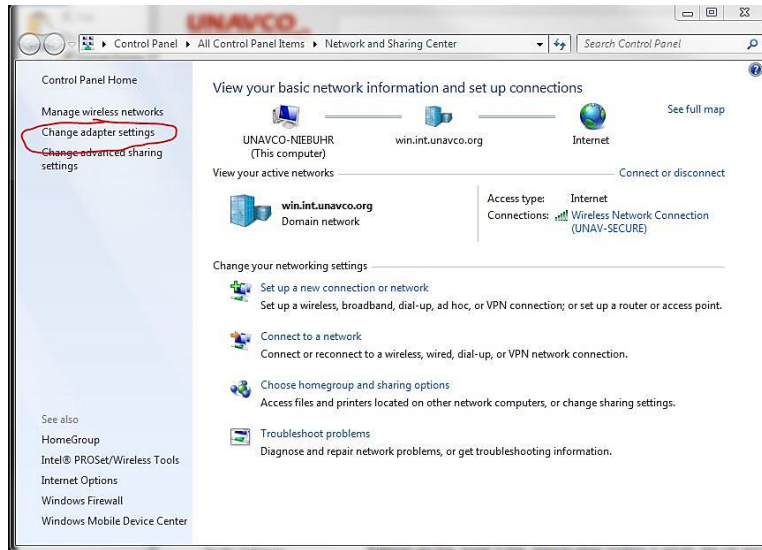
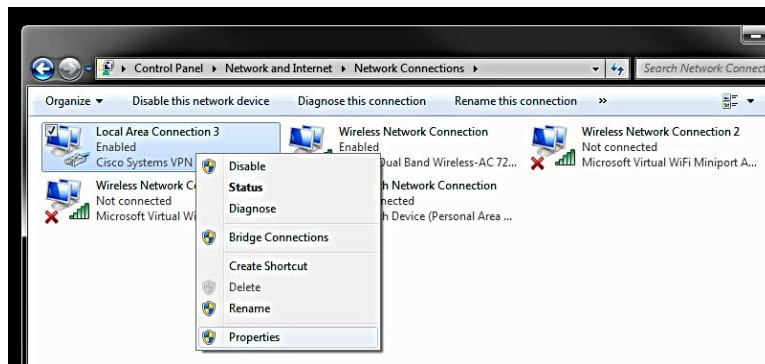


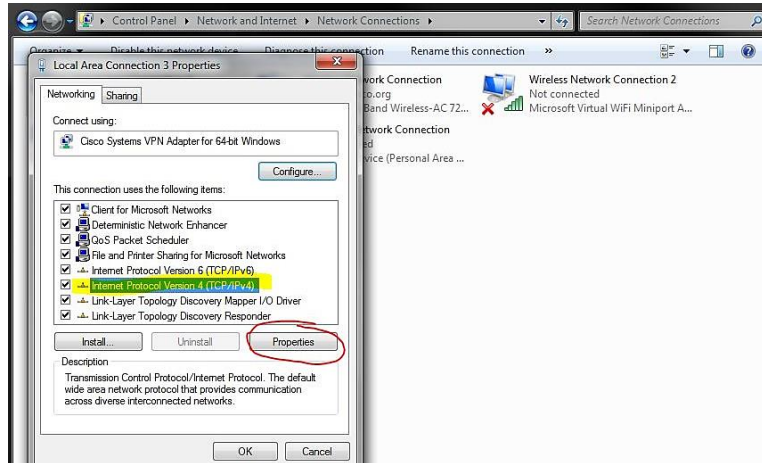
1. To configure a Windows machine to connect to the NetR9 receiver, search “View Network Connections” from the start menu or open the Control Panel and select Network and Sharing Center. In Network and Sharing window, click “Change Adapter Settings” in the left panel. See appendix on how to configure IP address on a Mac.



2. In the Network Connections window, find your enabled LAN port connection. Right click and select properties.



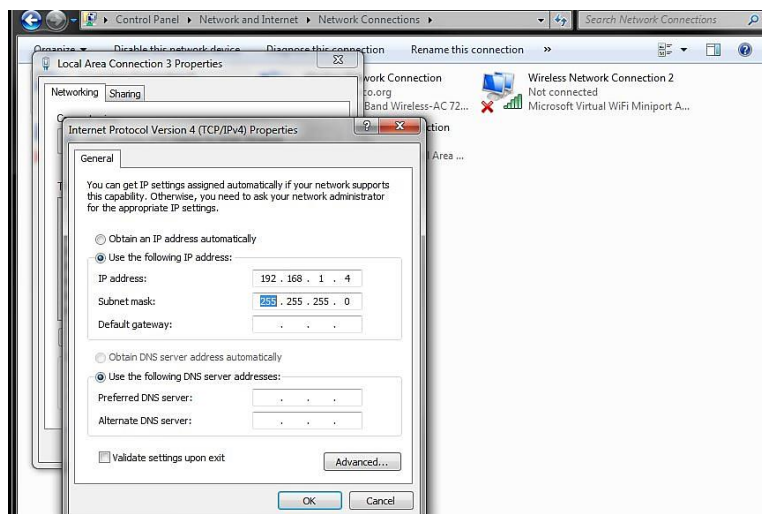
3. Select the TCP/IPv4 connection option and click the properties button.



