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## Installing and configuring the IBM Datacenter solution software for IBM eServer™ xSeries® 460

A complete IBM® Datacenter solution for your IBM eServer™ xSeries® 460 server consists of supported software and hardware components that are interconnected and designed to provide scalability, reliability, and availability for applications and data access.

The following items come with this software package:

- Microsoft® Windows® Server 2003, Datacenter edition publications package
- One or more recovery CDs, depending on your platform
- This documentation

**Important:** If you did not purchase this software package at the same time as your server, one or more Microsoft Certificate of Authenticity (COA) labels comes with the software package. You must attach the COA labels to your servers in accordance with the licensing agreement that comes with the operating system. If you purchased servers with the operating system preinstalled, the COA labels should already be affixed to your servers.

This documentation contains important information about how to initially configure your IBM Datacenter solution, how to use the recovery CDs that come with the software package, and how to obtain help and support. Except where otherwise stated in this document, use the documentation that comes with your server and optional devices to install, cable, and configure your hardware.

**Important:** Some IBM Datacenter solutions come with additional cabling instructions. Use those instructions in addition to the instructions in the documentation that comes with your server or optional devices. Keep this documentation with the documentation that comes with your server and other optional devices that are part of your IBM Datacenter solution..

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## Configuring your IBM Datacenter solution

Before you turn on your server and optional devices, make sure that your hardware is correctly configured. See “Configuring your hardware” on page 2 for hardware configuration information.

If your server does not come with the Datacenter operating system preinstalled, use the recovery CDs to install the operating system with a default configuration. Complete the steps in “Using the recovery CDs” on page 3 before proceeding.

Complete the following steps to configure your IBM Datacenter solution for the first time or after you restore the default configuration from the recovery CDs:

1. Turn on any optional devices that are connected to the server according to the documentation that comes with those optional devices; then, turn on the server according to the documentation that comes with the server.
2. When the Server Setup window opens, click **Next**.
3. Read and accept the information in the License Agreement window; then, click **Next**. In the Regional and Language Options window, select the applicable settings; then, click **Next**.
4. Type your full name and organization name in the applicable fields; then, click **Next**.
5. Set the license mode to five consecutive access licenses; then, click **Next**.
6. Type the computer name and configure the administrator account; then, click **Next**.
7. Complete the network setup process according to your network configuration; then, click **Next**.

8. Complete the network login setup process; then, click **Next**.
9. When the additional automatic configuration processes are completed, the server restarts automatically.
10. After the server restarts, log in.

**Note:** The first time you log in, the RAID controller is initialized.

11. Install any additional software or device drivers as required for your configuration, which come with your IBM Datacenter solution or an approved service pack release from IBM. See “Installing additional software or device drivers” on page 3 for more information.

You can now install other applications, such as a database application, on your server and begin using your IBM Datacenter solution. See the Microsoft Windows operating system documentation that comes with the software package for information about the operating system.

If you need assistance with your IBM Datacenter solution, see “Getting help and service” on page 5 for information about available help and service offerings from IBM.

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## Configuring your hardware

Use the information in this section and the documentation that comes with your server and optional devices to configure your IBM Datacenter solution. If applicable, install your server and optional devices in a rack cabinet according to the documentation that comes with the rack cabinet, server, and optional devices.

**Important:** To ensure compatibility between optional devices and your server, and reliability of your IBM Datacenter solution, make sure that you install and configure only supported hardware.

If your server comes with the operating system preinstalled, Hyper-Threading Technology is enabled for your server. Otherwise, you must enable it. You must use Fibre Channel technology to connect your server to an external storage enclosure. The IBM Datacenter solution does not support external storage using SCSI connectivity.

Refer to the IBM ServeRAID 8-i Installation Guide for more information on configuring and installing the ServeRAID Serial Attached SCSI Controller.

