



Ubiquiti Legacy CPE Configuration Guide



Setup Legacy Configurations

1. A Ubiquiti Legacy configuration file can be downloaded at <https://wisprsystems.com/support/>, under the name “Ubiquiti Legacy Configuration file”, this can be used to upload to your CPE to confirm the network lines up with the WISPr OS network. The picture seen below shows where to choose the configuration file to upload to the CPE.

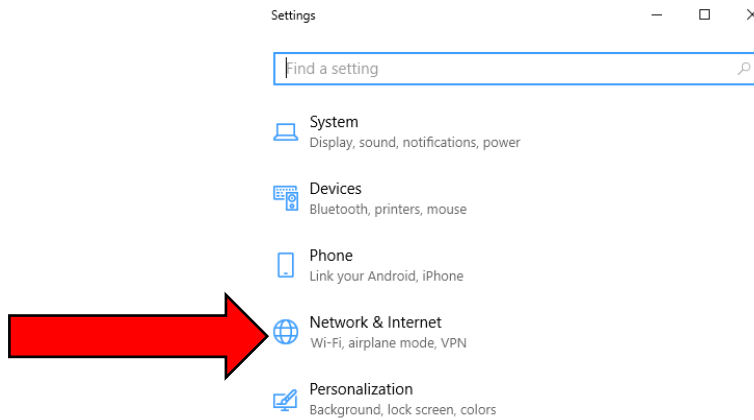
The screenshot displays the WISPr OS configuration interface with the 'SYSTEM' tab selected. The interface includes several sections:

- Firmware Update:** Shows 'Firmware Version: XW.v6.1.8' and 'Build Number: 32774'. It has an 'Upload Firmware' section with a 'Choose File' button and 'No file chosen' text. There is also a 'Check for Updates' section with a checked 'Enable' checkbox and a 'Check Now' button.
- Device:** Includes 'Device Name' (NanoStationLegacy) and 'Interface Language' (English).
- Date Settings:** Includes 'Time Zone' (GMT-12:00), 'Startup Date' (Enable), and a date picker.
- System Accounts:** Includes 'Administrator User Name' (ubnt) and a 'Read-Only Account' (Enable).
- Miscellaneous:** Includes a 'Reset Button' (Enable).
- Location:** Includes 'Latitude' and 'Longitude' input fields.
- Device Maintenance:** Includes 'Reboot Device' (Reboot...) and 'Support Info' (Download...) buttons.
- Configuration Management:** Includes 'Back Up Configuration' (Download...), 'Upload Configuration' (Choose File, No file chosen), and 'Reset to Factory Defaults' (Reset...) buttons.

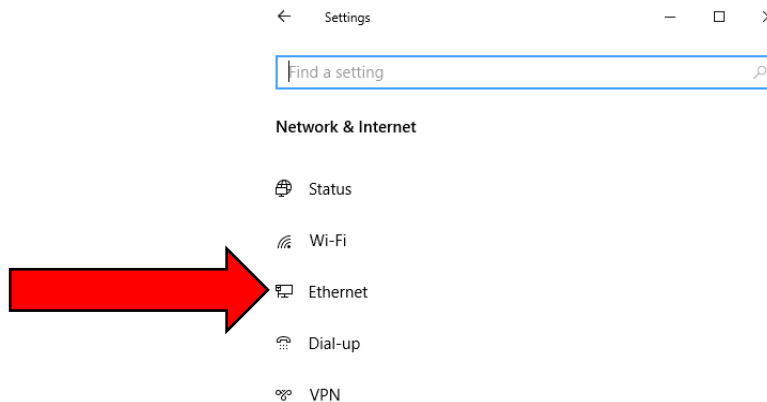
A large red arrow points to the 'Choose File' button in the 'Upload Configuration' section.



2. After uploading the configuration to the CPE, the user can connect/power the CPE via the WISPr drone's POE and the WISPr OS and move to step 3 or do as done below in a.
 - a. If using a POE Switch and a computer to configure the CPE, configure your computer network as shown below in i-viii.
 - i. To accomplish this first search for "Settings" then click and open.
 - ii. Next click "Network & Internet" as seen in the picture below.

