Intel® Server RAID Controller U2-1 (SRCU21)

Quick Start Guide

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http://support.intel.com/support/motherboards/server/srcu21/manual.htm

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Before You Begin

FCC/ Emissions Disclaimer

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules, CISPR 22, and EN55022. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio and television reception. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult an experienced radio/TV technician for help.

Warning

The connection of a non-shielded equipment interface cable to this equipment will invalidate the FCC certification of this device and may cause interference levels that exceed the limits established by the FCC for this equipment. It is the responsibility of the user to obtain and use a shielded equipment interface cable with this device. If the equipment has more than one interface connector, do not leave cables connected to unused interfaces unless otherwise instructed to do so in the user manual.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Canadian Users

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appariel num'erique de la Class B respect toutes les exigences du Reglement sur materiel brouilleur du Canada.

Cautions and Warnings



WARNINGS

This guide is for qualified technical personnel with experience installing and configuring PCI adapter cards.

Read and adhere to all warnings, cautions, and notices in this guide and the documentation supplied with this product.



CAUTION

Take precautions to prevent electrostatic discharge (ESD) damage before handling the Intel Server RAID Controller U2-1 Adapter Card.

Electrostatic discharge (ESD) can damage adapter card components. Perform the described procedures only at an ESD workstation. If no such station is available, you can provide some ESD protection by wearing an antistatic wrist strap and attaching it to a metal part of the computer chassis.

Introduction

The Intel® Server RAID Controller U2-1 (SRCU21) combines i960® I/O processor based hardware, firmware and an easy to use interface. The SRCU21 runs the Intel Integrated RAID software.

This guide provides an introduction to Intel[®] Integrated RAID software and provides a set of instructions to install and configure the Intel SRCU21. For detailed information on installing and configuration the Intel SRCU21, please refer to the *Intel Server RAID Controller U2-1 User's Manual* located on the CD-ROM included with this product.

Product Check List

The following hardware and software components are supplied with the standard shipping package:

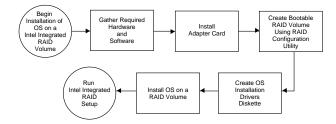
- Intel Server RAID Controller U2-1
- Intel Server RAID Controller U2-1 CD-ROM
- Intel Server RAID Controller U2-1 Quick Start Guide

Items Provided on the Intel Server RAID Controller U2-1 CD-ROM (bootable)

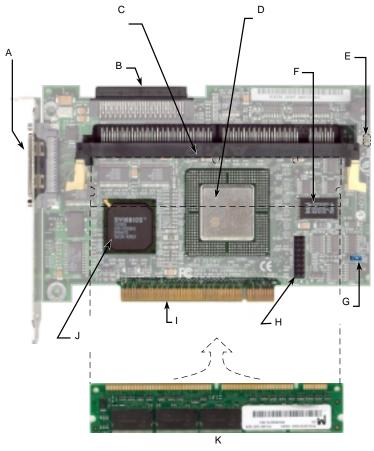
- Intel Server RAID Controller U2-1 User' Manual
- Intel Integrated RAID Software
 - Firmware
 - Drivers (OSM's)
 - Utilities (Firmware, Make Diskettes, Troubleshooting etc.)
 - Monitor Application
 - Storage Console
 - DMI Component Instrumentation
 - SNMP Extension Agent

The *Intel Server RAID Controller U2-1 User' Manual* is provided on the CD-ROM in an online/html format (at <cdromdrive>:\DOCS\COVER.HTM) viewable with any HTML-compatible browser, such as Microsoft Internet Explorer or Netscape Navigator[†]. The User's Manual can also be displayed and printed using Adobe[†]Acrobat[†] Reader.

