

Update*Xpress*



# User's Guide





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**NOTE**

Before using this information and the product it supports, be sure to read the general information in Appendix A, "Notices," on page 9.

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## Chapter 1. Introduction

Use the UpdateXpress CD to plan for maintenance updates of most IBM @server xSeries servers. The UpdateXpress CD is supported in Windows 2000 and Windows NT environments, it is easy to use, and the program provides device driver and firmware updates directly from this CD. If an automatic update is not available, UpdateXpress may supply a manual update option.

Insert the CD into your server to begin the update process.

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### Supported servers

This version of UpdateXpress supports the following IBM xSeries and Netfinity servers.

Supported servers	Machine type
xSeries 200	8478
xSeries 220	8645
xSeries 230 (Netfinity 5100)	8658
xSeries 240 (Netfinity 5600)	8664
xSeries 250 (Netfinity 7600)	8665
xSeries 330	8654
xSeries 340 (Netfinity 4500)	8656
xSeries 350 (Netfinity 6000R)	8682
xSeries 370 (Netfinity 8500R)	8681

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### Device driver support

UpdateXpress provides the following device driver updates.

#### Windows NT

**Notes:**

- The letter 'v' preceding a number designates a version. The letter 'd' preceding a number designates the diskette version available on the web. The letters 'd' and 'v' together indicate that the diskette and version numbers are the same.
- In the on-board Ethernet Controller column, '(I)' denotes an Intel chip set, and '(AMD)' denotes an AMD chip set. 'AUTO' indicates that an automatic update is available.

System	Serve-RAID 4L,4M	Onboard SCSI Controller	Onboard Ethernet Controller	Onboard ASM Controller	ASM PCI Adapter	Remote Service Processor	Onboard Video Controller
x200	v4.50.05	v 1.11 (Ultra160)	d4.0 - v5.00.66(I)	N/A	N/A	N/A	v8.19.11
x220	v4.50.05	v 1.11 (Ultra160)	d4.0 -v5.00.66(I)	v1.2	v1.2	v1.2	v8.19.06

System	Serve-RAID 4L,4M	Onboard SCSI Controller	Onboard Ethernet Controller	Onboard ASM Controller	ASM PCI Adapter	Remote Service Processor	Onboard Video Controller
x230	v4.50.05	v1.11 (Ultra160)	v3.7.2 (I)-v4.14 (AMD) Manual update only	v1.2	v1.2	N/A	v8.10.06
x240	v4.50.05	v3.02.4 (7800)	v3.7.2 (I)-v4.14 (AMD) Manual update only	v1.2	v1.2	N/A	v3.26.39
x250	v4.50.05	v3.02.4 (7800)	d2.09 -v4.12 (AMD) Manual update only	v1.2	v1.2	N/A	v3.26.39
x330	v4.50.05	v 1.11 (Ultra160)	d4.0-v5.00.66.0000 (I) AUTO	v1.2	v1.2	N/A	v8.19.06
x340	v4.50.05	v 1.11 (Ultra160)	v4.14 (AMD) Manual update only	v1.2	v1.2	N/A	v8.19.06
x350	v4.50.05	v 1.11 (Ultra160)	d2.10 - v4.14 (AMD) Manual update only	v1.2	v1.2	N/A	v8.19.06
x370	v4.50.05 AUTO	v 1.11 (Ultra160)	N/A	v1.2	v1.2	N/A	v3.26.39

## Windows 2000

### Notes:

- The letter 'v' preceding a number designates a version. The letter 'd' preceding a number designates the diskette version available on the web. The letters 'd' and 'v' together indicate that the diskette and version numbers are the same.
- In the on-board Ethernet Controller column, '(I)' denotes an Intel chip set, and '(AMD)' denotes an AMD chip set.

System	Serve-RAID 4L,4M	Onboard SCSI Controller	Onboard Ethernet Controller	Onboard ASM Controller	ASM PCI Adapter	Remote Service Processor	Onboard Video Controller
x200	v4.50.05	N/A	d4.00-v5.00.67.000(I)	N/A	N/A	N/A	v8.19.11
x220	v4.50.05	N/A	d4.00-v5.00.67.000 (I)	v1.2	v1.2	v1.2	v8.19.06
x230	v4.50.05	N/A	v4.23 (AMD) Manual update only	N/A	N/A	N/A	N/A
x240	v4.50.05	N/A	v4.23 (AMD) Manual update only	d1.2 Manual update only	d1.2 Manual update only	d1.2 Manual update only	N/A
x250	v4.50.05	N/A	d4.23- v4.23 (AMD) Manual update only	d1.2 Manual update only	d1.2 Manual update only	N/A	N/A
x330	v4.50.05	N/A	d4.00-v5.00.67.000(I)	d1.2 Manual update only	d1.2 Manual update only	N/A	N/A
x340	v4.50.05	N/A	v4.23- v4.23 (AMD) Manual update only	d1.2 Manual update only	d1.2 Manual update only	N/A	N/A
x350	v4.50.05	N/A	d4.23- v4.23 (AMD) Manual update only	d1.2 Manual update only	d1.2 Manual update only	N/A	N/A
x370	v4.50.05	N/A	N/A	d1.2 Manual update only	d1.2 Manual update only	N/A	N/A



