

Read Before Installing or Updating

HP-UX 11i v3

September 2007



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Acknowledgments

This product includes software developed by the Apache Software Foundation. This documentation is based on information from the Apache Software Foundation (<http://www.apache.org>).

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Welcome to HP-UX 11i v3

HP-UX 11i v3 delivers the highest level of integrated virtualization and automation. HP-UX 11i v3 dynamically reduces complexity and cuts deployment times to maximize return on investment.

This DVD booklet provides the following information:

- Contents of the HP-UX 11i v3 media kit.
- Descriptions of the Operating System and Operating Environments.
- New and updated products included in this release. See the *HP-UX 11i v3 Release Notes* for details.
- Critical, late-breaking cold-install and update issues not in the *HP-UX 11i v3 Installation and Update Guide*.

See the *HP-UX 11i v3 Installation and Update Guide* supplied with the HP-UX 11i v3 media kit. This guide has step-by-step instructions and a known problems appendix.

You can access the guide and others on the Instant Information DVD and the HP Technical Documentation Web site:

<http://docs.hp.com/hpux/os/11iv3>

Media Kit Contents

This guide is part of the HP-UX 11i v3 media kit, which includes the following DVDs and documents:

- **HP-UX 11i v3 (B.11.31) DVD (2-DVD set)** — Contains the HP-UX Operating System (OS), Operating Environments (OEs), required networking software, Update-UX, Ignite-UX, and online diagnostics.
- **HP-UX 11i v3 (B.11.31) Application DVD** — Contains HP-UX application software.
- **HP-UX 11i v3 Instant Information DVD** — Contains HP-UX manuals, release notes, and white papers. See the DVD booklet for more information.
- ***Read Before Installing or Updating to HP-UX 11i v3*** — (this document) Provides last-minute information for HP-UX 11i v3. Read this booklet before cold-installing or updating HP-UX 11i v3.
- ***HP-UX 11i v3 Installation and Update Guide*** — Describes the media kit and instructions to cold-install or update to the latest release of HP-UX.

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- ***HP-UX 11i v3 Release Notes*** — Describes new features and functionality changes for HP-UX 11i v3. Release Notes are available on the Instant Information DVD and the HP Technical Documentation Web site:
`http://docs.hp.com/en/oshpux11iv3`
 - ***Configuring HP-UX for Different Languages*** — This book is provided in localized media kits. The English version of this manual is on the Instant Information DVD and the HP Technical Documentation Web site:
`http://docs.hp.com/en/oshpux11iv3`

Note Updating from HP-UX 11i v1 to HP-UX 11i v3 is not supported. You must first update to an HP-UX 11i v2 Operating Environment. However, you can do a cold install of HP-UX 11i v3 if you are running HP-UX 11i v1. Please see the *HP-UX 11i v2 Installation and Update Guide* for information on how to update from HP-UX 11i v1 to HP-UX 11i v2. In addition, make sure your system meets the minimum system and disk space requirements before updating from HP-UX 11i v2 to HP-UX 11i v3.

HP-UX 11i v3 Operating Environments

Operating Environments (OEs) are tested and integrated application bundles designed to work with the OS and provide functionality needed for your system. The HP-UX 11i v3 OEs include the following:

- **HP-UX 11i v3 Foundation OE (FOE)** — Designed for the demands of Web servers, content servers, and front-end servers, this OE includes applications such as HP-UX Web Server Suite, Java™, and Mozilla Application Suite. It is bundled as HPUX11i-OE.
- **HP-UX 11i v3 Enterprise OE (EOE)** — Designed for database application servers and logic servers, this OE contains the HP-UX 11i v3 Foundation OE bundles and additional applications such as GlancePlus Pak to enable an enterprise-level server. It is bundled as HPUX11i-OE-Ent.

