

**Legato NetWorker[®]
ClientPak[™] for MPE/iX
Installation Guide**

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Introduction

The *Legato NetWorker ClientPak for MPE/iX Installation Guide* contains instructions on how to install Legato NetWorker ClientPak for MPE/iX on a client workstation.

MPE/iX is the operating system for Hewlett-Packard's HP 3000 business servers. Legato NetWorker provides enterprise storage management capability to the HP 3000-UNIX-NT coexistence market. The Legato NetWorker Clientpak for MPE/iX relies on HP's TurboSTORE software to interface with MPE/iX.

The Legato NetWorker Clientpak for MPE/iX is a command-line system that provides HP customers with backup, recover, archive, and retrieve capabilities from the MPE/iX Command Interpreter (CI) or from the POSIX shell.



Important: Before you install NetWorker on your MPE/iX client, see [“Planning the Installation” \(on page 7\)](#) for important information on system requirements.

For information on the typographic conventions used in this guide, see [“Conventions” \(on page 22\)](#).

Audience

System administrators who have experience with MPE/iX will benefit from this guide. This guide assumes that the system administrator has experience configuring NetWorker clients on a NetWorker server.

Legato Product Manuals and Documentation

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Installing NetWorker on a Client

This guide provides instructions for installing the NetWorker data storage management software on MPE/iX client systems.

Before installing NetWorker on your MPE/iX clients, you must install NetWorker on a server; otherwise, NetWorker will not work properly. Refer to the *Legato NetWorker Installation and Maintenance Guide* or the *Legato NetWorker Quick Start Guide* that was shipped with your NetWorker server software for instructions on installing NetWorker on a server.

A NetWorker *server* is a machine running the NetWorker server software with a backup device connected to it. The server provides backup and recover services to all *client* machines on the network. A client is a machine that accesses the NetWorker server to back up or recover files. Server software is packaged and sold separately from client software.

After you install Legato NetWorker on a client, refer to the *Legato NetWorker Administrator's Guide* to configure the client to back up to a NetWorker server. You can access the *Legato NetWorker Administrator's Guide* and the *Legato Disaster Recovery Guide* through the Documents Library option at www.legato.com.

New Features

With release 5.0 of the Legato NetWorker ClientPak for MPE/iX, you can now schedule automatic backups of MPE volume sets from the NetWorker server to which your HP 3000 is an MPE client. You can also do manual backups of MPE volume sets from the HP 3000 NetWorker MPE client. Refer to “Backing Up Volume Sets” and to “Recovering Volume Sets” in the *Legato NetWorker ClientPak for MPE/iX User's Guide* for more information on saving and recovering MPE volume sets.

Release 5.0 has the ability to run two or more scheduled backups in parallel. You can also perform manual backups or recovers of files, directories or MPE volume sets in parallel.

You can also set the following system variables for both server-initiated backups and for client-initiated backups. The different system variables that you can set are as follows:

- Set the NetWorker time zone to match the STORE process
- Create logs of your NetWorker backups
- Store shadow logs of TurboSTORE online backups on a separate MPE volume set
- Preserve the backup date for recovered files

-
- Turn the parallelism attribute on and off for server-initiated backups
 - Turn the parallelism attribute on and off for client-initiated recovery operations

For more information on setting variables, see [“Configuring the MPE Client on the NetWorker Server” \(on page 13\)](#).

Planning the Installation

The Legato NetWorker software is distributed on tape.



Important: If an earlier version of NetWorker is installed, follow the instructions in [“Removing NetWorker” \(on page 19\)](#) before you install this release of NetWorker.

To install NetWorker on an MPE client, you *must* meet *each* of the following system requirements:

- HP 3000 MPE/iX release 5.5 operating system
- HP 3000 FOS STORE/iX or TurboSTORE/iX II (Prod no. B5151AA) or TurboSTORE/iX 7x24 True-Online Backup (Prod no.B5152AA).
- MPE Patch MPEKX21 which includes the JXB1 patch. These patch numbers are the correct patch numbers at the time of printing this guide.
- 30 MB of disk space
- NS 3000 Network Services must be up and running
- TCP/IP must be configured through the NS 3000 Network Services
- NetWorker Windows NT or UNIX server version 4.2 or above as the server of the client
- Names of the servers of which the HP 3000 is a client

Please call the HP North American Response Center for the latest MPE Patch.

Loading the NetWorker Software

This section describes how to load the NetWorker ClientPak for MPE/iX software on a client with a local tape drive.

