

VeRsl0N=2.10 Novell Client 32 Installation Help
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ADMIN.CFG File

This is a sample configuration file for Administrator Defaults.

Source location:

CD-ROM: ENGLISH folder

Diskettes: SETUP diskette

Destination location: \NOVELL\CLIENT32

AUTOEXEC.BAT File

Generally, Client 32* does not load its modules using the AUTOEXEC.BAT file. However, Client 32 uses the AUTOEXEC.BAT file to load the modules needed for 16-bit ODI LAN drivers if they are being used. The following is an example of the statements needed in the AUTOEXEC.BAT file for 16-bit ODI LAN drivers:

```
C:\NOVELL\NWCLIENT\LSL.COM -C=C:\NOVELL\NWCLIENT\NET.CFG
```

```
C:\NOVELL\NWCLIENT\N16ODI.COM
```

```
C:\NOVELL\NWCLIENT\NESL.COM
```

```
C:\NOVELL\NWCLIENT\NE2000.COM
```


Add Name Space Notes

You need to add a name space to a volume only once by using the ADD NAME SPACE command.


Each time you mount a volume that you added a name space to (for example, each time you bring up the server), the corresponding name space module is autoloaded. Therefore, you don't need to put the ADD NAME SPACE command in the AUTOEXEC.NCF file.

Add TCP/IP support

IMPORTANT: You need access to the Windows** 95** CAB files to successfully set up TCP/IP.

1. Click here  to display the **Network** control panel.
2. Choose **Add**.
3. Choose **Protocol**.
4. Choose **Add**.
5. Choose **Microsoft**.
6. Choose **TCP/IP**.
7. Choose **OK**.
8. Configure the TCP/IP protocol as necessary for your network.
9. Choose **OK**.

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See also 

Administrator Defaults

Overview

By specifying default values for configuration settings in an ADMIN.CFG file, you can simplify the installation of Client 32*. This configuration method is good for administrators who are familiar with the NET.CFG syntax, want to install and configure Client 32 at the same time, and need to configure settings that can't be configured using the System Policy Editor.

Admin Defaults Option

The ADMIN.CFG file must have the words "Admin Defaults" as its first line. This is a new configuration option for Administrator Defaults. The valid parameters for this option are OVERWRITE and VERSION.

OVERWRITE Parameter

The OVERWRITE parameter can be TRUE or FALSE. TRUE means that all configuration settings in the ADMIN.CFG file are written to the registry. FALSE means that the configuration settings in the ADMIN.CFG file are written to the registry only if they aren't already there.

VERSION Parameter

The VERSION parameter can be any number from 0 to 4,294,967,295. If this number is greater than the ADMIN.CFG version stored in the registry, the configuration settings in the ADMIN.CFG file are written to the registry and this number is stored as the new version number. Otherwise, they aren't. The first time Client 32 is installed, no version number is in the registry. In this case, the Administrator Defaults are written to the registry, including the version number.

Admin Defaults Example

Admin Defaults

Overwrite = false

Version = 0

Notes

- The ADMIN.CFG file must be in the same folder as the SETUP.EXE file that you run to install Client 32.
- For information about the configuration settings that you can specify in the ADMIN.CFG file, see [Administrator Defaults Parameters](#) in the NWCFG95.HLP file.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

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* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■ Automatic Client Upgrade Overview

Introduction

Novell's Automatic Client Upgrade (ACU) provides a way to automatically upgrade NetWare* Client* 32* for Windows** 95** software. ACU executes an instruction placed by the network supervisor in a login script and then seamlessly upgrades clients during login. ACU will also upgrade the Microsoft** Client for NetWare Networks. The Automatic Client Upgrade will not work with NETX or with VLM* programs.

To use the Automatic Client Upgrade, the administrator first places the NetWare Client 32 for Windows 95 installation files and Windows 95 installation .CAB files in a folder where they can be read during client login. The administrator then adds an instruction to the login script that runs the Automatic Client Upgrade from that folder. With this in place, the client login runs as usual if there is no need to upgrade. If the client version on the workstation is not current with the version on the server, however, the user sees a dialog box stating that there are more recent files. The user can choose to **Continue** or **Cancel** the option to upgrade the client software.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Cabling Notes

- See the network board manufacturer's documentation for cabling requirements.
- Token ring network boards require a cable connection to the MAU before running the client software. Otherwise, the token-ring LAN driver will not load.

Cannot Display Readme

When you choose **View the Readme**, Windows** attempts to open the C:\NOVELL\CLIENT32\README.TXT file. If the Client 32* README.TXT file is somewhere else and you want to view the Readme, find the Client 32 README.TXT file and open it.

Change Installation Options

1. Choose **Installation Options**.
2. Set as many of the installation options as you want.
3. Choose **OK**.

Notes

- The more options you set at this time, the fewer interactions are required when installing Windows** 95** and Client 32* from the server.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Checking MSBATCH.INF

Compare the keys shown in the following MSBATCH.INF file with the ones generated by the INF Installer. If any of the highlighted lines differ, click the highlighted line in the help file, read the note explaining the significance of the statement, and adjust your MSBATCH.INF file if necessary.

Notes

- For more information about MSBATCH.INF parameters, see the [Microsoft** Windows** 95** Resource Kit](#).
- To set the values of Client 32* properties automatically during the installation, use the [ADMIN.CFG file](#).

Example

[Setup]

Express=1

EBD=0

DevicePath=0

[Network]

ComputerName=Sample

Workgroup="Sample Group"

Description="Computer"

Protocols=NWLINK, NOVELLIPX32

Clients=NOVELL32

IgnoreDetectedNetCards=1

NetCards=*PNP8300

[MSTCP]

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

NetWare Client 32 for Windows 95 Help

Overview

[What's New](#)

Installing Client 32*

[Readme](#)

[Installing](#)

Configuring Client 32

[Configuring](#)

Using Client 32

[Troubleshooting](#)

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Clients=NOVELL32

INF Installer should have added this line. Remove any other clients.

ComputerName=Sample

Windows** 95** requires this value, but Client 32* does not use it. To avoid having Windows 95 Setup prompt for this value, specify it in the MSBATCH.INF file. However, if you are using peer networking provided by the Client for Microsoft Networks, the **ComputerName** must uniquely identify each workstation.

■ **Configure Client 32**

1. (Conditional) If the **Network** control panel is not displayed, click here ■ to display it.
2. Choose **Novell NetWare Client 32**.
3. Choose **Properties**.
4. Ensure the following properties are set correctly.
 - Preferred Server
For a bindery connection to the network, specify the NetWare* server you want to attach to first.
 - Preferred Tree
For an NDS* connection to the network, specify the Directory tree that you want to connect to.
 - Name Context
For an NDS connection to the network, specify the position, or context, in the Directory tree where your user object is located. For example, to set your name context to the MNGT organizational unit in the MARKETING organization, type
OU=MNGT.O=MARKETING
5. Choose **OK** to save any changes to the properties.
6. Choose **OK** to exit the **Network** control panel and save your changes.

Notes

- For more information about configuring Client 32*, see the [configuration overview](#).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Configure TCP/IP Support


1. Click here ■ to display the **Network** control panel.
2. Choose **TCP/IP**.
3. Choose **Properties**.
4. Make any necessary changes.
5. Choose **OK**.
6. Choose **OK**.

Notes

- Configure the TCP/IP protocol as necessary for your network. NetWare*/IP* requires that DNS be configured either manually or via DHCP.

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Configure for Using a Real Mode (16-bit) NDIS Driver

1. Click here  to edit your AUTOEXEC.BAT file.
2. Ensure that your AUTOEXEC.BAT file executes the "NET START" command.
3. If Client 32* hangs, set the value for the Close Behind Ticks parameter to 0.

NOTE: Setting the value of the Close Behind Ticks parameter to 0 decreases performance. Therefore, do this only if you have a 16-bit NDIS driver and Client 32 hangs.