Hardware/Software Installation Overview



Intel Server RAID Controller U2-1 Adapter Card



A7469-01X

- A External VHDCI Connector
- B Internal 68-pin Connector
- C SDRAM DIMM Socket ECC 66 MHz or PC100
- D Intel i960 RM I/O Processor 100MHz Core Hardware XOR
- E SCSI Activity LED
- F 16 Mb Flash

- G Flash Recovery (FRU) Jumper
 - JTAG Port (Debug)
- I PCI 32-bit, 33 MHz
 - Ultra2 SCSI 1 Channel
- LSI Logic SYM53C895 SDRAM DIMM

Intel Server RAID Controller U2-1 Hardware Setup

Hardware Requirements

- Server with CD-ROM Drive not attached to Intel Server RAID Controller U2-1
- One available PCI slot (33MHz recommended)
- Monitor display resolution of 800 x 600 or higher
- Intel Server RAID Controller U2-1 Adapter Card
- PCI 2.2 Compliant BIOS

Installing Intel Server RAID Controller U2-1 into a System

The Intel Server RAID Controller U2-1 comes with the Intel Integrated RAID firmware already programed into the flach memory. All that is necessary before installing the SRCU21 adapter into the Intel server board is to install an approved SDRAM ECC DIMM into the memory socket. Install an appropreate DIMM into the memory socket as indicated in the diagram on the previous page. Please refer to the approved memory list at: http://support.intel.com/support/motherboards/server/srcu21.



WARNING

SHOCK HAZARDS may be present inside the unit in which this card is being installed. Disconnect all power cords to the unit before removal of any covers.

Follow the warnings noted in your computers user or service manual before installing this board. ONLY after all the covers are reinstalled should you reattach the power cords and power up the unit for the software installation and use.

- 1 Power down the system, disconnect power cord(s) and remove the system cover.
- 2 Install the SRCU21 into an available PCI slot. Connect one end of the SCSI cable to the internal (68 pin) or external (VHDCI) SCSI connector on the SRCU21. Connect the other end of the SCSI cable to the SCSI drives or drive enclosure.
- **3** Replace the system cover, reconnect power cord(s).



NOTE

SRCU21 will work in a 66MHz slot, however, a 33MHz PCI slot is recommended. Consult the system guide for the target server board to determine an appropriate 33MHz PCI slot.

NOTE

Ensure that the end of the SCSI bus is properly terminated. Consult the documentation for the drives or drive enclosure for termination details.

Intel Integrated RAID Software Setup and Installation

This section details installation of supported operating systems to a RAID volume controlled by the SRCU21. Operating systems can also be installed to a pass-through drive (drive attached to SRCU21, but controlled directly by the host) or to a drive connected to a different controller. For operating system installation instructions on pass-through drives and drives attached to another controller, refer to the *Intel Server RAID Controller U2-1 User's Manual*.

Create a RAID Volume for the Operating System

A volume (or logical drive) must be set up prior to installing an operating system. The volume created in this step will host the appropriate operating system. Ensure that the volume's size is large enough to contain the operating system. The volume may contain more than just the host operating system if desired.

Create and configure the operating system RAID volume (boot volume) using the RAID Configuration Utility (RCU).

- 1 Turn on target system with the SRCU21 installed. During system boot-up, the message Press Ctrl C to run the RAID Configuration Utility appears in the display. Press Ctrl-C when this message appears, to execute the RAID Configuration Utility (RCU).
- 2 Follow the screen instructions to create and configure a RAID volume. Ensure that the volume is designated as the boot device when creating the volume (you can verify it is the boot volume after it has been created by using the custom configuration menu option in the main menu of the RCU).
- 3 Reboot when finished and proceed to the appropriate section to install the desired operating system. For more information on using the RCU please refer to the *Intel Server RAID Controller U2-1 User's Manual*.

NOTE

The RCU is designed to create one volume for the host operating system, and therefore contains only a subset of the RAID configuration features. The RCU is limited to the creation of one RAID volume across all available drives. When using the RCU to create a volume using fewer than all disks attached to the SRCU21, first mark drives that will not be used in the RAID volume as pass-through. These drives can be changed to be non-pass-through drives after the volume has been created. The Storage Console application is the primary management tool and provides all RAID configuration options (including creation of more that one RAID volume). For instructions on using Storage Console, please refer to chapter 4 in the Intel Server RAID Controller U2-1 User's Manual.



Do not install OSMs (Operation System Service Modules) downloaded from OS vendor websites. An OSM is the operating system half of the I²O split driver model. The OSMs provided on the Intel Integrated RAID CD-ROM are a later version than the OSMs currently provided by OS vendors. Using OSMs other than those provided on the Intel Integrated RAID CD-ROM may yield unpredictable results.

