if it is not on the tape drive.

10. Boot the system from the alternate boot path. Boot messages can 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 Control B and RS commands.
- 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.
- If your system prompts, Boot from primary boot path?, enter N. When the system prompts Boot from alternate boot path?, enter Y.
- Enter Y to the Interact with IPL? prompt, if it appears on your screen.

The system boots from the CSLT. After some tape activity, the ISL prompt is displayed.

11. Refer to "Determining Available Disk Space On Your System" on page C-1 to determine is you have enough disk space to continue with your task.

If you do have enough disk space, return to the procedure your were working on and continue with the instructions.

If you do not have enough disk space, proceed to "Using Alternative Disk Space Allocation" on page C-7.

Using the SHOWUSAGE Command

After you have updated your system to Release 5.0, you should no longer use the CONTIGXL utility to locate contiguous disk space on LDEV 1. You must now 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” on page 3-20.

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 (and you have an HP software support contract), contact the HP Response Center. If you do not have a support contract, contact your HP 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 On Your System” on page C-1 to determine is you have enough disk space to continue with your task.

If you do have enough disk space, return to the procedure your were working on and continue with the instructions.

If you do not have enough disk space, proceed to “Using the ALTERVOL Command” on page C-5.

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 On Your System” on page C-1 to determine is you have enough disk space to continue with your task.

   If you do have enough disk space, return to the procedure your were working on and continue with the instructions.

   If you do not have enough disk space, proceed to “Using Alternative Disk Space Allocation” on page C-7.

Using Alternative Disk Space Allocation

If you cannot reserve all the disk space in one file on LDEV 1, additional disk space required beyond 60,000 sectors can be reserved in large contiguous sector peices. The minimum size of any contiguous sector piece must be 30,000 sectors.

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 AXLDEV3 DISK = 30000
   :BUILD AXLDEV*n* 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 create.

   :PURGE AXLDEV*n*

   where *n* - incremented number for each section. For example:

   :PURGE AXLDEV1
   :PURGE AXLDEV2
   :PURGE AXLDEV3

3. During the modification process, you will recieve a disk space error message.

   Select `OVERRIDE` at the disk space warning prompt 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.

Backdating Your System D

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.

Warning!

You perform a backdate when you have updated your operating system version and are experiencing **serious** issues. Only do this under direction from your HP representative.

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
- Preparing Your System
  - Secure The System
  - Prepare to Backdate to 4.0
- Performing the Backdate
  - Backdate using a CSLT (Method 1)
  - Backdate using a Factory SLT (Method 2)
  - Backdate using an FPT (Method 3)
- 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 (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 5.5 to 5.0 (General Release)
- Backdate from 5.5 to 4.0

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.

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 HP Representative.
- Reference Table D-1 for a list of materials required for each of the possible backdating methods.

Table D-1 Required Backdating 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	

Table D-1 Required Backdating Materials (Continued)

Requirement	Method 1	Method 2	Method 3
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 to which you are backdating, as well as the copy you received with your new release. These documents provide additional information on backdating specific products. The related Communicators are:
  - Communicator 3000 MPE/iX General Release 5.0 (Core Software Release C.50.00) (30216-90124)
  - Communicator 3000 MPE/iX Release 4.0 (Core Software Release B.40.00) (30216-90104)
- If you are backdating to version 4.0 and you have the related product, read “Backdating HP Open DeskManager” on page D-42 and “Backdating Magneto-Optical Media” on page D-44.

Patch Considerations

If you have applied patches to your level 4.0 or 5.0 system software, read the section appropriate to the backdating method you are using. The sections are:

- Patching with Method 1: Using a CSLT
- Patching with Method 2: Using a Factory SLT
- Patching with Method 3: Using an FPT

Patching with Method 1: Using a CSLT

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

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 (B.40.05 or later) 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” on page D-16, 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.

Patching with Method 2: Using a Factory SLT

If any patches were applied to your 4.0 or 5.0 system, they must be reapplied from the PowerPatch tape(s) after the backdate. Follow the 4.0 or 5.0 PowerPatch manual.

Patching with Method 3: Using an FPT

If any patches were applied to your 4.0 or 5.0 system, they must be reapplied from the PowerPatch tape(s) after the backdate. Follow the 4.0 or 5.0 PowerPatch manual.

Check Patch Tape Media

To verify the patch tape source media and contents:

1. If you are not already logged on, from the console at the MPE/iX prompt, log on 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" on page D-5.

Before you begin the process of backdating, log on and verify that your backup tape is valid.

1. From the console at the MPE/iX prompt, 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;DIRETORY

   If your backup is not valid, you must use either Method 2: Using a factory SLT, or Method 3: Using an FPT. Refer to the appropriate checklist.

Check for Disk Space

Ensure you have sufficient disk space to backdate your system.

Refer to "Estimating Disk Space" on page 3-20 and Appendix C "Reserving Disk Space" for additional information about any of the below listed 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 "Estimating Disk Space" on page 3-20 or use the default of 120,000 sectors.

   m = AXLSPACE number, use the maximum value 1,279,200 (for 4.0 versions) and 1,084,000 (for 4.5 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.

   Refer to Appendix C “Reserving Disk Space” for directions on clearing space.

Preparing Your System

If you are backdating to 5.0:

- Proceed to “Secure Your System” on page D-6.
- Skip “Prepare to Backdate to 4.0” on page D-8.
- Proceed to “Performing the Backdate” on page D-14.

If you are backdating to 4.0, perform the steps in both sections:

- “Secure Your System” on page D-6.
- “Prepare to Backdate to 4.0” on page D-8.
- Then proceed to “Performing the Backdate” on page D-14.

Secure Your System

Securing your system prepares it and your users for a shutdown. Refer to “Securing the System for Tape Tasks” on page 5-1 for additional information about any of the below listed steps.

1. If you are not already in the `PUB` group, change groups now.

   ```
   :CHGROUP PUB
   ```

2. Log users off.

   ```
   :LIMIT 0,0
   :WARN@ PLEASE LOG OFF! SYSTEM UPDATE ABOUT TO BEGIN
   ```

3. Wait approximately five minutes, then abort job or sessions still executing.

   Make sure users have saved their work and logged off. 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
   ```

   `J`*nn* - the ID number for each job to be aborted.

   `S`*nnn* - the ID number for each session to be aborted.

4. Deactivate NS3000/iX, if applicable.

   ```
   :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
```

logid - the ID number for each logging process to be stopped.

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* (36216-90005) 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* (30601-64001) 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* (36375-90001) 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.

```
: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 is an alphabetic character

nn is the numeric release number (for example, OSA10.TELESUP and 0SB23.TELESUP).

If you have not performed a system modification before, these files 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 here or on your checklist.

Prepare to Backdate to 4.0

If you are backdating to version 5.0, proceed to "Performing the Backdate" on page D-14.

If you are backdating to version 4.0, perform all the sub-sections in this section:

- "Backdate HP Predictive Support" on page D-8
- "Backdate ALLBASE/SQL or IMAGE/SQL" on page D-9
- "Backdate Magneto-Optical Media" on page D-9
- "Convert the Files" on page D-9

Backdate HP Predictive Support

If you have HP Predictive Support and you are backdating to system version 4.0, you need to prepare HP Predictive Support for backdating.

1. Logon the HP Predictive Support files.

```
:HELLO MANAGER.SYS
```

2. You must print the Configuration Report before you purge the HP Predictive Support files before you begin backdating:

```
:RUN PSCONFIG.PRED.SYS;INFO="PRINT CONFIGURATION"
```

3. Purge the HP Predictive Support files in the PRED.SYS group.

```
:CHGROUP PRED
:PURGEGROUP PRED.SYS
```

Enter Y at the prompt to purge.

Ignore the message:

```
"IN USE: CAN'T BE PURGED. (CIERR 916)"
```

4. Mount the 4.0 full backup or STORE tape referenced in the section, "Planning Your Backdate" on page D-1 and enter the following commands:

```
:FILE T;DEV=TAPE
:RESTORE T;@.PRED.SYS;OLDDATE;SHOW
```

A message may display indicating that PSMON.PRED.SYS and CPSMG000.PRED.SYS did not restore. Ignore this message.

5. If you added disk or tape drives after the update to 5.5, then you must reenter their serial numbers in PSCONFIG after the operating system backdate.
6. If you do not have a backup tape, you must re-enter complete configuration information into HP Predictive Support after the operating system backdate.

Backdate ALLBASE/SQL or IMAGE/SQL

If your system is running a newer version of ALLBASE/SQL or IMAGE/SQL than is available on this release you are backdating to, you will need to backdate the databases. Follow the procedures that are specific to the version of ALLBASE/SQL you are backdating to. The options are:

- ALLBASE/SQL G.1 (shipped with OS 5.5) to F.0 (shipped with OS 4.0)
- ALLBASE/SQL G.1 (shipped with OS 5.5) to G.0 (shipped with OS 5.0)

Backdating to ALLBASE/SQL F.0

You can use the SQLMIG.PUB.SYS utility to migrate all SQL DBEnvironments (DBEs) so they will operate on the earlier release. You can use SQLMIG to identify and eliminate incompatible information. Refer to the *ALLBASE/SQL Database Administrator's Guide* (36216-90005) for information on running this utility.

Backdate Magneto-Optical Media

If you have magneto-optical media mounted on your system, you need to backdate all of the magneto-optical media that make up a disk library system as you would other user volumes. To be successful, you need to repeat some of the backdating steps to mount and backdate all of the media. Refer to the section “Backdating Magneto-Optical Media” on page D-44 for specific information on how to do this.

Convert the Files

If you backdate from Release 5.5 system to 4.0, the presence of hierarchical directories, symbolic link files, byte stream files, and other new entities will prevent the older version of the operating system from functioning correctly. Therefore, you must follow the conversion process to remove these incompatibilities.

The following functionality available on Release 5.5 is not compatible with Releases 4.0:

- Directory structure
- Symbolic link files
- Device link files
- FIFO files
- User information in UID and GID databases
- Hierarchical directories
- Other byte stream files
- Account information

- Native mode message files

Note: If applications use the features of message files on your Release 5.5 system, you could encounter problems when backdating. If a 5.5 message file is restored to a 4.0, the message file may be corrupted if there are more than 384 writer IDs attached to it.

Why You Need to Convert the Files

The purpose of the conversion process is to:

- Identify incompatibilities (`BDREPORT`).
- Store the files/directories in question using the `STORE` subsystem.
- Remove these incompatibilities by executing the `BDSCRP1` and `BDSCRP2` scripts and `STORE` a compatible directory structure for preservation of user information.

In addition to these files and directories that need to be purged to prepare the system for backdating, there may be many files whose file labels and ACDs are not compatible with the Release 4.0 format. The `BDSCRP1` and `BDSCRP2` scripts convert these incompatibilities on the disks themselves. You do not need to store or purge such files.

These tools report and fix incompatibilities on all user volume sets that are mounted. User volumes that are not mounted will not be converted and may cause problems on the backdated system.