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Example

If the folder you created in Step 2 is C:\C32TEMP and your server install path is F:\WIN95, use the following commands to copy the .INF files.

```
COPY C:\C32TEMP\*.INF      F:\WIN95
COPY C:\C32TEMP\*.INF      F:\WIN95\INF
COPY C:\C32TEMP\*.INF      F:\WIN95\SUWIN
```

Copying NETDEF.INF

Examples

If your CD-ROM drive is accessed as drive D: and your MSBATCH Setup install folder is F:\WIN95, use the following commands to copy the NETDEF.INF file:

```
D:
CD \ADMIN\BATCH95\NLS\ENGLISH
COPY NETDEF.INF F:\WIN95\NETDEF.INF
ATTRIB -R F:\WIN95\INF\NETDEF.INF
COPY NETDEF.INF F:\WIN95\INF\NETDEF.INF
ATTRIB -R F:\WIN95\SUWIN\NETDEF.INF
COPY NETDEF.INF F:\WIN95\SUWIN\NETDEF.INF
```

If you are installing from diskettes using drive A: and your MSBATCH Setup install folder is F:\WIN95, use the following commands to copy the NETDEF.INF file after inserting the Admin2 disk in drive A:.

```
A:
CD \BATCH95\NLS\ENGLISH
COPY NETDEF.INF F:\WIN95\NETDEF.INF
ATTRIB -R F:\WIN95\INF\NETDEF.INF
COPY NETDEF.INF F:\WIN95\INF\NETDEF.INF
ATTRIB -R F:\WIN95\SUWIN\NETDEF.INF
COPY NETDEF.INF F:\WIN95\SUWIN\NETDEF.INF
```

Notes

- The following are the key changes made to the NETDEF.INF file for Client 32*:
- [NETWARE] Section
Original:
[NETWARE]
00000000=NETWARE3
00032600=NETWARE3
00040000=NETWARE4
Updated:
[NETWARE]
00000000=NOVELL32
00032600=NOVELL32
00040000=NOVELL32
- [TYPICAL], [COMPACT], and [PORTABLE] Sections (only changed statements are shown)
Updated:
NetTrans=NWLINK,NOVELLIPX32
NetClient=NOVELL32
For NetWare*/IP*, NWIP should also be specified for NetTrans:
NetTrans=NWLINK,NOVELLIPX32,NWIP

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Copying the INF Files

Notes

- Copy the .INF files from the ADMIN\BATCH95\NLS\ENGLISH folder of the Client 32* CD-ROM or from the BATCH95\NLS\ENGLISH folder of the Admin2 disk. Copy them to the folder where you put all the files for Client 32.
- Always copy the following files:
 - NWCLIENT.INF
 - NWTRANS.INF
 - NWLAYOUT.INF
- For NetWare/IP* support, copy the following file:
 - NWIP.INF
- For SNMP support, copy the following file:
 - NWSERV.INF
- If you want the Client 32 help integrated with the Windows** 95** system help, edit the NWCLIENT.INF file and remove the semicolon (;) in front of the line that has OEM.CNT. For more information about integrating the help, see [Integrating Client 32 Help: Overview](#).

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■
Create an ACU Install Folder

In order for the Automatic Client Upgrade to work, the client needs access to a folder where all the installation files are stored. To make this happen, the administrator needs to do the following

1. Create a folder for the Automatic Client Upgrade.
2. Copy all NetWare* Client* 32* for Windows** 95** installation files into the ACU install folder.
3. Copy all Windows 95 installation files that have a .CAB extension into the ACU install folder.
4. Make sure that all clients scheduled for automatic upgrade have Read and File Scan rights to the ACU install folder.

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Create an MSBATCH.INF File

1. Run BATCH.EXE.
2. (Optional) Fill in the **Setup Information**.
3. Remove **Network Options**.
4. Change the **Installation Options**.
5. (Optional) Select **Optional Components**.
6. Choose **Done**.
7. Save with a unique filename (such as C32BATCH.INF) in the MSBATCH Setup install folder (for example, F:\WIN95).
8. Replace the existing MSBATCH.INF file with the file you just created.
 - a. Remove the read-only attribute from the existing MSBATCH.INF file.
 - b. Rename the existing MSBATCH.INF file.
 - c. Rename the file you just created to MSBATCH.INF.

For example:

```
ATTRIB -R MSBATCH.INF
RENAME MSBATCH.INF MSBATOLD.INF
RENAME C32BATCH.INF MSBATCH.INF
```

Notes

- BATCH.EXE is in the ADMIN\NETTOOLS\NETSETUP folder of the Windows** 95** CD-ROM.
- BATCH.EXE can be run under Windows 3.x or Windows 95.
- For more information about Batch Setup (BATCH.EXE), see the Microsoft Windows 95 Resource Kit.
- You can also create or change the MSBATCH.INF file by hand. For information on how to do this, see the Microsoft** Windows 95 Resource Kit.

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Customize Notes

After you choose **Customize**, the **Network** control panel is displayed. You can use the **Network** control panel to do any of the following that you need to do to customize your workstation.

- [Configure Client 32*](#)
- [Set up optional features](#)
- [Change the LAN driver for your network adapter.](#)
- [Configure for a real mode \(16 bit\) NDIS** driver](#)

Do not do the following:

- [Do not remove **Novell ODINSUP**](#)
- [Do not remove **IPX/SPX-compatible Protocol**](#)

When you are finished, choose **OK** on the **Network** control panel and [restart your computer.](#)

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Description="Computer"

This is an optional comment describing a workstation. Client 32 doesn't use this value.

DevicePath=0

Do not add a source directory path for .INF files. To add the installation source directory to the path for finding .INF files, specify "DevicePath=1."

Suggestion: Specify DevicePath=0 to avoid multiple database rebuilds, which are indicated by the **Building driver information database** message.

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Novell strongly recommends a backup be made before any software is installed. Technical support for this software may be provided at the discretion of Novell.

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EBD=0

Do not create an emergency Startup Disk. To create an emergency Startup Disk, which requires user interaction, specify "EBD=1."

Existing ODI Driver

Client 32* does not support choosing the **Existing ODI Driver** as your network adapter.

If you run the Client 32 install program (SETUP.EXE), it removes the **Existing ODI Driver** if it is installed.

If you use MSBATCH Setup, use the IgnoreDetectedNetCards and NetCards parameters in the MSBATCH.INF file to specify a network adapter. This ensures that the **Existing ODI Driver** is not installed as the network adapter.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Express=1

User input is not required or allowed during Windows** 95** Setup. To allow user input, specify "Express=0."

Alphabetical List of Files

1250_UNI.001...1256_UNI.001

3C503.COM
3C589.COM
3C5X9.COM
3C689.COM
3CTOKEN.COM
ACC41.LAN
ADMIN.CFG
ADMIN1
ADMIN2
AM2100.COM
APPSNAP.DLL
APPSNAP.HLP
CALWIN16.DLL
CALWIN32.DLL
CEODI.COM
CLIENT32.NLM
CLNWIN16.DLL
CLNWIN32.DLL
CLNWINTH.DLL
CLXWIN16.DLL
CLXWIN32.DLL
CMSM.MSG
CMSM.NLM
CNE1500T.LAN
CNE1500T.MSG
CNE2.LAN
CNE2.MSG
CNE2000.LAN
CNE2000.MSG
CNE2100.LAN
CNE2100.MSG
CNE2_32.LAN
CNE2_32.MSG
CNE3200.LAN
CNE3200.MSG
CNTR2000.LAN
CNTR2000.MSG
DC21040.COM
ETHERISM.MSG
ETHERISM.NLM
F70ODI.COM
FDDITSM.MSG
FDDITSM.NLM
HOSTMIB.MSG
HOSTMIB.NLM
HPFEODI.COM
HPISAODI.COM
HPMCAODI.COM
IPX.NLM
LOCWIN16.DLL
LOCWIN32.DLL
LOGIN.DAT
LOGIN.MSG
LOGINW95.EXE
LOGINW95.HLP
LSL.COM
LSLC32.MSG

LSLC32.NLM
MADGEODI.COM
MSBATCH.INF
N16ODI.COM
NAL.EXE
NAL.HLP
NALRES32.DLL
NALW95.EXE
NCPWIN16.DLL
NCPWIN32.DLL
NE1000.COM
NE1000.INF
NE1000.LAN
NE1500T.COM
NE15_21.INF
NE2.COM
NE2.INF
NE2000.COM
NE2000.INF
NE2100.COM
NE2_32.COM
NE2_32.INF
NE3200.COM
NE3200.INF
NESL.COM
NESL.MSG
NETDEF.INF
NETWARE.DRV
NETWIN16.DLL
NETWIN32.DLL
NIOS.VXD
NIOSLIB.DLL
NMR.NLM
NOVELLNP.DLL
NOVELNPR.DLL
NOVPP32.DLL
NTR2000.COM
NTR2000.INF
NWCALLS.DLL
NWCFG95.CNT
NWCFG95.HLP
NWCLIENT.INF
NWGDI.DLL
NWHOSTX.MIB
NWICFG.NLM
NWIP.INF
NWIP95.NLM
NWIPXSPX.DLL
NWLAYOUT.INF
NWLINK2.VXD
NWLOCALE.DLL
NWMSG95.CNT
NWMSG95.HLP
NWNET.DLL
NWOVER95.CNT
NWOVER95.HLP
NWPASSWD.DLL
NWPOPUP.EXE
NWPSRV.DLL
NWSERV.INF

NWSETUP.DLL
NWSETUP.INI
NWSHELLX.DLL
NWSIPX32.DLL
NWSIPX32.NLM
NWTIPS95.CNT
NWTIPS95.HLP
NWTRANS.INF
NWTSG95.CNT
NWTSG95.HLP
NWUSE95.CNT
NWUSE95.HLP
ODI3COM.INF
ODI3COMT.INF
ODIALLIE.INF
ODIAMD.INF
ODIARC.INF
ODIAST.INF
ODIBOCA.INF
ODICABLE.INF
ODICOGNT.INF
ODICPQ.INF
ODIDCA.INF
ODIDEC.INF
ODIDELL.INF
ODIEXOS.INF
ODIFARA.INF
ODIFLEX.INF
ODIHP.INF
ODIIBMTR.INF
ODIINTEL.INF
ODIKING.INF
ODILNKSX.INF
ODILOAD.VXD
ODIMADGE.INF
ODIMHZ.INF
ODIMICRO.INF
ODIMITRO.INF
ODINCR.INF
ODINSUP.INF
ODINSUP.SYS
ODIOLI.INF
ODIPAGE.DLL
ODIPCN2.INF
ODIPROT.INF
ODIPURE.INF
ODIRACAL.INF
ODISILC.INF
ODISMC.INF
ODISMCTR.INF
ODISMC32.INF
ODISVEC.INF
ODISYS.INF
ODITCC.INF
ODITDKP.INF
ODITOSH.INF
ODITULIP.INF
ODIUB.INF
ODIXIR.INF
ODIZNYX.INF

