

Article ID: 5011

# How to Configure Wireless Distribution System (WDS) on the RV130W

## **Objective**

A Wireless Distribution System (WDS) is a system that enables the wireless interconnection of access points (APs) in a network. WDS allows a wireless network to be expanded using multiple access points without the need for a wired backbone to link them. To establish a WDS link, the device and other remote WDS peers must be configured in the same wireless network mode, wireless channel, wireless band selection, and encryption types (None or WEP). For more information, refer to *Configuring Basic Wireless Settings on the RV130W.* 

In a typical small business environment, you can configure WDS in Bridge mode or Repeater mode. Bridge mode is useful if you want the other APs to extend the network signal for your device, which acts as the common link. Repeater mode is useful if you want your device to act as a network signal repeater for other APs by using a wireless connection.

The objective of this document is to show you how to configure a Wireless Distribution System on the RV130W.

# **Applicable Devices**

• RV130W

#### **Software Version**

• v1.0.1.3

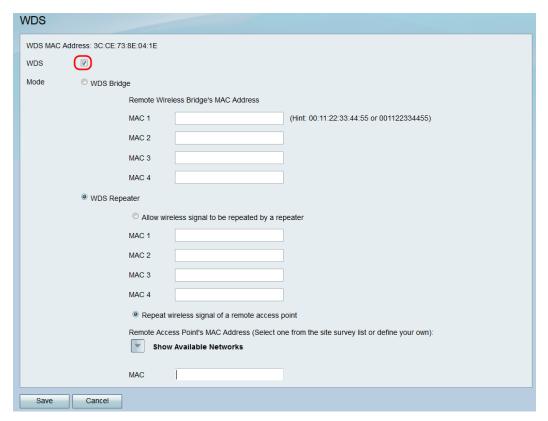
### **Wireless Distribution System Configuration**

#### **Configuration of WDS in Bridge Mode**

Step 1. Log in to the web configuration utility and choose **Wireless > WDS**. The *WDS* page opens:

W	DS		
V	VDS MAC Add	fress: 3C:CE:73	3:8E:04:1E
V	VDS		
N	lode	WDS Bridg	ge
			Remote Wireless Bridge's MAC Address
			MAC 1 (Hint: 00:11:22:33:44:55 or 001122334455)
			MAC 2
			MAC 3
			MAC 4
		WDS Rep	eater
			Allow wireless signal to be repeated by a repeater
			MAC 1
			MAC 2
			MAC 3
			MAC 4
			Repeat wireless signal of a remote access point
			Remote Access Point's MAC Address (Select one from the site survey list or define your own):
			Show Available Networks
			MAC
	Save	Cancel	

Step 2. To enable WDS, check the check box in the WDS field.



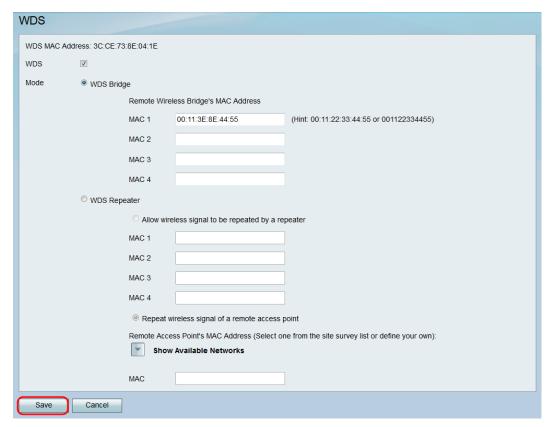
Step 3. In the *Mode* field, click the **WDS Bridge** radio button. When the router's WDS is configured to Bridge mode, the WDS designates the configured access point as the common link between multiple access points.

WDS		
WDS MA	C Address: 3C:CE:7	3:8E:04:1E
WDS	<b>V</b>	
Mode	WDS Brid	lge
		Remote Wireless Bridge's MAC Address
		MAC 1 (Hint: 00:11:22:33:44:55 or 001122334455)
		MAC 2
		MAC 3
		MAC 4
	© WDS Rep	peater
		O Allow wireless signal to be repeated by a repeater
		MAC 1
		MAC 2
		MAC 3
		MAC 4
		Repeat wireless signal of a remote access point
		Remote Access Point's MAC Address (Select one from the site survey list or define your own):
		Show Available Networks
		MAC
Save	Cancel	

Step 4. In the *Remote Wireless Bridge's MAC Address* section, enter the MAC address of an access point to use as a bridge in the *MAC 1* field. You can also configure additional access points to use as bridges in the *MAC 2, MAC 3,* and *MAC 4* fields.

