

WFW3_11.WRI File

Documentation for Using the Backup Exec Agents with Windows For Workgroups Version 3.11

Updated 7/27/95

For best results, view this file in Portrait mode (File menu, Print Setup command).

About This Document

In order for the Backup Exec DOS Agent and Backup Exec Windows Client to operate properly under Windows For Workgroups 3.11, the procedures detailed in the following text must be followed.

The remainder of this document was taken from a technical document from Novell's World Wide Web site (<http://netware.novell.com/ServSupp/texttids/netware/021979.t>). While the entire document has information of general interest to users of Windows for Workgroups 3.11, the section which has information of specific use to Backup Exec for NetWare users is located in the last note of the section labeled **Other Windows for Workgroups 3.11 / Novell Issues**.

Technical Information

Windows for Workgroups Using VLM/NETWARE.DRV

NOVELL TECHNICAL INFORMATION DOCUMENT

DOCUMENT ID:	TID021979
DOCUMENT REVISION:	A
DATE:	11JAN95
ALERT STATUS:	Yellow
INFORMATION TYPE:	Symptom Solution
NOVELL PRODUCT CLASS	NetWare OS
NOVELL PRODUCT and VERSION:	NetWare Client for DOS/MS Windows 1.2
CATEGORY:	ODI
	Shells
	VLMs
	Windows Drivers
ABSTRACT:	NA

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ADDITIONAL CONFIGURATION

Third-Party Product and Version:

Microsoft Windows 3.x

Microsoft Windows for Workgroups 3.11 (WFWG)

SYMPTOM

When updating the NETWARE.DRV v3.03 for Virtual Loadable Modules (VLM) contained in WINDR2.EXE, you may run into the following error after starting Windows 3.x or Windows for Workgroups 3.11:

MESSAGE

Application Error: Call to Undefined Dynalink

SOLUTION

The updated NETWARE.DRV (v3.03) for VLMs contained in WINDR2.EXE now requires the NWGDI.DLL file (found in NWDLL2.EXE) to be copied to the WINDOWS/SYSTEM directory for both Windows 3.x and Windows for Workgroups 3.11.

Note: The NETX.EXE users are not affected because NETX (shell) uses the NETWARE.DRV v2.02 file that does not require the NWGDI.DLL file.

Solution Specifics:

Windows for Workgroups 3.11 (WFWG) and VLMs

Overview:

Windows for Workgroups 3.11, the latest update from Microsoft, now supports ODI drivers using Virtual Loadable Modules (VLMs). The earlier version (3.1) of WFWG only supported monolithic IPX with NETX.EXE (shell) using ODINSUP.COM. In addition, the earlier version (3.1) required manual modifications of the configuration files to have both NDIS and IPX support. VLMs were not supported in the WFWG 3.1 environment because of several incompatibilities between the two redirectors. The current release of WFWG 3.11 no longer requires manual modifications of the user's configuration files or the use of ODINSUP.COM when using the ODI drivers. This extra step is eliminated when using Microsoft's Network Setup and their VXD's (NWLINK.386, NDIS.386, and MSODISUP.386) that perform the ODINSUP function.

Steps:

The following are some steps to include when updating from Windows 3.x to WFWG or from WFWG 3.1 to 3.11 and using the VLMs:

1. First, you need to make sure that you have installed the DOS Client Kit (VLMs) and include the support for Windows in the client install. (This kit can be obtained by calling

1-800-UPDATE1.) If you have previously installed the VLM client kit (1.02), make sure you have obtained and applied the latest updates from VLMUP2.EXE and WINDR2.EXE and NWDLL2.EXE from NOVFILES on Compuserve or FTP.NOVELL.COM.

2. Start the WFWG 3.11 Setup. When you reach the Network Setup option, choose the following: **This example assumes you are using NE2000 adapter with ODI and NDIS3**

```
=====
Networks... Microsoft Windows Network (version 3.11)
Novell NetWare (Workstation Shell 4.0 and above)
Drivers....
Novell/Anthem NE2000 [ODI/NDIS3]
IPX/SPX Compatible transport with NETBIOS
Microsoft NETBEUI
```

```
Default Protocol Set at
IPX/SPX Compatible transport with NETBIOS
```

```
Driver type [ODI Driver]
=====
```

3. WFWG 3.11 will now prompt you for the Novell files that you will have already installed from the DOS client kit. If WFWG cannot find them, give the path to C:\WINDOWS\SYSTEM and it will find the NETWARE.DRV file and other Windows files needed to complete the install.
4. Now exit to DOS and copy over the NWGDI.DLL from NWDLL2.EXE to the WINDOWS\SYSTEM directory. This DLL is new and required when using NETWARE.DRV 3.03.*

If these four steps are followed, then WFWG 3.11 will modify and build the Windows SYSTEM.INI, WIN.INI, and PROTOCOL.INI. The following DOS files will also be modified AUTOEXEC.BAT, CONFIG.SYS and NET.CFG.

*Note: Previously, Novell has stated that the client kit should be installed before starting the WFWG update. However, some users are updating their 1.02 client kit with VLMUP2.EXE and WINDR2.EXE. The NetWare Client for DOS/Windows Install 1.02 (which shipped with NetWare 4.01, 3.12, and was available on Compuserve) and WFWG 3.11 Setup does not copy the NWGDI.DLL file. However, the current NetWare Client for DOS/Windows 1.1 does copy NWGDI.DLL file to the appropriate location.

