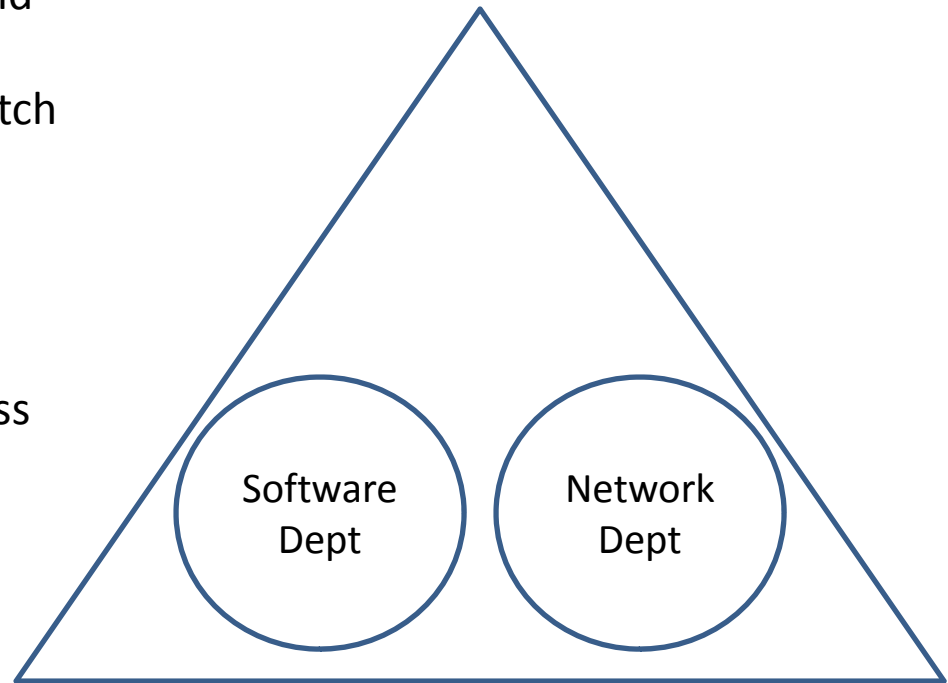


Setup External Network Card on a 2008 Server

May 26, 2011

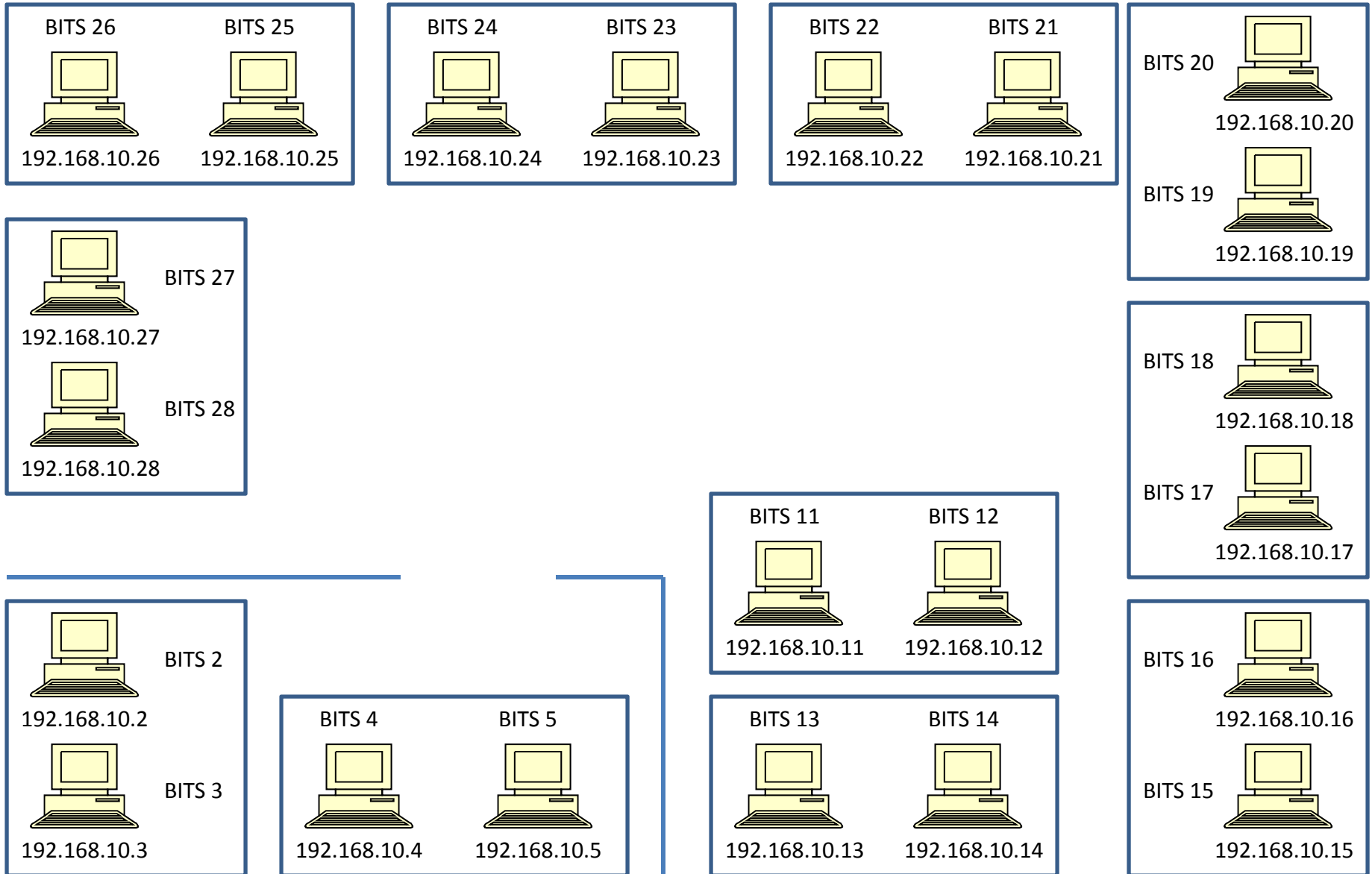
Who Uses Static TCP/IP Addresses?

