
Northeast Rural Broadband together with Skyfx Presents:

Sharing an Internet Connection with StarConnect

1 Introduction

A network is defined as two (2) or more computers sharing resources and information over a transmission media. See Figure 9-1 for an example of a Client/Server network using the ISAT satellite system for the reception of Internet requests.

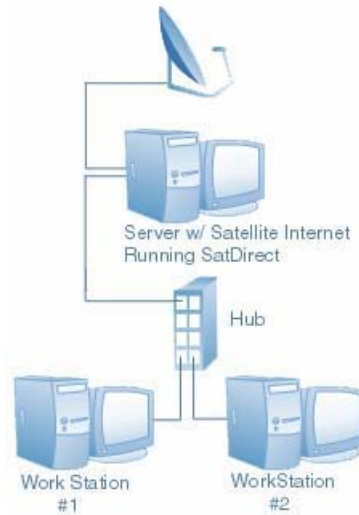


Figure 9-1

To create a simple network that connects several computers to an individual computer that has the satellite hardware installed, you will need to physically set up your network and configure your server and workstations.

Please remember the following steps can only be accomplished after you have completed all the required steps in your B2C2 Broadband Modem Users Guide.

Note: When setting up Internet Connection Sharing it is recommended that the computer that shares the Internet connection be either Windows 2000 or Windows XP. These operating systems have the sharing capabilities built into them. Older operating systems such as Windows 98SE and Windows Me do not.

IMPORTANT NOTE: While this document is being provided as a guideline for sharing the satellite Internet connection, due to the unique nature of networks, we will not be able to provide technical support for any specific network solutions. This document is to be used as a guideline when sharing a satellite Internet connection with network workstations.

2 Physical Setup

First you will need to designate one computer as the “Internet Server”. This computer will need to have the satellite modem installed with the StarConnect software application. This “server” should have the satellite modem and an Ethernet Network Interface Card (NIC) installed. Preferably a 10/100 MB card that will accept an RJ-45 plug for a twisted pair network cable (Cat 5e or 6). See examples in Figure 9-2 of a NIC and Figure 9-3 for an RJ-45 with Cat 5e or 6 network cable.



Figure 9-2



Figure 9-3

Each of the computers that will be sharing the broadband satellite connection will also need to have a network interface card (NIC) (Figure 9-2 above) installed in them as well. These will be referred to throughout this document as the “clients” or “workstations”.

Other hardware that you will need to establish the physical connections of your network will be:

- Quantity 1 of a Category 5e or 6 twisted pair RJ45 network patch cable per computer that will be on your network.
- Quantity 1 of a Hub or switch. A crossover cable may be used if only setting up one workstation with the server. A crossover cable is a Category 5e or 6 twisted pair network cable that has been specially wired to work between two network interface cards.

Note: You will only need to have one of the three items; a hub, a switch or a crossover cable.

Once all network interface cards have been installed with the correct drivers (see NIC and installation manual), you will connect one network cable from the NIC in your server to the number one port on your hub or switch, (see the hub or switch installation manual). You can see an example of a hub in Figure 9-4.

Note: If using a router, disable the Dynamic Host Communication Protocol (DHCP). Please refer to the router’s user manual for further information on how this is accomplished.



Figure 9-4

At this point you can begin connecting network cables from your workstations to your hub in the same manner that you connected your server.

Note: To make tracing network cables easier at a later time, you may want to plug the first computer on your network into port one on your hub or switch, The second computer should plug into port two and so on until all workstations have been connected.

If you are only connecting one workstation and are using a crossover cable, simply plug one end of the crossover cable into the NIC in the server and the other end into the NIC in the workstation.

The physical setup of your network is now complete.

3 Enabling Internet Connection Sharing on Windows XP

Enabling ICS On Windows XP As The Host

The first step is to open the Control Panel. Click on **Start -> Control Panel**, or **Start -> Settings -> Control Panel**, depending on your Windows XP configuration. On the top left of the Control Panel screen, if you see a link to **Switch to Classic View**, click this link. You should now more icons on the right hand side, similar to Figure 9-5.

