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Adding MS TCP/IP to WFWG 3.11

Windows for Workgroups 3.11 supports all the features of the earlier Windows 3.x systems. In addition, it provides new support for 32-bit disk and file access that has the potential to improve performance significantly (unless the user has a badly behaved application that does not tolerate this option). WFWG also has built-in network support with 32-bit LAN and protocol drivers.

WFWG 3.11 can be installed on a bare DOS machine, and it will produce a default set of groups and program items. It can also be used to upgrade an existing Windows 3.x system, when it will maintain the existing profiles, configuration, groups, and products.

WFWG assumes that a LAN adapter card should be present in the target machine. A few people do install this version of the system just to get the faster disk access, but most customers intend to use it on a network. During installation, the user will be presented with a list of LAN adapter cards and will select the entry in the list that corresponds to the adapter card installed in the machine. If this installation is upgrading an earlier Microsoft Windows networking product, then the adapter card may be pre-selected based on the configuration present from the previous system.

The best performance will be achieved if a 32-bit LAN driver can be found for the card. WFWG 3.11 uses the NDIS 3.x standard (which it shares with Chicago and NT) rather than the older NDIS 2.x standards used by LANMAN, WFWG 3.1, and the IBM requesters. If the newer type of driver is not available, then an older driver can be presented and WFWG 3.11 will fall back to loading the driver down in the DOS 640K area using the "real mode" linkage.

WFWG 3.11 is a real product with a real manual and Microsoft support. If there is a problem installing it, then there are many other sources of information available for troubleshooting the problem. It is possible to install the TCP/IP support along with the rest of the WFWG package, but things are much simpler if the user installs the rest of the package, and then tests out the LAN support using WFWG peer networking. When that part of the installation is complete, then the TCP/IP protocol can be added in a second operation.

Microsoft spent the first half of 1994 developing a new, modern 32-bit "VxD" version of the TCP/IP support for WFWG. Code named "Wolverine", this software is available on the network from ftp.microsoft.com. It is also on CompuServe. It is also distributed on the CD for Windows NT 3.5 Server. The code is small enough to fit on a single diskette. In Microsoft NDIS terms, this code adds an additional protocol to the configuration of the existing LAN adapter card.

Acquire a copy of the code from one of these sources. The WFWG machine on with it will be installed must have access to the files 1) on a floppy disk, 2) on a CDROM, or 3) through the network from another server machine using the already installed file requester support.
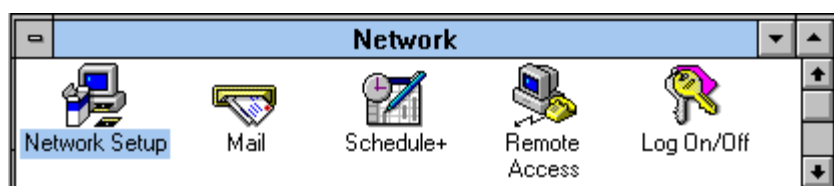

