Support Plus User Guide HP-UX Version 11.00

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Overview	 HP-UX 11.00 Support Plus delivers diagnostics and HP-UX system patches. These patches enable new hardware and fix known defects. In some cases, a patch may deliver new software functionality. All Support Plus software is cumulative and replaces completely any previous Support Plus release for the same OS release. This document describes recommended patch bundles, gives instructions for getting started, and provides pointers for more information. The Support Plus CD includes patch bundles that contain the following software:
	• Diagnostics includes Support Tool Manager (STM) for online diagnostics, ODE (off-line diagnostics), Event Monitoring Service (EMS) hardware monitors, Predictive Support, EMS Kernel Resource Monitor, the Instant Capacity on Demand (iCOD-purchase) client product, and the Pay Per Use (iCOD-utility) client product.
	• Quality Pack (QPK) bundle includes all stable defect fix patches for core HP-UX, graphics, and key networking drivers. As of September 2001, the former General Release (GR) bundle has been consolidated with the QPK bundle.
	• Hardware enablement (HWE) bundle provides patches required for new systems and for add-on hardware supported on HP-UX 11.00. See the next section on "Bundle Changes in Previous Releases" for more information.
Bundle Changes in Previous Releases	In the December 2001 release, the 11.00 Hardware Enablement (HWE) bundle replaces the 11.00 Hardware/Critical (HWCR) bundle. The HWE bundle provides the minimal number of patches for supporting new and legacy hardware using the HP-UX 11.00 OS. Critical patches previously found in the HWCR bundle are now available in the Quality Pack bundle. Also, in the September 2001 release, the updated Quality Pack (QPK) bundle replaced the General Release (GR) bundle. Hewlett Packard (HP) has eliminated separate patch bundles on the HP-UX 11.00 Support Plus CD for servers versus workstations.
	If you have immediate questions or concerns regarding these changes, please send e-mail:
	supportplus@hp.com

Getting Started

The following steps provide a general overview of the installation procedure. Each step is described in the following sections of this booklet.

- 1. Decide which bundle you want to use (page 7).
- 2. Mount the Support Plus CD or download the bundles from the Software Depot (page 8).
- 3. Check documentation sources for last-minute information (page 10).
- 4. Set up access to Support Plus for other systems (page 12).
- 5. Install the selected bundle (page 14).
- 6. Use diagnostic Support Tools, if needed (page 16).
- 7. Get help from the HP IT Resource Center, if needed (page 18).
- 8. Get more information from the media kit and the web (page 20).

Deciding Which Bundle to Use

Use the following table to determine which bundle you need to install.

- For all bundles listed in the table, the supported systems are HP-UX workstations or servers running HP-UX 11.00.
- Unless otherwise indicated, this document assumes all bundles are located directly under your CD mount-point directory, for example, /cdrom/QPK1100. See "Mounting the CD" on page 8 for more information.
- See "Bundle Changes in Previous Releases" on page 5 for more information.

If you want to:	You should install:	Updated:
Update or install all the latest diagnostic tools, including hardware monitors.	OnlineDiag bundle: /cdrom/DIAGNOSTICS/B.11.00	Quarterly (Mar, Jun, Sep, Dec)
Prepare your server to use new iCOD functionality.	iCOD-purchase (B9073AA bundle) or iCOD-utility (T1322AA bundle): /cdrom/DIAGNOSTICS/B.11.00	As needed
Enable new systems and supported hardware products, including I/O adapters and devices.	HWE bundle:	Quarterly (Mar, Jun, Sep, Dec)
Bring all HP-UX core and graphics software to the current patch level and install critical patches for core, add-on I/O, and networking drivers.	QPK bundle: QPK1100	Every six months (Mar, Sep)

Mounting the CD

- 1. Open a terminal window and log on as root on the system.
- 2. If the CD drive is external, switch it on.
- 3. Insert the appropriate Support Plus CD into the drive. Wait for the busy light to stop blinking.
- 4. If necessary, define a new directory as the mount point for the CD drive. For example, to define /cdrom as the mount point:

mkdir /cdrom

5. If necessary, identify the drive device file:

ioscan -fnC disk

This command lists all recognized CD drives and their associated device files. The filename will be similar to /dev/dsk/clt2d0.

