Netfinity 3000

Start Here

IBM

Netfinity 3000

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> **Note**
>
> Before using this *Start Here* book, read the *Safety Information* book.

Second Edition (April 1999)

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Contents

Setup overview

This booklet provides the information you need to unpack your server, cable and start your server, and install a network operating system (NOS). This booklet contains general information, such as features, help information, and a system illustration.

If you want detailed information or if you have options to install, refer to your *IBM Netfinity 3000 User's Handbook*.

These are the steps you will perform to set up your server and to ensure that your server is functioning properly.

1. Review the *Safety Information* book.

2. Unpack your server and verify the package inventory.

3. Cable your server.

4. Start your server and run the power-on self-test (POST).

5. Install your options.

6. Configure your hardware.

7. Install your software.

Reviewing the Safety Information book

Before installing this product, read the *Safety Information* book.

Antes de instalar este produto, leia o Manual de Informações sobre Segurança.

安装本产品前请先阅读《安全信息》手册。

Prije instalacije ovog proizvoda pročitajte priručnik sa sigurnosnim uputama.

P ed instalací tohoto produktu si p e t te p íru ku bezpe nostních instrukcí.

Læs hæftet med sikkerhedsforskrifter, før du installerer dette produkt.

Lue Safety Information -kirjanen, ennen kuin asennat tämän tuotteen.

Avant de procéder à l'installation de ce produit, lisez le manuel Safety Information.

Vor Beginn der Installation die Broschüre mit Sicherheitshinweisen lesen.

Πριν εγκαταστήσετε αυτό το προϊόν, διαβάστε το εγχειρίδιο Safety Information.

Installálás el tt olvassa el a Biztonsági el írások kézikönyvét !

Prima di installare questo prodotto, leggere l'opuscolo contenente le informazioni sulla sicurezza.

本製品を導入する前に、安全情報資料を御読みください。

이 제품을 설치하기 전에, 안전 정보 책자를 읽어보십시오.

Пред да го инсталирате овој производ прочитајте ја книгата со безбедносни информации.

Lees voordat u dit product installeert eerst het boekje met veiligheidsvoorschriften.

Les heftet om sikkerhetsinformasjon (Safety Information) før du installerer dette produktet.

Przed zainstalowaniem tego produktu należy przeczytać broszurę Informacje Dotyczące Bezpieczeństwa.

Antes de instalar este produto, leia o folheto Informações sobre Segurança.

Перед установкой продукта прочтите брошюру по технике безопасности (Safety Information).

Pred inštaláciou tohto produktu si pre ítajte Informa nú brožúrku o bezpe nosti.

Preden namestite ta izdelek, preberite knjižico Varnostne informacije.

Antes de instalar este producto, lea la Información de Seguridad.

Läs säkerhetsinformationen innan du installerar den här produkten.

在安裝本產品之前，也請先閱讀「安全性資訊」小冊子。

Verifying your server package inventory

Verify that you received the items listed below.

Hardware:

□ IBM® Netfinity® 3000 server
□ Keyboard
□ Mouse
□ System power cord
□ Power-on switch protector
□ Two server keys (Attached to the back of the server)

> **Note:** Record the server key number in your *IBM Netfinity 3000 User's Handbook* under "Server records and specifications." If you lose the keys, you can order replacement keys from Illinois Lock Company providing you have the key number.
>
> > Phone number:
> >
> > > (800) 299-5880 (in the U.S.)
> > >
> > > (847) 537-1800 (in other countries)
> >
> > Web Site: http://www.illinoislock.com

Software:

□ *IBM Enhanced Diagnostics* CD
□ *IBM ServerGuide*® CD package
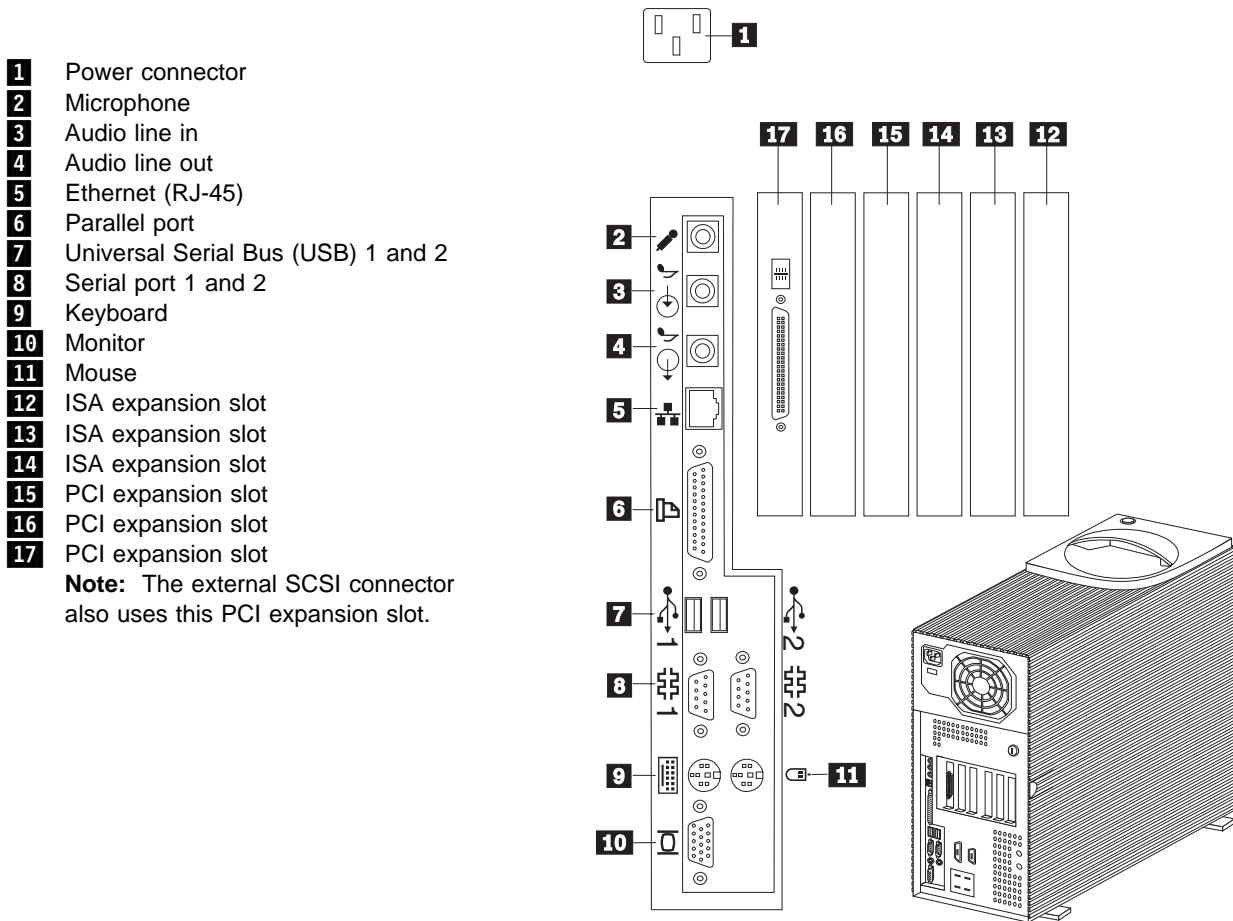□ Other software packages

Publications:

□ *IBM Netfinity 3000 User's Handbook*
□ *Safety Information* book

If an item is missing or damaged, contact your place of purchase.