`BDREPORT` reports the incompatibilities and generates two scripts (`BDSCRP1` and `BDSCRP2`) that, when executed, remove the incompatibilities. `BDSCRP1` purges incompatible files and directories. `BDSCRP1` also uses the program `BDXM` to backdate the transaction manager logs on the user volume set and the program `BDLABEL` to backdate the file labels. `BDSCRP2` stores the user and directory information and then uses `PXUTIL` to backdate the account information on the system (residing in the `UID` and `GID` databases). `BDSCRP2` also backdates the transaction manager logs on the system volume set so the logs will be compatible with the earlier release.

`BDSCRP1` also runs program `BDLT` to backdate label tables for a specified volume set, or all the mounted volume sets if no volume set is specified.

Note: `BDREPORT` only reports the incompatibilities. It does not purge or modify any files or directories, or their file labels. You can run `BDREPORT` several times without affecting anything on the volumes.

To Convert the Files

If you want to use any user (private) volumes that have been mounted on a Release 5.5 system on a system running an earlier release, you must mount them on the Release 5.5 system before backdating. In addition, the *`group.account`* entries on the user volumes must have corresponding *`group.account`* entries on the system volume set.

1. If you are not logged on as MANAGER.SYS on the system console, do so now.

   :HELLO MANAGER.SYS,PUB

2. Verify that you have the conversion program files.

   :LISTFILE PX@.PUB.SYS

   :LISTFILE BD@.PUB.SYS

   Check that you have: BDREPORT.PUB.SYS, BDLABEL.PUB.SYS, BDXM.PUB.SYS, BDLT.PUB.SYS, PXUTIL.PUB.SYS, and BDMO.PUB.SYS

   If you do not have the files, restore them from the Release 5.5 FOS tape:

   :FILE T;DEV=TAPE

   :RESTORE*T;BDREPORT,BDLABEL,BDXM,BDLT,BDMO,PXUTIL;SHOW

3. Mount all user volume sets that you want to backdate.

4. Rename existing BDREPORT files, if desired or archive purposes.

   :RENAME BDSCRP1.PUB.SYS *new_name1*

   :RENAME BDSCRP2.PUB.SYS *new_name2*

   where:

   new_name1 is the temporary name you assign the BDSCRP1 file.

   new_name2 is the temporary name you assign the BDSCRP2 file.

   Each time you run BDREPORT.PUB.SYS, it creates two script files, BDSCRP1.PUB.SYS, and BDSCRP2.PUB.SYS. If these scripts exist on the system, they are purged by BDREPORT then recreated.

5. Run BDREPORT.PUB.SYS.

   :RUN BDREPORT.PUB.SYS;INFO="*indirect_store_file,volume_set*"

   This creates the script files BDSCRP1 and BDSCRP2 in PUB.SYS.

   indirect_store_file — optional INFO parameter. Use to selectively store only those directories or files that are not recognized by the previous version.

   BDREPORT places the names of all the directories and files that are not recognized by release 4.0 in the *indirect_store_file*. If you have stored all the files to tape before beginning to backdate, you do not need to use this parameter.

   volume_set — optional INFO parameter. Use to backdate one specific volume set. The default is to backdate all mounted volume sets.

6. At the prompt, enter 4.0, the system software version level you are backdating to.

```
Please enter the version to backdate to:
4.0
4.5
5.0LIMITED
5.0GENERAL
> 4.0 Enter the release number of the last release you were on _
```

   The only supported choices are 4.0 and 5.0GENERAL. However, if you are backdating to 5.0GENERAL, you do not need to perform the procedures in this section, refer to the 5.0 checklist appropriate to your backdating method.

7. Review the standard output listing. It displays the number of incompatibilities, if any, that are found during the execution of BDREPORT.PUB.SYS.

   If no incompatibilities are found, the following is displayed. Proceed to Step 13.

   ```
   Total number of incompatibilities found: 0
   ```

   If incompatibilities are found, they are listed in the standard output. Proceed with Step 8. Most incompatibilities found relate to file labels, such as the following. There may be others.

   a. Files in MPE groups which have ACDs that are only supported on release 5.5 or 5.5.

   b. Files in MPE groups have CREATORs outside their ACCOUNTs.

   c. Files in MPE groups have GIDs that don't match their ACCOUNTs.

   d. Files in MPE groups have fields in their file labels not understood by release 4.0.

   e. MPE GROUP nodes have a field not understood by release 4.0.

8. Ensure that you have stored any incompatible directories and files.

   If you specified the INFO parameter with the *indirect_store_file* parameter, the *indirect_store_file* lists the files and directories that need to be stored.

   If you have not stored these incompatible directories and files before you began the file conversion, STORE them now, using the indirect file. Label the tape "BDREPORT Files." Include the volume set name on the label, if the *volume_set* parameter was specified.

   To store files for use on a Release 4.0 system:

   ```
   :FILE T;DEV=TAPE
   :STORE ^indirect_store_file; *T;TRANSPORT=MPEXL
   ```

   Purge the *indirect_store_file* after storing the files.

9. Edit the BDSCRP1 file and specify creator names, if needed.

   When file label incompatibilities are found, the line "run BDLABEL.PUB.SYS" is added to the BDSCRP1 script.

   If there is a file with CREATOR outside the ACCOUNT of the file, BDLABEL changes the CREATOR field in the file label to MGR by default. To specify different creator names:

   ```
   :RUN BDLABEL.PUB.SYS;INFO="creator_name,volume_set,version"
   ```

   For example:

   ```
   :RUN BDLABEL.PUB.SYS;INFO="MGR,,4.0"
   ```

   Or, when you are backdating a specific volume set:

   ```
   :RUN BDLABEL.PUB.SYS;INFO="MGR,MYVOL,4.0"
   ```

10. Execute the script file BDSCRP1 which was created when you ran BDREPORT.

    This script runs BDLABEL, BDLT, and BDXM to remove all the incompatibilities found and backdates the transaction management logs.

    ```
    :BDSCRP1.PUB.SYS > OUTPUT_FILE1
    ```

It is critical that you designate an output file name. This redirects the output of the BDSCRP1 script to a file. BDSCRP1 sends the results of running the script to the output file. You can check the output file to determine whether or not all files and directories were purged as expected.

11. Run BDREPORT again.

```
:RUN BDREPORT.PUB.SYS;INFO="indirect_store_file,volume_set"
```

12. Check the output for incompatibilities.

If no incompatibilities were found this time, all the incompatibilities were removed and you have no more volume sets to mount and backdate, continue to Step 13.

If incompatibilities still exist or if you have additional volume sets:

a. Return to Step 5. Review the output file to identify the incompatibilities, correct the problems.

b. Repeat Step 5 through Step 12 until there are no incompatibilities.

c. Then continue to Step 13 below.

13. Execute the script file BSCRP2 which was created when you ran BDREPORT.

```
:BDSCRP2.PUB.SYS > OUTPUT_FILE2
```

Note: You must continue with the backdating process now. Performing any other procedures at this point could invalidate the procedures performed during the conversion process.

BDSCRP2:

- Stores directory information on tape to preserve account information.
- Backdates the user and group databases.
- Backdates the SYSTEM VOLUME SET Transaction Management logs.

The account information must be restored from the tape after you complete the backdating process. To ensure this, perform the following:

a. BDSCRP2 asks you to mount a new tape on which to store account information. BDSCRP2 automatically stores the account information (using a STORE;;DIRECTORY command) in a form that is compatible with 4.0.

b. Label the tape "BDSCRP2 Account Information."

Purge BDSCRP1.PUB.SYS, BDSCRP2.PUB.SYS, and output files. These files were created on Release 5.5 and have some fields in their file label that are not recognized by the previous release.

```
:PURGE BDSCRP1.PUB.SYS
:PURGE BDSCRP2.PUB.SYS
```

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.

- Backdate Using a CSLT (Method 1)
- Backdate Using a Factory SLT (Method 2)
- Backdate Using an FPT (Method 3)

Backdate Using a CSLT (Method 1)

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" on page 5-40 for additional information about any of the below listed 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.

   Control 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:

      Control B

      CM>SP

      SP>RS

      Enter Y to HARD BOOT the computer system.

   b. For all other systems:

      Control B

      SP>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 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.

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. 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 CSLT/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.

Restore Account Information

Earlier, you created a tape named "BDSCRP2 Account Information," containing account information as a result of running the BDSCRP2 script file. This contains all user names, groups, and accounts on the system. You need to restore that information now.

Restore the account information as follows:

1. Mount the tape labeled "BDSCRP2 Account Information."
2. Restore the account information:

   ```
   :RESTORE;;DIRECTORY
   ```
3. Reply to tape request.
4. Dismount the tape.

Restore FOS and SUBSYS

Refer to “Creating the CSLT Using AUTOINST” on page 5-19 for additional information about any of the below listed steps.

1. Run AUTOINST.

   ```
   :RUN AUTOINST.INSTALL.SYS
   ```
2. Select the FOS and SUBSYS option (4) and reply to 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.

```
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)>>
```

   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.

4. Restore FOS files.

   This step takes about 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.

```
Has a SUBSYS tape been included in your installation package
(y/n)?
```

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 Step 8.

6. Restore SUBSYS files.

This step takes about 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 about 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 either your 4.0 or 5.0 system, you need to restore the patch files that may be appended to the CSLT created during the 4.0 or 5.0 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" on page D-3 and restore them to your system:

```
:CHGROUP PUB
:FILE T;DEV=TAPE
:RESTORE *T;NMCONFIG,HPSWINFO,OLDDATE;DEV=1;SHOW
```

9. Proceed to "Finishing Up" on page D-35.

Backdate Using a Factory SLT (Method 2)

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" on page 5-6 for additional information about any of the below listed 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.

Control 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:

Control B

```
CM>SP
SP>RS
```

Enter Y to HARD BOOT the computer system.

b. For all other systems:

Control 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.

a. Boot messages can vary, respond as appropriate depending on the system model.

b. 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.

a. Boot messages can vary, respond as appropriate 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. If you backdating to 4.0 proceed with “Listing 4.0 System Configuration” on page D-21.

If you are backdating to 5.0 proceed with “Listing 5.0 System Configuration” on page D-22.

Listing 4.0 System Configuration

If you backdating to 4.0 proceed with this section.

If you are backdating to 5.0, proceed with “Listing 5.0 System Configuration” on page D-22.

Use SYSGEN to modify the appropriate sample configuration you used with your START NORECOVERY GROUP=. This sample configuration should represent the configuration of your system as shown in IOMAP or ODE.

To list the 4.0 System Configuration:

1. Start SYSGEN.

   ```
   :SYSGEN
   sysgen>IO
   ```

2. List the sample configuration to the screen and record the configuration.

   ```
   IO>LPATH
   ```

3. Compare this configuration with one printed out using IOMAP or ODE. You should change the sample system configuration to match the one that is actually on the system, as shown in IOMAP or ODE.

Note: 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.

---

4. When you have completed your configuration changes, save this new configuration. Respond to the prompts as shown below.

   ```
   IO>HOLD
   IO>EXIT
   sysgen>KEEP CONFIG
   Purge old config?YES
   sysgen>EXIT
   ```

Note: You may see warning messages regarding NMMGR and NMCONFIG.PUB.SYS. This warning is normal for an installation. You will configure NMCONFIG.PUB.SYS later in this section.

