Intel® Server RAID Controller U3-1 (SRCU31)

Quick Start Guide

Translations of this guide are available at:

http://support.intel.com/support/motherboards/server/srcu31/manual.htm

Order Number: A26081-002

Before You Begin

FCC/ Emissions Disclaimer

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 U3-1 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.

Intended Audience

To use this product you should be experienced in configuring computer equipment. For example, you should be able to install and configure your OS to recognize peripherals and you should be able to use software utilities to configure and troubleshoot those installed components.

Introduction

The Intel® Server RAID Controller U3-1 (SRCU31) includes an i960® I/O processor, firmware and the Intel® Integrated RAID software with an easy to use html interface.

This guide provides Intel Integrated RAID software installation information and provides a set of instructions to install and configure the SRCU31. For detailed information on installing and configuring the SRCU31, see Chapter 2, "Advanced Installation Steps" in the *SRCU31 User's Manual*.

Product Check List

The following hardware and software components are supplied with the standard shipping package:
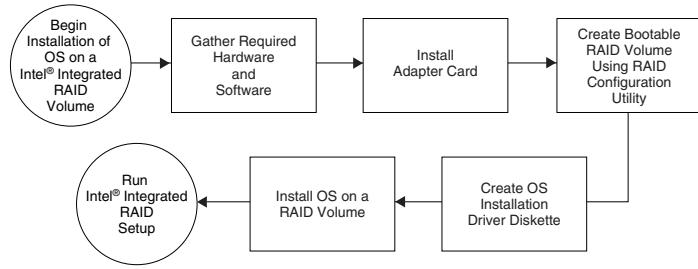
- Intel® Server RAID Controller U3-1 (SRCU31) adapter card
- Intel® Server RAID Controller U3-1 Software CD
- Intel® Server RAID Controller Linux† Software CD
- *Intel® Server RAID Controller U3-1 Quick Start Guide*

Items Provided on the Intel® Server RAID Controller U3-1 CD-ROM (bootable)
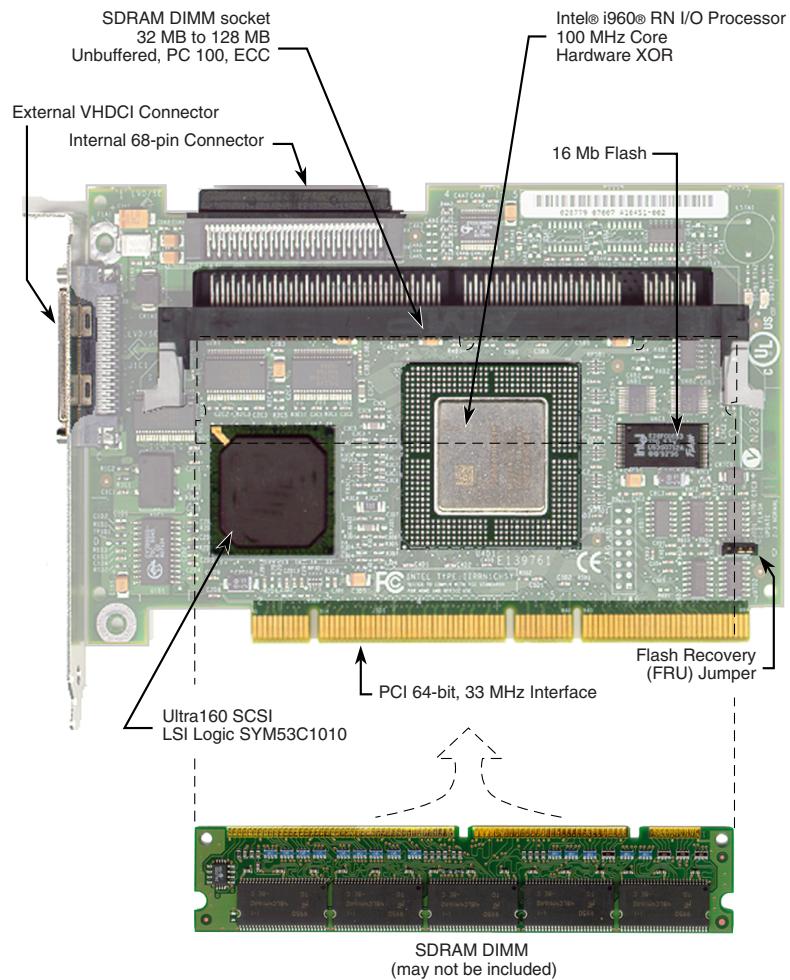
- *Intel Server RAID Controller U3-1 (SRCU31) User's Manual*
- Intel Integrated RAID Software
  — Firmware
  — Drivers (OSM's)
  — Monitor Service
  — Utilities (Make Diskettes, Firmware Updates, Advanced RAID Configuration, etc.)
  — Storage Console
  — DMI Component Instrumentation
  — SNMP extension agent

The *Intel Server RAID Controller U3-1 (SRCU31) User's Manual* is provided on the CD-ROM in an online/html format (at <cdromdrive>:\docs\index.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 (provided on the CD-ROM).

Hardware/Software Installation Overview

```
┌──────────┐      ┌──────────┐      ┌──────────┐      ┌──────────┐
│  Begin   │      │  Gather  │      │          │      │  Create  │
│Installation      │ Required │      │          │      │ Bootable │
│ of OS on a│─────▶│ Hardware │─────▶│ Install  │─────▶│   RAID   │
│Intel® Integrated│ │   and    │      │Adapter Card│    │  Volume  │
│  RAID    │      │ Software │      │          │      │Using RAID│
│  Volume  │      │          │      │          │      │Configuration│
└──────────┘      └──────────┘      └──────────┘      │ Utility  │
                                                       └──────────┘
                                                            │
┌──────────┐      ┌──────────┐      ┌──────────┐            │
│   Run    │      │          │      │Create OS │            │
│Intel® Integrated│ │Install OS on a│  │Installation│◀────────┘
│  RAID    │◀─────│RAID Volume│◀────│  Driver  │
│  Setup   │      │          │      │ Diskette │
└──────────┘      └──────────┘      └──────────┘
```

Intel Server RAID Controller U3-1 Adapter Card

SDRAM DIMM socket
32 MB to 128 MB
Unbuffered, PC 100, ECC

Intel® i960® RN I/O Processor
100 MHz Core
Hardware XOR

External VHDCI Connector

Internal 68-pin Connector

16 Mb Flash

Flash Recovery
(FRU) Jumper

PCI 64-bit, 33 MHz Interface

Ultra160 SCSI
LSI Logic SYM53C1010

SDRAM DIMM
(may not be included)

OM10749

Intel Server RAID Controller U3-1 (SRCU31)
Quick Start Guide

Intel Server RAID Controller U3-1 Hardware Setup

Hardware Requirements

- Server with CD-ROM Drive (not attached to Intel Server RAID Controller U3-1)
- One available PCI slot (64 bit, 33 MHz recommended)
- Monitor display resolution of 800 x 600 or higher (recommended)
- Intel Server RAID Controller U3-1 Adapter Card
- PCI 2.2 Compliant System BIOS
- Memory: SDRAM DIMM ECC unless already installed. See supported parts at

  http:// support.intel.com/support/motherboards/server/srcu31

Installing Intel Server RAID Controller U3-1 into a System

The SRCU31 comes with the Intel Integrated RAID firmware already programmed into the flash memory. Note that you must install an approved SDRAM ECC DIMM into the memory socket prior to SRCU31 installation. Refer to the approved memory list at

http://support.intel.com/support/motherboards/server/srcu31

⚠️ **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 SRCU31 into an available PCI slot. Connect one end of the SCSI cable to the internal (68 pin) or external (VHDCI) SCSI connector on the SRCU31. 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**

> *SRCU31 will work in a 32 bit slot, however, a 64 bit, 33 MHz PCI slot is recommended. Consult the system guide for the target server board to determine an appropriate 64 bit, 33 MHz 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 guide details the installation of supported operating systems to a RAID volume controlled by the SRCU31. Operating systems can also be installed to a pass-through drive (drive attached to SRCU31, but controlled directly by the host) or to a drive connected to a different controller. For instructions on using SRCU31 with pass-through drives or drives attached to another controller, refer to Chapter 2, "Advanced Installation Steps" in the *SRCU31 User's Manual*.

