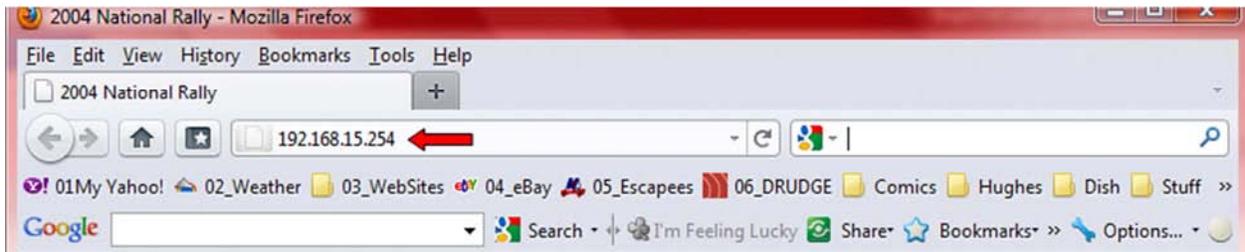


Establishing a Connection to a Wi-Fi Source with a Bullet HP

Steps to Establish Connection to Wi-Fi Source:

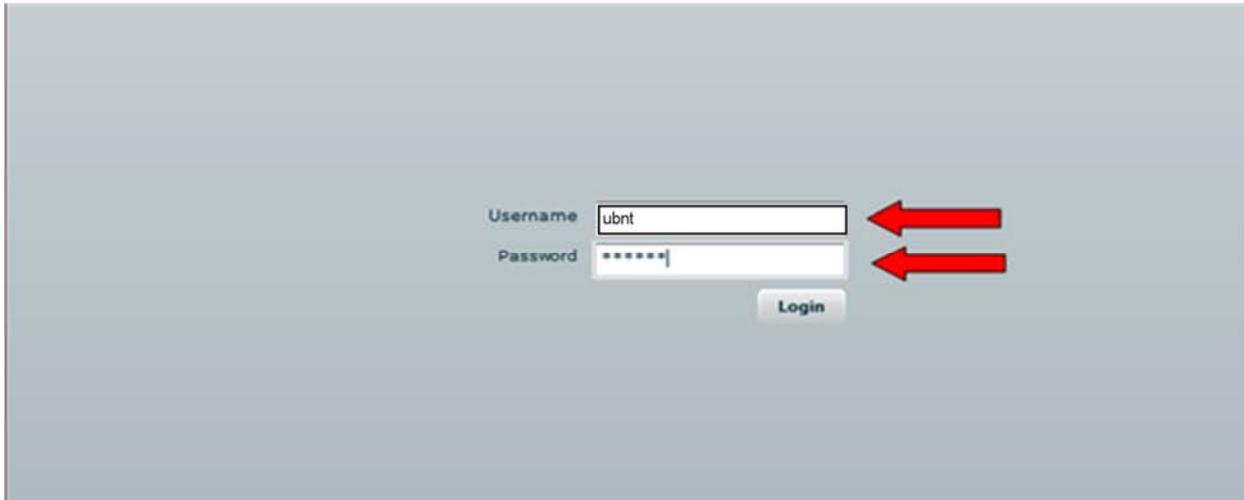
1. If your PC is wire connected to your router, go to step 2. Connect your laptop to your router wire your wireless adapter.
2. Open your web browser (e.g. Internet Explorer, FireFox, and Chrome)



Enter **192.168.15.254** in the indicated URL field. Sometimes you need to add the **http://** in front. Hit the keyboard **Enter** key.

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3. On the Bullet **Login** screen:



The screenshot shows a login interface with a light gray background. On the left, the labels "Username" and "Password" are positioned to the left of their respective input fields. The "Username" field contains the text "ubnt". The "Password" field contains seven asterisks "*****". Below the password field is a "Login" button. Two red arrows point from the right side of the image towards the "Username" and "Password" input fields, highlighting them.

Enter the user code and password.

In your case, this would be **ubnt** and **ubnt**.

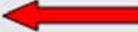
Establishing a Connection to a Wi-Fi Source with a Bullet HP

4. On the **Main** screen:



BASIC WIRELESS SETTINGS

Wireless Mode: [?] Station

ESSID: ubnt_ap Select... 

