

Windows 9x WINS/DHCP Issues

This paper identifies some issues related to Windows 95 and 98 with WINS registration and browsing the network.

Windows 95 –

Some Windows 95 machines will not register themselves with the WINS server.

- Ensure Winsock2 is installed (for Windows 95 ONLY). Available at <http://ucw1a.uc.edu/software/freebie/w95ws2setup.exe>
- Ensure “Use DHCP for WINS Resolution” is checked. Located in WINS tab under TCP/IP properties in Network Control Panel.
- A few incidences have shown that the WINS addresses must be manually put into the TCP/IP configuration.

Windows 98 –

- Ensure “Use DHCP for WINS Resolution” is checked. Located in WINS tab under TCP/IP properties in Network Control Panel.

Microsoft TechNet Documents related to Issues above.

Windows 9x DHCP Clients Do Not Query WINS

PSS ID Number: Q197857

Article last modified on 09-23-1999

WINDOWS:95,98

WINDOWS

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The information in this article applies to:

- Microsoft Windows 95
- Microsoft Windows 98

SYMPTOMS

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Windows 95 and Windows 98 computers that are configured as DHCP Clients that also receive WINS Server addresses by using DHCP may still not query WINS for NetBIOS name resolution.

When looking at IP properties with Winipcfg.exe, the WINS Server fields are populated and correct.

CAUSE

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When a Windows 95 or Windows 98 client gets its IP address and WINS Server IP address from DHCP, it will ignore the WINS entries if the Disable WINS Resolution dialog box is set in the Network tool in Control Panel.

RESOLUTION
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To resolve this problem, perform the following steps:

1. Click Start, click Settings, and then click Control Panel.
2. Open the Network tool in Control Panel.
3. Select the TCP/IP Binding for the installed Network Adapter, and then click Properties.
4. Select the WINS Configuration tab.
5. Select the Use DHCP for WINS Resolution option.
6. Click OK, and then OK again.
7. Restart the client even if you are not prompted to do so.

MORE INFORMATION
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On the WINS Configuration Tab

If the Disable WINS Resolution option is selected, the client computer will still receive WINS addresses from DHCP, but will not query the WINS server for name resolution.

If the Enable WINS Resolution option is selected and at least the Primary WINS Server field is filled in, this setting will override the WINS received from DHCP and name queries will go here.

If the Use DHCP for WINS Resolution option is selected, the client computer will get WINS IP addresses by using DHCP and use those WINS addresses for name resolution.

Additional query words: kbDSupport wins options

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Version : WINDOWS:95,98
Platform : WINDOWS
Issue type : kbprb
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Windows 95 WinSock2 Update

<http://ucw1a.uc.edu/software/freebie/w95ws2setup.exe>

This Microsoft® Windows® Sockets 2 release is an update of the Windows Sockets 2 version released as a Software Developers Kit (SDK) version only. This release includes a new version of the TCP/IP stack and resolves the following Winsock issues:

- Slow performance with some IPX applications
- An incompatibility with Microsoft Internet Explorer 4.0 that could cause a page fault

- IGMP V2 support had a problem that meant that applications could drop out of a multicast group

CONTENTS

This update consists of one file WS2SETUP.EXE. This file installs an updated TCP/IP stack, updated TCP/IP utilities and updated Winsock2 components.

SETUP WINDOWS 95 RUN-TIME COMPONENTS

WS2SETUP.EXE detects versions of Windows newer and older than Windows 95 and will NOT install over them. WS2SETUP.EXE will, by default, install the Microsoft service providers and TCP/IP stack upgrade unless explicitly instructed not to do so when it attempts to call a vendor installation DLL.

If WS2SETUP.EXE determines that there are non-Microsoft WinSock 1.1 system DLLs present, installation will terminate unless specific override instructions configured by the vendor's installation dll are determined to exist.

If WS2SETUP.EXE finds that there is at least one Winsock2 compatible service provider installed, it will backup the current installation and proceed to copy the WinSock2 DLLs into the correct directories and configure the registry. It is necessary to reboot before using WinSock2.

WS2SETUP.EXE has been tested on Windows 95 and Windows 95 OEM Service Release 2 machines that have the Microsoft TCP/IP and IPX stacks (for WinSock 1.1) already installed and on machines that have either no TCP/IP and/or no IPX installed. Microsoft recognizes that there are other network transport stacks present in the industry, but this setup program does not upgrade them.

Warning: Neither WS2SETUP.EXE, nor any of the separate WinSock2 DLLs, should be installed on Microsoft Windows NT®. WinSock2 is built into Windows NT version 4, and will not be provided for earlier versions of Windows NT.