1. Organizations that no longer use peer to peer networks and move to server client set-ups will use IP addresses that match the computer name.
2. Static IP is best for name resolution such as for DNS servers, where having the machine change it's IP address at each startup would be inefficient.



Bigorganization.com

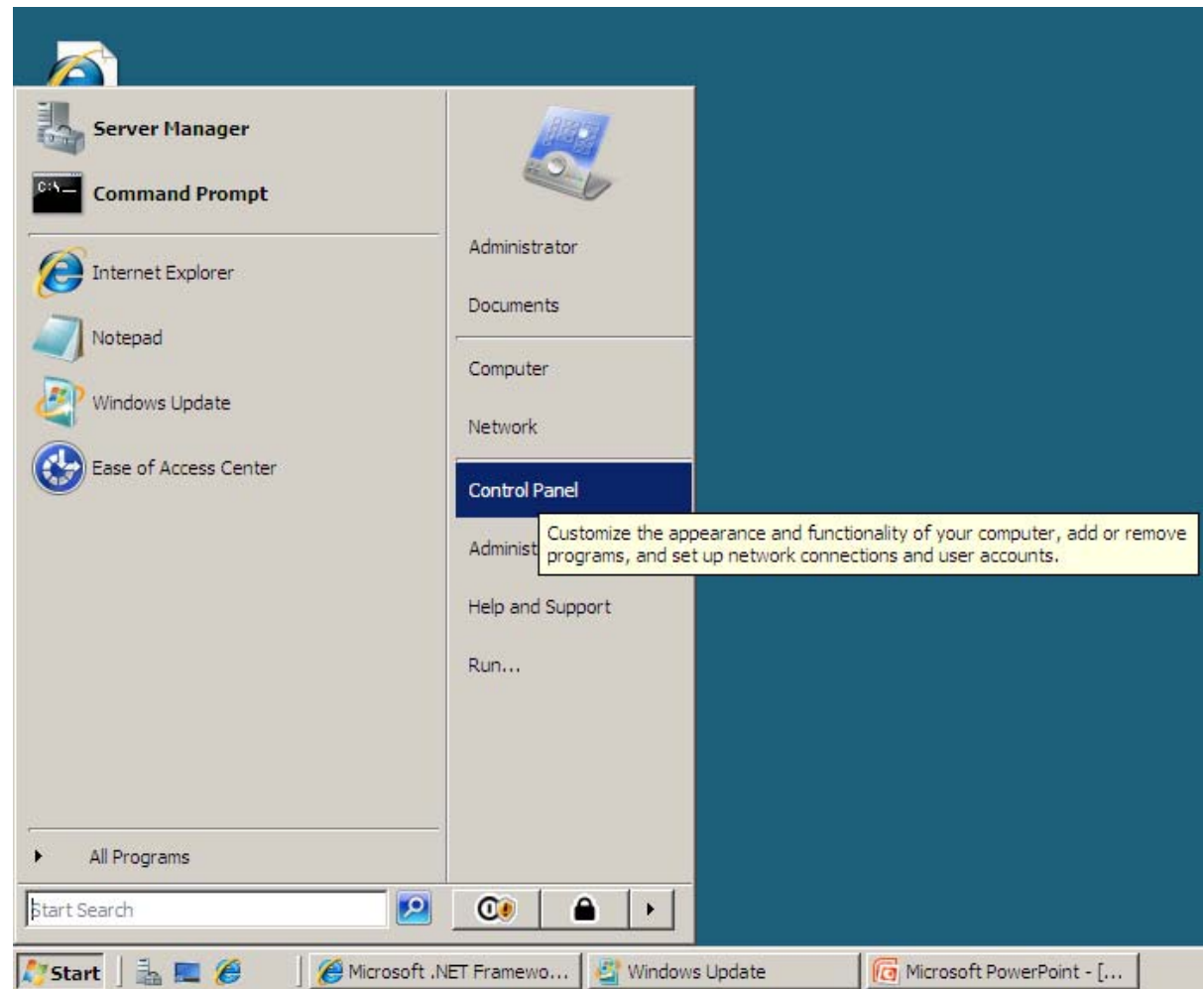