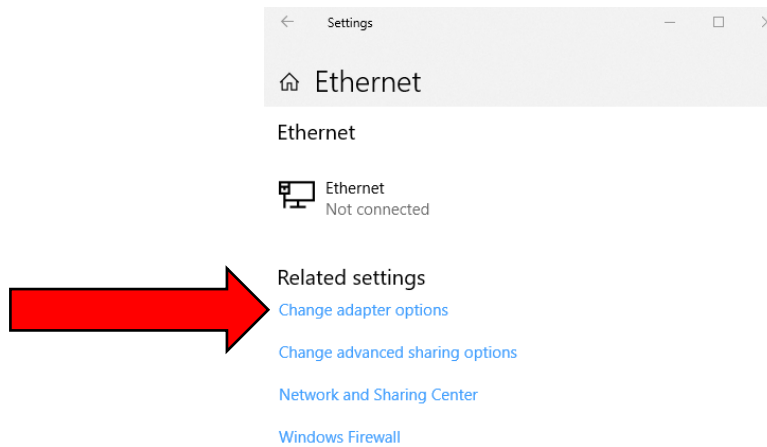


- iii. Next click "Ethernet" as seen in the picture below

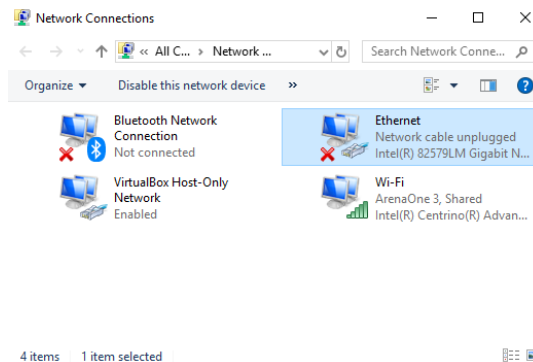




- iv. Next click “Change adapter options” as seen in the picture below.

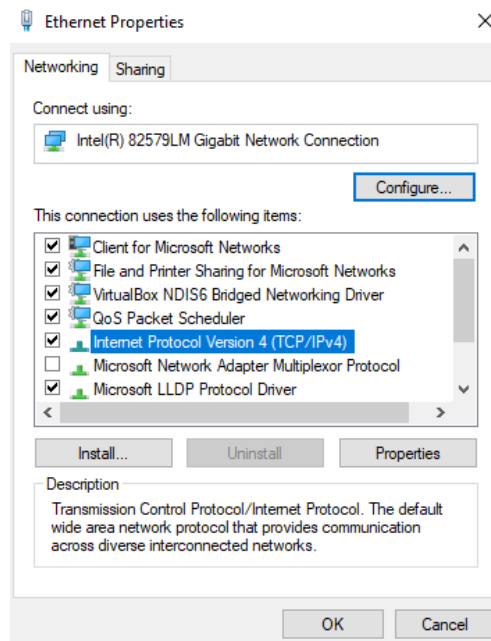


- v. Next click the adapter in which your ethernet cable is plugged in, in this example ours is the Intel® 82579LM Gigabit ethernet port, which means click “Ethernet”, this can be seen in the picture below

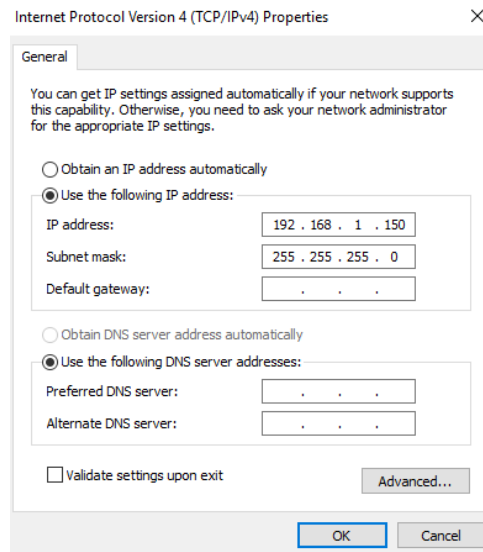




- vi. Next click “Internet Protocol Version 4 (TCP /IPv4)” as seen in the picture below



- vii. Configure the network as seen in the picture below, then click “OK” when complete



- viii. Once this is done open a web browser and go to 192.168.1.20 and move to step 3.