6. Mount the CD drive to the mount-point directory:

mount -r /dev/dsk/device_filename /cdrom

For example if the CD drive's device filename is clt2d0:

mount -r /dev/dsk/c1t2d0 /cdrom

If the CD drive's device filename is not c1t2d0, use the name you found using ioscan in Step 5.

7. You can now access the CD via the mount-point directory:

ls /cdrom

Downloading the Software Depot

1. Go to the web:

http://software.hp.com

- 2. Click Enhancement Releases.
- 3. Scroll to HP-UX Quality Packs.
- 4. Click the HP-UX Quality Packs link to see information and the link.
- 5. Click the Receive for Free button.

- Fill out the Trial/Free Product Registration form. Click Next. You get the Receipt Information and the link.
- 7. Click the link to download the bundle.

NOTE The process is the same for other bundle types. The HWE1100 bundle is under the HP-UX Hardware Enablement Patch Bundles link.

Checking for Last-Minute Information

Support Plus often contains last-minute information. Before proceeding, HP recommends strongly that you read the documentation for each bundle or patch you want to load. There are several important sources of information:

• Check the HP IT Resource Center for information about recommended patches:

http://itrc.hp.com

Select the **Maintenance and Support** page, then select the appropriate patching tools.

• Refer to the Support Plus web site for additional information:

```
http://software.hp.com/SUPPORT_PLUS
```

- Review the *Read Before Installing* document that accompanies the Support Plus CD. This short document contains up-to-date information about known problems with patches in recent Support Plus releases.
- Read the patch bundle's readme file. This file contains additional installation instructions, notes about problems in previous releases, a list of patches and their dependencies, and changes since the last release. You can print or view these files directly from the CD:

more /cdrom/QPK1100.readme

Each bundle readme file is also available in HTML format. These files contain hyperlinks to the patch text files. You can enter a URL into a web browser to view these files directly from the CD:

file:/cdrom/QPK1100.readme.html

• Read the patch's accompanying text file in the /cdrom/TEXT_FILES directory. This file provides detailed information about the patch. Patch text files are also included with individual patches that you retrieve from HP. You can print or view these directly from the CD:

more /cdrom/TEXT_FILES/PHCO_19550.text

• Review the Diagnostic products readme files and additional information in the /cdrom/DIAGNOSTICS directory. Some information is in Adobe® Portable Document Format (PDF) files. A free version of the Adobe Acrobat® Reader is available:

http://www.adobe.com

TIPTo simplify sharing of patch information, you may want to copy the
documentation files onto your own system. The hyperlinks from the
HTML bundle readme files to the patch text files will work as long as
the HTML files reside in the same directory as the TEXT_FILES
subdirectory.

Setting Up Access to Support Plus

If you mounted the CD on the system that is the target for the patch or diagnostic installation, then you have access to the Support Plus data; proceed to "Installing the Selected Bundles" on page 14. Otherwise, continue with the steps on this page.

Sharing Support Plus with Remote Systems

To enable direct access from one or two other systems, you must register a Support Plus bundle with the swreg command. For example, to register the QPK1100 bundle if the Support Plus CD is mounted to /cdrom:

1. Register the depot:

```
swreg -1 depot /cdrom/QPK1100
```

- 2. Install the bundles. See "Installing the Selected Bundles" on page 14.
- 3. Disable remote access by unregistering the depot before unmounting the CD:

```
swreg -u -l depot /cdrom/QPK1100
```

NOTE You cannot access or register HP-UX 11.00 depots from HP-UX 10.20 systems.

Setting Up Hard Disk Access

If more than two systems must access the depot, or if you cannot dedicate the CD drive to the Support Plus CD, HP recommends that you copy the patch depots to a hard disk using the swcopy command. For example, with the CD mounted at /cdrom:

swcopy -s /cdrom/QPK1100 * @ /var/tmp/MyDepot

This copies the contents of the QPK1100 bundle and depot to the local system under the /var/tmp/MyDepot directory. The new depot is registered automatically for remote systems to use.

• HP recommends that you do not merge depots created on different versions of HP-UX. Also, HP recommends that both the host system and depot should have the same major HP-UX version, for example, HP-UX 11.x versions.

