















Introduction

This document presents information for installing and configuring Microsoft® Service for NetWare® Directory Services (NDS) and describes the NetWare 4.1 features made available by using Service for NDS and the Microsoft Client for NetWare Networks.

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Microsoft Service for NDS: The Basics

The Microsoft Service for NDS and the Microsoft Client for NetWare Networks provide full client support for NetWare Directory Services. Service for NDS works with NetWare version 4.0x and 4.1 servers, in addition to NetWare 2.x, NetWare 3.x, and the NetWare-compatible Windows® 95 peer servers.

Service for NDS provides the following networking features to support computers running on NetWare 4.x networks:

- The ability to log in to NetWare Directory Services, which can be integrated with the Windows 95 logon. The login prompt for NDS contains the name of the user object and password. It also enables the user to set the NDS tree and workstation default name context.
- Full support of NetWare login script commands and variables, including those introduced in NetWare 4.0 and 4.1. Container, profile, and user object login scripts are all processed.
- The capability to run NDS-specific command-line utilities, such as NWADMIN, NETADMIN, MAP, CX, CAPTURE, and NLIST. Service for NDS also supports 16-bit NDS-aware programs written for MS-DOS® or Windows using documented calls from the NetWare Client SDK.
- The ability to use Network Neighborhood to browse the directory tree in addition to network objects such as attached servers. NDS resources currently visible in Network Neighborhood include objects of the following classes: server, volume, printer, print queue, and directory map.
- Connection management. You can map drives to volume objects, directory map objects, and directories and subdirectories, and you can capture printer ports the same way you do with current Windows 95 clients.
- Point and Print configuration of NDS printer and queue objects, and drag-and-drop printing to NDS queues. For more information, see [Setting Up Point and Print with Service for NDS](#)
- The ability to change NDS passwords or bindery server passwords by using the Passwords icon in Control Panel.
- The ability to use NDS locations for user profile and system policy information. For more information, see [New User Profile Location](#) and [New Location for System Policies](#).

Microsoft Service for NDS: The Issues

This section describes issues you should be aware of before installing Microsoft Service for NDS at your site.

- If your users need to run NetWare utilities (including NDS ones) with Windows 95, they will need access to, and the appropriate license to use, the following Novell-supplied files:

- NWCALLS.DLL
- NWLOCALE.DLL
- NWIPXSPX.DLL
- NWNED.DLL
- NWGDI.DLL
- NWPSRV.DLL

If you change passwords for a bindery server by using the Passwords icon in Control Panel, you will also need access to these files.

The Microsoft Service for NDS searches for these files in locations in the user's search path statement. If you put these files in a directory on a server, make sure the directory is in each of your users' search path statements. We recommend that you place these files in the SYS:PUBLIC directory of your users' preferred servers.

- Service for NDS for Microsoft Windows 95 provides support for VLM API calls documented in the *Novell NetWare Client SDK*.

Service for NDS provides compatibility with many NDS-aware programs using the 16-bit DLLs that shipped with NetWare versions 4.1 and earlier.

If problems occur with programs that make proprietary or undocumented API calls, then you should use a Novell®-supplied client.

- The Client for NetWare Networks does not support loading of terminate-and- stay-resident programs (TSRs) from login scripts, even with Service for NDS installed. If you need to load a TSR, you should load it in AUTOEXEC.BAT, if possible.
- When you map a drive letter or create a shortcut to directory map objects and volume objects, Windows 95 uses UNC name syntax to resolve the connection information. The UNC name syntax for an NDS name is `\\$NDS\objectname\pathname`. For example:

```
\\$NDS\MARKETING_SYS
```

```
\\$NDS\MARKETING_SYS\PUBLIC\TABLES\JANUARY
```

Your users may see this syntax in some dialog boxes, but they do not have to use this syntax. For more information about mapping drive letters to NDS object or about shortcuts using UNC name syntax for NDS names, see [Running Windows 95 with Service for NDS](#).