At the time you are configuring the system, SYSGEN may generate a warning message about NMCONFIG. The NMCONFIG is used by DTS and NS data communications products and must be created after the system installation is completed.

If you need help with SYSGEN commands, please refer to the *System Startup, Configuration, and Shutdown Reference Manual* (32650-90042).

5. Proceed with “Start the System” on page D-22.

Listing 5.0 System Configuration

If you backdating to 4.0 proceed with "Listing 4.0 System Configuration" on page D-21.

If you are backdating to 5.0 proceed with this section.

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" on page 5-10 for additional information about any of the below listed steps.

To list the 5.0 system configuration:

1. Check 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" on page 5-12 for additional information about any of the below listed 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 startup process, the system makes several configuration checks and may display warning messages. This is normal for system startup, 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 HPSWININFO.

1. Mount your 4.0 backup or STORE tape. Refer to "Planning Your Backdate" on page D-1 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" on page 5-14 for additional information about any of the below listed 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 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 4.0 System Configuration” on page D-21 or “Listing 5.0 System Configuration” on page D-22.

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.

```
(Control) 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:

```
(Control) B
CM>SP
```

```
SP>RS
```

Enter Y to HARD BOOT the computer system.

b. For all other systems:

```
Control B
SP>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
```

Check Volumes

Refer to "Checking Volumes" on page 5-17 for additional information about any of the below listed steps. For more information on VOLUTIL commands, refer to the *Volume Management Reference Manual* (32650-90045).

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 Account Information

If you are backdating to version 4.0, perform the steps in this section.

If you are backdating to version 5.0, proceed to "Restore FOS and SUBSYS" on page D-25.

Earlier, you created a tape named "BDSCRP2 Account Information," containing account information as a result of running the BDSCRP2 script file. This contains all user names, groups, and accounts on the system. You need to restore that information now.

Restore the account information as follows:

1. Mount the tape labeled "BDSCRP2 Account Information."
2. Restore the account information:

   ```
   :RESTORE;;DIRECTORY
   ```
3. Reply to tape request.
4. Dismount the tape.

Restore FOS and SUBSYS

Refer to “Creating the CSLT Using AUTOINST” on page 5-19 for additional information about any of the below listed 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 RUN AUTOINST.INSTALL.SYS command again.

5. Select the task option 4 and reply to 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 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.

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 `RUN AUTOINST.INSTALL.SYS` command again.
8. Restore FOS files.

   This step takes about 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.

```
Has a SUBSYS tape been included in your installation package
(y/n)?
```

If you have a SUBSYS, enter Y at the prompt. Proceed to Step 10.

If you do not have a SUBSYS, enter N at the prompt, Proceed to Step 11.

10. Restore SUBSYS files, if you have purchased products to add-on to your system software.

This step takes about 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)
product name
product name
...
```

Record the product names.

_____

_____

_____

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)

product name
product name
. . .
```

Record the product names.

_____

_____

_____

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" on page 5-40 for additional information about any of the below listed steps.

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" on page D-25.

   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.

   Control 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:

      Control B
      CM>SP
      SP>RS

      Enter Y to HARD BOOT the computer system.

   b. For all other systems:

      Control B
      SP>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. 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 CSLT/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.
13. Proceed to “Finishing Up” on page D-35.

Backdate Using an FPT (Method 3)

If you are performing a backdate using a Factory Pre-Load Tape, perform the steps in this section.

Apply the FTP

Refer to “Applying the Modification” on page 5-40 for additional information about any of the below listed 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.

Control 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:

      Control B
      CM>SP
      SP>RS

      Enter Y to HARD BOOT the computer system.

   b. For all other systems:

      Control B
      SP>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 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 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. 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 CSLT/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" on page 5-14 for additional information about any of the below listed 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.

```
Control 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:

```
Control B
CM>SP
SP>RS
```

Enter Y to HARD BOOT the computer system.

b. For all other systems:

```
Control B
SP>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 Account Information

If you are backdating to version 4.0, perform the steps in this section.

If you are backdating to version 5.0, proceed to “Restore FOS and SUBSYS” on page D-34.

Earlier, you created a tape named "BDSCRP2 Account Information," containing account information as a result of running the BDSCRP2 script file. This contains all user names, groups, and accounts on the system. You need to restore that information now.

Restore the account information as follows:

1. Mount the tape labeled "BDSCRP2 Account Information."
2. Restore the account information:

   ```
   :RESTORE;;DIRECTORY
   ```
3. Reply to tape request.
4. Dismount the tape.

Restore FOS and SUBSYS

Refer to “Rerunning HPINSTAL” on page 5-50 for additional information about any of the below listed steps.

1. Remount the 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 call the CSLT on the console screen. That is because the FPT is a type of CSLT created at the factory.
3. Select option 5 to continue:

```
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
```

4. Mount the FPT and put the tape drive online.

   This restores the STORE portion of the CSLT. 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.
   - 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.

   The time it takes to restore the software files varies depending on how many and which specific subsystems you have on your system.

5. 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.

6. 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)
product name
product name
...
```

Record the product names.

_____

_____

_____

7. 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 FPT label.

   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 Data Comm and UPS" on page 6-1, and "Cross Validating" on page 6-4, for additional information about any of the below listed 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 Terminal Controller (DTC) and allows communication between the terminal and the Uninterruptible Power Supply (UPS). Refer to *Using the Node Management Services Utilities* (32022-61005).

Convert Data Communications

To configure for data communications on a new or modified system, you need an nmconfig file. When you update an existing nmconfig file, that is, convert the file to a format compatible with your current operating system, you perform one of the following:

- Update an existing nmconfig file, that is, convert the file to the MPE 4.0 or 5.0 version level you are backdating to. If you have an existing nmconfig file, continue with this section.
- Create an nmconfig file using NMMGR. Do this if:
  - Your previous version of an nmconfig file is from a pre-4.0 system.
  - You are using either Method 2: Using a factory SLT or Method 3: Using an FPT.

  After you create an nmconfig file:

  a. Refer to *Using the Node Management Services (NMS) Utilities* (32022-90041) for directions on creating an nmconfig file.

  b. Proceed to "Cross Validate" on page D-37.

Convert your data communication files:

1. Determine if you have a copy of the nmconfig file already on your system.

```
:LISTF NMCONFIG.PUB.SYS
```

- If the return message lists the 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* (32022-90041) for directions on creating an nmconfig file.

    Then proceed to "Cross Validate" on page D-37.

  - 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 Step 2.

2. Run the NMMGRVER conversion utility.

```
:RUN NMMGRVER.PUB.SYS
```

3. Enter the filename 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" on page D-40.

- 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” on page D-37.

Cross Validate

Perform the steps in this section if you did either of the following:

- Completed the previous section “Convert Data Communications” on page D-36 and your files were converted.
- Created a new `nmconfig` file using `NMMGR`.
- If your files were not converted, proceed to XXX

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, so do now. For example, now is the time to add a DTC.

   This is particularly relevant to those of you who copied and updated your `nmconfig` file from another system, things like network addresses must be updated.

   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* (D2355-90001).

   b. For information on `NMMGR`, refer to *Using the Node Management Services (NM S) Utilities* (32022-90041).

   c. For information on configuring UPS devices, refer to *Performing System Management Tasks* (32650-90004).

   d. If you need to configure new DTCs on your system or if your need more information on host-based network management, refer to *Configuring Systems for Terminals, Printers, and Other Serial Devices* (32022-61000).

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* (32022-90041) 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), you need to do either of the following depending upon the type of error:

   ❑ Resolve them using `NMMGR` (if related to networking).

- Exit NMMGR, resolve inconsistencies using SYSGEN, then rerun 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 running NS300/iX. NS3000/iX 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” on page 6-10.

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 are not passworded, Hewlett-Packard recommends that you set them now. The accounts are:

Table D-2 Passworded HP Accounts

CONV	HPPL85	HPSKTS	INDHPE	SNADS
CCL	HPPL87	HPSPOOL	ITF3000	SUPPORT
HPNCS	HPPL89	HPX11	NETWARE	SYS
HPOFFICE	HPLANMGR		RJE	SYSMGR
HPOPTMGT				TELESUP

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. The users are:

Table D-3 Passworded HP Users

MANAGER.SYS	FIELD HPPL85	MGR.SNADS
MGR.HPOFFICE	MGR.TELESUP	MGR.SYSMGR

3. Set passwords for MANAGER.SYS

   :ALTACCT SYS;PASS=*password*

   :ALTUSER MANAGER;PASS=*password*;HOME=*pub*

   :ALTGROUP PUB;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* (32650-90155) and the *HP Security Monitor/iX Managers Guide* (32650-90455).

7. Reenter customized changes to `CATALOG.PUB.SYS`.

Enable UDCs

Refer to “Enabling UDCs” on page 6-12 for additional information about any of the below listed steps.

1. Enable UDCs.

   ```
   :RENAME command_name, COMMAND.PUB.SYS
   ```

   Where *command_name* is a temporary name you assigned the file. Refer to your task checklist “Securing the System for Tape Tasks” on page 5-1 or “Securing the System” on page 5-32, as appropriate, for the temporary name of this file.

2. Set special UDCs, if your users plan to use POSIX features on MPE/iX.

   ```
   :SETCATALOG HPPXUDC.PUB.SYS;SYSTEM;APPEND
   ```

3. Log on to activate the UDCs.

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

Configure Manually Installed Products

Refer to Appendix A “Manually Installed Products” and the appropriate manual for these instructions. The products will not be operational until your perform the necessary configuration changes. Manually installed products include:

- HP ALLBASE/4GL
- ALLBASE/iX HP SQL
- OpenView Console/System Manager
- HP Telex II
- SNA IMF/iX
- HP Predictive Support
- HP Resource Sharing
- HP Information Access
- Non-HP (Third Party) Software

Final Reboot

Refer to “Performing the Final Reboot” on page 6-16 for additional information about any of the below listed steps.

1. Shutdown the system.

Control 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:

      Control B
      CM>SP
      SP>RS

      Enter Y to HARD BOOT the computer system.

   b. For all other systems:

      Control B
      SP>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" on page 6-19 for additional information about any of the below listed steps.

1. On local systems power cycle the DTCs. 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). If you are using OpenView System Manager, the DTCs do not need to be power cycled.

   To reset DTCs:

   a. Type:

      :SYSDIAG
      DUI>TERMDSM

   b. For each DTC, type:

      DUI>RESET DTC*nn*

      Where *nn* is the DTC number.

2. Purge groups.

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

3. Start data communications.

   If you have NS3000/iX configured, bring up the configured network interfaces. For more information, refer to the *HP 3000/iX Network Planning, and Configuration Guide* (36922-61023).

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

Record the system Backdate in the system log book.

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.

1. If you have HP OpenDesk, complete the section “Backdating HP Open DeskManager” on page D-42.
2. If you have Magneto-Optical devices, complete the section “Backdating Magneto-Optical Media” on page D-44.
3. If you need to add patches contact your Response Center.

Backdating HP Open DeskManager

This section applies if you are backdating to system software version 4.0.

As part of the backdating to either 4.0 system software version, HP Open DeskManager is automatically installed. You need to complete the installation. Follow the procedures described here.

