



How-To:

Guide to Your Network

<http://www.vermontcomputing.com/>

©2006 Vermont Computing, Inc.

Network Basics

Definitions

10/100/1000 Bit – the maximum speed at which a piece of equipment can transmit. Note that a bit is 1/8 of a byte.

Cable Internet – high speed internet that uses the cable lines.

Cables – network cables allow you to hook various pieces of equipment together. Also known as Category 5 (CAT5), Ethernet or RJ45.

Cross Over Cable – a network cable that allows you to hook two computers directly together without the use of a switch or hub.

DSL – digital subscriber line. High speed internet connection that uses the phone line.

Hub / switch – a device that allows one network connection to be divided amongst several computers. Unlike a router, a hub or switch cannot split an internet connection.

Internet Service Provider (ISP) – the company that provides you with internet access. This could be over a phone line, DSL, Cable or Satellite. In other words, the company you send money to every month.

IP address – Internet Protocol address, a series of numbers of the form xxx.xxx.xxx.xxx that uniquely defines your computer on the internet. This number is assigned to you by your ISP.

Modem (dial up, cable, satellite and DSL) – a device that sends and receives information from computers to the Internet Service Provider, and thus to the internet.

Network Card – a piece of equipment that connects directly to a computer, allowing you to plug a network cable into it.

Router – a device that allows you to share an internet connection between several computers

Satellite Internet – high speed internet that uses a small satellite dish placed on the building.

Troubleshooting

On the next page you will find a flow chart for troubleshooting the most involved of the three problems you may have with your network. If the chart prompts you to call your ISP, then please do so. Vermont Computing can only handle certain problems with your network and there are things that your ISP can do better than we (such as tell you when your connection will be restored).

Some people have reported a problem when calling an ISP stating the ISP refused to provide them with service because they had a network installed with their connection, i.e. they had a router. The flowchart on the following page gives you the information you need in order to determine whether the problem is with you or the ISP. If you are calling the ISP, it should mean the problem is on their end. A good way to start your conversation with a technician is to ask if there is a service outage in your area. If so, then you simply ask when it will be fixed and hang up. If there is not, they will assume the problem is with your computer (even though there may be an outage they are unaware of) and try to help you through it.

If you get a technician who is unhelpful, write down their name, hang up and call back. One client reported a technician telling them, continually “we don’t support routers” when there was a question about email! Different technicians do things differently, and you shouldn’t have to call more than twice to get someone who will help you. If all else fails, call Vermont Computing.

The three network situations you may run into are

1. I can “see” other computers on my network, but I cannot use the internet. **There’s a problem - Use the flowchart.**
2. I can use certain websites or internet services, but not others. **First, try restarting your computer. If that doesn’t work, then those particular web services or sites are down. Either wait for them to become available or contact the company that handles them.**
3. I can’t get on to the internet or use any web services. **There’s a problem - Use the flowchart.**

Vermont Computing, Inc.
Randolph, VT
Phone – (802) 728-9217

info@vermontcomputing.com
<http://www.vermontcomputing.com>