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Online Documentation: To access the online documentation for this and other Novell products, and to get updates, see www.novell.com/documentation.

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About This Guide

What Are Quick Starts?

Quick Starts are NetWare[®] installation procedures designed for experienced users who want to get started installing NetWare right away.

Quick Start procedures do not contain the detailed explanations found in the printed installation manual or in the online documentation.

Quick Starts usually provide the default or the simplest installation path.

Who Should Use Quick Starts?

If this is your first experience installing NetWare, we recommend that you use the printed installation manual and the online documentation, where you will find background and planning information and detailed explanations of each installation step.

If you are familiar with NetWare and with general networking terms and concepts, using the NetWare Quick Starts may be the fastest way to install NetWare 5.1 and enable many of its key features.

For More Information

For more detailed information about installing and using NetWare, refer to these sources:

- For server installation and upgrade procedures, see the printed *NetWare 5.1 Installation Guide* manual.
- For all other information, including background and conceptual information, network management, and general reference material, see the online documentation on the NetWare documentation CD.

Use NetWare Deployment Manager

IMPORTANT: Make sure that you complete the Network Preparation section of NetWare[®] Deployment Manager before you install a NetWare 5.1 server into an existing network.

NetWare Deployment Manager is an administration utility that helps you:

- Prepare an existing network for NetWare 5.1
- · Understand installation and upgrade options
- · Complete post-installation tasks

NetWare Deployment Manager (NWDEPLOY.EXE) is located on the NetWare 5.1 Operating System CD.

Prerequisites

- □ An existing network with NetWare 3, NetWare 4, or NetWare 5 servers.
- □ Supervisor rights to the [Root] of the NDS[®] tree.

System Requirements

□ A Windows* 95/98 or Windows NT* workstation running the latest version of Novell[®] Client[™] software.

Software and Other Requirements

□ NetWare 5.1 Operating System CD.

Running NetWare Deployment Manager

- **1** From a Windows workstation, log in as a user with Supervisor rights to the [Root] of the NDS tree.
- 2 Insert the NetWare 5.1 Operating System CD.
- **3** Run NWDEPLOY.EXE.
- 4 Accept the License Agreement.
- **5** Double-click an icon to open a section.

Network Preparation

Before installing or upgrading to NetWare 5.1 on an existing network, you must complete the following steps in the Network Preparation section:

1 Double-click the icon to open the NetWork Preparation section.

NOTE: Double-click an icon to read a topic or launch a program.

- 2 Open and read Overview.
- 3 Read and complete Step 1: Back Up Data.
- 4 Launch and follow the on-screen instructions for Step 2: View and Update NDS Versions.
- 5 If you will be installing NDS 8, launch and follow the on-screen instructions for Step 3: Prepare for NDS 8.
- 6 Open Step 4: Novell Licensing Services.
- 7 Open and read About Novell Licensing Services.
- **8** Launch and follow the on-screen instructions for Viewing and Updating Novell Licensing Services.

Installation/Upgrade Options

Several options are available for installing or upgrading to NetWare 5.1. To help you decide which option is best for you, read each topic carefully.

NOTE: Double-click an icon to open and read a topic.

Post-Installation Tasks

After installing a NetWare 5.1 server, you can complete the following:

1 Double-click the icon to open the Post-Installation Tasks section.

NOTE: Double-click an icon to read a topic or launch a program.

- 2 Launch Step 1: Install NetWare 5.1 Products to install a NetWare product after server installation.
- **3** Check the status of the network by reading and completing Step 2: Use DSREPAIR to Check NDS and Schema Status.

Install a NetWare 5.1 Server

NOTE: Complete instructions are available in the printed *NetWare 5.1 Installation Guide*, on the NetWare 5.1 Documentation CD, and on the Novell Documentation Web site at www.novell.com/documentation.

Prerequisites

- □ Read the README.TXT file.
- □ Plan your NDS[®] tree.
- □ Complete the steps in the Network Preparation section of the NetWare[®] Deployment Manager utility. (NWDEPLOY.EXE is located on the NetWare 5.1 Operating System CD.)