Before you load NetWorker, verify that your system recognizes the tape drive.

To load the software, follow these steps:

1. Log on as the system manager:
: **HELLO MANAGER.SYS**
2. Put the Legato NetWorker tape in the tape drive.
3. Set the following file equation:
: **FILE T;DEV=TAPE**
4. Restore the MPE/iX files from the product tape onto your system with the following command:
: **RESTORE *T;/legato;CREATE;TREE**

After you load the software, you can install it.

Installing the NetWorker Software

This section describes how to install the Legato NetWorker software. You use the **NSRIZE** command to install the NetWorker software. The installation script provides *pathnames* for the locations of the software.

Remember, the disk must have 30 MB of space before you can install the NetWorker software.

The installation script automatically creates a new MPE group, named *NETWRKR.SYS*. The *NETWRKR.SYS* group has the following capabilities: BA, IA, PM, MR, DS, PH.

The installation script gives you the option to create the group automatically or manually. If you plan to install the group manually, see [“Manually Creating the MPE Group” \(on page 10\)](#).

Daemons are programs that implement services. NetWorker has two daemons, *PORTMAP* and *NSREXECD*. These two daemons allow a client to communicate with the server. Clients must be running the *NSREXECD* daemon for the server to back them up.

The *NETWRKR.SYS* group is a special group that only exists for the NetWorker daemons. This separate group allows you to identify the daemons in the **SHOWJOB** listing. This group also allows you to stop the daemon jobs.



Important: You should *not* carry out any other work as *NETWRKR.SYS*.

To install the ClientPak software, follow these steps:

1. Change directories to the *legato* directory:
: **CHDIR /legato**
2. Begin the installation with the following command:
: **./NSRIZE INSTALL**

The following script text is displayed on the screen:

```
NetWorker(TM) - Release 5.0
```

```
Copyright (c) 1990-1997, Legato Systems, Inc. All  
rights reserved.
```

```
This product includes software developed by the  
University of California, Berkeley and its  
contributors.
```

```
NSRIZE is about to INSTALL NetWorker client software on  
machine MARS.
```

```
Do you want to continue? [Yes] [Enter]
```

```
In order to install the NetWorker software a new MPE  
group must be added to your system. If you wish NSRIZE  
to automatically create the MPE group, answer `yes'  
to the question below. If you wish to create the MPE group  
manually respond `no'. For further information please  
read 'Installing the NetWorker Software' and 'Manually  
Creating the MPE Group' sections in the Installation  
Guide.
```

```
Do you wish NSRIZE to create the group automatically  
[yes]? [Enter]
```

If you responded **no** to creating the group automatically, see [“Manually Creating the MPE Group” \(on page 10\)](#).

If you responded **yes** to creating the group automatically, the installation continues and the following message is displayed:

```
Installing the NetWorker executables.
```

```
Making the symbolic links.
```

Manually Creating the MPE Group

Installing the NSRHELP pages.

NetWorker installation was successful.

Once the installation is complete, if you created the MPE group automatically, you must now create the MPE user (see [“Creating the MPE User” \(on page 11\)](#)). If you did *not* create the MPE group automatically, you must create the MPE group manually and you must create the user.

Manually Creating the MPE Group

If, while installing NetWorker, you responded **no** to creating the MPE group automatically, the following message is displayed.

Exiting script so the installer can create a new group.



Important: You must create the MPE group manually. The installation script will not be completed unless you create the new MPE group with the same name *NETWRKR.SYS*. Changing the name of the group or altering its capabilities is not supported and will cause NetWorker to fail.

1. When the NSRIZE script exits, create the MPE group as follows:

```
: NEWGROUP NETWRKR.SYS;CAP=BA,IA,PM,MR,DS,PH
```
2. After you create the group, you must run the NSRIZE script again:

```
./NSRIZE INSTALL
```

The following script is displayed:

```
NetWorker(TM) - Release 5 .0
```

```
Copyright (c) 1990-1997, Legato Systems, Inc. All  
rights reserved.
```

```
This product includes software developed by the  
University of California, Berkeley and its  
contributors.
```

```
NSRIZE is about to INSTALL NetWorker client software on  
machine MARS.
```

```
Do you want to continue? [Yes] [Enter]
```

```
The group NETWRKR.SYS already exists. If there are any  
NetWorker files in this group they will be overwritten.
```

Do you wish to continue using the existing NETWRKR.SYS
[yes]? [**Enter**]

Installing the NetWorker executables.

Making the symbolic links.