The LAN Diagram



Setting Static IPs in Server 2008

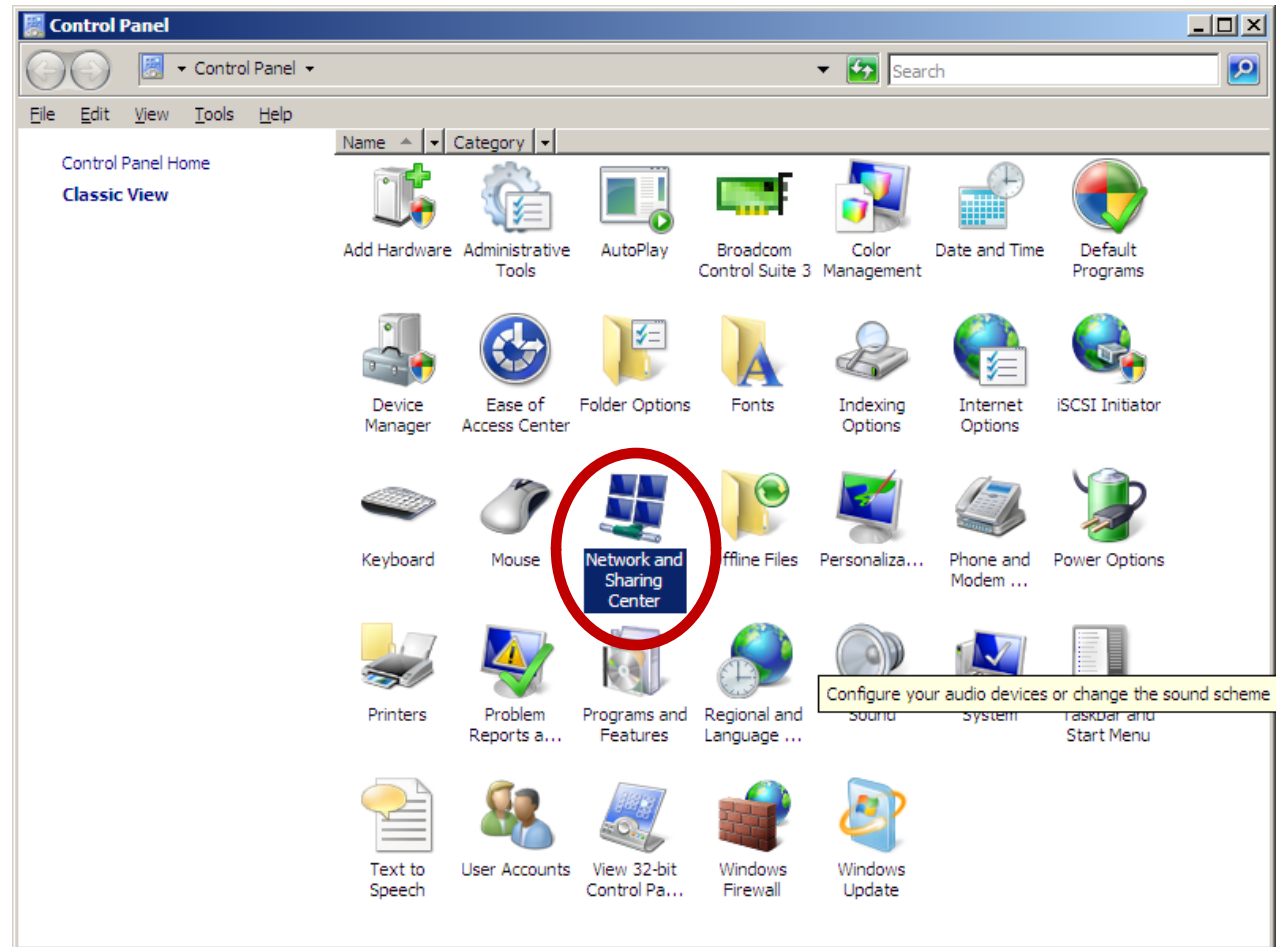
To access the window to change from Dynamic Host Configuration Protocol (DHCP) to Static IP, we press the Start Button icon on the lower left corner of the Server 2008 desktop.

Then we select the Control Panel command button on the Start Menu.



