

Configuring Workstation Network Interface Controller Cards Windows XP

Disclaimer

This procedure is an optional method of troubleshooting network connectivity problem. It is not recommended or required for use by anyone that does not have the knowledge, tools, or the skill level to perform it.

Purpose

This procedure outlines the steps necessary to configure a workstation Network Interface Controller card to support the IP protocol. The examples in this document are from a Microsoft XP workstation.

Computer (Client) Prerequisites

A NIC card installed and driver software installed. Active network connection into a working IP network.

What is a NIC card?

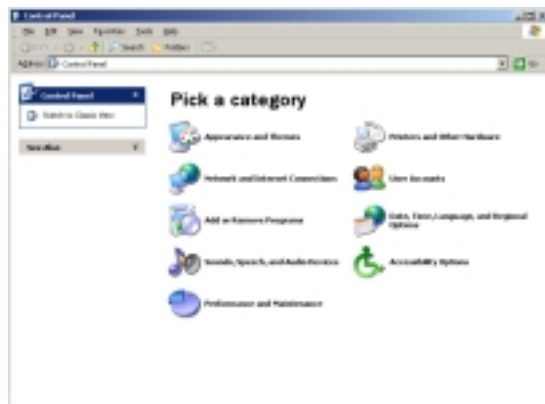
NIC stands for Network Interface Card. A NIC card enables clients the ability to physically connect a computer to a network cable. NIC cards require NIC software drivers to be loaded on the PC to run.

NIC card installation and configuration

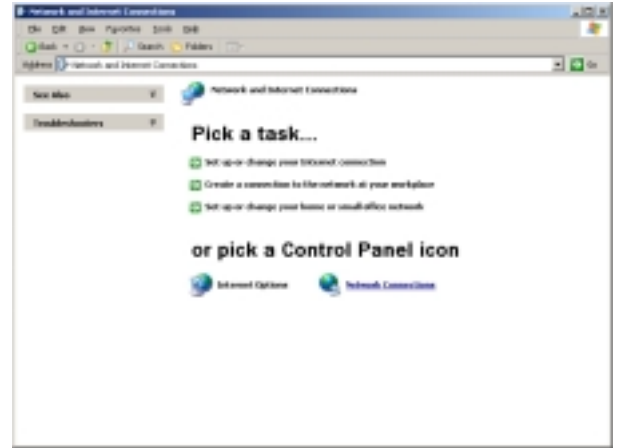
NIC cards and NIC software drivers should be installed and configured per the manufacture specifications.

Configuring the IP address on the workstation

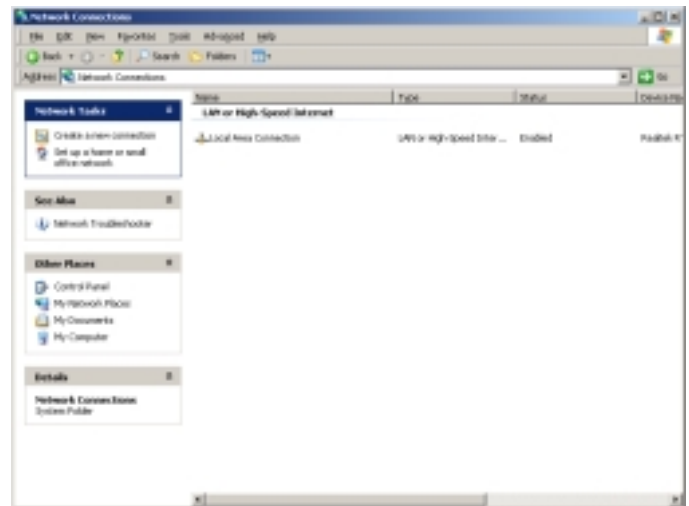
Click on the start menu button on the lower left corner of the workstation screen. Click on Control panel.