Installing the NSRHELP pages.

NetWorker installation was successful.

Creating the MPE User

In order for automated NetWorker backups to run successfully, you must create the MPE user. The MPE user has the following capabilities: SF, BA, IA, PH, SM.

To create the MPE user, enter the following commands:

```
: NEWUSER NETWRKR.SYS;PASS=NEW_PASSWORD; CAP=SF,BA,IA,PH,SM;HOME=NETWRKR
```

Starting the NetWorker Daemons

NetWorker has two daemons, *PORTMAP* and *NSREXECD*. These two daemons, or services, allow a client to communicate with the server. The two daemon files are located in */SYS/NETWRKR*.



Important: You must start the NetWorker daemons. NetWorker daemons must be running at all times if automated backups are to be enabled.

Before you start the daemons, you must edit the *JPRTSTRT* and *JNSRSTRT* job files. These files start the two daemon jobs.

To edit the job files, follow these steps:

1. Change to the NetWorker directory by entering the following command:

```
: CHDIR /SYS/NETWRKR
```

2. Alter the *JPRTSTRT* and the *JNSRSTRT* files so they work with your system security and passwords.
3. Locate the following line in the *JNSRSTRT* file:

```
!run nsrexecd.netwrkr.sys;info=""
```

Starting the NetWorker Daemons

4. Depending on whether you are adding one or more servers, insert the host NetWorker name or names between the double quotation marks in the JNSRSTRT file:
 - If you have only one NetWorker server, enter the name as follows:

```
!run nsrexecd.netwrkr.sys;info="-s jupiter"
```
 - If you have more than one NetWorker server, enter all server names between the double quotation marks; as in the following example:

```
!run nsrexecd.netwrkr.sys;info="-s jupiter -s pluto"
```

To start the daemons, follow these steps:

1. Start the *PORTMAP* daemon by entering the following command:

```
: STREAM JPRTSTRT
```

2. Start the *NSREXECD* daemon by entering the following command:

```
: STREAM JNSRSTRT
```

Note that you can add the two *STREAM* commands to */SYS/PUB/SYSTRT*.

3. Verify that the daemons are running:

```
: SHOWJOB
```

The job list is displayed :

JOBNUM	STATE	IPRI	JIN	JLIST	INTRODUCED	JOB NAME
#S2	EXEC		20	20	THU 2:06P	MANAGER.SYS
#J1	EXEC		10S	LP	THU 2:07P	FTPMON,FTP.SYS
#J2	EXEC		10S	LP	THU 2:07P	JINETD,MANAGER.SYS
#J11	EXEC		10S	LP	THU 3:18P	PORTMAP,NETWRKR.SYS
#J12	EXEC		10S	LP	THU 3:18P	NSREXECD,NETWRKR.SYS

The installation is complete.

Note that you can stop the daemon jobs by typing the same command twice, once for each daemon:

```
: ABORTJOB NETWRKR.SYS
```

```
: ABORTJOB NETWRKR.SYS
```

Configuring the MPE Client on the NetWorker Server

Before you use NetWorker to back up a NetWorker MPE client, you must add the client to the NetWorker server. When you add the client, you need to choose a network-wide backup schedule, assign a backup group, and choose backup directives. Make sure the server can access the client for its scheduled network-wide backups. Refer to Chapter 2, “Preconfigured Configurations” and Chapter 5, “New NetWorker Client Configuration” in the *Legato NetWorker Administrator’s Guide* for configuring a new NetWorker client on a NetWorker server.

You can configure your HP 3000 as two MPE client resources on the NetWorker server: one for the sake of performing server-initiated backups of nonvolume sets, such as specific files and directories, and one for performing server-initiated backups of MPE volume sets.

The advantages of configuring a separate client resource for MPE volume sets are as follows:

- You can customize the backup schedules of your MPE volume sets to do “Full” backups so you get an entire, consistent view of the NetWorker save sets. Nevertheless, NetWorker does not prevent the use of incremental backups of MPE volume sets. Refer to Chapter 3, “Scheduled Backup Configuration” of the *Legato NetWorker Administrator’s Guide* for more information on configuring schedules for your client.
- You can schedule infrequent full backups of MPE volume sets, for example, to back up once a month. However, if an entire volume set has nonsystem data that changes frequently, you should increase the frequency of the full backups, for example, to every week or to every day.
- You can set the “Store Index Entries” attribute for the pool resources that you assign to MPE volume sets to “Off.” Setting “Store Index Entries” to “Off” turns off the browsing capabilities which simplifies browsing of files and directories. Refer to Chapter 4, “Device and Media Management” in the *Legato NetWorker Administrator’s Guide* for more information on configuring pool resources.