Setup and Installation for Microsoft Windows NT Server

Software Requirements

- Intel Integrated RAID CD-ROM
- Hard Disk Space: 9 MB Minimum
- Windows NT Installation Diskette (Microsoft Windows NT SCSI Miniport Diskette)
- Microsoft Windows NT Server 4.0 including Microsoft Internet Information Server 2.0*
- Microsoft Windows NT 4.0 Service Pack 5 or greater*. (Service Pack 5 will automatically upgrade Internet Information Server 2.0 to Internet Information Server 3.0.)
- Microsoft Internet Explorer 4.01 Service Pack 1 (recommended) or greater or Netscape Navigator 4.05 or greater*
- * Not supplied

■ NOTE

Microsoft Internet Information Server 4.0 may also be required (instead of Microsoft Internet Information Server 3.0) for servers that will be used to host web sites. These servers typically require the advanced features and security provided with Microsoft Internet Information Server 4.0. See the Intel Server RAID Controller U2-1 User's Manual for instructions on setting up SRCU21 with Microsoft Internet Information Server 4.0.

■ NOTE

Microsoft Internet Explorer with Service Pack 1 can be downloaded from the Microsoft website (www.microsoft.com) and is also included in the Microsoft Windows NT 4.0 Option Pack (available as web download or CD).

Installing Microsoft Windows NT Server on a Intel Integrated RAID Volume

This procedure installs Microsoft Windows NT Server on an Intel Integrated RAID volume.

1 Create a Microsoft Windows NT SCSI Miniport Diskette: Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM. When the ROM-DOS Startup Menu appears select option #1 "Make Diskettes". When the "Select a diskette to create" screen appears, select "Windows NT Installation". A command window then appears. Insert a blank high-density diskette in drive A: and press Enter to create the Windows NT SCSU Miniport Diskette. Alternatively the CD-ROM can be inserted into a system already running Windows 95, 98 or NT. The CD-ROM's "auto-run" feature will bring up a menu that will allow creation of the Miniport Diskette.

- **2** Install the following required software:
 - a. Microsoft Windows NT Server 4.0

Select the scenario below (1 or 2) which matches your installation to complete the Microsoft Windows NT SCSI diskette miniport driver installation.

- If you are installing NT with boot disks (booting from diskettes initially to setup NT), during install let NT detect the storage devices in your system. When device detection is complete, select "S" to specify additional storage devices, then select "Other". Insert the Microsoft Windows NT SCSI Miniport Diskette (created in step 1 above) in the floppy drive. Press Enter to select the "120 Miniport Driver" and continue with the NT installation. Go to step b.
- 2. If you are installing NT without boot disks, for example, you are booting with the NT Server CD-ROM, press F6 as soon as the blue screen appears to ensure that the Microsoft Windows NT bypasses mass storage controller detection. When prompted to specify a mass storage controller, select "S" to specify additional storage devices and then select "Other". Insert the Microsoft Windows NT SCSI Miniport Diskette (created in step 1 above) in the floppy drive. Press Enter to select the "I2O Miniport Driver" and continue with the NT installation. Go to step b.
- b. During the Windows NT Server 4.0 installation install:
 - TCP/IP
 - Microsoft Internet Information Server 2.0 (TCP/IP must be installed prior to installing Internet Information Server).
- After completing the NT installation, install the following components and software:
 - Microsoft Windows NT 4.0 Service Pack 5 or greater. (This will automatically upgrade Internet Information Server 2.0 to Internet Information Server 3.0.)
 - Microsoft Internet Explorer 4.01 Service Pack 1 (recommended) or greater or Netscape Navigator 4.05 or greater.

NOTE

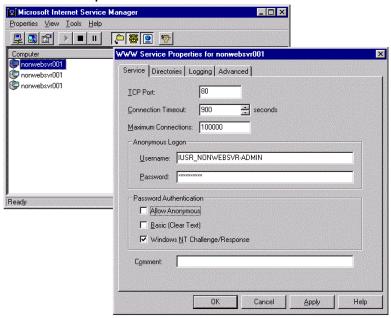
If your browser is configured to use a proxy server, ensure that it is configured to bypass the proxy server for local addresses. See the User's Manual for details on configuring a browser to bypass the proxy server for local addresses.

NOTE

Due to added security in Intel Integrated RAID, anonymous connections must be disabled in Microsoft Internet Information Server in order to execute the Intel Integrated RAID Storage Console in NT.