Create a RAID Volume for the Operating System

A RAID volume (or logical drive) must be set up prior to installing an operating system when installing the operating system to a RAID volume. The volume created in this step will host the 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). For more information on using the RCU please refer to Chapter 2, "Advanced Installation Steps" in the *SRCU31 User's Manual.*

✏ **NOTE**

> *The RCU can only configure one RAID volume. If more than one RAID volume is needed, use the Advanced RCU described in Chapter 2, "Advanced Installation Steps" in the SRCU31 User's Manual. By default, the RCU uses all disks attached to the SRCU31 when creating a RAID volume. To exclude a disk from the RAID volume, make it a pass through disk. To create a pass through disk, use the* custom configuration *option in the RCU.*

1 Turn on the target system with the SRCU31 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 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 Exit the RCU and reboot when finished and proceed to the appropriate operating system installation instructions to install the desired operating system.

⚠ **CAUTION**

> *Do not install OSMs (Operation System Service Modules) downloaded from OS vendor websites. An OSM is the operating system half of the I_2O split driver model. Using OSMs other than those provided on the Intel Integrated RAID CD-ROM may yield unpredictable results.*

Setup and Installation for Microsoft Windows† 2000 Server and Windows NT† 4.0 Server

✏️ **NOTE**

This guide details the steps necessary to setup the SRCU31 for local RAID administration. If you wish to setup remote administration for the SRCU31, refer to Chapter 2, "Advanced Installation Steps" in the SRCU31 User's Manual.

Software Requirements

Software Requirements for Microsoft Windows 2000 Server

- SRCU31 CD-ROM
- Hard Disk Space (for RAID Software Suite): 9 MB Minimum
- Microsoft Windows 2000 Server* or Advanced Server*
- SRCU31 Windows 2000 Installation Driver Diskette (Microsoft Windows 2000 SCSI Miniport Diskette) (one blank high density floppy diskette required)
- Microsoft Internet Explorer 5.0 or greater* (included with Windows 2000)

* Not supplied

Software Requirements for Microsoft Windows NT 4.0 Server

- SRCU31 CD-ROM
- Hard Disk Space (for RAID Software Suite): 9 MB Minimum
- SRCU31 Windows NT Installation Diskette (Microsoft Windows NT SCSI Miniport Diskette) (one blank high density floppy diskette required)
- Microsoft Windows NT Server 4.0*
- Microsoft Windows NT 4.0 Service Pack 4 or greater*
- Microsoft Internet Explorer 4.00 or greater*
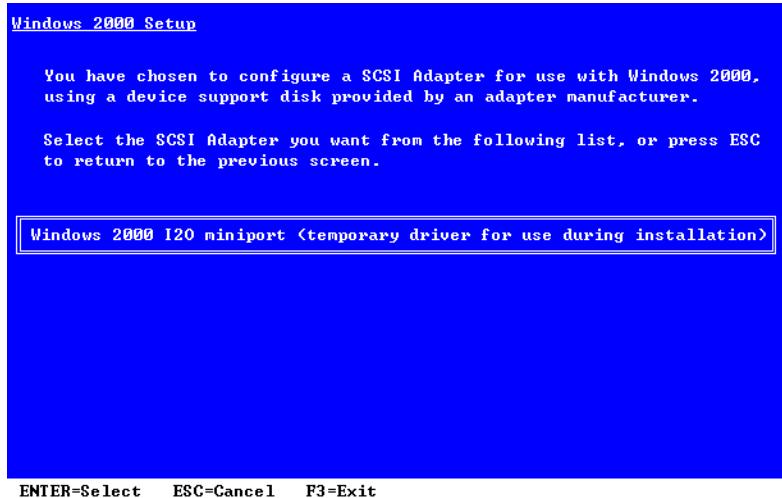
* Not supplied

Installing Microsoft Windows 2000 Server or Windows NT 4.0 Server on a Intel Integrated RAID Volume

1   Create a SRCU31 Microsoft Windows 2000 or Windows NT Installation Driver (temporary) Diskette

   a.   Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM.
   b.   When the ROM-DOS Startup Menu appears select option #1, *Make Diskettes*.
   c.   When the *Select a diskette to create* screen appears, select *Windows NT Installation for Windows NT 4.0 or Windows 2000 Installation for Windows 2000*. A command window appears.
   d.   Insert a blank high-density diskette in drive A: and press *Enter* to create the Windows Installation Driver Diskette.

2   Install Microsoft Windows 2000 or NT Server

    a.   Boot with the Windows 2000 or NT Server CD-ROM.

    b.   Press *F6* as soon as the first blue screen appears to ensure that Windows Setup bypasses mass storage controller detection.

    c.   When prompted to specify a mass storage controller:

- Select *S* to specify additional storage devices.
- Insert the appropriate SRCU31 Microsoft Windows Installation Driver Diskette (created in **Step 1** above) in the floppy drive and press *Enter*.
- Press *Enter* to select the Installation Driver and continue with Windows installation (see example for Windows 2000 below).

Windows 2000 Setup Screen Example

```
Windows 2000 Setup


   You have chosen to configure a SCSI Adapter for use with Windows 2000,
   using a device support disk provided by an adapter manufacturer.

   Select the SCSI Adapter you want from the following list, or press ESC
   to return to the previous screen.


  ┌────────────────────────────────────────────────────────────────────┐
  │ Windows 2000 I2O miniport (temporary driver for use during installation)│
  └────────────────────────────────────────────────────────────────────┘




 ENTER=Select    ESC=Cancel    F3=Exit
```

    d.   **Windows 2000:** Complete the remainder of the Windows 2000 installation and then proceed to **Step 3**

        Windows NT 4.0: After completing the NT installation, install the following components and software:

        — Microsoft Windows NT 4.0 Service Pack 4 or greater

        — Microsoft Internet Explorer 4.00 or greater

3   Install the RAID Software Suite

✏ **NOTE**

The system should be powered on and logged into Windows with an administrator's account before proceeding.

    a.   Insert the Intel Server RAID Controller U3-1 CD-ROM in the CD-ROM drive. The setup splash screen appears (If the setup splash screen does not appear, then run the appropriate setup.exe file: **Windows 2000:** <CD- ROM root>\os_setup\win2k\setup.exe **Windows NT 4.0:** <CD- ROM root>\os_setup\winnt\setup.exe)

Intel Integrated RAID Setup Splash Screen

    b.   Click on the Setup button. See the figure above. The RAID Software Suite setup program starts.

    c.   Complete the installation using the default selections

          Windows 2000 (only): A "Digital Signature Not Found" message box may pop up during the installation. If this occurs, click "Yes" to continue the installation.

    d.   When setup is complete a message will pop up indicating that a reboot is necessary and give a choice to "reboot now" or "reboot later".

    e.   Remove the CD-ROM from the CD ROM drive and **select "reboot now"**. The system MUST be rebooted immediately after installation of the RAID Software Suite.

    f.   **Windows 2000 (only):** After the system reboots a message will pop up indicating that a new device has been found and that the "I2Odisk.sys" driver has been started. This is the device driver for the RAID volume itself. The message will prompt for a reboot. Reboot the system to complete the installation.