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- **HP-UX 11i v3 Mission Critical OE (MCOE)** — Designed for application servers and database servers, this OE contains the Enterprise OE bundles, plus applications such as HP Serviceguard and Workload Manager to enable a mission-critical server. It is bundled as HPUX11i-OE-MC.
 - **HP-UX 11i v3 Technical Computing OE (TCOE)** — Designed for server applications, this OE contains extensive graphics applications and Math Libraries. It is bundled as HPUX11i-TCOE.

Use Subscriber's Choice for Latest Firmware Updates

HP recommends that you sign-up for Subscriber's Choice so you can automatically receive email notices for the latest firmware updates. Make sure you register all your products to receive the appropriate firmware update notices.

You can also go to the Business Support Center Web site at **<http://www.hp.com/go/bizsupport>** for the latest HP-UX 11i firmware updates. The IT Resource Center (ITRC) Web site at **<http://itrc.hp.com>** also provides a link to the Business Support Center.

To obtain the system firmware files, installation instructions, and release notes with detailed firmware version information select **Download Drivers and Software** at:

<http://www.hp.com/bizsupport>

This site provides a searchable database for various products or you can follow the **Server** link to select the latest firmware download for your specific server product.

Make sure you read the Release Notes for the firmware to ensure a successful update. In general, HP recommends that you update to the latest firmware available before installing or updating to HP-UX 11i v3.

For a matrix of system firmware for I/O adapters with HP-UX 11i v3 boot support, as well as the minimum system firmware requirements for HP-UX 11i v3, refer to the documents at:

<http://docs.hp.com/en/hw.html#System%20Firmware>

What's New in This Release

This section provides a quick overview of what is new, has changed, and has been deprecated or obsoleted in the HP-UX 11i v3 September 2007 release. For detailed product information, see the *HP-UX 11i v3 Release Notes* on the Instant Information DVD and the HP Technical Documentation Web site:

<http://docs.hp.com>

New Products in HP-UX 11i v3

This section lists the new products included in the HP-UX 11i v3 September 2007 release.

For a list of the associated bundle tags, refer to the *HP-UX 11i v3 Installation and Update Guide*. For information on these products, refer to the *HP-UX 11i v3 Release Notes*.

New Product	Description
Hardware Enablement Patch Bundle for HP-UX 11i v3 (HWEnable11i)	Provides patches required for new systems and for add-on hardware supported on HP-UX 11i v3, including I/O adapters and devices.
HP Instant Support Enterprise Edition	Updated to version A.03.95.510.42.07 to incorporate defect fixes.
Feature Enablement Patch Bundle (Feature11i)	Contains required patches for new or updated software products.
Quality Pack Patch Bundles	Stable, defect-fix patch bundles for the OS and applications.

New Product	Description
Dynamic Root Disk (DRD)	An HP-UX system administration toolset used to clone an HP-UX system image to an inactive disk for software maintenance and recovery. System administrators use DRD to manage system images on HP PA-RISC and Itanium®-based systems.
Dynamic nPartitions	Cell online activation and deactivation.
HP Application Discovery	Application Discovery agent (AppDiscAgent) is default-installed on the OE media. The agent securely supplies data to Application Discovery server at intervals that can be set by a system administrator.
HP-UX IOTree Indication Provider	Supports changes to PCI hot-swap-able slots.
HP-UX KC Provider	Supports kcmodule provider and kctunables provider. Both work in the WBEM environment.
HP-UX WBEM RAIDSA Provider	Used by client applications to determine information about Smart Array HBAs present on the system.
HP-UX WBEM SAS Provider	Used by client applications to determine information about SAS HBAs present on the system. With this component you can retrieve details about the various attributes of SAS HBAs.