3. Login to the CPE using the credentials seen below
 - a. Username: **ubnt**
 - b. Password: **wispr**

4. Enter your tower's access point (AP) **SSID** in the box labeled "**SSID**", as highlighted in the picture below



5. Select your **channel width** by clicking the drop-down box besides the label “**Channel Width**” and selecting the corresponding channel with to the Tower’s AP SSID as seen in the below.

The screenshot shows the 'Basic Wireless Settings' page in the WISPR SYSTEMS interface. The 'Channel Width' dropdown menu is highlighted with a red arrow. The settings are as follows:

- Wireless Mode: Station
- WDS (Transparent Bridge Mode): ☒ Enable
- SSID: Your_ssid
- Lock to AP: ☐
- Country Code: United States
- IEEE 802.11 Mode: B/G/N mixed
- Channel Width: Auto 20/40 MHz
- Frequency Scan List, MHz: ☐ Enable
- Calculate EIRP Limit: ☒ Enable
- Antenna: Built in (2x2) - 8 dBi
- Output Power: 23 dBm
- Data Rate Module: Default
- Max TX Rate, Mbps: MCS 15 - 130/144.4 [27C] ☒ Auto

6. Select your security either none, **WPA-AES** or **WPA2-AES**. (none used in example)
 - a. If **WPA-AES** or **WPA2-AES** is selected, then enter the **WPA passphrase** that corresponds with the SSID

The screenshot shows the 'Basic Wireless Settings' page in the WISPR SYSTEMS interface. The 'Security' dropdown menu is highlighted with a red arrow. The settings are as follows:

- Wireless Mode: Station
- WDS (Transparent Bridge Mode): ☒ Enable
- SSID: Your_ssid
- Lock to AP: ☐
- Country Code: United States
- IEEE 802.11 Mode: B/G/N mixed
- Channel Width: Auto 20/40 MHz
- Frequency Scan List, MHz: ☐ Enable
- Calculate EIRP Limit: ☒ Enable
- Antenna: Built in (2x2) - 8 dBi
- Output Power: 23 dBm
- Data Rate Module: Default
- Max TX Rate, Mbps: MCS 15 - 130/144.4 [27C] ☒ Auto
- Security: none



- You can run the CPE in “Bridge” (DEFAULT) or “Router” mode, regardless the LAN network on the CPE must be static **192.168.1.20** as seen in the sample configuration below. The example configuration provided by WISPr Systems is in bridge mode.

The screenshot displays the WISPr Systems configuration web interface. At the top, there is a navigation bar with tabs: MAIN, WIRELESS, NETWORK, ADVANCED, SERVICES, and SYSTEM. The 'NETWORK' tab is selected. Below the navigation bar, the 'Network Role' section is expanded, showing 'Network Mode' set to 'Bridge' and 'Disable Network' set to 'None'. A large red arrow points to the 'Network Mode' dropdown. Below this, the 'Configuration Mode' section is expanded, showing 'Configuration Mode' set to 'Simple'. The 'Management Network Settings' section is also expanded, showing 'Management IP Address' set to 'Static' (selected) and 'DHCP' (unselected). The 'IP Address' is set to '192.168.1.20', 'Netmask' is '255.255.255.0', 'Gateway IP' is '192.168.1.1', 'Primary DNS IP' is empty, 'Secondary DNS IP' is empty, 'MTU' is '1500', 'Management VLAN' is 'Enable' (unchecked), 'Auto IP Aliasing' is 'Enable' (checked), and 'STP' is 'Enable' (unchecked).

- If the CPE is put in “Router” mode, the LAN must remain at a static **192.168.1.20**.
- Save all setting and your antenna is ready to begin survey with the WISPr OS and drone.