Netfinity 5000

Start Here
Netfinity 5000

Start Here
Before using this Netfinity Server Library and the product it supports, be sure to read the information in the “Legal and Safety Information” section of this Server Library.
Thank you for purchasing an IBM Netfinity 5000 server. This “Start Here” section gives you an overview of the Server Library for the Netfinity 5000 server. “Start Here” also contains a list of the features and provides illustrations of some of the major components of the Netfinity 5000 server.

The Netfinity Server Library contains sections that provide detailed information about set up and installation, hardware, software (ServerGuide and Netfinity Manager), Advanced System Management, getting help, and legal and safety information.

To organize your Netfinity Server Library, place the library materials into the binder in the following order.

**CD Pack 1**
- HardwareGuide, SoftwareGuide, Operating Systems Fixpak,
- and Server Application Programs

**Server Library**
- Library tabs and information sections, such as Express Setup and Installation,
- Hardware, ServerGuide and Netfinity Manager, Advanced System Management, Getting Help, Legal and Safety, and other materials

**Note:** The library materials that come with your server contain Tab 8 which is blank. This tab is for you to use for any additional information you might want to add to the binder.

**CD Packs 2 and 3**
- Additional Application Programs
Overview of the Netfinity Server Library

The following list describes the sections of the Netfinity Server Library.

Express Setup and Installation
This section is written for all users, but it is designed with the experienced user in mind. Here you will find the information you need to set up and cable your server, start and configure your server, and install your network operating system (NOS).

Hardware Information
This section contains detailed information, such as:

- Configuration Procedures
- Option Installation Instructions
- Rack Installation Instructions
- Solving Problems and Troubleshooting
- Server Records and Specifications

ServerGuide and Netfinity Manager Information
This section contains detailed information about:

ServerGuide
Software setup and installation tools specifically designed for IBM Netfinity and PC servers.

Netfinity Manager
A group of distributed applications designed to enhance the hardware systems-management capabilities of a network.

Advanced System Management Information
This section contains detailed information about Advanced System Management, using the Netfinity Manager Advanced System Management services.

Getting Help Information
This section contains telephone numbers and Web site addresses where you can get assistance.

Legal and Safety Information
This section contains detailed legal information (warranties, electronic emission statements, and so forth) and safety information.
Safety Statement

Before installing this product, read the Safety Information.

Antes de instalar este producto, 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.

安装本产品之前，请先阅读「安全資訊」。
Help Information

If you need help at any time during the set up, installation, or operation of your server, refer to the “Getting Help Information” section of this Server Library. There you will find telephone numbers and Web site addresses where you can get assistance.

Inventory List

The following is a list of the items shipped with your Netfinity 5000 server.

Hardware:
- **Tower Models**
  - Keyboard
  - Mouse
  - System power cord
  - Two server keys and a power-on switch cover attached to the server

  **Note:** If you lose the keys, you must order a replacement lock mechanism and keys from IBM.

- **Rack Models**
  - Rack installation hardware
  - System power cord
  - A power-on switch cover attached to the server

Software:
- **IBM ServerGuide** CDs
- Other software packages

Publications:
- **Netfinity Server Library**
- IBM Netfinity Rack Installation Template (rack models only)

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

Use the following information and illustrations to familiarize yourself with the various features of the Netfinity 5000 server.

Features at a Glance

The following table summarizes the features of the Netfinity 5000. For detailed information about the features listed in the table, refer to the “Hardware Information” section of this Server Library.