New Product	Description
HP-UX Mobile IPv4	Provides mobility support for mobile devices to migrate from their home network to other networks, either within the same administrative domain or to other administrative domains on the Internet.
Printer Management (Web-based)	A new Web-based printer management tool available on the HP System Management Homepage (HP SMH).
Multimedia Streaming Protocols	Enables you to stream audio and video files. Delivered on the OEs as an optional feature.
Firefox and Firefox Source	Web browser sets a new standard for internet browsing by providing an easier and more personal way to use the Internet.
GTK and GTK Source	Open-source windowing toolkit used by Firefox and Thunderbird.
Thunderbird and Thunderbird Source	E-mail application provides convenient, customizable, rich-featured e-mail access.
HP-UX NSA HTTP	Updated to version B.11.31.01.02; enables NSA (Network Server Accelerator).

New Product	Description
HP-UX Software Assistant (SWA)	A command-line based tool that consolidates and simplifies patch management and security bulletin management on HP-UX systems. Includes Security Patch Check (SPC) and is the HP-recommended utility to use to maintain currency with HP-published security bulletins for HP-UX software.

Updated Products in HP-UX 11i v3

This section lists products that have changed, and have been deprecated or obsoleted in the HP-UX 11i v3 September 2007 release.

For a list of the associated bundle tags, refer to the *HP-UX 11i v3 Installation and Update Guide*. For detailed information on these products, refer to the *HP-UX 11i v3 Release Notes*.

Updated Product	Description
Software Pack (SPK)	No SPK content delivered on media in the HP-UX 11i v3 September 2007 release. Core enhancements, AccessControl and AtomicAPI, have been delivered on the HP Software Depot at: http://www.hp.com/go/softwaredepot
Mass Storage Stack	New options to manage multi-pathed disks and disk arrays.
I/O Subsystem	More networking & I/O drivers are DLKM-enabled, which means they can be dynamically loaded and unloaded from the HP-UX kernel without manually rebuilding the kernel or rebooting the system.

Updated Product	Description
10GigEthr-00	Updated to support UDP traffic over the destination port-based multi-queues and to display vital product data (vpd) by using the nwmgr command. DLKM-enabled.
GigEther-00	DLKM-enabled and defect fixes.
GigEther01	DLKM-enabled.
IEther-00 and Gigabit Ethernet	PCI-Express is now supported; iether is DLKM-enabled.
100BT (btlan)	DLKM-enabled.
InfiniBand Clustering System	Supports additional PCIe cards; DLKM-enabled.
CommonIO bundle	Support for additional FC HBAs; delivers SAS-COMMON, which contains utilities for managing specific SAS HBAs; delivers FC-COMMON, which contains utilities for managing specific FC HBAs.
FibrChanl-00	DLKM-enabled. Defect fixes.
FibrChanl-01	DLKM-enabled. Defect fixes.
RAID-01	DLKM-enabled.

Updated Product	Description
scsiU320-00	DLKM-enabled.
SerialSCSI-00	DLKM-enabled.
USB-00	The USB-00 driver version, as stated in the <i>HP-UX 11i v3 September 2007 Release Notes</i> , is incorrect. The USB-00 driver has been updated to version C.01.05.03 to incorporate defect fixes.
iCAP (Instant Capacity)	GiCAP disaster recovery, changes to TiCAP transfer and consumption; changes to icapstatus output; defect fixes.
Enterprise Cluster Master Toolkit	Updated to version B.04.01; support for HP-UX Apache on HP-UX Tomcat for CVM/CFS 5.0; support for HP CIFS/900 on CVM/CFS 5.0; support for CVM/CFS 5.0; enhanced Oracle toolkit; support for Serviceguard A.11.18.
Event Monitoring Services	Updated to incorporate defect fixes.
High Availability Monitors	Updated to incorporate defect fixes.
HP OpenView GlancePlus Pak	Support for HPVM 2.0; configurable logging intervals and flush intervals; gpm renamed to xglance.