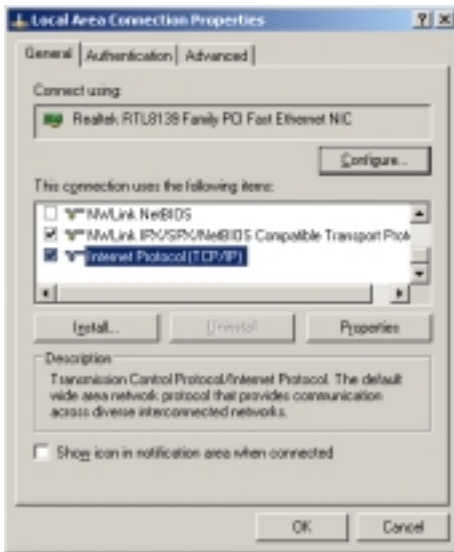
Click Network and Internet Connections.



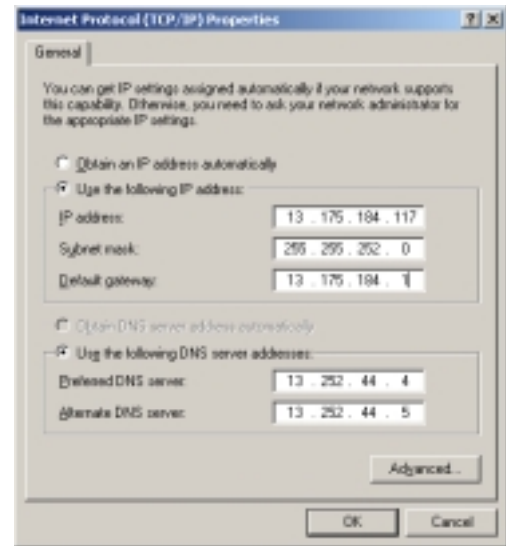
Click Network Connections on the lower right side of the screen.



Right click the Local Area Connection icon on the screen above select properties.

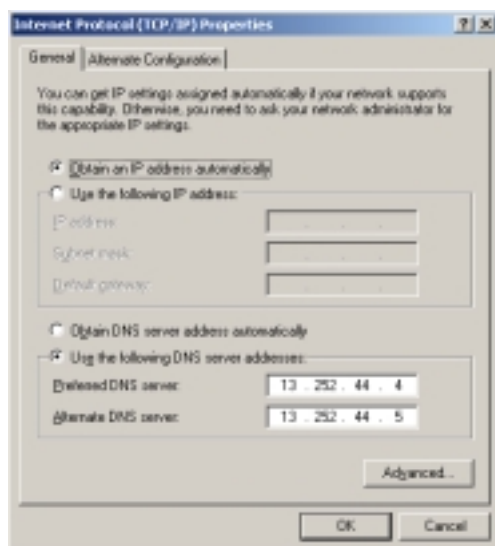


Select Internet Protocol (TCP/IP) in the window then click the Properties button.



Select the Use the following IP address button and enter the following information.

- ☐ IP address
- ☐ Subnet mask
- ☐ Default Gateway



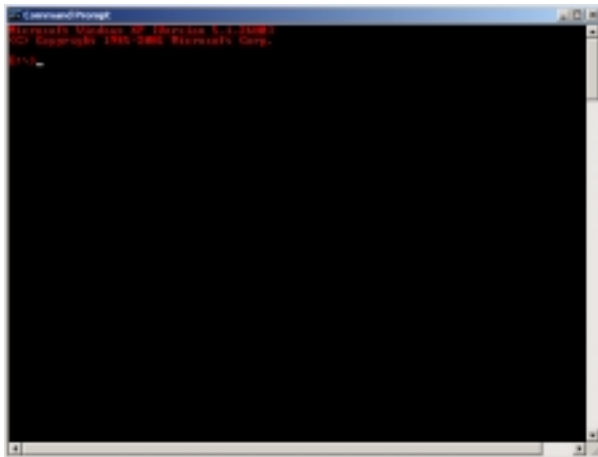
The display above does not display a IP address. This workstation is configured for Dynamic Host Control Protocol, DHCP. DHCP allows this workstation to receive a IP address from a server on the network. To configure this workstation with a static IP address, continue below.