PC32MLID.LAN
PC32MLID.MSG
PCI40.LAN
PCNTNW.COM
PEDOSODI.COM
PHASERS.WAV
PIDOSODI.COM
PRTWIN16.DLL
PRTWIN95.DLL
README.NAL
README.TXT
ROUTE.COM
RFC1514.MIB
SETUP.EXE
SETUPNW.CNT
SETUPNW.HLP
SMC8000.COM
SMC80PC.COM
SMC8100.COM
SMC8232.COM
SMC8332.COM
SMC9000.COM
SMCPWR.COM
SNMP.MSG
SNMP.NLM
SNMPDLL.DLL
SNMPIPX.EXE
SNMPUDP.EXE
SPX_SKTS.NLM
SROUTE.MSG
SROUTE.NLM
SUPWIN16.DLL
TCCARC.COM
TCE32ESW.COM
TCE32MCW.COM
TCE32PCW.COM
TCNSW.COM
TCTOKSH.COM
TLI_SPX.DLL
TLI_WIN.DLL
TOKENSM.MSG
TOKENSM.NLM
TRXNET.COM
UNI_1250.001...UNI_MON.001
VMLID.NLM

List of Files by Folder

[\Novell\Client32](#)

[\Novell\Client32\Install](#)

[\Novell\Client32\Nls\language](#)

[\Novell\Nwclient](#)

[\Windows](#)

[\Windows\Help](#)

[\Windows\Inf](#)

[\Windows\Nls\language](#)

[\Windows\System](#)

[Other](#)

Client 32 Files

[Alphabetical list of files](#)

[List of files by folder](#)

[List of third-party LAN drivers](#)

[LAN Driver Files](#)

LAN Driver Files

32-bit LAN Drivers

ACC41.LAN
CNE1500T.LAN
CNE2.LAN
CNE2000.LAN
CNE2100.LAN
CNE2_32.LAN
CNE3200.LAN
CNTR2000.LAN
NE1000.LAN
PCI40.LAN

16-bit LAN Drivers

3C503.COM
3C589.COM
3C5X9.COM
3C689.COM
3CTOKEN.COM
AM2100.COM
CEODI.COM
DC21040.COM
F70ODI.COM
HPFEODI.COM
HPISAODI.COM
HPMCAODI.COM
MADGEODI.COM
NE1000.COM
NE1500T.COM
NE2.COM
NE2000.COM
NE2100.COM
NE2_32.COM
NE3200.COM
NTR2000.COM
PCNTNW.COM
PEDOSODI.COM
PIDOSODI.COM
SMC8000.COM
SMC80PC.COM
SMC8100.COM
SMC8232.COM
SMC8332.COM
SMC9000.COM
SMCPWR.COM
TCCARC.COM
TCE32ESW.COM
TCE32MCW.COM
TCE32PCW.COM
TCNSW.COM
TCTOKSH.COM
TRXNET.COM

List of Files in Other Folders

SNMP management station files:

RFC1514.MIB

NWHOSTX.MIB

List of Files in the \Novell\Client32 Folder

CLIENT32.NLM
CMSM.NLM
CNE2000.LAN
CNE3200.LAN
ETHERTSM.NLM
FDDITSM.NLM
IPX.NLM
LGNW9532.DLL
LOGINW95.EXE
LSLC32.NLM
NMR.NLM (if NMR is installed)
NWIP95.NLM (if NetWare/IP is installed)
NWPOPUP.EXE
NWSIPX32.NLM
PC32MLID.LAN
PHASERS.WAV
README.TXT
SETUPNW.CNT
SETUPNW.HLP
SPX_SKTS.NLM
SROUTE.NLM
TOKENSM.NLM
VMLID.NLM

List of Files in the \Novell\Client32\Install Folder
ADMIN.CFG

List of Files in the \Novell\Client32\Nls\language Folder

LOGIN.DAT
LOGIN.MSG

Notes

- The name of this folder varies depending on the language being used. For English, the name is "\Novell\Client32\Nls\English."

List of Files in the \Novell\Nwclient Folder

This folder and the files in it are for 16-bit ODI* LAN driver support. It is not needed unless you are using a 16-bit ODI LAN driver.

LSL.COM

N16ODI.COM

NESL.COM

NET.CFG

The .COM file for the 16-bit LAN driver--for example, NE2000.COM. For a list of 16-bit ODI LAN drivers, see [LAN Driver Files](#).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

List of Files in the \Windows Folder

LSL.COM

List of Files in the \Windows\Help Folder

LOGINW95.HLP

NWCFG95.HLP

NWMSG95.HLP

NWOVER95.HLP

NWTIPS95.HLP

NWTSG95.HLP

NWUSE95.HLP

Note: Each of these help files might also have files with the following file types associated with them:

- CNT (Contents)
- FTS (Full-text search)
- GID (Help file configuration)

List of Files in the \Windows\Inf Folder

NE1000.INF
NE15_21.INF
NE2.INF
NE2000.INF
NE2_32.INF
NE3200.INF
NETDEF.INF
NTR2000.INF
NWCLIENT.INF
NWIP.INF
NWLAYOUT.INF
NWSERV.INF
NWTRANS.INF
ODINSUP.INF

List of Files in the \Windows\Nls\language Folder

NOVELNPR.DLL

Notes

- The name of this folder varies depending on the language being used. For English, the name is "\Windows\Nls\English."

List of Files in the \Windows\System Folder

CALWIN16.DLL
CALWIN32.DLL
CLNWIN16.DLL
CLNWIN32.DLL
CLNWINTH.DLL
CLXWIN16.DLL
CLXWIN32.DLL
LOCWIN16.DLL
LOCWIN32.DLL
NCPWIN16.DLL
NCPWIN32.DLL
NETWARE.DRV
NETWIN16.DLL
NETWIN32.DLL
NIOS.VXD
NIOSLIB.DLL
NOVELLNP.DLL
NOVPP32.DLL
NWCALLS.DLL
NWDRVLGO.BMP
NWGDI.DLL
NWIPXSPX.DLL
NWLINK2.VXD
NWLOCALE.DLL
NWNET.DLL
NWPASSWD.DLL
NWPSRV.DLL
NWSETUP.DLL
NWSHELLX.DLL
NWSIPX32.DLL
ODILOAD.VXD
ODINSUP.SYS
ODIPAGE.DLL
PRTWIN16.DLL
PRTWIN95.DLL
SUPWIN16.DLL
TLI_SPX.DLL
TLI_WIN.DLL

■
Force an Upgrade

In some cases, an administrator may update one or more files without upgrading the entire client. For example, if Novell, Inc. releases a new version of LOGINW95.EXE with additional functionality, the administrator may decide that all clients need to use this file. Because this isn't a new version of the Novell* NetWare* client, there isn't a client revision number for ACU to check and the client will not be automatically upgraded. In this case, the administrator can force the clients to upgrade, using ACU, so that all clients use the newer file.

In the [Client Version] section of NWSETUP.INI (located in the folder where the NetWare Client 32* for Windows** 95** installation files are stored) there are four numbers separated by dots (e.g., 0.0.3.0). The final number in this series, the level number, is what upgrades the client. To force the upgrade, the administrator makes the level number higher than it is when NWSETUP.INI is first opened; if the number is 0, make it a 1. With this done, ACU compares the level numbers upon client login, finds the discrepancy and upgrades the client to the system's newer files.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

HOSTMIB.NLM File

This file implements the standard Host Resources MIB as defined by the Internet Engineering Task Force (IETF) and Novell's NetWare* Host Resources Extensions MIB. Its basic purpose is to allow SNMP management software to manage the physical resources of a client workstation.

IgnoreDetectedNetCards

To prevent Windows** 95** from detecting and using a 16-bit ODI* driver, specify IgnoreDetectedNetCards=1 and specify the device ID of the correct network adapter for the NetCards parameter. Client 32** does not support using the network adapter called **Existing ODI Driver**.

■
Installation Complete

Reboot

To use Client 32*, choose **Reboot**. When your workstation reboots, Client 32 starts automatically.

Return to Windows

To use Windows** 95** before restarting your workstation, choose **Return to Windows**. When you're ready to use Client 32, shut down Windows 95 and restart your workstation.

Customize

To add optional features to your configuration or to change Client 32 properties, choose **Customize**. Use the **Network** control panel to **Add** the protocols or services or to change the **Properties** that you want, then choose **OK** and restart your workstation.