The Control Panel Window

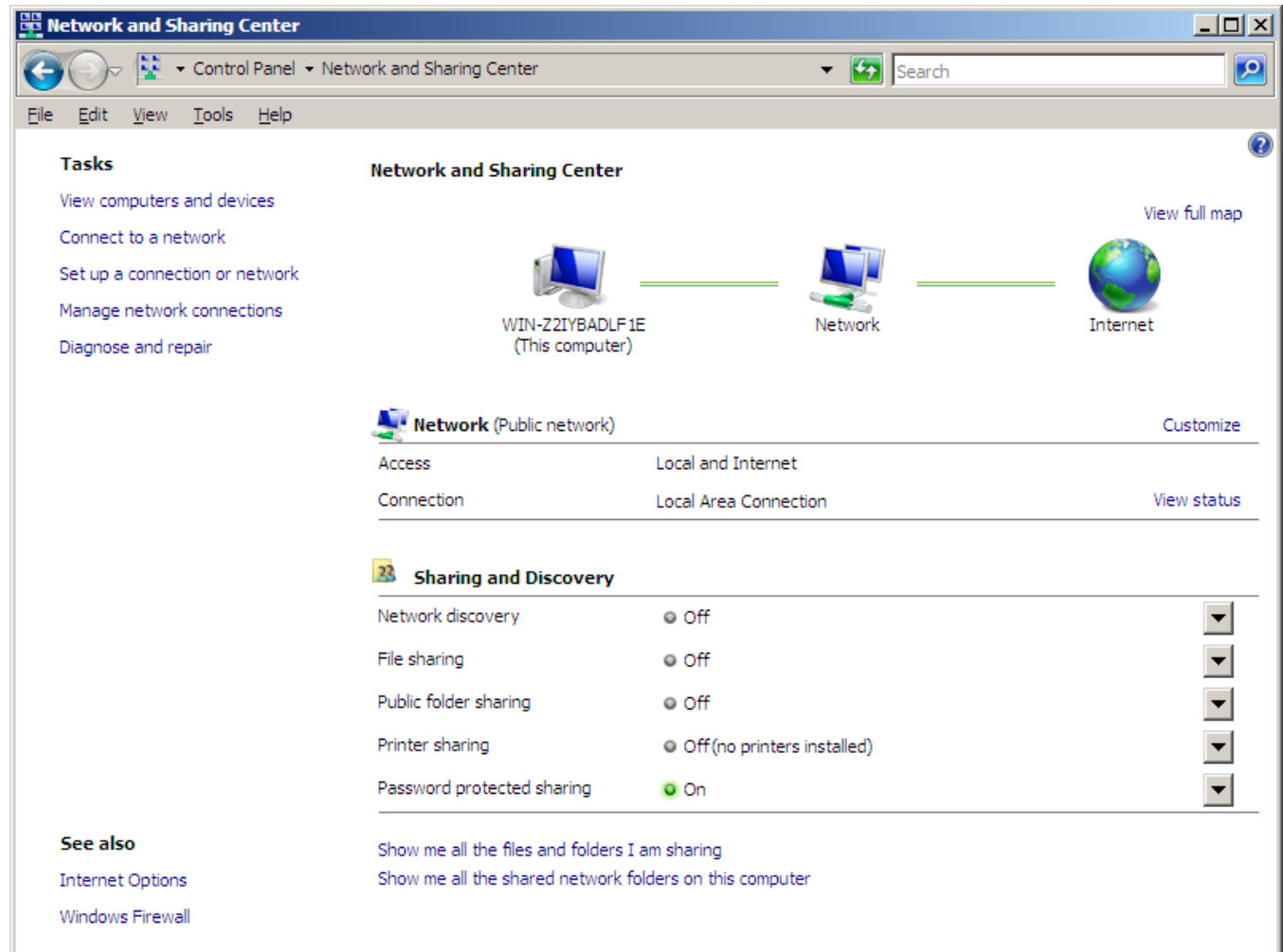
Next, we pick the Network and Sharing Center hyperlink.



The Network and Sharing Center Window

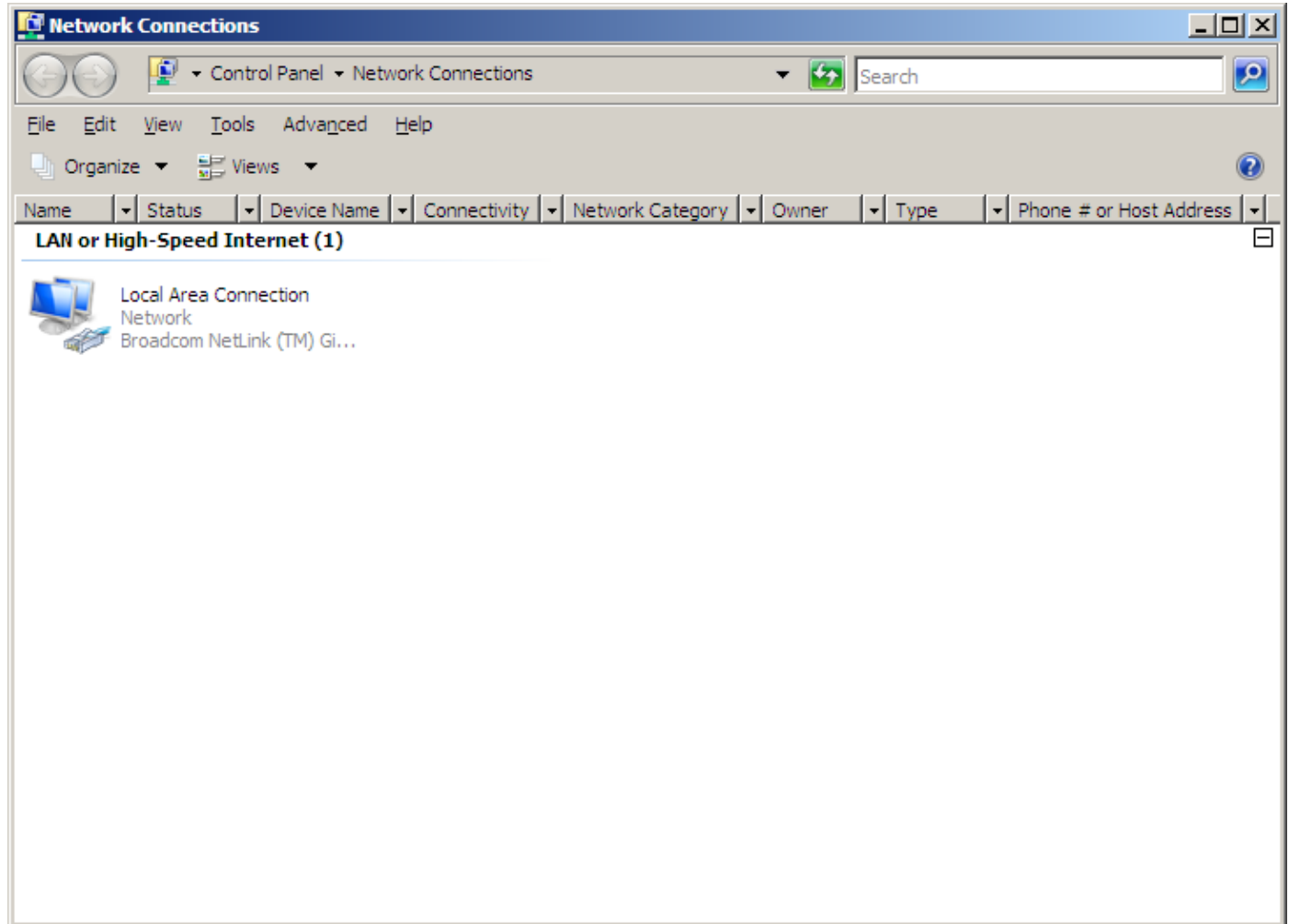
In the Network and Sharing Center window, we can see the Tasks listings on the left side of the dialogue box.