HP-UX 11i encompasses the 11.00 and 11.11 versions.

• If the swcopy interactive user interface appears, an unexpected condition was encountered and you may need to enter additional information or take other action.

Installing the Selected Bundles

The bundles on the Support Plus CD are built, tested, and intended for use as a unit. Although you can select individual patches from the bundles, this requires additional analysis of the readme files to ensure you do not overlook software dependencies.

To ensure the greatest reliability, HP recommends the following tasks for all systems:

1. Plan for system down time.

Even though the swinstall command used for installing the bundles requires that the system has networking enabled, it is prudent to limit system activity during any installation. Also, Support Plus bundles commonly include patches that require a system reboot. Therefore, you should plan the installation for an appropriate time and announce a system outage to the users ahead of time.

2. Create a system backup.

Some amount of risk is involved in any system modification. You should implement a recovery plan as an insurance policy against a system failure. One recovery technique is to use the HP Ignite-UX tools (available from http://software.hp.com/products/IUX) to create recovery images.

3. Review the documentation.

The bundle readme files may contain additional installation instructions and other important information. Although you should already have reviewed the patch documentation, it is wise to recheck the readme files before installing. See "Checking for Last-Minute Information" on page 10.

4. Install the patch bundles.

HP recommends that after you have selected a bundle for installation (see "Deciding Which Bundle to Use" on page 7), you should install the bundle using the matching operations of the swinstall command. For example, to install from a CD mounted and registered on the system grendel:

```
swinstall -s system1:/cdrom/QPK1100 \
    -x patch_match_target=true -x autoreboot=true
```

You can use the swinstall command's preview mode (-p option) to get an idea of what to expect for the bundle you want to install:

NOTE If the swinstall interactive user interface appears, an unexpected condition was encountered. You may need to enter additional information or take other action such as setting mount_all_filesystems to false. Use the command:

-x mount_all_filesystems=false

Usage Tips for HP-UX 11.00

• The patch_match_target option was introduced in Software Distributor (SD-UX) for HP-UX 11.00. Do not use the match_target option; it will not select patches from the Support Plus 11.00 CD.

Refer to the *Patch Management Guide for HP-UX 11.x* for complete information on patch-related features of SD-UX. See "Getting More Information" on page 20.

- When using the graphical user interface (GUI) for installing bundles using the matching operation, choose Manage Patch Selection under the Actions menu and not Match What Target Has. Then, check the box "Automatically select paths for software installed on target". Click OK.
- All depots that contain HP-UX 11.*x* software or patches must be located and registered on HP-UX 11.*x* systems. This limitation is due to data format changes introduced in SD-UX for HP-UX 11.00. The version of SD-UX on the HP-UX 10.*x* releases does not support these data format changes.

	Using Support Tools (Diagnostics)			
	The Support Tools in the OnlineDiag bundle give you a complete solution for verifying, troubleshooting, and monitoring HP 9000 system hardware. This includes CPUs, memory, interface cards, mass storage devices, and other devices. The tools in OnlineDiag:			
	• Protect against some hardware failures, for example, some memory problems.			
	• Provide EMS hardware monitors that notify you of events that may indicate impending hardware failure.			
	• Maintain logs that can give you critical help in determining the cause of failures.			
	• Let you troubleshoot system problems with the system online or offline.			
	For most computer systems, no special configuration of the support tools is necessary. For complete information, see the Diagnostics web site at:			
CAUTION	If you remove or do not install the OnlineDiag bundle, some products with dependencies on OnlineDiag , will not function correctly.			
	• Each Support Plus release provides the latest tools and hardware monitors, enabling Predictive Support.			
	• These tools give you multiple protections against hardware failures.			
	• The Support Tools make it much easier to troubleshoot and fix hardware failures if they occur.			
	To ensure the reliability of your computer system, HP recommends strongly that you load the OnlineDiag bundle.			

Bootable Offline Diagnostics and Utilities

Experienced administrators can use the Support Plus CD as a bootable medium from which to run offline diagnostics and utilities.

