How to Configure an SSH Tunnel on PuTTY

Devolutions

YOU CAN USE A DYNAMIC TUNNEL TO ACCESS ALL REMOTE INFRASTRUCTURE.

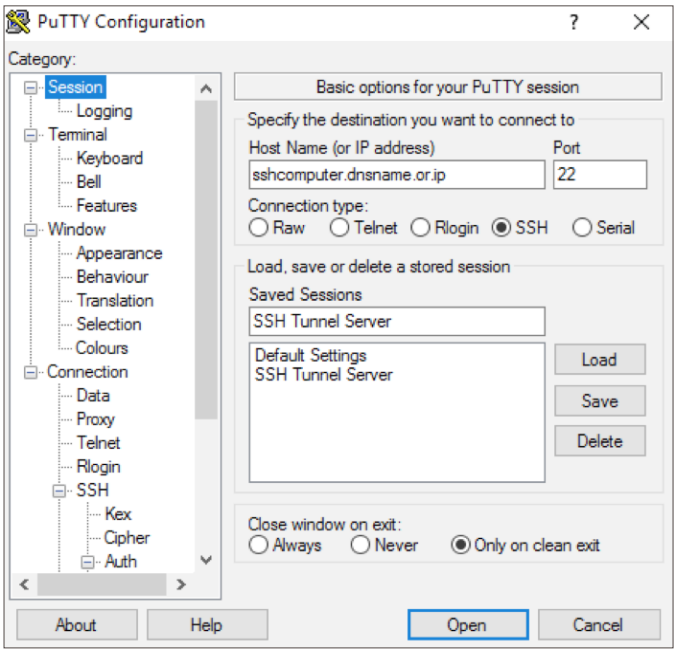
Most of you have probably used a tunnel with an SSH connection. What you probably weren't aware of is that you can use a dynamic tunnel to access all remote infrastructure. Furthermore, you can specify a port and a destination IP to have direct access. This process is achieved through your PuTTY configuration.

In this procedure, we will use **Internet Explorer, Firefox and an RDP connection** to demonstrate the use of a tunnel with an SSH connection, as well as configuring the tunnel with several other protocol types.

LOCAL PORT FORWARDING

STEP 1 – Load the Session

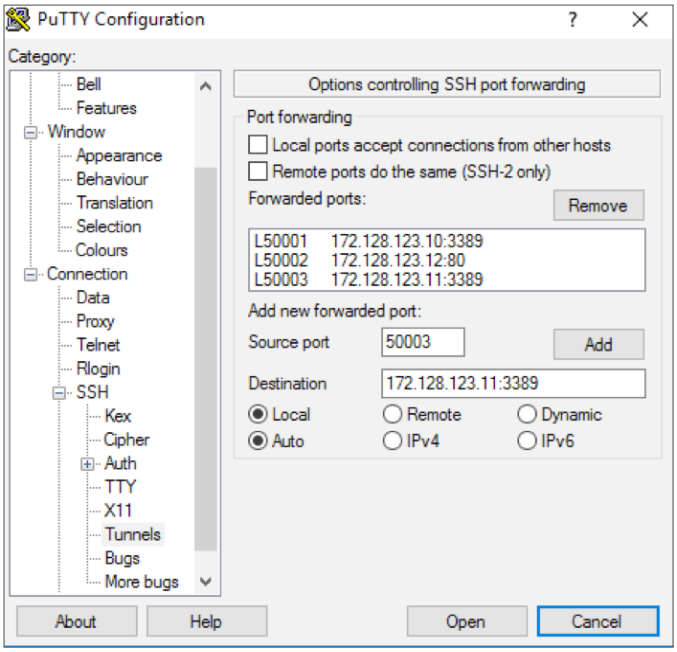
In your PuTTY configuration, configure the **Host Name** and **Port** of your remote SSH computer. Enter your **Saved Sessions** name, and click **Save**. If your session already exists, **Load** it as shown below:



STEP 2 – Configure PuTTY for RDP

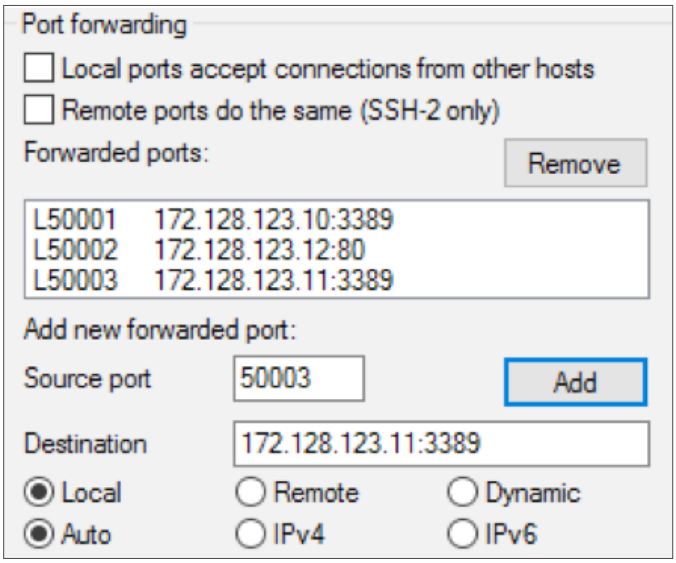
In the **Tunnels** section in PuTTY, configure a specific **Local** port, such as **50001**, that will redirect to **3389** of your destination server.

In the **Source Port** field, enter the local port that will be redirected. In the **Destination** field, enter the IP address as well as the destination port. Select **Local** and **Auto** to activate IPv4 and IPv6. Here is an example from my local machine I would like to go to 172.128.123.10, server port 3389.



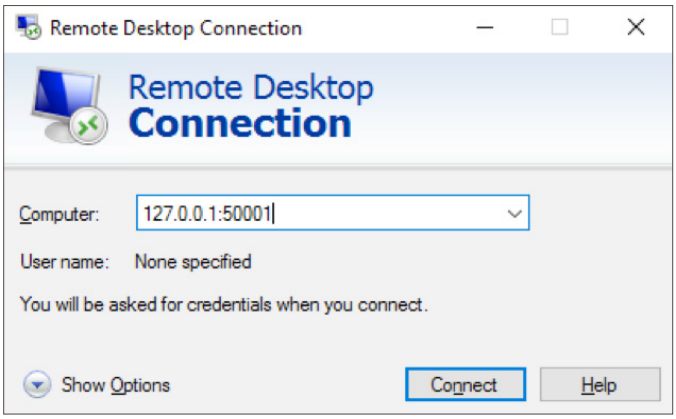
Please note that you may configure your ports for multiple servers simultaneously. Configuring a specific **Local** port such as **50002** will redirect to **80** of your destination server. Doing so will allow you to configure PuTTY to your web browser.

Once the configuration setup is complete, open an RDP connection and enter your local IP (**127.0.0.1**), along with the local port configuration in PuTTY.



As illustrated above, if I enter **127.0.0.1:50001**, my connection will translate to the server 172.128.123.**10**:3389.

If I enter **127.0.0.1:50003**, my connection will translate to the server 172.128.123.**11**:3389.



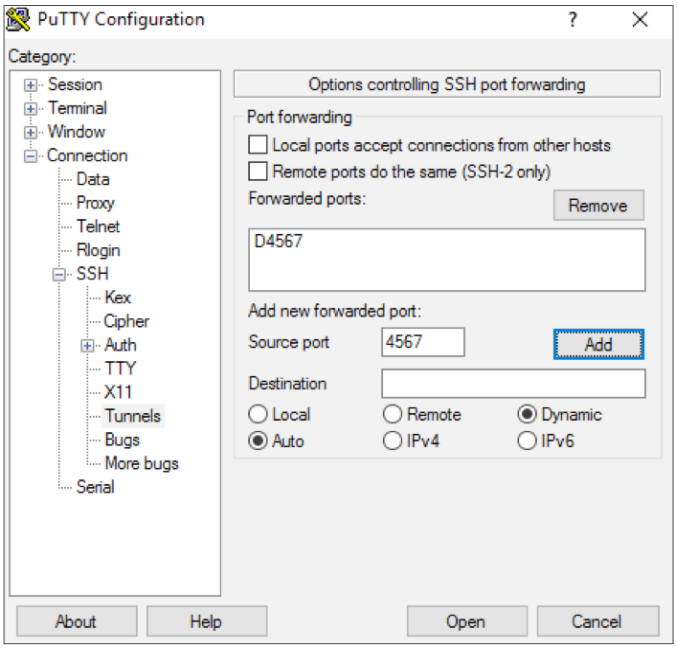
STEP 3 – Configure the SSH Tunnel

In the Category menu, drill down to Connection --> SSH --> Tunnels. There are several ways to configure a Tunnel. We shall proceed with a browser tunnel configuration.