Cabling your server

1. Select a location that will allow for air circulation. Be sure to maintain minimum clearances around the server:

   - 102 mm (4 in.) in the front
   - 127 mm (5 in.) in the rear
   - 51 mm (2 in.) on the left and right sides

2. See the illustration below to help you connect the monitor, keyboard, and mouse cables to the server.

3. Connect all power cords to electrical outlets.

4. Continue with "Starting your server" on page 3.

1   Power connector
2   Microphone
3   Audio line in
4   Audio line out
5   Ethernet (RJ-45)
6   Parallel port
7   Universal Serial Bus (USB) 1 and 2
8   Serial port 1 and 2
9   Keyboard
10   Monitor
11   Mouse
12   ISA expansion slot
13   ISA expansion slot
14   ISA expansion slot
15   PCI expansion slot
16   PCI expansion slot
17   PCI expansion slot
Note: The external SCSI connector also uses this PCI expansion slot.

Starting your server

1. Turn on your monitor; then, turn on your server. See the following illustration.

2. Observe your monitor.

   When the system successfully completes its power-on self-test (POST), the prompt requesting that you insert startable (bootable) media appears.

   Note: The following message will appear because the operating system has not been installed:

   ```
   1962 No operating system found.  Press F1 to repeat boot sequence.
   ```

   If any other error message appears, if you hear any beeps, or if your monitor screen is blank, refer to the "Solving Problems" chapter in your *IBM Netfinity 3000 User's Handbook* for instructions; then, continue with step 3.

3. In the table provided under "Server records and specifications" in your *IBM Netfinity 3000 User's Handbook*, record the server serial number and server key number.

4. Continue with "Installing your options" on page 4.

1	Power-on switch
2	Power-on light
3	Hard disk drive in-use light
4	Ethernet activity light
5	Bay 1 (CD-ROM drive)
6	CD-ROM eject/load button
7	CD-ROM emergency eject hole (behind the bezel on some models)
8	CD-ROM drive in-use light
9	Bay 2
10	Bay 3
11	Bay 4 (3.5-inch diskette drive)
12	Diskette eject button
13	Diskette drive in-use light
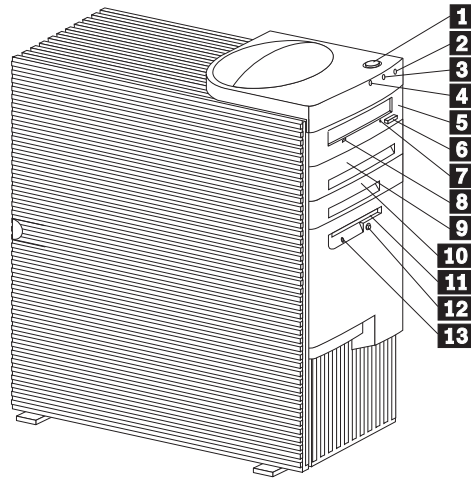
Installing your options

If you have options, install them now. Refer to the information provided with the option and your *IBM Netfinity 3000 User's Handbook* for installation instructions.

After you have installed all your options, return here and continue with "Installing your software" on page 5. Use the *IBM ServerGuide* CD-ROM package to configure your hardware and install your software.

Notes:

- When you install options, be sure that each option has a unique interrupt request (IRQ) assignment. Do not duplicate IRQs.

- When you install devices in bays 2, 3, 5, and 6, disable the termination for the devices before you install them.

- If you plan to install multiple network adapters, install only one at this time. After you have installed the operating system and it starts without errors, add the additional network adapters one at a time.

- If you have a modem or fax machine attached to the server and you are in the United Kingdom, plug in the power cords first; then, connect the telephone line to the wall outlet and the server.

- To connect the server 10BASE-T or 100BASE-TX port to a repeater, use an unshielded twisted pair (UTP) cable with RJ-45 connectors at both ends. An EIA/TIA-568 category 5 cable must be used for 10BASE-T and 100BASE-TX connectors to meet various standards, including electromagnetic compatibility.

If you *do not* have options to install, continue with "Installing your software" on page 5.

Installing your software

Your server includes a copy of IBM ServerGuide. The ServerGuide CDs provide a simplified server installation with device drivers tested for your server.

You can use the programs on the ServerGuide CDs to:

- Configure supported hardware directly from a CD.

- Automate some of the network operating system (NOS) installation steps.

