

## Troubleshooting Your Internet

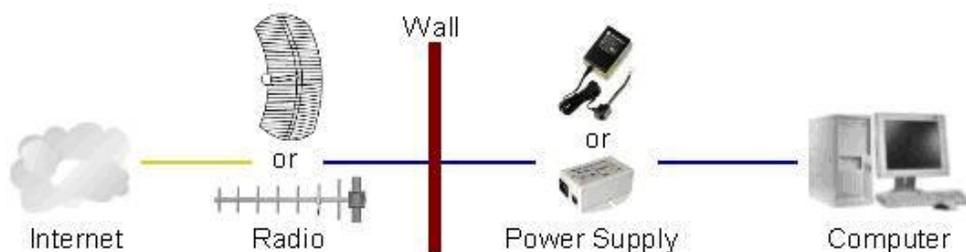
These troubleshooting documents describe how to troubleshoot an internet connection that isn't working. As it's necessary to identify the parts of your network in order to troubleshoot it, we also describe the components of a home network and discuss how the parts fit together in your home.

Many of the calls we receive regarding the internet not working are due to problems with the equipment in the customer's home. By providing you with this document, we hope that you will be able address these issues and get back online immediately. Performing these steps before calling will help us narrow down where the problem lies sooner, so that we can get you back up and running faster. If you are having problems with your email, please see our document, Configuring Email Applications.

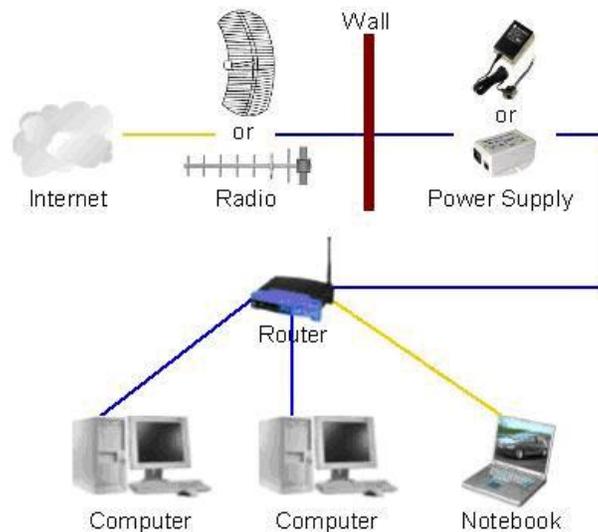
### Home networks

The components of your home network that you will need to identify are:

- Radio: is usually mounted on the roof with an antenna/ dish. The radio connects you to the internet.
- Power Supply: is plugged into an electrical outlet, and provides the power the radio needs to operate. If you follow the internet cable from the wall, it should be the first thing you find. We use two different types of power supplies. The first is a small white box with two internet cables plugged into it and a green or amber light. The second is a black box that plugs directly into the outlet, and has a wire with an internet cable plugged into the end that plugs into your computer.
- Router: you may or may not have a router depending on how your network is set up. A router is like a switchboard operator, allowing more than one computer to use the same internet connection at once. Wireless routers also allow computers to connect wirelessly, often from anywhere in the house. Routers usually have five ports for internet cables in the back, one labeled WAN or Internet, and four numbered ports for your computers to plug into.
- Basic Network: typically in households with one computer, the wire coming into the house from the radio plugs directly into the power supply which plugs into the computer



- Network with a Router: typically found in households with more than one computer or requiring a wireless connection to the internet. The biggest difference from the basic network is that the power supply is plugged into the router and the router is connected to the computers using either cables or wireless. If you have VOIP phone service, you will also have a box for this service.



## Troubleshooting Slow Internet

There are many reasons your internet may be running slowly. If you aren't getting any internet at all, or if your internet works only some of the time, please see Troubleshooting No Internet .

Sometimes it can be frustrating trying to determine whether the internet is still running slowly after making a change. A simple test is to open Google's image page <http://images.google.ca> and search for something like dogs or horses. It will bring up many photos at once. If images come up promptly, your internet is likely fine. If it is slow, there is still something wrong.

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*Step 1* – Many internet problems can be fixed by restarting the entire network. We want to restart the power supply and router (if you have one). Start by following the internet cable from the wall, and unplug the power cord from each device you find, leave it unplugged for thirty seconds, and then plug it back in. Wait until the lights on each device turn on before moving on to the next one. If a device does not light up, that is likely where the problem lies. Keep going until you reach the computer and then restart the computer as well. If the internet is still slow, continue to the next step.