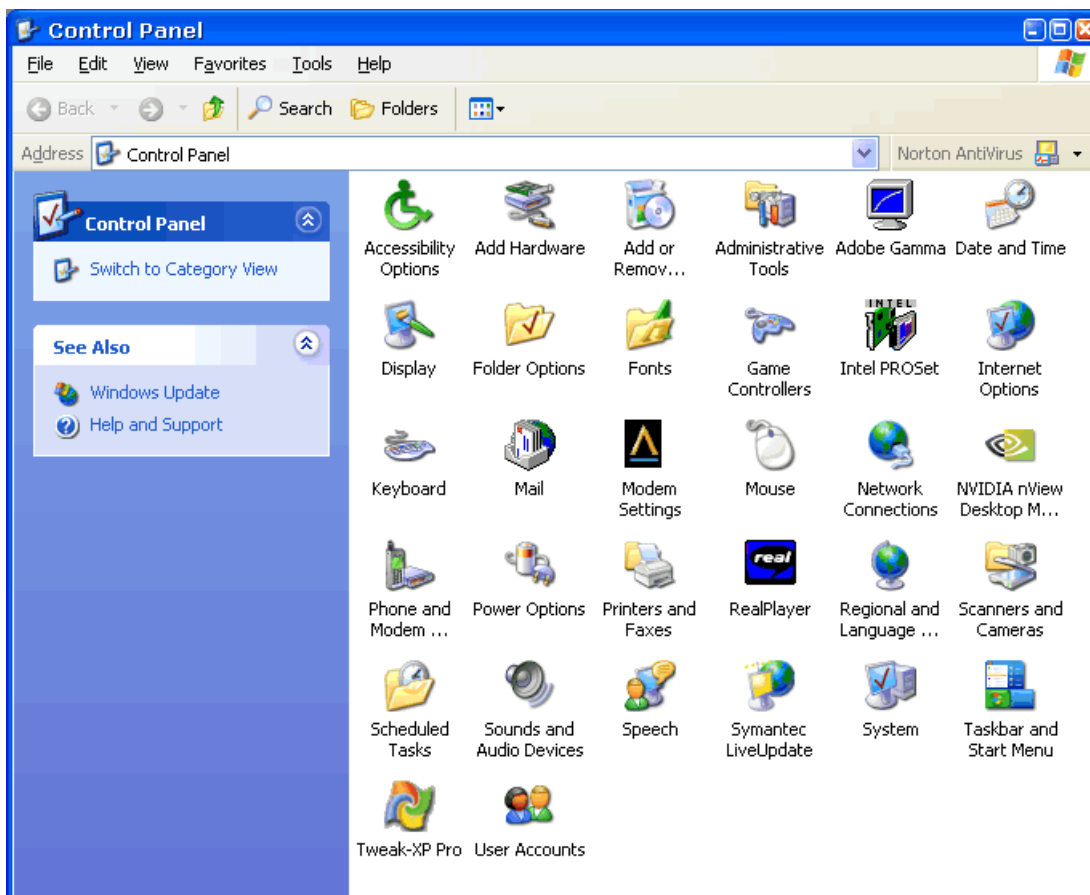


Figure 9-5

Find the icon labeled **Network Connections** and double click on it. This should bring you to a screen similar to Figure 9-6.

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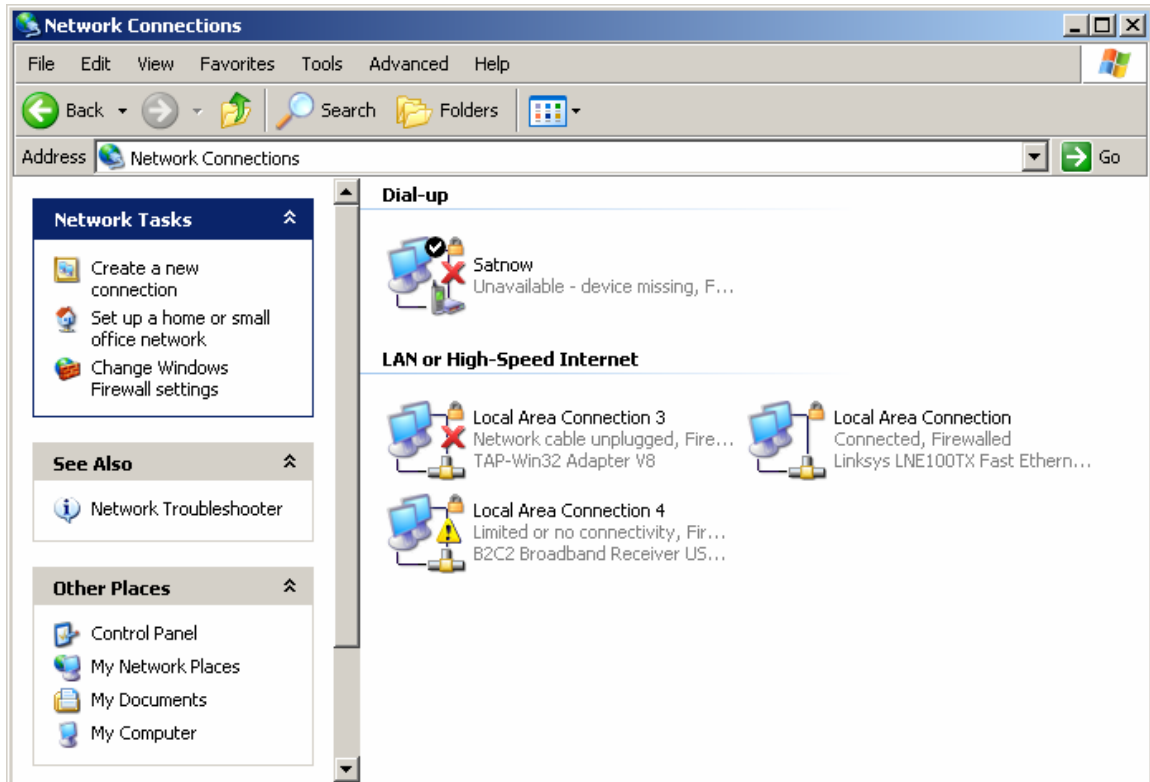


