VeRsIoN=2.10 Novell Client 32 Installation Help CoPyRiGhT=(c) Copyright 1994-1996, Novell, Inc. All rights reserved.

### ADMIN.CFG File

This is a sample configuration file for  $\underline{\text{Administrator Defaults}}.$ 

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\N160DI.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 1 to display the **Network** control panel.
- Choose Add. 2.
- Choose **Protocol**.
  Choose **Add**.
- 3. 4.
- Choose Microsoft. 5.
- 6. 7. Choose TCP/IP.
- Choose **OK**.

  <u>Configure the TCP/IP protocol as necessary for your network</u>.

  Choose **OK**. 8.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.



### **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 <u>Administrator Defaults Parameters</u> in the NWCFG95.HLP file.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## **Automatic Client Upgrade Contents**

## **Automatic Client Upgrade Overview**

ACU Overview
What the User Sees

## Tasks for ACU

Create an ACU Install Folder
Modify the Login Script
Use the Microsoft\*\* Client
Force an Upgrade

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.



### **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 <u>login script</u> 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

### **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  $\underline{\text{Trademarks}}$ .

### **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 <u>ADMIN.CFG file.</u>

### 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]

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## **NetWare Client 32 for Windows 95 Help**

Overview

What's New

**Installing Client 32\*** 

**Readme** 

<u>Installing</u>

**Configuring Client 32** 

Configuring

**Using Client 32** 

**Troubleshooting** 

<u>Tips</u>

**Using the Network** 

**Printing Help Topics** 

**Notices** 

**Trademarks** 

**Disclaimer** 

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

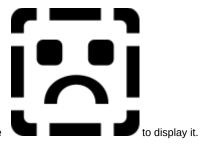
### Clients=NOVELL32

 $\ensuremath{\mathsf{INF}}$  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.

# See also Configure Client 32



- 1. (Conditional) If the **Network** control panel is not displayed, click here
- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

# **Configure TCP/IP Support**

- Click here to display the Network control panel.
   Choose TCP/IP.
   Choose Properties.
   Make any necessary changes.
   Choose OK.
   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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

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

- Click here to edit your AUTOEXEC.BAT file.
   Ensure that your AUTOEXEC.BAT file executes the "NET START" command.
   If Client 32\* hangs, set the value for the <u>Close Behind Ticks</u> 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

### 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\<u>INF</u>

 COPY
 C:\C32TEMP\\*.INF
 F:\WIN95\<u>SUWIN</u>

### **Copying NETDEF.INF**

### **Examples**

If your CD-ROM drive is accessed as drive D: and your <u>MSBATCH Setup install folder</u> 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

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

## **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 <a href="Integrating Client 32">Integrating Client 32</a> Help: Overview.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

**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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

### 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

### **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:

- <u>Do not remove **Novell ODINSUP**</u>
- Do not remove IPX/SPX-compatible Protocol

When you are finished, choose **OK** on the **Network** control panel and <u>restart your computer.</u>

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## 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.

### **Disclaimer**

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Novell is not responsible for lost profits or revenue, loss of use of the software, loss of data, costs of recreating lost data, the cost of any substitute equipment or program, or claims by any party other than you.

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.

\* Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## 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  $\underline{\text{MSBATCH Setup}}$ , use the  $\underline{\text{IgnoreDetectedNetCards}}$  and  $\underline{\text{NetCards}}$  parameters in the MSBATCH.INF file to specify a network adapter. This ensures that the  $\underline{\text{Existing ODI Driver}}$  is not installed as the network adapter.

\* Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## Express=1

 $\label{thm:continuity:equiv} \text{User input is not required or allowed during Windows***} \ 95^{***} \ \text{Setup.} \quad \text{To allow user input, specify "Express=0."}$ 

### **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

ETHERTSM.MSG

ETHERTSM.NLM

F700DI.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

00100011115

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

ODILNKSY.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

TOKENTSM.MSG

TOKENTSM.NLM

TRXNET.COM

<u>UNI\_1250.001...UNI\_MON.001</u>

VMLID.NLM

# **List of Files by Folder**

\Novell\Client32

\Novell\Client32\Install \Novell\Client32\NIs\language

\Novell\Nwclient

\Windows

\Windows\Help

\Windows\Inf

\Windows\NIs\language

\Windows\System

<u>Other</u>

## **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

F700DI.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

TOKENTSM.NLM

VMLID.NLM

# List of Files in the \Novell\Client32\Install Folder

ADMIN.CFG

# List of Files in the \Novell\Client32\NIs\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\NIs\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 <u>LAN Driver Files.</u>

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

# **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\NIs\language Folder

NOVELNPR.DLL

# Notes

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

# List of Files in the \Windows\System Folder

CALWIN16.DLL

CALWIN32.DLL

CLNWIN16.DLL

CLNWIN32.DLL

CLINVVIIN32.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 <u>Trademarks</u>.