Updated Product	Description
HP-UX IPQoS	<p>HP-UX IPQoS for earlier HP-UX releases (HP-UX 11i v1 and v2) is incompatible with HP-UX 11i v3 and so is removed by ObsIPQoS. However, a new, HP-UX 11i v3-compatible version of HP-UX IPQoS is now available on the Application Release (AR) media for September 2007, as well as on Software Depot at:</p> <p>http://www.hp.com/go/softwaredepot</p>
LVM and MirrorDisk/UX	Parallel re-sync; parallel opens; alternate link behavior; defect fixes.
Online Diagnostics	Supports Dynamic nPartitions, additional systems, and additional cards.
System Fault Management	New WBEM providers, Throttling Configuration, and Log Viewer are introduced on HP 9000 and Itanium-based system.
HP Serviceguard	New package-creation process and enhanced support for package dependencies and multi-node packages; additional support for cluster parameters, APA and VLAN, HPVM, and more.
HP Serviceguard Extension for RAC	Support for VxVM 4.1, Cluster Interconnect Monitoring, SGeRAC Toolkit, Veritas CVM/CFS 4.1, and Oracle 9i & 10g R2 RAC.

Updated Product	Description
Ignite-UX	Supports new hardware for HP-UX 11i v3, plus other changes.
Update-UX and SW-GETTOOLS	Updated to incorporate defect fixes.
Software Distributor	Updated to incorporate defect fixes.
Software Package Builder	Updated to incorporate defect fixes.
nPartition Configuration Commands	New parolrad command for Dynamic nPartitions operations.
nPartition Provider	Interpretation of Dynamic nPartitions capability bit is changed.
Partition Manager (parmgr)	Support for Dynamic nPartitions.
Virtual Partitions (vPars)	Support for PA systems running sx2000 chipset, pre-enablement for SCSI tape boot and recovery for Integrity systems. Purchased separately.
HP Global Workload Manager	Includes conditional policies related to Serviceguard events, usage of TiCAP resources based on policy level, support for Hyper-Threading, and further integration with other VSE products.

Updated Product	Description
HP Process Resource Manager	Provides an interface within HP SIM (System Insight Manager).
PRMKernelSW (formerly known as PRM Libraries)	Changes in fileset.
PRMLibraries	Changes in product and fileset encapsulation. Now contains the PRM API.
HP Integrity Virtual Machines Provider (VM Provider)	Supports the new features of VM A.03.00.
HP Integrity Virtual Machines (VMGuestLib)	Supports the new features of VM A.03.00.
Utilization Provider	Updated to version A.01.06.02.xx to incorporate defect fixes.
HP System Management Homepage (SMH)	Defect fixes.
HP Systems Insight Manager (SIM)	Supports VSE 3.0 products.
Distributed Systems Administration Utilities (DSAU)	Usability enhancements.

Updated Product	Description
Network Configuration (ncweb)	Support for IPv6; support for specifying additional modules to be pushed among IPv6, IPv4, and DLPI; more information for tunnels.
Disks and File Systems (fsweb)	Support for Volume Group creation for Serviceguard clusters and automatic distribution of LVM changes to all cluster nodes.
HP-UX Accounts for Users and Groups (ugweb)	Supports managing POSIX users and groups from LDAP database.
HP-UX Kernel Configuration (kcweb)	Defect fixes.
HP-UX Peripheral Devices Manager (pdweb)	Defect fixes.
HP WBEM Services for HP-UX	Defect fixes.
HP-UX WBEM Fibre Channel Provider	Supports Consolidated Status Provider and Indication Provider features.
HP-UX WBEM LAN Provider for Ethernet Interfaces	New provider, LAN Consolidated Status Provider, delivered in this release.

Updated Product	Description
HP-UX WBEM Online Operations Service Provider (OLOS)	Supports cell online activation and deactivation.
HP-UX SCSIProvider	Supports Consolidated Status Provider feature and defect fixes.
HP CIFS Server	Updated to 3.0g version A.02.03.02 to incorporate defect fixes and enhancements. No longer maintains the LDAP management scripts, smbldap-tools.
LDAP-UX Integration	Updated to version B.04.15 with dynamic group support, PAM_AUTHZ, TLS support, schema extension utility, and more.
Red Hat Directory Server	Updated to version B.07.10.30 to incorporate defect fixes.
HP-UX Web Server Suite	Updated versions of products in the HP-UX Web Server Suite.
HP-UX Apache-based Web Server	Includes additional modules, including scripting, content management, and security.
HP-UX Tomcat-based Servlet Engine	Implements Java Servlet 2.4 and Java Server Pages 2.0 specifications.
HP-UX Webmin-based Admin	Defect fixes.

