

WDS DWL-6700AP im 5GHz Band

Testaufbau:



DWL-6700AP SSID Setting

AP1 & AP2

2.4GHz	Enabled	VLAN ID	SSID	Broadcast SSID	Security		MAC Auth Type	Redire	ct Mode	Redirect URL	
VAP 0		1	wds		WPA Personal	٠	Disabled 💌	None	*		۲
VAP 1		1	dlink		None	Ŧ	Disabled 💌	None	*		
VAP 2		1	dlink		None		Disabled 💌	None	¥		
VAP 3		1	dlink		None	Ŧ	Disabled 🔻	None	¥		۲
5GHz VA	P Enabled	VLAN ID	SSID	Broadcast SSID	Security		MAC Auth Type	Redire	ct Mode	Redirect URL	
VAP 0	V	1	wds2		WPA Personal	•	Disabled •	None	•		9
					WPAVersions: Cipher Suites:				V WPA		WPA2 CCMP (AES)
					Key: Broadcast Key	Refr	esh Rate (Range: 0	-86400)	••••••		
VAP 1		1	dlink	V	None	¥	Disabled *	None	*		•

DWL-6700AP Settings WDS-Settings

Access Point	Configure WDS bridges to other access points					
Basic Settings	Spanning Tree Mode 5GHz Radio MAC Address	Enabled Disabled C4:12:F5:1C:16:E0				
Events Transmit/Receive	ACK Timer Value	64 (Range: 64-200 µs)				
 Client Associations Managing switch IP via DHCP option 43 Radio Statistics 	Remote Address Encryption	C4:12:F5:1C:15:D0 💿 WPA (PSK) 💌				
Email Alerts Status	SSID wds2					
Manage	Key 1234567890					



Access Point	Conf	Configure WDS bridges to other access point						
Basic Settings Status Manage Ethernet Settings Wireless Settings	Spanning SGHz Ra ACK Tim	g Tree Mode dio MAC Address er Value	 Enabled Disabled C4:12:F5:1C:15:D0 64 (Range: 64-200 μs) C4:12:F5:1C:16:E0 WPA (PSK) 					
- Scheduler Association - VAP(SSID) - WDS	Remote /	Address						
MAC Authentication Managed Mode Configuration Parameters	SSID Key	wds2 1234567890	-					

DWL-6700AP Radio Setting 2,4 & 5 GHz

AP1 & AP2

2.4GHz Radio Interface	● on ○ off
MAC Address	C4:12:F5:1C:16:F0
Mode	IEEE 802.11b/q/n 🗸
Channel	Auto 🗸
Station Isolation	No V
Channel Bandwidth	Auto 🗸
Primary Channel	Lower V
Short Guard Interval Supported	No V
Protection	Auto 🗸
Beacon Interval	20 (Msec, Range: 100 - 2000)
DTIM Period	20 (Range: 1-255)
Fragmentation Threshold	256 (Range: 256-2346, Even Numbers)
RTS Threshold	2347 (Range: 0-2347)
Maximum Stations	200 (Range: 0-127)
Transmit Power	100 (Range: 1-100)
Fixed Multicast Rate	6 V Mbps



5GHz Radio Interface	On Off
MAC Address	6C:72:20:B7:20:80
Mode	IEEE 802.11a/n 💌
Channel	100 -
Station Isolation	No 🔻
Channel Bandwidth	40 MHz 🔻
Primary Channel	Lower -
Short Guard Interval Supported	Yes 🔻
Protection	Auto 💌
Beacon Interval	200 (Msec, Range: 100 - 2000)
DTIM Period	1 (Range: 1-255)
Fragmentation Threshold	2346 (Range: 256-2346, Even Numbers)
RTS Threshold	2347 (Range: 0-2347)
Maximum Stations	20 (Range: 0-127)
Transmit Power	100 (Percent, Range: 1 - 100)
Fixed Multicast Rate	Auto 💌 Mbps

Bitte stellen Sie bei WDS beide APs manuell fest auf den gleichen WLAN Kanal ein. Beachten Sie hierbei jedoch die gesetzlichen Richtwerte und Vorgaben bzgl. z.B. DFS Kanälen.



Um eine zusätzliche SSID für Clients auszustrahlen, ist es ausreichend im 2,4 GHz Band die VAP entsprechend zu konfigurieren.