Naming Conventions for MPE Volume Sets

An MPE system volume, *MPEXL_SYSTEM_VOLUME_SET*, is automatically created when any HP system is installed. NetWorker identifies MPE/iX nonsystem volume sets by the appended tag *_VOLUME_SET*. For this reason, when you back up or recover nonsystem volume sets with NetWorker, you must add the tag *_VOLUME_SET* to the MPE volume set name. For example, if you were backing up all your project files that reside exclusively on an MPE volume set, *PROJECTS*, you would name the volume set *PROJECTS_VOLUME_SET*.



Important: NetWorker identifies the MPE volume set, *PROJECTS_VOLUME_SET*, as *PROJECTS_VOLUME_SET_VOLUME_SET*; NetWorker does not consider the first *_VOLUME_SET* string.

When NetWorker saves an MPE volume set it saves the *file directory information* in the file *PROJECTS_VOLUME_SET*. Using the example, when you recover this specific file, it will contain only the file directory information. To recover all the files and directories on an MPE volume set, you use the *save set identification (ssid)* for the volume set. Refer to “Recovering Volume Sets” in “Chapter 3: Recovering Files” of the *Legato NetWorker ClientPak for MPE/iX User’s Guide* for more information on recovering MPE volume sets.

If you want the NetWorker server to do server-initiated backups of MPE volume sets, you must add the correct save set names for the MPE volume sets to the Client resource on the NetWorker server, as in the following examples:

```
/MPEXL_SYSTEM_VOLUME_SET  
/PROJECTS_VOLUME_SET
```

If the default keyword “All” appears in the Save Set attribute in the Clients resource on the NetWorker server, all currently mounted MPE volume sets for the MPE client are backed up according to the group and schedule listed in the Clients resource.

Listing Groups in an MPE Volume Set

You can get a list of all accounts and groups in an MPE volume set that NetWorker will back up in a server-initiated backup.

Enter the following MPE command at the CI prompt to display a list of groups in an MPE volume set, as in the following example:

```
: REPORT ;ONVS= PROJECTS
```

Backing Up Multiple Save Paths in Parallel

A new feature of the NetWorker ClientPak for MPE/iX allows you to back up multiple save paths in parallel. The actual number is limited by the "parallelism" value assigned to the parallelism attribute for MPE client configuration on the NetWorker server. The default setting for the parallel attribute is 4 parallel backups. The number of parallel backups is also limited by other clients competing for the NetWorker server's resources at the time of the backup. Powerful client hosts should be able to gracefully run several scheduled backup processes concurrently. Finally, besides setting the "parallelism" attribute on the NetWorker server to "1" to completely turn off parallelism, you can turn off parallelism using a new system variable. See ["Turning Off Parallel Backups" \(on page 18\)](#) for information in this new system variable.



Important: If multiple saves are running in parallel, the logs of your NetWorker backups will be corrupt (see ["Creating Logs of Your NetWorker Backups" \(on page 17\)](#)). The solution is to turn parallelism off.

Determining What Server-Initiated Saves Will Run

The **SAVEFS** program determines what server-initiated saves will run. You can probe the server from your MPE client with the **SAVEFS** program, as in the following example:

```
: RUN SAVEFS;INFO="-p -s jupiter"
type: NSR client description;
pools supported: Yes;
remote user: MANAGER.SYS;
client OS type: HpOS;
IP address: 137.69.101.27;
NetWorker version: dev;
OS: MPE/iX C.55.00;
version: dev;
save set: path=/PROJ_VOLUME_SET, level=full, diskno=1,
max_sessions=1,
stype=save,\
path=/MPExL_SYSTEM_VOLUME_SET, level=full, diskno=0,
```

```
max_sessions=1,  
stype=save,\  
path=/, level=full, diskno=0, max_sessions=1,  
stype=save,\
```

The SAVFS program always computes the correct maximal parallelism schedule when all save paths are volume set names.

You can set the parallelism attribute to a lower value. You can also set the system variable NSR_MPE_SCHED_SAVES_PARALLELISM_OFF to completely turn off any parallelism.

Setting System Variables for Server-Initiated Backups

You can set system variables to customize the scheduled backups of the HP 3000 NetWorker MPE client from the NetWorker server. You set these system variables by adding them to the JNSRSTRT file.