Lock to AP MAC: []

Country Code: United States

IEEE 802.11 Mode: B/G mixed

Channel Spectrum Width: [?] 20MHz Max Datarate: 54Mbps

Channel Shifting: [?] Disabled

Channel Scan List: Enabled Edit...

Output Power: 26 dBm Obey Regulatory Power

Data Rate, Mbps: 54 Auto

Click on the **Select** button.

Establishing a Connection to a Wi-Fi Source with a Bullet HP

5. On the **Link Setup** screen:

WIRELESS SECURITY

Security: WPA

Authentication Type: Open Shared Key

WEP Key Length: 128 bit

WEP Key: VERYSECURE123

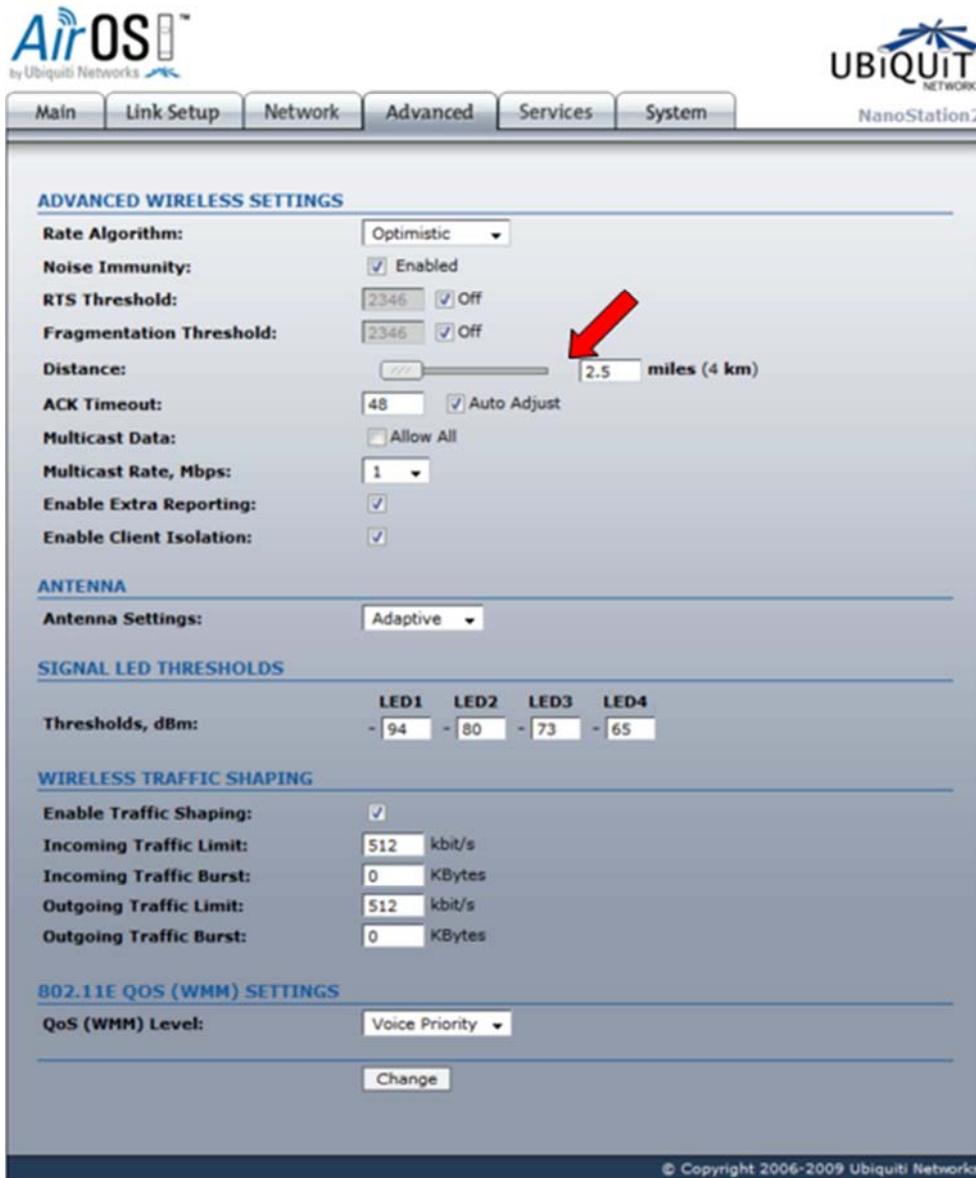
WPA Authentication: PSK EAP-TTLS MSCHAP

WPA Preshared Key: very_secret_key

If you need wireless security for the connection you are establishing; enter in the **WIRELESS SECURITY** section.

