Netfinity 3500 M10

Start Here
Note

Before using this Start Here book, read the Safety Information book.
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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 3500 M10 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.

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

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

安装本产品前请先阅读《安全信息》手册。

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在安装本产品之前，也请先阅读「安全性資訊」小冊子。
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.

<table>
<thead>
<tr>
<th>To Connect:</th>
<th>To Disconnect:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Turn everything OFF.</td>
<td>1. Turn everything OFF.</td>
</tr>
<tr>
<td>2. First, attach all cables to devices.</td>
<td>2. First, remove power cords from outlet.</td>
</tr>
<tr>
<td>3. Attach signal cables to connectors.</td>
<td>3. Remove signal cables from connectors.</td>
</tr>
<tr>
<td>4. Attach power cords to outlet.</td>
<td>4. Remove all cables from devices.</td>
</tr>
</tbody>
</table>

CAUTION:
Use safe practices when lifting.
Verifying your server package inventory

Verify that you received the items listed below.

Hardware:

- IBM® Netfinity® 3500 M10 server
- Keyboard
- Mouse
- System power cord
- Power-on switch protector
- Two server keys

**Note:** After you unpack your server, locate the server keys (attached to the back of the server). Record the server key serial number and manufacturer telephone number in your *IBM Netfinity 3500 M10 User's Handbook* under “Server records and specifications.”

The serial number and telephone number are on the keys.

If you lose the keys, you can order replacement keys from the manufacturer providing you have the key serial number.

Software:

- IBM Enhanced Diagnostics CD
- IBM ServerGuide™ CD package
- Other software packages

Publications:

- IBM Netfinity 3500 M10 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 Using the following illustration for reference, 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.

![Diagram of Netfinity 3500 M10 server with connector labels]

1 Mouse connector
2 Parallel port connector
3 SCSI connector
4 Monitor connector
5 Expansion slot 6 (Shared PCI/ISA)
6 Expansion slot 5 (PCI)
7 Expansion slot 4 (PCI)
8 Expansion slot 3 (PCI)
9 Expansion slot 2 (PCI)
10 Expansion slot 1 (AGP)
11 Microphone connector
12 Audio line in connector
13 Audio line out connector
14 Ethernet connector
15 Serial port 2 connector
16 Serial port 1 connector
17 Universal Serial Bus (USB) 2
18 Universal Serial Bus (USB) 1
19 Keyboard connector
20 Power cord connector
Starting your server

1. Turn on your monitor; then, turn on your server.

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 3500 M10 User’s Handbook* for instructions; then, continue with step 3.

3. In the table provided under “Server records and specifications” in your *IBM Netfinity 3500 M10 User’s Handbook*, record the server serial number and server key number.

Installing your options

If you have options, install them now. Refer to the information provided with the option and your *IBM Netfinity 3500 M10 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.
- 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. For information about ServerGuide, refer to the documentation provided inside your ServerGuide package.

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.
- Detect the supported hardware installed in your server; then, provide device drivers tested for that hardware.
- Automate some of the network operating system (NOS) installation steps.
- Provide a replicated installation path for installing Microsoft® Windows NT® Server 4.0 on multiple servers.
- Install popular application programs included with ServerGuide.
- 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).

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 and device drivers from the World Wide Web at http://www.ibm.com/support

1 Under Servers, click Netfinity.

2 From the Select your family field, click Netfinity 3500 M10.

3 From the Select your model field, click your model; then:
   - Click Downloadable files to download device drivers.
   - or
   - Click Software information to download NOS installation instructions.
## Features at a glance

The following table summarizes the features of the IBM Netfinity 3500 M10 server. For detailed information about the features listed below, refer to your *IBM Netfinity 3500 M10 User's Handbook*.