✎ **NOTE**

Refer to the user's manual for information on HP Openview and RAID Monitor, SNMP, DMI components or remote storage console. Also see the user's manual for instructions on customizing your RAID volumes using Storage Console.

Setup and Installation for Novell NetWare

Software Requirements

- SRCU31 CD-ROM
- Hard disk space: minimum 4 MB
- MS-DOS† 5.x or later (Novell 4.2 only)
- SRCU31 NetWare Installation Diskette (one blank high density floppy diskette required)
- Novell NetWare† 4.2 with Service Pack 8a or higher or Novell NetWare 5.0 or 5.1 with Service Pack 4 or higher*

* Not supplied

Installing Novell NetWare on a RAID Volume

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 and 5.1).

NetWare 4.2

1 Create a SRCU31 NetWare Installation Diskette.

   a. Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM.

   b. When the ROM-DOS Startup Menu appears select option #1, *Make Diskettes*.

   c. When the *Select a diskette to create* screen appears, select *NetWare Installation*. A command window appears.

   d. Insert a blank high-density diskette in drive A: and press *Enter* to create the SRCU31 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 SRCU31 NetWare Installation Diskette.

2 Insert the NetWare Installation CD-ROM, reboot the server, go to the appropriate drive letter and begin the NetWare 4.2 installation.

3 When the device driver installation screen appears, *Select additional or modify selected Disk / LAN drivers*.

4 Choose *Select an additional driver*. Select *Insert* to install an unlisted driver. Ensure that the SRCU31 NetWare Installation diskette (created in **Step 1**) is in the floppy drive and press *Enter*. Select BKSTROSM.HAM from the list.

5 Continue with the NetWare installation as normal by following the screen prompts.

6 Once the server installation is finished, complete the installation of the Intel Integrated RAID software suite by following the steps below.

7 Run *LOAD INSTALL*.

8 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 SRCU31 NetWare Installation diskette is in the floppy drive, press *Enter* to continue.

9 A screen prompt will ask which components (see below) you wish to install. Select the following components and press *F10* to continue.

> BKSTROSM.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.

⚠ **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**.

10 After the installation is complete, reboot the server.

11 Load Support Pack 8a and reboot.

12 See Chapter 4, "Using the Storage Console" in the user's manual for instructions on customizing your RAID volumes using Storage Console.

NetWare 5.0 or 5.1

✎ **NOTE**

> *If you do not use the boot capability of the NetWare 5.0 or 5.1 CD-ROM, then replace step 2-5 below with steps 2-4 of the NetWare 4.2 instructions above.*

1 Create a SRCU31 NetWare Installation Diskette.

 a. Insert the Intel Integrated RAID CD-ROM into the target system and restart the system to boot from the CD-ROM.

 b. When the ROM-DOS Startup Menu appears select option #1, *Make Diskettes*.

 c. When the *Select a diskette to create* screen appears, select *NetWare Installation*. A command window appears.

 d. Insert a blank high-density diskette in drive A: and press *Enter* to create the SRCU31 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 SRCU31 NetWare Installation Diskette.

2 Insert the NetWare CD-ROM and reboot.

3 After booting, accept the license agreement. Then select *Create a New Boot Partition*.

4 When NetWare boots again, it will first format the newly created boot partition, and then begin loading files. During this initialization, you will see a white graphical NetWare logo screen.
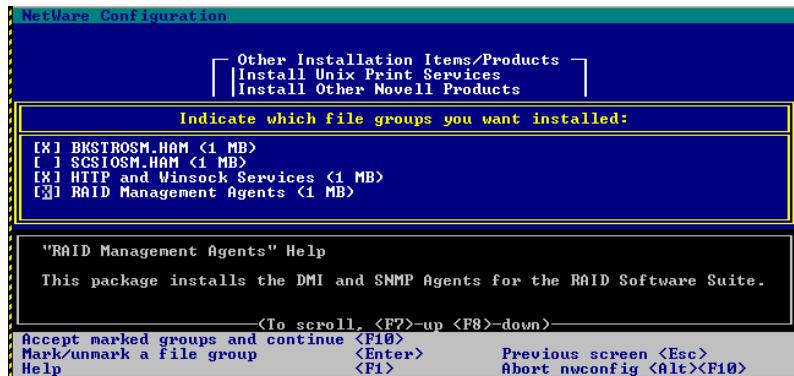
5 It will eventually load a Welcome screen, asking you to verify the startup directory (C:\NWSERVER). Press *Alt F10* to exit the installation. At the console, type *Down*. The installation exits to the boot drive prompt.

6 Insert the SRCU31 NetWare installation diskette created in **Step 1** 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.

7 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.

8 Continue with the NetWare installation as normal by following the screen prompts. Select the Block Storage OSM when prompted.

9 Reboot the server and install Service Pack 4 or higher. Once the server installation is completed, reboot the server.

10 To install the Intel Integrated RAID software (run the Intel Integrated RAID setup) run *NWCONFIG*.

11 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 SRCU31 NetWare Installation diskette is in the floppy drive, press *Enter* to continue.

12 A screen prompt will ask which components (see below) you wish to install. Select the following components and press *F10* to continue. See figure below.

> BKSTROSM.HAM
>
> HTTP and Winsock Services
>
> RAID Management Agents

Preselect Components

```
NetWare Configuration
                    ┌ Other Installation Items/Products ┐
                    │ Install Unix Print Services        │
                    │ Install Other Novell Products      │
          Indicate which file groups you want installed:
  [X] BKSTROSM.HAM (1 MB)
  [ ] SCSIOSM.HAM (1 MB)
  [X] HTTP and Winsock Services (1 MB)
  [X] RAID Management Agents (1 MB)

   "RAID Management Agents" Help

   This package installs the DMI and SNMP Agents for the RAID Software Suite.

                 ─(To scroll, <F7>-up <F8>-down)─
Accept marked groups and continue <F10>
Mark/unmark a file group          <Enter>        Previous screen <Esc>
Help                              <F1>           Abort nwconfig <Alt><F10>
```

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

13 After the installation is complete, reboot the server.

✏ **NOTE**

> *See Chapter 4, "Using the Storage Console" in the user's manual for instructions on customizing your RAID volumes using Storage Console.*

Setup and Installation for UnixWare 7.1 or 7.1.1

Software Requirements

- SRCU31 CD-ROM
- Hard disk space: minimum 20 MB
- SRCU31 UnixWare† Installation Disk (HBA diskette) (one blank high density floppy diskette required)
- SCO UnixWare 7.1 or 7.1.1 software with Netscape 4.08 or greater*

* Not supplied

Installing UnixWare on a RAID Volume

Follow the required procedure below to install Intel Integrated RAID.

✏ **NOTE**

> *When installing UnixWare, create only one RAID volume on which the operating system is to be installed.*

1 Create a SRCU31 UnixWare installation disk (HBA 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 appears. Insert a blank high-density diskette in drive A: and press *Enter* to create the UnixWare Installation Disk. 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 Disk. If more than one RAID volume is required, complete this installation and then use Storage Console to create multiple volumes.

⚠ **CAUTION**

> *Insert the SRCU31 UnixWare installation disk 1 (of 2 disks) 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 created in* **Step 1**.