System Requirements

- □ A server-class PC with a Pentium* II or higher processor.
- □ VGA or higher resolution display adapter (SVGA recommended).
- □ A DOS partition of at least 50 MB with 35 MB of available space.
- □ Minimum disk space requirements outside the DOS partition:
 - NetWare products plus WebSphere* Application Server for NetWare—1.3 GB for volume SYS
- □ Minimum memory requirements:
 - Standard NetWare products—128 MB
 - NetWare products plus WebSphere Application Server for NetWare—256 MB (512 MB recommended)
 - All products including Oracle8*—512 MB

- □ One or more network boards.
- □ A PS/2* or serial mouse (recommended).
- A CD drive. Bootable CD drives must support the El Torito specification.

The system requirements listed above are minimum requirements. You can optimize the server performance by increasing the amount of server memory and disk space and the processor speed.

Software Requirements

□ If this is the *first* NetWare 5.1 server on the network, you must:

 Make sure that this server will be a reliable, accessible, and continuing part of your network.

NOTE: The first NetWare 5.1 server will automatically create and physically store the Organizational Certificate Authority (CA) object for the entire NDS tree. The Organizational CA object enables secure data transmissions and is required for Web-related products such as NetWare Web Manager and NetWare Enterprise Web Server.

IMPORTANT: Once the Organizational CA object is created, you should not delete or move it.

- Have Supervisor rights at the [Root] of the NDS tree.
- □ If this is *not* the first NetWare 5.1 server on the network, you must:
 - + Have Supervisor rights to the container where the server will be installed.
 - · Have Read rights to the Security container object for the NDS tree.
- □ NetWare 5.1 Operating System CD.
- □ NetWare 5 License/Cryptography diskette.
- DOS 3.3 or later. (Novell[®] DOS 7 is included on the NetWare 5 License diskette.)

NOTE: Do not use the version of DOS that ships with Windows* 95, Windows 98, or Windows NT* operating systems.

DOS CD drivers.

- □ Client connection utilities (optional, for installing from a network):
 - Novell Client[™] for DOS and Windows 3.1*x* (optional, for installing from a NetWare server running IPX[™]).
 - IP Server Connection Utility (optional, for installing from a NetWare server running IP only). For instructions, see PRODUCTS\SERVERINST\IPCONN.TXT on the Novell Client CD.
- □ IP address and domain names (optional, for connecting to the Internet):
 - An IP address
 - An IP address of a Domain Name Server
 - The name of your domain

NOTE: For IP addresses and domain names, contact your system administrator and Internet service provider (ISP).

Network board and storage device properties such as the interrupt and port address. For more information, contact your hardware manufacturer.

Network Requirements

Before adding a NetWare 5.1 server to an existing NetWare network, you must complete the following requirements by running NetWare Deployment Manager from a Windows workstation.

NOTE: NetWare Deployment Manager (NWDEPLOY.EXE) is located on the NetWare 5.1 Operating System CD.

- Back up NDS and server data.
- □ Update the version of NDS running on every server on the network.
- Prepare the network for NDS 8 (required only if installing NetWare 5.1 with NDS 8).
- □ Install or update Novell Licensing Services.

Set Up Server

- **1** Back up any desired data to another computer or off-line storage media.
- **2** Boot the computer with DOS 3.3 or later. (DOS 7 is included on the NetWare 5.1 License/Cryptography diskette.)

NOTE: Do not use the version of DOS that ships with Windows 95, Windows 98, or Windows NT operating systems.

- **3** Use **FDISK** to create a 50 MB DOS partition and make it active.
- **4** Use **FORMAT** /**s** to format and transfer system files to the boot partition.
- **5** If installing from CD, install the software necessary to access the CD-ROM drive.
- 6 If installing from the network, install the appropriate client connection utility to access the network.
- 7 Make sure that the CONFIG.SYS file contains the following commands: FILES=40 and BUFFERS=30.

Install NetWare 5.1

- **1** Insert the NetWare Operating System CD or log in to the server containing the installation files.
- 2 At the CD drive or network prompt, enter **INSTALL**.
- **3** Select the type of installation and regional settings.
- 4 Select server settings such as NDS version and Server ID number.
- **5** Select and set the properties for a platform support module (if required), a PCI Hot Plug module (if required), and a storage adapter.
- 6 Select and set properties for a storage device and network board.
- 7 Create a NetWare partition and volume SYS.
- 8 Name the NetWare 5.1 server.
- **9** Install the NetWare server file system.
- **10** Install and configure networking protocols.
- **11** Set up Domain Name Service.
- **12** Set the server time zone.

