

## TROUBLESHOOT BASIC NETWORK PROBLEMS

If you experience a network problem, follow these steps to troubleshoot the issue.

Press the Windows key on your keyboard. Type **cmd** in the search box. This will take you to the command prompt.

A basic rule of troubleshooting: always start with the closest possible source. You need to check your own computer for network connectivity first. Type **ping 127.0.0.1** and press Enter.

You've just sent four requests for dummy data to your computer's "loopback" IP address and it (hopefully) replied to each one. An IP address is a unique tag for your computer that tells the server where to send data; the loopback address is used for testing your computer's network card. If there were intermittent problems or if your card were completely non-functional, the ping would have experienced some loss.

The next step up the chain is your default gateway, which is in most cases the network router. Any data entering or exiting the network has to pass through the router. To diagnose the router, you need to ping its IP address. Type **ipconfig** at the command prompt and look for the entry next to "Default Gateway."

Now, ping your router: type **ping your default gateway**. If the connection between your computer and the router is strong and stable, all four of your data packets should get a response. If not, your router has connectivity problems. As a note, wireless connections are prone to drop a signal, so keep that in mind when working with a wireless router.

Let's say you've tested your computer and router and that everything checks out, but you still can't connect to a webpage. So, perform the ping test on it. Let's use our BKK site (**ping scsccbkk.org**) for an example. If BKK works, just to be sure, do another ping test, this time to Google (**ping google.com**).

If Google's homepage checks out (if you are able to ping two remote sites successfully), you don't have a problem with your network or Internet connection.