Updated Product	Description
HP-UX XML Web Server Tools	Upgraded to version 2.03; Xerces upgraded to version 2.8.0.
HP-UX Auditing and Security Attributes Configuration (secweb)	Supports new GUI as part of the security attributes tool in HP SMH (System Management Homepage).
HP-UX Bastille and Install Time Security	Now works with Software Assistant (SWA).
HP-UX Host Intrusion Detection System	Updated to version 4.1. Includes alert volume reduction feature, generation of customized and consolidated alert reports, and a tuning tool that reduces the time and effort to deploy and maintain Surveillance Schedules.
HP-UX IPFilter	Changes in versioning.
HP-UX Secure Shell	Updated to incorporate defect fixes.
OpenSSL	Updated to version A.00.09.08d.002.
HP MPI	User's guide updated from the 10th edition to the 11th edition.

Updated Product	Description
HP-UX Java Development Kit and HP-UX Java Runtime Environment for the Java® 2 Platform Standard Edition (JDK/JRE)	Updated to versions Java 1.4.2.13 and Java 5.0.8 to incorporate defect fixes.
Perl	Updated to version 5.8.8 build 817.1 to incorporate defect fixes.

Known Problems

This section contains critical, late-breaking information that was not included in the *HP-UX 11i v3 Installation and Update Guide*.

Before cold-installing or updating to HP-UX 11i v3, make sure you read this entire section and *Appendix A, Known Problems and Troubleshooting*, in the *HP-UX 11i v3 Installation and Update Guide*.

For information and patches for other known problems, go to the HP IT Resource Center Web site:

<http://itrc.hp.com>

Problem When Igniting a System to Use VxVM

When igniting a system to use VxVM, the initialization of the Ignite environment may take up to 1 or 2 hours. This is due to a defect in VxVM start up code, and is limited to systems with very large SAN configurations (for example, a SAN configuration that contains thousands of LUNs). This issue will be fixed in a future version of Ignite UX.

What To Do

When Igniting systems in large SANs, HP recommends that you unplug the system from the SAN for the duration of the Ignite session. Once the ignited system is up and running, you may re-connect the SAN.

Cannot Find Boot Device

If you install the HP-UX 11i v3 media or a media image using an iLo-2 vMedia USB DVD device, it may be necessary to interactively indicate the device after boot to continue with the installation. In some cases the USB Mass Storage driver may not be able to detect the device as the boot source due to a late simulated device attach. If this occurs Ignite-UX will display the following warning:

```
WARNING: Could not find Q_BOOT device.  Cannot determine
what the boot device was.
```

```
WARNING: Could not find source device in ioscan output.
You must select from the list of devices below to use for
the source device:
```

```
...
```

```
(a listing of the I/O config)
```

```
..
```

```
Enter the index corresponding to the device to use as the
installation source, 'r' to rescan, or 'q' to reboot:
```

```
NOTICE: USB device attached.
```

```
Identification String:
```

```
Devices/MassStorage-SCSI/USB/BulkOnly/hp/Unknown/0_1
<2.310.3.150.1008.4902.1>
```

```
NOTICE: USB device attached. Identification String:
```

```
Devices/ScsiControllerAdaptor/USB/BulkOnly/hp/Unknown
<2.1000.3.150.1008.4902>
```

What To Do

The I/O configuration listing will not normally include the vMedia device. After the USB driver indicates device attach via the messages above, use the "r" rescan option to rescan the I/O configuration. This will result in the system displaying the message and prompt again. This time the vMedia USB DVD device will be listed. Select the vMedia device using the I/O configuration index number.

