

# Advanced TM Networks

Event Partner Summit 2016



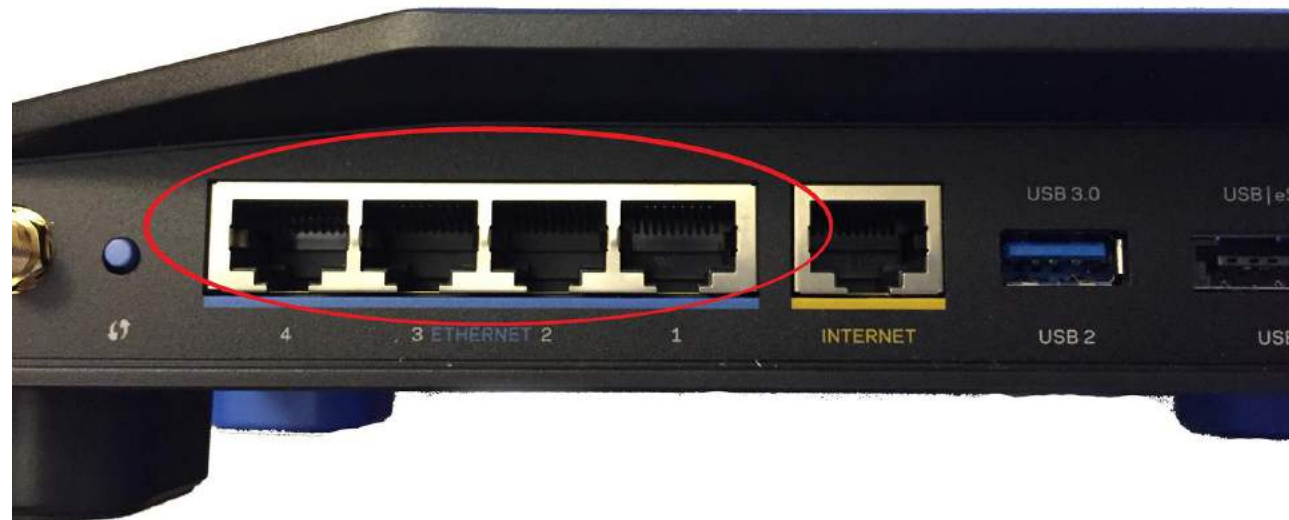
# The Router

- Any router with a 5 GHz wireless network will work
- The REC Foundation recommends the Linksys WRT 1900ACS



# Required Supplies

- You will need a router, network cable, and computer
- Cables must be in ports labeled “1” through “4” and not “Internet”



# First Time Setup

- In a web browser type in “192.168.1.1” and hit enter



**Note: For this point forward all router screenshots will be based upon the Linksys WRT1900ACS**

# First Time Setup

Check both boxes and click Next

**LINKSYS™ Smart Wi-Fi Setup**

## Linksys Smart Wi-Fi Setup

Linksys Smart Wi-Fi Setup will help you set up your router and get it connected to the Internet. Your new wireless home network will be online in just a few minutes.

Click **Next** to continue.

[I have read and accepted the License Terms for using this software](#)

I want to skip Setup and configure my router manually

i To access Setup in the future you must factory reset your router.

