



ASUS Wireless Router WDS Configuration Guide

Introduction

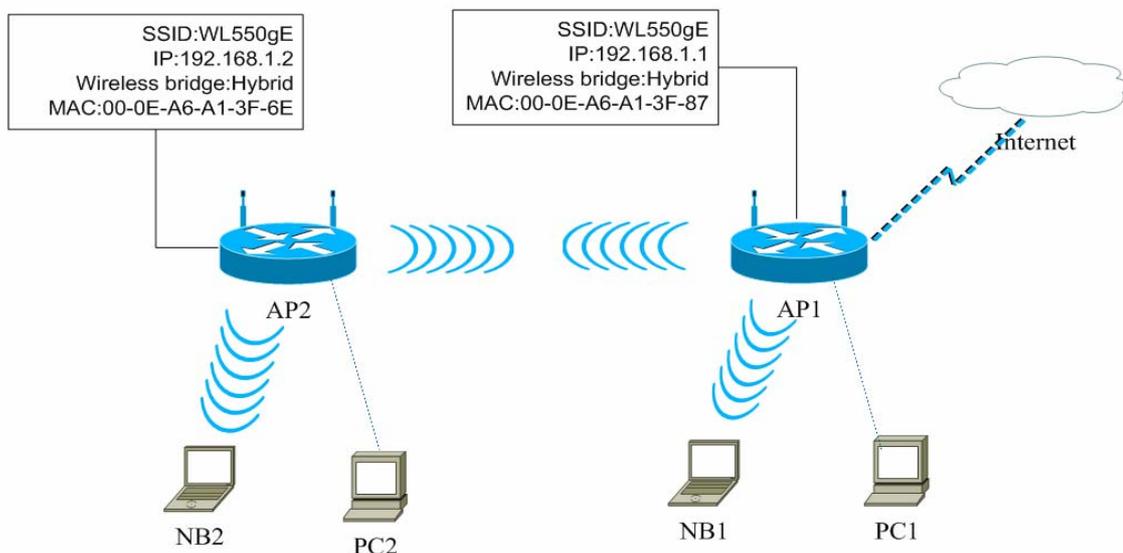
This document introduces the configuration of WDS on ASUS wireless routers, we set WL-550gE as example.



Note: Wireless Distribution System (WDS) allows you to make a completely wireless infrastructure. There're two types of application of WDS: Bridge and Repeater. Bridge is set to build communication between two different wireless networks but not accept the connection of other wireless equipments like PDA. Repeater is set to build communication with both wireless networks and other wireless equipments. Hybrid mode in ASUS wireless products is corresponding to the general idea of Repeater, WDS only to Bridge.

Chapter 1 Getting Start

We take an example to tell how to set up WDS for two APs. In this example, AP 1 will operate in "Hybrid mode". The MAC address of AP1 is 00:0E:A6:A1:3F:87. AP2 will operate in "Hybrid mode", too. But AP2 will not assign IP address to clients. We'll keep only one DHCP server in a subnet and that is AP1. The MAC address of AP2 is 00:0E:A6:A1:3F:6E. In the subnet, the IP address of AP1 is 192.168.1.1, and AP2's is 192.168.1.2.





In Hybrid mode, both wired (PC1/PC2) and wireless clients (NB1/NB2) can communicate with the other AP and its network while only wired client (PC1/PC2) can communicate with the other AP and its network in WDS mode.

	Access Point 1	Access Point 2
SSID	WL550gE	WL550gE
LAN IP Address	192.168.1.1	192.168.1.2
Encryption	NONE	NONE
Wireless Bridge	Hybrid mode	Hybrid mode
MAC Address	00:0E:A6:A1:3F:87	00:0E:A6:A1:3F:6E
Allow Anonymous	No	No
DHCP Server	Yes	No



NOTES:

- Note 1: Considering compatibility, please use ASUS router/AP to build WDS.
- Note 2: Disable DHCP server function on AP2.
- Note 3: Assign different LAN IP address to each ASUS router.
- Note 4: SSID and channel of two routers/APs should be the same.

Chapter 2 Configuration on AP1

1. Enter the following address in your Web browser: <http://192.168.1.1> with defaults:
User name: **admin** Password: **admin**



2. After log in the Web configuration page, enter **Wireless->Interface**





3. Set SSID as WL550gE, WEP Encryption is none. We suggest AP1 and AP2 should use the same SSID.

Wireless - Interface	
SSID:	WL550gE
Channel:	3
Wireless Mode:	Auto <input type="checkbox"/> 5g Protection
Authentication Method:	Open System or Shared Key
WPA Encryption:	TKIP
WPA Pre-Shared Key:	
WEP Encryption:	None

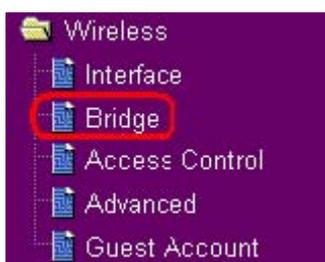
4. Enter IP Config ->WAN & LAN



5. Make sure the IP address of AP1 in LAN is 192.168.1.1

LAN IP Setting	
IP Address:	192.168.1.1
Subnet Mask:	255.255.255.0
Restore Finish Apply	

6. Enter Wireless->Bridge.





10. Enable **Connect to APs in Remote Bridge List** function to connect to the other APs which connected by the APs in your list.

11. If you want to allow anonymous to login your local area network, you can choose **Yes** in 6. In our example, we set no anonymous user.

AP Mode:	Hybrid
Channel:	3
Connect to APs in Remote Bridge List?	<input checked="" type="radio"/> Yes <input type="radio"/> No
Allow anonymous?	<input type="radio"/> Yes <input checked="" type="radio"/> No

12. Enter the MAC address of the AP2. It should be 00:0E:A6:A1:3F:6E.

13. Click **Add** after you key in the MAC address.

Remote Bridge List		Add	Del
MAC Address	000ea6a13f6e		

14. Click **Finish**.

Restore	Finish	Apply
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15. Click **Save&Restart**

Save & Restart
Save&Restart will save all setting you have changed to WL520g and restart it. Please click SaveRestart button to continue.
Save&Restart



Chapter 3 Configuration on AP2

1. Repeat step 1-3 introduced in Chapter 1 to make sure that AP2 has the same SSID with AP1.
2. Enter **WAN & LAN ->IP Config**



3. Modify the LAN IP address of AP2 to 192.168.1.2.

LAN IP Setting	
IP Address:	192.168.1.2
Subnet Mask:	255.255.255.0

4. Next, we should disable DHCP server since AP1 has been the only one DHCP server in this subnet. Enter **IP Config->DHCP Server**.



5. Choose Not to Enable DHCP Server and click **Apply**.

IP Config - DHCP Server	
Enable the DHCP Server?	<input type="radio"/> Yes <input checked="" type="radio"/> No
Domain Name:	
IP Pool Starting Address:	192.168.1.2
IP Pool Ending Address:	192.168.1.254
Lease Time:	86400
Default Gateway:	



6. Repeat step 6-11 introduced in Chapter 1. Make sure that AP2 has the same channel as AP1.
7. Enter the MAC address of the AP1. It should be 00:0E:A6:A1:3F:87.
8. Click **Add** after you key in the MAC address.

MAC Address
000ea6a13f87

9. Repeat step 14-15 introduced in Chapter 1. After rebooting, WDS should work.