- The NWUSER application is not supported for use with the Microsoft Service for NDS. Your users will be able to use Windows 95 to perform most of the tasks they would have previously performed by using NWUSER.
- You can include the Microsoft Service for NDS in an installation of Windows 95 that will run over a network. However, to do this, you will need to run at least one NetWare 4.1 server in bindery mode. Also, users who are using a shared installation of Windows 95 with the Microsoft Service for NDS will not be able to choose between a bindery login and an NDS login. For more information, see [Server-Based Setup with Service for NDS](#).
- The NetWare 3.x versions of some utilities, such as SETPASS, do not work well with NetWare 4.x NDS trees. You should make sure that the 4.x versions of these utilities are available to your users.
- NetWare 4.01 servers on networks running the Microsoft Service for NDS only recognize distinguished names. For example, .ANNE.MARKETING would not be recognized, but .CN=ANNE.OU=MARKETING would be. If your network has servers running NetWare 4.01, make sure that your users do not specify typeless names when logging in, capturing a print queue, or otherwise specifying the context of objects.

Installing Microsoft Service for NDS

This section summarizes how to install Microsoft Service for NDS. You can install Microsoft Service for NDS over the Microsoft Client for NetWare Networks, VLM, or NETX; you can also install Microsoft Service for NDS on a computer that has no NetWare client support installed. If the Client for NetWare Networks is not already present on the computer, it will be installed automatically.

Note Before you begin, make sure your Windows 95 Setup disk is nearby. During the setup process, you are prompted for files located on it.

When you are prompted for your Windows 95 Setup disk, you have to specify the folder on the Setup disk that contains the Windows 95 cabinet files.



To install Microsoft Service for NDS

1. In Control Panel, double-click the Network icon, and then click Add.
2. Double-click Service.
3. Click Have Disk, and then type the drive name for the disk or network drive where the Service for NDS files are located.

Warning Do not click Cancel during the installation. If, for some reason, you decide that you do not want to install the Service for NDS, you must complete the installation process, and then remove the Service for NDS. For more information on removing the Service for NDS, see [Removing Microsoft Service for NDS](#).

The next time you start your computer, you are prompted to log in to the NDS tree. Make sure the dialog box refers to the correct context and tree.



To set the default context and tree

1. On the Enter Network Password dialog box, click Advanced.
2. Click Context, and type your context. The context is the location in the NDS tree where your user object is located.
3. Click Tree, and choose the name of your NDS tree from the list of available trees.

Note The setup process for the Microsoft Service for NDS adds a line to your AUTOEXEC.BAT file that runs a batch file called _NWND.S.BAT when you restart your computer after installing the Service for NDS. The batch file is only run one time, but the line is not removed from AUTOEXEC.BAT. You may want to delete this line from AUTOEXEC.BAT.

Microsoft Service for NetWare Directory Services

Installing Microsoft Service for NDS

Automated Installation of Windows 95 with Service for NDS

You can include Microsoft Service for NDS in automated installations that work with MSBATCH.INF. For more information about automated installations, see the *Microsoft Windows 95 Resource Kit*.

Setting up the Microsoft Service for NDS in an automatic installation of Windows 95 involves the following tasks:

1. Add the NDS service to the list of services available from MSBATCH.INF.
2. Include the Service for NDS in MSBATCH.INF.

To add the Service for NDS to the list of available services

1. Copy all the files for the Service for NDS to the directory where you will be storing your Windows 95 CAB files.
2. Create a file called CUSTOM.INF, and then copy the following lines and paste them into the file:

```
[version]
signature="$CHICAGO$"

[Custom_Precopy]
CopyFiles=PrecopyFiles

[DestinationDirs]
PrecopyFiles=2

[PrecopyFiles]
ndscli.inf

[SourceDisksNames]
1=Disc_1_Desc,"",0

[SourceDisksFiles]
ndscli.inf=1,,6000

[load_inf]
ndscli.inf
```

To include the Service for NDS in MSBATCH.INF

1. Copy the following two lines to the [Network] section in MSBATCH.INF.

```
Clients=NWREDIR
Services=NWREDIR4
```

Note You can also include entries for other networking clients and services on the above lines. Each entry should be separated by a comma. For example:

```
Clients=VREDIR,NWREDIR
```

2. If you want to set the preferred tree and default context in MSBATCH.INF, add the following lines:

```
[NWRedir4]
PreferredTree = <Tree>
NameContext = <MyNameContext>
```

3. Create an [Install] section in MSBATCH.INF, if it is not already there, and add the following line to it:

```
AddReg=NDSP.PADD
```