- Detect the supported hardware installed in your server; then, provide device drivers tested for that hardware.

    Note: Some of these system-specific device drivers are newer than those drivers included with off-the-shelf NOS packages.

- Provide a Replicated Installation path for installing Windows NT Server 4.0 on multiple servers.

- Install popular application programs directly from a CD.

- Install IBM Update Connector. Once this program is installed, you can connect your server to an IBM update Web site and receive any available device drivers, BIOS, and program updates (requires Windows NT Server 4.0 and TCP/IP access to the Internet).

- Install other application and utility programs.

For more information, refer to the documentation provided inside your ServerGuide package.

If you decide not to use ServerGuide to assist you with the installation of your NOS, you must download system-specific NOS installation instructions.

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

   1 Click on **IBM Servers Support**.

   2 From the **select family** field, click on **Netfinity 3000**.

   3 From the list in the Netfinity 3000 window, click on the model.

   - To download device drivers, click on **Downloadable Files**.

   - To download NOS installation instructions, click on **Software information**.

Features at a glance

The following table summarizes the features of the IBM Netfinity 3000 server. For detailed information about the features listed below, refer to your *IBM Netfinity 3000 User's Handbook*.

Microprocessor

- Intel® microprocessor (speed and type varies by model)
- 100 MHz Front Side Bus (FSB)
- Level-1 and level-2 cache memory varies by microprocessor.

Memory

- Three 3.3 V, synchronous, 168-pin dual in-line memory-module (DIMM) sockets
- 64 MB, expandable to 768 MB
- 100 MHz, synchronous dynamic random-access memory (SDRAM) with error checking and correction (ECC)
- Support for 32 MB, 64 MB, and 128 MB unbuffered DIMMs[1] or for 256 MB registered DIMMs[1]
- Flash memory for system programs

Diskette drive

- Supports one diskette drive
- Standard: One 3.5-inch, 1.44 MB

Hard disk drives

- Number and capacities of hard disk drives vary by model
- Server supports up to four internal hard disk drives

CD-ROM drive

- Standard: IDE

Keyboard and auxiliary device

- Keyboard
- Mouse

Expansion slot connectors

- Three dedicated ISA slot connectors
- Three dedicated PCI slot connectors
- One dedicated Accelerated Graphics Port (AGP) slot connector

Expansion bays

- Standard: One dedicated 5.25-inch drive bay for CD-ROM drive
- One 3.5-inch or 5.25-inch drive bay
- Four 3.5-inch drive bays
- Number of bays empty and available for expansion varies by model

Upgradable POST and BIOS

- POST/BIOS upgrades (when available) to update EEPROM on the system board

Security features

- Bolt-down capability
- Chassis-intrusion detector
- Power-on and administrator passwords
- Security-error indicator
- Selectable drive-startup sequence
- Side cover lock
- Unattended start mode

SCSI features (if a SCSI adapter comes with your model server)

- 16-bit UltraSCSI adapter
  - One external connector
  - One internal connector
- Server supports up to four internal SCSI hard disk drives

Power supply

- 330 Watts
- Auto-sensing function
- Built-in overload and surge protection

Integrated functions

- Voltage regulator for microprocessor
- Two serial ports
- Two universal serial bus (USB) ports
- One parallel port
- Mouse port
- Keyboard port
- Full-duplex 10/100 Mbps Ethernet controller
  - 10BASE-T/100BASE-TX port
  - Integrated Direct Memory Access (DMA) Buffer Management Unit for low microprocessor and bus utilization
- AGP function on system board
  - 4 MB synchronous graphics random-access memory (SGRAM), 100 MHz
- Systems Management Controller

Pressing **F1** at startup enables you to view the configuration information for your server. See the *IBM Netfinity 3000 User's Handbook* for details.

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[1] **Important:** You cannot mix registered and unbuffered DIMMs in your server. To use registered DIMMs, you must remove all unbuffered DIMMs from your server.

