AirOS Wireless Repeater/Network Extender Configuration

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Contents: How to make a Wireless Repeater AirOS

Introduction

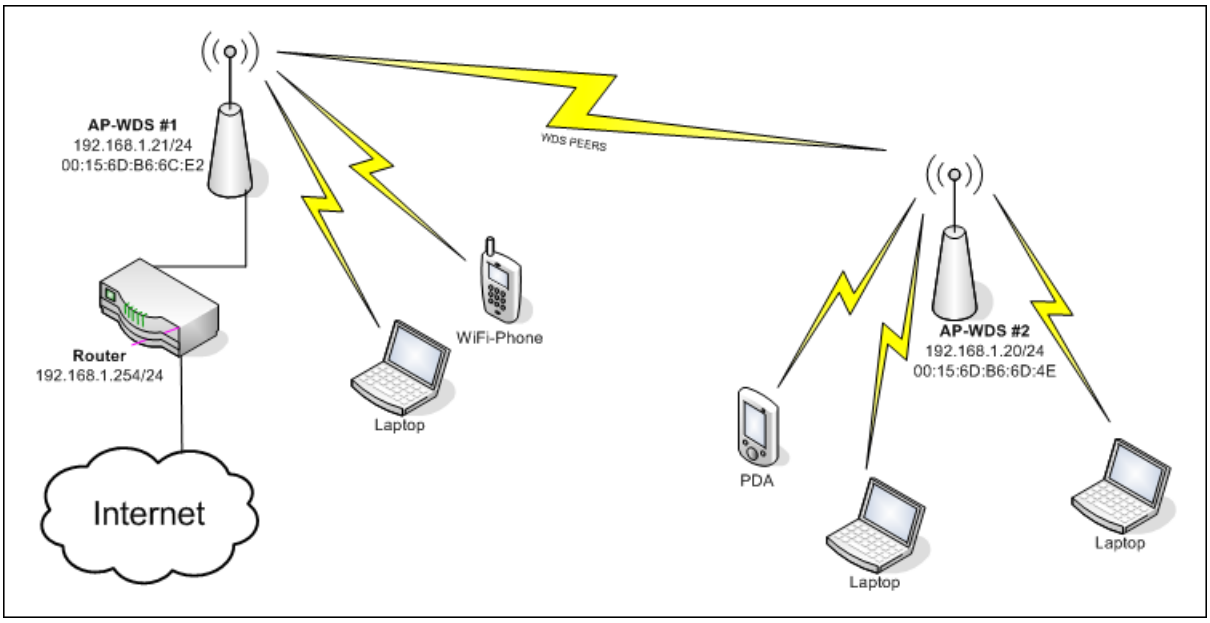
Wireless Repeater or Network Extender

From UBNT Forum

Typical scenario is to install a Network Extender device to provide wireless signal to Clients that cannot be reached from **AP #1** (poor signal level). We consider this simply network topology:

- 1 **Router** connected to Internet and/or private LAN (IP Address: 192.168.1.254/24)
- 1 AirOS device **AP #1** directly connected to Router (IP Address: 192.168.1.21/24)
- 1 AirOS device **AP #2** connected via wireless to **AP #1** (IP Address: 192.168.1.20/24)
- 1 or more Wireless Clients (Notebook, WiFi-Phone, other Wireless devices...)
- The Router assign IP Address to network devices by DHCP Server. Alternatively, if you prefer, you can set static IP Address to Clients.

In this schema, **AP #2** is a Wireless Repeater device.



Configuring

Minimal configuration:

- all AirOS devices in **AP-WDS** mode
- same **SSID**
- same **Channel**
- enter mutual **WDS Peers** (or enable **Auto WDS**, not recommended)

AP #1 Setup

Login into AirOS WEB User Interface of **AP #1** and set as below:

- **NETWORK** Tab
  - Network Mode: **Bridge**
  - Bridge IP Address: **Static**
  - IP Address: **192.168.1.21**
  - Netmask: **255.255.255.0**
  - Gateway IP: **192.168.1.254**
  - Click **Change** button to confirm
  - Click **Apply** button to apply changes
  - Wait until process is complete

- **LINK SETUP** Tab
  - Wireless Mode: **Access Point WDS**
  - WDS Peers: **00:15:6D:B6:6D:4E** (*WLAN MAC of AP #2*, you can see on MAIN Tab of **AP #2**)
  - SSID: **mywlan** (or any stringh to identify your WLAN, but the same for all WDS Peers)
  - Country Code: set according your location
  - IEEE 802.11 Mode: **B/G mixed** (assuming devices running in 2.4 GHz band)
  - Channell Spectrum Width: **20MHz**
  - Channel: **1 - 2412 MHz** (or any other free channel, but the same for all WDS Peers)
  - Output Power: **10 dBm** (or check *Obey Regulatory Power* according your country law)
  - Data Rate, Mbps: **54, Auto**
  - Click *Change* button to confirm
  - Click *Apply* button to apply changes
  - Wait until process is complete

AP #2 Setup

Login into AirOS WEB User Interface of **AP #2** and set as below:

- **NETWORK** Tab
  - Network Mode: **Bridge**
  - Bridge IP Address: **Static**
  - IP Address: **192.168.1.20**
  - Netmask: **255.255.255.0**
  - Gateway IP: **192.168.1.254**
  - Click *Change* button to confirm
  - Click *Apply* button to apply changes
  - Wait until process is complete

- **LINK SETUP** Tab
  - Wireless Mode: **Access Point WDS**
  - WDS Peers: **00:15:6D:B6:6C:E2** (*WLAN MAC of AP #1*, you can see on MAIN Tab of **AP #1**)
  - SSID: **mywlan** (or any stringh to identify your WLAN, but the same for all WDS Peers)
  - Country Code: set according your location
  - IEEE 802.11 Mode: **B/G mixed** (assuming devices running in 2.4 GHz band)
  - Channell Spectrum Width: **20MHz**
  - Channel: **1 - 2412 MHz** (or any other free channel, but the same for all WDS Peers)
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