*Table 1. Table 1. PCI and PCI-X adapter slot assignments*

PCI or PCI-X adapter type	xSeries 460 adapter slot
IBM ServeRAID™ 8i Serial Attached SCSI Controller	Motherboard PCI Expansion slot
IBM FAStT FC2-133 Host Bus Adapter	5
IBM FAStT FC2-133 Host Bus Adapter	6

**Note:** The xSeries 460 server has a dedicated PCI slot to the left of PCI slot 1 that you must install the ServeRAID 8-i Serial Attached SCSI controller in order for the on-board SAS drives to be detected and configured by the ServeRAID configuration utility.

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## Using the recovery CDs

The software package includes recovery CDs, which you can use to restore your server to the default configuration. If your server does not come with the Datacenter operating system preinstalled, use the recovery CDs to install the operating system with a default configuration. If your server comes with the Datacenter operating system preinstalled, you do not have to use the recovery CDs before you begin using the server for the first time.

**Attention:** Any applications that are installed or configuration changes that are made during or after the initial configuration will be lost when you use the recovery CDs to restore the default configuration. You must back up all data and configuration information on your server if you want to preserve this information.

Complete the following steps to restore the default configuration to your server.

1. If you have not already done so, back up the data on the hard disks in the server if they contain configuration information or data that you need to preserve.
2. If you have two servers in a 16-way configuration, make sure that the hardware is correctly cabled and configured before installing the operating system. See the documentation that comes with your server for detailed instructions.
3. Turn on the server and insert the first recovery CD into the CD-ROM or DVD-ROM drive.

**Note:** For 16-way configurations, turn on the primary server and use the primary server CD-ROM or DVD-ROM drive.

4. When prompted, insert the second recovery CD into the CD-ROM or DVD-ROM drive; then, press Enter to continue.
5. After the operating system installation is completed, configure your IBM Datacenter solution.
6. See “Configuring your IBM Datacenter solution” on page 1 for information about configuring your IBM Datacenter solution.

**Note:** The configuration process could take up to 45 minutes to be completed.

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## Installing additional software or device drivers

After initial configuration of your server, you can install additional software or device drivers.

**Important:** Do not install any device drivers that are not part of your IBM Datacenter solution or service pack release unless otherwise instructed by an IBM support representative. If a version of software is included with your solution or a service pack release, always use that version unless otherwise instructed by an IBM support representative.

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## Installing a service pack

If you purchase the Software Update Subscription for your IBM Datacenter solution, you might receive a service pack release that contains updated software or device drivers. The service pack release contains instructions for installing the software or device drivers that are part of that release. See “Getting help and service” on page 5 for more information about these optional service offerings.

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## Installing IBM Director

You can install IBM Director Agent from the IBM Director CD that comes with your server. Follow the instructions in the IBM Director documentation or your server documentation to install IBM Director Agent.

**Note:** Do not perform a complete IBM Director installation on the server that is running a Microsoft Windows Datacenter operating system. Install only IBM Director Agent on that server.

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## Installing TotalStorage FAStT Storage Manager software

Use the information in this section to determine the location of the TotalStorage<sup>®</sup> FAStT Storage Manager software on your hard disk that comes with your IBM Datacenter solution.

For Microsoft Windows Server 2003 Datacenter Edition on xSeries 460 servers:

- `d:\Software\DS4500\Controller` – This directory contains firmware to update an IBM DS4500 or DS4800 Storage Server. See the documentation that comes with the controller for update instructions.
- `d:\Software\DS4500_SM` – This directory contains the IBM DS4500/4800 Storage Manager Management software and driver installation package. See the documentation that comes with the optional device for installation instructions.

(where *d* is the drive letter of the hard disk)

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## Getting help and service

See the documentation that comes with your server and optional devices for warranty information and information about how to obtain help and service for your hardware. Software support is provided by several optional service offerings that are described in this section. Contact your IBM representative for information about how to purchase one of the optional service offerings.