There are two versions of HP Open DeskManager Version C.00 or HP DeskManager Version B.05. The following directions apply to both versions. Differences in the steps for each version are noted.

1. Log on.

   ```
   :HELLO MGR.HPOFFICE,MAILDB
   ```

2. Check the your version level of DeskManager.

   ```
   :RUN HPMAIL.HPMAIL.SYS,VERS;LIB=G
   ```

   If the following message displays, you have HP Open DeskManager C.00.

```
OpenDesk Version Number Information.
User's session ID:\#S nn
C.00. nn USER INTERFACE
```

   If the following message displays, you have HP DeskManager B.05.

```
HPDESK Version Number Information
User's session ID:\#S nn
B.00. nn USER INTERFACE
```

   If the following message displays, contact your Response Center or your HP representative for information on updating to a newer version of HPDESK.

```
HPDESK Version Number Information
User's session ID:\#S nn
B.03. nn USER INTERFACE
```

3. If you are installing HP Open DeskManager for the first time, create and configure your databases. Refer to the *HP Open DeskManager Administration Manual* (B3606-90001) for details on how to do this.

4. Set the operator commands level.

   The following UDC files are supplied with HP Open DeskManager:

   `OPERUDC.MAILLIB.HPOFFICE` - holds the operator commands

   `MAILUDC.MAILLIB.HPOFFICE` - holds the user commands

   Set the operator commands at the same user level as the user `MGR.HPOFFICE`. To do this, enter the following commands:

   ```
   :HELLO MGR.HPOFFICE,MAILDB
   :SETCATALOG OPERUDC.MAILLIB.HPOFFICE
   :MAILON
   ```

   Include all other UDCs that are to be set at the same level in the `SETCATALOG` command.

5. The American version of the product is supplied by default. If you want to install the British version, enter the following command:

   ```
   :STREAM UKDICT.MAILJOB.HPOFFICE
   ```

6. If you are running HP Open DeskManager/HP DeskManager on a standalone system, and Distributed Systems (DS) or Network Services (NS) are not installed, enter the following command:

   ```
   :STREAM DSNSSEGS.MAILJOB.HPOFFICE
   ```

7. You can improve the performance of HP Open DeskManager/HP DeskManager by creating an Object Code Translated (OCT) version. Read the file `OCTINSTL.MAILJOB.HPOFFICE` for detailed instructions on how to perform this translation.

8. The following items only apply to HP Open DeskManager C.00.

   a. If you plan to use Lotus cc:Mail or MicroSoft Mail clients with HP Open DeskManager, you need to change the `UALCONFG.MAILCONF.HPOFFICE` configuration file. Refer to chapter 2 of the *HP Open DeskManager Administration Manual* (B3606-90001) for details.

   b. If you plan to use the HP DeskNote text editor, you may need to revise the HP DeskNote global configuration file to enable spell checking. Refer to chapter 2 of the *HP Open DeskManager Administration Manual* (B3606-90001) for details.

   c. If you use the Garbage Collector process, you need to reenable it. Refer to chapter 2 of the *HP Open DeskManager Administration Manual* (B3606-90001) for details.

9. If you are upgrading an existing version of HP DeskManager, the old HP DeskManager job stream files will be overwritten during the installation process. If you have customized any of these job stream files, you must re-apply your changes to the new files. DO NOT overwrite the new files with your old files. For a complete list of these job stream files, refer to chapter 24 of the *HP Open DeskManager Administration Manual* (B3606-90001).

Backdating Magneto-Optical Media

This section applies if you are backdating to system software version 4.0. This section describes the detailed steps you must follow to backdate a system with magneto-optical disk library systems.

A magneto-optical disk library system is a DASS device that consists of rewritable magneto-optical disks which are manipulated by an autochanger arm. When the media in magneto-optical disk library systems are mounted, they are mounted into the MPE/iX File System as user volumes.

Refer to the following manuals for more information on magneto-optical disk library systems:

- *Installing and Using the Optical Disk Library System* (C1700-90076)
- *Magneto-Optical Media Management User's Guide* (36398-90001)

Since the mounted media in magneto-optical disk library systems are just user volumes, they must be backdated like any other user volumes on your system. Since there are not as many disk drives as there are media in a magneto-optical disk library system, in order to backdate all the media in one of these devices requires repeating a number of steps to mount and backdate the media.

In addition to the `BDREPORT` program and `BDSCRP1` script used to backdate user volumes, the `BDMO` program must be used in the backdating process to mount the magneto-optical media. Similar to non-optical user volumes, the `group.account` entries on magneto-optical user volumes must have corresponding `user.account` entries on the system volumes in order for the backdating process to succeed on the media.

Overview of the steps

In general, you would backdate your magneto-optical media using the below listed utilities in the following way:

- Run the `BDMO` program to mount magneto-optical media as a User Volume Set.
- Run the `BDREPORT` program (from another session than that used to run the `BDMO` program), specifying the volume set mounted in (1) in the volume set parameter.
- Store the files using the *`indirect_store_file`* that was specified in the `BDREPORT` *`indirect_store_file`* parameter.
- Invoke the `BDSCRP1` script.
- Dismount the mdeia and exit the `BDMO` program.
- Repeat the above steps to backdate any additional magneto-optical media.

The following steps describe using `BDREPORT`, they include information on running the `BDMO` program to mount the magneto-optical media. Refer to “Convert the Files” on page D-9 for a more detailed description on running `BDREPORT` and associated scripts.

Note: Backdating your magneto-optical media can be performed as a separate step after you have found and fixed all the inconsistencies on your system volumes (and non-optical volumes). However, you must backdate magneto-optical media before you invoke the `BDSCRP2` script.

To backdate your magneto-optical media:

1. Log on as MANAGER.SYS.

   ```
   :HELLO MANAGER.SYS
   ```

   Your session must be the only session logged on to the system.

2. Use LISTFILE to ensure that you have the five program files, BDREPORT.PUB.SYS, BDLABEL.PUB.SYS, BDXM.PUB.SYS, BDMO.PUB.SYS and PXUTIL.PUB.SYS on your system. If you do not have these files, restore them from the MPE/iX Release 5.5 FOS tape.

3. Run MOUTIL to list the magneto-optical media on your system. In the following example, the magneto-optical disk LDEVs are configured as LDEV 51 and 52.

```
:moutil
MO Utility A.50.00, (C) Hewlett-Packard Co., 1990. All Rights
Reserved.
moutil: status 51
AutoChanger LDEV = 50
Magneto-optic Disk LDEVs = 51,52
Slot Side Volume Media Name Sub Name (Optional)
---- ---- ------ ---------- ------------------
1 A VOL1A JSTORE1 MED# 1
  B VOL1B JSTORE1 MED# 2
2 A VOL2A $SCRATCH (pre-erased)
  B VOL2B $SCRATCH (pre-erased)
3 A VOL3A BK1054AM.D21SEP92.SYSNAME MED# 1
  B VOL3B BK1055AM.D21SEP92.PHOENIX MED# 1
4 A VOL4A BK1056AM.D21SEP92.PHOENIX MED# 1
  B VOL4B BK1058AM.D21SEP92.SYSNAME MED# 1
5 A VOL5A BK0652AM.D20OCT92.SYSNAME MED# 1
  B VOL5B BK0705AM.D20OCT92.SYSNAME MED# 1
. . .
moutil: exit
```

4. Next, run the BDMO program specifying the media that you want to mount. Specify the magneto-optical disk LDEV number in addition to the media name of the media you want to mount. Optionally, you can specify subname1 and subname2.

   In the following example, the volume VOL1A (media JSTORE1) is mounted in LDEV 51.

```
:BDMO
Enter Magneto-Optical Disk Ldev: 51
Enter Media Name: JSTORE1
Specify Subname1 (Y/N): y
Enter Subname1: MED# 1
Specify Subname2 (Y/N): n
Volume Set Mounted: VOL1A
Media has been successfully mounted. At this point, you
can run the BDREPORT program to find any inconsistencies
with the mounted magneto-optical media.
Type C to Dismount the Media and Continue:
```

Note: BDMO creates the group.account entry *volume_set_name*.HPOPTMGT on the system volume set when it mounts the media. For example, VOL1A.HPOPTMGT. It deletes this entry, when the media is dismounted.

For media with the same media name (subname1 and subname2) within a device, BDMO mounts the first media that it finds, for example, you could name multiple media $SCRATCH, but only the first media named $SCRATCH that is found will be mounted.

Since media named $SCRATCH was not written to or stored to by TurboSTORE, another option for backdating this media is to reinitialize this media using the MOUTIL utility once you have backdated to the earlier release.

5. Log on as MANAGER.SYS from another session.

   ```
   :HELLO MANAGER.SYS.PUB
   ```

6. Use the DSTAT command to display the status of the volume and to ensure that it was mounted:

```
:DSTAT 51
LDEV-TYPE STATUS VOLUME (VOLUME SET - GEN)
---------- -------- -------------------------
51-S6300.6 MASTER VOL1A (VOL1A-0)
```

7. Each time you run BDREPORT, it creates two script files, BDSCRP1.PUB.SYS and BDSCRP2. If these scripts exists on the system, they will be purged when you run BDREPORT. If you have previous versions BDSCRP1 and BDSCRP2 on your system and you want to keep them, rename them before you continue.

Note: Do not dismount the magneto-optical media once you have mounted the media and are running the BDREPORT program or the BDSCRP1 script. Doing so will lead to unexpected results.

8. Run BDREPORT.

   ```
   :RUN BDREPORT.PUB.SYS; INFO="STORE-FILE, VOLUME_SET"
   ```

   This creates the script files BDSCRP1 and BDSCRP2 in PUB.SYS. BDSCRP1.PUB.SYS lists all the volume sets. BDSCRP2.PUB.SYS lists only the system volume set. These scripts are used in the process to remove hierarchical directories, byte stream files, etc.

   The INFO parameter is optional. If you plan to store all files containing incompatibilities to tape before backdating (such as using STORE/), you do not need to use the INFO parameter. By specifying the volume set name in the INFO parameter, only the inconsistencies on the magneto-optical media are reported and fixed.

   To selectively store those directories or files that will not be recognized by the previous version, specify the *indirect_store_file* in the INFO parameter. BDREPORT places the names of all the directories and files that are not recognized by earlier releases in the *indirect_store_file*.

To backdate one specific volume set, specify the *volume_set* parameter of the magneto-optical media in the INFO parameter.

Note: Two internal files that you should not store may be included in the indirect_store_file created by BDREPORT. They are: MEDINFO.VOL-SET. HPOPTMGT and BACKUP.VOL-SET.HPOPTMGT. These files are large files used by TurboSTORE. Edit the *indirect_store_file* to delete these files from the list.

9. Continue the backdating process using Step 3 through Step 11 in "Convert the Files" on page D-9. Repeat these steps as necessary until no incompatibilities are found.

Note: Do not invoke the BDSCRP2 script until all of your magneto-optical media has been backdated.

10. Exit the BDMO program, type C:

```
Type C to Dismount the Media and Continue: C
```

11. If you need to backdate additional magneto-optical media, return to Step 4 and repeat the subsequent steps.

CD-ROM Resources E

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

Using the SHOWME command should 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, load them into the CD-ROM drive, 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:

```
:user 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.

