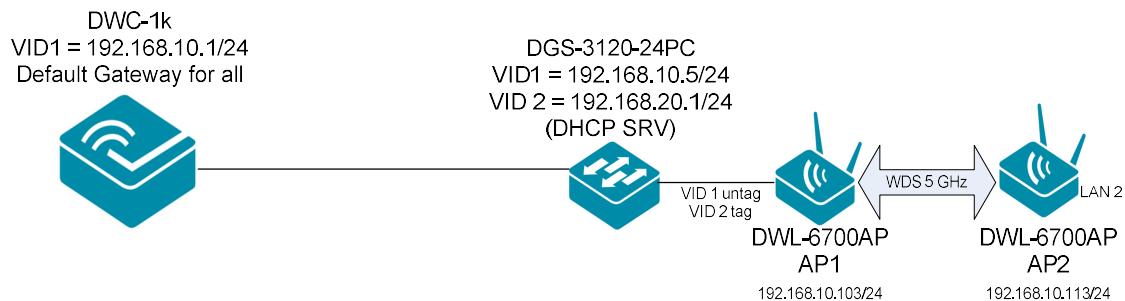


## WDS DWL-6700AP im 5GHz Band

Testaufbau:



## DWL-6700AP SSID Setting

AP1 & AP2

2.4GHz	Enabled	VLAN ID	SSID	Broadcast	SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL
VAP 0	<input type="checkbox"/>	1	wds	<input checked="" type="checkbox"/>		WPA Personal	Disabled	None	
VAP 1	<input type="checkbox"/>	1	dlink	<input checked="" type="checkbox"/>		None	Disabled	None	
VAP 2	<input type="checkbox"/>	1	dlink	<input checked="" type="checkbox"/>		None	Disabled	None	
VAP 3	<input type="checkbox"/>	1	dlink	<input checked="" type="checkbox"/>		None	Disabled	None	
5GHz VAP	Enabled	VLAN ID	SSID	Broadcast	SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL
VAP 0	<input checked="" type="checkbox"/>	1	wds2	<input checked="" type="checkbox"/>		WPA Personal	Disabled	None	
						WPAVersions:	<input checked="" type="checkbox"/> WPA	<input checked="" type="checkbox"/> WPA2	
						Cipher Suites:	<input checked="" type="checkbox"/> TKIP	<input checked="" type="checkbox"/> CCMP (AES)	
						Key:	*****		
						Broadcast Key Refresh Rate (Range: 0-86400)	0		
VAP 1	<input type="checkbox"/>	1	dlink	<input checked="" type="checkbox"/>		None	Disabled	None	

## DWL-6700AP Settings WDS-Settings

AP1

- [Access Point](#)
- [Basic Settings](#)
- [Status](#)
  - [Interfaces](#)
  - [Events](#)
  - [Transmit/Receive](#)
  - [Client Associations](#)
  - [Managing switch IP via DHCP option 43](#)
  - [Radio Statistics](#)
  - [Email Alerts Status](#)
- [Manage](#)
- [Ethernet Settings](#)

### Configure WDS bridges to other access points

Spanning Tree Mode	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled
5GHz Radio MAC Address	C4:12:F5:1C:16:E0
ACK Timer Value	64 (Range: 64-200 µs)
<hr/>	
Remote Address	<input type="text" value="C4:12:F5:1C:15:D0"/>
Encryption	WPA (PSK) <input type="button" value="Change"/>
SSID	wds2
Key	1234567890

AP2

The screenshot shows the AP2 configuration interface. On the left, a navigation tree includes 'Access Point', 'Basic Settings', 'Status', 'Manage' (selected), 'Ethernet Settings', 'Wireless Settings', 'Scheduler', 'Scheduler Association', 'VAP(SSID)', 'WDS' (selected), 'MAC Authentication', 'Managed Mode', and 'Configuration Parameters'. The main right panel is titled 'Configure WDS bridges to other access points'. It contains the following fields:

- Spanning Tree Mode: Enabled (radio button selected)
- 5GHz Radio MAC Address: C4:12:F5:1C:15:D0
- ACK Timer Value: 64 (Range: 64-200 µs)
- Remote Address: C4:12:F5:1C:16:E0
- Encryption: WPA (PSK) (dropdown menu)
- SSID: wds2
- Key: 1234567890

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

AP1 & AP2

The screenshot shows the DWL-6700AP Radio Interface configuration. The left column lists the parameters, and the right column shows their current values or dropdown menus.

<b>2.4GHz Radio Interface</b>	<input checked="" type="radio"/> On <input type="radio"/> Off
MAC Address	C4:12:F5:1C:16:F0
Mode	IEEE 802.11b/g/n
Channel	Auto
Station Isolation	No
Channel Bandwidth	Auto
Primary Channel	Lower
Short Guard Interval Supported	No
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 Mbps

<b>5GHz Radio Interface</b>	
<input checked="" type="radio"/> On <input type="radio"/> 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

2.4GHz	Enabled	VLAN ID	SSID	Broadcast SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL
VAP 0	<input checked="" type="checkbox"/>	1	clientssid11-6700ap		<input checked="" type="checkbox"/>	WPA Personal	Disabled	None
VAP 1	<input checked="" type="checkbox"/>	2	clientssid22-6700ap		<input checked="" type="checkbox"/>	WPA Personal	Disabled	None
VAP 2	<input type="checkbox"/>	1	dlink		<input checked="" type="checkbox"/>	None	Disabled	None
VAP 3	<input type="checkbox"/>	1	dlink		<input checked="" type="checkbox"/>	None	Disabled	None

5GHz VAP	Enabled	VLAN ID	SSID	Broadcast SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL
VAP 0	<input checked="" type="checkbox"/>	1	wds2		<input checked="" type="checkbox"/>	WPA Personal	Disabled	None

## AP2

2.4GHz	Enabled	VLAN ID	SSID	Broadcast SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL
VAP 0	<input checked="" type="checkbox"/>	1	clientssid11-6700ap		<input checked="" type="checkbox"/>	WPA Personal	Disabled	None
VAP 1	<input checked="" type="checkbox"/>	2	clientssid22-6700ap		<input checked="" type="checkbox"/>	WPA Personal	Disabled	None
VAP 2	<input type="checkbox"/>	1	dlink		<input checked="" type="checkbox"/>	None	Disabled	None
VAP 3	<input type="checkbox"/>	1	dlink		<input checked="" type="checkbox"/>	None	Disabled	None

5GHz VAP	Enabled	VLAN ID	SSID	Broadcast SSID	Security	MAC Auth Type	Redirect Mode	Redirect URL
VAP 0	<input checked="" type="checkbox"/>	1	wds2		<input checked="" type="checkbox"/>	WPA Personal	Disabled	None

## Sichtbare SSIDs

SSID	SIGNAL	CHANNEL	SECURITY	MAC ADDRESS	MAX RATE	802.11
clientssid11-6700ap	-35	6	WPA2-Personal	C4:12:F5:1C:16:F0	270	n
clientssid22-6700ap	-35	6	WPA2-Personal	C4:12:F5:1C:16:F1	270	n
clientssid-6700ap	-36	1	WPA2-Personal	6C:72:20:B7:20:90	270	n
clientssid2-6700ap	-36	1	WPA2-Personal	6C:72:20:B7:20:91	270	n
wds2	-50	100+104	Open	C4:12:F5:1C:16:E0	300	n
wds2	-52	100+104	Open	6C:72:20:B7:20:80	300	n

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.
3. 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.