For example, in the output below the response to the prompt would be '7'. After you select the vMedia device, the install will continue normally. This issue will be fixed in a future HP-UX release.

index	HW-path	Class	description
0) 120	processor	Processor	
1) 121	processor	Processor	
2) 122	processor	Processor	
3) 123	processor	Processor	
4) 0/0/2/0	OO	USB_OHCI_Interface	
5) 0/0/2/0.0x0	OO	USB_Composite_Device	
6) 0/0/2/0.0x0.0x0	OO	USB_Bulk_Only	
7) 0/0/2/0.0x0.0x10	disk	USB_SCSI_Stack_Adaptor	
...			

Enter the index corresponding to the device to use as the installation source, 'r' to rescan, or 'q' to reboot:

USB Mass Storage Device Not Configured

If no USB mass storage device is attached to your HP-UX system at installation, the USB mass storage driver will not be configured into the kernel. If a USB mass storage device is subsequently attached to the system, HP-UX will not be able to communicate with it because the driver has not been configured.

What To Do

Verify that the USB software is installed on your system by executing the following command:

```
swlist -lproduct USB-00 | grep BLKONLY-MS
```

If the installation scripts indicate that the USB product was not installed because the legacy USB driver was disabled, run 'kcmodule -s hcd=static hid=static hub=static' and reinstall USB-00 by executing the command 'swinstall USB-00' using your install media.

Once USB-00 is installed, you can configure it into the kernel using the kernel configuration tools as follows:

```
kcmodule -s UsbBulkOnlyMS=static UsbIomega=static
```

Reboot your system to make sure the changes take effect.

Boot Disk Must Be at Least 9 GB for HP-UX 11i v3

HP-UX 11i v3 requires more space on the HP-UX boot disk than prior HP-UX releases. The disk chosen as the boot/root disk must be at least 9 GB to fit the volumes that must reside on the root/boot disk. More than 9 GB will be required in the root disk group in order to load the required and recommended operating environment components (typically 18 GB depending on swap space and software selections.)

Install may fail if your boot disk is too small regardless of the total size of the root volume.

What To Do

When configuring systems for installation, make sure the boot disk is at least 9 GB.

Performance Degradation with Single-Threaded Applications

Single-threaded applications linked with `libpthread` shows performance degradation because of thread safe libraries having to acquire and release mutex locks.

What To Do

Install patch `PHCO_36551`. The new `libpthread` patch `PHCO_36551` reduces the overhead of calling `pthread_mutex_lock(3T)` and `pthread_mutex_unlock(3T)` in a single threaded application.

Install PHCO_36356 to Avoid OLRAD or kcmodule failures

Critical Resource Analysis (CRA) may fail during a dynamic unload of a Mass Storage driver module, or the Online Replacement (OLR) or Online Deletion (OLD) of a Mass-Storage I/O adapter.

- OLR occurs when doing a replacement operation with either the `olrad` command, PCI attention button, or the Systems Management Homepage (SMH) on systems with this OLR feature.
- OLD occurs when doing a delete operation with the `olrad` command, or the Systems Management Homepage (SMH) on systems with this OLD feature.
- A dynamic unload of a module can occur with `kcmodule`, `swinstall`, or `swremove` commands.

OLR, OLD, or dynamic unload of a DLKM capable Mass Storage driver, might unexpectedly fail during Critical Resource Analysis (CRA) causing a core dump.

If the CRA fails in this way during a `swinstall` or `swremove` operation the system will automatically reboot to complete the requested operation.

If the CRA fails during a `kcmodule mod=unused` operation, the unload action will not occur until the system is manually rebooted.