- *Step 2* – If you have more than one computer, test the internet on all of them. If the internet is slow on only one computer, it is not an issue with the internet but rather with your computer. If the internet is slow on all computers, continue to the next step.

- *Step 3* – If you have a router, bypassing it will determine if it is the source of the problem. First, unplug the power cord from the router to make sure it is turned off. Unplug the cable from the WAN or internet port on the router and connect it directly to a computer. This removes the router and other devices in the house from the equation and limits the test to the

internet and the computer being used to test it. Test the internet again. If it is now working properly, the router is most likely the problem. See [Fixing a Router](#). Otherwise, continue to the next step.

- *Step 4* – At this point, we’ve ruled out most of the equipment in your home – you may try the simple suggestions under [Fixing My PC Computer](#) or call Broadband Surfer Canada at 780-686-7873.

## Troubleshooting No Internet

If any part of the network is not working, your internet will not work. Follow the steps below to resolve the problem.

- *Step 1* – If you are having problems with a computer connected wirelessly, try to connect it using an internet cable instead. If the computer is able to get online using a cable, the problem is usually due to wireless settings or interference. Linksys has an excellent help page addressing weak signal strength [here](#). You may also try [Fixing a Router](#) and [Fixing a Computer](#), if these do not work you will likely need a professional to take a look at it. Please call Broadband Surfer Canada at 780-686-7873; we can suggest a company or local technician to assist you.
- *Step 2* – Many internet problems can be fixed by restarting the entire network. Start by following the internet cable from the wall unplugging the power cord from each device, leave it unplugged for thirty seconds, then plug it back in. Wait until the lights on each device turn back on before moving to the next one. If a device does not light up, that is likely where the problem lies. Keep going until you reach the computer, and then restart the computer as well. If the internet is still not working, continue to the next step.
- *Step 3* – If you have more than one computer, test the internet on all of them. If the internet works on at least one computer, then the internet connection is working and the problem lies somewhere in the house. If none of the computers can get on the internet, continue to the next step.
- *Step 4* – Check the internet cables. Sometimes, a plug can pop out or it may not be in all the way. Starting at the wall and following the internet cable back, unplug each cable end you find and then plug it back in. You should hear a snapping sound as the locking tab engages. Wiggle the cable, and make sure it is plugged in firmly and can’t be tugged out. If you find any kinks or breaks in the cable itself that may be the problem. Replace it with another network cable if possible, if not continue troubleshooting. If the internet is still not working, continue to the next step.



- *Step 5* – Next you will check the power supply. If you follow the cable from the wall, the power supply should be the first device you find. It will either be a small white box with two internet cables and a power cord, or a short piece of black internet cable with a wire leading to a black box plugged directly into the

outlet. White power supply: Check the light on the box itself. If it is green, the radio is receiving power. If it is amber, there is something wrong with the cabling. Check to make sure that the cable going from the wall to the power supply is plugged into the end of the power supply with the red sticker on it. The other port on the same end as the power cable, should be going to the router or computer. If the light is out the power adapter is not receiving power, plug another device into the power socket to make sure the socket is working. If the outlet is working, but the power supply is not getting power, the supply itself needs to be replaced, please call Broadband Surfer Canada at 780-686-7873. If the cables are in correctly, and the light is green, please continue to the next step.



- *Black power supply.* Check the green light on the box plugged into the power outlet. If the light is out the power adapter is not receiving power, plug another device into the power socket to make sure the socket is working. Inspect the wire running from the black box, if there are any breaks or kinks in the wire it may need to be replaced. If the light is lit and the cable appears to be OK, continue to the next step; otherwise please call Broadband Surfer Canada at 780-686-7873.
- *Step 6* – If you have a router, you will need to bypass it to determine if it is the source of the problem. First, unplug the power cord from the router. Next, unplug the cable from the WAN or internet port on the router and connect it directly to a computer. Test the internet again. If it is now working properly, the router is most likely the problem. See *Fixing a Router*. Otherwise, continue to the next step.
- *Step 7* – At this point, we've ruled out most of the equipment in your home. If you only have one computer, it may still be the source of the problem, feel free to try *Fixing a Computer*. If that fails or if you have multiple computers that cannot get online, please call Broadband Surfer Canada at 780-686-7873.