The first step is to open the Network group in the Program Manager and to select the Network Setup icon. This displays a panel showing the current network software configuration:
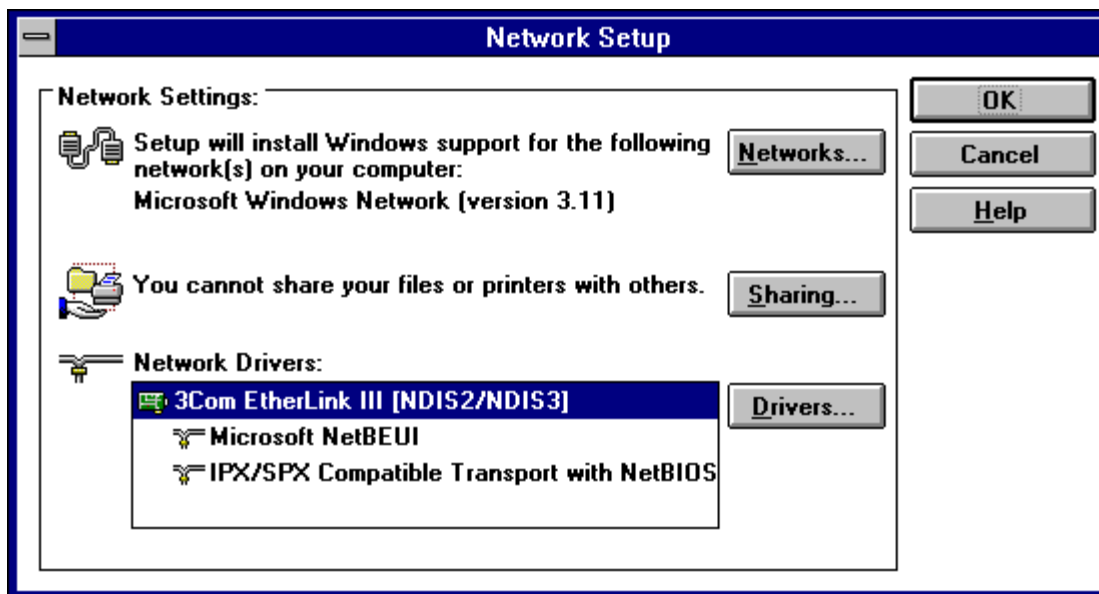
Click on the button labeled "Drivers...". This brings up the panel that allows further configuration of the NDIS components of the LAN adapter support.
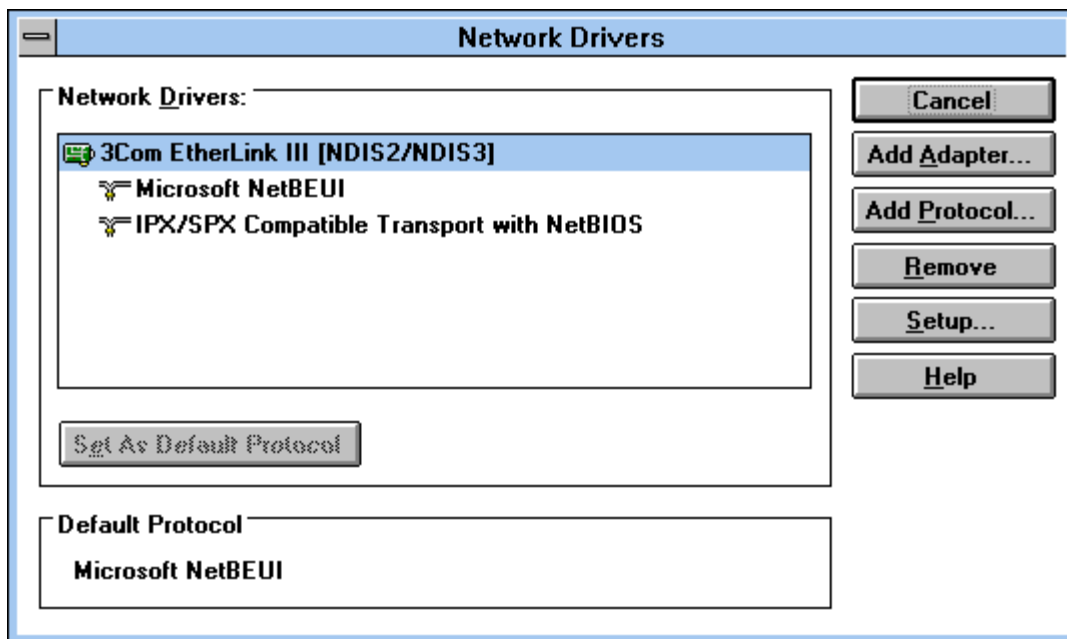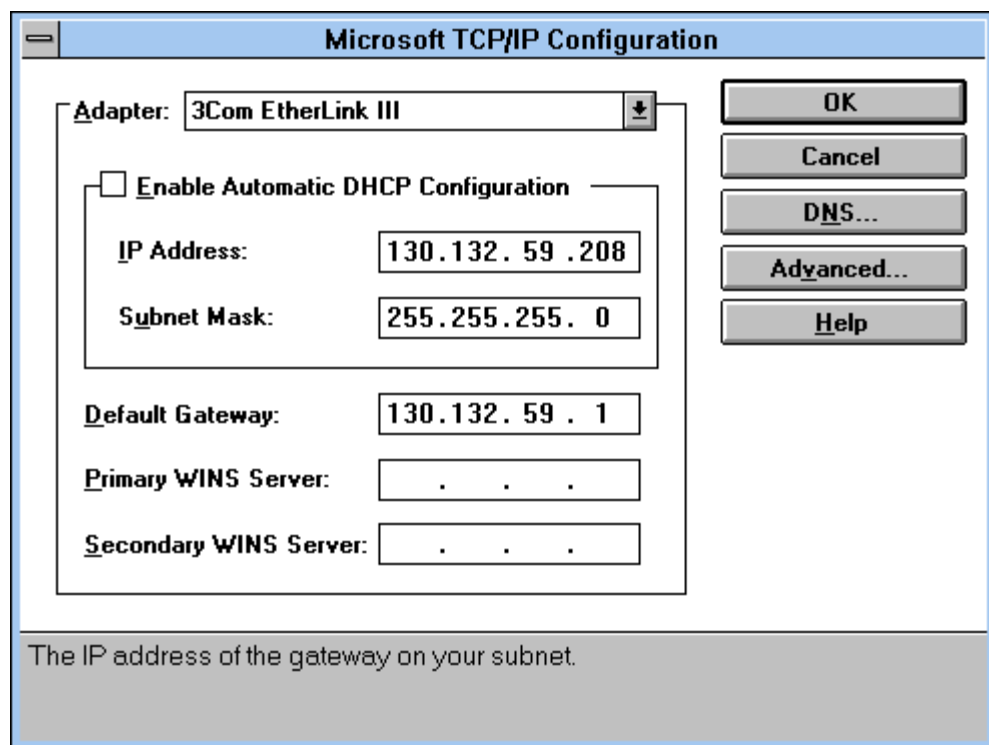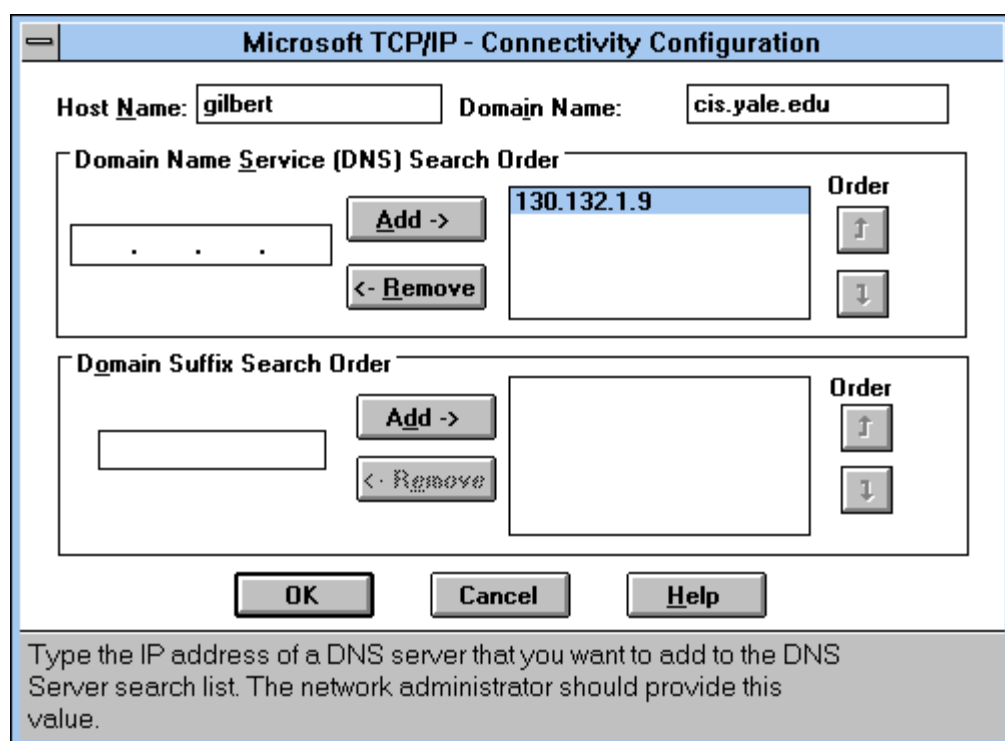