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## Hardware service and support

You can receive hardware service through IBM Services or through your IBM reseller, if your reseller is authorized by IBM to provide warranty service. Go to <http://www.ibm.com/planetwide/> for support telephone numbers, or in the U.S. and Canada, call 1-800-IBM-SERV (1-800-426-7378).

IBM, or your IBM reseller, provides Solution Assurance at the time of purchase, which includes:

- Server and solution evaluation
- ServerProven<sup>®</sup>, which ensures solution compliance
- ClusterProven<sup>®</sup>, which ensures solution compliance for clustered configurations
- Independent technical assessment of selected solution designs or proposals
- Evaluation of the solution to ensure that your requirements are met

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## Optional service offerings

Not all service offerings are available in all countries or regions. Your IBM representative can assist you in finding out what service offerings are available to you. For additional information about the IBM Services available in your country, go to <http://www.ibm.com/services>.

The following optional service offerings are available for your IBM Datacenter solution on a fee basis:

- **Operational Support Services:**
  - **Advanced Support** — This service is customized to meet your unique needs for continuous, business-critical system operation. IBM assigns a Technical Solution Manager (TSM) to be an interface for both software and hardware support. During the initial on-site visit, the TSM becomes thoroughly familiar with your business and systems environment. On an ongoing basis, the TSM manages your account, provides proactive assistance, generates usage reports, and hosts status calls.
  - **Support Line** — Technical assistance is provided through support that is available from the IBM Support Line. The Support Line provides assistance for solving problems, correcting operating-system errors, and solving problems. Installation assistance is also available through the Support Line.
  - **Account Advocate** — This service provides support from an assigned specialist who is thoroughly familiar with your solution and business environment from the time the problem is reported until the problem is resolved.
- **Hardware Maintenance Agreements:** This service provides post-warranty support for your hardware for one year with 24-hour-a-day, 7-day-a-week support. It is available in 4-hour response time or 2-hour response time offerings in some countries or regions.
- **IBM Software Update Subscription for Microsoft Windows Datacenter:** This subscription service entitles you to obtain new releases of the operating system and maintenance updates, when available

for your Datacenter solution. This subscription is valid for a period of 12 months. If you purchase the Software Update Subscription offering after your operating-system purchase, the entitlement period begins at the time of purchase of the Microsoft Windows Datacenter operating system. You will have the opportunity to renew the subscription service before the end of the entitlement period.

Ensure that you register your Software Update Subscription when purchased. You must register to receive any Datacenter operating system upgrades or maintenance from IBM. To register go to <http://www.pc.ibm.com/ww/eserver/xseries/windows/registration.html> and follow the instructions. Although Software Update Subscriptions are optional, upgrades to future Microsoft Windows Datacenter Operating System Releases are possible only with a subscription.

- **Custom Installation Services:** IBM provides skilled, experienced technical resources to deliver installation services for your IBM Datacenter solution.
- **Enterprise Services for Microsoft Technologies:** Skilled Microsoft Certified Professionals deliver migration, assessment, planning, architecture, design, and deployment services to assist with the implementation of your solution.
- **Business Continuity and Recovery Services:** This service provides assistance in planning, designing, and implementing processes and solutions in preparation for potential business disruptions or disasters.
- **Testing Services:** These services provide proof of concept, assessment, design, planning, and automated testing to help determine problem areas before you implement system applications. These services help create a scalable, stable, and reliable business environment.

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## Important notes

Processor speeds indicate the internal clock speed of the microprocessor; other factors also affect application performance.

CD-ROM drive speeds list the variable read rate. Actual speeds vary and are often less than the maximum possible.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for approximately 1000 bytes, MB stands for approximately 1 000 000 bytes, and GB stands for approximately 1 000 000 000 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity may vary depending on operating environments.

Maximum internal hard disk drive capacities assume the replacement of any standard hard disk drives and population of all hard disk drive bays with the largest currently supported drives available from IBM.

Maximum memory may require replacement of the standard memory with an optional memory module.

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