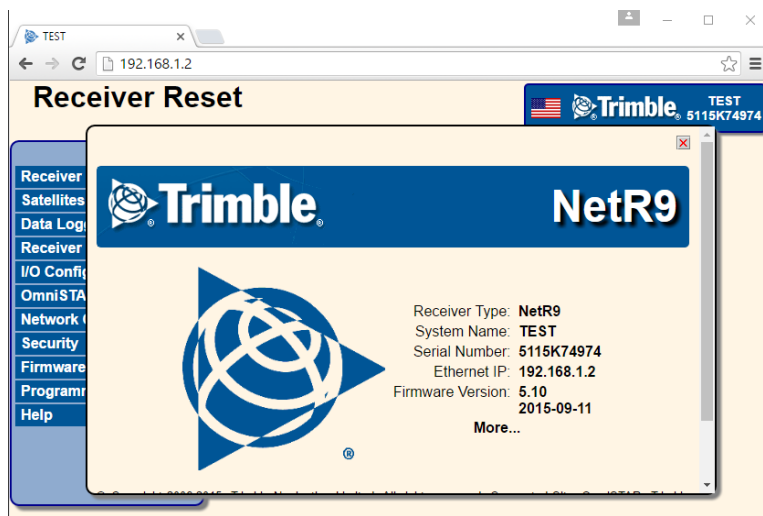
4. Select the “Use the following IP address:” bubble. We disable the DHCP option on the receivers and assign them a fixed address. Determine the IP address of the receiver. UNAVCO Polar default is 192.168.1.2.

If the IP address is not labelled on top of the device, press the up arrow button [^] on the front of the receiver to view the configured IP address. If you see 0.0.0.0, try to power cycle the receiver by holding the green power button for 3 seconds to turn off and reconnect the Ethernet cable. Power up the receiver by pressing the green button once.

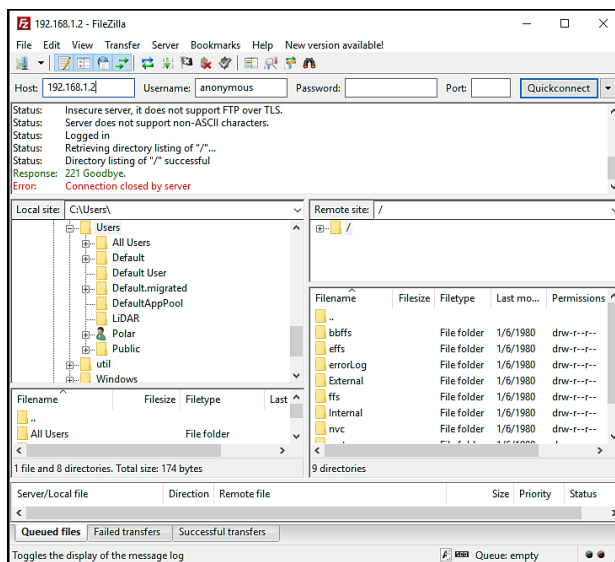
Now you will be able to set the IP address of your computer. Keep the first three triplets as the same as the receiver (192.168.1) for connection to the private network. Modify the fourth triplet to be something slightly different to the receiver's assigned value of “2” to avoid the IP conflict. A possible triplet combination for your computer could be 192.168.1.3 or 192.168.1.9 etc.



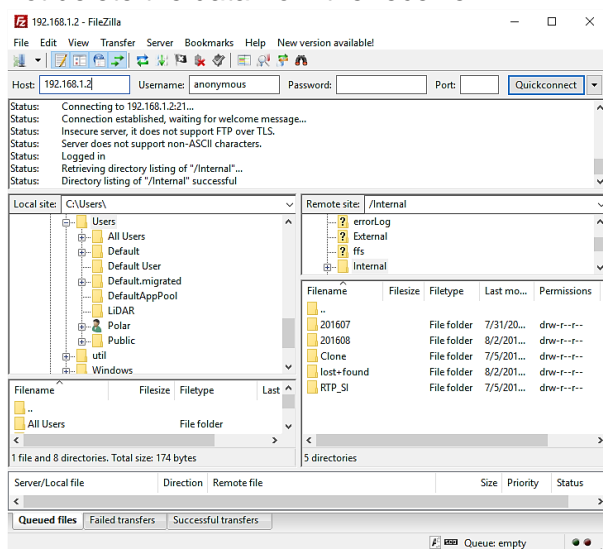
- Verify you are connected to the receiver by opening a web browser and entering the IP Address of the receiver in the search bar. You should see the Trimble HTTP interface. You can download files one by one in this window but downloading multiple data files is easier using an FTP client. The receiver can also be configured in the HTTP interface. If you are not sure what you are doing, please contact a UNAVCO field engineer for configuration options.



- Using your favorite FTP client, enter the IP address of the receiver in the host field. UNAVCO Polar default configuration for the NetR9 is not protected and you can keep the credentials either as anonymous or blank.