Click on the button labeled "Add Protocol..."
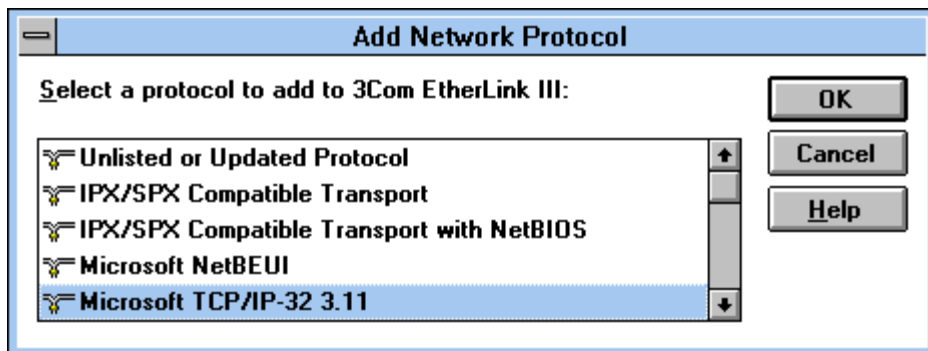
With a bit of luck, the TCP/IP-32 protocol will be in the list. If not, then it is an "Unlisted or Updated Protocol" which is the first choice. Unfortunately, even if the TCP/IP protocol is listed, WFWG generally doesn't really know where to find it. It may invent a plausible but incorrect directory on the CDROM