Help

The help files are the primary source of information about Client 32. They include information about installing, configuring, using, and troubleshooting Client 32. To display the contents screen for the Client 32 help, choose **Help Topics**.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Installation Help

Start

To install NetWare* Client* 32* for Windows** 95**, choose **Start**. Any existing NetWare clients are removed and Client 32 is added.

IMPORTANT: If you are upgrading from the NetWare DOS Requester* (VLM*) client or if you don't have any network client software installed, you need to have the Windows 95 CD-ROM or diskettes or the Windows 95 CAB files.

Cancel

To quit the installation, choose **Cancel**.

Check Box

To use ODI* LAN drivers, check the check box. When this check box is checked, the Client 32 installation program (SETUP.EXE) installs an ODI LAN driver if it finds one for your network adapter. If you cannot use ODI LAN drivers, the installation program hides this check box.

Help

The help files are the primary source of information about Client 32. They include information about installing, configuring, using, and troubleshooting Client 32. To display the contents screen for the Client 32 help, choose **Help Topics**.

View README

To display the Client 32 README.TXT file, choose **View README**.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■ **Understanding Client 32 Installation**

Before installing NetWare* Client* 32* for Windows** 95**, make sure your workstation has sufficient hardware resources and the required software. Also, install the patches that are shipped with Client 32 on your NetWare servers.

After your workstation and servers are prepared, use one of the following methods to install Client 32.

- MSBATCH Setup, which means setting up a server with the Windows 95 and Client 32 files so that they can be installed at the same time from the server.

This is a good method to use if you need to install Client 32 on multiple workstations that don't already have Windows 95 on them. The software tools needed to set up the server are available on the Windows 95 CD-ROM or from the Microsoft** home page on the World Wide Web.

- Installing interactively at the workstation after Windows 95 has been installed.
This is a good method to use if you don't want to bother setting up a server for MSBATCH Setup or if the workstations don't already have a network connection.
- Installing using the Custom Setup Option of Windows 95 Setup.
This method can be used if Windows 95 isn't already installed. However, it is recommended that you first install Windows 95 and then install Client 32 using another method.
- Using the Automatic Client Upgrade feature.
This is a good method to use to automatically upgrade multiple workstations from the Client for NetWare Networks to Client 32.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Installing Client 32

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* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■ **Installing Interactively**

To set up NetWare* Client* 32 for Windows** 95****

IMPORTANT: If you are upgrading from the NetWare DOS Requester* (VLM*) client or if you don't have any network client software installed, you need to have the Windows 95 CD-ROM or diskettes or the Windows 95 CAB files.

1. Run the installation program, SETUP.EXE.
2. Choose **Yes** or **No** to respond to the Novell* License Agreement.
3. Choose **Start** to install NetWare Client 32 for Windows 95.
4. (Conditional) If you are prompted to select a network adapter, choose the one that matches your hardware.
5. (Conditional) If you don't need to customize your installation, choose **Reboot.**
OR
(Conditional) If you want optional features or need to configure your workstation, choose **Customize.**

Notes

- You can put the Client 32 files on a NetWare server, map a drive to the folder where you put them, and run SETUP.EXE from the mapped drive.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Windows** 95** couldn't open the WINDOWS.HLP file.

Use the Windows 95 Find function to find the WINDOWS.HLP file and open it. If you renamed the WINDOWS.HLP file, find and open it under its new name. If you erased this file or didn't install the Windows 95 help, you need to install the Windows 95 help before integrating the Client 32* help with the Windows 95 system help.

The following command did not complete successfully:

```
WINHELP -G WINDOWS.HLP
```



This command is used to reinitialize the Windows** 95** help in order to update the WINDOWS.GID file with information about the Client 32* help.

The most likely reasons that the command failed are that Windows 95 couldn't find the WINHELP.EXE file or that it couldn't find the WINDOWS.HLP file. If you know where these files are, try entering the command using the full path of each file. For example:

```
C:\WINDOWS\WINHELP.EXE -G C:\WINDOWS\HELP\WINDOWS.HLP
```

If this doesn't work, you might also try forcing Windows 95 to reinitialize the Windows 95 help by deleting the WINDOWS.GID file. The WINDOWS.GID file is a hidden file. Usually, it is in the Windows Help folder (typically, C:\Windows\Help). Windows help recreates the WINDOWS.GID file if it is not found when Windows help tries to display the WINDOWS.HLP file.

■
Integrate Client 32 Help

1. Click here  to see if the Client 32* help is already integrated.
2. If  **Novell* NetWare* Client 32** is displayed in the Contents tab of Help Topics, the Client 32 help is already integrated with the Windows 95 system help, and you're done with this task. Otherwise, continue.
3. Compare the OEM.CNT file in your Windows** Help folder (typically, C:\Windows\Help) with the OEM.CNT file that is shipped with Client 32 (in the English folder of the CD-ROM).
4. (Conditional) If the OEM.CNT file in your Windows Help folder is different from the OEM.CNT file that is shipped with Client 32, append the Client 32 OEM.CNT file to the one in your Windows Help folder.
5. (Conditional) If there isn't an OEM.CNT file in your Windows Help folder, copy the Client 32 OEM.CNT file to your Windows Help folder.
6. (Recommended) Click here ■ to print this help topic.
7. Click here ■ to integrate the Client 32 help.
This might take several seconds, and this help file will no longer be displayed. To verify that the Client 32 help is integrated, continue with the following steps.
8. Choose **Cancel** to close **Help Topics: Windows Help**.
9. Choose **Start** on the taskbar.
10. Choose **Help**.
11. See Step 2.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Integrating Client 32 Help

When the Client 32* help is integrated with the Windows** 95** system help, you can display the Client 32 help by choosing **Start** on the taskbar, then choosing **Help**, and, finally, by double-clicking **Novell* NetWare* Client 32**.

The key to this integration is the OEM.CNT file. If this file doesn't already exist in your Windows Help folder (typically, C:\Windows\Help), the Client 32 installation copies this file there. In which case, the Client 32 help is integrated with the Windows 95 help. If you don't want this, rename or erase the OEM.CNT file.

If your workstation already has an OEM.CNT file, you can append the OEM.CNT file that is shipped with Client 32 to your existing OEM.CNT file in order to integrate the Client 32 help.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Integrating Help

Overview

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LOGINW95.HLP File

This is the help file for the graphical login utility. It has a link to the SETUPNW.CNT file. The NWUSE95.CNT file has links to the LOGINW95.HLP file.

LSL.COM File

This is the 16-bit Link Support Layer (LSL*) program. It is used with 16-bit ODI* LAN drivers. It is loaded in the AUTOEXEC.BAT file before any other Client 32* programs.

The 32-bit LSL program is LSLC32.NLM. It is not loaded from the AUTOEXEC.BAT file.

Login Script

```
#\\LAHF\SYS\PUBLIC\CLIENT\ACU\SETUP.EXE /ACU
```

Option 1: MSBATCH Setup

Overview

[Understanding MSBATCH Setup](#)

Steps

[Step 1: Run Server-based Setup \(NETSETUP.EXE\).](#)

[Step 2: Put all the Client 32* files into a folder.](#)

[Step 3: Remove all the .INF files from the folder in Step 2.](#)

[Step 4: Copy the .INF files from the BATCH95 folder to the folder in Step 2.](#)

[Step 5: Create an MSBATCH.INF file.](#)

[Step 6: Run the INF Installer \(INFINST.EXE\) to add Client 32 to the MSBATCH.INF file.](#)

[Step 7: Check the MSBATCH.INF file.](#)

[Step 8: Copy the NETDEF.INF file from the BATCH95 folder to the MSBATCH Setup install folder and its INF and SUWIN subfolders.](#)

[Step 9: Run Windows 95 Setup \(SETUP.EXE MSBATCH.INF\).](#)

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

MSBATCH Setup Install Folder

This folder (directory) is on a server. It is at the root of the directory structure that contains the Windows** 95** and Client 32* files. It has the Windows 95 Setup program (SETUP.EXE) and the setup script (MSBATCH.INF) that users use to install Windows 95 and Client 32 simultaneously.

This is the folder where you installed the Windows 95 files using Server Based Setup (NETSETUP.EXE). (You set this folder as the server install path.) It is also the folder you set as the **Server Path** when using INF Installer (INFINST.EXE).

Example: F:\WIN95

Understanding MSBATCH Setup

If you need to install Windows** 95** and Client 32* on multiple workstations, investigate using MSBATCH Setup. MSBATCH Setup requires some preparation, but can simplify the installation on each workstation. User interaction for the Client 32 portion of the installation can be completely eliminated. User interaction for the Windows 95 portion of the installation can be kept to a minimum.

The preparation involves using some Windows 95 utility programs. These programs are available only on the Windows 95 CD-ROM and not on the Windows 95 diskettes. As of this writing, the programs are also available from Microsoft** on the Internet. The programs prepare the Windows 95 and Client 32 files on a file server, so that Windows 95 and Client 32 can be installed at the same time. During the installation, the files are copied from the server to the workstation.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Make Diskettes

1. Gather seven, formatted diskettes.
2. Insert the Client 32* CD-ROM into your CD-ROM drive.
3. Run MAKEDISK.BAT from the root directory of the CD-ROM.
4. Insert and label the diskettes as prompted.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■ **Modify the Login Script**

Depending upon which login script is modified, the administrator can allow different clients to upgrade.

