Configuring a DWL-1000AP+ as a Repeater

Version 1.1 Created by: Scott Howell Date: 17/12/03

This guide has been created to help you setup a DWL-1000AP+ as a repeater for another DWL-1000AP+. First of all we will need two units and as a minimum must have the below firmware:

Revision A: Version 1.15

You can determine the revision you have by flipping over the unit and looking at the silver sticker underneath the unit. Both of these firmware versions can be downloaded from here: http://www.dlink.com.au/tech/drivers/files/wireless/dwl1000ap+.htm Once the units have been updated to this version we can commence the setup for a repeater.

LAN 192.168.0.50 DWL-1000AP+ #1 192.168.0.51 **AP Mode** DWL-1000AP+ #2 **Repeater Mode** Workstatio with Wireless Card

Step 1: Configuring the DWL-1000AP+#1 in AP Mode

D-Link Building Networks for People	Air Premier				
DWL-1000AP+	Home Advanced Tools	Status	Help		
	Wireless Settings				
Wizard	AP Name : DWL-1000AP+				
	SSID : 1000repeat				
Wireless	Channel : 1 💌 🗖 Dynamic				
	WEP : 🔘 Enabled 💿 Disabled				
LAN	WEP Encryption : 64Bit 💌				
	Key Type : HEX 💌				
DHCP	Key1 : 💿 000000000				
	Key2 : 🔿 000000000				
	Key3 : 🔿 000000000				
	Key4 : 🔿 000000000				
		Mapply C	3 🛟 ancel Help		

For this example we will be using the main AP configured with the settings below: (Shown above in picture) IP Address: 192.168.0.50 AP Name: DWL-1000AP+ SSID: 1000repeat Channel: 1 WEP: Disabled

Make sure once all the settings are entered that you click the "Apply" button so that it can save the configuration into the Access Point.

Once this has been configured we can move onto the repeater setup.

Step 2: Configuring the second DWL-1000AP+ #2 as a Repeater

First of all what we will need to do is change the IP address of the DWL-1000AP+ #2 that is to be used as a repeater. For this example we will make it 192.168.0.51, this way it will not conflict with another unit. Change the name of the unit (AP Name) to something different from the AP#1 name, e.g. "Repeater". Set the SSID to be identical to SSID on DWL-1000AP+ #1 ("1000repeat" in our example).

Now we will need to configure the unit as a repeater. This is done by logging into the unit and going to the Advanced > Mode page of the DWL-1000AP+ #2.

In order for this second DWL-1000AP+ to connect we will need to select the Repeater option from the list then enter the LAN MAC address of the main DWL-1000AP+ #1 into the Remote AP MAC field (shown below).

To verify the MAC address of DWL-1000AP+ #1, you can select Wireless Client Mode and then click on Site Survey button: new window will pop up where you should be able to see your DWL-1000AP+ #1 and its MAC address. Write down the MAC address, then close the site survey window, select Repeater mode and enter the MAC address that you have written down.

D-Link Building Networks for People	Air Premier Enterprise 2.4GHz Wireless Access Point					
DWL-1000AP+	Home A	dvanced	Tools	Status	Help	
	Wireless Mode					
Mode	O Access Point					
Performance	C Load Balanc	ing	Group Name			
	O Backup AP		Primary AP's MAC			
Filters		🗌 Kee	p Alive Connection	0.0.0.0]	
802.1X	O Wireless Client		Remote AP MAC	00000000000 💽 S	ite Survey	
	🔿 Wireless Bridge	Re	emote Bridge MAC			
	🔿 Multi-point Bridg	e				
	Repeater		Remote AP MAC	0080C8010771		
				S Apply	(Ω) Cancel Help	

Then make sure that you click "Apply" so that the settings are saved into the unit.

Now if you are using one of the D-Link wireless adapters, open D-Link Air Utility and select Site Survey. What you should see in the site survey table is something similar to this:

D D-Link AirPro Utility						
Link Tofa	Available Netw					
	SSID	MAC(BSSID)	Signal			
▶ Configuration	1000repeat 1000repeat	00:80:C8:B8:40:5A 00:80:C8:B8:40:C8	₄1 76% ₄1 76%	Refresh		
▶ Advanced				Configure		
Site Survey	<		>	Gornigure		
▶ About	Profile			Advanced		
				Add		
				Remove		
				Properties		
				Connect		
<i>Air</i> Pro				Rescan		

The reason that you see two wireless networks with the same SSID is because we have the main DWL-1000AP+ #1 and also the DWL-1000AP+ #2 as the repeater, which is retransmitting the signal with the same SSID.

So now when you move away and out of range of the Main DWL-1000AP+ #1 you will only see one in the list (the DWL-1000AP+ #2). So this will be the one you connect to in order to get a connection back to the Main DWL-1000AP+ #1.

That's basically all that needs to be done in order to setup the repeater. The next step would be securing the connection and enabling encryption with the same key on all wireless devices.

Once the DWL-1000AP+ is set to repeater mode, it becomes a transparent device and will no longer be able to be configured from a wireless connection. You must use a computer that is wired into the network or directly to the DWL-1000AP+.

For Advanced Users:

Step 1: From a wired computer, open your web browser such as Internet Explorer and enter the IP address of the DWL-1000AP+ (192.168.0.50).

Step 2: Enter username (admin) and password.

Step 3: Click on Advanced at the top and then click Mode on the left side.

Step 4: Select Repeater and then enter the LAN (Ethernet) MAC address of the access point or wireless router you are connecting to. Click Apply and then click Continue.

Note: The DWL-1000AP+ in repeater mode will currently connect to another DWL-1000AP+ (in AP mode only), DWL-900AP+ (in AP mode only), DWL-1500, DI-764, DI-714P+, or a DI-614+ wireless router.

Note 2: You cannot daisy chain Access Points in Repeater mode.

~End of Document~