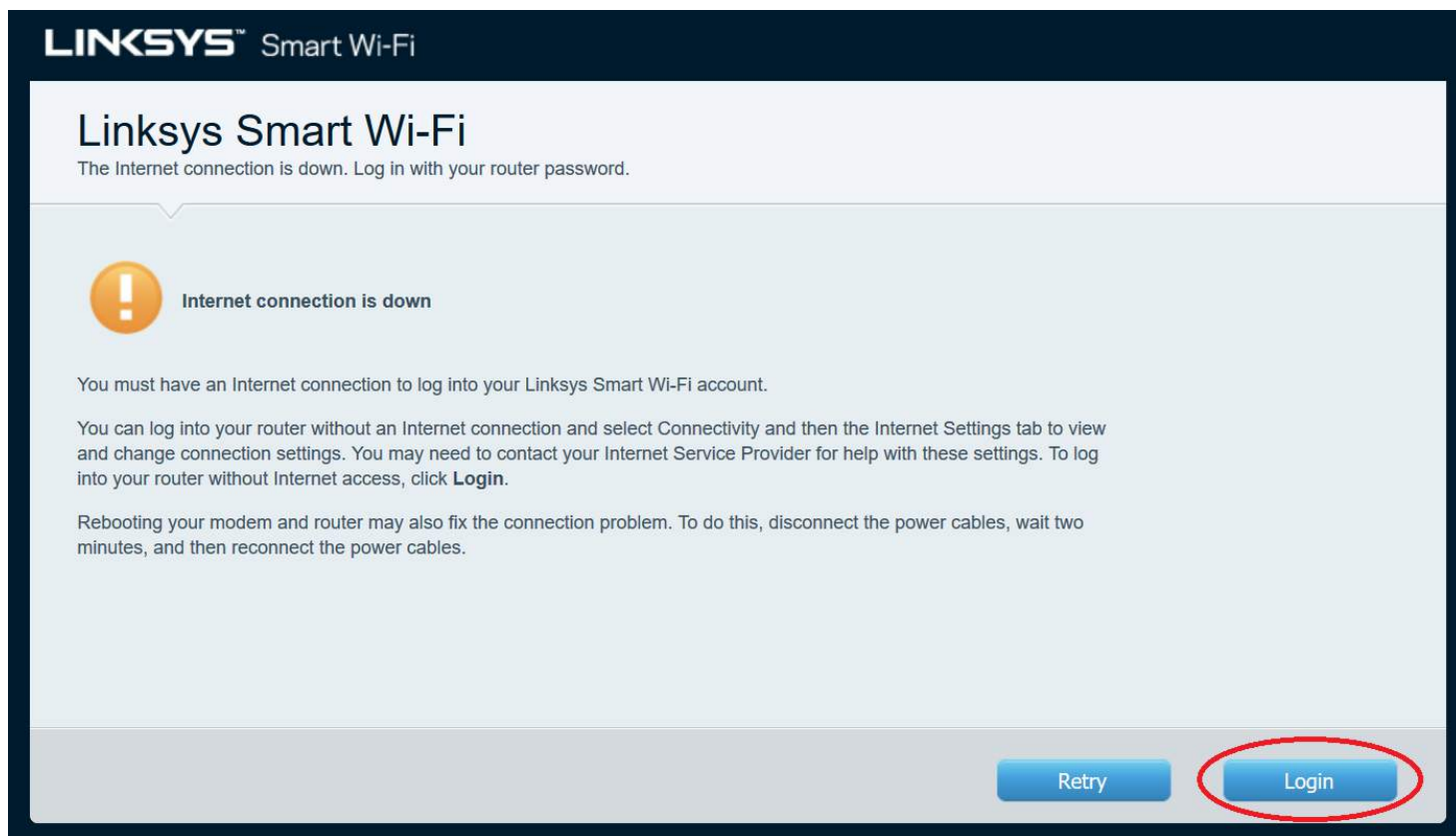
Back
Next





# First Time Setup

Click the “Login” button

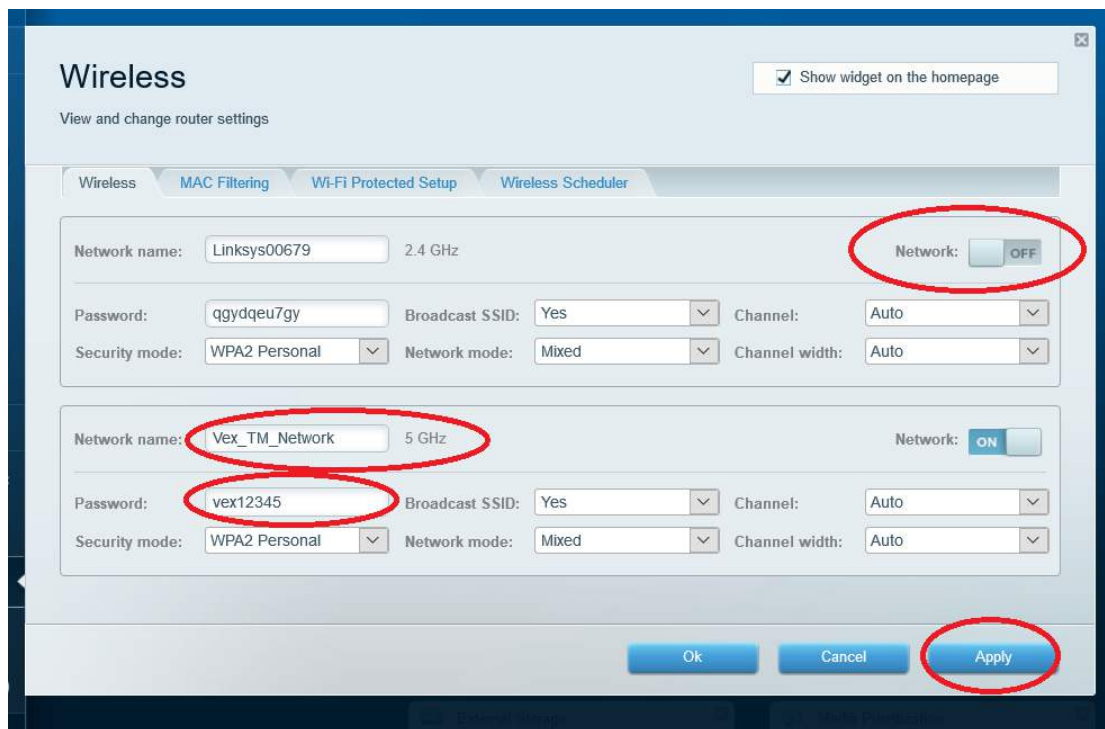
A screenshot of the Linksys Smart Wi-Fi login interface. The page has a dark blue header with the 'LINKSYS™ Smart Wi-Fi' logo. Below the header, the main content area is light blue and contains the following text: 'Linksys Smart Wi-Fi', 'The Internet connection is down. Log in with your router password.', an orange warning icon with an exclamation mark, and the text 'Internet connection is down'. Below this, there are three paragraphs of instructions: 'You must have an Internet connection to log into your Linksys Smart Wi-Fi account.', 'You can log into your router without an Internet connection and select Connectivity and then the Internet Settings tab to view and change connection settings. You may need to contact your Internet Service Provider for help with these settings. To log into your router without Internet access, click **Login**.', and 'Rebooting your modem and router may also fix the connection problem. To do this, disconnect the power cables, wait two minutes, and then reconnect the power cables.' At the bottom right, there are two blue buttons: 'Retry' and 'Login'. The 'Login' button is circled in red.

# First Time Setup

- When prompted for a password type in “admin”, the default password for Linksys
- Navigate to the wireless network setup page by clicking on the “Wireless” button on the left side

# First Time Setup

- Turn off the 2.4 GHz network
- Name the 5 GHz network
- Set a password for your network



Wireless  Show widget on the homepage

View and change router settings

Wireless **MAC Filtering** Wi-Fi Protected Setup Wireless Scheduler

Network name: Linksys00679 2.4 GHz Network:  OFF

Password: qgydqe7gy Broadcast SSID: Yes Channel: Auto

Security mode: WPA2 Personal Network mode: Mixed Channel width: Auto

Network name: Vex\_TM\_Network 5 GHz Network:  ON

Password: vex12345 Broadcast SSID: Yes Channel: Auto

Security mode: WPA2 Personal Network mode: Mixed Channel width: Auto

Ok Cancel **Apply**



Now that the first time setup is complete the internet can be connected to the router via the “Internet” port on the router.