## Firmware updates

UpdateXpress provides the following firmware updates. The firmware updates can be applied regardless of the operating system installed on your server.

### System firmware updates

System	HF microcode	ServeRAID 4L,4M	BIOS	Diags	ASM controller	ASM PCI	Remote Systems Management
x200	**	vd4.50	v28A	N/A	N/A	v5/60	N/A
x220	**	vd4.50	v12A/ d1.03	v7/ d1.01	N/A	N/A	v16/16
x230	**	vd4.50	v37A/ d7.00	v21/ d2.01	v4/14A/ d1.14	v5/60	N/A
x240	**	vd4.50	v54A/ d1.14	v63/ d3.02	v4/23A/ d2.16	v5/60	N/A
x250	**	vd4.50	v26A/ d1.05A	v40/ d2.02	v5/23A/ d1.24	v5/60	N/A
x330	**	vd4.50	v20A/ d1.02	v12/ d1.00	v4/14A/ d1.02	v5/60	N/A
x340	**	vd4.50	v37A/ d7.00	v21/ d2.01	v4/15A/ d1.14	v5/60	N/A
x350	**	vd4.50	v18A/ d1.05	v20/ d2.06	v5/16A/ d1.13	v5/60	N/A
x370	**	vd4.50	v33A/ d1.06	v23/ d2.03	N/A	v4/28A	N/A

#### Notes:

- For the Advanced Systems Management (ASM) controller and ASM adapters, the version shown is a combination of level/build ID on the UpdateXpress CD. Build IDs change more frequently than levels, and UpdateXpress performs only level checking. Only the level will be displayed by UpdateXpress. The user should update this firmware when the versions display as equal.
- Only ServeRAID-4L and -4M are supported by UpdateXpress. On a system with a combination of other of ServeRAID controllers ( for example, 3L, 3H, or 4H), no updates will be made to the ServeRAID subsystem.
- The BIOS flash utility requires a system restart immediately after updating the system BIOS. UpdateXpress automatically restarts the system and the original firmware versions screen displays. The BIOS is then updated and is equal to the version on the CD, so this item will not be automatically checked by UpdateXpress.

### Tape drive firmware updates

UpdateXpress provides the following certified tape drive updates.

Server	Certified tape drive firmware updates
x200	Storage Tape IBM 09N4041 12/24GB DDS/3 4mm Internal Tape Drive
x200	Storage Tape IBM 20L0549 10/20GB Internal IDE Tape Drive
x220	Storage Tape IBM 09N4042 10/20GB NS20 Internal SCSI Tape Drive(TR5)

Server	Certified tape drive firmware updates
x230/x340	Storage Tape IBM 01K1320 20/40GB DLT SCSI Internal Tape Drive
x240/x330	Storage Tape IBM 01K1325 20/40GB 8mm Internal SCSI Tape Drive
x250	Storage Tape IBM 00N8016 100/200GB LTO Tape Drive
x330/x240	Storage Tape IBM 01K1325 20/40GB 8mm Internal SCSI Tape Drive
x340/x230	Storage Tape IBM 01K1325 20/40GB DLT SCSI Internal Tape Drive
x350	Storage Tape IBM 00N7990 40/80GB DLT Internal Tape Drive
x370	Storage Tape IM 00N7991 20/40GB DDS/4 4mm Internal Tape Drive

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## Additional information

There are additional considerations for specific device driver and firmware support and upgrades.