2 Use only the version of the SRCU31 UnixWare installation disk (HBA disk) that is provided on the CD or available from the Intel Web site for installation of this adapter. Do not use a HBA disk available from the vendor to install this product.
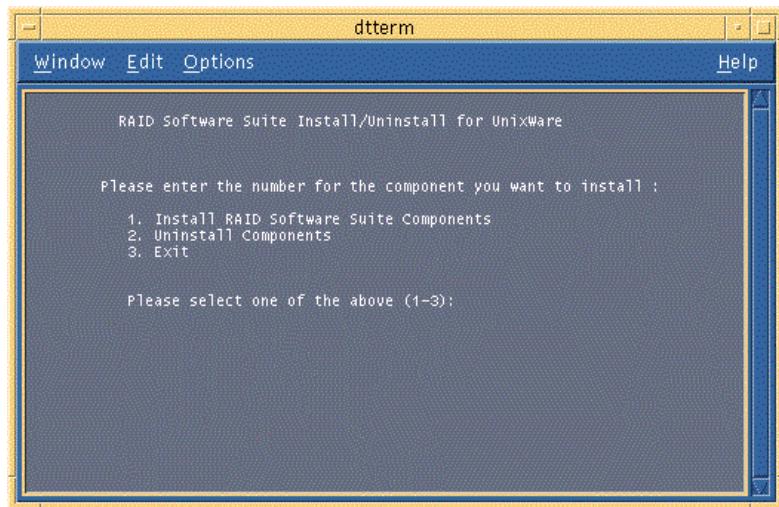
> *During the installation of UnixWare, you will be prompted to install the Network Information Services (NIS) package.*

When prompted *defer* the installation of NIS 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 U3-1 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.

    b. Mount the CD-ROM to the folder by typing:
       `mount -F cdfs -r /dev/cdrom/cdrom1 /cdfiles`

5 Launch the installer by typing the following:

    a. Type `cd /cdfiles/os_setup/unixware`

    b. Type `sh install` to start the install script
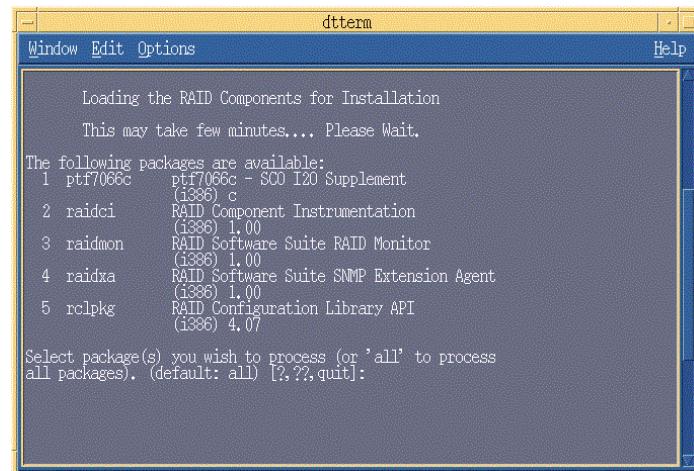
Installation Components and Preinstallation Requirements

Launched Scripts

    c. Select option 1 (by typing 1) to install the requirements and components. See the figure above. The launched scripts are shown in the figure below.

Install Components


```
                               dtterm
 Window  Edit  Options                                      Help

        Loading the RAID Components for Installation

        This may take few minutes.... Please Wait.

 The following packages are available:
   1  ptf7066c     ptf7066c - SCO I20 Supplement
                   (i386) c
   2  raidci       RAID Component Instrumentation
                   (i386) 1.00
   3  raidmon      RAID Software Suite RAID Monitor
                   (i386) 1.00
   4  raidxa       RAID Software Suite SNMP Extension Agent
                   (i386) 1.00
   5  rclpkg       RAID Configuration Library API
                   (i386) 4.07

 Select package(s) you wish to process (or 'all' to process
 all packages). (default: all) [?,??,quit]:
```

6 Press *Enter* to select all packages. After completing the installation of the components reboot the server.

7 Log on to the server as root or equivalent.

8 Launch Storage Console.

    a. To launch Storage Console launch Netscape and ensure that the URL points to *http://localhost:360/*. Press *Enter*.

    b. Click on the IOP # card that you want to configure; for example, IOP0, IOP1 etc.

    c. Click on the RAID Storage Console link. The Storage Console appears.

See Chapter 4 of the *SCRU31 User's Manual* for more information on customizing your RAID volumes using Storage Console.

Setup and Installation for Red Hat† Linux 6.2

Setup and installation instructions for Red Hat Linux 6.2 are available at the SRCU31 web site:

http://support.intel.com/support/motherboards/server/srcu31

Getting Help

World Wide Web

http://support.intel.com/support/motherboards/server/srcu31

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 *am*–4:00 *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.

** Or contact your local dealer or distributor.

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 a*m*–5:30 *pm*, Singapore local time) or via e-mail: **APAC_gid@ccm.isin.intel.com**

Intel® Server RAID Controller U3-1 (SRCU31)

快速入门指南

您可在下列网址查阅到本指南的译文：

http://support.intel.com/support/motherboards/server/srcu31/manual.htm

开始之前

FCC / 辐射免责声明

本设备已经过测试，并符合 FCC 条例的第 15 部分、CISPR 22 和 EN55022 对于 B 级数字设备的限制。这些限制旨在提供合理的保护措施，以防止在住宅区安装本设备时产生有害干扰。本设备产生、使用并可能辐射无线电频能，如果未按要求安装和使用本设备，可能会对无线电和电视接收造成有害干扰。然而，正确的安装和使用并不保证个别设备安装后不会产生干扰。如果本设备确实对无线电和电视接收产生干扰（通过关闭和打开本设备可以确定有无这种干扰现象发生），用户可以使用以下一种或几种方法来消除干扰现象：

- 改变接收天线的方向或位置。
- 增加设备和接收器之间的距离。
- 将设备和接收器分别接在位于不同电路上的电源插座中。
- 向有经验的无线电或电视技术专家咨询以获得帮助。

警告

将无屏蔽的设备接口电缆连接到此设备会导致此设备的 FCC 认证无效，并且可能导致干扰级别超出 FCC 为此设备设立的限制。获得此设备带屏蔽的设备接口电缆并使用它是用户的责任。如果设备具有多个接口连接头，除非用户手册另有说明，否则请不要将电缆连接到未使用的接口。

没有经过制造商明确认可的更改或改造会使得用户操作设备的权限失效。

加拿大用户

此 B 级数字设备符合"加拿大引起干扰设备规章"的所有要求。

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

注意和警告

⚠ **警告**

本指南仅供有 PCI 适配卡安装和配置经验的合格技术人员使用。

请阅读并遵守本指南以及本产品附带的文档中所包含的全部警告、注意事项和声明。

⚠ **注意**

注意在操作 Intel Server RAID Controller U3-1 适配卡之前要采取预防措施以防止静电释放 (ESD)。

静电释放 (ESD) 可能会损坏适配卡元件。因此您只能在 ESD 工作台上执行本指南所述操作。如果没有这样的工作台，您可以戴上防静电腕带，并将其连在计算机机箱的金属部分以获得一定的 ESD 保护。

面向的用户

若要使用此产品，您应熟练掌握如何配置计算机设备。例如，您应能够安装和配置操作系统 (OS) 以使之识别外围设备，同时还应能够使用软件实用程序来配置那些已安装的组件并对其进行故障排除。

简介

Intel® Server RAID Controller U3-1 (SRCU31) 包括 i960® I/O 处理器、固件和 Intel Integrated RAID 软件（具有简便易用的 html 界面）。

本指南提供 Intel® Integrated RAID 软件的安装信息，同时提供一组有关安装和配置 SRCU31 的说明。有关安装和配置 SRCU31 的详细信息，请参阅《SRCU31 用户手册》第 2 章 "高级安装步骤"。