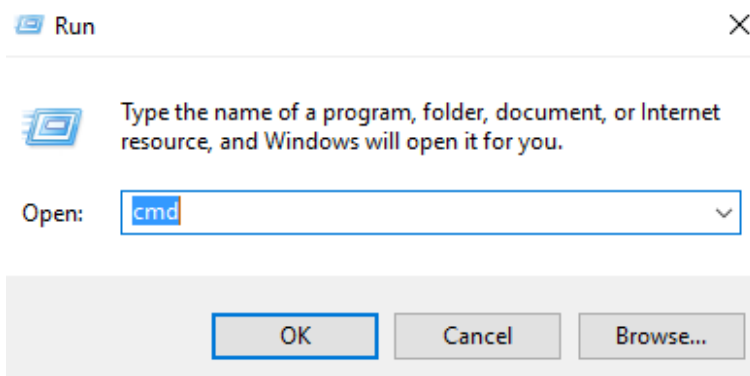
Setting up a static IP address for the computer running the tournament server will be the next step.

# Static IP Address Setup

- Press the windows key and “r” at the same time to bring up the “run” window.



type cmd into the text field and click “OK”

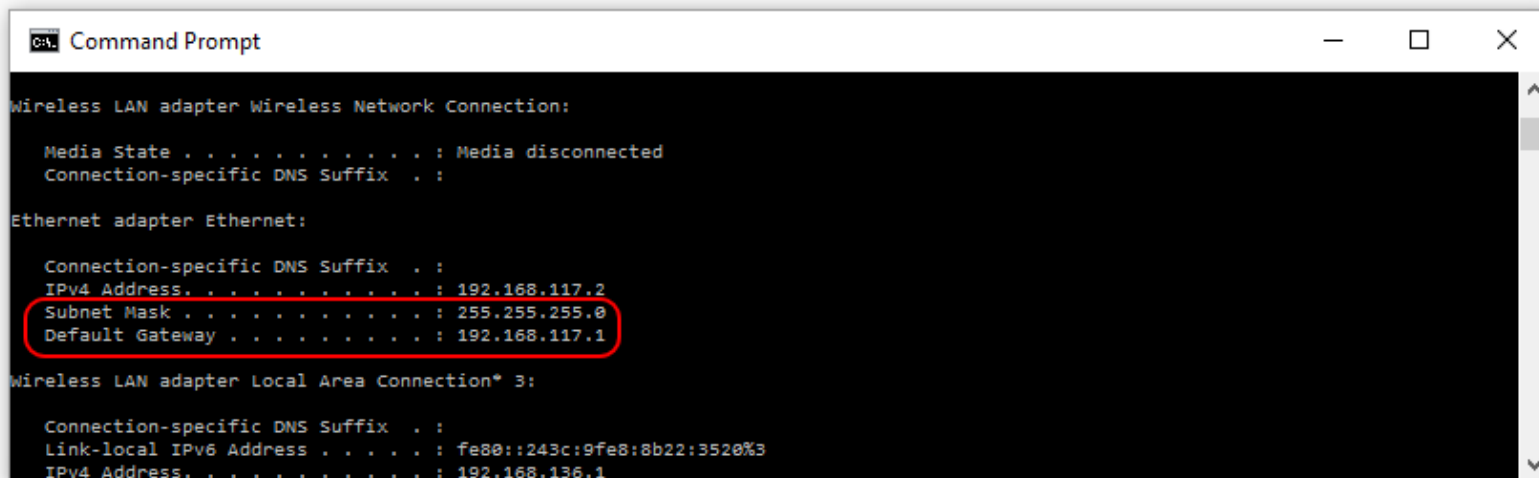


# Acquiring Your IP Address

- In CMD type in “ipconfig” and hit enter

**C:\Users\Your Computer>ipconfig**

- Find the Subnet Mask and Default Gateway you will need this information later



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C:\> ipconfig

Wireless LAN adapter Wireless Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Ethernet adapter Ethernet:

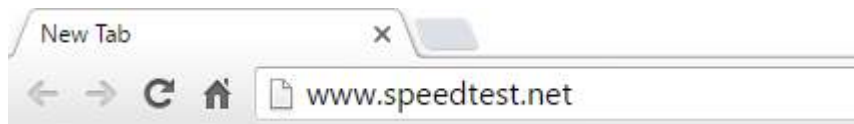
    Connection-specific DNS Suffix  . :
    IPv4 Address. . . . . : 192.168.117.2
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.117.1

Wireless LAN adapter Local Area Connection* 3:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::243c:9fe8:8b22:3520%3
    IPv4 Address. . . . . : 192.168.136.1
  
```

# Acquiring your DNS Server Address

- Navigagate to “speedtest.net”



- Make note of your ISP in circled in red



# Acquiring your DNS Server Address

- Now go to “whatsmydns.net/dns



- Select your country and then your ISP
- Make note of the primary DNS and secondary DNS if provided

## Charter DNS Servers

<http://www.charter.com>

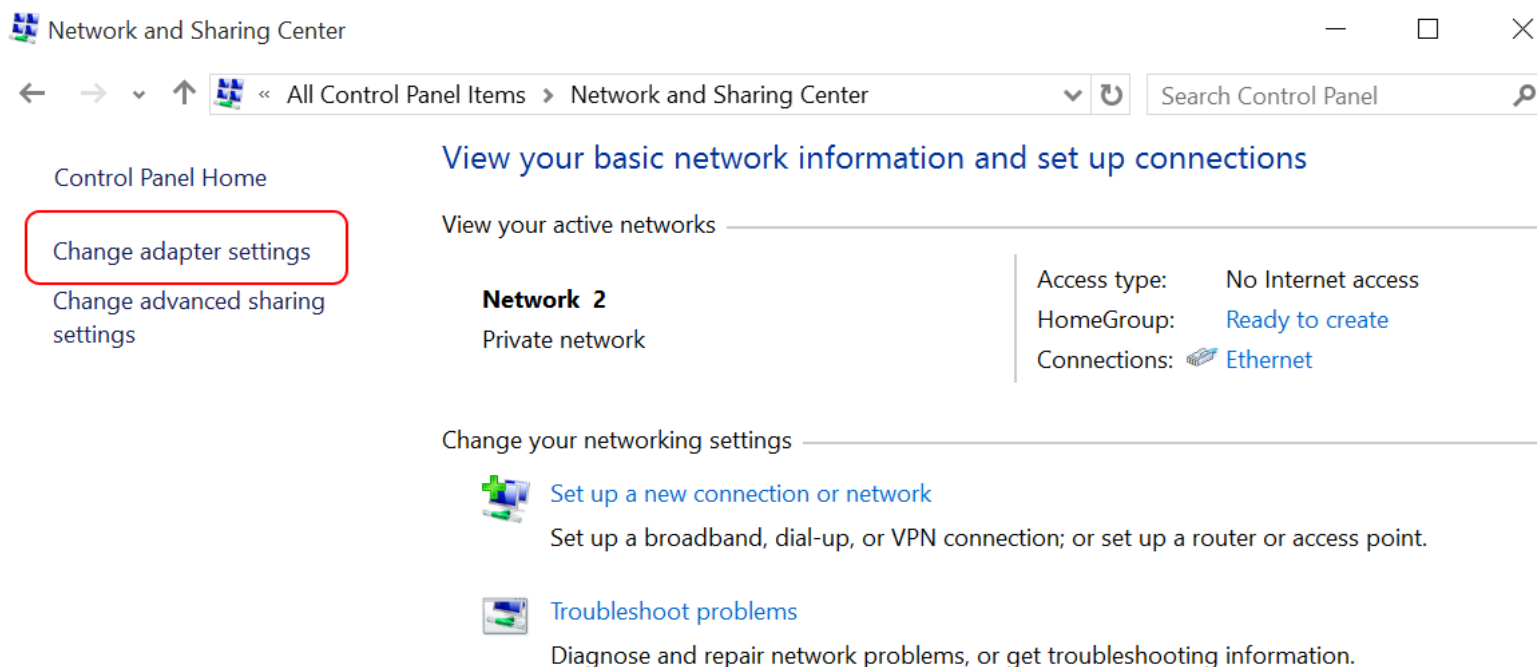
Primary DNS: 24.196.64.53

Secondary DNS:

[View all United States of America DNS Servers](#)

# Setting your Static IP

- Open the “Control Panel”, and select “Network and Sharing Center”
- Select “Change adapter settings”