- **3** Configure Microsoft Internet Information Server 3.0
 - Start Internet Service Manager from the Microsoft Internet Server program group.
 - b. Double-click on the server name in the WWW Service row (top computer name).
 - c. Under the Service tab in the WWW Service Properties window clear the Allow Anonymous checkbox in the Password Authentication section. See the figure below.

WWW Service Properties



d. Select "OK" and close Internet Service Manager.

■ NOTE

If you use Netscape Navigator as the default browser on an NT system where Intel Integrated RAID is installed, you will have to enable Basic Authentication in Microsoft Internet Information Server to use the Intel Integrated RAID Storage Console. Netscape Navigator does not support Windows NT Challenge/Response authentication. Please follow the instructions in the Intel RAID User's Manual to enable Windows NT Challenge/Response if you are using Netscape Navigator.

4 Install the Intel Integrated RAID software (run the Intel Integrated RAID setup). The system should be powered on and logged into NT with an administrators account before proceeding.

NOTE

You must have administrative level permissions to install Intel Integrated RAID software.

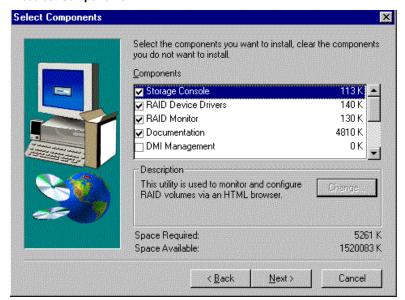
- a. Insert the Intel Server RAID Controller U2-1 CD-ROM in the CD-ROM drive. (If the RAID Installer Menu does not appear, then run the setup.exe file that resides at: <CD-ROM root>\os_setup\winnt\setup.exe on the CD-ROM and skip step B.)
- Click on the Setup button. See the following figure. Follow the onscreen prompts to complete installation.

Intel Integrated RAID Installer Main Menu



 The four components in the "preselected components" window below are preselected. Accept this configuration by clicking on Next.

Preselect Components



NOTE

The DMI and SNMP components are not selected by default.

■ NOTE

Refer to section "Intel Integrated RAID Software Component Installation" in chapter 4 of the Intel Server RAID Controller U2-1 User's Manual for information on HP Openview and RAID Monitor.

5 See Section 4.5 in the *Intel Server RAID Controller U2-1 User's Manual* to customize your RAID volumes using Storage Console.

Setup and Installation for Novell NetWare

Software Requirements

- Intel Server RAID Controller U2-1 CD-ROM
- Hard disk space: minimum 4 MB
- MS-DOS 6.22 or earlier* (Novell 4.2 only)
- NetWare Installation Diskette
- Novell NetWare 4.2 with Service Pack 6 or higher or Novell NetWare 5.0 with Service Pack 2a or higher*

^{*} Not supplied

Installing Novell NetWare on a RAID Volume

Follow the required procedure below to install Intel Integrated RAID. There are two procedures listed below (one for each supported version of NetWare). Please follow the instructions for the version you wish to install (version 4.2 or 5.0).

NetWare 4.2

- 1 Create a NetWare Installation Diskette: Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM. When the ROM-DOS Startup Menu appears select option #1 "Make Diskettes". When the "Select a diskette to create" screen appears, select "NetWare Installation". A command window appears. Insert a blank high-density diskette in drive A: and press Enter to create the NetWare Installation Diskette. Alternatively the CD-ROM can be inserted into a different system running Windows 95, 98 or NT. The CD-ROM's "auto-run" feature will bring up a menu that will allow creation of the NetWare Installation Diskette.
- 2 Insert MS-DOS floppy and reboot. Once you reboot, you will have to run FDISK to create a DOS partition of at least 50MB on the newly created volume (make sure it is flagged as the "Active" partition). Reboot and format the new partition. Make the new partition bootable.
- 3 Copy the desired MS-DOS files to the hard drive, copy the necessary CD-ROM drivers (e.g. ATAPI_CD.SYS and MSCDEX.EXE) and create a CONFIG.SYS and AUTOEXEC.BAT that loads those drivers. Additionally, insert the following lines in the CONFIG.SYS file: files=30 buffers=20
- **4** Reboot the server, insert the NetWare Installation CD-ROM, go to the appropriate drive letter and run INSTALL.BAT.
- 5 After booting you will first be asked to Accept the License Agreement. Do so and then select "NetWare 4.2", then select "Custom installation of NetWare 4.2". Enter the server name and internal network number. Hit Enter to begin the initial file copy.
- **6** Confirm the locale configuration and select Continue. Modify the NCF files. Make any desired modifications. Next, the device driver installation screen appears.
- 7 Choose "Select additional or modify selected Disk/LAN drivers".
- 8 Choose "Select an additional driver". Hit Insert to install an unlisted driver. Make sure that the NetWare Installation diskette is in the floppy drive and hit Enter. Select "BKSTROSM.HAM" from the list.
- **9** Continue with the NetWare installation as normal by following the screen prompts.
- **10** Once the server installation is finished, complete the installation of the Intel Integrated RAID software suite by following the steps below.
- 11 Run "LOAD INSTALL".