If the NWGDI.DLL is not found when NETWARE.DRV v3.03 initializes, it will return the following message:

Application Error: Call to undefined Dynalink.

Therefore, after installing WFWG 3.11, manually copy the NWGDI.DLL to the WINDOWS\SYSTEM directory when using the NETWARE.DRV 3.03 file.

ADDITIONAL INFORMATION FOR NOVELL/WFWG 3.11 USERS

NOTE: Users using LSL, 3C5x9.COM, IPXODI, and VLMs Configured with WFWG using NWLINK.386 and MSODISUP.386

SYMPTOM

When users copied files from their Windows for Workgroups 3.11 local drive to the NetWare server, the workstation could corrupt the files, locked up, or drop their connection.

CAUSE

A problem with the MSODISUP.386 file (a Microsoft WFWG Module) was causing the problem.

SOLUTION

Download and apply WG1004.EXE from Microsoft Download Services or FTP.MICROSOFT.COM SOFTLIB Area.

This updated patch from Microsoft resolves this issue and others. In MSODISUP.386, Microsoft had to adjust a problem with the counter for the number of outstanding packets to be copied off the NIC after the MLID fails to copy an incoming packet off the NIC. Additional information and instructions on this issue can be found in the README.TXT found in WG1004.ED available from Microsoft.

Other Windows for Workgroups 3.11 / Novell Issues

Note: The AUTOEXEC.BAT file needs to have ODIHLP.EXE (Real Mode stub for ODI support that binds NWLINK to the ODI driver) placed after the LSL.COM and MLID driver (NE2000.COM) file.

An issue can arise if you are using STARTNET.BAT file created by the client install. If you are using the "CALL STARTNET.BAT" command, then it is recommended that you move ODIHLP.EXE file to the STARTNET.BAT file after LSL.COM and NE2000.COM.

Note: NWLINK.386 (32-bit IPX/SPX compatible transport VXD) defaults to ETHERNET_802.3 frame type. In a NetWare 4.02 or 3.12 environment, the default frame type is ETHERNET_802.2. Running RCONSOLE in a DOS box in WFWG will utilize the NWLINK.386 when it sends raw SPX packets. Because it will send ETHERNET_802.3 frames, no servers will show up on the RCONSOLE server available list. By changing NWLINK.386 to ETHERNET_802.2 frames, the problem is resolved.

Note: The user was using the 32-file access parameter in Windows for Workgroups 3.11 and NETX. Performance was slow when starting Windows applications. If they turned the 32-bit files access off WFWG, the problem went away. The NETWARE.DRV file that the user was using was for the VLMs instead of the one for NETX. After the user changed to the NETWARE.DRV 10-27-92 for NETX found in NET33X.EXE, the problem was resolved.

Note: Novell users of DOSNP.EXE (DOS Named Pipes) will need to be alerted that WFWG 3.11 will not work with Novell's DOSNP.EXE. WFWG does not allow the INT 21 (Interrupt) requests, related to named pipes, to be passed down to the Novell DOSNP.EXE TSR (Terminate Stay Resident). Currently, there is no patch or workaround for this scenario.

[The following steps should be followed when using the Backup Exec agents and clients under Windows for Workgroups v3.11]

Note: A problem exist for users of Microsoft's NWLINK.386 that are using SPX based applications such as terminal emulators. Additional SPX issues have been discovered where NWLINK.386 does not provide full SPX API compatibility. Currently, there is no patch available for this Microsoft VXD (NWLINK).

Therefore, use the following the four-step workaround if you encounter this issue:

1. Double click on the NetWork Setup Icon inside WFWG 3.11.
 - a. Click on the NETWORKS button and select No Windows Support for Networks.
 - b. Then click on OK and Network Setup will notify you at this point that it has modified your AUTOEXEC.BAT, SYSTEM.INI, WIN.INI and PROTOCOL.INI files.
 - c. Then select RESTART COMPUTER button.
2. After restarting workgroups, double click on Network Setup icon and choose the NETWORKS button again.
 - a. Then pick Install Microsoft Network and OTHER.
 - b. For other, choose Novell NetWare workstation shell 4.0 and above.
 - c. Then select OK.
3. Now click on the DRIVERS button and ADD ADAPTER button.
 - a. Pick IPX Support driver [Monolithic] with NETBIOS transport.
 - b. Now click on CLOSE and OK.
 - c. You will receive two conflicting error dialogues that state the following: "You do not have an ODI network driver installed and will not be able to connect to a NetWare server with Microsoft Windows Network until you install the driver. Do you want to continue? Y/N " Click on Y.

The next error will say, "You are running an ODI driver and have chosen to install and NDIS driver. The NDIS driver must be set up on a separate NetWork adapter card other than the ODI driver. Do you want to continue? Y/N."

- d. Click on Y here.
- 4. SETUP will now modify the configuration files automatically.
 - a. Then click on RESTART COMPUTER.
 - b. At this point you will be able to utilize VIPX.386 and eliminate NWLINK.386. This will allow full SPX API for terminal emulators or other SPX based applications within a WFWG 3.11 machine and still provide peer-to-peer support through IPX encapsulated NETBIOS packets.

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