



Netfinity 8500R

**Express Setup and Installation**





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**Note**

Before using this *Netfinity Server Library* and the product it supports, be sure to read the information in the *Safety Information* book and the "Legal Information" section of this *Server Library*.

**First Edition (September 1999)**

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# Express setup and installation

This setup and installation section contains information that guides you through:

- Setting up and cabling your server.
- Starting and configuring your server.
- Installing your network operating system (NOS).

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## Overview

After reviewing the “Legal Information” section of this *Server Library*, these are the steps you perform when you follow the “Express Setup and Installation” procedures.

### Hardware installation

- 1** Install your server in a rack.
- 2** Install hot-swap hard disk drives.
- 3** Install an additional processor (optional).
- 4** Cable your server.
- 5** Verify your server is operating properly.
- 6** Install additional options.

### Software installation

- 1** Configure your hardware; install the NOS and device drivers.
- 2** Install additional programs.

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## Reviewing the Safety Information



Before installing this product, read the Safety Information.

Antes de instalar este produto, leia as Informações de Segurança.

在安装本产品之前，请仔细阅读 **Safety Information** (安全信息)。

Prije instalacije ovog produkta obavezno pročitajte Sigurnosne Upute.

Před instalací tohoto produktu si přečtěte příručku bezpečnostních instrukcí.

Læs sikkerhedsforskrifterne, før du installerer dette produkt.

Ennen kuin asennat tämän tuotteen, lue turvaohjeet kohdasta Safety Information.

Avant d'installer ce produit, lisez les consignes de sécurité.

Vor der Installation dieses Produkts die Sicherheitshinweise lesen.

Πριν εγκαταστήσετε το προϊόν αυτό, διαβάστε τις πληροφορίες ασφάλειας (safety information).

A termék telepítése előtt olvassa el a Biztonsági előírásokat!

Prima di installare questo prodotto, leggere le Informazioni sulla Sicurezza

製品の設置の前に、安全情報をお読みください。

본 제품을 설치하기 전에 안전 정보를 읽으십시오.

Пред да се инсталира овој продукт, прочитајте информацијата за безбедност.

Lees voordat u dit product installeert eerst de veiligheidsvoorschriften.

Les sikkerhetsinformasjonen (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu, należy zapoznać się z książką "Informacje dotyczące bezpieczeństwa" (Safety Information).

Antes de instalar este produto, leia as Informações sobre Segurança.

Перед установкой продукта прочтите инструкции по технике безопасности.

Pred inštaláciou tohto zariadenia si pečítajte Bezpečnostné predpisy.

Pred namestitvijo tega proizvoda preberite Varnostne informacije.

Antes de instalar este producto lea la información de seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

安裝本產品之前，請先閱讀「安全資訊」。

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## DANGER

Electrical current from power, telephone, and communication cables is hazardous.

To avoid a shock hazard:

- Do not connect or disconnect any cables or perform installation, maintenance, or reconfiguration of this product during an electrical storm.
- Connect all power cords to a properly wired and grounded electrical outlet.
- Connect to properly wired outlets any equipment that will be attached to this product.
- When possible, use one hand only to connect or disconnect signal cables.
- Never turn on any equipment when there is evidence of fire, water, or structural damage.
- Disconnect the attached power cords, telecommunications systems, networks, and modems before you open the device covers, unless instructed otherwise in the installation and configuration procedures.
- Connect and disconnect cables as described in the following table when installing, moving, or opening covers on this product or attached devices.

### To Connect:

1. Turn everything OFF.
2. First, attach all cables to devices.
3. Attach signal cables to connectors.
4. Attach power cords to outlet.
5. Turn device ON.

### To Disconnect:

1. Turn everything OFF.
2. First, remove power cords from outlet.
3. Remove signal cables from connectors.
4. Remove all cables from devices.

### Definitions of Attention, Caution, and Danger notices

**Attention:** Indicates situations that can potentially damage programs, devices, or data.

**Caution:** Indicates situations that are potentially hazardous to you.

**Danger:** Indicates situations that are potentially lethal or extremely hazardous to you.

## Hardware installation

This hardware installation procedure provides the information or references to the information you need to set up and cable your server, start your server, and verify that your server hardware is functioning properly.