This information may be obtained from the network administrator. If this interface is being configured to test connectivity to a printer. Print a printer configuration report, the IP information may be obtained from this sheet. Change the workstation IP address to be one number different from the printer IP address. In the screen capture the printer IP address could have been 13.175.184.116 or 13.175.184.118. Use the same subnet and default gateway addresses.

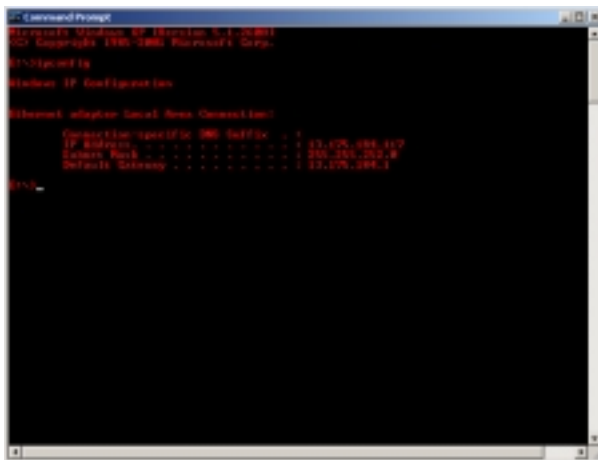
Testing the network configuration

The following procedure may be used to test the IP configuration of the workstation.

- ☐ Select the start menu
- ☐ Select the Command prompt

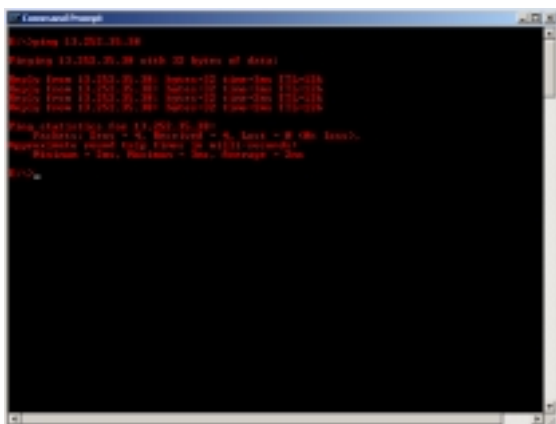


The command prompt is displayed above. Enter the command **ipconfig** and press the enter key.

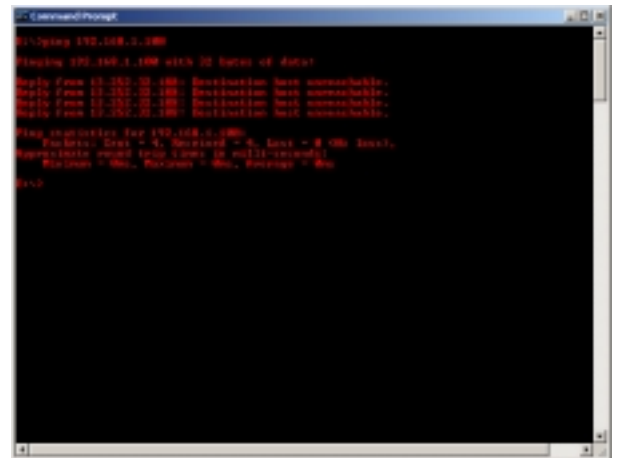


The IP address of the workstation is displayed above.

To test for IP connectivity between the workstation and another network device. Enter the command **ping** and the IP address of the other device, then press the enter key.



The display shows replies from the remote device. This indicates that both network interface controllers are on and configured correctly. This also indicates the physical media (cables) are connected.



The screen above indicated the workstation cannot reach the remote device. This could be a indication of the following problems.

- ❑ Incorrect IP address entered
- ❑ Route to the remote device down
- ❑ Remote device is not on
- ❑ Cable problems
- ❑ IP address mis-configured on the workstation