The screenshot shows the Windows Network and Sharing Center window. The title bar reads "Network and Sharing Center". The breadcrumb navigation shows "All Control Panel Items > Network and Sharing Center". On the left sidebar, "Change adapter settings" is highlighted with a red box. The main content area is titled "View your basic network information and set up connections". Under "View your active networks", there is a section for "Network 2" (Private network) with details: Access type: No Internet access; HomeGroup: Ready to create; Connections: Ethernet. Below this, under "Change your networking settings", there are two links: "Set up a new connection or network" (with a plus icon) and "Troubleshoot problems" (with a computer icon).

Network and Sharing Center

Control Panel Home

**Change adapter settings**

Change advanced sharing settings


View your basic network information and set up connections


View your active networks

**Network 2**  
Private network

Access type: No Internet access  
HomeGroup: Ready to create  
Connections: Ethernet

Change your networking settings

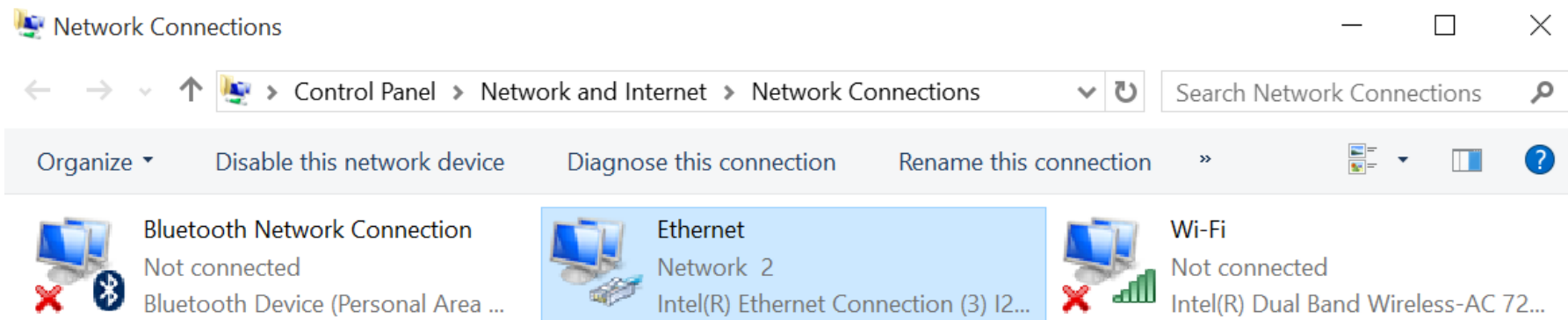
 [Set up a new connection or network](#)  
Set up a broadband, dial-up, or VPN connection; or set up a router or access point.

 [Troubleshoot problems](#)  
Diagnose and repair network problems, or get troubleshooting information.



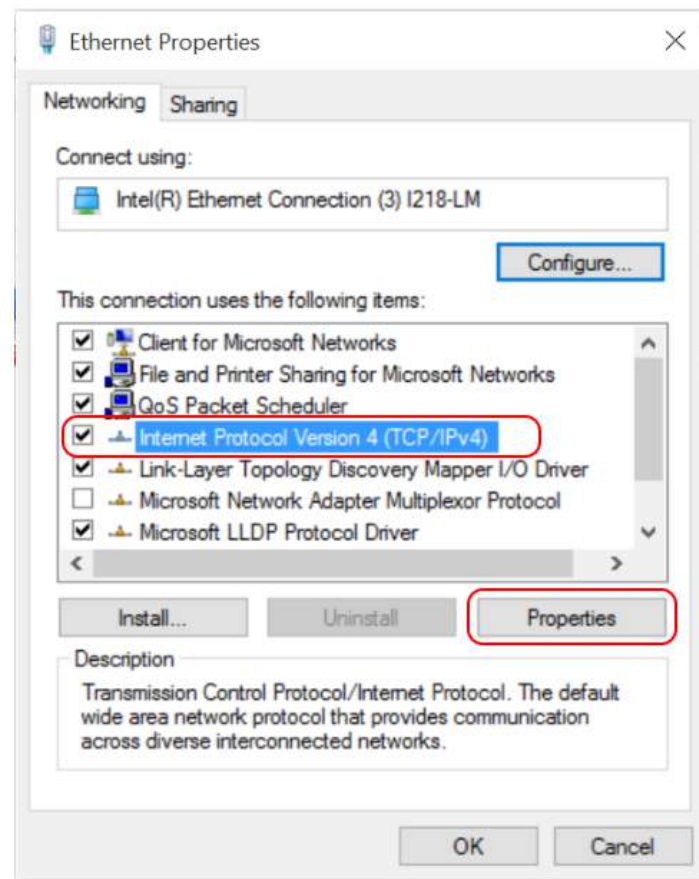
# Setting your Static IP

- Click on “Ethernet” then right click and select “Properties”



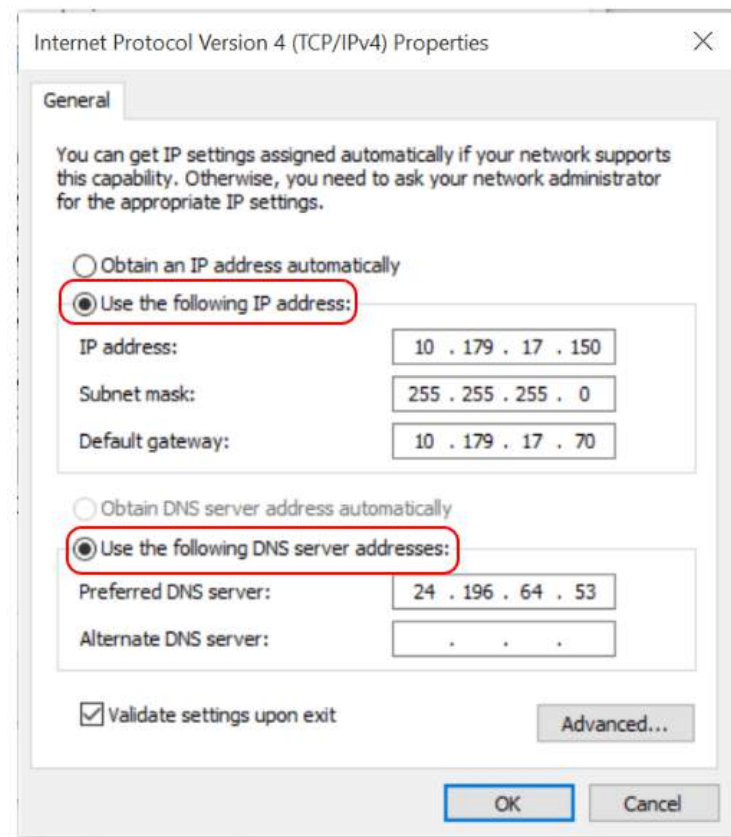
# Setting your Static IP

- Select “Internet Protocol Version 4 (TCP/IPv4)”
- Click on “Properties”



# Setting your Static IP

- Check the “Use the following IP address” bubble
- Check the “Use the following DNS server address” bubble



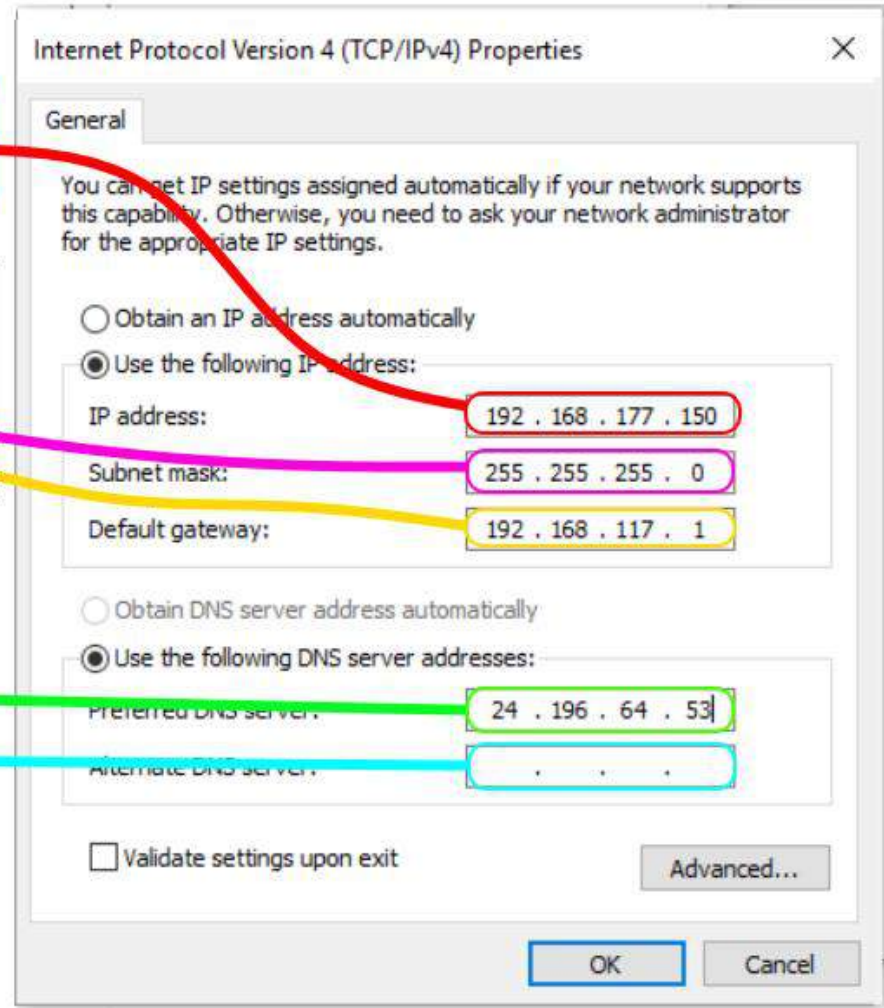
# Setting your Static IP

192.168.177.150 to 255

```

Ethernet adapter Ethernet:

Connection-specific DNS Suffix . :
IPv4 Address. . . . . : 192.168.117.2
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.117.1
    
```



Internet Protocol Version 4 (TCP/IPv4) Properties

General

You cannot get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.

Obtain an IP address automatically

Use the following IP address:

IP address: 192 . 168 . 177 . 150

Subnet mask: 255 . 255 . 255 . 0

Default gateway: 192 . 168 . 117 . 1

Obtain DNS server address automatically

Use the following DNS server addresses:

Preferred DNS server: 24 . 196 . 64 . 53

Alternate DNS server: . . .

Validate settings upon exit

Advanced...

OK Cancel

## Charter DNS Servers

<http://www.charter.com>

Primary DNS: 24.196.64.53

Secondary DNS:

[View all United States of America DNS Servers](#)



# Additional Devices

- Additional computers may be plugged into the router in ports “1” through “4”
- For additional ports a switch will be needed
- Tablets should be the only devices connected wirelessly