- **13** Set up NDS, the Novell directory technology.
- **14** License the NetWare server.
- **15** Select and install other networking products.
- **16** Install Novell Certificate Server to create an Organizational Certificate Authority (CA) object for the NDS tree.
- **17** Customize the installation by clicking Customize on the Product Summary screen.
- **18** After the file copy has completed, click Finish to reboot the server.

Upgrade to NetWare 5.1

NOTE: Complete instructions are available in the printed *NetWare 5.1 Installation Guide*, on the NetWare 5.1 Documentation CD, and on the Novell Documentation Web site at www.novell.com/documentation.

Prerequisites

- □ Read the README.TXT file.
- □ Plan your NDS[®] tree.
- Complete the steps in the Network Preparation section of the NetWare[®] Deployment Manager utility. (NWDEPLOY.EXE is located on the NetWare 5.1 Operating System CD.)

System Requirements

- □ A server-class PC with a Pentium* II or higher processor.
- □ VGA or higher resolution display adapter (SVGA recommended).
- □ 35 MB of available disk space on the DOS partition.
- □ Minimum disk space requirements on volume SYS:
 - NetWare products plus WebSphere* Application Server for NetWare—1.3 GB
- □ Minimum RAM requirements:
 - Standard NetWare products—128 MB
 - NetWare products plus WebSphere Application Server for NetWare—256 MB (512 MB recommended)
 - All products including Oracle8*—512 MB
- One or more network boards.
- □ A PS/2* or serial mouse (recommended).
- A CD drive. Bootable CD drives must support the El Torito specification.

The system requirements listed above are minimum requirements. You can optimize the server performance by increasing the amount of server memory and disk space and the processor speed.

Software Requirements

- □ The server to be upgraded must be running NetWare 3.1*x*, NetWare 4.1*x*, or NetWare 5.1.
- □ If this is will be the *first* NetWare 5.1 server on the network, you must:
 - Make sure that this server will be a reliable, accessible, and continuing part of your network.

NOTE: The first NetWare 5.1 server will automatically create and physically store the Organizational Certificate Authority (CA) object for the entire NDS tree. The Organizational CA object enables secure data transmissions and is required for Web-related products such as NetWare Web Manager and NetWare Enterprise Web Server.

IMPORTANT: Once the Organizational CA object is created, you should not delete or move it.

- Have Supervisor rights at the [Root] of the NDS tree.
- □ If this will not be the first NetWare 5.1 server on the network, you must:
 - Have Supervisor rights to the container where the server will be installed.
 - + Have Read rights to the Security container object for the NDS tree.
- □ NetWare 5.1 Operating System CD.
- □ NetWare 5 License/Cryptography diskette.
- DOS 3.3 or later installed on the DOS partition.

NOTE: Do not use the version of DOS that ships with Windows* 95, Windows 98, or Windows NT* operating systems. Novell[®] DOS 7 is included on the NetWare 5 License/Cryptography diskette.

DOS CD drivers.

- □ Client connection utilities (optional, for installing from a network):
 - Novell Client[™] for DOS and Windows 3.1*x* (optional, for installing from a NetWare server running IPX[™]).
 - IP Server Connection Utility (optional, for installing from a NetWare server running IP only). For instructions, see PRODUCTS\SERVERINST\IPCONN.TXT on the Novell Client CD.
- □ IP address and domain names (optional, for connecting to the Internet):
 - An IP address
 - An IP address of a Domain Name Server
 - The name of your domain

NOTE: For IP addresses and domain names, contact your system administrator and Internet service provider (ISP).

Network board and storage device properties such as the interrupt and port address. For more information, contact your hardware manufacturer.

Network Requirements

Before upgrading a server on an existing network to NetWare 5.1, you must complete the following requirements by running NetWare Deployment Manager from a Windows workstation.

NOTE: NetWare Deployment Manager (NWDEPLOY.EXE) is located on the NetWare 5.1 Operating System CD.)

- Back up NDS and server data.
- □ Update the version of NDS running on every server on the network.
- □ Prepare the network for NDS 8 (required only if installing NetWare 5.1 with NDS 8).
- □ Install or update Novell Licensing Services.

Prepare the Existing NetWare Server

- 1 Back up any desired data to another computer or off-line storage media.
- 2 Boot the server with DOS 3.3 or later.

NOTE: Do not start the server.