```
B1710A
B1720A
B1721A
B1722A
B1723A
HP32106
HP36578
```

Figure E-1 Sample PRODLIST File

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.GROUP.ACCOUNT
```

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* (32650-90004).

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” on page E-6 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.INSTALL.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.INSTALL.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* (32650-90004) 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” on page E-16 or “Copying to or from a Remote Tape” on page E-17.

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” on page E-16.

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 nodename 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 NS3000/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*–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—The number of copies.

nodename—The 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" on page E-19.

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* (32650-90042). 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–the logical device number of the CD-ROM drive.

   path–the hardware path to the CD-ROM drive (e.g., 36.1.3 or 52.4).

   prod#–the 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).

   The procedure varies slightly depending on whether you are configuring an HP-IB or SCSI CD-ROM drive. Examples of configuring both types are provided here. Each example shows two drives being installed.

HP-IB Example:

```
io> LPATH 36
   (to ensure that path 36 has SPECTRUM_CIO_CAM as PMGR)
io> LPATH 36.1                    ***SAMPLE OUTPUT***
   (to ensure that path 36.1 has HP-IB DAM as PMGR)
io> ADEVICE LDEV=11 PATH=36.1.3 ID=HPC1707A
   (to add the device)
io> ADEVICE LDEV=12 PATH=36.1.4 ID=HPC1707A
   (to add the second CD-ROM device)
io> LDEV 11/12
   (to ensure you get the following listing:)

 LDEV: 11 DEVNAME:          OUTDEV:    0 MODE:
   ID: HPC1707A             RSIZE:   128 DEVTYPE: DISC
 PATH: 36.1.3               MPETYPE:   4 MPESUBTYPE: 4
CLASS:

 LDEV: 12 DEVNAME:          OUTDEV:    0 MODE:
   ID: HPC1707A             RSIZE:   128 DEVTYPE: DISC
 PATH: 36.1.4               MPETYPE:   4 MPESUBTYPE: 4
CLASS:
```

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 "Listing the System Configuration" in Chapter 5 "Modifying Your System" on page 5-10, for procedural information. Also refer to the *Offline Diagnostics Environment (ODE) User's Manual* (5962-3648).

      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
______    ____________________________  ____    ___ ___  ___   ____
 0         Memory Controller             1H     9H   2    0     LB
 2         Bus Converter                 7H      CH   2    0
 2/4         CIO Channel Adapter         8H      10H  0    0
 2/4.0         HP-IB card               2H      -   3   261 2 ST LB
 2/4.0.0           7937 disk drive      214H      -   -    -
 2/4.1          Console Device adapter
 2/4.2         HP-IB card               2H      -   1   261 2 ST LB
 2/4.2.3           7978A/B mag tape     178H      -   -    -
 6          Bus Converter                7H      -   -    2 0
 6/4          CIO Channel Adapter        8H    10H   0    0
 16         PDH with AP Card             9H     1H   0    0
 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.

HP Patch/iX Reference F

This appendix defines the HP Patch/iX tool and options, this includes:

- Using the HP Patch/iX Tool
- HP Patch/iX Menu Descriptions
- HP Patch/iX Filter Descriptions

Using the HP Patch/iX Tool

Read this section if you are not familiar with using menus or function keys. This section describes how to move within HP Patch/iX. This includes:

- Selecting menu items
- Selecting list items
- Using the function keys
- Selecting filter or view options
- Responding to Prompt windows
- Referencing Information windows
- Referencing Message windows
- Responding to Error Message windows
- Using the Help tool

Selecting Menu Items

Menu items display in the data area of screens as well as various Prompt windows.

To select from a menu item:

1. From a HP Patch/iX screen or window, highlight the desired option.

   Use either the arrow or the (j) and (k) keys to move up and down the list. The (j) key moves the cursor up the list. The (k) key moves the cursor down the list.
2. Press the (RETURN) key.

Selecting List Items

Lists of patches display in the data area of screens. You can select (Mark) and item or unselect (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. From a HP Patch/iX screen or window, highlight the desired option. Select or de-select as many items as needed.

Use either the arrow or the (j) and (k) keys to move up and down the list. The (j) key moves the cursor up the list. The (k) key moves the cursor down the list.

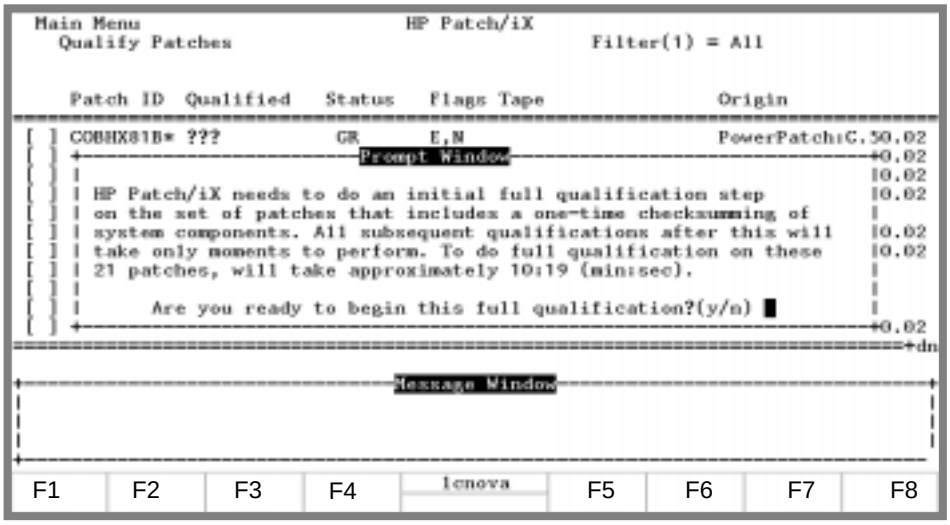
2. Press the Mark/Undo Mark ((F2)) function key.

   A letter displays in the Mark column. For example, if the Patch Qualification screen is displaying, the Mark column shows V for Veto and F for Force, depending upon the qualification status of the patch.

3. Press the appropriate process ((F4)) function key to complete the activity.

Using the Function Keys

Function keys display on the bottom of all screens. See Figure F-1. Only actions relevant to the current activity display.



Function Keys

Figure F-1 Function Key Numbers

To use an function key:

- Press the corresponding function key. The keys are numbered sequentially, starting with (F1) on the far left. Even if a function key location is blank, it is counted as a function key number.

  Table F-1 lists all the function keys, screen name, and corresponding action. There are standard keyboard key equivalents for each function key action.

Table F-1 Screen Function Key Assignments

Screen	Function Key	Action	Keyboard Alternate
All Screens	F1	Help	?
	F8	Exit/Previous Menu	E, e
Main Menu	F1	Help	?
	F8	Exit	E, e
Select Activities Menu	F1	Help	?
	F2	Mark/Undo Mark	X
	F4	Process List	P
	F8	Previous Menu	E, e
Customize Activities Menu	F1	Help	?
	F2	Mark/Undo Mark	X
	F3	Verify/Undo Verify	V
	F4	Process List	P
	F8	Previous Menu	E, e
View Patches Menu	F1	Help	?
	F4	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, 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, 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, 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. See Figure F-1 for a sample.

To select a specific filter or view, you have two options:

- Press the corresponding function key to toggle between the filter or view options. The buttons are numbered sequentially, starting with F1 on the far left. Even if an function key location is blank, it is counted as a function key number.
- Press the number key that corresponds to the desired filter or view. In Figure F-1, the filter number is 1.

Responding to Prompt Windows

Prompt windows display over screens. Prompt windows require a response to continue in an activity. A brief description of the activity or action required is included above the Prompt text.

To respond to a Prompt window:

1. Type the requested information.

   Typically, these windows request confirmation for continuing an activity or they require specific information such as LDEV numbers.
2. Press the RETURN key.

Referencing Information Windows

Information windows do not require a response from you. There are two types of Information windows.

Pop-up Information windows—These 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 window—This window displays 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 either the arrow or the j and k keys to move up and down the window. The j key moves the cursor up the window. The k key moves the cursor down the window.
- Use the Page Up and Page Down keys to scroll a page at a time.

Referencing 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—A 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—A 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 Message Windows

When HP Patch/iX experiences an error it displays an error window that gives a short description of the error. Refer to Figure F-2. Select from the options:

- Press the RETURN key to continue.
- Press the F1 key to get the *Error Help* window.

  The *Error Help* window provides a scrollable window that gives cause and action text for the error. Refer to Figure F-3.

Figure F-2 HP Patch/iX Error Message Prompt

Figure F-3 HP Patch/iX Error Help Screen

Using the Help Tool

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:

1. Press the Help (F1) function key.

   A message window displays with information about the current screen or error message.

2. To exit the Help screen, press the Exit Help (F8) function key.

HP Patch/iX Menu Descriptions

This section lists for each menu, the options and descriptions. This includes:

- Main Menu
- Activities Menu
- Customized Patch Preparation Options

Main Menu

The HP Patch/iX Main menu displays the list of available activities. See Figure F-4. The options are:

Select Activities—This item lists the type of patching options you can apply to your system using HP Patch/iX.

View Patches—This item displays lists of patches. There are several filters defined that allow you to view selected patches.

Qualify Patches—This item evaluates the submitted patches for compatibility with your system.

Create [Tape]—This item 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]—This item 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—This item exits you from HP Patch/iX. If you are in mid-process. *****Reviewers: how much is preserved?*****

Figure F-4 HP Patch/iX Main Menu

If Stage/iX is initialized, the HP Patch/iX Main menu replaces *Create [Tape]* with the Stage/iX option *Create [Stage][Tape]*. Refer to Figure F-5.

Figure F-5 HP Patch/iX Main Menu with Stage/iX Initialized

HP Patch/iX Activities Menu

The HP Patch/iX Activities menu (see Figure F-6) provides:

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

The three Activities menu options are:

- Adding a PowerPatch
- Adding a Reactive patch
- Adding (SUBSYS) products

Figure F-6 HP Patch/iX Patch Activity Selection Screen

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. These PowerPatch tapes are released periodically under a delivery vehicle called an Express. 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 Centers 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. Applying SUBSYS products to your system is know as the Add-On process.

When you select the option, *Adding (SUBSYS) Products*, HP Patch/iX restores product information from the SUBSYS tape that will be used in patch qualification. This option can also be used only when a new product is being added to the system at the same time a PowerPatch is applied. The PowerPatch tape and SUBSYS tape must be of a matched set, that is they must be from the same Express version.

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.

Viewing Qualified Patches

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 the [V] sign.
Forced, 6	Displays all patches marked for force from the default qualification. They are marked with the [F] sign.

From any of filter options, you can view detailed information about each patch. There are seven 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

Refer to Appendix F “HP Patch/iX Reference” for detailed descriptions of the Qualified Patches filter options and Flag column codes.

To change the View Patches filter:

1. From the HP Patch/iX View Patches screen, press the Previous Filter or Next Filter function keys, (F5 and F6) or press the number on the keyboard that corresponds to the filter view you desire.

   HP Patch/iX toggles through the View Patches filter options and displays the selected list of patches in the View Patches screen.

To view detailed patch information.