WS2SETUP.EXE AND MICROSOFT PROXY SERVER WINSOCK PROXY CLIENT

If WS2SETUP.EXE detects that the existing wsock32.dll is from the Microsoft Proxy Server WinSock Proxy Client (by way of the strings "Microsoft" & "Proxy" appearing in the version copyright), setup will look for the file _MSRWS32.dll, and perform a pass of its copyright version checking (as defined in section above) on _MSRWS32.dll as it did on WSOCK32.DLL. Setup will continue on, or abort depending on the copyright string as it normally would.

If WS2SETUP.EXE validates _MSRWS32.dll's copyright string, it will continue to install Winsock2 and the Microsoft Proxy Server Remote WinSock Client will work as it did prior to upgrade.

WS2Setup.exe INSTALLS NEW VERSION OF NDIS.VXD

Setup.exe will install a version of NDIS.VXD which is newer than that which came with the original Windows 95 release (ver 4.00.950) when either the Microsoft TCP/IP or IPX stack is included in the installation. The only known problem with the new NDIS.VXD involves the miniport MDGMPORT.SYS for Madge Smart Token Ring Adapters, shipped with Windows 95. If you have one of these cards or experience any other difficulties, please remove this driver and reinstall using the latest driver (v2.11 or later) or contact Madge customer support. If your Windows 95 version is 4.00.1111 or higher, there is no difference between the new NDIS.vxd and your existing one.

WS2SETUP.EXE AND DCOM'95

WS2SETUP.EXE will only install on machines that have DCOM'95 build 812 or higher, or no version of DCOM'95 at all. If a version of DCOM'95 prior to build 812 is detected, WS2SETUP.EXE will abort without installing Winsock2 for Windows 95 and an error message will be written to WS2SETUP.LOG.

To obtain an updated version of DCOM'95, see <http://www.microsoft.com/com/dcom95/download-f.htm> for availability, download instructions and release notes.

WS2SETUP.EXE AND DUN 1.2

If you need to install the Dial-Up Networking 1.2b or earlier update, install the Winsock2 upgrade after installing the Dial-Up Networking upgrade. Due to a problem in the Dial-Up Networking upgrade it will overwrite some more recent files from the Winsock2 upgrade.

WS2SETUP.EXE AND BETA VERSIONS OF THE WINSOCK2 FOR WINDOWS 95

If you are currently using a beta version of the Winsock2 for Windows 95 executables, you should completely uninstall that version to return to your pre-existing WinSock 1.1 configuration prior to running WS2SETUP.EXE.

To remove the older version, follow the directions in the section below called "Uninstalling Winsock2". You will also need to delete the directory C:\\WS2BAKUP and its contents manually to assure that all traces of the beta(s) are removed.

Note: It may also be necessary to reinstall TCP/IP from the Control Panel prior to running WS2SETUP.EXE, since newer versions of the beta do not contain replacements for the TCP/IP utilities, while older versions do. The final release makes use of the original Windows 95 TCP/IP utilities.

UNINSTALLING WINSOCK2

When WS2SETUP.EXE runs for the first time, it copies WS2BAKUP.BAT and the WinSock 1.1 files to %windir%\ws2bakup.

Running WS2BAKUP.BAT returns the user to their original WinSock 1.1 configuration. From Windows Explorer, simply double click on "C:\WS2BAKUP\ws2bakup.bat to uninstall Winsock2.

Caution: When you run WS2BAKUP.BAT from inside Windows 95, you may encounter a sharing violation as some system files may not be restored if the newer version is currently running! If this happens, you will need to re-run WSBAKUP.BAT in MS-DOS® mode. To do this click "Start", "Shut Down", select the "Restart the computer in MS-DOS mode" option, and click "OK". After reboot you will need to type "C:\WS2BAKUP\WS2BAKUP" and hit the Enter key. (In MS-DOS mode you will see errors for programs that cannot run outside of Windows, but you should not be concerned, as these programs will have already executed properly if you ran WS2BAKUP.BAT from inside Windows 95 first.) Reboot again and you will be back on WinSock 1.1

Note that if you are reinstalling WS2SETUP over a previous version of Winsock2 greater than beta 2, your prior configuration will NOT be backed up again. Uninstalling will yield your original 1.1 configuration, NOT beta 2 or 2a.

DO NOT restore by re-installing TCP/IP from the Network applet in the Control Panel! This action will NOT replace the WinSock DLLs, and does not guarantee you will have the same configuration you had before upgrading to Winsock2

NEW TCP/IP FEATURES

This release of Windows Sockets 2 for Windows 95 Microsoft TCP/IP includes several features that improve network performance. These features include large windows, selective acknowledgements, fast retransmission and recovery. In addition the DHCP client supports DHCP release on shutdown and DHCP decline, and WINS servers can now be set per adapter.

NOT IMPLEMENTED

The following features are available in the Windows Sockets 2 DLL, as per the specification, but they are either not implemented or not yet well tested in the Microsoft TCP/IP service provider.