- **3** If upgrading from CD, install the software necessary to access the CD drive on the server.
- **4** If upgrading from the network, install Novell Client for DOS and WIndows 3.1*x* to access the network.
- **5** Make sure that the CONFIG.SYS file contains the following commands: **FILES=40** and **BUFFERS=30**.

Install NetWare 5.1

- 1 Insert the NetWare 5.1 Operating System CD or log in to the server containing the installation files.
- 2 At the CD drive or network prompt, enter INSTALL.
- **3** From the Welcome screen, select Upgrade.

NOTE: Depending on the version of the NetWare server that you are upgrading, you may not be prompted to perform all of the following steps.

- 4 Select server settings such as NDS version and Server ID number.
- **5** Select and set the properties for a platform support module (if required), a PCI Hot Plug module (if required), and a storage adapter.
- 6 Select and set properties for a storage device and network board.
- 7 Create a NetWare partition and volume SYS.
- 8 Name the NetWare 5.1 server.
- 9 Install the NetWare server file system.
- **10** Install and configure networking protocols.
- **11** Set up Domain Name Services.
- **12** Set the server time zone.
- **13** Set up NDS, the Novell directory technology.

- **14** License the NetWare server.
- **15** Select and install other networking products.
- **16** Install Novell Certificate Server to create an Organizational Certificate Authority (CA) object for the NDS tree.
- **17** Customize the installation by clicking Customize on the Product Summary screen.
- **18** After the file copy has completed, click Finish to reboot the server.

Use Novell Upgrade Wizard

Novell[®] Upgrade Wizard helps you copy the files and objects from an existing server running NetWare[®] to another server running a later version of NetWare.

NOTE: Complete instructions are available in the printed *NetWare 5.1 Installation Guide*, on the NetWare 5.1 Documentation CD, and on the Novell Documentation Web site at www.novell.com/documentation.

Prerequisites

- □ Back up NDS[®] and all data.
- If migrating data from NetWare 4.x to NetWare 5.1, prepare your existing network for NetWare 5.1 by running NetWare Deployment Manager (NWDEPLOY.EXE), located at the root of the NetWare 5.1 Operating System CD. Complete all the steps in the Network Preparation section.
- If migrating data from NetWare 4.x to NetWare 5.1, make sure that no other products besides Storage Management Services[™] (SMS[™]), LDAP, Novell Certificate Server, and NetWare Management Portal[™] are installed on the NetWare 5.1 destination server.

System Requirements

- □ NetWare 5.1 installed on the destination server.
- □ A client connection to the source and destination servers using the IPXTM protocol.
- □ The source and destination servers running the IPX protocol.
- □ The source server, destination server, and client workstation all running on a common LAN segment (IPX external network number).

If it is impossible for the source server, destination server, and client workstation to be on a common LAN segment, disable SAP filtering between the source and destination servers. Supervisor or Supervisor-equivalent rights, including Console Operator rights, on both the source and destination servers.

Software Requirements

- □ A Windows* 95/98 or Windows NT* workstation with 50 MB of available disk space.
 - The Windows 95/98 workstation must be running Novell Client[™] for Windows 95/98 version 3.1 or later with Support Pack 1 or later.
 - The Windows NT workstation must be running Novell Client for Windows 95/98 version 4.6 or later with Support Pack 1 or later.

Netware 4 Source Server Requirements

- Verify that the NetWare 4 source server is running namespace support for Windows 95/98 and Windows NT on all volumes to be copied.
- □ Update the NetWare 4 software.
 - NetWare 4.10 requires 410PT8B.EXE, DS410N.EXE, LIBUPI.EXE, STRTL7.EXE, and SMSUPG.EXE. Copy these files to the SYS:SYSTEM directory.
 - NetWare 4.11 and NetWare 4.2 require NetWare 4 Support Pack 6a (IW4SP6A.EXE) or later.
- □ The NetWare 4 source server must have a Read/Write or Master NDS replica prior to migrating if the destination server is the first NetWare 5.1 server in the NDS partition.
- □ For a NetWare 4 source server that is a BorderManager[™] server: After the NDS migration, disconnect the source server from the network, restart it, and load NUW0.NLM at the NetWare 4 server console. Then follow the on-screen instructions.