- If the user login script is modified, only that user will automatically upgrade.
- If the container login script is modified, all clients in that container will automatically upgrade.
- If the profile login script is modified, all clients using that login script will automatically upgrade.

In order for the Automatic Client Upgrade to work, the administrator needs to make sure that all clients accessing the Automatic Client Upgrade have Read and File Scan rights to the folder where the NetWare* Client* 32* for Windows** 95** installation files and the Windows 95 installation .CAB files are stored. With this done, the administrator adds `#\\servername\volume\...\setup.exe /acu` to the login script (where after the volume name all directories are separated by a backslash [\]).

Example

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

N16ODI.COM File

This is the 16-bit ODI* shim needed to coordinate interrupt handling. It is used with 16-bit ODI LAN drivers. It is loaded in the AUTOEXEC.BAT file after LSL.COM and before NESL.COM.

NESL.COM File

This is the 16-bit NetWare Event Service Layer. It is used with 16-bit ODI* LAN drivers. It is loaded in the AUTOEXEC.BAT file after N16ODI.COM and before the 16-bit ODI LAN driver (such as NE2000.COM).

NET.CFG File

Only used for configuring 16-bit ODI* LAN drivers. For example, a complete NET.CFG file might have the following lines:

```
LINK DRIVER NE2000
  IRQ #1 3
  PORT #1 300
  Frame Ethernet_802.2
  Frame Ethernet_SNAP
  Frame Ethernet_II
  Frame Ethernet_802.3
```

NET.CFG Requirements for Smart Defaults

NET.CFG Options

The following NET.CFG options are moved to the registry. Other NET.CFG options are ignored. Obsolete NET.CFG parameters are also ignored.

DESKTOP SNMP
LINK SUPPORT
NETWARE DOS REQUESTER
NIOS
NWIP
PROTOCOL IPX
RESOURCES

NET.CFG Syntax

The following syntax rules must be obeyed:

- The NET.CFG options must be spelled as shown above.
- The NET.CFG options are not case sensitive.
- A line cannot be more than 512 characters long.
- Spaces, tabs, and equal signs can be used to separate parameters and values.
- Valid values must be specified for the parameters.

NET.CFG Location

- If a current Novell* NetWare* Client* is running, its NET.CFG file is used.
- Otherwise, the first NET.CFG file found in the following folders is used:
 - \NOVELL\CLIENT32
 - \NWCLIENT
 - \NET\BIN
- Otherwise, the first NET.CFG file found in the path name is used.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

NETWARE.DRV File

The NetWare* Device Driver is provided for backward compatibility with 16-bit Windows** applications that are NetWare aware.

NWCFG95.HLP File

This is the help file for Client 32* configuration. It has links to the LOGINW95.HLP, NWOVER95.HLP, NWUSE95.HLP, NWTSG95.HLP, SETUPNW.HLP, and SETUPNW.CNT files.

NWCLIENT.INF File

Contains information for installing Client 32* and removing existing NetWare* Client* software.

NWHOSTX.MIB File

This Management Information Base (MIB) defines extensions to the Host Resources MIB -- for Novell* NetWare* servers.

Source location:

CD-ROM: ADMIN\NMS folder

Diskettes: ADMIN1 diskette, NMS* folder

Destination location: SNMP management station. See the instructions for your SNMP management software for details.

Notes

- Must be manually copied to the appropriate destination.

NWIP.INF File

Contains information for installing NetWare/IP* on the workstation.

NWLAYOUT.INF File

Maintains paths to installation files. During Client 32* installation, if a file isn't in the current folder, it checks the NWLAYOUT.INF file for the path to the file. If the file is not in the paths listed, you are prompted for the file's path.

NWMSG95.HLP File

This is the help file for Client 32* system messages information. It has links to the NWCFG95.HLP, NWTSG95.HLP, WINDOWS.HLP and SETUPNW.CNT files.

NWOVER95.HLP File

This is the help file for Client 32* overview information. It has links to the NWCFG95.HLP, SETUPNW.HLP, WINDOWS.HLP and SETUPNW.CNT files.

NWSERV.INF File

Contains information for installing SNMP and Host Resources MIB.

NWSHELLX.DLL File

Provides shell extensions for Windows** 95**.

NWTIPS95.HLP File

This is the help file that has tips about installing, configuring, and using Client 32*. It has links to the NWCFG95.HLP, NWOVER95.HLP, NWTSG95.HLP, NWUSE95.HLP, SETUPNW.HLP, and SETUPNW.CNT files.

NWTRANS.INF File

Contains information for installing the 32-bit IPX* protocol.

NWTSG95.HLP File

This is the help file for Client 32* troubleshooting information. It has links to the NWCFG95.HLP, NWMSG95.HLP, NWTSG95.HLP, NWUSE95.HLP and SETUPNW.CNT files.

NWUSE95.HLP File

This is the help file that has information about using Client 32*. It has links to the LOGINW95.HLP, NWCFG95.HLP and SETUPNW.CNT files.

NetCards

Specify the device ID for the network adapter of the target workstations.

Network Board Installation Notes

- For information on installing the network board, see the manufacturer's documentation.
- NetWare* Client* 32* for Windows** 95** supports both Open Data-Link Interface* (ODI*) and Network Driver Interface Specification** (NDIS**) drivers.

No

If you choose **No**, that's the end. Ignore all the rest of the instructions. You can't use NetWare* Client* 32* for Windows** 95**.

Do not remove any instances of **Novell* ODINSUP** from the **Network** control panel unless you know which one belongs to which ODI* adapter. There is a one-to-one mapping. You cannot just remove any of them. **Novell ODINSUP** is automatically removed when the adapter is removed, but not until after the **Network** control panel is closed. Also, removing **Novell ODINSUP** removes Client 32* if there is only one adapter in use.

ODINSUP Overview

The ODI* NDIS** support module (ODINSUP) is an Open Data-Link Interface* (ODI) protocol stack that interfaces between NDIS and ODI LAN drivers.

ODINSUP provides ODI support for NDIS protocols. This enables you to use Microsoft** networking components with ODI LAN drivers. For example, using ODINSUP allows you to use the Client for Microsoft Networks with an ODI driver. Another example would be using ODINSUP to enable you to use the Microsoft TCP/IP protocol with an ODI driver.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

OEM.CNT File

This file can be used to integrate the Client 32* help with the Windows** 95** system help.
For more information, see [Integrating Client 32 Help: Overview](#).

■
Option 3: Installing Via Custom Windows 95 Setup

To install NetWare* Client* 32* for Windows 95** using Windows 95 Custom Setup**

1. Run Windows 95 Setup.
2. Select **Custom** when the Windows 95 Setup Wizard displays the **Setup Options**.

When presented with your **Network Configuration**:

1. (Conditional) If you have a NetWare client installed, remove it.
2. Add NetWare Client 32 for Windows 95.
 - a. Choose **Add**.
 - b. Choose **Client**.
 - c. Choose **Add**.
 - d. Choose **Have Disk**.
 - e. Specify the path for the NetWare Client 32 for Windows 95 files.
 - f. Choose **OK**.
3. Configure NetWare Client 32 for Windows 95.
 - a. Choose **Novell NetWare Client 32**.
 - b. Choose **Properties**.
 - c. Make sure the information for "Preferred server," "Preferred tree," "Name context," and "First network drive" are correct.
 - d. Do any other configuration.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

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Overview of Installing Additional Protocols and Features

Client 32* optionally supports NetWare*/IP*, NMR, SNMP, and Host Resources MIB. You can install these options from the **Network** control panel after installing Client 32.

Novell SNMP Agent and Host Resources MIB

Simple Network Management Protocol (SNMP) is a cross-protocol language that allows administrators to manage computers across diverse network platforms.

If the management console supports Management Information Base (MIB) files, you might also want to load Host MIB support on the client. Host MIB support enables the management console to poll SNMP clients for inventory information.

NetWare/IP

NetWare/IP sends and receives IPX* packets in IP format. NetWare/IP enables networked applications that use only IPX to communicate over TCP/IP networks. It also provides a way for separate IPX networks to communicate across IP-based internetwork connections.

NMR

Network Management Responder (NMR) is an application service that returns general workstation configuration information beyond what is normally available.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Overview of Removing Client 32 Software

You can remove Client 32* using the **Network** control panel. Some Client 32 information remains in the registry after you remove Client 32. This preserves your Client 32 configuration; when you reinstall Client 32, your configuration settings are the same as they were.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

PC32MLID.LAN File

The PC32MLID.LAN file is a shim between the 16-bit DOS ODI* specification and the 32-bit C-ODI specification. It acts like a 32-bit LAN driver, but it uses 16-bit LAN drivers to transmit and receive network data. It must be used if you are using 16-bit DOS ODI LAN drivers with Client 32.