### **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.

# Ignore Detected Net Cards

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 <a href="Existing ODI Driver">Existing ODI Driver</a>.

**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 <u>Trademarks</u>.

# **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 guit 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 <u>Trademarks</u>.

# **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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

# **Installing Client 32**

#### Overview

**Understanding Client 32\* Installation** 

### Preparation

Preparing Your Workstation Hardware
Preparing Your Workstation Software
Preparing Your NetWare Servers
Making Diskettes

#### **Procedures**

Option 1: MSBATCH Setup

Option 2: Installing on a Workstation That Already Has Windows\*\* 95\*\* Installed

Option 3: Installing Using Custom Windows 95 Setup

Option 4: Automatic Client Upgrade

# **Optional Features**

Installing Additional Protocols and Optional Features
Removing Additional Protocols and Optional Features

### Removal

Removing

#### Reference

Client 32 Files

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

**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**.

(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 <u>Trademarks</u>.

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 1 to print this help topic.
- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

**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 <u>Trademarks</u>.

# **Integrating Help**

Overview

Integrating Client 32 Help

Procedure

Integrate Client 32 Help

# 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  $\underline{AUTOEXEC.BAT}$   $\underline{file}$  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

 $\hbox{\#\LAHF\SYS\PUBLIC\CLIENT\ACU\SETUP.EXE\/} ACU$ 

# **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).

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

### **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 <u>Trademarks</u>.

# **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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

**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 \frac{/acu}{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 <u>Trademarks</u>.

# 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  $\underline{\text{AUTOEXEC.BAT file}}$  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  $\underline{\text{AUTOEXEC.BAT file}}$  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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

# NETWARE.DRV File

The NetWare*	Device Driver i	s provided for	backward con	mpatibility with	16-bit Windows**	applications that are	NetWare awar	e.

# 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 work stations.

# **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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

# OEM.CNT File

This file can be used to integrate the Client 32\* help with the Windows\*\* 95\*\* system help. For more information, see <a href="Integrating Client 32 Help: Overview">Integrating Client 32 Help: Overview</a>.

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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

**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 <u>Trademarks.</u>

# **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 <u>Trademarks.</u>

### 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

# **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

- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

# **Preparing NetWare Servers**

# Overview

Preparing NetWare Servers

# **Installing Patches and Long Filename Support**

<u>Prepare NetWare 4.1 Servers</u> <u>Prepare NetWare 3.11 Servers</u>

### Reference

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 <u>Trademarks</u>.

# **Preparing Your Workstation Hardware**

For more information, see <u>Cabling Notes</u>.

The following checklist can help you prepare your workstation for installing Client  $32^{\star}$ .

# 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 <u>Network Board Installation Notes</u> .
A cable connection to the network

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

# **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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

**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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

# **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 <u>View the Readme</u>.

### 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.  $^{\star}$ 

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

## Reboot Notes

_	Whon you	ir workstation	roboote	Cliont 22*	ctarte	automatically.	
•	vvnen you	ar 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.
- Choose Novell NetWare Client 32. 2.
- Choose Remove. 3.
- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

## **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 <u>Trademarks</u>.

# **Remove ODINSUP and your adapter**

- Click here to display the Network control panel.
   Choose Novell ODINSUP.
- Choose Remove.
- Choose the name of your network adapter (for example, NE2000\* Compatible).
- Choose Remove.
- 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.

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

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

## **Remove Optional Features**

- Click here to display the **Network** control panel.
   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.

- 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  $\underline{\text{Trademarks}}$ .

# **Removing INF Files**

- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## **Remove Network Options**

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

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

## **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**

- (Conditional) If you are installing from diskette, insert the Setup disk.
  - (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 5 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.

- 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 filenaming convention.
- \* Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

#### **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.

- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

### **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

- 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 /?.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

#### 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

 $ftp://ftp.microsoft.com/peropsys/Win\_News/TechnicalInfo\%26Support/ISTools/ig.exe$ 

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

### 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  $\overline{\text{ROUTE.COM}}$ .

\* Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks.</u>

## **Select a Network Adapter**

- 1. Choose **Novell** or the manufacturer of your network adapter.
- 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.