1. From the HP Patch/iX Qualified Patches screen, highlight the desired patch.

   Use either the arrow keys or the j and k keys to move up and down the list and press the RETURN key.

   The HP Patch/iX Patch Detail Summary screen displays.
2. Press the Previous View or Next View function keys, (F5 and F6).

   HP Patch/iX toggles through the View Patch Detail options and displays detailed information about the selected patch.
3. Press the Previous Patch or Next Patch function keys, (F2 and F3).

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 the (F8) key until the Main menu displays.

Customized Patch Preparation Options

When you select a patching activity from the Select Activities menu, the HP Patch/iX default is to perform preparation operations for that patching activity. When you chose not to have HP Patch/iX perform the default operations, you can customized patch preparation. When you customize patch preparation from the defaults, you are overriding the Hewlett-Packard recommended operations.

In the customized patch preparation activity, the possible patch preparation operations are: (The following is a description only, HP Patch/iX performs these activities for you either by default or if you select them through the customized patch preparation option.)

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 either HP Patch/iX or the Installer (`AUTOINST/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.

Caution: Unmark this item if you have intentionally placed new patch files in the `PATCHXL.SYS` group.

This operation is recommended for the Reactive Patch activities.

Purge all files in `USL.SYS`, `UXL.SYS`, and `UNL.SYS` groups.

HP Patch/iX purges all files found in the `UXL.SYS`, `UNL.SYS`, and `USL.SYS` groups as selected. These files are typically left over from a previous product installation and can cause either HP Patch/iX or the Installer, `AUTOINST,` to fail.

This operation 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.

This operation is recommended for the Reactive Patch 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.

Restore Product (SUBSYS) information files and library components.

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.

Copy Library Files.

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.

HP Patch/iX Filter Descriptions

HP Patch/iX displays a list of patches and patch information through the following Main menu options:

- Viewing Patches
- Qualifying Patches

Each option, View Patches and Qualify Patches, displays the list of patches based on different criteria. These criteria are defined in the set of filters. To view a selected list of patches, you select a specific filter.

Viewing Patches

When you select the View Patches Main menu option, the View Patches screen lists:

- 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. This will enable you to 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 options 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 HP Patch/iX View Patches screen varies depending upon the filter selected for the viewer. 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.

View Patches Filters

There are three View Patches filter options:

Installed Patches, (1)—These are the patches that are already on the system.

Available Patches, (2)—These are patches that are on the PowerPatch or Reactive patch tapes. From this filter you can view detailed information about each patch.

Available Products, (3)—These are the products on the SUBSYS tape.

Qualifying Patches

The Qualify Patches menu 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.

Qualified Patches 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 the [V] sign.

Forced, (6)—Displays all patches marked for force from the default qualification. They are marked with the [F] sign.

Qualified Patches Detailed Views

From any of filter options, you can view detailed information about each patch. There are seven 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

Summary

The Summary view, see Figure F-7, lists evaluation information about the selected patch in a scrollable window.

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.

Figure F-7 Patch Detail - Summary View

General Release (GR) Text

Displays all of the General Release text that is available for the patch. See Figure F-8.

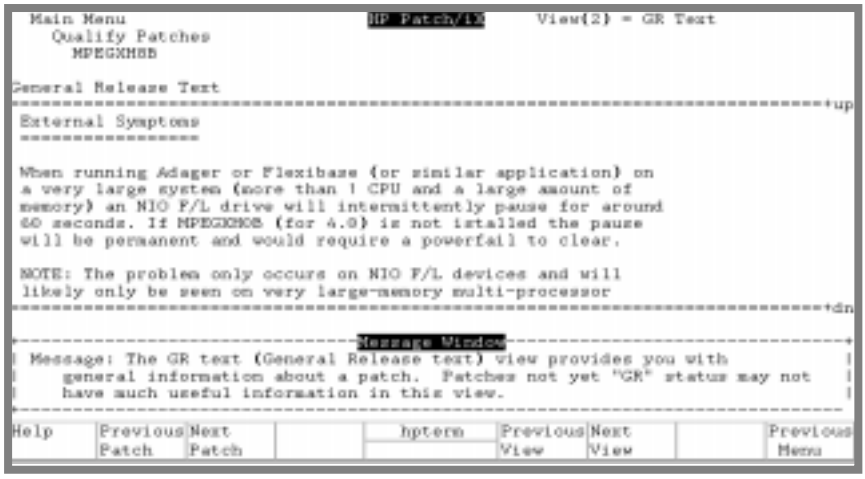


Figure F-8 Patch Detail - General Release Text View

Special Instructions (SI) Text

Displays any special instructions or configuration requirements that have been included for the patch.

Product Number

Displays a list of products that are affected by the selected patch.

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.

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. See Figure F-9.

Figure F-9 Patch Selection Detailed - Supersedes View

Patch Components

Displays the files and procedures that are modified by this patch. See Figure F-10.

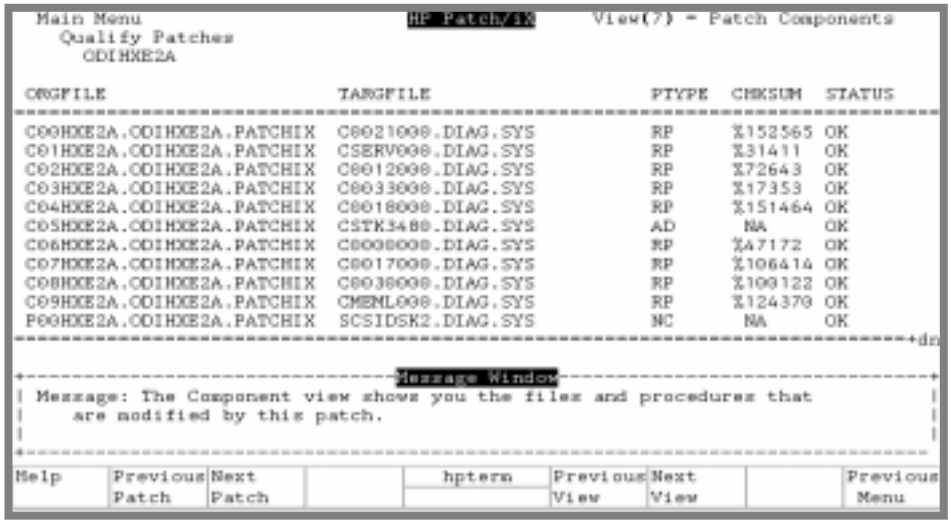


Figure F-10 Patch Selection Detailed - Component Information View

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 dependiceis are not present. If you force a patch on the system, all of its dependencies will also be forced onto the system.

HP Stage/iX Reference G

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, you 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, you execute HP Stage/iX commands from the STAGEMAN prompt.

This appendix contains:

- HP Stage/iX Concepts—introduction of HP Stage/iX terms and processes.
- Using HP Stage/iX—brief descriptions and procedures for using HP Stage/iX functions.
- HP Stage/iX Commands—standard command definition, syntax/parameter, and example descriptions.

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.

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.

The staging area and the archive use some disk space, much of it 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. So the amount of disk space used is based on the set of the patched files. Refer to Figure G-1.

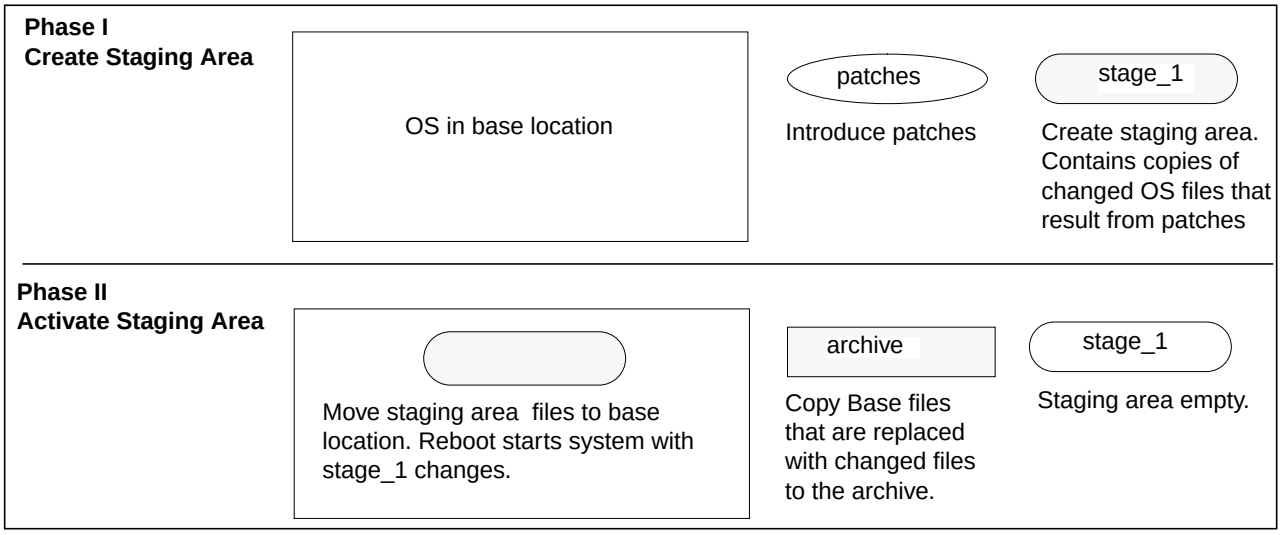


Figure G-1 Creating and Activating a Staging Area

To backout the changes from a staging area, use the HP Stage/iX SET command to designate the Base rather than the staging area. Refer to Figure G-2. 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.