PC32MLID.LAN is installed when a 16-bit ODI LAN driver is installed. It is loaded as part of the boot-up process.

PHASERS.WAV File

A wave file for the FIRE PHASERS login script command. This file has the phaser sound.

Prepare NetWare 3.11 Servers

IMPORTANT: Each name space added to a volume requires additional server memory. If you add name space support to a volume and do not have enough memory, that volume cannot be mounted. For information about how to calculate the memory required for name space support, see *System Administration* .

IMPORTANT: Once a name space is added to a volume, the name space can be removed from the volume only by deleting the volume and recreating it, or by using VREPAIR (see *Utilities Reference*).

1. Copy the patches for NetWare* 3.11 to the SYS:\SYSTEM folder on the server.
The patches are PATCHMAN.NLM, SHORTAFX.NLM, and OS2OPNFX.NLM. On the Client 32 CD-ROM, they are in the ADMIN\PATCHES\NW311 folder. On diskette, they are in the PATCHES\NW311 folder of the Admin1 disk.
2. Load the OS/2** name space. At the server console prompt, enter:
LOAD OS2.NAM
3. Load the patches. At the server console prompt, enter:
LOAD PATCHMAN
LOAD SHORTAFX
LOAD OS2OPNFX
4. Add the OS/2 name space. At the server console prompt, enter:
ADD NAME SPACE OS2 TO VOLUME *volume_name*
5. Add the load commands for the patches to the AUTOEXEC.NCF file.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Prepare NetWare 4.1 Servers

IMPORTANT: Each name space added to a volume requires additional server memory. If you add name space support to a volume and do not have enough memory, that volume cannot be mounted. For information about how to calculate the memory required for name space support, see *Supervising the Network* .

IMPORTANT: Once a name space is added to a volume, the name space can be removed from the volume only by deleting the volume and recreating it, or by using VREPAIR (see *Utilities Reference*).

1. Copy the patches for NetWare* 4.1 to the SYS:\SYSTEM folder on the server.
The patches are PM410.NLM and NSWILDFX.NLM. On the Client 32 CD-ROM, they are in the ADMIN\PATCHES\NW410 folder. On diskette, they are in the PATCHES\NW410 folder of the Admin1 disk.
2. Load the OS/2** name space. At the server console prompt, enter:
LOAD OS2.NAM
3. Load the patches. At the server console prompt, enter:
LOAD PM410
LOAD NSWILDFX
4. Add the OS/2 name space. At the server console prompt, enter:
ADD NAME SPACE OS2 TO VOLUME *volume_name*
5. Add the load commands for the patches to the AUTOEXEC.NCF file.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Preparing NetWare Servers

Overview

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Installing Patches and Long Filename Support

[Prepare NetWare 4.1 Servers](#)

[Prepare NetWare 3.11 Servers](#)

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[Add Name Space Notes](#)

Preparing NetWare Servers

Adding Long Filename Support

In order to support long filenames, each NetWare* 4* and NetWare 3* server needs to have the OS/2** name space loaded. In addition, each volume needs to have the OS/2 name space added to it.

Each name space added to a volume requires additional server memory. If you add name space support to a volume and do not have enough memory, that volume cannot be mounted. For information about how to calculate the memory required for name space support, see *Supervising the Network* (for NetWare 4*) or *System Administration* (for NetWare 3*)

Each name space also uses up to 252 KB of disk space.

Once a name space is added to a volume, the name space can be removed from the volume only by deleting the volume and recreating it, or by using VREPAIR (see *Utilities Reference*).

The NetWare installation procedure places the OS2.NAM file (the OS/2 name space) in the SYS:SYSTEM directory.

Loading Patches

Client 32 ships patches for NetWare 3.11 and NetWare 4.1 servers. It is recommended that you load these patches.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Preparing Your Workstation Hardware

The following checklist can help you prepare your workstation for installing Client 32*.

Prerequisites

- PC with an Intel** (or compatible) 80386 (or later) processor
- A hard disk with 6 MB of free storage space
This does not include the disk space requirements for Windows 95 and any other software you might install on your workstation.
- 6 MB or more of RAM
- A network board installed in your workstation
For more information, see [Network Board Installation Notes](#).
- A cable connection to the network
For more information, see [Cabling Notes](#).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Preparing Your Workstation Software

The following checklist can help you prepare your workstation software for installing NetWare* Client* 32* for Windows** 95**. If you are installing Client 32 on a new workstation, first [prepare your workstation hardware](#), and then return to this section.

Prerequisites

- You must be running Windows 95.
- The NetWare Client 32 for Windows 95 CD-ROM or diskettes.
- For NetWare 3* and NetWare 4* servers, the patches shipped with Client 32 are installed. For more information, see [Preparing NetWare Servers](#).
- If you are upgrading from the NetWare DOS Requester* (VLM*) client or if you don't have any network client software installed, you need to have the Windows 95 CD-ROM or diskettes or the Windows 95 CAB files.

Notes

- The following network components are not compatible with NetWare Client 32 for Windows 95:
- [Microsoft**] Client for NetWare Networks
- [Microsoft] File and printer sharing for NetWare Networks (emulated NetWare Core Protocol* (NCP*) file and print services)
- [Microsoft] Service for NetWare Directory Services*
- Novell* NetWare (Workstation Shell 3.x [NETX])**
- Novell NetWare (Workstation Shell 4.0 and above [VLM])
- Novell IPX* ODI* Protocol

Note: This is the 16-bit module for the NETX and VLM clients. Client 32 uses the **IPX 32-bit Protocol for Novell NetWare Client 32**.

These network components conflict with Client 32. If any of these network components is installed, the Client 32 installation program detects the conflict and removes the conflicting network component.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Print Help

1. Choose **Help Topics**.
2. (Conditional) If the **Contents** tab isn't already displayed, choose **Contents**.
3. Choose the book that you want to print.
4. Choose **Print**.
5. Make sure the printer information is correct.
6. Choose **OK**.

protocols=NWLINK, NOVELLIPX32

- INF Installer should have added this line. Make sure this line lists only NWLINK and NOVELLIPX32 unless you are installing NetWare/IP.
- For NetWare/IP:
- The protocols statement must be:
protocols=NWLINK, NOVELLIPX32, NWIP
- Make sure the MSTCP protocol is not listed, because NetWare/IP* automatically loads the MSTCP protocol.

Putting the Client 32 Files into a Folder

Notes

- This folder can be on the local hard disk, the NetWare* server, or any other location accessible to the INF installer (INFINST.EXE).
- Copy the files from the ENGLISH folder of the Client 32* CD-ROM or from the Client 32 diskettes.
- Do not copy the files from the ADMIN\BATCH95\NLS\ENGLISH folder of the Client 32 CD-ROM or from the BATCH95\NLS\ENGLISH folder of the Admin2 disk to the folder at this point.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

README.TXT File

The README.TXT file contains information that you should read before installing Client 32.

Source location:

CD-ROM: ENGLISH folder

Diskettes: SETUP diskette

Destination location: \NOVELL\CLIENT32

To display the README.TXT file, see [View the Readme](#).

RFC1514.MIB File

Definitions for the Host Resources Management Information Base (MIB).

Source location:

CD-ROM: ADMIN\NMS folder

Diskettes: ADMIN1 diskette, NMS* folder

Destination location: SNMP management station. See the instructions for your SNMP management software for details.

Notes

- Must be manually copied to the appropriate destination.

ROUTE.COM File

The NetWare* source routing driver (the ROUTE.COM file) enables communication across IBM** token-ring network bridges. It is used only for 16-bit ODI* LAN drivers.

ROUTE.COM can be loaded from the AUTOEXEC.BAT file after the 16-bit ODI LAN driver. There must be a ROUTE command for each frame type that you want to use source routing.*

The NetWare server also needs to load source routing (ROUTE.NLM).

Reboot Notes

- When your workstation reboots, Client 32* starts automatically.

■
Remove Client 32

To remove NetWare* Client* 32* for Windows 95****

1. Click here ■ to display the **Network** control panel.
2. Choose **Novell NetWare Client 32**.
3. Choose **Remove**.
4. Remove any other Client 32 networking components (such as the **Novell ODINSUP** component and the **IPX* 32-bit Protocol for Novell* NetWare Client 32**) in the same way.
5. Choose **OK**.
6. Choose **No**.
7. Remove the Client 32 files. For lists of Client 32 files, see [Client 32 Files](#).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Remove NetWare Client

To remove a NetWare* client

1. Choose the name of the client.

The name should be one of the following:

Client for NetWare Networks

Novell* NetWare (Workstation Shell 3.X (NETX))

Novell NetWare (Workstation Shell 4.0 and later [VLM*])


2. Choose **Remove**.

Note

You do not need to exit the **Network** control panel or restart your computer at this point

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Remove ODINSUP and your adapter


1. Click here  to display the **Network** control panel.
 2. Choose **Novell ODINSUP**.
 3. Choose **Remove**.
 4. Choose the name of your network adapter (for example, **NE2000* Compatible**).
 5. Choose **Remove**.
 6. Choose **OK**.
 7. (Conditional) If the Client 32* files or the Windows** 95** CAB files are on a network drive, choose **No**.
- Do not restart your computer, so you can access these files that are needed for installing Client 32.