ADVANCED SCENARIO (DYNAMIC PORT FORWARDING)

STEP 4 – Configure PuTTY for a Web Browser Tunnel

At the **Tunnels** page, configure a **Dynamic** port between the ranges of 49152-65535. For additional information, refer to https://en.wikipedia.org/wiki/List_of_TCP_and_UDP_port_numbers 49152–65535.



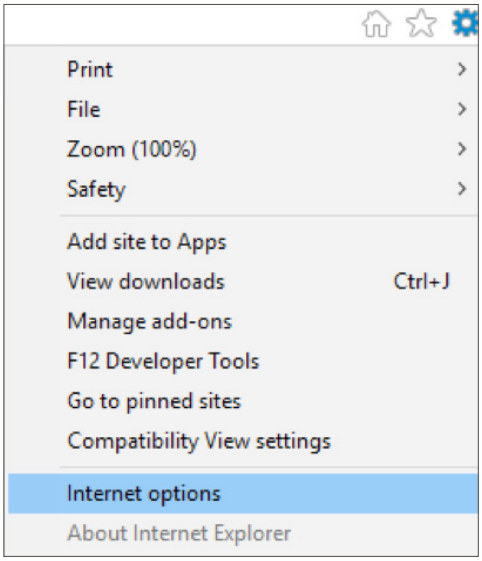
STEP 5 – Configure Your Software

Further information for Internet Explorer, Chrome or Edge can be seen in Step 5.1. For Firefox, refer to Step 5.2, and for RDP usage, refer to Step 2.

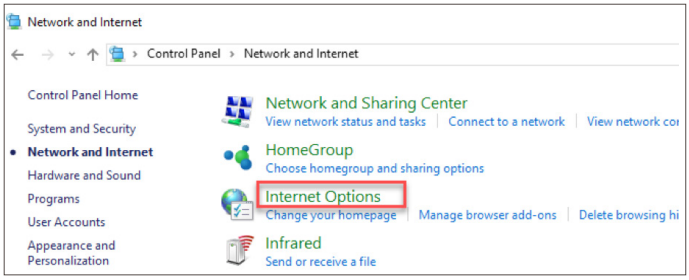
STEP 5.1 – Configure Internet Explorer to Pass Through an SSH Tunnel

As previously noted, configuring a tunnel through Internet Explorer will affect Google Chrome and Microsoft Edge.

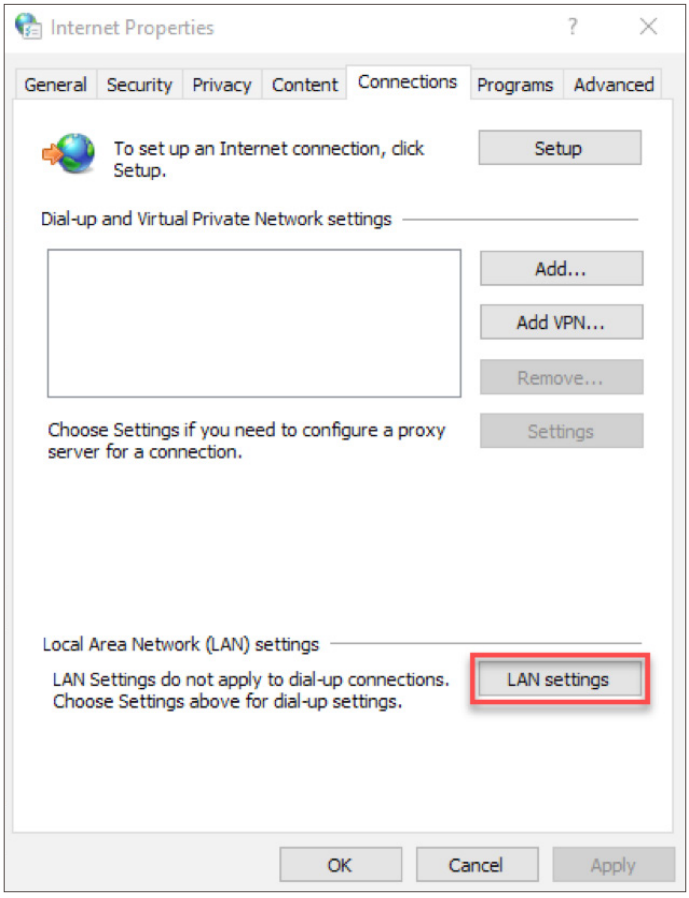
1- Click on **Internet options** by navigating through your **Control Panel** in your **Internet Explorer** browser.