<table>
<thead>
<tr>
<th>Microprocessor</th>
<th>Removable-media drives</th>
<th>Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Standard: 64 MB or 128 MB, depending on server model</td>
<td>• Standard: One 3.5-inch, 1.44 MB diskette drive</td>
<td>• Power-on and administrator passwords</td>
</tr>
<tr>
<td>• Intel® Pentium® III microprocessor</td>
<td>• Maximum: One diskette drive and one tape backup</td>
<td>• Lockable cover</td>
</tr>
<tr>
<td>• 512 KB L2 cache memory</td>
<td></td>
<td>• Bolt-down capability</td>
</tr>
<tr>
<td>Memory</td>
<td>Expansion</td>
<td>• Chassis-intrusion detection</td>
</tr>
<tr>
<td>• Expandable to 1 GB of SDRAM</td>
<td>• Six drive bays</td>
<td>• Startup sequence control</td>
</tr>
<tr>
<td>• Installed: synchronous dynamic random access memory (SDRAM) error correcting code (ECC), 100 MHz DIMMs</td>
<td>• Six expansion slots (four dedicated PCI, one shared ISA/PCI, and one dedicated AGP)</td>
<td>• Startup without diskette drive, keyboard, or mouse</td>
</tr>
<tr>
<td>• Support for:</td>
<td>• Support for PCI/ISA Plug and Play adapters</td>
<td>• Unattended start mode</td>
</tr>
<tr>
<td>– 64 MB and 128 MB unregistered DIMMs, or 256 MB registered DIMMs, in either single-sided or double-sided configurations</td>
<td>• Support for dual microprocessors</td>
<td>• Control access to diskette, hard disk, serial port, parallel port</td>
</tr>
<tr>
<td>– DIMM heights up to 2.5 inches</td>
<td>• Support for additional internal and external SCSI devices</td>
<td>Video</td>
</tr>
<tr>
<td>• Four 3.3 V, synchronous, 168-pin, dual in-line memory module (DIMM) sockets</td>
<td>• Support for 3.5-inch, 1.44 MB diskette drive; internal tape drive</td>
<td>• Standard: Graphics adapter or AGP graphics adapter, depending on server model</td>
</tr>
<tr>
<td>• Flash memory for system programs</td>
<td>• Support for Netfinity ServeRAID adapters</td>
<td>Integrated functions</td>
</tr>
<tr>
<td>Internal hard disk drives</td>
<td></td>
<td>• Ethernet controller with 10BASE-T and 100BASE-TX connectivity</td>
</tr>
<tr>
<td>• Standard: Open bay or one SCSI hard disk drive</td>
<td>Power supply</td>
<td>• ECP/EPP parallel port</td>
</tr>
<tr>
<td>• Maximum SCSI devices:</td>
<td>• 330 W, 115/230 V ac, 50/60 Hz</td>
<td>• Two 16550 UART serial ports</td>
</tr>
<tr>
<td>– Four slimline hard disk drives</td>
<td>• Automatic ac voltage sensing</td>
<td>• Two USB ports</td>
</tr>
<tr>
<td>– Two half-height hard disk drives</td>
<td>• Built-in overload and surge protection</td>
<td>• Mouse port</td>
</tr>
<tr>
<td>CD-ROM drive</td>
<td>System Management</td>
<td>• Keyboard port</td>
</tr>
<tr>
<td>• One IDE CD-ROM drive</td>
<td>• RPL (remote program load) and DHCP (dynamic host configuration protocol)</td>
<td>• Monitor port (on graphics adapter)</td>
</tr>
<tr>
<td></td>
<td>• Wake on LAN</td>
<td>• Ethernet RJ-45 port</td>
</tr>
<tr>
<td></td>
<td>• Alert on LAN (supported on certain models)</td>
<td>Operating systems supported</td>
</tr>
<tr>
<td></td>
<td>• Remote reset from LAN</td>
<td>• Microsoft® Windows NT® Server Version 4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Novell Netware Version 4.x or 5.x</td>
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<tr>
<td></td>
<td></td>
<td>• SCO UnixWare</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IBM OS/2 Warp Server SMP</td>
</tr>
</tbody>
</table>

You can press F1 at startup to view the configuration information for your server. Refer to the *IBM Netfinity 3500 M10 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.
Exploded view of the Netfinity 3500 M10

1. Server handle/cap assembly
2. Server top/side cover assembly
3. CD-ROM drive
4. Hard disk drive
5. Drive bezels
6. Diskette drive
7. Server front bezel
8. System board
9. Microprocessor
10. DIMM (memory)
11. Adapter card guide
12. Fan
13. Hard disk drive cage
14. Server side cover
15. Adapter card
16. Air baffle
17. Hard disk drive bracket
18. Power supply
19. Keylock assembly
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.

IBM representatives are trained to help you with almost 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

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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