4. Create an [NDSP.PADD] section in MSBATCH.INF, if it is not already there, and then copy the following lines and paste them into the file:

```
[NDSP.PADD]
```

```
HKLM,"System\CurrentControlSet\Control\Print\Providers\Microsoft Print Provider for
NetWare",Name,, "ndspp.dll"
HKCR,CLSID\{E6EF27C0-7984-11CE-BA00-00AA001F3DC4},,, "Netware objects"
HKCR,CLSID\{E6EF27C0-7984-11CE-BA00-00AA001F3DC4}\InProcServer32,,,"ndspp.dll"
HKCR,CLSID\{E6EF27C0-7984-11CE-BA00-
00AA001F3DC4}\InProcServer32,ThreadingModel,, "Apartment"
HKCR,Printers\shellex\PropertySheetHandlers\CaptureConfig,,,"{971A71A0-449B-101B-
A9B9-4AF3EEDDA3E3}"
HKCR,CLSID\{971A71A0-449B-101B-A9B9-4AF3EEDDA3E3},,, "Capture Settings"
HKCR,CLSID\{971A71A0-449B-101B-A9B9-4AF3EEDDA3E3}\InProcServer32,,,"ndspp.dll"
HKCR,CLSID\{971A71A0-449B-101B-A9B9-
4AF3EEDDA3E3}\InProcServer32,ThreadingModel,, "Apartment"
```

5. Save and exit MSBATCH.INF. At the command prompt, type:

```
setup <path>\msbatch.inf
```

Note All of the above examples can be found in the NDSBATCH.TXT file, which is included with the files for Microsoft Service for NDS.

If you are doing an automated installation of Microsoft Service for NDS on computers that are running NETX or VLM, you should be aware of these issues:

- Setup does not automatically comment out the line in STARTNET.BAT or AUTOEXEC.BAT that loads NETX or VLM. This will not cause any problems, but you may want to delete the line or comment it out.
- If Windows was not already installed on the computers, an error message may appear during Windows 95 Setup saying that you should run the Novell Workstation Shell install program after Windows 95 Setup. Disregard this message.

Server-Based Setup with Service for NDS

You can include the Microsoft Service for NDS in server-based installations of Windows 95. For more information about server-based installations, see the *Microsoft Windows 95 Resource Kit*.

Setting up the Microsoft Service for NDS in a server-based installation of Windows 95 involves the following tasks:

1. Include the Microsoft Service for NDS with a shared installation of Windows 95.
2. Set up users' computers with the shared installation. During the installation, add the Microsoft Service for NDS

Note Server-based setup requires one NetWare 4.x server to run bindery emulation. It will not work from a NetWare 3.x server. Also, make sure that the server's bindery context contains each container that has user objects representing users who will be running the shared installation.

If your users run a shared installation of Windows 95 with the Microsoft Service for NDS, they cannot change their client software by using the Network icon in Control Panel. If some of your users need to run VLM, NETX, or the Microsoft Client for NetWare Networks without the Service for NDS, you need to set up a separate shared installation of Windows 95, and those users need to reinstall Windows 95 by using that shared installation.



To include the Microsoft Service for NDS with a shared installation of Windows 95

1. Change to the directory or network drive where you have installed the Microsoft Service for NDS files, and then delete or rename NDSCLI.INF. Then rename NDSCLI.SBS to NDSCLI.INF.
2. Make sure no users have connections to the NetWare server that you will set up for remote installation.
3. Set up Windows 95 on the NetWare server for remote installation. For more information about doing this, see the *Microsoft Windows 95 Resource Kit*.
4. Run INFINST.EXE. It is located on the Windows 95 CD, in \admin\nettools\netsetup.
5. Click Set Path, and then type the location of the Windows 95 installation on the network server.
6. Click Install INF, and then type the path of the directory or network drive where you have installed the Microsoft Service for NDS installation files.

For more information about INFINST.EXE, see the *Microsoft Windows 95 Resource Kit*.

You can have the Service for NDS automatically installed during in the server-based installation by using MSBATCH.INF, or you can set up the user's computer for server-based setup with the Service for NDS manually.