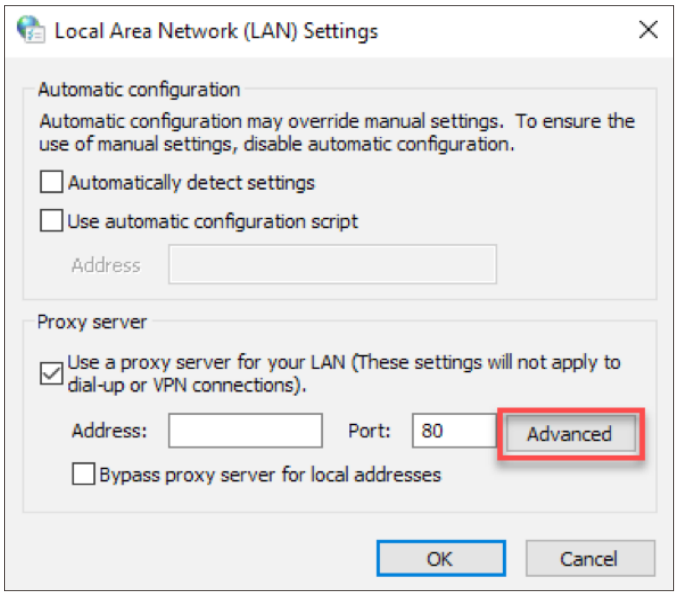
2- The following illustration displays the **Control Panel Home**.



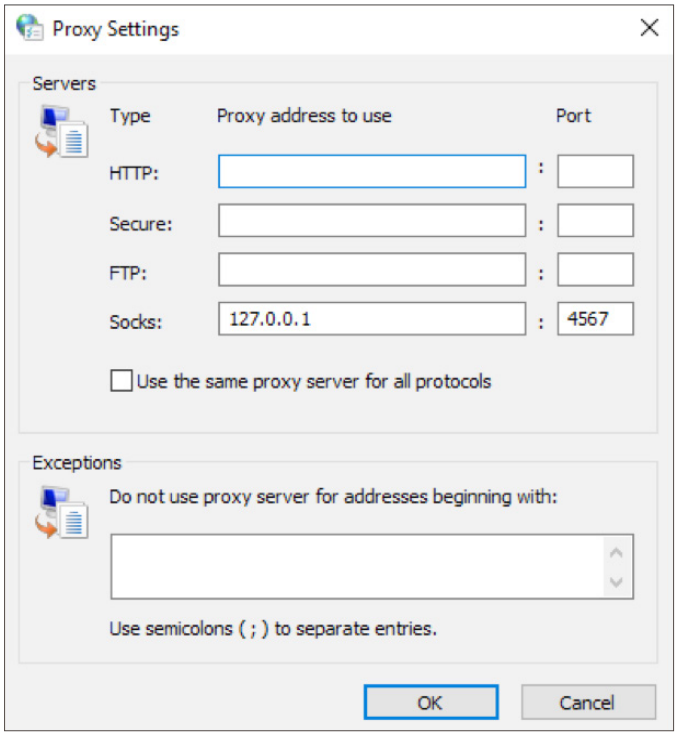
3- Select the **Connections** tab and click on **LAN settings**.



