Volcano Internet User Help

Contents

Home Networking

With today’s devices, access to movies, games, online videos, along with normal internet browsing has never been easier and more widespread. While at home, in order to have all your wired and wireless devices connected to your Volcano Internet service, you will need a wireless home router.

With the rental of a wireless home router from Volcano Internet, or by obtaining your own router, you can have all your devices connected to the internet at the same time, all doing their own thing. Connect all your families’ computers, smart phones, tablets, and game consoles and have a happy home.

Home Network Benefits

Having a home network can mean more than just getting all your computers and devices online. After installing a router and connecting all devices, a number of options and features become available, such as file and media sharing, printer sharing, getting game consoles online, installing security web cameras, and giving smart appliances internet access.

Home Networking Benefits

- File, Media, and Printer Sharing
- Online gaming with consoles
- Online Video
- WatchTVEverywhere
- Internet Cameras and Security
- Smart Appliances

File, Media, and Printer Sharing – With all your devices connected to your home network, you can move pictures, music, and video from one device to another by setting up file sharing. File sharing can be easily set up for each device by accessing the network or sharing settings and allowing that device to be discovered on the network.

Media hubs or file storage can be placed in a home network to have a central location for shared items. There are many commercial products available that can store any content you wish to share.

If your printer can be networked, then you would be able to use that printer from any device on the network. This is much move convenient than having to connect each device to the printer whenever you want to print.

Game Consoles – Online gaming is very popular and all newer consoles have the ability to connect to a wired or wireless network. Once connected, you can play games with others that are online.

Online Video – Many online video providers such as Netflix and YouTube, and cable and satellite providers (Including VolcanoVision) have content available online that is accessiable either with an app or at a web site. After installing such an app on your smart phone or tablet you can watch that content while relaxing outside, laying in bed or anywhere that your network can reach.

If you would rather watch online video on your HDTV, home networking is the way to do it. There are devices such as Chromecast, AppleTV, Roku, and others that connect to your HDTV that allow you to stream video from the internet to your TV. These devices have appications pre-installed that connect to video services like Netflix, YouTube, HBO, ESPN and many others.

WatchTVEverywhere – The WatchTVEverywhere service let's you watch many VolcanoVision channels from any online connected device. This service is free for any VolcanoVision subscriber. After creating a WatchTVEverywhere account you can then use your computer, tablet, or smart phone to watch live and recorded programs from networks such as A&E, Cartoon Network, CNN, TNT, and TBS. There are a number of additional networks available with more being added. Enjoy this benefit to your VolcanoVision service on your home networked device from anywhere in your home.

Internet Cameras and Security Systems – Need to keep tabs on what's going on at home while you are away? Internet cameras are a great way to make sure your home and property are safe and can provide valuable data in case of problems. Having a home network makes setting up an internet or network camera a fairly easy task, and will allow to view the camera not only from the internet, but also directly from the home network.

Home security companies now have services that can let you remotely monitor for problems like smoke or carbon monoxide levels, or control things like the thermostat, door locks or house lighting. Of course cameras could also be a part of a security system and remote viewing is available from many security companies.

Smart Appliances – Newer applicances are built with internet access capabilities and would connect to your home network with a wired, or more likely, a wireless connection. Smart applicances such as refrigerators, dishwashers, ranges, and lightling systems can be connected to the internet through your home network. You then can manage these applicances with apps installed on your smart phone.

All this communication requires a home network with suffient bandwidth. So along with obtaining a router, make sure your internet service level will be enough for all the activity.

Volcano Supplied Router

Routers rented from Volcano Internet are fully supported. We will get you set up when your service is first installed and we will continue to support the router as long as you have your service. Prior to installation, routers are set up by Volcano so that your service works right away. You would not have to know about any of the details needed to configure the router, we'll take care of that for you. If the device malfunctions we will either replace or correctly configure the router to get it to working order. Volcano Internet Support is experienced in supporting our supplied routers, and can quickly diagnose and correct many problems during a support call. There is a small monthly fee for the rental of wireless router, but this provides you with the piece of mind of knowing Volcano will be ready to help with any problems with your router.

Customer Supplied Router

If you purchase a router on your own, we will make sure internet service is working to that router, however you will need to get support from that router's manufacturer for any other help you might need. You can obtain any brand of wireless router that supports the wireless technology on your mobile devices and most modern wireless routers will be fully compatible. If you are still unsure, be sure to ask some questions when you purchase the router. Talk to a knowledgeable person, what devices you would like to connect wirelessly, and they can tell what type of router you can use.