### ServeRAID support for 4L and 4M - version 4.50

- Servers with only ServeRAID-4L, -4M, or both installed, are supported automatically by UpdateXpress. The device driver and firmware/BIOS will be updated to ServeRAID version 4.50.
- On systems that have one or more other ServeRAID, no updates will be performed to the ServeRAID subsystem.
- The UpdateXpress CD provides installation procedures, diskette images, and code from the IBM ServeRAID Support CD version 4.5 for all the operating systems supported by ServeRAID. These operating systems are:
  - Windows NT and 2000
  - NetWare
  - UnixWare
  - Linux
  - SCO OpenServer
  - OS/2
- To manually update all ServeRAID software (device driver, firmware and BIOS, ASM, and clustering) refer to the README file on the UpdateXpress CD at: d:\SRV45\readme.txt.
- After UpdateXpress updates the device drivers, firmware, and BIOS, you must manually update other ServeRAID software. These software offerings include:
  - IBM ServeRaid Command Line Program diskette version 4.50
  - IBM ServeRAID Manager version 4.50
  - IBM ServeRAID Cluster solution version 4.50

**Note:** The IBM ServeRAID-4M Ultra160 SCSI controller and the IBM ServeRAID-4L Ultra160 SCSI controller do not support IBM OS/2 on the xSeries 240 server.

### HF Microcode support

UpdateXpress will install hard disk drive firmware updates to levels equivalent to that provided by the IBM Hard Disk Drive Update Program Version 1.11 (released to the web on 2/14/2001).

## Other tape drives

IBM Tape Drive Model 09N4042 10/20GB NS20 Internal SCSI Tape (TR5) is not one of the certified tape drives identified in the table in “Tape drive firmware updates” on page 3. It may work in some situations: specifically, on a system where a ServeRAID update is not being attempted at the same time.



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## Chapter 2. Performing the updates

Insert the CD into your server to begin the update process.

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### Updating the device drivers

All installed and active device drivers that are supported by UpdateXpress will display when UpdateXpress starts. To start the device driver update procedure, click Continue. UpdateXpress compares the level of the device driver on the server to the level on the CD:

- If the device driver is downlevel from the version on the UpdateXpress CD, the device driver is selected for update.
- If the device driver is later than the version on the UpdateXpress CD, the device driver is greyed-out and the item is not selectable.
- If the device driver is equal to the version on the UpdateXpress CD, the device driver is selectable for update.

The program displays a progress window, so that you will know that you have completed all the device driver updates. UpdateXpress prompts you to restart the server with the UpdateXpress CD in the CD drive to begin the firmware update procedure.

**Note:** You must have the CD drive in the drive startup sequence.

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### Updating the firmware

There are two ways to perform firmware updates:

- Automatic unattended
- Manual

### Automatic unattended firmware updates

When the UpdateXpress CD starts, the firmware version window displays. This window has a 60-second countdown timer. You can view the current system firmware versions and compare these to the firmware versions available on the UpdateXpress CD.

UpdateXpress determines the level of the firmware on the server:

- If the firmware is downlevel from the version on the UpdateXpress CD, the firmware is selected for update.
- If the firmware is later than the version on the UpdateXpress CD, the firmware is greyed-out and the item is not selectable.
- If the firmware is equal to the version on the UpdateXpress CD, the firmware is selectable for update.

If you do nothing, the firmware update procedure begins after the timer reaches zero. If you want to unselect any items before the update process begins, see "Manual firmware updates" on page 8.

**Note:** Hard disk and tape microcode are always selected for update, regardless of the version, because the version numbers are not available for examination. The UpdateXpress program displays **See Help** in place of the version number. If you do not think you should update the microcode with the version from the CD, you can click **Stop Timer** and unselect the hard disk or tape microcode.

If you choose to allow the microcode update, the UpdateXpress program displays **Equal** as the version after the update completes.

The update utilities for each firmware component perform the firmware updates.

Once updating is complete, UpdateXpress restarts and the program shows you a summary of the new levels of firmware installed on you system.

## Manual firmware updates

To stop the automatic process click, **Stop Timer**. Then, select the firmware to update by selecting or deselecting the firmware items. Once you have made your selections, click **Continue** to start the update procedure.

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## Special conditions

There are special conditions for some servers or firmware.

### POST/BIOS flash on IBM Netfny 6000R/ xSeries 350

The IBM Netfny 6000R/ xSeries 350 systems have a POST/BIOS firmware flash anomaly that reboots the system. This is something that UpdateXpress cannot correct as it is a problem with the actual flash utility. Once the system's POST/BIOS firmware is updated, and the system is rebooted, the UpdateXpress firmware window (and consequently the countdown timer) will display. If any custom selections were made initially, you must reselect the desired options, or you can just allow UpdateXpress to continue, now that the POST/BIOS firmware has been updated.

### Advanced Systems Management (ASM) Adapter /Controller firmware

The UpdateXpress CD supplies the latest ASM firmware level available at the time the CD was developed. The ASM firmware has an internal BUILDID as well as a higher level version number for the firmware. Currently, the BUILDID of the ASM firmware in the system is not available for examination by UpdateXpress. When you select to install the same version of UpdateXpress ASM firmware over your current system ASM firmware "version", you will actually get the BUILDID as the version number.

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