- 12 Select "Product Options", then "Install product not listed". It will tell you that it is going to scan the A: drive for installation scripts. Ensure the "NetWare Installation" diskette is in the floppy drive, hit Enter to continue.
- 13 A screen prompt will ask which components you wish to install. Select the desired components, and hit F10 to continue. The appropriate files will be copied and the AUTOEXEC.NCF and STARTUP.NCF files modified as necessary.



CAUTION

Once the product is installed, check for and remove any duplicate lines in STARTUP.NCF. For example, NetWare 4.2 installations may insert an extra load line for the module PK411.NLM. Remove the extra line.

- **14** After the installation is complete, reboot the server to load the new drivers.
- **15** See Section 4.5 in the *Intel Server RAID Controller U2-1 User's Manual* to customize your RAID volumes using Storage Console.

NetWare 5



NOTE

If you do not use the boot capability of the NW5 CD, then replace step 2-5 below with steps 2-4 of the NetWare 4.2 instructions above.

- 1 Create a NetWare Installation Diskette: Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM. When the ROM-DOS Startup Menu appears select option #1 "Make Diskettes". When the "Select a diskette to create" screen appears, select "NetWare Installation". A command window then appears. Insert a blank high-density diskette in drive A: and press Enter to create the NetWare Installation Diskette. Alternatively the CD-ROM can be inserted into a different system running Windows 95, 98 or NT. The CD-ROM's "auto-run" feature will bring up a menu that will allow creation of the NetWare Installation Diskette.
- 2 Insert the NetWare CD-ROM and reboot.



NOTE

The CMOS may need to be edited on some systems to be set to boot from the CD-ROM. Otherwise, if the system finds a partition on the hard drive it will attempt to boot from it and an error will result.

- **3** After booting you will first be asked to Accept the License Agreement. Do so. For a brand new volume, you should then select "Create a New Boot Partition".
- 4 NetWare will then ask for the size of the boot partition, you can either keep the default of 50MB or hit Modify to change the size to suit your needs. When you are done, select "Continue".

- **5** It will ask you confirm the boot partition creation. Select Continue. You will then press a key to reboot.
- **6** When NetWare boots again, it will first format the newly created boot partition, and then start loading files. During this initialization, you will see a white graphical NetWare logo screen.
- 7 It will eventually load a Welcome screen, asking you to verify the startup directory (C:\NWSERVER). Hit Alt F10 to exit the installation. At the console, type "Down". The installation exits to the boot drive prompt.
- 8 Insert the NetWare installation diskette into the A: drive. If your boot drive is C:, then run NWUPDATE.BAT. If your boot drive is other than C:, then create an NWUPDATE subdirectory and copy all the files from A:\DRIVERS into the NWUPDATE subdirectory.
- **9** Remove the diskette from the A: drive and reboot the server. After booting you will be asked to Accept the License Agreement. Do so and then select "Continue with Existing Partition". You are now ready to install NetWare 5 on the Intel Integrated RAID volume.
- **10** Continue with the NetWare installation as normal by following the screen prompts. Select the "Block Storage OSM" when prompted.
- 11 Reboot the server and install Service Pack 2a or higher. Once the server installation is completed, reboot the server.
- 12 Install the Intel Integrated RAID software (run the Intel Integrated RAID setup).
- 13 Run "NWCONFIG".
- 14 Select "Product Options", then "Install product not listed". It will tell you that it is going to scan the A: drive for installation scripts. Ensure the "NetWare Installation" diskette is in the floppy drive, hit Enter to continue.
- 15 A screen prompt will ask which components you wish to install. Select all of the components and hit F10 to continue.

