Help Essay, Research Paper

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CLIENT FOR NETWARE

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Windows 95 and NetWare 3.12 and 4.01 Servers

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Windows 95 with Microsoft Client for NetWare can experience

problems with NetWare 3.12 and 4.01 servers if packet burst is

turned on. This is a known problem with these servers that Novell

has fixed and posted on their forums. Download the file Pburst.exe

from the Novell NetWare Forum on Compuserve or the Novell Web site

(Ftp.Novell.com).

Pburst.exe contains the patch for the affected servers.

Opening Files on NetWare 3.11 Servers

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Programs that open a large number of files consecutively in rapid

succession might have occasional problems opening files on NetWare 3.11

servers. This can also happen when opening a file in a folder for which

you do not have file scan rights, such as an MS Mail shared post office.

Possible error messages:

- “File not found” error on a file you know exists

- “Sharing violation” or “Lock violation” error

- “Unable to open file” error

- “File in use” error

There are two solutions to these problems:

- Obtain a patch file from Novell for the NetWare 3.11 server. Using

FTP, connect to ftp.novell.com. Go to /pub/netware/nwos/nw311/osnlm

and run 311ptd.exe. This program will extract the file os2opnfx.nlm.

Then, load the .nlm file onto the NetWare 3.11 server.

(”load os2opnfx.nlm”)

- Disable long filename support in Client for NetWare. This means that

you will not be able to use long filenames on any NetWare servers

from Windows 95. To disable long-filename support, carry out the

following steps:

1. Click the Start menu, click Run, and then type Regedit.

2. Go to

HKEY\_Local\_Machine\System\CurrentControlSet\Services\VxD\NWRedir

3. Create a new binary value named supportLFN with a value of 0.

Lowercase Extended-Character Passwords on NetWare 4.1 Servers

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In a NetWare 4.1 environment, Client for NetWare does not support

passwords that use certain lowercase extended characters. Users

need to change their password to all uppercase characters.

Client for NetWare and Programs That Use External Files

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If you are using Microsoft Client for NetWare, and you run a program

that needs to access an auxiliary file, your program will have problems

if the auxiliary file is on a drive other than the one the program is

on. This is because only the current drive is searched for auxiliary

files; the search path is not searched. If you experience this problem,

make sure the program and any auxiliary files are on the same drive.

Novell NetWare Login Scripts

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The Login Script Processor for the Microsoft Client for NetWare should

correctly process all commands in your login scripts. However, you

cannot load memory-resident programs (TSRs) from these scripts.

Installing Novell Client32 Overwrites

NetWare Directory Services Files

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When you install Novell Client32, the Novell setup program replaces

the Microsoft file Netdef.inf and renames it Netdef.bnw, and deletes

the NDS setup file Nwnds.dll. The result is that after uninstalling

Novell Client32, Service for NetWare Directory Services will not

install.

To work around this problem, carry out the following steps:

1. Find the file Netdef.bnw and rename it Netdef.inf.

2. Copy the Nwnds.dll file to the Windows\System directory on your

your hard disk by carrying out the following procedure:

1. Insert your Windows 95 installation CD into the CD-ROM drive.

2. Open an MS-DOS window.

3. Change to the Win95 directory on your CD-ROM, and then type the

following at the command prompt:

extract /l c:\windows\system precopy2.cab nwnds.dll

Upgrading Over an Earlier Beta Version of Windows

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If you upgrade this release of Windows over an earlier beta release,

and you have Service for NetWare Directory Services installed, you

will be prompted about version conflicts for the following files:

- Nwnp32.dll (v. 4.0.969)

- Nwlsproc.exe (v. 4.0.968)

- Netware.tmp (v. 4.0.968)

When you see the version conflict prompt, click No. After Windows is

installed, you need to reinstall Service for NetWare Directory Services.

To do this, carry out the following steps:

1. In Control Panel, double-click the Network icon.

2. Click Add, click Service, and then click Add.

3. Follow the instructions on your screen.

Printing to NetWare Directory Services Printers

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You cannot install Client for NetWare Networks and Service for NetWare

Directory Services (NDS) during the same installation session. If you

do, your NDS printers will appear to be offline.

If your printers appear to be offline, try carrying out the following

steps:

1. In Control Panel, double-click the Network icon.

2. Remove both Client for NetWare Networks and Service for NDS.

3. Restart your computer.

4. In Control Panel, double-click the Network icon.

5. Add Service for NDS.

6. Restart your computer.

NOTE:

If your local area network is using NetWare 4.1 or later, there is no

need to install Client for NetWare Networks separately. When you install

Service for NDS, it also installs the Client for NetWare Networks.