١	WDS		
	WDS MAC Add	dress: 3C:CE:73	3:8E:04:1E
	WDS	<b>V</b>	
	Mode	WDS Bridge	ge
			Remote Wireless Bridge's MAC Address
			MAC 1 (00:11:3E:8E:44:55 (Hint: 00:11:22:33:44:55 or 001122334455)
			MAC 2
			MAC 3
			MAC 4
		○ WDS Repe	eater
			Allow wireless signal to be repeated by a repeater
			MAC 1
			MAC 2
			MAC 3
			MAC 4
			Repeat wireless signal of a remote access point
			Remote Access Point's MAC Address (Select one from the site survey list or define your own):
			Show Available Networks
			MAC
	Save	Cancel	

Step 5. Click **Save** to save the changes.



# **Configuration of WDS in Wireless Repeater Mode**

Step 1. Log in to the web configuration utility and choose **Wireless > WDS**. The WDS page opens.

١	WDS	
	WDS MAC A	ress: 3C:CE:73:8E:04:1E
	WDS	
	Mode	○ WDS Bridge
		Remote Wireless Bridge's MAC Address
		MAC 1 (Hint: 00:11:22:33:44:55 or 001122334455)
		MAC 2
		MAC 3
		MAC 4
		WDS Repeater
		Allow wireless signal to be repeated by a repeater
		MAC 1
		MAC 2
		MAC 3
		MAC 4
		Repeat wireless signal of a remote access point
		Remote Access Point's MAC Address (Select one from the site survey list or define your own):
		Show Available Networks
		MAC
	Save	Cancel

Step 2. To enable WDS, check the check box in the WDS field.

١	VDS		
	WDS MAC A	dress: 3C:CE:73:8E:04:1E	
	WDS		
	Mode	WDS Bridge	
		Remote Wirel	ess Bridge's MAC Address
		MAC 1	(Hint: 00:11:22:33:44:55 or 001122334455)
		MAC 2	
		MAC 3	
		MAC 4	
		WDS Repeater	
		Allow wire	less signal to be repeated by a repeater
		MAC 1	
		MAC 2	
		MAC 3	
		MAC 4	
		Repeat w	reless signal of a remote access point
			ss Point's MAC Address (Select one from the site survey list or define your own):
		Show	Available Networks
		MAC	
		IVIAC	
	Save	Cancel	

Step 3. In the *Mode* field, click the **WDS Repeater** radio button. When the router's WDS is configured to Repeater mode, the WDS designates the configured access point to connect to multiple access points without a wired connection to the LAN by repeating signals using wireless connection.

WDS	
WDS MAC	dress: 3C:CE:73:8E:04:1E
WDS	₹
Mode	© WDS Bridge
	Remote Wireless Bridge's MAC Address
	MAC 1 (Hint: 00:11:22:33:44:55 or 001122334455)
	MAC 2
	MAC 3
	MAC 4
	WDS Repeater
	Allow wireless signal to be repeated by a repeater
	MAC 1
	MAC 2
	MAC 3
	MAC 4
	Repeat wireless signal of a remote access point
	Remote Access Point's MAC Address (Select one from the site survey list or define your own):
	Show Available Networks
	MAC
Save	Cancel

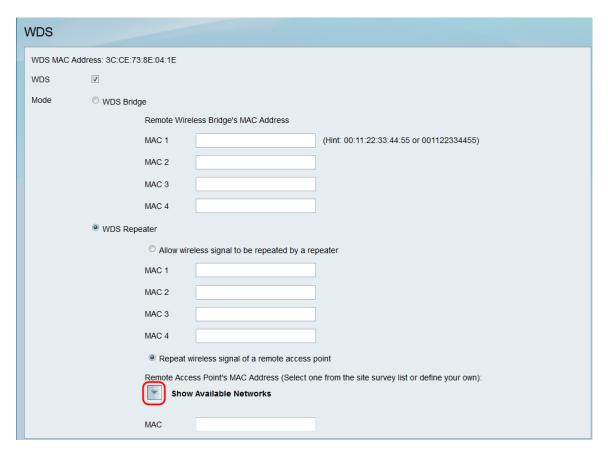
Step 4. Choose the desired option for the WDS Repeater mode. The available options are defined as follows:

- Allow wireless signal to be repeated by a repeater Designated Access Points are used to repeat the device's wireless signal.
- Repeat wireless signal of a remote access point The device is used to repeat
  the wireless signal of another wireless access point. If you select this option, skip
  to Step 6.

