How to set up 2 WDS connections using 3 Edimax APs (or AP-Router)

This FAQ applies to the following models:

All series of the Edimax wireless access points and AP routers.

Introduction:

The WDS (Wireless Distribution System) is a wireless technology for connecting 2 wireless access points (IEEE.802.11 wireless LAN). The benefit is that you could extend the wireless coverage at relatively inexpensive cost. The effect of a successfully WDS setup is that the wired PC A, C, E and wireless PC B, D and F are linked together (as illustrated in Figure-1). But the drawback is that wireless performance is affected in the range between 30% to 70%.

Step by Step:

Step 1: Separate the IP address of the 3 APs. In this example, we set the AP-1 as 192.168.2.1,
   AP-2 as 192.168.2.2
   AP-3 as 192.168.2.3

Step 2: Write down the MAC addr of the 3 APs
   In this example, the MAC addresses for the 3 APs are:
   AP-1 = 112233445561
   AP-2 = 112233445562
   AP-3 = 112233445563

Figure-1
Step 3: Set up WDS between AP-1 and AP-2

In the AP-1: http://192.168.2.1 setup page.

(3.1). Go to the configuration page:
"Wireless"/Basic Setting

(3.2). Change the Mode to "AP Bridge-WDS".

(3.3). Enter the MAC address of the AP-2 (112233445562) in "MAC address 1" box.

(3.4). Click "Apply".

In the AP-2: http://192.168.2.2 setup page

(3.6). Go to configuration page:
"Wireless"/Basic Setting

(3.7). Change the Mode to "AP Bridge-WDS".

(3.8). Enter the MAC address of the AP-1 (112233445561) in "MAC address 1" box.

(3.9). Click "Apply".
At this stage, the WDS between AP-1 and AP-2 is ok. The PC A, B, C and D are now linked.

**Step 4:** Set up WDS between AP-1 and AP-3

In the AP-1: [http://192.168.2.1](http://192.168.2.1) setup page.

(4.1). Go to the configuration page: 
/Wireless/Basic Setting

(4.2). Change the Mode to “AP Bridge-WDS”.

(4.3). Enter the MAC address of the AP-3 (112233445563) in “MAC address 2” box.

(4.4). Click “Apply”.

(3.10). Click “Apply” to take the above settings into effect.
(4.5) Click “Apply” to take the above settings into effect.

In the AP-3: [http://192.168.2.3](http://192.168.2.3) setup page

(4.6) Go to configuration page:

"Wireless"/Basic Setting

(4.7) Change the Mode to “AP Bridge-WDS”.

(4.8) Enter the MAC address of the AP-1(112233445561) in “MAC address 1” box.

(4.9) Click “Apply”.
All WDS settings required for AP-1, AP-2 and AP-3 are complete. Please check whether wired PC A, C, E and wireless PC B, D and F are linked together and can access the Internet.