To set up a user's computer for server-based setup with the Service for NDS automatically included

1. Copy the following two lines to the [Network] section in MSBATCH.INF in the folder in which you created the Windows 95 installation on a NetWare server.

```
Clients=NWREDIR  
Services=NWREDIR4
```

Note You can also include entries for other networking clients and services on the above lines. Each entry should be separated by a comma. For example:

```
Clients=VREDIR,NWREDIR
```

2. If you want to set the preferred tree and default context in MSBATCH.INF, add the following lines:

```
[NWRedir4]  
PreferredTree = <Tree>  
NameContext = <MyNameContext>
```

3. Create an [Install] section in MSBATCH.INF, if it is not already there, and add the following line to it:

```
AddReg=NDSPP.ADD
```

4. Create an [NDSPP.ADD] section in MSBATCH.INF, if it is not already there, and then copy the following lines

and paste them into the file:

```
[NDSPP.ADD]
HKLM,"System\CurrentControlSet\Control\Print\Providers\Microsoft Print Provider for
NetWare",Name,, "ndspp.dll"
HKCR,CLSID\{E6EF27C0-7984-11CE-BA00-00AA001F3DC4},,, "Netware objects"
HKCR,CLSID\{E6EF27C0-7984-11CE-BA00-00AA001F3DC4}\InProcServer32,,,"ndspp.dll"
HKCR,CLSID\{E6EF27C0-7984-11CE-BA00-
00AA001F3DC4}\InProcServer32,ThreadingModel,, "Apartment"
HKCR,Printers\shelllex\PropertySheetHandlers\CaptureConfig,,,"{971A71A0-449B-101B-
A9B9-4AF3EEDDA3E3}"
HKCR,CLSID\{971A71A0-449B-101B-A9B9-4AF3EEDDA3E3},,, "Capture Settings"
HKCR,CLSID\{971A71A0-449B-101B-A9B9-4AF3EEDDA3E3}\InProcServer32,,,"ndspp.dll"
HKCR,CLSID\{971A71A0-449B-101B-A9B9-
4AF3EEDDA3E3}\InProcServer32,ThreadingModel,, "Apartment"
```

5. If the user's computer already has Windows 95 installed, delete the Windows 95 folder.
6. Use the NETX or VLM client software to map a network drive to the server on which you created the Windows 95 installation .
7. Run Windows 95 Setup from the network drive.

Note All of the above examples can be found in the NDSBATCH.TXT file, which is included with the files for Microsoft Service for NDS.



To set up a user's computer for server-based setup and the Service for NDS manually

1. If the machine already has Windows 95 installed, delete the Windows 95 folder.
2. Use the NETX or VLM client software to map a network drive to the server on which you created the Windows 95 installation .
3. Run Windows 95 Setup from the network drive. Choose the Custom installation option.
4. In the Network configuration screen, if your NETX or VLM client software appears in the list of network components, click the client, and then click Remove.
5. Click Add, and then click Service.
6. Click Microsoft, and then click Service for NetWare Directory Services.
7. Click Service for Netware Directory Services, and then click Properties.
8. Type the preferred NDS tree and the workstation default context. The default context must be the container in which the user object resides.
9. When Setup restarts your computer, you are prompted to login from the command prompt. When you log in, Windows 95 establishes a bindery login to the server on which you set up Windows 95. If the context and preferred tree have been specified correctly, after Windows 95 starts, you will be logged in to the NDS tree automatically.

Warning Make sure the Novell-supplied version of NETWARE.DRV is deleted from all the computers using the shared installation. This version of NETWARE.DRV is incompatible with the Microsoft Service for NDS. The users should be using the version of NETWARE.DRV located on the shared installation of Windows 95 and the Service for NDS.

Removing Microsoft Service for NDS

This section summarizes how to remove Service for NDS.

Note You cannot remove the Service for NDS from a computer running a shared installation of Windows 95.

Before you begin, make sure your Windows 95 Setup disk is nearby. During the removal process, you are prompted for files located on it.



To remove Microsoft Service for NDS

1. In Control Panel, double-click the Network icon.
2. Click Microsoft Service for NetWare Directory Services, and then click Remove.

Note When Windows 95 is copying networking files from your Windows 95 Setup disk, a message will appear several times, saying that older versions of files are being copied to your computer, and asking whether you want to keep the newer version that is currently on your computer. In order to remove the Service for NDS, click No every time this message appears.