We now pick the Manage Network Connections hyperlink.



Local Area Connection

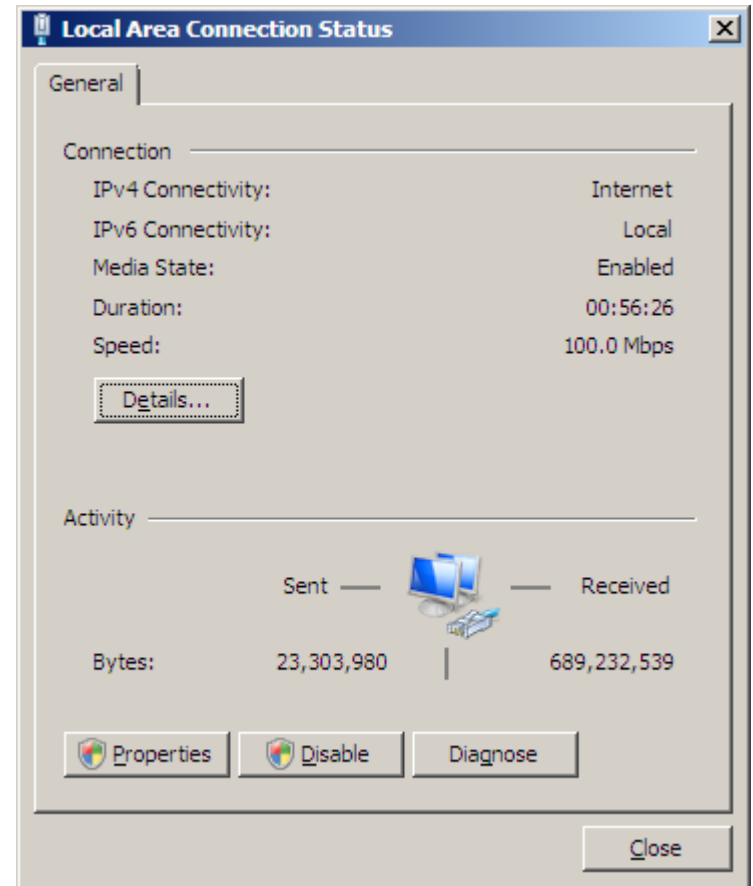
We next double click on the Local Area Connection hyperlink.



The Local Area Connection Status Window

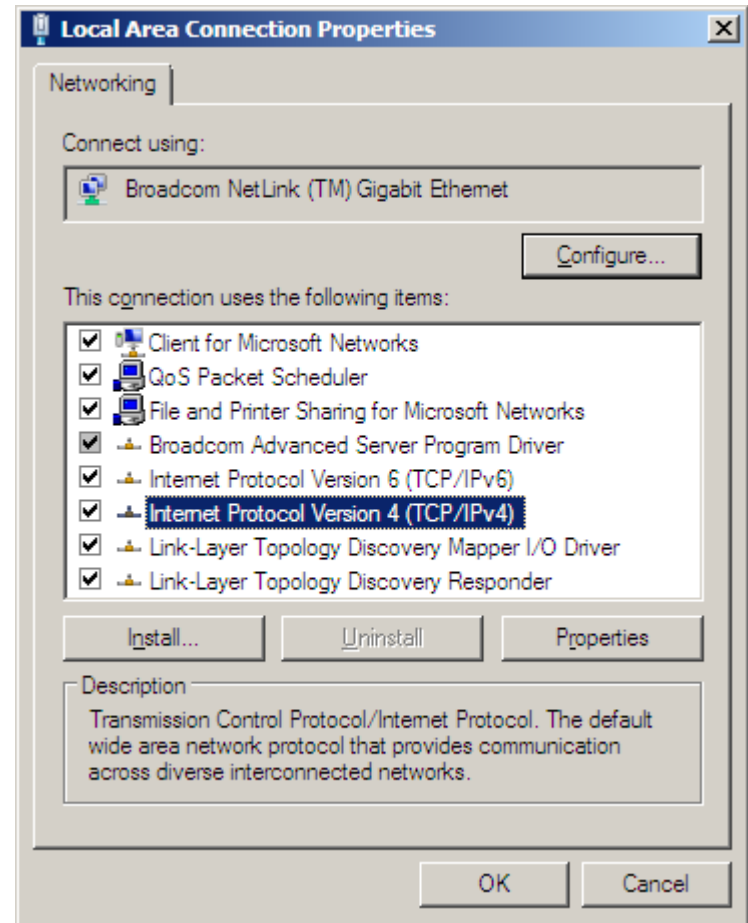
The Local Area Connection Status dialogue box gives the technician real-time data about the IPv4 connectivity, how long the link has been in progress and the speed of transmission. On the bottom of the utility, we can observe the sent and received number of Bytes.