Establishing a Connection to a Wi-Fi Source with a Bullet HP

6. On the **Advanced** screen:



The screenshot displays the AirOS Advanced Wireless Settings interface. The top navigation bar includes tabs for Main, Link Setup, Network, Advanced, Services, and System. The main content area is titled "ADVANCED WIRELESS SETTINGS" and contains the following sections:

- ADVANCED WIRELESS SETTINGS:**
 - Rate Algorithm: Optimistic
 - Noise Immunity: Enabled
 - RTS Threshold: 2346 Off
 - Fragmentation Threshold: 2346 Off
 - Distance: miles (4 km) (indicated by a red arrow)
 - ACK Timeout: 48 Auto Adjust
 - Multicast Data: Allow All
 - Multicast Rate, Mbps: 1
 - Enable Extra Reporting:
 - Enable Client Isolation:
- ANTENNA:**
 - Antenna Settings: Adaptive
- SIGNAL LED THRESHOLDS:**

| LED1 | LED2 | LED3 | LED4 |
|------|------|------|------|
| -94 | -80 | -73 | -65 |
- WIRELESS TRAFFIC SHAPING:**
 - Enable Traffic Shaping:
 - Incoming Traffic Limit: 512 kbit/s
 - Incoming Traffic Burst: 0 KBytes
 - Outgoing Traffic Limit: 512 kbit/s
 - Outgoing Traffic Burst: 0 KBytes
- 802.11E QoS (WMM) SETTINGS:**
 - QoS (WMM) Level: Voice Priority
 - Change button

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If you need to adjust the power of the Bullet, adjust the **Distance** slider. You should keep the **Distance** setting as low as can obtain the desired connection at a reasonable speed. Setting the **Distance** too high can cause problems for the AP you are connecting to as it may not clearly receive an overpowering signal. Also, too much power can interfere with other users in the area..

Establishing a Connection to a Wi-Fi Source with a Bullet HP

7. On the **Main** screen:

The screenshot shows the AirOS NanoStation2 configuration interface. The 'Main' tab is selected. The configuration fields are as follows:

| | | | |
|--------------------|-------------------|------------------|---------------------|
| Base Station SSID: | UBNT | AP MAC: | 00:18:84:14:26:B5 |
| Signal Strength: | -59 dBm | RX Rate: | 54 Mbps |
| TX Rate: | 54 Mbps | Channel: | 1 |
| Frequency: | 2412 MHz | Noise Floor: | -95 dBm |
| Antenna: | Adaptive | ACK Timeout: | 25 |
| Security: | WEP | QoS Status: | No QoS |
| Transmit CCQ: | 0.6% | Date: | 2009-05-04 17:52:53 |
| Uptime: | 00:00:55 | Host Name: | UBNT |
| LAN Cable: | ON | LAN IP Address: | 192.168.1.20 |
| LAN MAC: | 00:15:6D:AA:40:1C | WLAN IP Address: | 192.168.1.20 |
| WLAN MAC: | 00:15:6D:A9:40:1C | Tools: | ---- |
| Extra info: | ---- | | |

Below the configuration fields are three sections of statistics:

LAN STATISTICS

| | Bytes | Packets | Errors |
|--------------|--------|---------|--------|
| Received: | 154968 | 966 | 0 |
| Transmitted: | 196887 | 854 | 0 |

WLAN STATISTICS

| | Bytes | Packets | Errors |
|--------------|-------|---------|--------|
| Received: | 4394 | 48 | 0 |
| Transmitted: | 19041 | 122 | 0 |

WLAN ERRORS

| | | | |
|-------------------|---|-----------------------|---|
| Rx Invalid NWID: | 0 | Tx Excessive Retries: | 0 |
| Rx Invalid Crypt: | 0 | Missed Beacons: | 0 |
| Rx Invalid Frag: | 0 | Other errors: | 0 |

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Verify the **Base Station SSID:** is the AP you intended to connect to.

Observe the **Signal Strength:**, **TX Rate:** and **RX Rate:** after setting the **Distance** on the **Advance** screen.

8. **Done**