Microsoft Service for NetWare Directory Services

Configuring Microsoft Service for NDS

To configure Service for NDS, you need to consider the following:

- Default contexts for users
- Whether user profiles are to be used on your network
- Whether to use system policies to control how the directory tree appears in Network Neighborhood

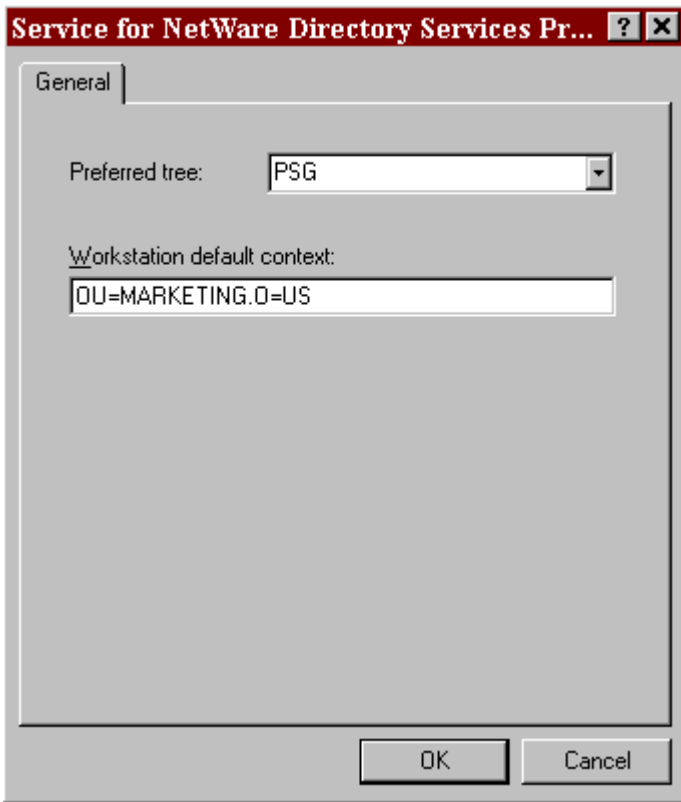
Configuring the Default Context

The *default context* determines what the user will be able to see and use in Network Neighborhood. On computers running VLM, you set it by using the user's NET.CFG file. On computers running the Microsoft Service for NDS, you can set it by using the user's Network Control Panel, or by clicking the Advanced button on the login dialog box.



To configure the default context for a computer

1. In Control Panel, double-click the Network icon.
2. Double-click Service for NetWare Directory Services.
3. Click Preferred Tree, and then type the name of your preferred tree.
4. Click Workstation Default Context, and then type the name of your default context.



The *login context* is the context where your user object is located. In many cases, a user's default context and login context will be the same, so he or she can log in without using a full or partial distinguished name.

Depending on how your directory tree is set up, a user who travels to other locations in your organization (such as other people's offices or other sites) may need to log in from a different context from the one that contains his or her user object. You may want to encourage such users to type their full distinguished name when they log in. They may also need to change the context they are logging into. For information on changing the login context, see [Installing Microsoft Service for NDS](#).

Note When a user logs in using a different login context than the computer's default context, the current context does not switch to the user's login context, but the container script from the user's login context is run. For example, suppose Anne has a user object in the APPS container object. She logs into a machine whose default context is set to MARKETING, using the full distinguished name .CN=ANNE.O=APPS. Even though her login context is APPS, the current context stays in MARKETING, but the APPS container login script is run.

New User Profile Location

On a network using NetWare 3.x support with the Client for NetWare Networks, user profiles are stored in a user's MAIL directory on his or her preferred server, as described in "User Profiles and System Policies" in the *Microsoft Windows 95 Resource Kit*.

However, on a network using Microsoft Service for NDS, user profiles are stored in the home directory for each user object. Because of this, if your site has user profiles enabled, you need to make sure that every user object in the directory tree has a home directory associated with it.

When you log in by using bindery mode, your user profile is stored in the MAIL directory on your preferred server.

If a user alternates between bindery and NDS logins, then user profiles will be stored in both the MAIL directory and the home directory. If the user always logs in from the same computer, both profiles will be updated properly. However, if the user logs in from several other computers, using both bindery and NDS modes, out-of-date user profiles could get copied.