System component locations
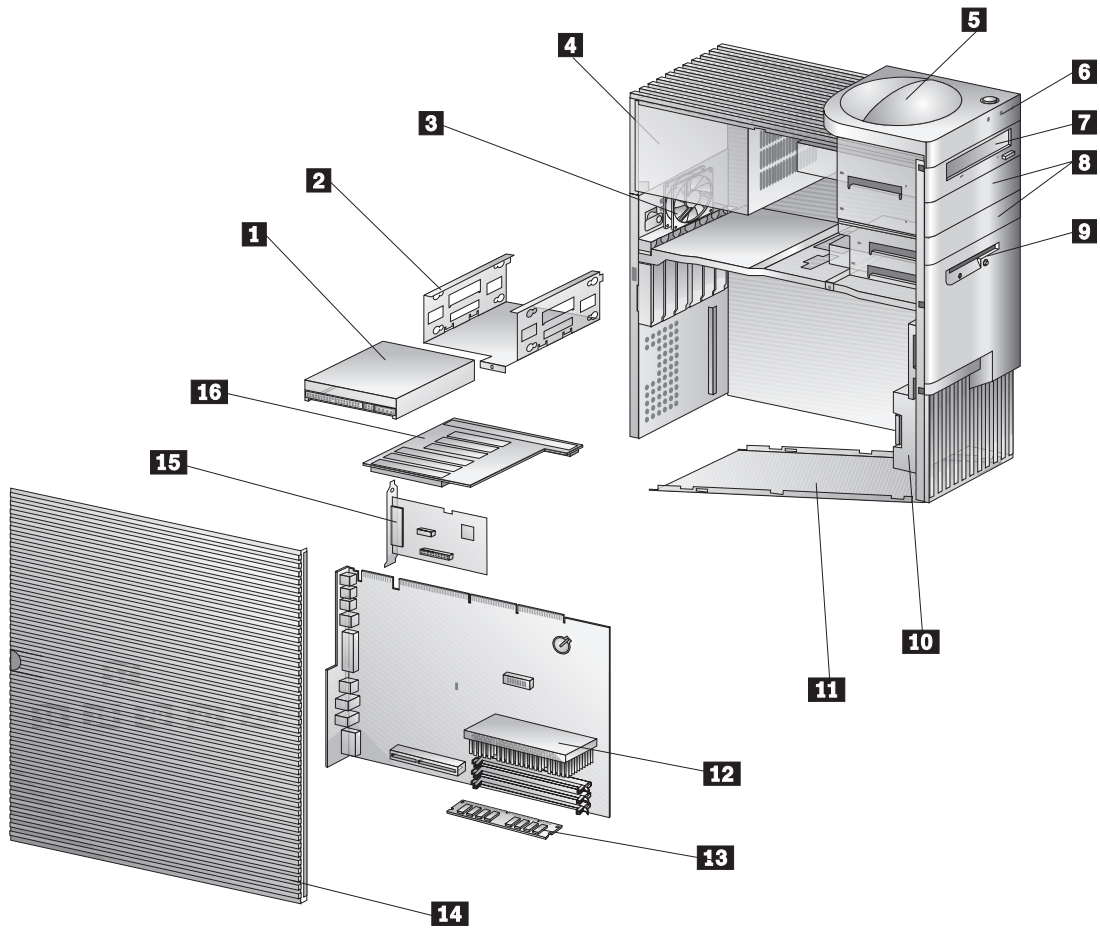
1	Hard disk drive	**9**	Diskette drive
2	Drive cage	**10**	Front fan
3	DASD fan	**11**	Bottom cover
4	Power supply	**12**	Microprocessor
5	Server handle	**13**	DIMM (memory)
6	LED information display	**14**	Server side cover
7	CD-ROM drive	**15**	UltraSCSI adapter
8	Bays for additional options	**16**	Riser card with PCI and ISA slots

Getting help

Many problems can be solved by using online help or by reading the online or printed documentation that comes with your server or software. Also, be sure to read the information in any README files that come with your software. If you are unable to solve the problem yourself, contact your place of purchase or IBM.