Volcano Supplied Router or Your Own?

Volcano Supplied

- Fully supported for lifetime of service
- Configured and tested by Volcano prior to installation
- Technical support can remotely connect and diagnose router and connection issues
- Small monthly fee

Customer Supplied

- Your choice of router
- Do not need to return at end of service
- Self installation and configuration of router
- Not supported by Volcano
- No monthly fee

Whether you decide to rent a router from Volcano or buy your own, if you would like have multiple devices online, you will need a router. There's more you can do with a router though. With some setup, you'll be able to share files between all these devices, or set up a media hub where all your content is stored and accessed through your home network by your devices.

Some routers have additional features like parental controls, firewall settings, printer sharing and guest networks. Decide what features might be important to you and find a router that will do what you want.

Having a wireless home network gives you the freedom to use the device you want, where you want while at home. Security however is very important once you have a wireless router in your home network.

Wireless Security

Wireless routers should be configured with security features in place so that only devices you allow can connect to your internet service. There are a number of security settings that can be enabled, and some routers have proprietary security features, so we'll focus on the most important ones.

Wireless Authentication and Encryption

Enabling wireless authentication and encryption is absolutely needed to secure your wireless network. All wireless routers will have the ability to authenticate and encrypt the connection between it and any devices with a number of different protocols. You should use the strongest protocol available, usually this is WPA2. When setting up WPA2, choose the Personal or PSK (pre-shared key) authentication mode, and choose a key (basically a password) that contains a mix of numbers, capital letters, and special characters. Do not use a simple password here as that will leave your wireless network less secure. Then select the encryption protocol AES, and not TKIP. For now don't worry too much about these acronyms, but some web searches can help you find these definitions. If WPA2 is not an option, use WPA and avoid WEP which is an older, less secure protocol.

Wireless Security Tips

Tips for securing your wireless network

- Use WPA2 PSK with AES
- Change the default administrator password – **Non Volcano Supplied Router**
- Disable remote management from the internet
- Change the default SSID
- Disable WPS
- Create separate internal network – Guest mode or DMZ

Other Steps

Some people recommend taking other security steps such as hiding the network name, MAC address filtering, disabling WPS (Wi-Fi Protected Setup), or something more complex like creating separate networks. There are all good ideas, adding layers to security, but some require more expertise than others.

Change your default router administrator password - If you have purchased your own router, this is a very easy step that should be taken. Routers come with known default passwords that can be easily found online. Make your administrator password complex to deter intrusion into your network.

IMPORTANT - Volcano Internet supplied routers have a custom administrator password. When you call in for help, technical support can easily connect to diagnose problems by connecting remotely to the router. **If you change your default administrator password in your Volcano supplied router, we may not be able to fully diagnose and solve a problem you may have.**

Disable Remote Management – Routers have on option that allows you to connect to it remotely from the internet. Unless you need to administer your network while away, this option should be disabled.

Change your SSID – Changing the default SSID (Service Set Identifier) will lessen the chance of your wireless network being hacked.

MAC Address filtering - A MAC address is a unique identifier given to all networking devices. Each of your computers, phones, tablets, or networked gaming systems have their own MAC address which can be set up in the wireless router to only allow connections from these devices. While this sounds to be very secure, MAC addresses can be easily sniffed and faked. Meaning someone could see your device's MAC address, and then set their device with your MAC address and then gain access. As with hiding the SSID, MAC address filtering is not foolproof and some would say unneeded as it is easily overcome. However setting this up does give an added layer of security and can be part of an overall security system you might put in place.

Disable WPS - Wi-Fi Protected Setup (WPS), is an industry standard that allows less technical users to easily setup wireless security. Sounds just fine, but a vulnerability was discovered a few years ago that allows a hacker to obtain WPS information, which can lead to obtaining a WPA2 key. If possible, disable WPS.

Create separate internal network - This is an advanced configuration that should be taken by those with networking knowledge. This type of setup has the internal devices on a separate network from the default network and can be set up to allow and disallow traffic as required. Traffic to and from the internal network can be controlled so that the default network cannot communicate with the internal network.

Some routers will have "Guest Mode" or a "DMZ" setup, complete with an easy setup wizard, which can accomplish the same thing has manually setting up a new network. In this configuration the internal network is separated from the "Guest" or "DMZ" network and does not allow communication in between. So, if someone were able to connect to your wireless network without your authorization, they wouldn't be able to connect to your internal devices. Systems in the "Guest" or "DMZ" network could possibly have access to the internet, so take care if this is the setup you go with.