PLUG AND PLAY NETWORK CARDS AND 16-BIT REAL-MODE DRIVERS

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When you run the 16-bit real-mode driver for your Plug and Play

network interface card (NIC), your Plug and Play card might appear

not to function.

The reason the card appears to malfunction is that on most computers,

the Plug and Play card is inactive until Windows 95 enables it. 16-bit

NIC drivers load before Windows 95 can turn on Plug and Play cards.

Some 16-bit NIC drivers do not recognize Plug and Play cards (most

NE2000 Plug and Play clones fall into this category). In this case,

follow these steps to use your Plug and Play card with a 16-bit NIC

driver:

1. Run the Softset utility that comes with your Plug and Play card,

and then set the card to non-Plug and Play mode.

2. Remove the network card from the list of devices in the Device

Manager listing: In Control Panel, double-click the System icon,

click the Device Manager tab, select the network card, and then

click Remove.

3. Reinstall the network card using the Add New Hardware icon in

Control Panel.

When you install a 32-bit protect mode NIC driver in the future, you

can rerun Softset to turn on Plug and Play mode for your card. This

problem does not happen if you are using a 32-bit protect-mode NIC

driver.

INTEL ETHEREXPRESS 16 NICs AND PCI COMPUTERS

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If you are using an Intel EtherExpress 16-network interface card (NIC)

in a PCI computer that has a Diamond Speed Star PCI video card, your

system might hang or not initialize properly. These problems, according

to Intel customer support, are not related to Windows 95 and happen

on a variety of operating systems.

If you have one of the following video cards, contact your vendor to

obtain a new video BIOS update:

\* Diamond Speed Star PCI video card with BIOS version 1.01

\* Diamond Viper PCI VGA Video Adapter

\* Diamond Stealth video card, BIOS v1.03

Other PCI video cards might also cause problems with this Intel NIC.

In general, if you experience problems with your EtherExpress 16 in

a PCI computer other than those described above, please replace the

card before reporting the problem to Microsoft.

WINDOWS FOR WORKGROUP SHARES

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When you upgrade to Windows 95 from Windows for Workgroups, your

shares are not maintained. The folders/directories you shared in

Windows for Workgroups need to be reshared.

RUNNING WINDOWS 95 FROM A SERVER

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Windows 95 can be set up to run from a network server. The Windows 95

Resource Kit contains complete instructions for installing Windows

in this environment (see Chapter 4, “Server Based Setup for Windows 95″).

The following configurations are supported:

- Booting from hard disk using:

– Client for Microsoft Networks

– Client for NetWare Networks

– Novell Workstation Shell 3.x (NETX)

– Novell Workstation Shell 4.x (VLM)

– Banyan VINES DOS/Windows client

- Booting from a floppy disk using:

– Client for Microsoft Networks

– Client for NetWare Networks

– Novell Workstation Shell 3.x (NETX)

– Novell Workstation Shell 4.x (VLM)

– Banyan VINES DOS/Windows client

- Booting from a remote boot server using:

– Client for NetWare Networks

– Novell Workstation Shell 3.x (NETX)

– Novell Workstation Shell 4.x (VLM)

To use one of the Microsoft clients, your network card must have

both an NDIS2 (16-bit real mode) \*AND\* an NDIS3 (32-bit protect

mode) driver. If your network card is a PCI, EISA, or ISAPNP card,

you must run Windows over a real-mode client.

To Install Windows 95 over Previous Builds

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To install this final version of Windows 95 on network computers that

are already running Windows 95, you have two choices:

- Do a clean install on each computer;

-or-

- Upgrade each computer using the following procedure:

1. Shut down any clients running from the server.

2. Windows 95 must be installed on the server into the same folder

that you were using for previous builds. Delete everything in the

shared Windows 95 folder, and then run Netsetup.exe to install this

build into that folder.

3. Restart the client to a command prompt.

4. If you are using the Microsoft Client for NetWare Networks and use

map rooted drives, you must start either NETX or VLM to run Setup.

5. Map drives to the machine folder and shared Windows 95 folder

as before. These must use the same drive letters as used in the

previous build, and map roots should be to the same folder level.

6. Run Setup for the new build.

SUPPORT FOR THIRD-PARTY NETWORKS

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To install support for a third-party, real-mode network, you must be

running the network when you run Windows 95 Setup. Windows 95 does not

support installation of a real-mode network after Setup, unless you have

a Windows 95-specific .inf file from your network vendor. For example,

FTP includes a Windows 95 .inf in their 32-bit NFS client. Although

Windows 95 supports other networks, network component files for networks

other than Microsoft networks are not included with Windows 95. You must

already have the files for the network you want to install.