To change from DHCP to Static IP, we double click on the Properties command button.



Local Area Connection Properties

As highlighted in blue, we double click on the Internet Protocol Version 4 (TCP/IPv4) phrase in the connection list box.



Internet Protocol Version 4 (TCP/IPv4) Properties

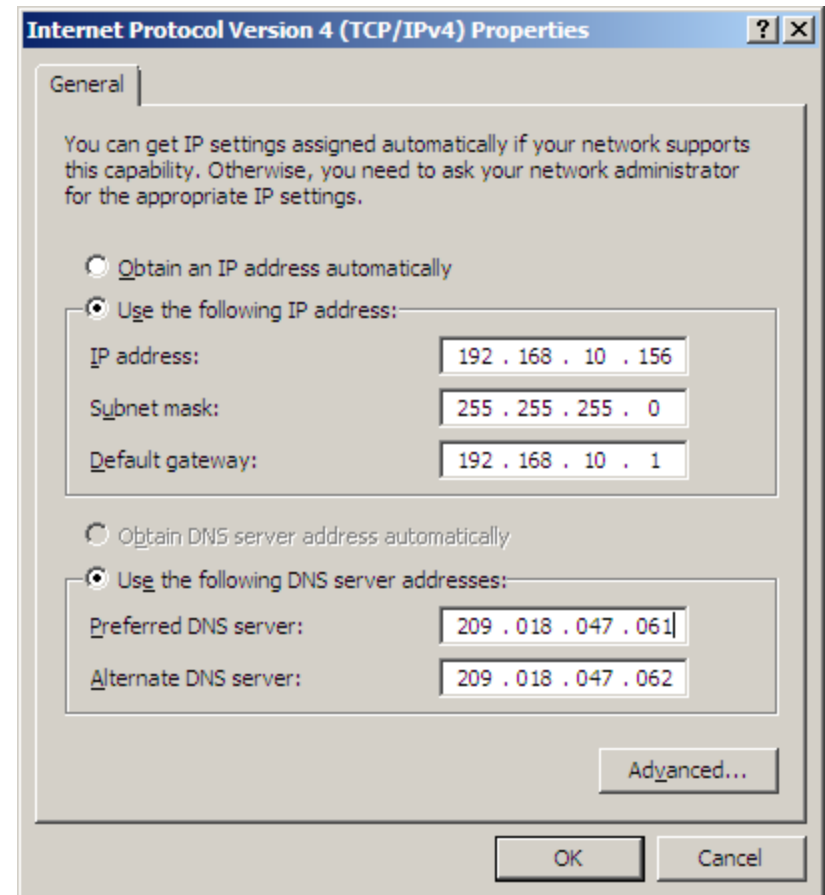
We first select the “Use the following IP address:” radial button.

For the IP address, we retrieve that information from our Local Area Network (LAN) diagram. In this example, our computer is 192.138.10.156.

This is a standard Class C network, so we will use 255.255.255.0 for the Subnet mask.

The Default Gateway is our router’s IP address , which is 192.168.10.1 and is the first address on the network.

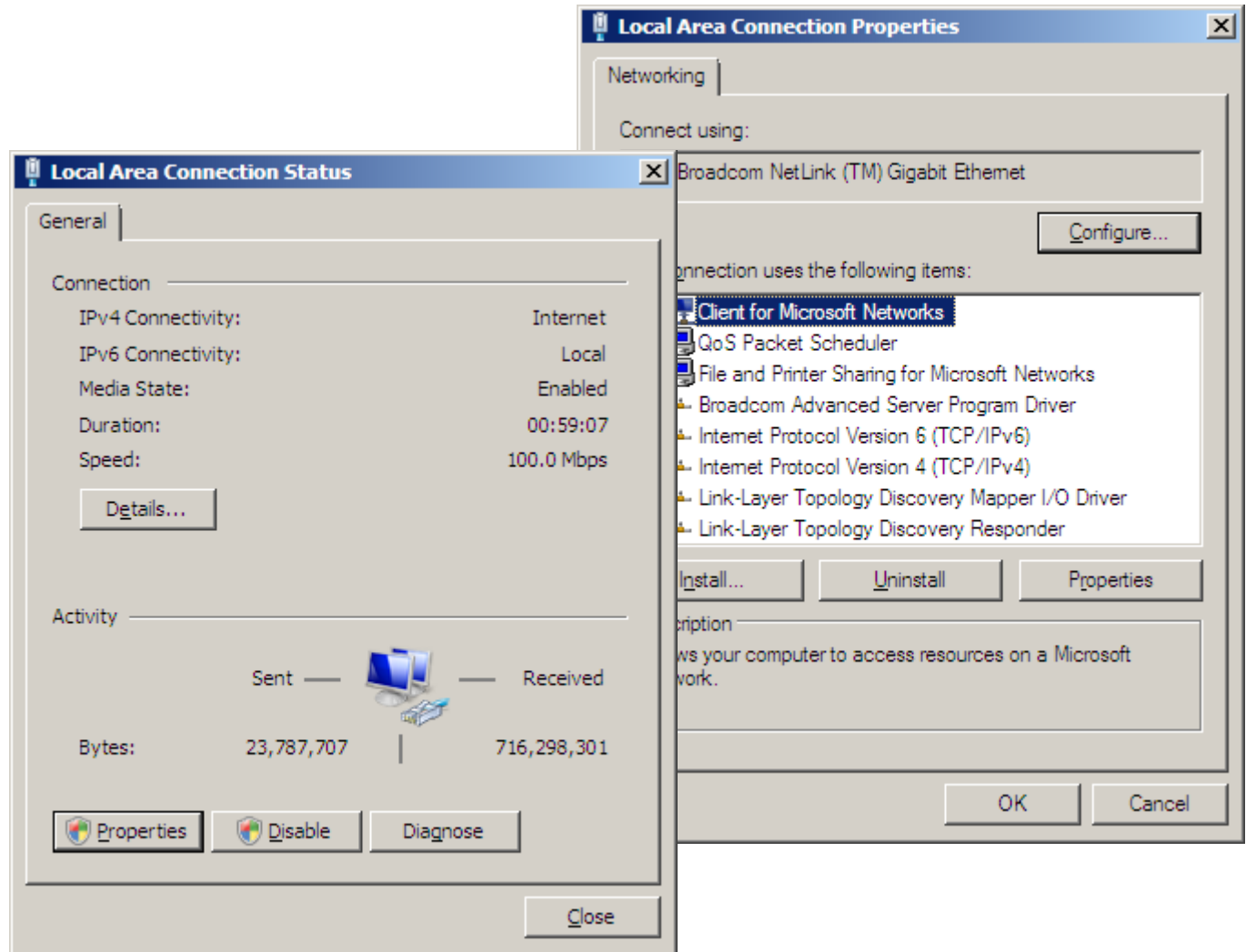
The Preferred and Alternate DNS Server addresses are obtained typically from the ISP.