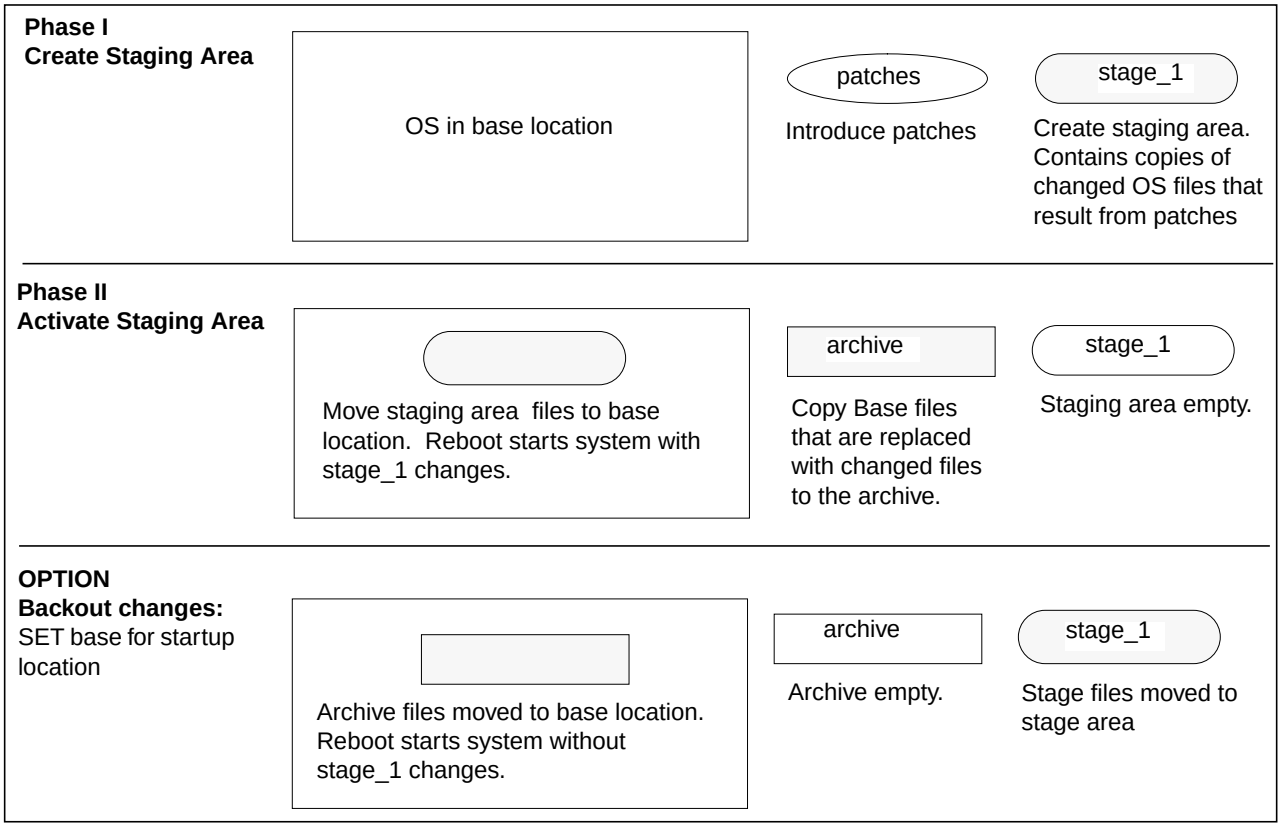


Figure G-2 Backing Out Patch Changes

Once you have tested and are satisfied with the changes from a staging area, use the HP Stage/iX `COMMIT` command to permanently apply the changes to your system. This accomplishes the following:

- Creates a new base
- Frees up disk space by removing
  - The archived base files
  - The committed staging area

Refer to Figure G-3.

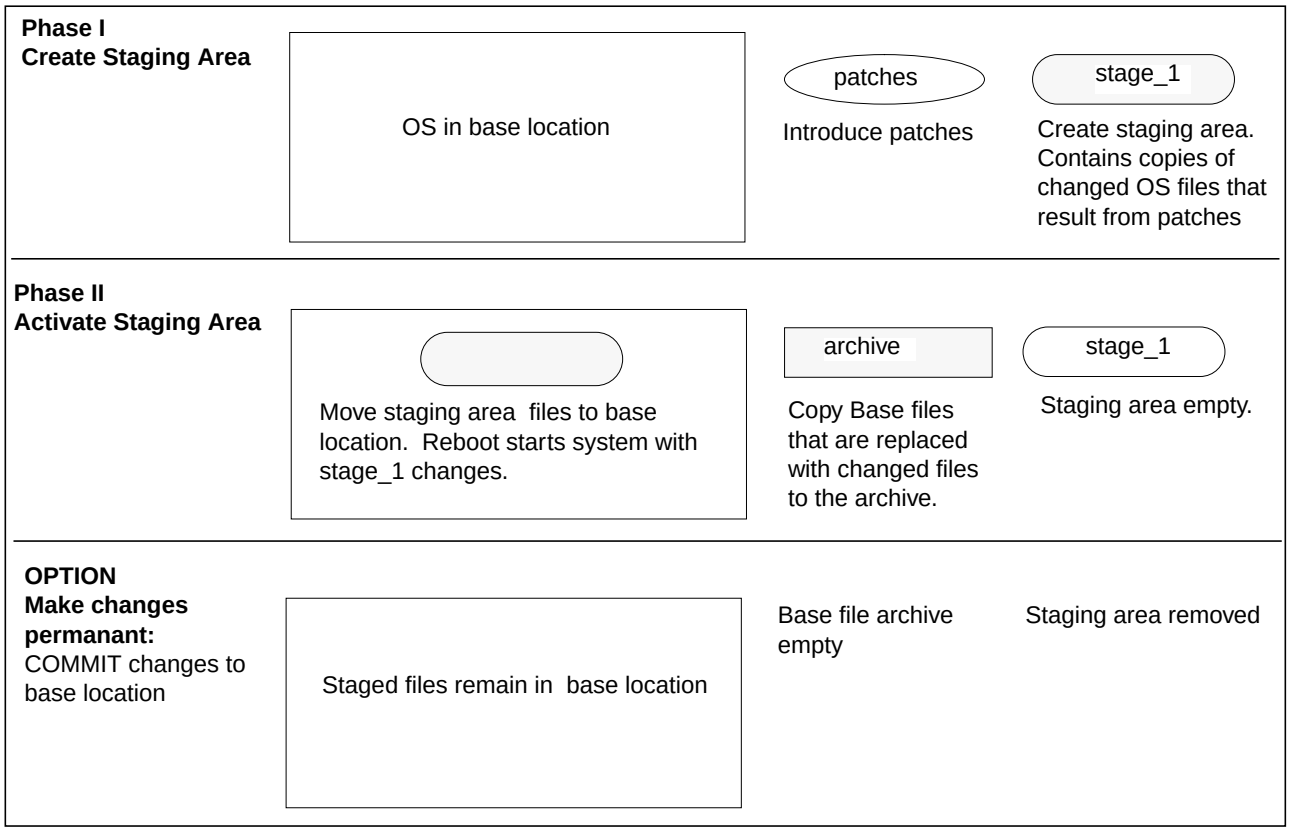


Figure G-3 Permanently Applying Patch Changes

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.

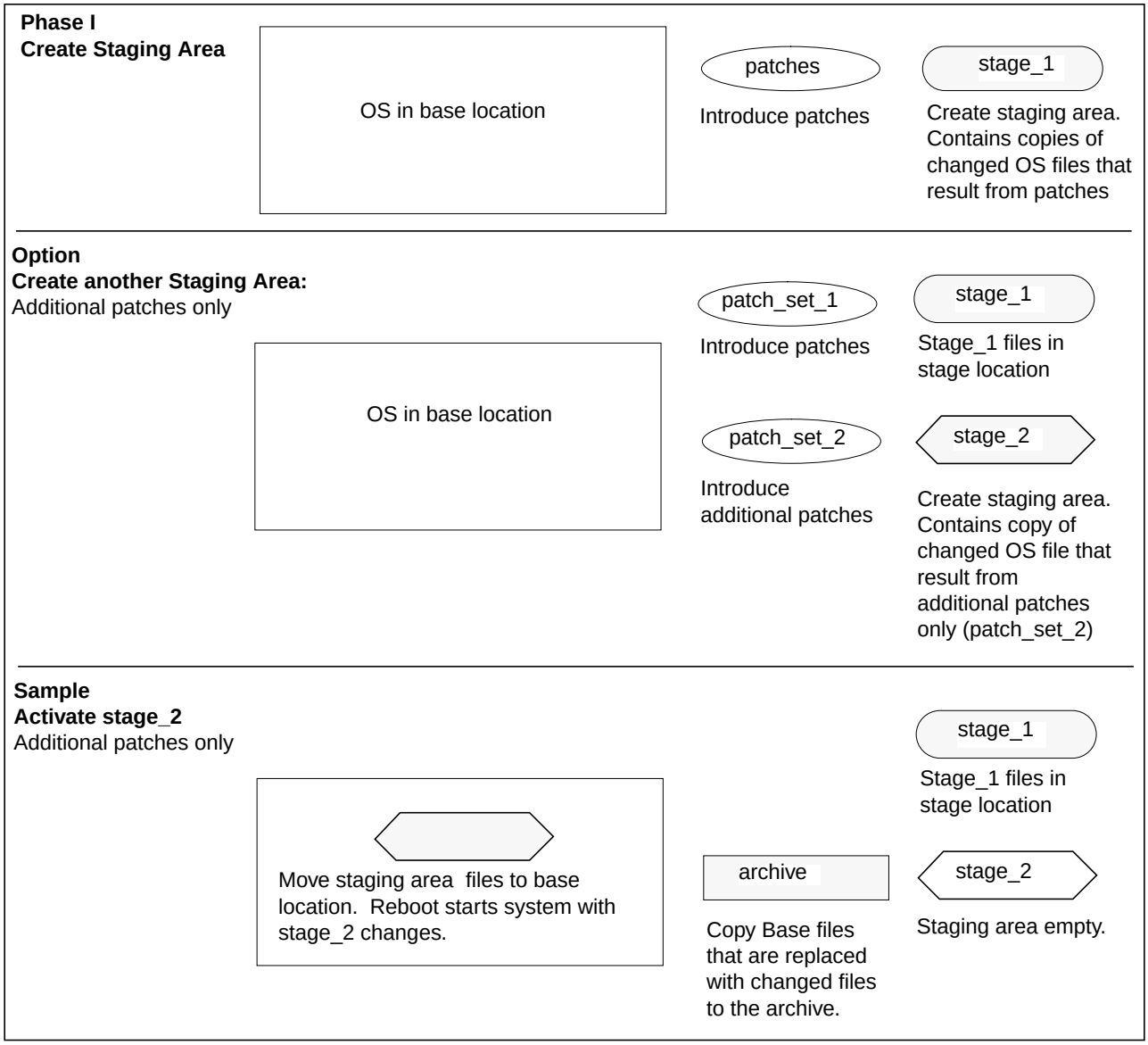


Figure G-4 Creating Another Staging Area, from the Base Location

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.