产品核对表

标准运输包装中含如下软硬件：
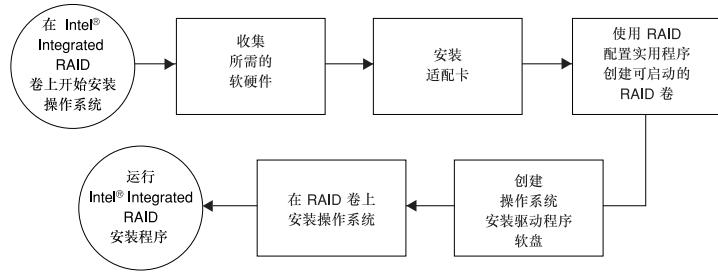
- Intel® Server RAID Controller U3-1 (SRCU31) 适配卡
- Intel® Server RAID Controller U3-1 软件光盘
- Intel® Server RAID Controller Linux† 软件光盘
- Intel® Server RAID Controller U3-1 快速入门指南

Intel® Server RAID Controller U3-1 光盘（可启动）上提供的内容物
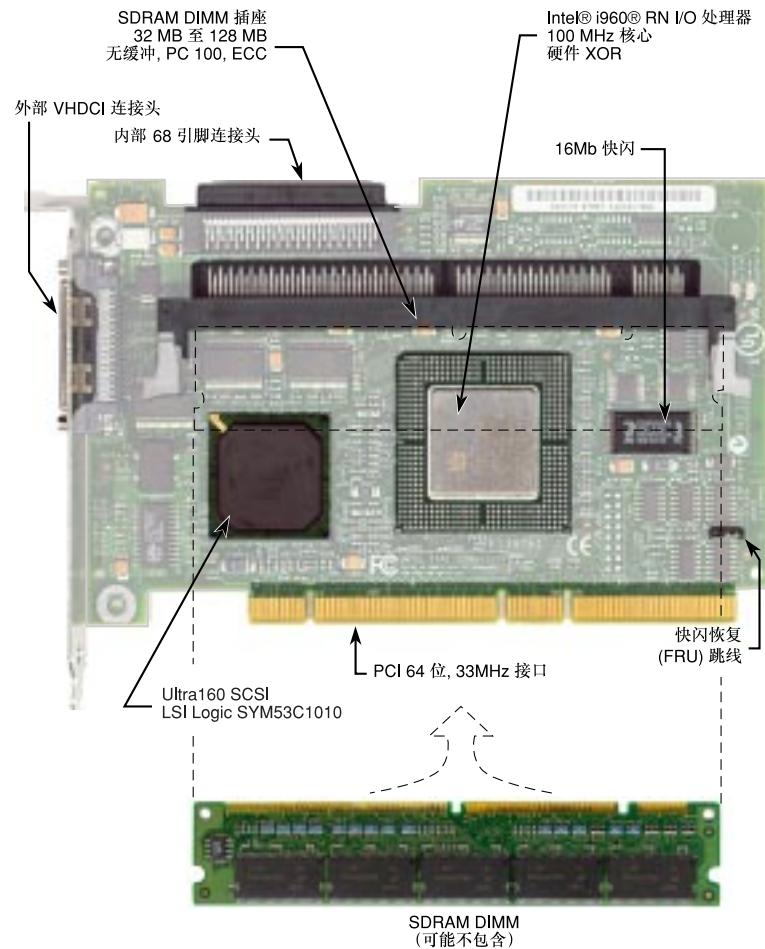
- Intel Server RAID Controller U3-1 (SRCU31) 用户手册
- Intel Integrated RAID 软件
    - 固件
    - 驱动程序 (OSM)
    - 监视器服务
    - 实用程序（制作软盘、固件更新、高级 RAID 配置等）
    - Storage Console（存储控制台）
    - DMI Component Instrumentation（DMI 组件检测）
    - SNMP extension agent（SNMP 扩充代理程序）

《Intel Server RAID Controller U3-1 (SRCU31) 用户手册》随光盘以联机
/html 格式提供（位于 <CDROM 驱动器>:\docs\index.htm 中），可用任何
兼容 HTML 的浏览器浏览，例如 Microsoft† Internet Explorer† 或者
Netscape Navigator†。也可使用 Adobe† Acrobat† Reader（光盘附带提供）
来显示和打印 "用户手册"。

软硬件安装概述

在 Intel® Integrated RAID 卷上开始安装操作系统 → 收集所需的软硬件 → 安装适配卡 → 使用 RAID 配置实用程序创建可启动的 RAID 卷

运行 Intel® Integrated RAID 安装程序 ← 在 RAID 卷上安装操作系统 ← 创建操作系统安装驱动程序软盘 ←

Intel Server RAID Controller U3-1 适配卡

SDRAM DIMM 插座
32 MB 至 128 MB
无缓冲, PC 100, ECC

Intel® i960® RN I/O 处理器
100 MHz 核心
硬件 XOR

外部 VHDCI 连接头

内部 68 引脚连接头

16Mb 快闪

快闪恢复
(FRU) 跳线

PCI 64 位, 33MHz 接口

Ultra160 SCSI
LSI Logic SYM53C1010

SDRAM DIMM
(可能不包含)

OM10749

Intel Server RAID Controller U3-1 硬件安装

硬件要求

- 带有光盘驱动器的服务器（要求光盘驱动器不与 Intel Server RAID Controller U3-1 相连）
- 一个可用的 PCI 插槽（推荐为 64 位、33 MHz）
- 监视器显示分辨率 800 x 600 或更高（推荐）
- Intel Server RAID Controller U3-1 适配卡
- 符合 PCI 2.2 的系统 BIOS
- 内存：如果尚未安装，请使用 SDRAM DIMM ECC。请访问以下站点，参考受支持的部件：
  http:// support.intel.com/support/motherboards/server/srcu31

将 Intel Server RAID Controller U3-1 安装到系统中

SRCU31 附带有已固化到闪存中的 Intel Integrated RAID 固件。注意：在安装 SRCU31 之前，必须在内存插槽内安装认可的 SDRAM ECC DIMM。请访问以下站点，参考认可的内存列表：

http://support.intel.com/support/motherboards/server/srcu31

⚠ 警告

安装该卡的设备内可能存在电击危险。拆除任何箱盖之前，请断开所有连接到该设备的电源线。

安装该卡之前，请遵循计算机用户手册或服务手册中的警告。只有全部的箱盖重新装好后，您才能再次连接电源线并接通该设备的电源以便安装软件并使用。

1 关闭系统电源，断开电源线并拆除系统箱盖。

2 将 SRCU31 安装到可用的 PCI 插槽中。将 SCSI 电缆的一端连接到 SRCU31 上的内部（68 引脚）或外部 (VHDCI) SCSI 连接头上。将 SCSI 电缆的另一端连接到 SCSI 驱动器或驱动器机箱上。

3 重新装好系统箱盖，连接电源线。

➡ 注释

SRCU31 可以在 32 位的插槽内工作，但我们推荐使用 64 位、33 MHz PCI 插槽。参考目标服务器母板的系统指南以确定适当的 64 位、33MHz PCI 插槽。

➡ 注释

确保 SCSI 总线的末端被正确地终止。关于终止的详细资料，请参考驱动器或驱动器机箱的文档。

Intel Integrated RAID 软件的设置和安装

本指南详述如何将受支持的操作系统安装到由 SRCU31 控制的 RAID 卷上。操作系统也可以安装到直通驱动器（连接在 SRCU31 上但直接由主机控制的驱动器）或者连接到其它控制器的驱动器上。有关在直通驱动器或连接到其它控制器的驱动器上使用 SRCU31 的说明，请参阅《SRCU31 用户手册》第 2 章 "高级安装步骤"。

为操作系统创建 RAID 卷

将操作系统安装到 RAID 卷上时，必须在安装操作系统之前设置好 RAID 卷（或逻辑驱动器）。这一步创建的卷可以保存操作系统。请确保卷有足够的大小来容纳操作系统。如果需要，卷可以不只包含主机操作系统。