- 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 <u>ODINSUP Overview</u>.
- 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 <u>Trademarks</u>.

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

#### Notes

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

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

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

#### Notes

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

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## **Installing Optional Features**

## Overview

Overview of Installing Optional Features

## Procedures

Installing the Host Resources MIB
Installing NetWare\*/IP\*
Installing NMR
Installing SNMP
Integrating Help

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

**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.
- Choose OK.
- (Optional) Configure SNMP.
   (Conditional) If TCP/IP isn't already installed, add it.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

**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 <u>Trademarks</u>.

### **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 <u>Administrator Defaults.</u>

- 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 <a href="MET.CFG Requirements for Smart Defaults">MET.CFG Requirements for Smart Defaults</a>.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

#### **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 thearea that Client 32 uses in the system registry. For details, see <u>Smart Defaults.</u>
- If the <u>Existing ODI\* Driver</u> is installed, it is removed.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## **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 <u>Trademarks</u>.

## **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.
- 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 <u>restart your computer.</u>

OR

(Conditional) Otherwise, for ISA and MCA network adapters, choose **Add,** choose **Adapter**, choose **Add,** and then <u>select the LAN driver that you want.</u>

- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

#### **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.

LANalyzer is a registered trademark of Novell, Inc. in the United States and other countries.

Link Support Layer and LSL are trademarks of Novell, Inc.

ManageWise is a trademark of Novell, Inc.

NE2000 is a trademark of Novell, Inc.

NetWare is a registered trademark of Novell, Inc. in the United States and other countries.

NetWare 3 is a trademark of Novell, Inc.

NetWare 4 is a trademark of Novell, Inc.

NetWare Client is a trademark of Novell. Inc.

NetWare Core Protocol and NCP are trademarks of Novell, Inc.

NetWare Directory Services and NDS are trademarks of Novell, Inc.

NetWare DOS Requester is a trademark of Novell, Inc.

NetWare/IP is a trademark of Novell, Inc.

NetWare Loadable Module and NLM are trademarks of Novell. Inc.

NetWare Management System and NMS are trademarks of Novell, Inc.

NetWire is a registered service mark of Novell, Inc. in the United States and other countries.

Network Support Encyclopedia Professional Volume and NSEPro are trademarks of Novell, Inc.

Novell is a registered trademark of Novell, Inc. in the United States and other countries.

Novell Application Notes is trademark of Novell, Inc.

Novell Authorized Reseller is a service mark of Novell, Inc.

Novell Gold Partner is a service mark of Novell, Inc.

Novell Labs is a trademark of Novell, Inc.

The Novell Network Symbol is a trademark of Novell, Inc.

Novell Platinum Partner is a service mark of Novell, Inc.

Novell Technical Services is a service mark of Novell. Inc.

Open Data-Link Interface and ODI are trademarks of Novell, Inc.

Packet Burst is a trademark of Novell, Inc.

SPX is a trademark of Novell, Inc.

Storage Management Services and SMS are trademarks of Novell, Inc.

Virtual Loadable Module and VLM are trademarks of Novell, Inc.

### **Third-Party Trademarks**

 $\label{lem:compuServe} \mbox{CompuServe is a registered trademark of CompuServe, Inc.}$ 

Hewlett Packard and HP are registered trademarks of Hewlitt-Packard Company.

IBM is a registered trademark of International Business Machines Corporation.

Intel is a registered trademark of Intel Corporation.

Microsoft is a registered trademark of Microsoft Corporation.

MS is a registered trademark of Microsoft Corporation.

MS-DOS is a registered trademark of Microsoft Corporation.

Netscape is a trademark of Netscape Communications Corporation.

Netscape Navigator is a trademark of Netscape Communications Corporation.

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

 ${\sf OS/2} \ is \ a \ registered \ trademark \ of \ International \ Business \ Machines \ Corporation.$ 

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.

- 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.

<sup>\*</sup> Novell trademark. \*\* Third-party trademark. For more information, see <u>Trademarks</u>.

## **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  $\underline{\text{Trademarks}}$ .

## **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  $\underline{\text{README.TXT}}$   $\underline{\text{File}}$ .

\* Novell trademark. \*\* Third-party trademark. For more information, see  $\underline{\text{Trademarks}}$ .

## **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 <u>Trademarks</u>.

## 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.