OR

(Conditional) Otherwise, choose **Yes** to restart your computer.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Remove Optional Features

1. Click here  to display the **Network** control panel.
2. Choose any of these optional features to remove:
 - Host Resources MIB for Novell* Client* 32*
 - Network Management Responder for NetWare Client 32
 - Novell NetWare/IP* Protocol
 - Novell SNMP Agent
3. Choose **Remove**.
4. Choose **OK**.

Notes

- Because the Host Resources MIB requires SNMP, if you remove SNMP, Client 32 also removes the Host Resources MIB.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Removing INF Files

Notes

- Rename or erase all the files with an extension of .INF in the folder where you put all the files for NetWare* Client* 32* for Windows** 95**.
- The Client 32 .INF files for MSBATCH Setup are different than the regular Client 32 .INF files. In this step, you remove the regular .INF files. In the next step, you replace them with the .INF files for MSBATCH Setup.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Remove Network Options

1. Choose **Network Options**.
2. Uncheck any protocols, services, clients, or other options that are checked.
3. Check **IPX/SPX* compatible protocol**, which is listed under **Available Protocols**.
4. Choose **OK**.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Restart Your Computer

1. Remove any diskettes from the diskette drive (if you haven't already).
2. Choose **Yes** on the **System Settings Change** window.


Notes

■ The **System Settings Change** window asks you if you want to restart your computer now. Occasionally, this pop-up might be partially or totally hidden. If you don't see it, minimize or close windows until you do.

If the **System Settings Change** window is not displayed, restart your computer by doing the following:

1. Choose **Start** on the taskbar.
2. Choose **Shut Down**.
3. Choose **Restart the computer?**
4. Choose **Yes**.

Run SETUP.EXE

1. (Conditional) If you are installing from diskette, insert the Setup disk.
OR
(Conditional) If you are installing from CD-ROM, insert the NetWare* Client* 32* for Windows** 95** CD-ROM.
2. (Conditional) If you are installing from a diskette in drive A:, click here  to run the installation program (SETUP.EXE).
OR
(Conditional) If you are not installing from a diskette in drive A:, run the SETUP.EXE program from the folder that has the Client 32 files.

Notes

- The path to the Client 32 files cannot have any folders with long filenames in it. All the folders in the path must conform to the 8.3 filename convention.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Run Server-Based Setup

1. (Conditional) Log in to the NetWare* server and map a network drive to the volume from which you want users to install Windows** 95** and Client 32*.
2. Run NETSETUP.EXE under Windows 95.
NETSETUP.EXE is in the ADMIN\NETTOOLS\NETSETUP folder of the Windows 95 CD-ROM.
3. Set the server install path to the MSBATCH Setup install folder (F:\WIN95, for example).
 - a. Choose **Set Path**.
 - b. Enter the path.
 - c. Choose **OK**.
4. Install the Windows 95 source files to the server install path.
 - a. Choose **Install**.
 - b. Choose **Local hard drive**.
Client 32 does not support running Windows 95 with shared files on a server.
 - c. Enter the path that has the Windows 95 cabinet files (*.CAB) as the **Path to install from**--F:\WIN95CAB, for example.
 - d. Choose **OK**.
 - e. Respond to the **Create Default** prompt. Choose either option.
 - f. Follow the instructions for responding when any other prompts are displayed.
 - g. Choose **Exit** after the installation is complete.

Notes

- Server-based Setup (NETSETUP.EXE) must be run under Windows 95. It cannot be run successfully under any other workstation operating system.
- Server-based Setup (NETSETUP.EXE) extracts the Windows 95 source files from the cabinet (*.CAB) files in the source folder (**Path to install from**) and places the source files into the destination folder (**Path to install to**).
- Running Server-based Setup (NETSETUP.EXE) might take 15 to 45 minutes, depending on the performance of your workstation and the network.
- For more information about Server-based Setup (NETSETUP.EXE), see the Microsoft** Windows 95 Resource Kit.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Install Windows 95 and Client 32

1. (Conditional) Log in to the NetWare* server and map a network drive to the MSBATCH Setup install folder.
2. Run SETUP.EXE with MSBATCH.INF as the first parameter.

For example: SETUP F:\WIN95\MSBATCH.INF

Notes

- Specify the complete path of the MSBATCH.INF file.
- Use Windows 95 Setup (SETUP.EXE), which is in the MSBATCH Setup install folder (for example, F:\WIN95).
- For more information about Windows 95 Setup (SETUP.EXE) including the workstation requirements for running SETUP.EXE, see the Microsoft** Windows 95 Resource Kit. For brief descriptions of Setup Options, enter SETUP /?.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Run the INF Installer

1. (Conditional) Log in to the NetWare* server and map a network drive to the MSBATCH Setup install folder.
2. Run the INF Installer (INFINST.EXE).
INFINST.EXE is in the ADMIN\NETTOOLS\NETSETUP folder of the Windows** 95** CD-ROM.
3. Choose **Set path**.
4. Enter the **Server Path**.
Specify the MSBATCH Setup install folder (for example, F:\WIN95).
5. Choose **Install INF**.
6. Choose NWCLIENT.INF.
The NWCLIENT.INF file is in the folder where you put all the Client 32* files.
7. Choose **OK**.
Important: Do not keep the existing NETWARE.DRV file even if it is newer than the NETWARE.DRV file that is shipped with Client 32. Choose **NO** in response to the **Version Conflict** message.
Important: It is strongly recommended that you not skip files. If the INF Installer cannot find a file, specify the path where you think the file is. For example, try the folder where you put all the Client 32 files.
8. Respond to any messages that are displayed as the INF Installer runs.
9. Choose **Exit** when finished.

Notes

- The NWCLIENT.INF file must be in the folder where you put all the Client 32 files. You should already have copied it there from the ADMIN\BATCH95\NLS\ENGLISH folder on the NetWare Client 32 for Windows 95 CD-ROM or from the BATCH95\NLS\ENGLISH folder on the Admin2 disk.
- The INF Installer installs all the .INF files that are in the same folder as the .INF file you specify. Only the .INF files that you want installed should be in that folder.
- The INF Installer (INFINST.EXE) must be run under Windows 95. It cannot be run successfully under any other workstation operating system.
- Microsoft** also has a wizard called the INF Generator (INFGEN.EXE) that can be used in place of the INF installer. The INF Generator helps create setup script files that include variations for individual users or groups of users.

As of this writing, the INF Generator is available at the following Internet sites:

<http://www.microsoft.com/windows/support/istools.htm>

ftp://ftp.microsoft.com/peropsys/Win_News/TechnicalInfo%26Support/ISTools/ig.exe

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

SROUTE.NLM File

This is the source route NLM* program. It is designed to provide source routing support for Client 32*. Source routing enables communication across IBM** token-ring network bridges. SROUTE.NLM is the 32-bit replacement for ROUTE.COM.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Select a Network Adapter

1. Choose **Novell** or the manufacturer of your network adapter.
2. Choose the network adapter that matches your hardware.
For example, choose **NE2000 Compatible** if you have an NE2000* or compatible network adapter.
3. Choose **OK**.

Notes

- The Novell* IPX* Monolithic Driver is not supported.
- There should be a matching Novell ODINSUP component for each ODI* LAN driver. It is installed automatically. For more information, see the [ODINSUP Overview](#).
- Generally, you should not remove **Novell ODINSUP** from the **Network** control panel unless it is the only ODINSUP in the system.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Set Up NMR

IMPORTANT: You need access to the Windows** 95** CAB files and the NetWare* Client* 32* for Windows 95 files to successfully set up the Network Management Responder (NMR).

1. Click here ■ to display the **Network** control panel.
2. Choose **Add**.
3. Choose **Service**.
4. Choose **Add**.
5. Choose **Novell**.
6. Choose **Network Management Responder for NetWare Client 32**.
7. Choose **OK**.

Notes

- NMR is an optional feature of NetWare Client 32 for Windows 95.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Set Up NetWare/IP

IMPORTANT: You need access to the Windows** 95** CAB files and the NetWare* Client* 32* for Windows 95 files to successfully set up NetWare/IP*.

1. Click here ■ to display the **Network** control panel.
2. Choose **Add**.
3. Choose **Protocol**.
4. Choose **Add**.
5. Choose **Novell**.
6. Choose **Novell NetWare/IP Protocol**.
7. Choose **OK**.
8. Configure NetWare/IP*
9. (Conditional) If TCP/IP isn't already configured, configure it.

Notes

- NetWare/IP requires that the TCP/IP protocol stack be Transport Driver Interface (TDI)-compliant.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Installing Optional Features

Overview

[Overview of Installing Optional Features](#)

Procedures

[Installing the Host Resources MIB](#)

[Installing NetWare*/IP*](#)

[Installing NMR](#)

[Installing SNMP](#)

[Integrating Help](#)

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■
Set Up SNMP

IMPORTANT: You need access to the Windows** 95** CAB files and the NetWare* Client* 32* for Windows 95 files to successfully set up SNMP.