Figure 9-6

The icon you are looking for is called **TAP-Win32 Adapter V8**. Right-click on this icon and then select **Properties**. You should now see a screen similar to Figure 9-7.

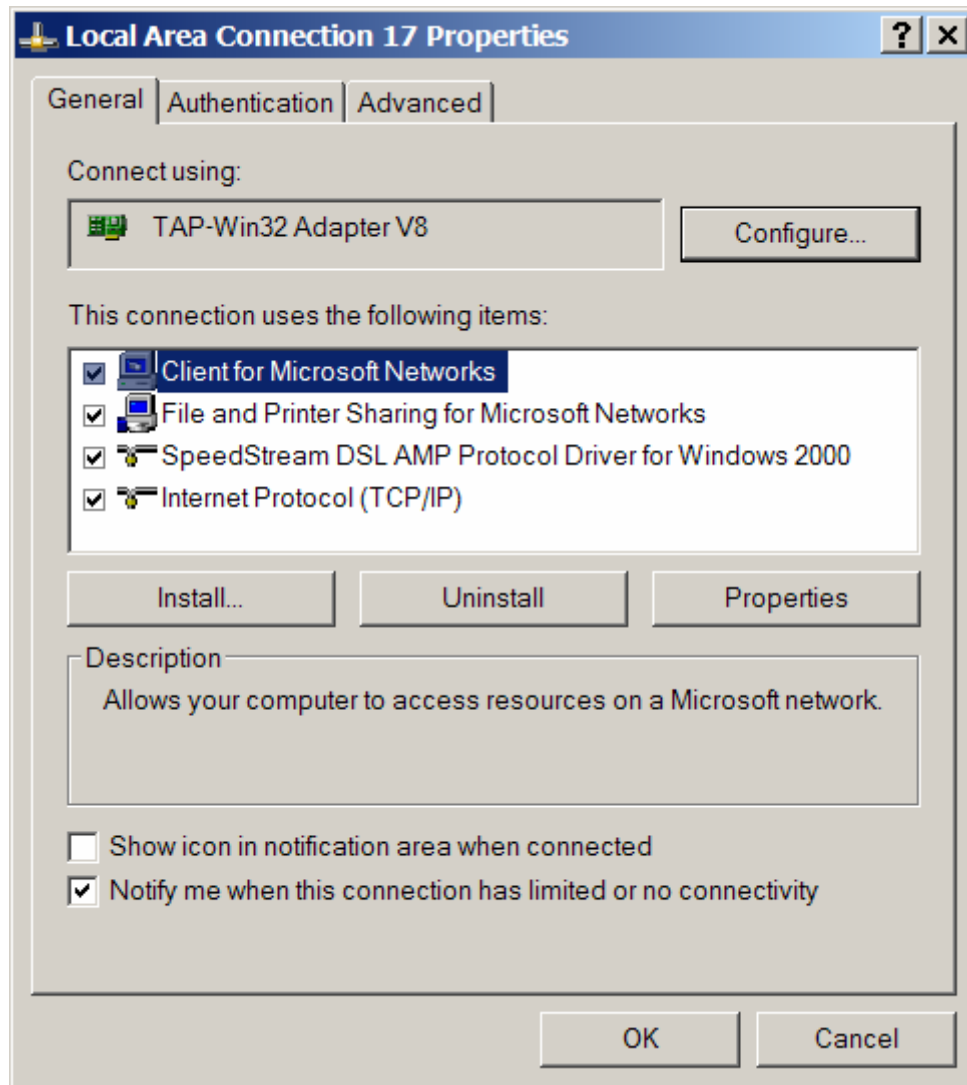


Figure 9-7

Next, click on the **Advanced** tab at the top. A screen should appear similar to the screen shown in Figure 9-8.