1. Boot the system to the PDC (BOOTADMIN, BCH, etc.) prompt. PDC prompts may differ on some computer models.

Main Menu: Enter command or menu >

2. List the bootable devices:

search

- 3. Select the CD device that contains the Support Plus CD, for example: p3
- 4. Boot from that device:

boot p3

5. Wait for the ISL prompt:

ISL >

6. Start the Offline Diagnostic Environment (ODE):

ODE

Basic ODE Commands

After the ODE starts, use the following commands at the ODE prompt:

help	To display a list and description of the available commands.
help < <i>command</i> >	To display additional information.
help <var></var>	To display additional information.
ls	To list the ODE modules that will run on your computer.
<module name=""></module>	To run an ODE module interactively.
help	To display a list of commands once an ODE module loads.
run <module_name></module_name>	To run an ODE module non-interactively.

Getting Help

For technical support, software management, and electronic patch management services, contact the HP IT Resource Center (ITRC):

http://itrc.hp.com

Use the ITRC for the following services:

- Access customized support tools quickly.
- Make informed decisions with proactive information.
- Access a rich, knowledge database to quickly self-solve problems.
- Submit hardware and software calls online.
- Identify and download patches quickly and accurately.
- Get one-stop access to software updates for your entitlements.
- Take advantage of ITRC resources across the IT lifecycle:
 - Forums: Community where you can collaborate and tackle IT questions with peers.
 - Training: Online seminars, self-paced web-based training, and more.
 - Planning, Design and Implementation: Guidance to manage changes to your IT environment.
- Review Support Plus patch bundle information on the ITRC:
 - 1. Go to the web:

http://itrc.hp.com

- 2. Click Maintenance and Support.
- 3. Under Patching, click Standard Patch Bundles (Support Plus).
- 4. Click View Support Plus Releases.
- 5. Log in using your ITRC login and password.

If you do not have a login, register by clicking the Register Now link. After you log in, you see the Support Plus Release Index.

6. Click the release you want.

This links you to more information about the release.

7. Click the appropriate bundle link.

All patch names are linked to the patch database on the ITRC, and provide detailed patch information and download options.

Getting More Information

Read Before Installing

Each Support Plus media kit contains a *Read Before Installing* document, which has last-minute information about patches in a Support Plus release.

Support Plus CD

Each Support Plus CD includes the following:

- Bundle readme files in text and HTML format with hyperlinks to the patch text files, located at the same directory level as each bundle.
- Patch text files for all patches on the CD, located in the /cdrom/TEXT_FILES directory.
- Diagnostics readme files and other information contained in text and PDF files in the /cdrom/DIAGNOSTICS directory:
 - Support Plus: Diagnostics User's Guide describes all diagnostics products on Support Plus and gives instructions on how to install and use them.
 - *EMS Hardware Monitors Users Guide* gives detailed instructions on how to install, configure, and use hardware monitors.
- Detailed technical reference for patch operations: /cdrom/PATCH_TUTORIAL.PDF

Instant Information CD

Available documents on the HP Instant Information CD include the following:

- *Managing HP-UX Software with SD-UX* for information on using swinstall, swcopy, swreg, and other Software Distributor (SD-UX) commands.
- *HP-UX 11.0 Installation and Update Guide* for detailed instructions about system installation.

Web Resources

Additional help with HP-UX patching and related resources is available on the web:

• Download HP-UX patches and patch information from your nearest HP IT Resource Center:

http://itrc.hp.com

Select the site (americas/asia pacific or european). Select the Maintenance and Support page, then select the appropriate patching tools. To receive HP Security Bulletins, select the Maintenance and Support page, then select Support Information Digests.

• Additional Support Plus information:

http://software.hp.com/SUPPORT_PLUS

• Latest hardware support tools (diagnostics) information, including STM and EMS Hardware Monitors:

http://docs.hp.com/hpux/diag

• Latest HP-UX manuals and white papers:

http://docs.hp.com/hpux/os/11.0

Select the page for your operating environment, then pages on Patch Management, System Administration, or Installing and Updating.

• HP-UX 11i features and news:

http://unix.hp.com/operating

• Latest Ignite-UX information:

http://software.hp.com/products/IUX

• Software Distributor (SD):

http://software.hp.com/SD_AT_HP

Feedback

Please send your comments regarding this release to: supportplus@hp.com

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