LANDESK 2.0

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LANDESK version 2.0 uses a TSR named Usertsr.exe that might cause

Windows 95 to stop responding when you use the Microsoft IPX/SPX-

compatible protocol (Nwlink.vxd) or file and printer sharing for

Microsoft Networks (Vserver.vxd).

LANDESK version 2.01 fixes this problem, and the patch is available

on Intel’s BBS or from Intel product support. For the BBS and product

support telephone numbers, consult the documentation that came with your

copy of LANDESK.

SunSelect PC-NFS

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Windows 95 supports versions 5.0 or greater of SunSelect PC-NFS.

If SunSelect PC-NFS is installed using an NDIS 2 LAN driver or an

ODI LAN driver, then SunSelect PC-NFS can be installed as an additional

16-bit network client along with 32-bit protected-mode clients. If you

are using a SunSelect PC-NFS LAN Driver, Windows 95 can support PC-NFS

only as the primary network. Additional 32-bit network providers are not

possible in this case.

Banyan VINES

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If you see a message during startup that the VINES version is not the

latest, edit the Vines.ini file in the Windows folder so it contains

the following lines:

[NEWREV]

dontcopy=1

vines.version=5.5x (x) USA ; where x=your version

windows.version=3.95

If you receive the message, “Vines NDIS Interface error: 1021. See

NDISBAN.DOC for an error description,” during startup, run the VINES

utility PCCONFIG to change Banyan drivers to NDIS drivers. Also, make

sure the section name matches the driver name in the Protocol.ini file.

DEC Pathworks

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Windows 95 provides support for upgrading over existing DEC

PATHWORKS V5.0, V5.0A and V5.1 configurations. This makes it possible

to run your existing real-mode PATHWORKS components while migrating

to Windows 95. However, it is strongly recommended that you upgrade

to DEC’s PATHWORKS for Windows 95, which contains protected-mode

components.

Restrictions:

PATHWORKS must be started before running Windows 95 Setup to

automatically detect and upgrade PATHWORKS components. If PATHWORKS

is not started or is not automatically detected, you will see startup

errors when you run STARTNET. To correct this, add the appropriate

“PATHWORKS V5.0 and above” protocol, using the Network icon in Control

Panel.

Once a system has been upgraded to Windows 95, you cannot change your

PATHWORKS configuration using PWSETUP. However, all existing template

configurations present when you upgrade are converted to work under

Windows 95.

PATHWORKS Native, DLC, X.25, and ISDN datalinks are converted to use

an NDIS driver, if available, during the upgrade. If the replacement

NDIS driver is not configured correctly or is not operating, startup

will display an error and prevent loading of other PATHWORKS components.

To correct this, double-click the Network icon in Control Panel, and

verify that the adapter driver is configured correctly. If any changes

are made to the adapter configuration, you must remove the “PATHWORKS

V5.0 and above” protocol and add it again.

PATHWORKS NetWare client licenses (CCS or FPA) are not currently

supported with Windows 95. If you are using the Microsoft Client for

NetWare Networks to connect to PATHWORKS for OpenVMS (NetWare) or

PATHWORKS for OSF/1 (NetWare) servers, the server must have PATHWORKS

FPS licenses.

Long filenames do not work correctly on PATHWORKS servers up to and

including version 5.0b. You will be able to create and delete LFN

files and make and remove LFN folders, but the files and folders will

not appear when you use the DIR command, or when you open an Explorer

window to the PATHWORKS server. PATHWORKS server version 5.00 EC01

corrects this problem and is available from DEC.

Artisoft LANtastic

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The LANtastic server cannot be run when Windows 95 is setting up.

LANtastic also cannot be run in conjunction with networking support

for other networks.

PRINTING TO A NETWORK PRINTER

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You might have problems setting up a printer that is shared by a third-

party network server. The solution is to redirect LPT1 through an

MS-DOS window to the third-party share, and then use the printer setup

for LPT1.

For example, if a network printer is connected to LPT1, follow these

steps:

1. At the MS-DOS prompt, type:

net use lpt1: \\servername\sharename

(This command might be different on the network you are using.

Check the product documentation to find out how to redirect

an LPT port.)

2. Start Control Panel, double-click Printers, and then double-click

Add Printer.

PROBLEMS PRINTING TO POSTSCRIPT PRINTERS

OVER A NETWARE NETWORK

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If you have problems when printing to a PostScript printer over a

network, (error messages on the printer; no output is printed), it

might be due to incorrectly configured Banner Pages. To solve this

problem, you can do one of the following:

- Disable banner pages by removing the check mark from the Banner Pages

box on the Capture printer properties (open the Printers folder, click

the icon for the printer you are using, and then click Properties on

the File menu);

-or-

- Ask your network administrator to correctly configure banner pages on

the Netware server for a PostScript printer.