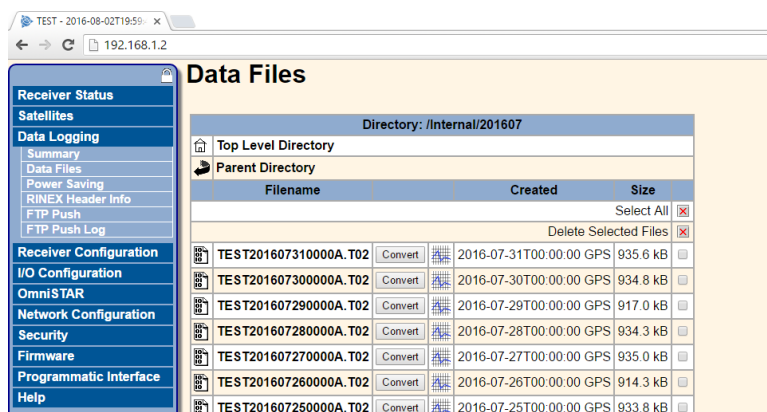
- Connect to the receiver. You should see the NetR9 file structure as your remote site. Open the "Internal" folder. The GPS data will be in files labeled by UTC year and month the data was collected. **Copy** these folders to your local storage. UNAVCO Polar archives project data for a year or two on our server in Boulder for any receivers coming back from field deployment. If you would like UNAVCO to keep a copy of your GPS data *for a limited time*, do not delete the data from the receiver.



- Confirm the data has been copied to your local storage. File sizes will depend on the logging rate the receiver was configured for. The table below shows approximate file sizes for GPS only and how long it might take for the receiver memory to fill. Proprietary .T02 files are not human readable. You will need to convert to RINEX to view the data.

Logging Rate (s)	24hr files				1Hr files		
	Daily File Size (MB)	4GB NetR9 Memory (days to fill)	8GB NetR9 Memory (Days to fill)		Daily File Size (MB)	4GB NetR9 Memory (days to fill)	8GB NetR9 Memory (Days to fill)
15	0.6	7018	14035		0.7	6154	12308
1	8.9	449	899		9.5	421	842
0.5	17.1	234	468		18.0	222	444
0.2	40.3	99	199		42.5	94	188
0.1	73.6	54	109		77.4	52	103

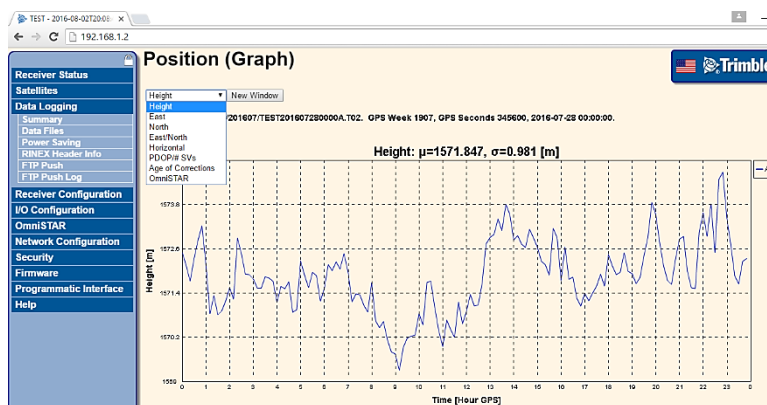
Optional: To visually check your data, open the “Data Logging” menu on the left side of the HTTP page. Click on the Data Files option to see a list of the data stored internally.



The screenshot shows the 'Data Files' web interface. On the left is a navigation menu with options: Receiver Status, Satellites, Data Logging (selected), Summary, Data Files, Power Saving, RINEX Header Info, FTP Push, and FTP Push Log. Below these are sections for Receiver Configuration, I/O Configuration, OmniSTAR, Network Configuration, Security, Firmware, Programmatic Interface, and Help. The main content area is titled 'Data Files' and shows a directory listing for '/Internal/201607'. It includes a table with columns for Filename, Created, and Size. The table lists several data files, each with a 'Convert' button and a graph icon. The files are:

Filename	Created	Size
TEST201607310000A.T02	2016-07-31T00:00:00 GPS	935.6 kB
TEST201607300000A.T02	2016-07-30T00:00:00 GPS	934.8 kB
TEST201607290000A.T02	2016-07-29T00:00:00 GPS	917.0 kB
TEST201607280000A.T02	2016-07-28T00:00:00 GPS	934.3 kB
TEST201607270000A.T02	2016-07-27T00:00:00 GPS	935.0 kB
TEST201607260000A.T02	2016-07-26T00:00:00 GPS	914.3 kB
TEST201607250000A.T02	2016-07-25T00:00:00 GPS	933.8 kB

To the right of the “Convert” button is an option to open data plots. Click the graph symbol to view various plots.



Appendix:

To configure a Mac, go to System preferences, Network. Change the Configure IPv4 option to “Manually” and set the IP address to an address similar to that of the NetR9. Return to Step 5 above