可以使用 RAID 配置实用程序 (RCU) 创建和配置操作系统 RAID 卷（启动卷）。有关使用 RCU 的详细信息，请参阅《SRCU31 用户手册》第 2 章 "高级安装步骤"。

➡ 注释

　　RCU 只能配置一个 RAID 卷。如果需要多个 RAID 卷，请参阅《SRCU31 用户手册》第 2 章 "高级安装步骤" 内的 "高级 RCU"。创建 RAID 卷时，RCU 默认使用连接到 SRCU31 上的所有磁盘。若要从 RAID 卷中排除某张磁盘，请将其配置为直通磁盘。若要创建直通磁盘，请使用 RCU 内的定制配置选项。

1　打开已安装有 SRCU31 的目标系统。系统启动期间，信息 press Ctrl C to run the RAID Configuration Utility（按 Ctrl C 运行 RAID 配置实用程序）会出现在屏幕上。当该信息出现时，按 Ctrl-C 以执行 RCU。

2　按照屏幕说明创建和配置 RAID 卷。创建卷时确保该卷指定为启动设备（您可以在其创建后通过使用 RCU 主菜单中的定制配置菜单选项验证它是启动卷）。

3　完成后退出 RCU 并重新启动，然后执行适当的操作系统安装指令以安装所需的操作系统，

⚠ 注意

　　不要安装从操作系统提供商站点下载的 OSM（操作系统服务模块）。OSM 是 I_2O 分离驱动程序模型的操作系统部分。如果使用的 OSM 不是 Intel Integrated RAID 光盘上提供的 OSM，可能产生无法预料的后果。

Microsoft Windows 2000 Server 和 Windows NT 4.0 Server 的设置和安装

⟹ 注释

本指南详述在本地 RAID 管理中用于设置 SRCU31 所需的步骤。如果希望为 SRCU31 设置远程管理，请参阅《SRCU31 用户手册》第 2 章"高级安装步骤"。

软件要求

Microsoft Windows 2000 Server 的软件要求

- SRCU31 光盘
- 硬盘空间（用于 RAID 软件套件）：最小 9 MB
- Microsoft Windows 2000 Server* 或 Advanced Server*
- SRCU31 Windows 2000 安装驱动程序软盘（Microsoft Windows 2000 SCSI Miniport 软盘）（需要一张空白高密度软盘）
- Microsoft Internet Explorer 5.0 或更高版本*（Windows 2000 附带提供）

* 未提供

Microsoft Windows NT† 4.0 Server 的软件要求

- SRCU31 光盘
- 硬盘空间（用于 RAID 软件套件）：最小 9 MB
- SRCU31 Windows NT 安装软盘（Microsoft Windows NT SCSI Miniport 软盘）（需要一张空白高密度软盘）
- Microsoft Windows NT Server 4.0*
- Microsoft Windows NT 4.0 Service Pack 4 或更高版本*
- Microsoft Internet Explorer 4.00 或更高版本*
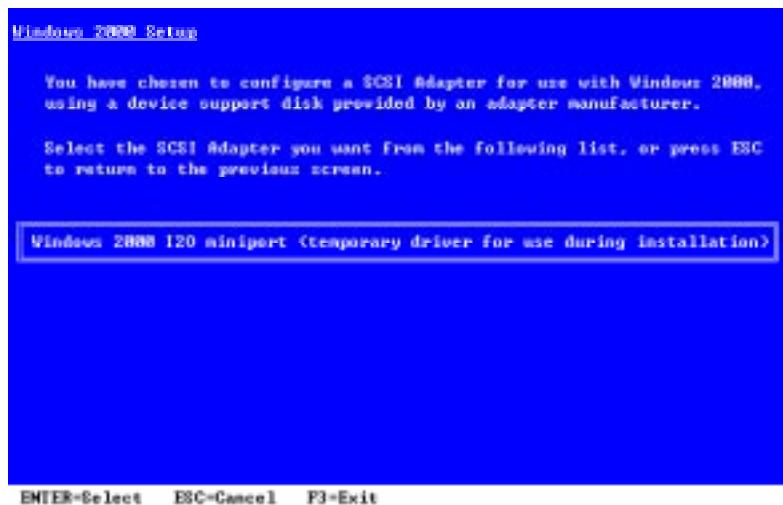
* 未提供

在 Intel Integrated RAID 卷上安装 Microsoft Windows 2000 Server 或 Windows NT 4.0 Server

1   创建一张 SRCU31 Microsoft Windows 2000 或 Windows NT 安装驱动程序（临时）软盘。

   a.   将 Intel Integrated RAID 光盘插入目标系统，然后由光盘引导来重新启动系统。

   b.   ROM-DOS Startup Menu（启动菜单）出现时，选择选项 #1：Make Diskettes（制作软盘）。

   c.   出现 Select a diskette to create（选择要创建的软盘）屏幕时，选择 Windows NT Installation for Windows NT 4.0（用于 Windows

NT 4.0 的 Windows NT 安装）或 Windows 2000 Installation for
Windows 2000（用于 Windows 2000 的 Windows 2000 安装）

    d. 将一张空白高密度软盘插入驱动器 A:，然后按 Enter 键创建
Windows 安装驱动程序软盘。

2   安装 Microsoft Windows 2000 或 NT Server

    a. 用 Windows 2000 或 NT Server 光盘启动。

    b. 第一个蓝色屏幕出现时，请按 F6 键以确保 Windows Setup 绕过
海量存储控制器检测。

    c. 提示指定一海量存储控制器时：

- 选择 S 以指定附加的存储设备。

- 将合适的 SRCU31 Microsoft Windows 安装驱动程序软盘（在
上述步骤 1 中创建）插入软盘驱动器，然后按 Enter 键。

- 按 Enter 键选择安装驱动程序并继续 Windows 安装（参阅下
面的 Windows 2000 示例）。

Windows 2000 安装屏幕示例

Windows 2000 Setup

You have chosen to configure a SCSI Adapter for use with Windows 2000,
using a device support disk provided by an adapter manufacturer.

Select the SCSI Adapter you want from the following list, or press ESC
to return to the previous screen.

Windows 2000 I2O miniport (temporary driver for use during installation)

ENTER=Select   ESC=Cancel   F3=Exit

    d. Windows 2000：完成剩余的 Windows 2000 安装，然后继续
步骤 3
Windows NT 4.0: 完成 NT 安装之后，请安装以下组件和软件：

    — Microsoft Windows NT 4.0 Service Pack 4 或更高版本

    — Microsoft Internet Explorer 4.00 或更高版本

3   安装 RAID 软件套件

  注释

继续操作之前，应给系统通电并以管理员的帐户登录到 Windows 中。

a. 将 Intel Server RAID Controller U3-1 光盘插入光盘驱动器。此时会出现安装介绍屏幕（如果没有出现安装介绍屏幕，则请运行适当的 setup.exe 文件，该文件位于：Windows 2000：<CD- ROM 根目录>\os_setup\win2k\setup.exe 处，Windows NT 4.0：<CD- ROM 根目录>\os_setup\winnt\setup.exe 处）。

Intel 集成 RAID 安装介绍屏幕

b. 单击 Setup（安装）按钮。参阅上图。RAID 软件套件安装程序开始进行安装。

c. 使用默认选项完成安装
Windows 2000（唯一适用）：安装期间可能弹出一个 Digital Signature Not Found（找不到数字签名）信息框。如果发生这种情况，单击 Yes（是）继续安装。

d. 安装完成后，将弹出一条信息，指示需要重新启动并让您选择 reboot now（立即重新启动）或 reboot later（以后重新启动）。

e. 从光盘驱动器中取出光盘，然后选择 reboot now（立即重新启动）。安装 RAID 软件套件后，系统*必须*立即重新启动。

f. Windows 2000（唯一适用）：系统重新启动后，将弹出一条信息，指示发现新设备并已启动 "I2Odisk.sys" 驱动程序。这是 RAID 卷自身的设备驱动程序。将有信息提示您重新启动。重新启动系统以完成安装。