The user can also set these system variables in the CI shell for client-initiated backups. Refer to “Backing Up Volume Sets” and “Recovering Volume Sets” in the *Legato NetWorker ClientPak for MPE/iX User’s Guide* which came with the Legato NetWorker ClientPak for MPE/iX product.

System variables that you add to the JNSRSTRT file do not affect client-initiated backups.

The system variables that you can set for server-initiated backups have the following functions:

- Set the NetWorker time zone to match the HP STORE process
- Create logs of your NetWorker backups
- Store shadow logs of TurboSTORE online backups on a separate MPE volume set
- Turn the parallelism attribute on and off



Important: When you enter system variables in the JNSRSTRT file, put them before the following line in the JNSRSTRT file:

```
!run nrexecd.netwrkr.sys;info=""
```

Setting the NetWorker Time Zone to Match the HP STORE Process

The HP STORE process runs in the Command Interpreter which uses the time zone set for your MPE client. NetWorker runs in POSIX, which by default is Greenwich Mean time. To correct a potential discrepancy between time zones, you must set the **TZ** variable.



Important: You should always have the TZ variable set when doing server-initiated backups, doing client-initiated backups, or recovering files and directories with NetWorker. For example, when you are recovering your files, you need to set the time zone variable; otherwise the recover browse will be in Greenwich Mean Time.

To set the time zone for server-initiated backups, add the following system variable to the JNSRSTRT file:

```
!setvar TZ "EST5daylight"
```

Note that the value **EST5daylight** is only an example; it might not be appropriate for your time zone.

For information about the value to set the **TZ** variable, display the **timezone** man page from the POSIX prompt only:

```
$ man timezone
```

Creating Logs of Your NetWorker Backups

You can set the **NSR_MPE_LOGNAME** variable to save information on scheduled backups in a log file.

To create logs of your server-initiated backups, add the following system variable to the JNSRSTRT file to set the variable:

```
!SETVAR NSR_MPE_LOGNAME "/tmp/log"
```



Important: If multiple saves are running in parallel, the NetWorker backup logs will be corrupt. To eliminate this problem, turn parallelism off.

Storing Temporary Shadow Logs for Online Backups

You can set the **NSR_MPE_ONLINE_SAVE_LOGVOLSET** system variable to specify on the MPE volume set on which the 7x24 TurboSTORE will store the temporary *shadow logs* for online backups. Shadow logs contain the before-

backup images of any files that are changed during the backup. If you don't set this system variable, the shadow logs are saved to the MPE volume set of the file that NetWorker and TurboSTORE are backing up currently. If you decide not to save the shadow log to a different volume set, then make sure that you have enough space on the volume set to which you are backing up.



Important: You must *not* include the NetWorker-expected tag, “_VOLUME_SET”, for nonsystem volume sets.

To store temporary shadow logs on a separate MPE volume set named SHADOW_LOG, enter the following system variable to the JNSRSTRT file:

```
!SETVAR NSR_MPE_ONLINE_SAVE_LOGVOLSET "SHADOW_LOG"
```

Turning Off Parallel Backups

Setting the system variable NSR_MPE_SCHED_SAVES_PARALLELISM_OFF to any value, including null, turns off any parallelism of server-initiated backups. Backups that are scheduled to run at the same time as defined in the client resource on the NetWorker server will run sequentially.

This variable is useful when the host and its I/O are unable to gracefully sustain more than one volume-set-based save at the same time. Note that parallelism can also be turned off by setting the "parallelism" attribute of the client resource to "1" (refer to the *Legato NetWorker Administrator's Guide*).

To turn parallelism of server-initiated backups off, add the following system variable to the JNSRSTRT file:

```
!SETVAR NSR_MPE_SCHED_SAVES_PARALLELISM_OFF ""
```

Note that if you set this variable to "no", parallelism will still be turned off.

Trying NetWorker on the Client

You should try to run NetWorker on your HP 3000 client to make sure that the software was installed properly and that you can access the NetWorker server to back up, recover, archive, and retrieve MPE/iX client files.

Refer to the *Legato NetWorker ClientPak for MPE/iX User's Guide* for instructions on using NetWorker to back up, recover, archive, and retrieve files.

Removing NetWorker

If you have an earlier version of NetWorker ClientPak for MPE/iX installed on the client, you need to remove it before you install the latest version.

