

## Vero Beach Computer Group: January 9, 2012 General Meeting

Topic: Home Networking

Speaker: Eric Price, club president



## Home Networking, Part Two

Last Month we discussed routers and some key components of a home network. Cables, switches, network cards, etc. This month we'll get a bit more hands on and in-depth.

**TCP/IP – Transmission Control Protocol/Internet Protocol** – the “language” that network devices use to communicate. Started in use by the Internet and now used by all home and business networks.

**IP Address** – a unique address to the network device in a network (ie. Home Network, Business Network, the Internet). No two devices can have the same IP address within their network. Issued by the router automatically if Dynamic.

**Workgroup** – common name for the network in a home. All computers can share their drives/printers easier if their workgroup names are the same.

**HomeGroup** – an automated way of networking computers in the home that use Windows Vista/7

**Subnet Mask** – usually 255.255.255.0 in a home network. Issued by the router automatically.

**Gateway** – the IP Address of the router, such as 192.168.0.1 or 192.168.1.1 or 192.168.1.254 but can be anything. If the gateway address is incorrect on the computer, you won't be able to get to the Internet but you can still print and see local network devices.

**Ping** – a way to test and troubleshoot your network. Can be blocked by the Windows Firewall.

**IPConfig** – to show the ip address currently assigned to your computer, Start > Run > Command (Enter) > IPConfig (Enter)

**DNS** – domain name service or server. Identified by an IP address. Used to look up the “names” of computers and translate them to their unique IP addresses. Usually the same as the Gateway (Router) IP Address in a home network.

**Sharename** – the name of the shared folder or printer

**Computername** – the name of the computer

**UNC Path** = [\\computername\sharename](#) - used to map network drives to folders on other computers in the network

**The Cloud** – a service or storage located elsewhere and accessed only via the Internet

**Map** – to assign a shared resource (printer or file folder) on another computer to the computer you are using now. If it's a file folder, you can assign it an unused drive letter such as Z:

**Permissions** – you can assign users rights to read and not write, or read & write. Can enable Guest user account and then assign it permissions. Otherwise, need same username/passwords all computers in network. Or, use HomeGroup for Windows 7/Vista users to avoid having to do that.

### Setup a home network:

1. Decided what resources to share – printers, folders on the computers
2. Make sure any computers are on the same workgroup (helps, but not required)
3. Share your resource – printer on a PC or file folder on a PC
4. Map to your resource from the other computer using the UNC Path

### Troubleshoot:

1. Try to the UNC Path on the source (Sharing) computer
2. Ping the IP Address of the sharing computer from the other computer (Firewall may block)
3. Look at the permissions on the shared folder or printer

**Alternatives to networking:** Drop Box, other file or photo sharing services/websites in the Cloud.