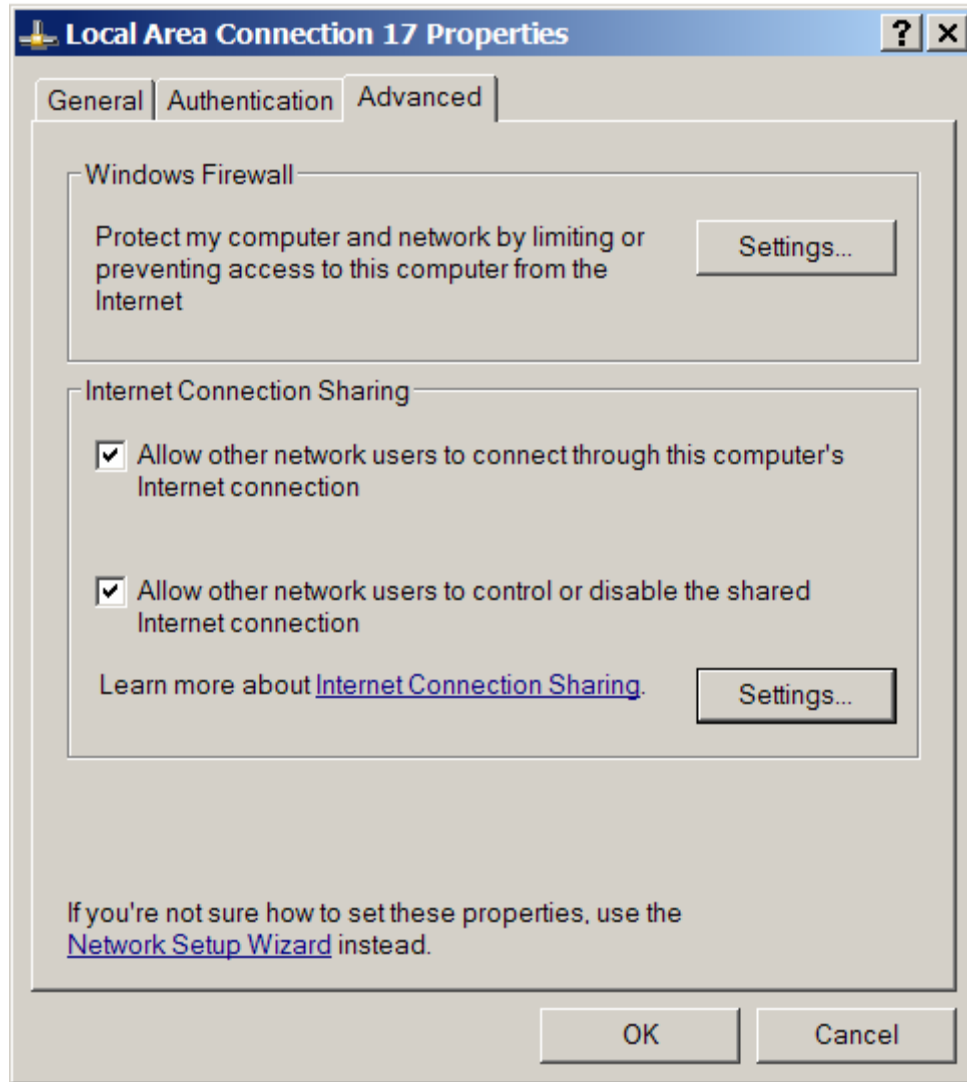


Figure 9-8

In the middle of this screen, there will be an **Internet Connection Sharing** section. Place a check in the box next to **Allow other network users to connect through this computer's Internet connection** by clicking on the box. Once you check the box then a drop down menu could appear. If so then select the network adapter you are using to network your computers. Click ok to accept the changes. You have now succesfully configured your host computer. The next step is to configure your client computer(s) in other words, the computers you want to share the connection with the host computer.

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The next step is to set the connection settings in Internet Explorer on the client computers

Figure 9-9

Open Internet Explorer on a client computer and click tools, internet options, and you will see a window like the one in figure 9-9. next, click the connections tab at the top