BKSTROSM.HAM

SCSIOSM.HAM

HTTP and Winsock Services

RAID Management Agents

The appropriate files are copied and the AUTOEXEC.NCF and STARTUP.NCF files are modified as necessary.

- **16** After the installation is complete, reboot the server to load the new drivers.
- **17** See Section 4.5 in the *Intel Server RAID Controller U2-1 User's Manual* to customize your RAID volumes using Storage Console.

Setup and Installation for UnixWare 7.1

Software Requirements

- SCO UnixWare 7.1 software with Netscape 4.08 or greater included *
- Intel Server RAID Controller U2-1 CD-ROM
- Hard disk space: minimum 20 MB
- UnixWare Installation Diskette
- * Not supplied

Installing UnixWare on a RAID Volume

Follow the required procedure below to install Intel Integrated RAID.

- 1 Create a UnixWare Installation Diskette: Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM. When the ROM-DOS Startup Menu appears select option #1 "Make Diskettes". When the "Select a diskette to create" screen appears, select "UnixWare Installation". A command window then appears. Insert a blank high-density diskette in drive A: and press Enter to create the UnixWare Installation Diskette. Alternatively the CD-ROM can be inserted into a different system running Windows 95, 98 or NT. The CD-ROM's "auto-run" feature will bring up a menu that will allow creation of the UnixWare Installation Diskette.
- 2 Insert UnixWare 7.1 Volume: 1 of 2 diskette and reboot. Install the OS using the install instruction provided in *UnixWare 7 Installation Guide Manual*. UnixWare will prompt you to install Host Bus Adapter diskette. At that time insert the UnixWare Installation Diskette when prompted.

NOTE

During the installation of UnixWare, you will be prompted to install the Network Information Services (NIS) package. By default the installation will configure your system as an NIS client. See your system administrator for configuration of the NIS services.

After the installation, files such as /etc/inet/inetd.conf are supposed to be distributed to the client via NIS. If, however, you don't have a master NIS server on the network, the client will be unable to retrieve its copy of this (and other) file(s). Depending on the particular service being requested, fulfilling the request may take a long time, or may fail completely.

If you do not plan on using NIS, defer installation of NIS during the installation by pressing F8 on the NIS configuration screen. If you decide at a later time to install NIS, you can do so using the pkgadd(1) command.

3 Install the Netscape browser. The Netscape browser is provided in the SCO UnixWare CD-ROM Disk 2 of 3.

- 4 After completing the UnixWare installation insert the Intel Server RAID Controller U2-1 CD-ROM in the CD-ROM drive and mount the CD-ROM.
 - a. Create a directory to mount the file. For example, type "mkdir cdfiles" at the prompt.
 - Mount the CD-ROM to the folder by typing "mount –F cdfs –r /dev/cdrom/cdrom1 /cdfiles"
- 5 Install all the Packages/Services Requirements first before installing the components packages. The following table lists the installation components and preinstallation requirements provided by Intel Integrated RAID for UnixWare.

Installation Components and Preinstallation Requirements

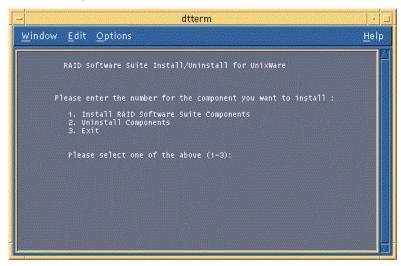
Component Name	Component Package Name	Packages/ Services Requirements	Optional Packages	Note
SNMP Extension Agent	raidxa	Snmpd, i2OosM, ptf7066a, ptf7429a	N/A	Snmpd service provided with the UnixWare CD-ROM. A typical installation should have the snmpd service running.
Raid Monitor	raidmon	i2oOSM, ptf7066a, ptf7429a	N/A	
RAID Documentation	raiddoc	Web Browser	N/A	Install the web browser from the UnixWare Installation CD-ROM.
Storage Console	i2oOSM, ptf7066a, ptf7429a	inetd & Web Browser	N/A	By default inetd is installed and started. Install the web browser from the UnixWare Installation CD-ROM.