Close and Save Setting

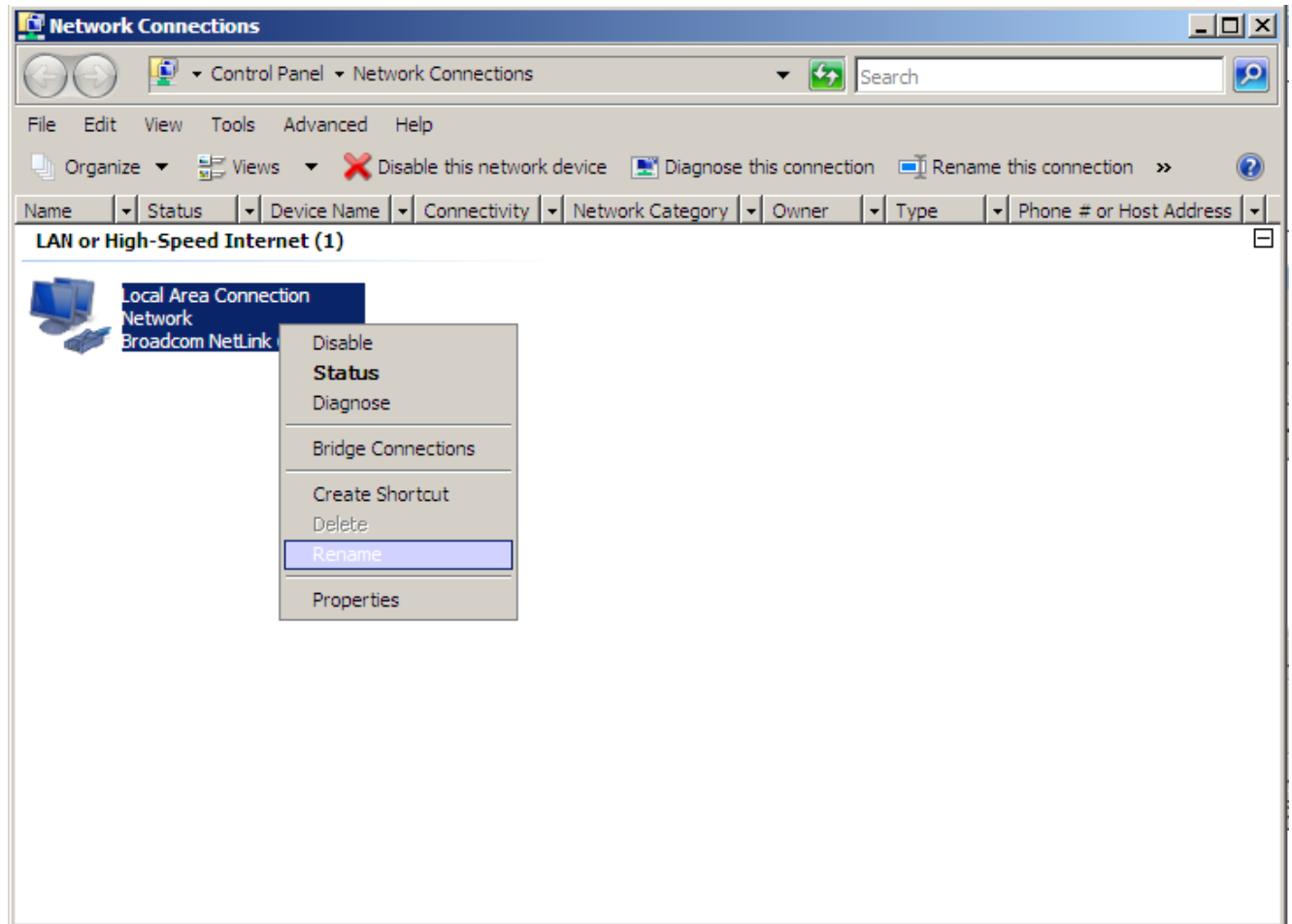
To close and save the Settings, press the OK button on the Internet Protocol Version 4 (TCP/IPv4) Properties window.