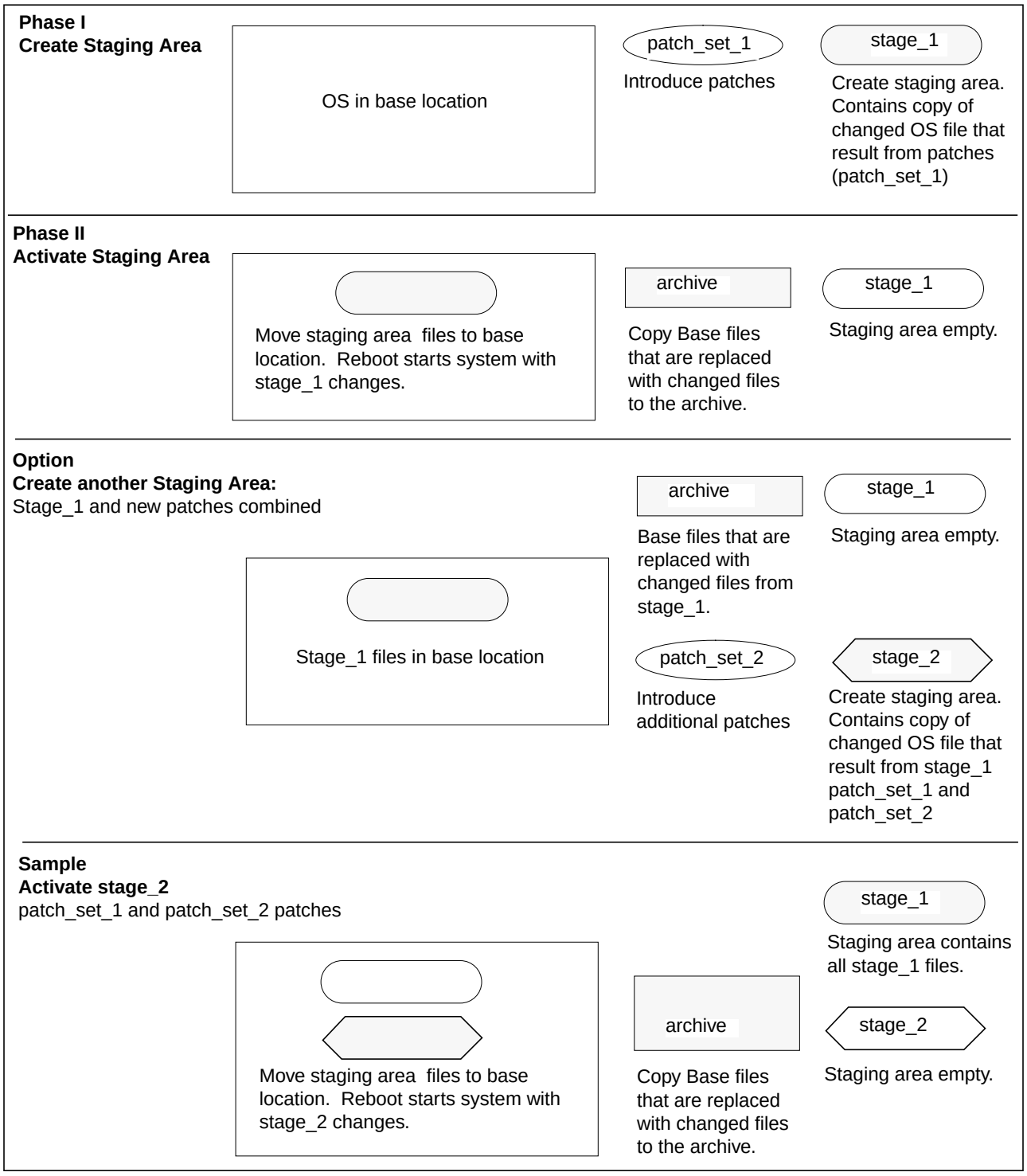


Figure G-5 Creating Another Staging Area from an Existing Staging Area

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 OS version 5.5. It is used in conjunction with HP Patch/iX. Refer to “Introducing HP Patch/iX” on page 1-4 for information about HP Patch/iX. HP Stage/iX only needs to be initialized once, from then on any time you run HP Patch/iX, HP Stage/iX capabilities are included.

To be able to use HP Stage/iX you must:

1. Update or install your system software to version 5.5.

   Refer to Chapter 2 “Selecting Your Task Checklist” and follow the directions in this manual for updating and/or installing your system software.
2. Install HP Patch/iX.

   Once HP Patch/iX is installed, refer to Chapter 2 “Selecting Your Task Checklist” and 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.

   This step is required to manage your qualified patches.
3. Initialize HP Stage/iX.

   Refer to “Initializing HP Stage/iX” on page 4-10 for initialization 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 you wish to apply to your system software. Typically, you electronically download or request tape shipment of patches from the Response Center.
2. If necessary, install and initialize HP Stage/iX. Refer to “Installing and Initializing HP Stage/iX” on page G-6.
3. Qualify patches.

   Typically, this is done using HP Patch/iX. 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. Refer to Chapter 4 “Preparing Your System” for directions on using HP Patch/iX to qualify patches. However, a HP Stage/iX command line option is available, for **experienced users only!**

a. Start HP Stage/iX. At the MPE/iX prompt, type:

```
:STAGEMAN
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. Start HP Stage/iX, if it is not already running.

```
:STAGEMAN
stageman>
```

6. Identify current staging area and next boot staging area.

```
stageman> STATUS
```

The following is a sample status command response.

```
STAGEMAN> status
Last booted with: BASE
Next boot will be with: stage_1
```

7. 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
```

8. Make changes to staging area. This can be a very destructive step, for **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.

9. Activate a staging area.

```
stageman> SET stagename
```

Where *stagename* is the name for the desired staging area or base.

a. Specify BASE to change the booting location to the Base.

b. Reboot your system.

This activates the staging area.

10. Commit a staging area to the base location.
    a. Boot from the staging area you wish to permanently apply 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 desired commands.

   ```
   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 (files, directories, staging areas, etc.) that HP Stage/iX created.

To uninstall HP Stage/iX:

1. At the MPE/iX prompt, type:

   ```
   :STAGEMAN
   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 HP Stage/iX Help

Help is available for all HP Stage/iX Normal mode, HP Stage/iX Expert mode, and STAGEISL commands. The Help information that displays is specific to the tool and mode.

To use HP Stage/iX Help:

- From the STAGEMAN prompt, type:
  `stageman> HELP`
  A list of the HP Stage/iX commands displays.
- From the STAGEMAN prompt, type:
  `stageman> HELP command option`
  command—the HP Stage/iX command you want information about.
  option—the portion of the help text you want to view.
  The *option* choices are:
  - 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:

- From the STAGEISL prompt, type:
  `stageisl> HELP`
  A list of the STAGEISL commands displays.
- From the STAGEISL prompt, type:
  `stageisl> HELP command`
  command—the HP Stage/iX command you want information about.

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 re-install.

If you do not have a backup of the staging areas, you will have to perform two tasks:

- A normal re-install task to re-install your operating system. If the OS is also damaged.
- A managing patches with staging area task to re-install your patches and staging areas.

To perform a staging area disaster recovery, using backup tapes:

1. Identify the your backup materials. Is your backup material from a:
   - ❏ Backup made after staging area created, but prior to applying (SET and boot) a staging area.
   - ❏ Backup 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 re-install of your current operating system. Refer to Chapter 2 “Selecting Your Task Checklist” for directions on performing a re-install task.

   Hewlett-Packard recommends performing the re-install 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 re-install process.

   b. You will not be able to `RECOVER` the staging area that the system was booted from. It becomes the new Base. The re-install 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. 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—for use by either system operators or system managers. The HP Stage/iX normal mode prompt is:

  ```
  stageman>
  ```

  Expert mode—requires system manager level. 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, which commands and command capabilities 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`
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`
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. Table G-3 lists general operation HP Stage/iX commands. Table G-4 lists the 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.

Table G-2 Staging Area Management Commands

Required Command (Abbrev)	Capabilities	Description
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 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 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.
CHANGEFILE (CF)	SM	Change the attributes of a staged file.
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 the user to change various attributes of an HP Stage/iX staging area. Specifically, CHANGE will allow the user 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”
```

CHANGEFILE (CHANGEF, CF)

This command is not currently supported.

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> COMMENT this is just a comment -- STAGEMAN will ignore it.
STAGEMAN> # this is just a comment -- it is equivalent to the line above.
```

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 that overall quality of the patched system software environment (reliability, performance, etc), 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 the user for confirmation of his/her intent to commit to the current software environmnt. The `;NOCONFIRM` option can be used to suppress the confirmation prompt. The `COMMIT` command will then make all of the necessary changes to the system software environment so that the current system software becomes the new base. Finally, the `COMMIT` command will delete the HP Stage/iX staging area.

When you commit to a stage, any other stages that were created from the same base, as the commited 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 the user for confirmation. If the user specifies ;NOCONFIRM, then STAGEMAN will *NOT* prompt the user 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, the user is 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 the user is free to 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.

The user 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). The user is therefore 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 the user for confirmation that it is OK to delete the staging area before it is deleted. The user 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 the user for confirmation. If the user specifies ;NOCONFIRM, then STAGEMAN will **NOT** prompt the user 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 the user does 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 the user 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 Expert Mode Commands

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 man 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 the user chooses. 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
```

To get help on all commands, enter:

```
STAGEMAN> HELP
```

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 the user 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 carot (^) 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 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 preceeding 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 supressed. 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. If the user wishes to see the output of a command executed from a command file, then he should 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 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, the user must set the CONTINUE option to CONTINUE.

If the user enters 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 the user puts 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.

The user 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 bootup.

[;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 bootup code will do.

WARN—Bootup will continue. An error message will be printed.

IGNORE—Bootup 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 re- strictions match what they should be.

EXISTENCE—The file that the staged file corres- ponds 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 accept- able 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 bootup 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 bootup 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 (refered to as its pre-stage location). The user is 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, the user 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 bootup.

[;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 bootup code will do.

WARN—Bootup will continue. An error message will be printed.

IGNORE—Bootup 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 the user 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 the user types 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 the user for confirmation of the user's intent to UNINSTALL HP Stage/iX unless the user explicitly specifies 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 the user for confirmation. If the user specifies ;NOCONFIRM, then STAGEMAN will **NOT** prompt the user 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 the user 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> USE cmdfile
```

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
```

Error Messages and Warnings H

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) (SETERRs; occur while SETUP script is being executed)
- Installer Error Messages (INSTERR) (INSTERRs; occur while running HPINSTAL or AUTOINST)
- Warning Messages (INSTWARN) (INSTWARNs; occur while running HPINSTAL or AUTOINST)
- SLTCOPY Messages (occur while copying tapes)
- Stage/iX Messages (STAGEMAN) (STAGEs: 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 "Estimating Disk Space" in Chapter 3 "Planning for Your Task" on page 3-20, 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 Chapter C "Reserving 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. The *PowerPatch Reference Manual* (30216-90184) provides additional information on these patches.

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 instructions on installing these products.

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)” on page H-69.

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 *non-recoverable 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 (RETURN) 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 display 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 occured 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 “Creating a Patch Tape or Staging Area Using HP Patch/iX” on page 4-37 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 `INLOG.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 invlid 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 CDvuuff .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 contine. (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 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 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.
- 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.
- 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, logon 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. Createprocess 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 Referenc e 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 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** `6Resetting 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* (32650-90030).
- 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* (32650-90030).
- 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* (32650-90030).

- 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* (32650-90030).
- 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* (32650-90030).
- 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* (32650-90030).
- 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 !HPGROUP,PUB,PUB.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 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 SOM's 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 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* (32650-90030).
- 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* (32650-90030).
- 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* (32650-90030).
- 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* (32650-90030).
- 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* (32650-90030).
  - 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 uneeded 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 existance 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.

131

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.

---

135 **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 intrinisic 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* (32650-90030).
- 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 intrinisic 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 unforseen 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 corective 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 *PowerPatch/iX Reference Manual* (30216-90157) 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** `Note 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 fialed. The CD-VERSION is lower than system's BASE-VERSION. You cannot continue with installation (INSTERR #255)`

Cause The release version on the CD is earlier than the release version on the system you are using to create the CSLT.

Action Use CDs whose release version level is equal to or greater than the release version on the base system.

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 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), 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 alright 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 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 inconsitent 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 inconsitent 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 expressable 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 expressable in Posix (HFS) syntax. Currently, Posix files cannot be placed in the LIF Directory.
	Action	Rename the file so that is is expressable 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 preceeded 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 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 Responce 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 preceeded 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 perfrom 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 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 taht 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 = vlaue (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.`
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.
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.

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.

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