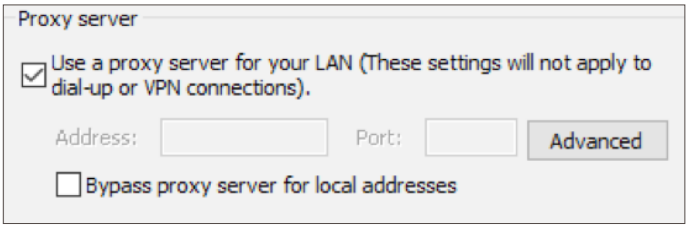
4- Check the **Use a proxy server for your LAN** box, and click **Advanced**.



5- Enter **127.0.0.1** of the host IP in the **Socks** field, with the configured **Port** of **4567**, and click **OK**.

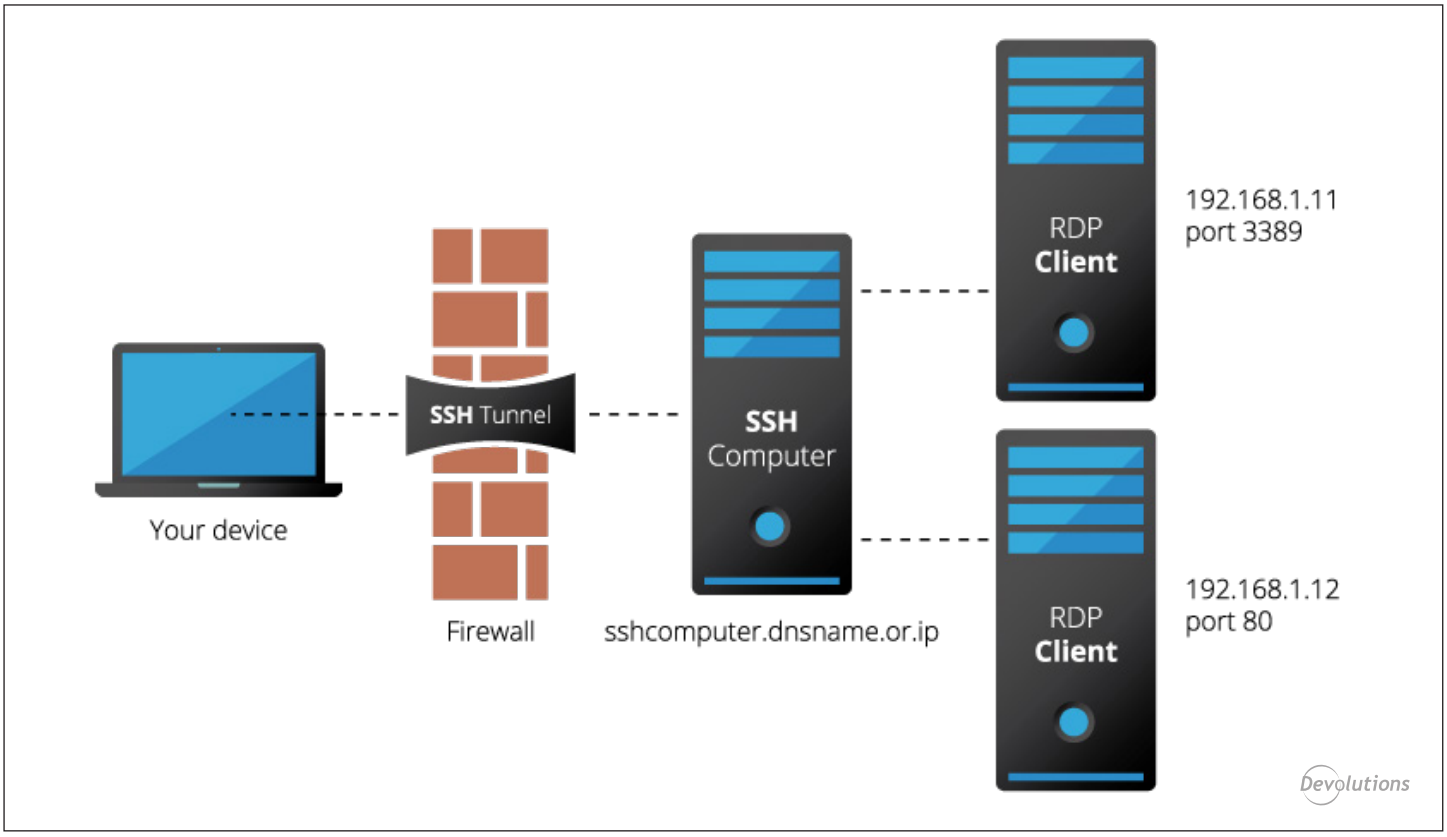


You should see a grey **Address** bar. If your remote segment IP differs from internal segment, please check the **Bypass proxy server for local addresses** box.