What To Do

Install `PHCO_36356` to fix this problem. For availability of the patch, please check the HP IT Resource Center site at:

<http://itrc.hp.com>

Kernel Build Error Message

If a golden image is created on a system without USB ports and that image is used to install HP-UX on a system that has USB ports, the install will fail with a kernel build error:

```
ld: Unsatisfied protected symbol "usb_isc" in file
"/usr/conf/mod/ehci"
ld: Unsatisfied protected symbol "usb_isc" in file
"/usr/conf/mod/hcd" 2 errors.
ERROR:   The kernel build failed.
ERROR:   Could not make an executable kernel.
```

What To Do

Install the following two patches on the affected system before creating the recovery (golden) image with the Ignite-UX tools. These patches are available from the HP ITRC web site: <http://itrc.hp.com>:

- PHKL_36019: 11.31 hcd USB kernel driver cumulative patch
- PHKL_36072: 11.31 ehci USB kernel driver cumulative patch

Cold Install Slow or Fails with 1.5 GB or Less of RAM

Cold installs on systems with 1.5 GB or less of RAM may take very long to complete, or may fail with an ERROR. The minimum amount of supported memory on HP-UX 11i v3 is 1.5 GB and is intended only to be used with the Foundation OE and minimal applications. Installing all the OE Recommended applications, or other OEs, may require more than 1.5 GB of memory. If your system is affected by this problem the install process may appear to hang while building the kernel, or you may see the following messages:

```
WARNING: It is necessary to add more swap via swapon
- use volume with at least 30 MB of free space.
ERROR:   Cannot fork to run
"/var/tmp/.../preinstall".  Not enough space (12).
```

What To Do

Add additional memory so that your system has at least 2 GB of RAM, or install only the Foundation OE with as few additional applications as possible. If the kernel build appears to be hung, it will eventually complete, but this may take several hours.

System Hangs When RAID-01 and RAIDSAProvider Depots are Installed From AR Media or Web Download

When the RAID-01 and RAIDSAProvider depots are installed together from the Application Release media or web download, on each subsequent boot the system hangs at:

```
Configuring all unconfigured software  
filesets
```

This condition does not occur during a full installation of HP-UX from the Operating Environment media.

What To Do

When the system hangs, press `Ctrl + \` to stop the configuration script and continue the boot process. When the system has booted, re-install RAIDSAProvider. On subsequent boots, the system will no longer hang.

To prevent this condition, install RAID-01 and RAIDSAProvider separately. A reboot may be required after you install RAID-01; no reboot is required after installing RAIDSAProvider.

System Hangs When SerialSCSI-00 and SASProvider Depots are Installed From AR Media or Web Download

When the `SerialSCSI-00` and `SASProvider` depots are installed together from the Application Release media or web download, on each subsequent boot the system hangs at:

```
Configuring all unconfigured software  
filesets
```

This condition does not occur during a full installation of HP-UX from the Operating Environment media.

What To Do

When the system hangs, press `Ctrl + \` to stop the configuration script and continue the boot process. When the system has booted, re-install `SASProvider`. On subsequent boots, the system will no longer hang.

To prevent this condition, install `SerialSCSI-00` and `SASProvider` separately. A reboot may be required after you install `SerialSCSI-00`; no reboot is required after installing `SASProvider`.

Web Resources

For additional help when cold-installing or updating HP-UX 11i v3 and related products, go to the Web:

- HP Software Releases & Media:
[http://www.hp.com/software/releases/ \ releases-media2/index.html](http://www.hp.com/software/releases/releases-media2/index.html)
- Guides in various languages:
<http://docs.hp.com>
- Latest HP-UX 11i v3 guides and white papers:
<http://docs.hp.com/en/oshpux11iv3.html>
- For a complete listing of all HP publications:
<http://www.hp.com/hpbooks>
- HP-UX server information:
<http://www.hp.com/go/Integrity>
<http://www.hp.com/go/HP9000>
- Ignite-UX information:
<http://docs.hp.com/en/IUX>
- HP Apache-based Web Server documentation:
<http://www.hp.com/go/webserve>



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