For example, suppose Anne logs in on September 1 using bindery mode. Her user profile is stored in her MAIL directory. She logs in to NDS on September 2 and changes her desktop color scheme. She does not log in using bindery mode again until September 15, and when she does, she logs in from a computer in a different office. Because the new user profile has not been stored in the MAIL directory since her last bindery login on September 1, Anne's desktop will display the old color scheme.

New Location for System Policies

Service for NDS supports system policies on an NDS network. When your users log in, Windows looks for the policy file in a location that you specify.

Note The first time system policies are implemented on an NDS tree, the tree's schema database, which defines the objects in the tree, is modified. This is because the schema provides templates for each NDS object type, and adding system policies is a modification of some templates. In order to modify the schema, you must have Supervisor rights to the [Root] on the NDS tree. Subsequent implementations of system policies, however, can be done by administrators who do not have Supervisor rights to the [Root] on the NDS tree.

If you plan to implement user or group system policies, you have to enable user profiles on your network. Also, for group policies, at least one NetWare 4.1 server on the network must be running in bindery emulation mode. Make sure the group and all the users in the group are in the bindery context for the server.

For more information about user profiles, see [New User Profile Location](#) or the *Microsoft Windows 95 Resource Kit*.

The new system policies for the Microsoft Service for NDS are located in MAPLE.ADM. You edit them by using System Policy Editor.



To set the system policies in a new or existing policy file

1. On the Options menu, click Template.
2. Click Open Template, and then type the path for MAPLE.ADM.
3. If you have already implemented system policies on your network, open the current policy file.
4. If you haven't implemented system policies on your network, then on the File menu, click New.
5. Set the policies, and then save them as CONFIG.POL. (If a policy file with a different name already exists on your network, type the name of that policy file instead.) The new settings will be merged into the existing policy file.

For more information on System Policy Editor, see the *Microsoft Windows 95 Resource Kit*.

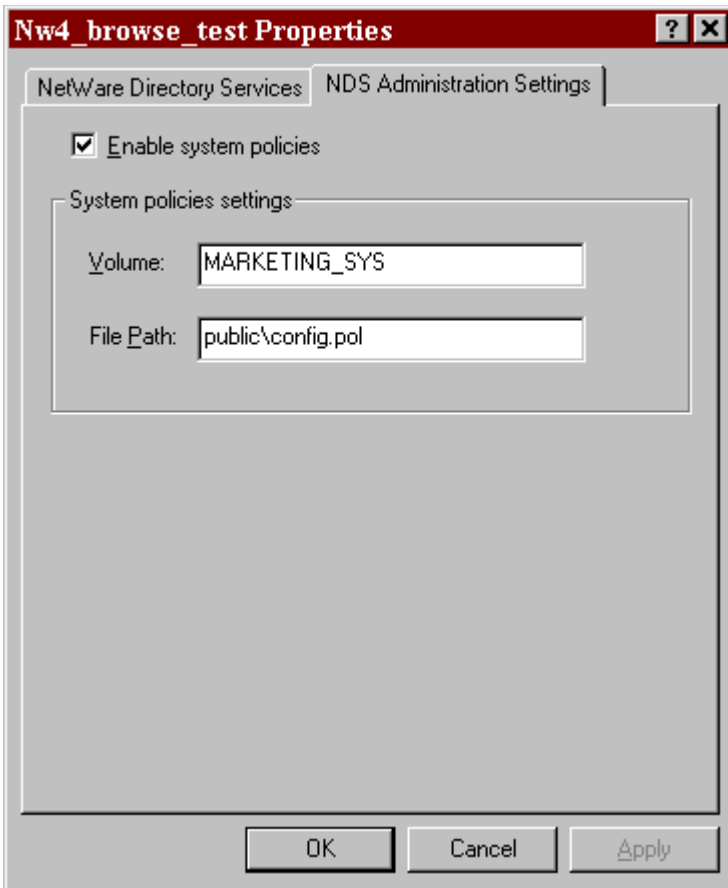


To specify the location of the policy file

1. In Network Neighborhood, find the Organization or Organizational Unit object for which you have created the policy file.
2. Using the right mouse button, click the icon for the Organization or Organizational Unit object, and then click Properties.
3. Click the NDS Administration Settings tab.

Note To access the NDS Administration Settings tab, you must be a trustee for the volume object. You must also have the Supervisor object right and Supervisor property right for the volume.