AP1

Access Point	Modif	y Virti	ual Ad	ccess Point settings	;				
Basic Settings	Global RA	DIUS ser	ver setti	ngs					
□	RADIUS IP Address Type:			IPv4					
- Dinterfaces	RADIUS IP Address:								
- Events	RADIUS IP Address-1:								
Transmit/Receive	RADIUS IP Address-2:								
- Client Associations	RADIUS IP Address-3: RADIUS Key: RADIUS Key-1:		5-3:						
Managing switch IP via DHCP option 43			••••••						
- Radio Statistics	RADIUS #	ley-2:		•••••					
Email Alerts Status	RADIUS Key-3:			•••••					
₽ Image Manage	Enab	e RADIU	S accour	iting					
Ethernet Settings	Enab	e RADIU	S Failthr	bugh					
	2.4047	Enabled	VI AN T	D CEID	Broadcast SSID	Cogurity	MAC Auth Tup	o Rodiroct Mod	la Radiract IIRI
-B Scheduler	VAP 0	Enabled	VLANI		Broadcast SSID	WBA Borsonal			
-B Scheduler Association	10.0	•	1			WPA Personal	- Disabled	inone -	
- VAP(SSID)	VAP 1	-	2	clientssid22-6700ap	✓	WPA Personal	Disabled V	None 🗸	+
- IN WDS		_							
-B MAC Authentication	VAP 2		1	dlink	~	None	Disabled V	None V	•
Managed Mode Configuration Parameters	VAP 3		1	dlink	\checkmark	None	Disabled V	None 🗸	•
🗉 📁 Services	5GHz VAP	Enabled	VLAN I	D SSID	Broadcast SSID	Security	MAC Auth Typ	e Redirect Mod	e Redirect URL
■ <i>I</i> Maintenance	VAP 0	~	1	wds2		WPA Personal	Disabled V	None 🗸	•

AP2

🏠 Home	🐒	To	ols		Configuration			🛬 Syste	m	
Access Point	Modif	v Virtu	al Ac	cess Point settings						
Basic Settings		,		g-						
	Global RADIUS server settings									
	RADIUS	D Address		© 1PV4						
	RADIUS IP Address.		- 1 ·							
Events	RADIUS IP Address-1:									
Infansmit/Receive	RADIUS I	D Addross	-21							
Client Associations	DADIUG I	Audress	5.							
- Managing switch IP via DHCP	RADIUS P	Cey:	•••••							
option 43	RADIUS P	(ey-1:								
Radio Statistics	RADIUS Key-2: RADIUS Key-3:									
Email Alerts Status										
₽ Manage	Enab	le RADIUS	account	ing						
Ethernet Settings	Enab	le RADIUS	Failthro	ugh						
Wireless Settings	2.4047	Enabled		SCID	Propheret SSID	Focurity	MAC Auth Turo	Redirect Mode	Padiract UPI	
-B Scheduler	VAR 0	Enabled	VEAN ID	3310		Security		None X	Redifect ORL	
- Scheduler Association	VAFO	✓	1	clientssid-6700ap		WPA Personal	Disabled	None +		(H)
-BVAP(SSID)	VAP 1	\checkmark	2	clientssid2-6700ap	✓	WPA Personal	✓ Disabled ✓	None 🗸		+
-B WDS										_
-B MAC Authentication	VAP 2		1	dlink	~	None	✓ Disabled ✓	None V		Ð
Managed Mode Configuration Parameters	VAP 3		1	dlink	✓	None	Disabled V	None V		•
E Services	5GHz VAP	Enabled	VLAN ID	SSID	Broadcast SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL	
■ ØMaintenance	VAP 0	~	1	wds2		WPA Personal	Disabled V	None 🗸		(H
Configuration Cours										1

Sichtbare SSIDs

	802.11
clientssid11-6700ap	
clientssid22-6700ap -35 6 WPA2-Personal C4:12:F5:1C:16:F1 270 r	
elientssid-6700ap -36 1 WPA2-Personal 6C:72:20:B7:20:90 270 p	
clientssid2-6700ap	
wds2 -50 100+104 Open C4:12:F5:1C:16:E0 300 m	
wds2	



UPDATE with Firmware 4.5.0.5 and later WPA Encryption is NOT working in basic WDS Configuration, therefore please do NOT use WPA Encryption in Basic setup.

If you like to use WPA Encryption for WDS, please follow this setup steps:

- 1. We need to setup same channel for both DWL-6700AP for 5GHz radio.
- 2. In VAP (SSID) page, we have to setup a SSID which with security WPA Personal and setup the password on both AP for 5GHz radio.
- In WDS page, we have to setup WDS type as "Advanced" for both AP. And on WDS-client DWL-6700AP, we need to input MAC address of WDS-root DWL-6700AP and SSID please input the SSID which we've configured on step 2 and password as well. On WDS-root DWL-6700AP, we don't have to input anything.

[Topology]

Client#1---Switch---DWL-6700AP#1)))WDS-5GHz(((DWL-6700AP#2---Client#2 outer---/

[Result]

Client#1 is able to ping DWL-6700AP#2 and Client#2 and Client#2 is able to get DHCP IP address.

Please refer above procedure to establish WDS with WPA(PSK) on DWL-6700AP.