### Before you begin:

- Review the “Legal Information” section of this *Server Library*.
- If you have not unpacked your IBM® Netfinity® 8500R server, unpack it and use the “Inventory list” in the “Start Here” section of this *Server Library* to make sure you received all items shipped with the server.
- If you plan to install a ServeRAID adapter in your Netfinity 8500R, you must determine how you want to set up your disk arrays before you configure your server. The RAID levels (0, 1, or 5) of the disk arrays you configure determine the number of hard disk drives you need to install. RAID level-0 requires one drive (minimum), RAID level-1 requires two drives (minimum), and RAID level-5 requires three drives (minimum). For additional information, refer to the information that comes with your ServeRAID option.
- If you plan to install additional processors, ensure that your operating system supports multiprocessing operations. For a list of operating systems that support SMP, see <http://www.ibm.com/pc/us/compat/> on the World Wide Web.



≥18 kg (37 lbs)



≥32 kg (70.5 lbs)



≥55 kg (121.2 lbs)

### CAUTION:

Use safe practices when lifting.

## Installing the server in a rack

- 1 Install the server in the rack.

For installation instructions, refer to the rack installation information in the “Hardware Information” section of this *Server Library*.

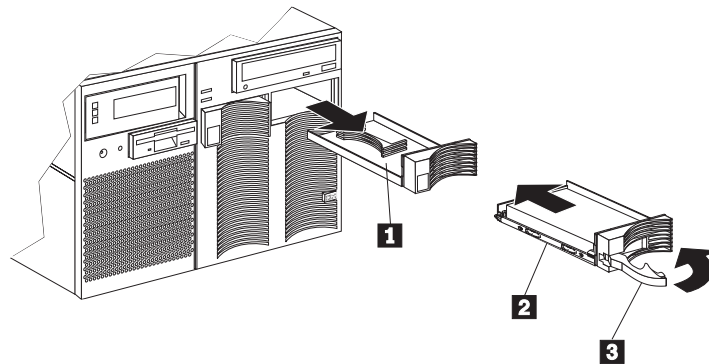
- 2 Continue with “Installing hot-swap hard disk drives” on page 5.



## Installing hot-swap hard disk drives

Use the following procedure to install hot-swap hard disk drives in your Netfinity 8500R server.

- 1 Remove the filler panel **1** from one of the hot-swap bays. See the following illustration.  
**Note:** If you are installing a slim-high drive, separate the slim-filler bezel from the filler panel **1** and insert the slim filler bezel into the top of the hard disk drive bay. Otherwise, store the filler panel in a safe place.
- 2 Touch the static-protective bag containing the drive to any unpainted metal surface on the server; then, remove the drive from the bag.
- 3 Insert the drive **2** into the bay. Ensure that the tray handle **3** on the drive is in the open position (fully extended as shown).
- 4 Slide the drive assembly into the bay until it connects to the backplane; then, move the handle to the locked (closed) position.  
**Note:** To maintain proper system cooling, **do not** operate the server without a hard disk drive or a filler panel installed in each bay.
- 5 Continue with “Installing an additional processor.”



## Installing an additional processor

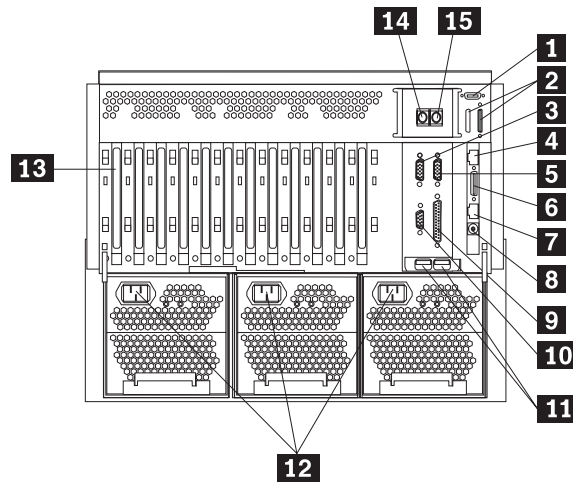
If you have additional processors to install:

- 1 Install the processors now.  
For installation instructions, refer to “Working with the processor housing assembly” in the “Hardware Information” section of this *Server Library* and the information provided with the processor.
- 2 Continue with “Cabling your server” on page 6.

