



Intel® SR440BX Workstation Motherboard

OS Installation (Netware 5)

You may need to reinstall your operating system if:

- You purchased a server without buying the operating system.
- Tangent's default shipping configuration does not meet your administrative needs.
- The operating system becomes corrupted or has its integrity compromised.

NOTE

This chapter details installation procedures for Netware 5. If your system is running Windows NT or Netware 4.11, please refer to the appropriate previous chapter for information in installing your operating system.

There are numerous ways to install Netware 5 on your system depending on the model ProServ you have and the components found in that particular system.

Use the following general procedure to install Netware 5 on your ProServ:

1. Depending on what ProServ model you have, refer to the appropriate section below.
2. Each section contains a list of operating system installation procedures that may vary depending on your system's internal configuration. Find the appropriate installation procedure for your system, and go to that procedure.
3. Before beginning, read each procedure thoroughly in order to fully understand it.
4. Assemble all required materials.
5. Install the operating system following the selected procedure.

WARNING
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BE SURE TO DOUBLE-CHECK YOUR ProServ MODEL AND ITS EXACT COMPONENTS. ATTEMPTING TO INSTALL THE OPERATING SYSTEM USING THE WRONG PROCEDURE COULD POTENTIALLY LOCK UP YOUR SYSTEM AND CAUSE DATA LOSS.

ProServ 900

To Be Developed

ProServ 1200/1500

The ProServ 1200 and 1500 share a common motherboard. Thus, they use identical installation procedures for any given system configuration. There are three possible procedures for installing Netware 5 on your ProServ 1200 or 1500:

- Procedure 1200-NW5-1: AMI 438 RAID as primary controller, SCSI or IDE CD-ROM
- Procedure 1200-NW5-2: AMI 762 RAID as primary controller, IDE CD-ROM
- Procedure 1200-NW5-3: onboard Symbios 875 as primary controller, SCSI or IDE CD-ROM

Procedure 1200-NW5-1 (AMI 438, SCSI or IDE CD-ROM)

Use this procedure if you have a ProServ 1200 or 1500 running Netware 5 that uses the AMI 438 RAID card as the primary RAID controller and that has a SCSI or IDE CD-ROM.

Items Required

- Tangent Computer CERT-OS
- Netware 5.0 Installation CD
- Netware 5.0 License

Installation Process

1. Insert the Netware 5 installation CD into the CD-ROM and reboot your system.
2. Netware 5 Setup will boot from the CD. Proceed with the Custom Install. Netware Setup automatically detects drivers for the onboard controllers and offers you two possible driver selections for the AMI 438. Select the MEGA4_XX.HAM driver.

WARNING
!

BE SURE TO SELECT ONLY THE ABOVE LISTED DRIVER. SELECTING THE WRONG DRIVER MAY CAUSE YOUR SYSTEM TO LOCK UP.

3. Select the E100B.LAN driver for the PCI LAN Controller.
4. When the driver summary screen appears, select *Continue* from the Options menu.
5. Proceed with normal installation.

NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

Procedure 1200-NW5-2: (AMI 762, IDE CD-ROM)

Use this procedure if you have a ProServ 1200 or 1500 running Netware 5 that uses the AMI 762 RAID card as the primary RAID controller and that has an IDE CD-ROM.

Items Required

- Tangent Computer CERT-OS
- Netware 5.0 Installation CD
- Netware 5.0 License

Installation Process

NOTE

The following conditions must be met in order to use the AMI 762 RAID controller with the Intel N440BX motherboard:

- The card must be installed in PCI slot 3.

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- **Disable the SCSI ROM Scan option in the motherboard BIOS** (Advanced>PCI Configuration>Select PCI Device>Embedded SCSI Device>Options).
 - **Do not use the Symbios SCSI drivers for the operating system being loaded.**
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1. **Insert the Netware 5 installation CD into the CD-ROM and reboot your system.**
 2. **Netware 5 Setup will boot from the CD. Proceed with Custom Install. Setup automatically detects two possible drivers for the AMI 762. Select the MEGA4_XX.HAM driver only.**
 3. **Select the E100B.LAN driver for the PCI LAN Controller.**
 4. **When the driver summary screen appears, select Modify from the Options menu and press [ENTER]. Select Storage Adapters and press [ENTER]. The SYM8XXNW.HAM driver is listed twice. Highlight both listings and delete them by pressing [DEL].**
 5. **From the Additional Drive Option menu, select Return to driver summary and press [ENTER]. From the Options menu, select Continue and Press [ENTER].**
 6. **Proceed with normal operation.**
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NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

Procedure 1200-NW5-3 (Symbios 875, SCSI or IDE CD-ROM)

Use this procedure if you have a ProServ 1200 or 1500 running Netware 5 that uses the Symbios 875 RAID as the primary RAID controller and that has a SCSI or IDE CD-ROM.