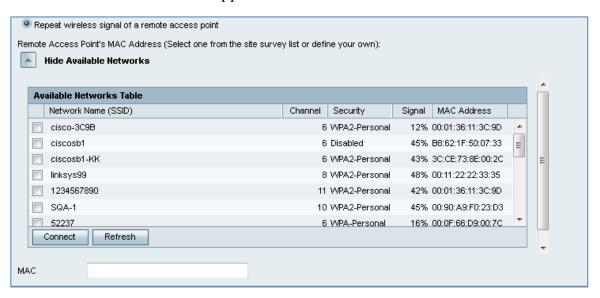
Step 5. If you choose **Allow wireless signal to be repeated by a repeater** in Step 4, enter the MAC address of an access point to use as a repeater in the *MAC 1* field. You can configure additional access points to use as repeaters in the *MAC 2, MAC 3*, and *MAC 4* fields. Skip to Step 9.

,	WDS	
	WDS MAC Ad	dress: 3C:CE:73:8E:04:1E
	WDS	₹
	Mode	O WDS Bridge
		Remote Wireless Bridge's MAC Address
		MAC 1 (Hint: 00:11:22:33:44:55 or 001122334455)
		MAC 2
		MAC 3
		MAC 4
		WDS Repeater
		Allow wireless signal to be repeated by a repeater
		MAC 1 00:01:32:23:3C:9D
		MAC 2
		MAC 3
		MAC 4
		Repeat wireless signal of a remote access point
		Remote Access Point's MAC Address (Select one from the site survey list or define your own):
		Show Available Networks
		MAC
	Save	Cancel

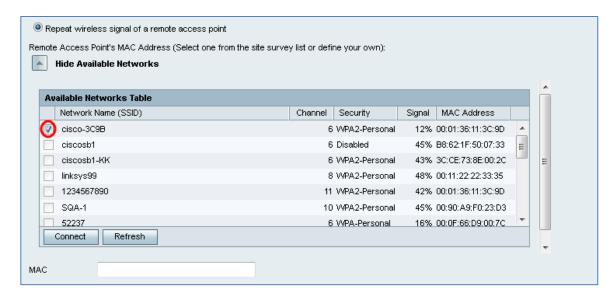
Step 6. If you choose **Repeat wireless signal of a remote access point** in Step 4, click **Show Available Networks** to find available wireless access points to connect to.



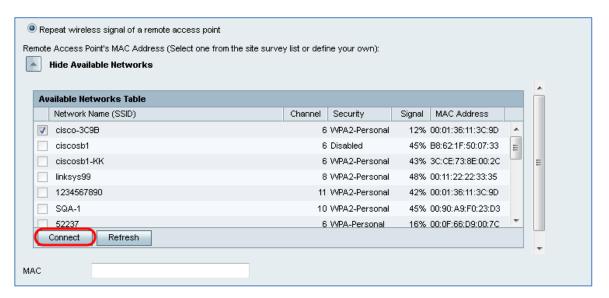
#### The Available Networks Table appears:



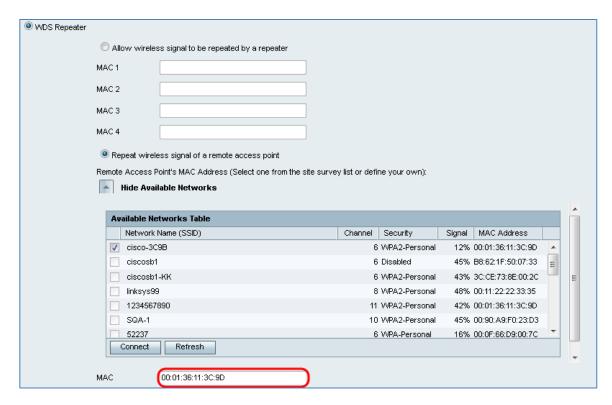
Step 7. Check the desired check box of the network name to designate which available wireless access point you want the device to repeat the signal for.



Step 8. Click the **Connect** button to add the MAC address of the selected access point to the *MAC* field.



The *MAC* field will be updated with the MAC Address of the selected network.



Step 9. Click **Save** to save your settings.

