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

Technical Support

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



	Quick Setup
System	
• WAN	Sattings saved successfully
LAN	Settings saved successions:
Wireless	You may press CONTINUE button to continue configuring other settings or press APPLY button to costant the gustern for changes to take affect.
Access Control	
• NAT	Continue Apply
Firewall	

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".

	Wireless Setting		
	Mode :	AP Bridge-WDS	
	Band:	2.4 GHz (B+G) 🗸	
System	ESSID :	AP-2	
WAN	Channel Number :	11 🗸	
LAN	Associated Clients :	Show Active Clients	
Wireless	MAC Address 1:	112233445561	
Basic Setting	MAC Address 2:	0000000000	
NAT Firowall	MAC Address 3 :	0000000000	
- I liewali	MAC Address 4 :	0000000000	
	MAC Address 5:	0000000000	
	MAC Address 6 :	00000000000	
	Set Security	Set Security	

(3.10) . Click "Apply" to take the above settings into effect.

	Quick Setup
System	
• WAN	Settings saved successfully
LAN	ocangs surve successiony.
Wireless	You may press CONTINUE button to continue configuring other settings or press APPLY button to restart the system for changes to take effect
Access Control	
• NAT	Continue Apply
Firewall	

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: <u>http://192.168.2.1</u> 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".

	Wireless Setting			
	Mode :	AP Bridge-WDS		
	Band :	2.4 GHz (B+G) 🗸		
Svstem	ESSID :	AP-1		
• WAN	Channel Number :	11 🗸		
LAN	Associated Clients :	Show Active Clients		
Wireless	MAC Address 1:	112233445562		
Basic Setting	MAC Address 2 :	112233445563		
	MAC Address 3 :	0000000000		
Filewall	MAC Address 4 :	0000000000		
	MAC Address 5 :	00000000000		
	MAC Address 6 :	00000000000		
	Set Security:	Set Security		

(4.5) . Click "Apply " to take the above settings into effect.



In the AP-3: <u>http://192.168.2.3</u> 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".

	Wireless Setting		
	Mode :	AP Bridge-WDS	
	Band :	2.4 GHz (B+G) 🗸	
Svstem	ESSID :	AP-3	
WAN	Channel Number :	11 🗸	
LAN	Associated Clients:	Show Active Clients	
Wireless	MAC Address 1:	112233445561	
Basic Setting	MAC Address 2 :	0000000000	
NAT	MAC Address 3 :	0000000000	
	MAC Address 4 :	00000000000	
	MAC Address 5 :	00000000000	
	MAC Address 6 :	00000000000	
	Set Security:	Set Security	

(4.10) . Click "Apply " to take the above settings into effect.

NETWORKING PEOPLE TOGETHER	Quick Setup
System	
• WAN	Settings saved successfully!
LAN	ocungs surve successiony.
Wireless	You may press CONTINUE button to continue configuring other settings or press APPLY button to
Access Control	
	Continue Apply
Filewall	



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.