You're covered by the best support people in the business. IBM representatives are trained to help you with just about any problem you might have, from setting up your server, to hardware or software problems.

IBM Start Up Support

The IBM Start Up Support program provides comprehensive telephone assistance 24 hours a day, 7 days a week during the first 90 days after installation of your server. Service availability will vary by country. Response time will vary depending on the number and nature of calls received. IBM specialists can help you set up, install, and configure your server.

- In the U.S. or Puerto Rico, call 1-800-772-2227.
- In Canada, call 1-800-565-3344.
- In the United Kingdom, call 01475-55555.

Help is available for IBM and non-IBM network operating systems, network interface adapters, and other optional peripherals. To receive marketing and technical information, including hardware, operating systems, and local area network (LAN) information, access the IBM Automated Fax System:

- In the U.S., call 1-800-426-3395.
- In Canada, call 1-800-465-3299.
- In all other countries, contact your IBM reseller or your IBM marketing representative.

Placing the call

Please have the following information ready when you call and, if possible, be at your server.

- Serial numbers of your server, monitor, and other components
- A description of the problem
- Exact wording of any error messages
- Hardware and software configuration information for your system

IBM HelpCenter®

During the warranty period, you can get help and information by telephone through the IBM HelpCenter. The HelpCenter provides:

- Telephone assistance with problem determination
- Service arrangements (on-site or carry-in)

These services are available 24 hours a day, 7 days a week. Service availability will vary by country. Response time will vary depending on the number and nature of calls received.

- In the U.S. or Puerto Rico, call 1-800-772-2227.
- In Canada, call 1-800-565-3344.
- In the United Kingdom, call 01475-55555.

In all other countries, contact your IBM reseller or your IBM marketing representative.

IBM bulletin board system (BBS)

Bulletin boards and online information services provide assistance through question-and-answer message areas, chat rooms, searchable databases, and more. The IBM BBS is available 24 hours a day, 7 days a week. Service availability will vary by country. Long distance telephone charges might apply.

- In the U.S., call 1-919-517-0001.

- In Canada, call:

    Montreal: 514-938-3022
    Toronto: 905-316-4255 or 416-956-7877
    Vancouver: 604-664-6464

- In all other countries, contact your IBM reseller or your IBM marketing representative.

Using the World Wide Web

For the latest information about IBM products and support, access the IBM World Wide Web site at the following address:

http://www.ibm.com/

You can select a country-specific Web site from this page.

Network and Server Support

For support on simple or complex networks, you can purchase the Network and Server Support service. This service provides support for major network operating systems and many popular non-IBM and network-interface adapters. You can purchase this service on a per-call basis, as a multiple-incident package, or as an annual contract with a 10-incident limit.

To receive a list of products that this service supports:

- In the U.S., call 1-800-426-3395
- In Canada, call 1-800-465-7999 or 1-800-465-3299.
- In all other countries, contact your IBM reseller or your IBM marketing representative.

Additional support

Services similar to the ones described in this section might be available through your IBM reseller or place of purchase. Contact your dealer for further information.

Warranty service

Your server comes with a three-year, limited, on-site warranty. The warranty covers IBM parts installed in the server and includes labor for the replacement of defective IBM parts. Options by IBM (OBI), when installed in the server, are covered under the system warranty or the option warranty, whichever is greater.

Be sure to retain your proof of purchase to verify your warranty service entitlement.

Upgrading your warranty service

You can upgrade your standard warranty service or extend the service beyond the warranty period. Warranty upgrades in the U.S. include:

- Carry-in service to on-site service.
- On-site service to premium on-site service.

You also can extend your warranty. Warranty and Repair Services offer a variety of post-warranty maintenance options. Availability of these services varies by product.

- In the U.S., call 1-800-426-4968.
- In Canada, call 1-800-465-7999.
- In the United Kingdom, call 01705-561000.
- In all other countries, contact your IBM reseller or your IBM marketing representative.

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