## Cabling your server

Use the following procedure to attach the cables to your Netfinity 8500R server.

- 1 Connect the device cables to the server. For the location of cable connectors, see the following illustration.



- 1 External connector knockouts for Advanced System Management PCI token ring adapter (option)
- 2 External SCSI device knockout (not used)
- 3 Serial port A
- 4 Advanced System Management PCI adapter 10/100 Mbps Ethernet port
- 5 Serial port B
- 6 Advanced System Management PCI adapter dual serial port
- 7 Advanced System Management Interconnect port
- 8 Advanced System Management external power
- 9 Parallel port
- 10 Video port
- 11 Universal Serial Bus (USB) 1 and 2
- 12 Power supply
- 13 PCI expansion slot
- 14 Keyboard port
- 15 Mouse port

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### CAUTION:

When the power-cord strain-relief bracket option is installed on the power cord, the server must be plugged into a power source that is easily accessible.

- 2 Connect the power cord(s) to the server. If applicable, install the power-cord strain-relief clamp.

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### DANGER

Overloading an electrical circuit breaker is potentially a fire hazard and a shock hazard under certain conditions. To avoid these hazards, adhere to the instructions in the following statements.

- a. If you are connecting to a 100–127 V ac power source, connect each power cord to a separate branch circuit.
- b. If you are connecting to a 200–240 V ac power source and the branch circuit breaker rating is:
  - 1) 13 amps or less, connect each power cord to a separate branch circuit.
  - 2) 14 amps to 19 amps, do not connect more than two power cords to the same branch circuit.
  - 3) 20 amps or greater, you may connect up to three power cords to the same branch circuit.

- 3 Connect all power cords to electrical outlets.

**Note:** To maintain proper system cooling, **do not** operate the server for more than thirty minutes without the server top cover installed.

- 4 Continue with “Verifying your server is operating properly” on page 8.

## Verifying your server is operating properly

Use the following procedure to verify that your Netfinity 8500R server is operating properly.

- 1 Turn on all external devices, such as your monitor, printer, and modem; then, turn on your server. For the location of controls and lights, see the illustration on the following page.

### Important

After you plug the server power cord into an outlet and before you press the power control button, the power-on light will blink to indicate that power is present.

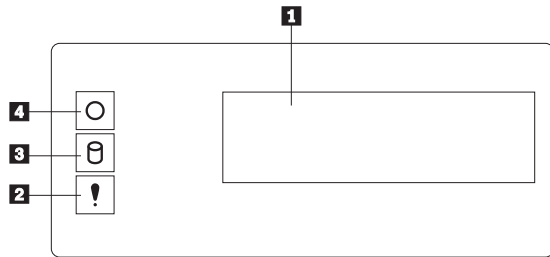
- 2 Press the power control button on the front of the server. The system power light comes on and the power-on self-test (POST) begins.
- 3 Observe your monitor. When the system successfully completes its POST, the server beeps once, CP:71 appears in the operator information panel, and a prompt appears on your monitor requesting that you insert startable (bootable) media.

### Important

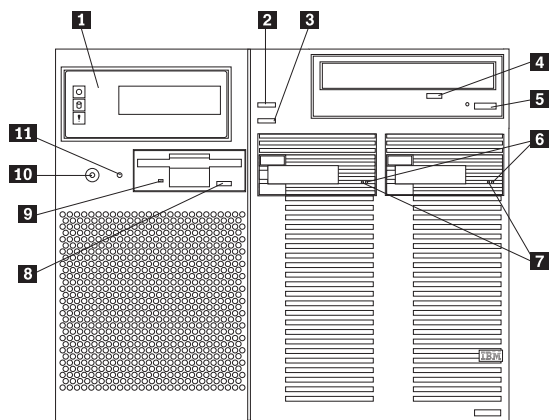
- If F1 is pressed at this time, the following POST message might appear because the operating system has not been installed.  
1962 No operating system found. Press F1 to repeat boot sequence.
- If you have added or removed options, POST message 164 appears if configuration information has changed. Start the Configuration/Setup Utility program and select **Save Settings**.
- If any other error message appears, you hear more than one beep, or your monitor screen is blank, refer to "Problem solving" in the "Hardware Information" section of this *Server Library* for instructions; then, return here and continue with "Installing additional options" on page 10.