Migrating Data from NetWare 3 Using Novell Upgrade Wizard

- 1 Insert the NetWare 5.1 Operating System CD into the CD drive of your Windows 95/98 or Windows NT workstation.
- 2 Launch Novell Upgrade Wizard (Products\upgrdwrd\UPGRDWRD.EXE).
- **3** Create a new project. This requires naming and saving the project and logging in to the source and destination trees.
- 4 Click-and-drag the NetWare 3 source server bindery and volume contents to the desired Organizational Unit or folder on the NetWare 5.1 destination server.
- 5 Click Verify to verify that the bindery and file system can be migrated as specified.
- 6 Resolve all critial errors.
- 7 Click Project > Migrate.
- 8 Review both the error and success log files.
- **9** Perform the post-migration procedures documented in the Novell Upgrade Wizard online documentation.

Migrating Data from NetWare 4 Using Novell Upgrade Wizard

- 1 Insert the NetWare 5.1 Operating System CD into the CD drive of your Windows 95/98 or Windows NT workstation.
- 2 Launch Novell Upgrade Wizard (Products\upgrdwrd\UPGRDWRD.EXE).
- **3** Create a new project. This requires naming and saving the project and logging into the source and destination trees.
- **4** Click Copy Volumes and select which NetWare 4 volumes you want to copy.
- **5** (Optional) Click Edit Configuration Files to modify any NetWare 5.1 .NCF files.
- 6 Click NDS Migration > Migrate NDS to confirm migration selection and resolve all critical errors. Warning errors can be resolved after NDS migration.
- **7** Click Continue NDS Migration and make sure that the destination server has restarted and that NDS is synchronized.
- 8 Review both the error and success log files.
- **9** Perform the post-migration procedures documented in the Novell Upgrade Wizard online documentation.

Install Novell Clients

NOTE: Complete instructions are available in the printed *NetWare 5.1 Installation Guide*, on the NetWare 5.1 Documentation CD, and on the Novell Documentation Web site at www.novell.com/documentation.

Prerequisites

- LONG.NAM installed on NetWare[®] servers for long filenames in Windows^{*} 95/98 and Windows NT^{*}
- Connection to a NetWare network
- Applicable server patches installed

Hardware Requirements

WINDOWS 95/98

- □ 486 processor or higher
- Minimum 28 MB free disk space
- Minimum 16 MB RAM

WINDOWS NT/2000

- Minimum hardware requirements of Windows NT 4.0 (Service Pack 3 or later) or Windows 2000
- Minimum 24 MB RAM

DOS AND WINDOWS 3.1X

- □ 386 processor or higher
- □ Minimum 15 MB free disk space
- Minimum 8 MB RAM
- □ A memory manager

Software Requirements

- Windows 95/98 with the Windows 95 or Windows 98 CD-ROM or the Windows .CAB files
- □ Windows NT 4.0 or Windows 2000
- □ A DOS operating system, such as:
 - Novell[®] DOS 7
 - MS-DOS* 5.x or 6.x
 - PC-DOS 5.*x*, 6.*x*, or 7.0
 - Windows 3.1x or Windows for Workgroups 3.11

Procedure

NOTE: Instructions explaining network installation methods are available in the online documentation on the Novell Web site. This documentation can be viewed at www.novell.com/documentation.

1 Insert the Novell CD.

If the Setup utility does not start automatically, run WINSETUP.EXE from the root of the CD.

- **2** Click a language for the installation.
- 3 Click the platform that you want to install.
- 4 Click Install Novell Client, then follow the on-screen instructions.

- **5** Do one of the following:
 - If you have a NetWare 4 network or you are using IPX[™] protocols, click Custom to configure Novell Client[™] for an IPX network, then select the IPX protocol.
 - If you have a NetWare 5 network and you are using IP protocols, accept the Typical installation.
 - To finish installing Novell Client, follow the on-screen instructions.

NOTE: Novell Client for DOS and Windows 3.1*x* is an IPX-only client. If you are connecting to a NetWare 5 IP-only server, the server must be running Compatibility Mode (SCMD.NLM), and the network must have a Migration Agent on a NetWare 5 server.

Software Incompatibilities

WINDOWS 95/98

- □ Microsoft* Client for NetWare networks
- Microsoft file and printer sharing for NetWare networks
- □ Microsoft Service for Novell Directory Services[®]
- □ Novell NetWare workstation shell 3.x (NETX)
- □ Novell NetWare workstation shell 4.0 and later (VLMTM)
- □ Novell IPX ODI[™] protocol

WINDOWS NT/2000

□ Incompatibilities listed in the Readme for this Novell Client (WINNT.TXT)