➡ 注释

有关 HP Openview 和 RAID Monitor、SNMP、DMI 组件或远程存储控制台的信息，请参阅用户手册。有关使用存储控制台来定制 RAID 卷的说明，请亦参阅用户手册。

Novell NetWare 的设置和安装

软件要求
- SRCU31 光盘
- 硬盘空间：最小 4 MB
- MS-DOS† 5.x 或更高版本（仅适用于 Novell 4.2）
- SRCU31 NetWare 安装软盘（需要一张空白高密度软盘）
- 带 Service Pack 8a 或更高版本的 Novell NetWare 4.2†，或者带 Service Pack 4 或更高版本的 Novell NetWare 5.0 或 5.1*

* 未提供

在 RAID 卷上安装 Novell NetWare

下面列出了两种步骤（分别对应所支持的 NetWare 版本）。请按照要安装版本的说明进行（4.2 版或 5.0 及 5.1 版）。

NetWare 4.2

1 创建一张 SRCU31 NetWare 安装软盘。
   a. 将 Intel Integrated RAID 光盘插入目标系统，然后由光盘引导来重新启动系统。
   b. ROM-DOS "Startup Menu"（启动菜单）出现时，选择选项 #1：Make Diskettes（制作软盘）。
   c. 当 Select a diskette to create（选择要创建的软盘）屏幕出现时，请选择 NetWare Installation（NetWare 安装）。这时出现一个命令窗口。
   d. 将一张空的高密度软盘插入驱动器 A:，然后按 Enter 键以创建 SRCU31 NetWare 安装软盘。也可以将光盘插入其它运行 Windows 95、98 或 NT 的系统中。光盘的"自动运行"功能将显示一个菜单，允许创建 SRCU31 NetWare 安装软盘。

2 插入 NetWare 安装光盘，重新启动服务器，转到相应的驱动器盘符，然后开始安装 NetWare 4.2。

3 设备驱动程序安装屏幕出现时，请选择 Select additional or modify selected Disk / LAN drivers（附加磁盘/局域网驱动程序，或者修改已选的磁盘/局域网驱动程序）。

4 选择 Select an additional driver（选择附加驱动程序）。选择 Insert 键以安装未列出的驱动程序。确保 SRCU31 NetWare 安装软盘（在步骤 1 中创建）位于软盘驱动器中，然后按 Enter 键。从列表中选择 BKSTROSM.HAM。

5 按照屏幕提示以正常方式继续 NetWare 安装。

6 服务器安装结束后，按照下列步骤完成 Intel Integrated RAID 软件的安装。

7 运行 LOAD INSTALL。

8　选择 Product Options（产品选项），然后选择 Install product not listed
（安装未列出的产品）。系统会提示您将扫描 A: 驱动器以查找安装
脚本。确保 SRCU31 NetWare 安装软盘位于软盘驱动器中，按 Enter
键以继续。

9　此时将会出现屏幕提示，询问要安装的组件（见下文）。选择下列组
件，然后按 F10 键以继续。

BKSTROSM.HAM

HTTP and Winsock Services（HTTP 和 Winsock 服务）

RAID Management Agents（RAID 管理代理程序）

系统将会复制适当的文件，并对 AUTOEXEC.NCF 和 STARTUP.NCF 文件
进行必要的修改。

⚠ 注意

产品安装完后，请检查并删除 STARTUP.NCF 中的所有重复行。例如，安
装 NetWare 4.2 时可能会为模块 PK411.NLM 插入额外的加载行。**删除额
外的行。**

10　安装完后，重新启动服务器。

11　加载 Support Pack 8a，然后重新启动。

12　有关使用存储控制台来定制 RAID 卷的说明，请参阅用户手册第 4 章
"使用存储控制台"。

NetWare 5.0 或 5.1

⇒ 注释

如果您不使用 NetWare 5.0 或 5.1 光盘的启动功能，请用上述 NetWare 4.2
说明中的步骤 2 到步骤 4 代替下文中的步骤 2 到步骤 5。

1　创建一张 SRCU31 NetWare 安装软盘。

a.　将 Intel Integrated RAID 光盘插入目标系统，然后由光盘引导来重
新启动系统。

b.　ROM-DOS "Startup Menu"（启动菜单）出现时，选择选项 #1：
Make Diskettes（制作软盘）。

c.　当 Select a diskette to create（选择要创建的软盘）屏幕出现时，请
选择 NetWare Installation（NetWare 安装）。这时出现一个命令
窗口。

d.　将一张空的高密度软盘插入驱动器 A:，然后按 Enter 键以创建
SRCU31 NetWare 安装软盘。也可以将光盘插入其它运行
Windows 95、98 或 NT 的系统中。光盘的"自动运行"功能将显
示一个菜单，允许创建 SRCU31 NetWare 安装软盘。

2　插入 NetWare 光盘并重新启动。

3　重新启动后，请接受许可证协议。然后选择 Create a New Boot
Partition（创建新的启动分区）。

4　NetWare 再次启动时，将首先格式化新创建的启动分区，然后开始加
载文件。初始化过程中，您将看到白色的图形 NetWare 标志屏幕。
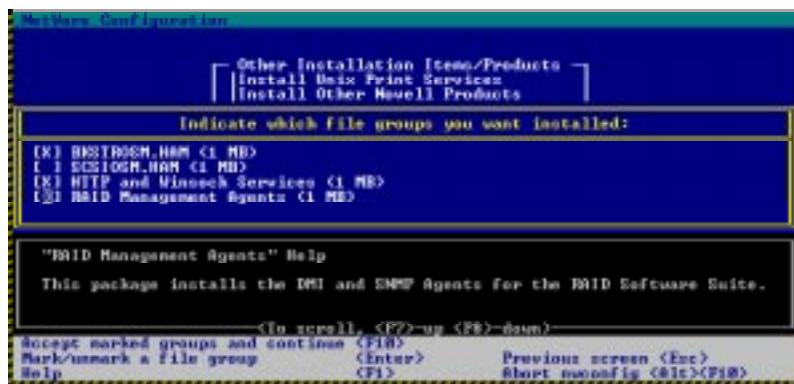
5   最后系统将载入欢迎屏幕，该屏幕会要求您验证启动目录
     (C:\NWSERVER)。按 Alt F10 键以退出安装程序。在控制台上，输入
     Down。安装程序退出到启动驱动器提示符。

6   将步骤 1 中创建的 SRCU31 NetWare 安装软盘插入 A:驱动器。如果启
     动驱动器是 C:，则运行 NWUPDATE.BAT。如果启动驱动器不是
     C:，请创建 NWUPDATE 子目录，然后将所有文件从 A:\DRIVERS 复
     制到 NWUPDATE 子目录中。

7   从 A: 驱动器中取出软盘，然后重新启动服务器。启动后，系统将询
     问是否接受许可证协议。接受协议，然后选择 Continue with Existing
     Partition（继续使用现有分区）。现在您已准备好在 Intel Integrated
     RAID 卷上安装 NetWare 5。

8   按照屏幕提示以正常方式继续 NetWare 安装。提示时，选择 Block
     Storage OSM（块存储 OSM）。

9   重新启动服务器，然后安装 Service Pack 4 或更高版本。服务器安装
     完成后，重新启动服务器。

10   若要安装 Intel Integrated RAID 软件（运行 Intel Integrated RAID 安装
     程序），请运行 NWCONFIG。