- 4 Continue with "Installing additional options" on page 10.

## Server controls and lights



- 1** Information panel
- 2** System error light
- 3** SCSI hard drive activity light
- 4** System power light



- 1** Front panel
- 2** Scroll button
- 3** Enter button
- 4** CD-ROM drive in-use light
- 5** CD-ROM eject/load button
- 6** Hard-disk drive status light
- 7** Hard-disk drive in-use light
- 8** Diskette-eject button
- 9** Diskette drive in-use light
- 10** Power control button
- 11** Reset button

## Installing additional options

- 1 If you have additional options, install them now.

For installation instructions, refer to the information in this *Server Library* and the information provided with the option.

### Important

- Adding or removing some options can change the configuration information in the server. When you start (boot) the server after adding or removing options, POST message 164 appears if configuration information has changed. Start the Configuration/Setup Utility program and select "Save Settings."
- If you plan to install multiple network adapters, install only one at this time. After you have installed the NOS and it starts without errors, install the additional network adapters one at a time.  
  
You can install all other adapters at once, but installing the adapters one at a time makes locating a defective adapter much easier.

- 2 Use the tables provided in the "Hardware Information" section of this *Server Library* to:
  - Update the device-record tables with the new option information.
  - Record the server serial number and key serial number.
- 3 After you have installed all your options, continue with "Software Installation" on page 11.

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## Software Installation

This software installation procedure provides the information you need to configure your hardware and install your network operating system (NOS) and application programs.

## Configuring Hardware and Installing the NOS

### Before you begin:

- If the ServerGuide program does not start, refer to “Error symptoms” in the “ServerGuide and Netfinity Manager Information” section of this *Server Library*.
- Information about the ServeRAID configuration program is included with the ServeRAID option.

- 1** Insert the *Netfinity Setup and Installation* CD (CD1) and restart the server; then, select your language and keyboard layout when the menu appears.
- 2** When the Main Menu appears, click **View installation tips** to review the README information provided for your NOS and adapter.
- 3** Return to the Main Menu and click **Run Netfinity setup programs and configure hardware**

When you complete the configuration process, you will be prompted to start the NOS installation program.

- 4** Click the NOS you want to install and follow the online instructions.  
For help, click ? from any screen.

### Important

If you decide not to use ServerGuide to install the NOS, see “Installing Your NOS without ServerGuide” on page 12.

- 5** After the NOS is installed, be sure to see “Installing Additional Programs” on page 12.

## Installing Your NOS without ServerGuide

If you have already configured the server hardware, and you decide not to use ServerGuide to install your NOS, you must have system-specific NOS installation instructions and device drivers.

You can download the latest level of NOS installation instructions and device drivers from the World Wide Web at: <http://www.ibm.com/support>

- 1** Click **Netfinity** under **Servers**.
- 2** From the **Select your family** field, click **Netfinity 8500R**.
- 3** From the list in the **Netfinity 8500R** window, click the **model**; then:
  - Click **Downloadable files** to download device drivers.
  - or
  - Click **Software information** to download NOS installation instructions.

## Installing Additional Programs

As a convenience, ServerGuide includes current NOS updates provided by NOS software developers. To install updates, refer to the README file on the root directory of the ServerGuide *Operating System Updates* CD.

### Application Programs

The ServerGuide CDs include a variety of powerful application programs for which no activation keys are required. Some of these programs are:

- IBM Update Connector
  - Connects you to the IBM HelpCenter server to check for updates to your server BIOS, microcode (firmware), device drivers, and application programs.
  - Note:** Specific Update Connector support varies with the NOS installed.
- IBM Netfinity Manager
  - State-of-the-art systems management software
- IBM ServeRAID programs
  - Administration and monitoring capability.

For more information about the application programs included with ServerGuide, refer to the "ServerGuide and Netfinity Manager Information" section of this *Server Library*.







Part Number: 01K7572

Printed in U.S.A.

September 1999

01K7572