To remove the NetWorker software, follow these steps:

1. Copy NSRIZE from the `/sys/netwrkr` directory to any other directory; for example:
: `copy /SYS/NETWRKR/NSRIZE, /tmp/NSRIZE`
2. Change the group to PUB:
: `CHGROUP PUB`
3. Change to the `/tmp` directory:
: `CHDIR /tmp`
4. Enter the following command to remove the NetWorker software:
: `./NSRIZE REMOVE`

Information and Services

Legato offers a variety of services, including electronic, telephone, and fax support that provide company, product, and technical information.

Legato Service or Resource	Technical Bulletins	Binary Patches	Company & Product Information	Training Programs
<i>http://www.legato.com</i>	Yes	Yes	Yes	Yes
<i>ftp.legato.com</i> , Internet address 137.69.200.1 (log in as <i>anonymous</i>)	Yes	Yes		
FaxWorker, interactive fax service, (650) 812-6156	Yes		Yes	Yes
e-mail request server, <i>request@legato.com</i>	Yes	Yes	Yes	
Legato Inside Sales, (650) 812-6000 or <i>sales@legato.com</i>			Yes	
Legato Education Services, (650) 812-6096 or <i>training@legato.com</i>				Yes
*For detailed information about our services, support policies, and software subscriptions, please refer to the booklet <i>LegatoCare Service, Support and Training Programs</i> included in the NetWorker package.				

Customer Feedback

The Legato NetWorker ClientPak for MPE/iX team welcomes your comments and suggestions about software features, the installation procedure, and documentation. Please send any suggestions and comments to *feedback@legato.com*. You will receive a notice confirming receipt of your e-mail. Although, we cannot respond personally to every request, we consider all your comments and suggestions during product design.

Technical Support

If you purchased technical support from HP, please refer to your HP Support Contract.

You must register the Legato NetWorker ClientPak for MPE/iX with Legato Systems Inc. before you can purchase Legato technical support. Please complete the registration form found on the last page of this guide.

Legato also provides several sources to fulfill your technical support needs.

Technical Support Service	Address
Hotline	(650) 812-6100
e-mail	<i>support@legato.com</i>
Tech Dialog (requires password)	<i>http://www.legato.com/tech_dialog</i>

Customer Service

Contact Legato Customer Service if you have questions about licensing, registering, or authorizing your Legato products. Customer Service also supplies instructions for transferring licenses to a different server (rehosting) and provides status on product orders.

Customer Service	Address
Telephone number	(650) 812-6000 (option 3)
fax number	(650) 812-6220
e-mail	<i>service@legato.com</i>
e-mail for order status	<i>orderadmin@legato.com</i>

Conventions

Conventions

This guide uses the following typographic conventions and symbols to make information easier to access and understand.

- **boldface, lowercase or UPPERCASE** – Indicates references to NetWorker programs or commands within paragraphs as in the following example:

You can start the NetWorker **NSRSAVE** program either from the MPE/iX Command Interpreter (CI) or from the POSIX shell if you prefer.

- *italic* – Indicates directory pathnames, files, machine names, new terms defined in the Glossary or within the chapter, and emphasizing words or ideas as in the following example:

With the NetWorker ClientPak for MPE/iX, you can manually perform *client-initiated backups*.

- `fixed-width` – Used for examples and information displayed on the screen as in the following example:

```
NSRSAVE: /reports/ 389 KB 00:00:30 5 files.
```

- **fixed-width, boldface lowercase or UPPERCASE** – Used for commands and text you type exactly as shown as the ***recover*** command or the ***RUN NSRRECOV;INFO=*** command as in the following examples:

```
recover>recover
```

```
: RUN NSRRECOV;INFO="-s server -c client"
```

- ***fixed-width, boldface italic lowercase*** – Used for commands and text you type for which you need to substitute a variable as the ***reports***, ***server***, and ***client*** text as in the following examples:

```
recover> add reports
```

```
: RUN NSRRECOV;INFO="-s server -c client"
```



Important: This box contains important information and cautionary notes that prevent you from making a mistake.

NetWorker Product Registration

You must register the Legato NetWorker ClientPak for MPE/iX with Legato Systems Inc. before you can purchase Legato technical support.

Product Name: Legato NetWorker ClientPak for MPE/iX

HP Sales Order Number

Name (please print)

Company

Address

City

State

Zip

Telephone

Fax

Internet Address

Date Purchased

NetWorker Server Host ID

MPE TIER

Send in Your Registration:

Fax this form to (650) 812-6220 or mail it to the following address:

Customer Service
Legato Systems Inc.
3210 Porter Drive
Palo Alto, CA 94304
U.S.A.