We press OK on the Local Area Connection Status window.



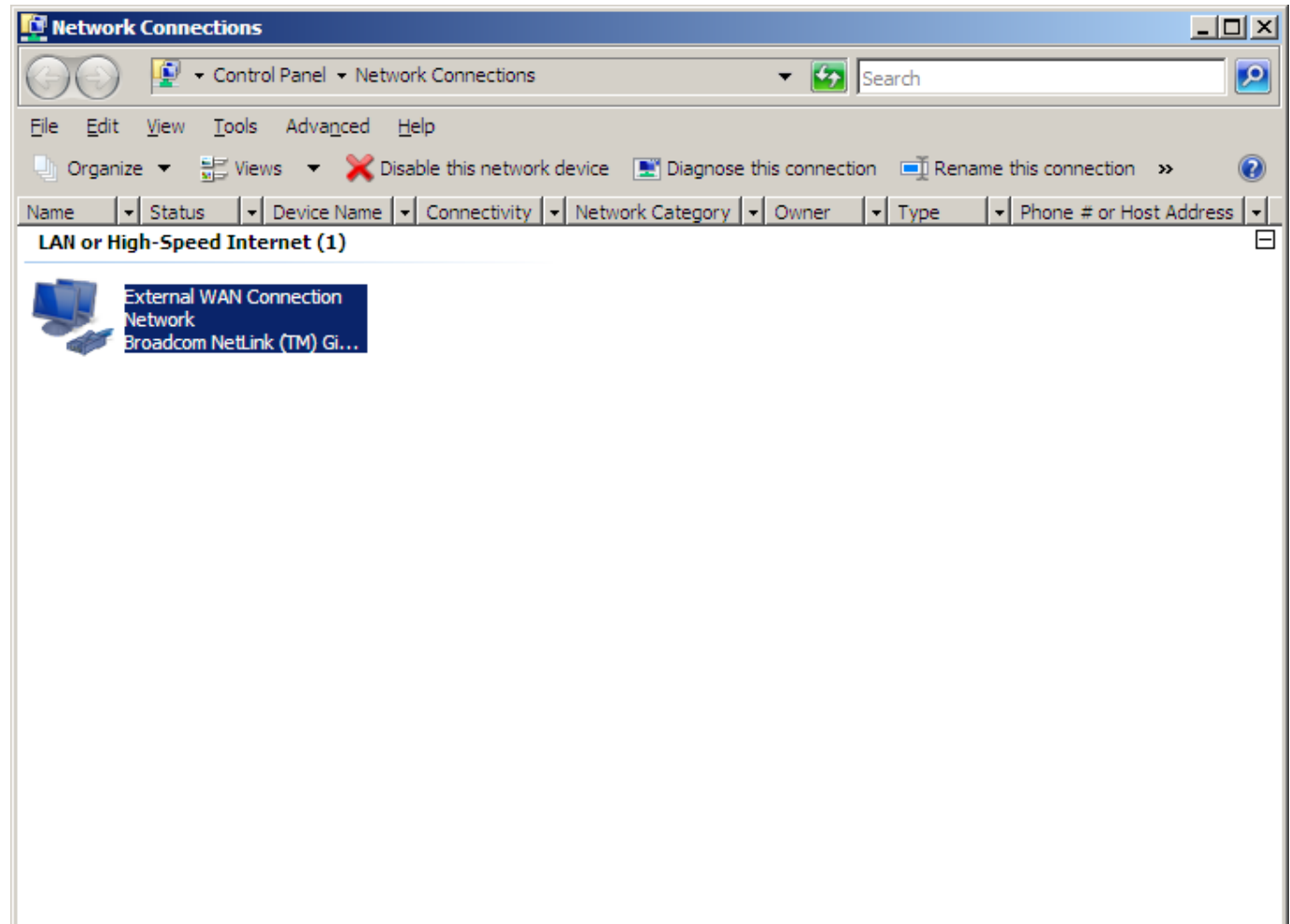
Rename the Network Connection

Now that we have set the IP Address for the external Network Interface Card (NIC), we need to rename the connection. We right click on the description text and choose Rename from the list.



Enter the New Connection Name

We will type
“External WAN
Connection”
for the new
description
and press
Enter to save
the change.



Close and Verify the Functionality

We close the Local Area Connection Status dialogue box and the Local Area Connection window.

To quickly check your connection, we can Ping the router and then we visit the World Class CAD website on the Internet to check the Static IP setup.

The screenshot shows a Windows Internet Explorer browser window displaying the World Class CAD website. The browser's address bar shows the URL <http://www.worldclasscad.com/>. The website features a navigation menu with categories such as CAD Training, Programming, Architecture, Mechanical, Civil Design, Energy Mgmt, Electrical, Designing, Mathematics, Office Aps, Ohio STEM, and Poster. A central section titled "World Class CAD Online Resources" lists various topics like 3D AutoCAD, 2D AutoCAD, Mechanical, Electrical, Architectural, Drafting, Programming, Microstation, Solid Edge, Pro Engineer, and Project. The right side of the page contains advertisements for progeSoft's progeCAD 2009 Smart Free Student Software and Auto Cad. The bottom of the page includes a "Take the Virtual Tour" section, a "Visit the World Class CAD Bookstore" section, and a "Need CAD Software" section. The browser's status bar at the bottom indicates the connection is to the Internet and the page is zoomed to 75%.