Items Required:

- **Tangent Computer CERT-OS**
- **Netware 5.0 Installation CD**
- **Netware 5.0 License**

Installation Process

1. **Insert the Netware 5 installation CD into the CD-ROM and reboot your system.**
2. **Netware 5 Setup will boot from the CD. Proceed with Custom Install. Setup automatically detects storage devices.**
3. **Select the E100B.LAN driver for the PCI LAN Controller.**
4. **Proceed with normal installation.**

NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

ProServ 3000

There are four possible procedures for installing Netware 5 on your ProServ 1200 or 1500:

- Procedure 3000-NW5-1: AMI 438 RAID as primary controller, SCSI or IDE CD-ROM
- Procedure 3000-NW5-2: AMI 762 RAID as primary controller, IDE CD-ROM
- Procedure 3000-NW5-3: AMI 762 RAID as primary controller, SCSI CD-ROM
- Procedure 3000-NW5-4: onboard Symbios 896 SCSI as primary controller, SCSI or IDE CD-ROM

Procedure 3000-NW5-1 (AMI 438 RAID, SCSI or IDE CD-ROM)

Use this procedure if you have a ProServ 3000 running Netware 5 that uses the AMI 438 RAID card as the primary RAID controller and that has a SCSI or IDE CD-ROM.

Items Required

- Tangent Computer CERT-OS
- Netware 5.0 Installation CD
- Netware 5.0 License

Installation Process

1. Insert the Netware 5 installation CD into the CD-ROM and reboot your system.
2. Netware 5 Setup will boot from the CD. Proceed with the Custom Install. Netware Setup automatically detects drivers for the onboard controllers and offers you two possible drivers select for the AMI 438. Select the MEGA4_XX.HAM driver.
3. Select the appropriate driver for the PCI LAN Controller.
4. When the driver summary screen appears, select `Continue` from the Options menu.
5. Proceed with normal installation.

NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

Procedure 3000-NW5-2 (AMI 762 RAID, IDE CD-ROM)

Use this procedure if you have a ProServ 3000 running Netware 5 that uses the AMI 762 RAID card as the primary RAID controller and that has an IDE CD-ROM.

Items Required

- Tangent Computer CERT-OS
- Netware 5.0 Installation CD
- Netware 5.0 License

Installation Process

The following conditions must be met in order to use the AMI 762 RAID controller with the Intel SC450NX motherboard:

NOTE

- The card must be installed in PCI slot 3 (the slot number is listed on the board).
- Disable the SCSI ROM Scan option in the motherboard BIOS (Advanced>PCI Configuration>Select PCI Device>Embedded SCSI Device>Options)
- Do not use the Symbios 896 (high performance) SCSI drivers for the operating system being loaded.
- The AMI 762 firmware must be version F205 or above.

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1. Insert the Netware 5 installation CD into the CD-ROM and reboot your system.
 2. Netware 5 Setup will boot from the CD. Proceed with Custom Install. Setup automatically detects two possible drivers for the AMI 762. Select the MEGA4_XX.HAM driver only.
 3. Select the correct driver for the PCI LAN Controller.
 4. When the driver summary screen appears, select `Modify` from the Options menu and press [ENTER]. Select `Storage Adapters` and press [ENTER]. The SYMHINW.HAM driver is listed twice. Highlight and delete both listings by pressing [DEL].
 5. From the Additional Drive Option menu, select `Return to driver summary` and press [ENTER]. From the Options menu, select `Continue and Press` [ENTER].
 6. Proceed with normal operation.

NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

Procedure 3000-NW5-3 (AMI 762 RAID, SCSI CD-ROM)

Use this procedure if you have a ProServ 3000 running Netware 5 that uses the AMI 762 RAID card as the primary RAID controller and that has a SCSI CD-ROM.