ISSUES AND INSTALLATION OF

MS-DLC WITH WINDOWS 95

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Windows 95 contains MS-DLC and support for installing over an existing

MS-DLC or IBM-DLC installation. Setup will detect DLC and make the

appropriate changes to your configuration files for these. Refer to

the Windows 95 Resource Kit, Chapter 10, for a complete description

of DLC support.

MICROSOFT TCP/IP PROOL

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If Microsoft’s TCP/IP is the only protocol you have loaded on your

system, the IP Address will not be added during Setup. If you have

a DHCP server, open Control Panel, double-click the Network icon, and

then close it. This will update the IP Address. (If you don’t know if

you have a DHCP server, check with your network administrator, or check

if your IP address is already entered.)

If you don’t have a DHCP server, start Control Panel, double-click

the Network icon, double-click TCP/IP, click the IP Address tab, and

then enter your IP Address.

If you are not updating from a previous Windows 95 installation (you

are doing a “clean install”), to use DNS or LMHOSTS name resolution,

make sure you have DNS enabled in the Network properties. To enable

DNS, double-click the Network icon in Control Panel, double-click

TCP/IP, click the DNS configuration tab, and then click Enable DNS.

USER PROFILES OVER THE NETWORK

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If you are using user profiles over a Windows NT or Novell NetWare

network, and you include Start Menu/Programs, Network Neighborhood,

and/or desktop icons in your profile, the server must have long

filename support to ensure that these parts of the user profile work

over the network.

NETWORK BACKUP AGENTS

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Arcada Backup Exec Network Backup Agent

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To use the Arcada Backup Exec network backup agent included in

Windows 95, you must have Arcada Backup Exec version 5.x.

Cheyenne ARCserve Network Backup Agent

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To use the Cheyenne ARCserve network backup agent included in

Windows 95, you must have Cheyenne ARCserve version 5.01F. You might

also use earlier versions if you obtain updated NLMs from Cheyenne

Software.

REAL-MODE PROOLS: WARNING ICONS ON YOUR NETWORK ADAPTER

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If you install a network that does not use protected-mode protocols,

such as Novell Netware 3.x, you might see a yellow warning icon next

to your network adapter in Device Manager. You can ignore this warning;

your network is fully functional. To remove the warning icon, use the

program, Extract.exe on Setup disk 1 to extract the file Ndis.vxd from

your Windows 95 disks. Then, copy Ndis.vxd into your Windows\System

folder. When you reboot your system, the yellow warning icon will no

longer appear.

USING AN IBM THINKPAD WITH A DOCK II

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If you enable 32-bit PCMCIA support, and your network cards do not

appear to work properly when inserted into the Dock II’s PCMCIA slots;

or, if you have an ISA network card in the Dock II that has a “Code 10″

error in its properties in Device Manager, call the IBM Help Center.

They will provide you with a file to correct this problem.

INTEL ETHEREXPRESS PRO /100B CARD NOT CORRECTLY DETECTED

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Windows 95 does not correctly detect an Intel EtherExpress Pro /100B

card during Setup or hardware detection. After Setup, an entry for

“PCI Ethernet controller” appears under Other Devices in Device Manager,

which shows that the device is functioning properly; however, the card

doesn’t work.

To properly install the card, remove the PCI Ethernet controller from

Device Manager, and then restart your computer. The card will then be

detected; the Update Device Driver wizard will appear. Insert the

driver disk that came with the card, and then click Next. The wizard

will search the disk and find drivers for the Intel 82557-based PCI

Ethernet. This is correct. Click Finish and the card should work.

SETTING UP A WINS SERVER

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To set up a WINS server, carry out the following steps:

1. In Control Panel, double-click the Network icon.

2. Click TCP/IP, and then click Properties.

3. Click the WINS Configuration tab.

4. Make sure that both the Primary WINS Server and Secondary WINS

Server boxes are filled in.

If you have only one WINS Server, you must enter the identical

information in both the Primary WINS Server and Secondary WINS

Server boxes.

If you do not fill in both boxes, your WINS setting will be

changed to Disable WINS Resolution when you restart your computer.

INTERLNK

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The InterLnk networking product contained in MS-DOS 6.x does not

function properly in MS-DOS mode if you are using FAT32.

USING COMSPEC VARIABLES POINTING TO NETWORK COMMAND.COM FILES

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If you are on a network and are currently mapping your compspec to

remote network file servers, you may get “incorrect DOS version”

errors (and an explanation of the version shipping with Windows 95

version 4.00.950 B being an updated ver 7.1 etc.). You need to map

the comspec to the local copy or to a compatible version on the network.