4. Type the path and name of the system policy file.



Any container (organization or organizational unit) can have its own policy file. When a user logs in to NDS, the Service for NDS looks for the policy file that you have associated with the user's login context. If there is no policy file in that container, the Service for NDS looks in the container in which the login context is located, and so on up to the root.

The advantage of this is that you can put a policy file in the root and have it apply to every object in the tree, or you can have individual system policy files in any container below the root.

New System Policies

Microsoft Service for NDS provides the following new system policies. Additional system policies are described in the *Microsoft Windows 95 Resource Kit*.

Option	Description
Default Name Context	Sets the default context.
Preferred Tree	Sets the default NDS tree.
Disable automatic tree login	When this option is checked, you are prompted to log in to the NDS tree when starting Windows 95, even if your NDS password is the same as your Windows password.
Enable login confirmation	Causes a confirmation dialog box to appear after you log in.
Default type of NetWare login	Specifies whether you log in as a bindery user (for example, by using login /b) or an NDS user by default.
Don't show Advanced login button	Hides the Advanced button on the login dialog box. The Advanced button enables you to choose a different tree or context when you log in.
Don't allow browsing outside the default context	Hides Directory Services containers outside the default context.
Don't show volume objects	Hides NDS volume objects from the directory tree in Network Neighborhood.
Don't show server objects	Hides NDS Server objects from the directory tree in Network Neighborhood.
Don't show servers that aren't NDS objects.	Hides all servers that are not objects in the Directory Tree (for example, bindery servers and peer servers).
Don't show printer objects	Hides NDS printer objects in Network Neighborhood.
Don't show print queue objects	Hides NDS queue objects in Network Neighborhood.
Don't show container objects	Hides NDS organizations and organizational units in Network Neighborhood.
Don't show peer workgroups	Hides Windows 95 workgroups within Network Neighborhood.
Load NetWare DLLs at startup	Automatically loads Novell-supplied NetWare DLLs required by some NDS applications

For information about using the Policy Editor to set policies, see the *Microsoft Windows 95 Resource Kit*.

Setting Up Point and Print with Service for NDS

Point and Print provides printer-driver information automatically; this enables users who are logged in to the NDS tree to install a printer over a network easily. A user “points” to a print server that you have set up for Point and Print—that is, opens its print queue either by using Network Neighborhood, typing the NDS path in the Run dialog box, or starting the Add Printer wizard. Then Windows 95 retrieves printer-specific information from the server and installs the printer automatically. The type of information retrieved depends on the type of print server connected to, and can include the following:

- Printer-driver files
- The name of the server on which printer-driver files are stored
- Printer model information, which specifies which printer driver to retrieve from the Windows directory on either a local computer or the network

For more information about Point and Print, see “Installing Remote Printers with Point and Print” in the *Microsoft Windows 95 Resource Kit*.

Note The first time Point and Print setup is implemented on an NDS tree, the schema database for the tree is modified. This is because the schema provides templates for each NDS object type, and adding Point and Print is a modification of some templates. In order to modify the schema, you must have Supervisor rights to the [Root] on the NDS tree. Subsequent implementations of Point and Print, however, can be done by administrators who do not have Supervisor rights to the [Root] on the NDS tree.



To set up Point and Print for an NDS printer object

1. In Network Neighborhood, find the printer that you want to configure.
2. Using the right mouse button, click the printer icon, and then click Properties.
3. Click the Point and Print Setup tab.

Note To use the Point and Print Setup tab, you must be a trustee for the printer object. You also must have the Supervisor object right and Supervisor property right for the printer.

4. Click Enable Point And Print.
5. In the text box, type the UNC path (`\\server\volume\path`) to a folder where the drivers are stored. Make sure you have write access to this folder, and that users have read access to it.

The image shows a Windows-style dialog box titled "Print_queue on Nw4_browse_test Properties". It has three tabs: "General", "NetWare Directory Services", and "Point and Print Setup". The "Point and Print Setup" tab is selected. Inside the dialog, there are two radio buttons: "Disable Point and Print" (unselected) and "Enable Point and Print" (selected). Below the radio buttons is a text box labeled "Path from which clients can copy drivers for the printer." containing the text "\\marketing\\sys\\prntdrvs". Below this is another text box labeled "Printer Model Name" containing the text "Apple LaserWriter". A button labeled "Set Printer Model" is located below the "Printer Model Name" text box. At the bottom of the dialog are three buttons: "OK", "Cancel", and "Apply".