<table>
<thead>
<tr>
<th>Microprocessor</th>
<th>Expansion Bays</th>
<th>Integrated Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Intel® Pentium® II microprocessor with MMX™ technology</td>
<td>• One 3.5-inch diskette drive bay</td>
<td>• Two serial ports</td>
</tr>
<tr>
<td>• 512 KB of level-2 cache (minimum)</td>
<td>• Two 5.25-inch drive bays (the open bay supports a half-high SCSI tape drive)</td>
<td>• Two universal serial bus (USB) ports</td>
</tr>
<tr>
<td></td>
<td>• Five 3.5-inch drive bays (hot-swappable)</td>
<td>• System management port (C)</td>
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<td></td>
<td></td>
<td>• Advanced System Management processor on the system board</td>
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<td></td>
<td></td>
<td>• One IDE internal connector, supports the system IDE CD-ROM drive</td>
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<td></td>
<td><strong>Upgradable Microcode</strong></td>
<td>• One parallel port</td>
</tr>
<tr>
<td></td>
<td>• BIOS, diagnostics, and Netfinity Advanced System Management Processor code upgrades (when available) can update EEPROMs on the system board</td>
<td></td>
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<tr>
<td></td>
<td><strong>Security Features</strong></td>
<td>• Mouse port</td>
</tr>
<tr>
<td></td>
<td>• Bolt-down capability</td>
<td>• Keyboard port</td>
</tr>
<tr>
<td></td>
<td>• Door lock (tower model only)</td>
<td>• 16-bit UltraSCSI controller</td>
</tr>
<tr>
<td></td>
<td>• Power-on and administrator passwords</td>
<td>• One external connector (16-bit)</td>
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<tr>
<td></td>
<td>• Selectable startup sequence</td>
<td>• One internal connector (16-bit)</td>
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<tr>
<td></td>
<td></td>
<td>• Full-duplex 10/100 Mbps Ethernet controller</td>
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<tr>
<td></td>
<td></td>
<td>• 10BASE-T/100BASE-TX port</td>
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<tr>
<td></td>
<td></td>
<td>• Redundant Ethernet capability, through the use of an optional network interface card (NIC)</td>
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<tr>
<td></td>
<td></td>
<td>• Video controller port, super video graphics array (SVGA)</td>
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<tr>
<td></td>
<td></td>
<td>• 1 MB video memory</td>
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<tr>
<td></td>
<td><strong>CD-ROM Drive</strong></td>
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<tr>
<td></td>
<td>• Standard: IDE</td>
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<tr>
<td></td>
<td><strong>Keyboard and Auxiliary Device</strong></td>
<td></td>
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<tr>
<td></td>
<td>• Tower models</td>
<td></td>
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<tr>
<td></td>
<td>• Keyboard</td>
<td></td>
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<tr>
<td></td>
<td>• Mouse</td>
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<td></td>
<td><strong>Expansion Slots</strong></td>
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<tr>
<td></td>
<td>• Supports up to five adapters</td>
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<tr>
<td></td>
<td>• Two shared PCI/ISA slots</td>
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<td></td>
<td>• Three dedicated PCI slots</td>
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<td></td>
<td><strong>Diskette Drive</strong></td>
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<td></td>
<td>• One 3.5-inch, 1.44 MB</td>
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<td></td>
<td><strong>Hard Disk Drives</strong></td>
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<td>• Up to five hot-swappable internal hard disk drives are supported</td>
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<td></td>
<td><strong>CD-ROM Drive</strong></td>
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<tr>
<td></td>
<td>• Standard: IDE</td>
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<td></td>
<td><strong>Power Supply</strong></td>
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<td></td>
<td>• 350 W with voltage auto-selection (110, 120, 220, 240 V ac) and power redundancy</td>
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<tr>
<td></td>
<td>• Standard</td>
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<tr>
<td></td>
<td>• 350 W (non-redundant)</td>
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<tr>
<td></td>
<td>• 175 W (redundant)</td>
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</tr>
<tr>
<td></td>
<td>• Optional</td>
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<tr>
<td></td>
<td>• 175 W (available for redundancy)</td>
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<tr>
<td></td>
<td>• Built-in overload and surge protection</td>
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<td></td>
<td>• Automatic restart after a momentary loss of power</td>
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</tr>
</tbody>
</table>
Exploded View of the Netfinity 5000 Server

1. Power supply
2. DASD Fan
3. Bezel release lever
4. Operator information panel
5. Diskette drive
6. Open bay
7. CD-ROM
8. Hot-swap hard disk drive
9. Filler panel
10. Bezel
11. Side cover release lever
12. Front door
13. Adapter card support bracket
14. Side cover
15. System board (planar)
16. DIMM sockets
17. Microprocessor terminator card or secondary microprocessor
18. Primary microprocessor
19. Adapter card retainers
System Board Connectors

1. Systems management adapter connector (J21)
2. Fan 2 connector (J6)
3. System switch block (SW1)
4. Microprocessor 2 connector (U21)
5. Reserved (J1)
6. Microprocessor 1 connector (U2)
7. Power connector (J3)
8. Reserved (J8)
9. Power connector (J4)
10. Reserved (J12)
11. Power supply data connector (J10)
12. Voltage regulator module (VRM) connector (U20)
13. Fan 1 connector (J13)
14. DIMM 1 (J15), DIMM 2 (J16), DIMM 3 (J17), & DIMM 4 (J22) connectors
15. SCSI connector (J18)
16. Diskette drive connector (J23)
17. IDE connector (J3)
18. Operator LED panel (J29)
19. Reserved (J31)
20. Power-on switch panel (J34)
21. RS-485 connector (J35)
22. Reserved (J37)
23. Reserved (J36)
24. Reserved (J41)
25. Reserved (J39)
26. Reserved (J32)
27. ISA connector (J40)
28. PCI/ISA connector, PCI bus 1 (J38)
29. PCI connector, PCI bus 1 (J33)
30. PCI connector, PCI bus 1 (J30)
31. Battery
32. PCI connector, PCI bus 1 (J28)
33. PCI connector, PCI bus 0 (J24)
34. Parallel/SCSI connectors (J19)
35. Video port and Management C port connectors (J11). (The Management C port connector is above the video connector.)
36. USB 1 and USB 2 port connectors (J9) (USB 2 is below USB 1.)
37. Ethernet connector (J7)
38. Mouse and keyboard connectors (J5). (The mouse connector is above the keyboard connector.)
39. Serial port A and B connectors (J2) (Serial port B is below serial port A.)
System Board LEDs

1. Microprocessor 1 error LED (CR1)
2. Microprocessor 2 error LED (CR5)
3. Integrated voltage regulator error LED (CR4)
4. Voltage regulator module (VRM) error LED (CR12)
5. Service processor error LED (CR49)
6. DIMM 1 error LED (CR13)
7. DIMM 2 error LED (CR14)
8. DIMM 3 error LED (CR21)
9. DIMM 4 error LED (CR22)
10. Software-maskable interrupt (SMI) error LED (CR29)
11. Non-maskable interrupt (NMI) error LED (CR28)
12. PCI bus 1 error LED (CR27)
13. PCI bus 0 error LED (CR26)
14. Reserved (CR25)
15. DASD error LED (CR24)
16. Temperature error LED (CR23)
17. Fan 1 (DASD) error LED (CR15)
18. Fan 2 (rear) error LED (CR16)
19. Reserved (CR17)
20. Reserved (CR18)
21. Power supply 1 error LED (CR19)
22. Power supply 2 error LED (CR20)