1. Click here ■ to display the **Network** control panel.
2. Choose **Add**.
3. Choose **Service**.
4. Choose **Add**.
5. Choose **Novell**.
6. Choose **Novell SNMP Agent**.
7. Choose **OK**.
8. (Optional) Configure SNMP.
9. (Conditional) If TCP/IP isn't already installed, add it.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Set Up the Host Resources MIB

IMPORTANT: You need access to the NetWare* Client* 32* for Windows** 95** files to successfully set up the Host Resources MIB.

1. Click here ■ to display the **Network** control panel.
2. Choose **Add**.
3. Choose **Service**.
4. Choose **Add**.
5. Choose **Novell**.
6. Choose **Host Resources MIB for Novell Client 32**.
7. Choose **OK**.
8. (Optional) Configure the Host Resources MIB.
9. (Conditional) If you haven't already installed TCP/IP, install it.

Notes

- There are two MIB files that need to be copied to the network management station:
[NWHOSTX.MIB](#)
[RFC1514.MIB](#)
- The Host Resources MIB is an optional feature of Client 32.
- The Host Resources MIB for Novell Client 32 is compatible only with the Novell SNMP Agent. It is not compatible with any other SNMP agent

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Smart Defaults

During the installation of Client 32*, the following settings are checked and used if applicable.

- If the Microsoft** Client for NetWare* Networks is installed, any values that have been specified for settings that are applicable to Client 32 are preserved.
- If there is a NET.CFG file, all applicable NET.CFG entries are preserved by moving them to the registry. Some parameters are not used or needed for Client 32, so they are not moved to the registry. In other words, a subset of all NET.CFG parameters are moved to the registry.
NetWare Client 32 for Windows** 95** does not include its own TCP/IP protocol stack. Therefore, any existing TCP/IP parameters are not moved from the NET.CFG file to the registry.
- If there is an ADMIN.CFG file, the parameters specified therein are moved to the registry. For more information, see [Administrator Defaults](#).

Notes

- Any time the Client 32 installation program (SETUP.EXE) runs, the Smart Defaults function also runs. Therefore, you can use Smart Defaults with the following installation methods:
 - [Option 1: MSBATCH Setup](#)
 - [Option 2: Installing on a Workstation that Already Has Windows 95 Installed](#)
 - [Option 4: Automatic Client Upgrade](#)
- For more information about moving parameters from a NET.CFG file to the registry, see [NET.CFG Requirements for Smart Defaults](#).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Start Installation Notes

- Any existing NetWare* Client* software is removed. Specifically, the following NetWare client software is removed if found:
 - Novell* NetWare (Workstation Shell 3.x (NETX))
 - Novell NetWare (Workstation Shell 4.0 and later [VLM*])
 - Novell NetWare Client 32*
 - [Microsoft] Client for NetWare Networks
 - [Microsoft] Service for NetWare Directory Services*
 - NetWare Client 32 for Windows** 95** is installed.
 - The Client 32 files are copied to your hard disk.
 - Insert the Client 32 diskettes as you are prompted for them.
 - Specify the path for the Windows 95 CAB files or for the Client 32 diskettes as necessary.
 - The folder for Client 32 is \Novell\Client32 on your workstation's Windows drive. Some of the Client 32 files are copied to this folder. Other files are copied to the appropriate Windows 95 folder, such as the \Windows\System, \Windows\Inf, and \Windows\Help folders.
- The system registry is updated with the information needed to start Client 32 automatically each time Windows 95 starts.
- Generally, the STARTNET.BAT, NET.CFG, and AUTOEXEC.BAT files are not created, modified, or used by Client 32. If you are using 16-bit ODI LAN drivers, the AUTOEXEC.BAT and NET.CFG files are still used, but only by the 16-bit ODI LAN drivers.
- Install checks for existing settings in the system registry and the NET.CFG file. Any applicable settings found are moved to the area that Client 32 uses in the system registry. For details, see Smart Defaults.
- If the **Existing ODI* Driver** is installed, it is removed.

* Novell trademark. ** Third-party trademark. For more information, see Trademarks.

Third-Party LAN Drivers

The following third-party LAN drivers are included with Client 32*:

ACC41.LAN

PCI40.LAN

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Change the LAN Driver for Your Network Adapter

1. (Conditional) If you have not already run the install program (SETUP.EXE), [run it](#).
2. (Conditional) If the **Network** control panel is not displayed, click here [■](#) to display it.
3. Choose the network adapter that is installed.
4. Choose **Remove**.
5. (Conditional) If your network adapter is a Plug and Play adapter that Windows** 95** detects and installs the software for, choose **OK** on the **Network** control panel and [restart your computer](#).
OR
(Conditional) Otherwise, for ISA and MCA network adapters, choose **Add**, choose **Adapter**, choose **Add**, and then [select the LAN driver that you want](#).

Notes

- After installing Client 32*, when Windows 95 detects a Plug and Play adapter, it automatically installs an ODI* LAN driver for the network adapter if an ODI LAN driver is available for the network adapter.
- For Plug and Play adapters that Windows 95 detects and installs the software for, if you add a network adapter using the **Network** control panel, you might get two LAN drivers installed. Therefore, you should let Windows 95 detect the network adapter and install the software for it, rather than doing it manually.
- The new LAN driver is not used until after you restart your computer.
- If an ODI LAN driver for your network adapter is already installed when you install Client 32, that LAN driver is used unless you change it.
- If an NDIS* LAN driver is already installed when you install Client 32 using SETUP.EXE, SETUP.EXE attempts to find a compatible ODI LAN driver. If it finds one, SETUP.EXE replaces the NDIS driver with the ODI LAN driver.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Trademarks

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Novell Trademarks

Client 32 is a trademark of Novell, Inc.

GroupWise is a trademark of Novell, Inc.

IPX is a trademark of Novell, Inc.

IPX/SPX is a trademark of Novell, Inc.

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Netscape Navigator is a trademark of Netscape Communications Corporation.

Network Driver Interface Specification and NDIS are trademarks of PC-Plus Communications LP.

OS/2 is a registered trademark of International Business Machines Corporation.

PostScript is a registered trademark of Adobe Systems Incorporated.

Unicode is a registered trademark of Transoft Ltd.

Windows is a registered trademark of Microsoft Corporation.

Windows 95 is a trademark of Microsoft Corporation.

Windows NT is a trademark of Microsoft Corporation.

Understanding Unicode Files

All objects and their attributes in the NetWare* 4* Directory database are stored in their Unicode (16-bit) representation. However, clients use 256-character code pages (using 8-bit character codes). The Unicode files are a set of Unicode translation tables needed to run NetWare utilities and manage the Directory database.

Notes

- The appropriate Unicode files need to be in the Windows** NLS folder (typically, C:\WINDOWS\NLS) or the Novell* NLS folder (typically, C:\NOVELL\NLS).
- The Unicode files include the Windows code page file, the Windows code page to Unicode file, the Unicode monocasing file, and the Unicode collating file.
- For example, the following Unicode files perform the functions indicated:
 - 1252_UNI.001 is used to translate code page 1252 to Unicode
 - UNI_1252.001 is used to translate Unicode to code page 1252
 - UNI_MON.001 is the monocasing file, which handles the proper alphabetization of upper- and lower-case letters
 - UNI_COL.001 is the collating file, which handles collation and sorted lists
- For different code pages, you need Unicode tables with corresponding code page numbers.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■
Use the Microsoft Client

When using the Microsoft** Client for NetWare* Networks that ships with Windows** 95**, Setup must be run from the user's bindery login script (located in the SYS:MAIL directory) in order for the Automatic Client Upgrade to work. When using ACU with the Microsoft Client for NetWare Networks Service for NetWare Directory Services*, Setup must be placed in the login script that corresponds with the type of login (bindery or NDS).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

View the README

When you display this help topic, the Client 32* README.TXT file is also displayed if possible.

For information about the pre-installation (or source) and post-installation (or destination) locations of this file, see [README.TXT File](#).

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

■ What the User Sees

When the user at the client workstation logs in, the Automatic Client Upgrade checks the client's files to see if the system files are newer than the client's files. If they are, the user sees the following dialog box:



If the user chooses **Continue**, the upgrade starts automatically and the user sees an installation progress indicator as the newer files are copied. If the user chooses **Cancel**, the network continues to function without the upgrade. However, each time the user logs in with the older client, the files are compared and the option to upgrade is presented.

After the client has been updated, the user sees a dialog box presenting the option to reboot the workstation. The client workstation must be rebooted in order for the newer version of NetWare* to take effect.

* Novell trademark. ** Third-party trademark. For more information, see [Trademarks](#).

Workgroup="Sample Group"

Windows** 95** requires this value, but Client 32* does not use it. To avoid having Windows 95 Setup prompt for this value, specify it in the MSBATCH.INF file.

[MSTCP]

The properties (such as IPAddress) for the Microsoft** TCP/IP protocol are specified in the [MSTCP] section. This protocol (and hence this section) is needed for the NetWare/IP* and SNMP features of Client 32*.

If you are not using TCP/IP, NetWare/IP, or SNMP, this section is not needed.