Print_queue on Nw4_browse_test Properties

General NetWare Directory Services Point and Print Setup

☐ Disable Point and Print

☒ Enable Point and Print

Path from which clients can copy drivers for the printer.

\\marketing\\sys\\prntdrvs

Printer Model Name

Apple LaserWriter

Set Printer Model

OK Cancel Apply

Note When you type the path to the folder when the drivers are stored, do not use the NDS path for the folder.








To disable point and print, click Disable Point And Print on the Point and Print Setup tab.

Running Windows 95 with Service for NDS

This section describes how Service for NDS works with Windows 95.

When users initially open Network Neighborhood, they see the NDS objects in their current context. If other computers in their current context have file sharing enabled, those will also be visible.

The following NDS objects are visible in Network Neighborhood.

Organization	
Organizational unit	
Server	
Volume object	
Directory map	
Printer	
Print queue	

Note Aliases for NDS objects are also visible in Network Neighborhood. Aliases use the icon of the NDS object they represent.

Since both printer and print queues are visible, you might want to use system policies to filter out one of the two types of objects. For more information about system policies, see [New System Policies](#).

Users can map drive letters to directory map objects and volume objects. They can also map drive letters to directories and subdirectories within directory map objects and volume objects. In order to browse these objects, users must have the rights to do so.

The Map Network drive dialog will accept any path that would be accepted by the NetWare 4.X MAP command. For example, suppose your directory tree contains a directory map object called CN=APPS.OU=MARKETING.O=ACME, and your default context is MARKETING.ACME. You can map a drive letter to the directory map object by using the syntax shown in any of the following examples:

- .cn=apps.ou=marketing.o=acme (full distinguished name)
- apps.marketing.acme (typeless name)
- cn=apps (relative name)
- apps (relative, typeless name)

Relative names will always be relative to the current context.



To view the contents of other organizational units in Network Neighborhood

- Double-click the Entire Network icon.



To change to another context by using Network Neighborhood

- Using the right mouse button, click the Organization or Organizational Unit you want to change your current context to, and then click Set Current Context.

The NDS login process uses one server in the tree for authentication and time synchronization (the login script variable %FILE_SERVER refers to this server). This server is the *preferred server*.



To specify your preferred server

1. In Control Panel, double-click the Network icon.
2. Click Client for NetWare Networks, and then click Properties.
3. Click Preferred Server, and type the name of the server.

Note If the preferred server is a 4.X server in the same NDS tree that the user is logging into, then it will be used for authentication when you log in, if it is available. If, however, it is set to a 3.X server or to a 4.X server in a different tree, then the setting is ignored.

File and Print Sharing for NetWare Networks is fully supported with Service for NDS. Shared folders and printers

can only be set up to use user-level access control.

Note In order for your network to support user-level access control, at least one server must be running bindery emulation.

Users can create shortcuts to NDS objects, just as they can for other objects they gain access to through My Computer and Network Neighborhood. A shortcut to an NDS object is stored using UNC name syntax for NDS objects (`\\$NDS\objectname\path`). For example, you could create a shortcut that resolved to:

```
\\$NDS\MARKETING_SYS\PUBLIC\SPREADSHEETS\JANUARY.XLS
```

This guarantees that shortcuts will work even if you change the location that an NDS object points to. For example, if you change the MARKETING_SYS object in the example above so that it points to MARKETING2\SYS:, then the shortcut will continue to work.

If, however, the NDS path for an NDS object is more than 64 characters long, the shortcut is instead stored using regular UNC name syntax (`\\server\share\path`). For example:

```
\\MARKETING\SYS\PUBLIC\SPREADSHEETS\JANUARY.XLS
```

In this case, if you change MARKETING_SYS so that it points to MARKETING2\SYS: , the shortcut might not work.

Microsoft Service for NetWare Directory Services

Running Windows 95 with Service for NDS

Viewing Information About Your Connections

Microsoft Service for NDS provides a graphical equivalent to the NetWare WHOAMI command. It shows information about each connection.



To view the Who Am I window

- Using the right mouse button, click the Network Neighborhood icon, and then click Who Am I.



To detach from a server by using the Who Am I window

- In the Who Am I window, click the name of the server you want to detach from, and then click Detach.