- **Generic QoS**
- **Socket Groups--these have been removed from the Winsock2 specification**
- **Deferred Accept**
- **Disconnect/Connect Data**

The Microsoft IPX network transport stack has been modified to work as a WinSock2 service provider. However, none of the features that are new in WinSock2 have been implemented yet in the IPX service provider. Similarly, Microsoft's SAP name space provider for IPX has not been upgraded to support any of the name resolution features that are new in Winsock2.

How to Identify Winsock 2.0 Run-Time Components for Windows 95

PSS ID Number: Q177719

Article last modified on 01-25-1999

WINDOWS:95

WINDOWS

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The information in this article applies to:

- Microsoft Windows 95

SUMMARY

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Microsoft has released the Microsoft Windows Sockets 2 (Winsock 2.0) run-time components for Windows 95. This article describes how to determine if the Winsock 2.0 run-time components are installed on a Windows 95-based computer.

MORE INFORMATION

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How to Determine If the Winsock 2.0 Run-Time Components Are Installed

To determine if the Winsock 2.0 run-time components are installed on a Windows 95-based computer, verify that the following files and registry keys exist.

The Winsock 2.0 update for Windows 95 installs the following files on your computer:

File name	Version	Date/Time	Size	Destination Folder
SNMPAPI.DLL	4.0.1371.1	06-06-97 2:46p	21,776	Windows
WINSOCK.DLL	4.10.1511	06-06-97 2:46p	19,040	Windows
WS2SETUP.LOG	n/a	n/a n/a	n/a	Windows
VDHCP.386	4.10.1423	06-06-97 2:46p	35,515	Windows\System
VIP.386	4.10.1511	06-06-97 2:46p	71,721	Windows\System
VTCP.386	4.10.1423	06-06-97 2:46p	52,109	Windows\System
VTDI.386	4.10.1423	06-06-97 2:46p	5,687	Windows\System
VUDP.386	4.10.1423	06-06-97 2:46p	20,613	Windows\System
MSAFD.DLL	4.10.1511	06-06-97 2:46p	52,736	Windows\System
MSVCRT.DLL	5.00.7022	06-06-97 2:46p	421,888	Windows\System
MSWSOCK.DLL	4.10.1511	06-06-97 2:46p	130,048	Windows\System
MSWSOSP.DLL	4.10.1511	06-06-97 2:46p	44,544	Windows\System
WS2HELP.DLL	4.10.1511	06-06-97 2:46p	80,384	Windows\System
WS2THK.DLL	4.10.1511	06-06-97 2:46p	9,216	Windows\System
RNR20.DLL	4.10.1511	06-06-97 2:46p	17,408	Windows\System
WS2_32.DLL	4.10.1511	06-06-97 2:46p	114,688	Windows\System
WSOCK32.DLL	4.10.1511	06-06-97 2:46p	35,328	Windows\System
WSASRV.EXE	4.10.1511	06-06-97 2:46p	6,960	Windows\System
AFVXD.VXD	4.10.1511	06-06-97 2:46p	25,387	Windows\System
NDIS.VXD	4.00.1111	06-06-97 2:46p	116,301	Windows\System
WSHTCP.VXD	4.10.1511	06-06-97 2:46p	9,913	Windows\System
WSIPX.VXD	4.10.1511	06-06-97 2:46p	14,522	Windows\System
WSOCK.VXD	4.10.1511	06-06-97 2:46p	15,523	Windows\System
WSOCK2.VXD	4.10.1511	06-06-97 2:46p	23,733	Windows\System
WS2BAKUP.BAT	n/a	n/a n/a	n/a	Windows\WS2Bakup
DELW2REG.EXE	n/a	06-06-97 2:46p	11,264	Windows\WS2Bakup

The Winsock 2.0 update for Windows 95 installs the following registry keys and subkeys under the
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services
registry branch:

- VxD\Winsock2
- Winsock2
- Winsock2\Setup
- Winsock2\Parameters (includes subkeys)
- Winsock2\Providers (includes subkeys)

How to Obtain the Winsock 2.0 Run-Time Components

The Winsock 2.0 run-time components are included in the Winsock 2.0 SDK for Windows 95.

The latest version of the Winsock 2.0 run-time components is available from the following location on the Microsoft FTP site:

<ftp://ftp.microsoft.com/bussys/winsock/winsock2>

This location contains the Winsock 2.0 SDK for Windows 95, which includes a utility you can use to install the Winsock 2.0 run-time components on a Windows 95-based computer.

You can also download the Winsock 2.0 update for Windows 95 from the following Microsoft Web site:

http://www.microsoft.com/windows95/downloads/contents/wuadmintools/s_wunetworkingtools/w95sockets2/default.asp?

Additional query words: winsock2 ws2

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Keywords      : kbnetwork win95 kbAPI kbSDKPlatform kbWinsock kbGrpNet  
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