How To Set up a SOCKS Proxy Using Putty & SSH

If you ever find yourself in front of a public computer connected to the Internet and are concerned about the security of the path between you and a website you wish to visit, a SOCKS proxy can come in handy.

SOCKS proxies generally allow you to bounce a TCP connection off another server transparently basically instructing another computer to make a connection on your behalf. When used in combination with Secure Shell (SSH), it can form an encrypted tunnel that insulates you from anyone attempting to grab traffic off the wire.

The following is a simple step-by-step tutorial about how to do this.

You will need:
 -Putty SSH client: http://www.putty.org
 -An account on an Internet-accessible server that accepts SSH connections and allows connection forwarding (enabled by default)
 -A popular web browser or other software that supports SOCKS communications

Step 1:
 Fire up Putty and navigate to the Session Category

Step 2:
 Enter the hostname/IP address and port of the server on which you have an account.
 (Note: The default SSH port is 22)

This tells Putty how to connect to the SSH server.

Step 3:
 Under the SSH->Tunnels Category
 Enter the following:
Source port: 8888 (or any port of your choosing. Just be sure to remember what it is)
Destination: hostname/IP address of the server on which you have an account

Also, select the Dynamic radio button.

This tells Putty that, upon a successful connection, a SOCKS tunnel should be opened from a port on the computer you are using to the SSH server.

Step 4:
 Click Add
The forwarded port is now added to the connection settings.

Step 5:
 Click Open to start the connection

Putty will ask for your login credentials. In most cases, this will be a username and

At this point, your Putty-enabled SOCKS proxy should be active. But how do we test it out? Keep reading

Step 6:
Fire up your web browser and navigate to its proxy connection properties menu.

For Firefox 3, it is in Tools->Options->Advanced->Network(tab)->Connection, Settings

Step 7:
Find the SOCKS settings text box and enter the following:
Proxy Address/Host: localhost OR 127.0.0.1
Port: 8888 (or whatever port you decided to use in Step 3)
Ensure SOCKS Version 4 is selected

might not work correctly.)

Step 8:
Click OK until you re back to your browser.

Go to http://ipchicken.com and check your IP address. It should be different from the machine you re on. In fact, it SHOULD be the IP address of the SSH server (or whatever machine is handling its connections).

Step 9:
Pat yourself on the back. Or have your buddies do it for you they ll no doubt be impressed by your newfound computer skills. Enjoy browsing the web using your own personal SSH proxy.

NOTE: Although this could be useful when using a public computer it won t protect you due diligence when using untrusted computers.