Optional Installation Components

Component Name	Component Package Name	Packages/Services Requirements	Optional Packages	Note
Component Instrumentation	raidci	Dmi, i2oOSM, ptf7066a, ptf7429a	DMIman, DMIdoc	DMI services installation only

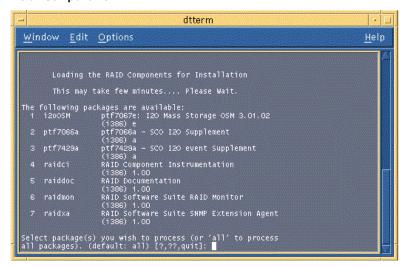
- **6** Launch the installer by typing the following:
 - a. Type "cd /cdfiles/os_setup/unixware"
 - b. Type "sh install" to start the install script. The launched scripts are shown in the following figure.

Launched Scripts



c. Select option 1 (by typing 1) to install the requirements and components. See the figure above.

Install Components



Packages can be individually installed by typing the package number listed on the screen as shown in the figure above. To select all packages, press Enter. To install multiple packages, type <package number>, <package number> etc. For example, 1,2,3,6 etc., then press Enter. After completing the installation type quit and hit Enter to return to the *main menu*. Packages which have been previously installed will only be updated if the revision number of the currently installed package is older or newer.

7 After completing the installation of the components launch the application using the commands in the following table.

Component Launch Commands

Component Name	Path to Add in .cshrc File	Launch by Typing
Component Instrumentation	/opt/rss/bin	Type "raidci" (if path is set)
SNMP Extension Agent	/opt/rss/bin	Type ".iraidxa" (if path set)
RAID Monitor	/opt/rss/bin	Type ".raidmon" (if path set)
Documentation	/opt/rss/docs	Type "raiddoc" (if path is set) or
		Type "netscape /opt/rss/docs/cover.htm"
Storage Console	N/A	Launch the browser and type the following in the http address box: "http://localhost:360/"

Getting Help

World Wide Web

http://support.intel.com/support/motherboards/server/srcu21

Telephone

Talk to a Customer Support Technician** (Intel reserves the right to change pricing for telephone support at any time without notice).

In U.S.: **1-900-555-5800** (M–F, 7:00 am–5:00 pm, Th 7:00 am–3:00 pm, PST). Calls billed at U.S. \$2.50 per minute.

In U.S. and Canada: 1-800-404-2284 (M-F, 7:00 am-5:00 pm,

Th 7:00 am-3:00 pm, PST). Credit card calls billed at U.S. \$25 per incident.

In Europe:

English language: +44-131-458-6847 French language: +44-131-458-6848 German language: +44-131-458-6954 Italian language: +44-131-458-6951

(M, Th, F, 8:00 am-5:00 pm, T-W, 8:00 am-4:00 pm, UK time)

Credit card calls billed at U.S. \$25 per incident (levied in local currency at the applicable credit card exchange rate plus applicable VAT).

In Asia-Pacific region (Singapore local time, Oct–April: M–F, 6:00 $\it am$ –4:00 $\it pm$;

April-Oct: M-F, 5:00 am-4:00 pm).

Credit card calls billed at U.S. \$25 per incident.

Australia (Sydney): +1-800-649-931 Hong Kong: +852-2-844-4456 Korea: +822-767-2595 PRC: +852-2-844-4456 Singapore: +65-831-1311 Taiwan: +886-2-718-9915

Rest of the world: Call the North American Service Center at **+1-916-377-7000** (M–F, 7:00 *am*–5:00 *pm*, U.S. pacific standard time). Credit card calls billed at U.S. \$25 per incident.

Technical Training & Support

If you are registered in the Intel Processor Dealer Program (North America), the Genuine Intel Dealer Program (Asia-Pacific Region), or the Intel Processor Integrator Program (Europe/Latin America), you are eligible for technical training and support.

In U.S. and Canada: **1-800-538-3373**, ext. 442 (M–F, 5:00 *am*–5:00 *pm*, PST) In Europe: contact your distributor or fax your details to European Literature on **+44 (0) 1793 513142**.

In Asia: +65-831-1379 (M–F, 8:30 am–5:30 pm, Singapore local time) or via e-mail: $APAC_gid@ccm.isin.intel.com$

^{**} Or contact your local dealer or distributor.