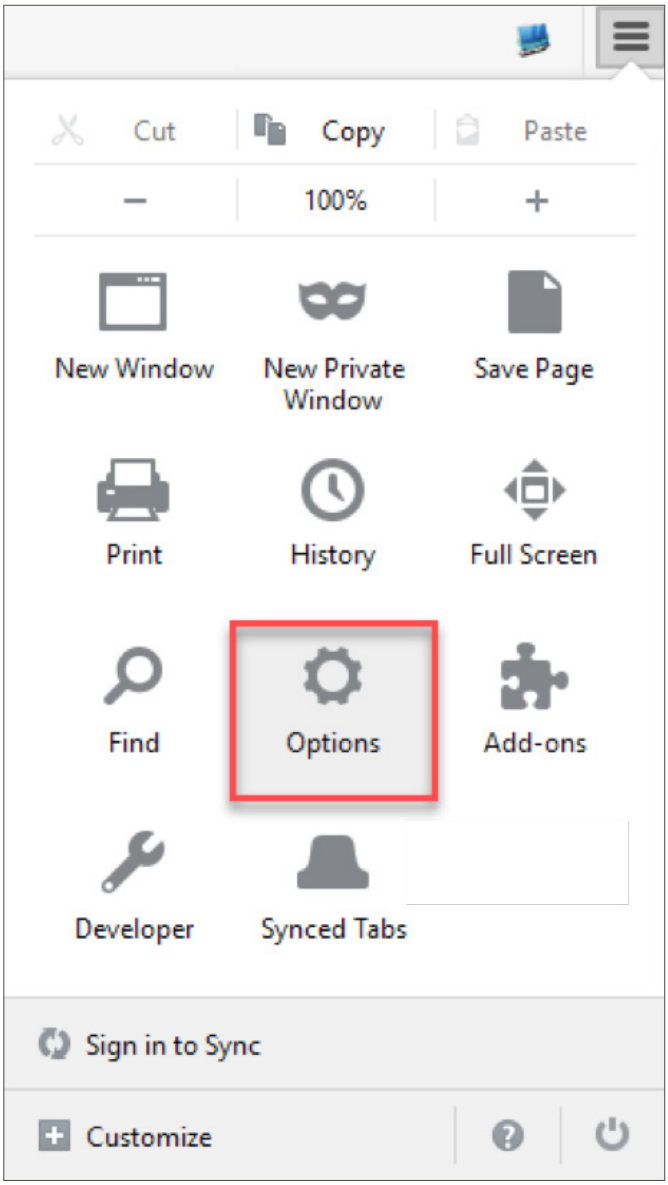
Once complete, you will be able to access Internet Explorer, Edge or Chrome to navigate onto an IIS server by entering the IP in your navigator. You may open a browser tab and visit http://172.128.123.10 in this example. Doing so will allow you to view the service from the Destination server.

YOUR CONFIGURATION SHOULD LOOK LIKE THE FOLLOWING FIGURE.

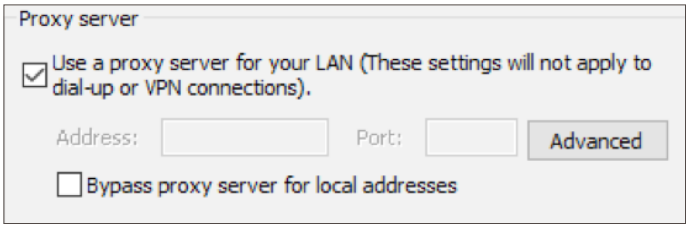


STEP 5.2 – Configure your Firefox Browser

1- In your Firefox browser, click on the **Menu** button in the top-right corner of the screen, and select **Options**. Then, navigate to the **Advanced** tab.



2- Within the Advanced tab, select the Network tab and click on Settings in the Connection section.



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