11   选择 Product Options（产品选项），然后选择 Install product not listed
     （安装未列出的产品）。系统会提示您将扫描 A: 驱动器以查找安装
     脚本。确保 SRCU31 NetWare 安装软盘位于软盘驱动器中，按 Enter
     键以继续。

12   此时将会出现屏幕提示，询问要安装的组件（见下文）。选择下列组
     件，然后按 F10 键以继续。参阅下图。

     BKSTROSM.HAM

     HTTP and Winsock Services（HTTP 和 Winsock 服务）

     RAID Management Agents（RAID 管理代理程序）

预选组件

     系统将会复制适当的文件，并对 AUTOEXEC.NCF 和 STARTUP.NCF
     文件进行必要的修改。

13 安装完后，重新启动服务器。

⇒ 注释

有关使用存储控制台来定制 RAID 卷的说明，请参阅用户手册第 4 章"使用存储控制台"。

UnixWare† 7.1 或 7.1.1 的设置和安装

软件要求

- SRCU31 光盘
- 硬盘空间：最小 20 MB
- SRCU31 UnixWare 安装磁盘（HBA 软盘）（需要一张空白高密度软盘）
- 带 Netscape 4.08 或更高版本的 SCO UnixWare 7.1 或 7.1.1 软件*

* 未提供

在 RAID 卷上安装 UnixWare

按照以下要求的步骤安装 Intel Integrated RAID。

⇒ 注释

安装 UnixWare 时，请仅创建一个用于安装操作系统的 RAID 卷。

1 创建一张 SRCU31 UnixWare 安装磁盘（HBA 软盘）：将 Intel Integrated RAID 光盘插入目标系统，然后由光盘引导来重新启动系统。ROM-DOS "Startup Menu"（启动菜单）出现时，选择选项 #1：Make Diskettes（制作软盘）。当 Select a diskette to create（选择要创建的软盘）屏幕出现时，请选择 UnixWare Installation（UnixWare 安装）。这时出现一个命令窗口。将一张空的高密度软盘插入驱动器 A:，然后按 Enter 键以创建 UnixWare 安装磁盘。也可以将光盘插入其它运行 Windows 95、98 或 NT 的系统中。光盘的"自动运行"功能将显示一个菜单，允许创建 UnixWare 安装磁盘。如果需要多个 RAID 卷，请完成该安装程序，然后用存储控制台创建多个卷。

⚠ 注意

插入 SRCU31 UnixWare 安装磁盘 1（共 2 张），然后重新启动。使用《UnixWare 7 安装指南》手册中提供的安装说明来安装操作系统。UnixWare 将提示您安装 Host Bus Adapter（主机总线适配器）的软盘。此时，请插入步骤 1 中创建的 UnixWare 安装软盘。

2 若要安装该适配器，则只能使用 CD 上提供的 SRCU31 UnixWare 安装磁盘（HBA 软盘）版本，或从 Intel 站点中获得的版本。请勿使用提供商所提供的 HBA 盘来安装该产品。

➡ 注释
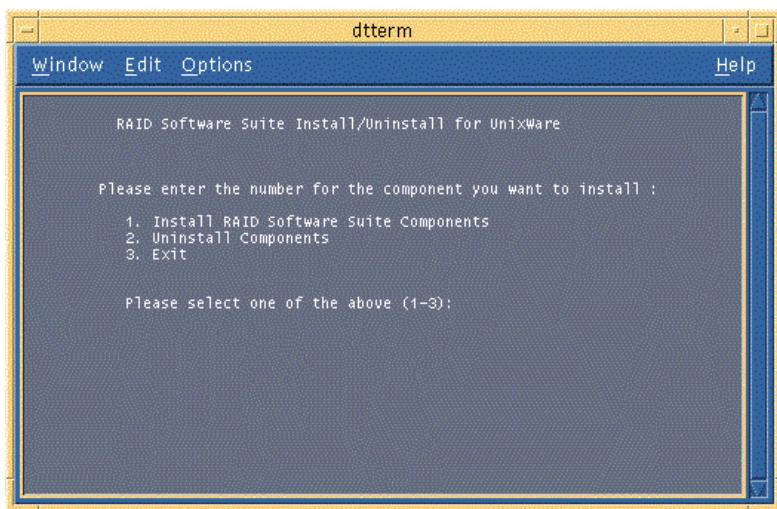
安装 UnixWare 期间，系统将提示您安装 Network Information Services (NIS)（网络信息服务）软件包。

提示时，可按 NIS 配置屏幕上的 F8 键以延迟 NIS 的安装。如果决定以后安装 NIS，可以使用 pkgadd(1) 命令进行安装。

3 安装 Netscape 浏览器。SCO UnixWare 光盘第 2 张盘（共 3 张）中提供了 Netscape 浏览器。

4 UnixWare 安装完后，将 Intel Server RAID Controller U3-1 光盘插入光盘驱动器并安装光盘。

   a. 创建一个目录以便安装文件。例如，在提示符后输入 `mkdir cdfiles`。

   b. 将光盘安装到文件夹中，方法是输入：
       `mount -F cdfs -r /dev/cdrom/cdrom1 /cdfiles`

5 输入以下命令可启动安装程序：

   a. 输入 `cd /cdfiles/os_setup/unixware`

   b. 输入 `sh install` 可启动安装脚本
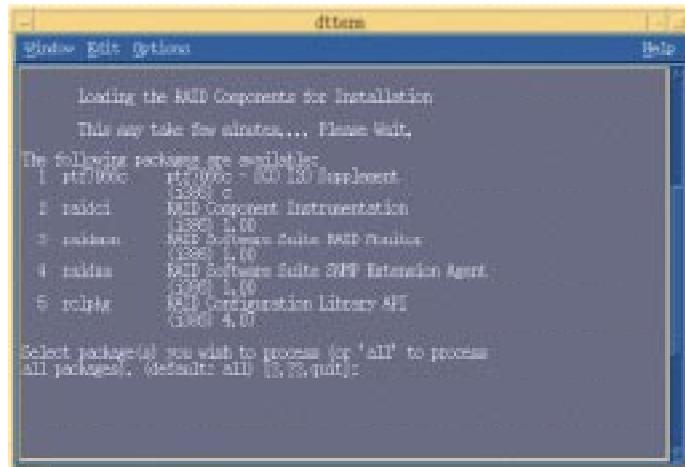
安装组件和预安装要求

启动的脚本

   c. 选择选项 1（输入 1）来安装要求和组件。参阅上图。启动的脚本如下图所示。

安装组件

6　按 Enter 键以选择所有软件包。组件安装完后，请重新启动服务器。

7　以根用户 (root) 或等价权限的用户身份登录到服务器中。

8　启动 Storage Console（存储控制台）。

　　a.　若要启动 Storage Console（存储控制台），请启动 Netscape，同时确保 URL 指向 http://localhost:360/。按 Enter 键。

　　b.　单击要配置的 IOP # 卡，例如 IOP0、IOP1 等。

　　c.　单击 RAID Storage Console（存储控制台）链接。此时出现 Storage Console（存储控制台）。

有关使用存储控制台来定制 RAID 卷的详细信息，请参阅《SCRU31 用户手册》第 4 章。

Red Hat† Linux 6.2 的设置和安装

可从下列的 SRCU31 网站上获得 Red Hat Linux 6.2 的设置和安装说明：

http://support.intel.com/support/motherboards/server/srcu31

获得帮助

万维网

http://support.intel.com/support/motherboards/server/srcu31

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德语：　　　　　　　+44-131-458-6954
意大利语：　　　　　+44-131-458-6951

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Intel Server RAID Controller U3-1 (SRCU31)
                                          快速入门指南