Items Required

- Tangent Computer CERT-OS
- Netware 5 Installation CD
- Netware 5 License
- MS-DOS bootable partition.
- MSCDEX.EXE file for respective DOS version
- Symbios DOS utilities to access the CD-ROM drive in DOS

NOTE

The following conditions must be met in order to use the AMI 762 RAID controller with the Intel SC450NX motherboard:

- The card must be installed in PCI slot 3 (the slot number is listed on the board).
- Disable the SCSI ROM Scan option in the motherboard BIOS (Advanced>PCI Configuration>Select PCI Device>Embedded SCSI Device>Options)
- Do not use the Symbios 896 (high performance) SCSI drivers for the operating system being loaded.
- The AMI 762 firmware must be version F205 or above.

Installation Process

1. Create a DOS bootable partition. Tangent Computer recommends 50 to 100MB.
2. Install the Symbios DOS utility to access your CD-ROM in DOS.
3. Using a DOS editor of your choice, add the lines `Buffers=15` and `Files=15` to your `CONFIG.SYS` file.

WARNING
!

DO NOT INCLUDE HIMEM.SYS OR ANY OTHER TSR SUCH AS MOUSE DRIVERS, MEMORY MANAGERS, ETC. IN YOUR CONFIG.SYS AND AUTOEXEC.BAT FILES. FAILURE TO REMOVE ALL SUCH ITEMS WILL CAUSE NETWARE 5 TO ABORT INSTALLATION AND POSSIBLY LOCK YOUR SYSTEM.

4. Reboot the system and verify that you can access the CD-ROM drive. If you cannot access the drive, reinstall the drivers.
5. Insert Netware 5 CD into the CD-ROM and type `<drive>:install [ENTER]`, where `<drive>` is the drive letter assigned to your CD-ROM drive (typically D).

6. Proceed with the installation. When prompted, select `Custom Install`. Setup will automatically detect and select two drivers for the AMI 762. Select the `MEGA4_XX.HAM` driver only.
7. Press `[ENTER]` when prompted to select a driver for PCI LAN Controller.
8. Press `[ENTER]` for a list of drivers, then select the corresponding driver and press `[ENTER]`.
9. When a driver summary screen appears, select `Modify` from the Options Menu and press `[ENTER]`. Select `Storage Adapters` and press `[ENTER]`. The `SYMHINW.HAM` driver is listed twice. Highlight both listings and delete them by pressing `[DEL]`.
10. Install the `SCSICD.CDM` driver.
11. Select `Return to driver summary` from the `Additional Drive Option` menu and press `[ENTER]`. Select `Continue` from the `Options` menu and press `[ENTER]`.
12. If the message `Disk Required - Insert disk or Cd-ROM Netware 5 Installation CD`, or specify a different path to the media appears then continue with Step 13, otherwise continue with normal installation.
13. In the section displaying the `Media Path` field, change the `NETWARE 5:` field to read `File:///d:` then select `Ok` and Netware will continue copying files and reboot when installation is complete.
14. Load `NWCONIG` when the system returns to the console prompt.
15. Select `Drive Option>Configure Disk>Storage Device Drivers`. Select `Select an additional driver`, select only the `SYM8XXNW.HAM` driver, and select `Select/Modify driver parameter`.
16. Enter `10001` in the `Slot` field. Press `[F10]` to save the parameter. Select `No` when prompted to add additional drivers.
17. Exit `NWCONFIG.NLM` and reboot the system to allow the modifications to become effective.
18. Proceed with normal operation.

NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

Procedure 3000-NW5-4 (Symbios 896 SCSI, SCSI or IDE CD-ROM)

Use this procedure if you have a ProServ 3000 running Netware 5 that uses the Symbios 896 as the primary controller and that has a SCSI or IDE CD-ROM.

Items Required:

- Tangent Computer CERT-OS
- Netware 5.0 Installation CD
- Netware 5.0 License

Installation Process

1. **Insert the Netware 5 installation CD into the CD-ROM and reboot your system.**
2. **Netware 5 Setup will boot from the CD. Proceed with Custom Install. Setup automatically detects storage devices.**
3. **Select the correct driver for the PCI LAN Controller.**
4. **Proceed with normal installation.**

NOTE

Retrieve NIC Drivers from the Tangent CD, Server Board CD, Tangent, or the Network Interface Card manufacturer's Web site. You may update NIC drivers after installing Netware.

ProServ 5000

To Be Developed