volume. No matter what choice is made, be prepared to fill in a dialog box with the letter and directory where the Microsoft TCP/IP distribution directory is found. Once the files are located, WFWG will copy them into the WFWG system and will add the protocol to the list in the Network Drivers and Network Setup panels. Back out by clicking the various OK buttons.

Microsoft TCP/IP Configuration

Adapter: 3Com EtherLink III

☐ Enable Automatic DHCP Configuration

IP Address: 130.132. 59 .208

Subnet Mask: 255.255.255. 0

Default Gateway: 130.132. 59 . 1

Primary WINS Server: . . .

Secondary WINS Server: . . .

OK
Cancel
DNS...
Advanced...
Help

The IP address of the gateway on your subnet.

Eventually this will trigger display of the TCP/IP configuration information. If the network is managed by a Windows NT 3.5 Server running the DHCP service, then it is possible to click the button labeled "Enable Automatic DHCP Configuration". Otherwise, fill in the IP address, Subnet Mask, and Default Gateway as explained in the previous section on Planning TCP/IP. If your organization runs a Domain Name Server and you are doing a manual configuration, then click the button labeled "DNS"

Microsoft TCP/IP - Connectivity Configuration

Host Name: gilbert   Domain Name: cis.yale.edu

Domain Name Service (DNS) Search Order

. . .   Add ->   130.132.1.9   Order ⇑
<- Remove   ⇓

Domain Suffix Search Order

Add ->   Order ⇑
<- Remove   ⇓

OK   Cancel   Help

Type the IP address of a DNS server that you want to add to the DNS Server search list. The network administrator should provide this value.

This panel allows configuration of the TCP/IP domain structure. This machine has a name. If it will act as a

file server, and if remote users expect to access it over TCP/IP instead of through NETBEUI or IPX, then the DNS name should be the same as the Workgroup machine name configured when the Redirector was installed. Otherwise, the DNS name and the Workgroup name for this machine can be entirely different. The rest of the organization domain name goes in a second area, and a series of IP addresses can be added for the machines that act as name servers for this company or organization.

When configuration is complete, the user will be given an opportunity to reboot the machine.

Continue   Back   PCLT

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