**D**-Link

# **NUCLIAS CONNECT** DAP-2682 User Guide





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## Nuclias Connect Introduction

Nuclias Connect is D-Link's centralized management solution for Small-to-Medium-Sized Business (SMB) networks. Nuclias Connect makes it easier to analyze, automate, configure, optimize, scale, and secure your network — delivering the convenience of an Enterprise-wide management solution, at an SMB price. Nuclias Connect gives you the financial and technical flexibility to expand from a small network to a larger one of up to 1,000 Access Points (APs), while retaining a robust and centralized management system. With its intuitive Graphical User Interface (GUI), a wealth of enhanced AP features, and a setup wizard that supports 11 languages, Nuclias Connect minimizes the hassle of deployment, configuration, and administration tasks.

Deployable on a Windows server (or Linux via Docker), PC, or Smartphone (via lite management app) the Nuclias Connect free-to-download software is capable of managing up to 1,000 APs without licensing charges, coupled with an inexpensive optional hardware controller (DNH-100 Nuclias Connect Hub) suitable for remote locations. Through software-based monitoring and remote management of all wireless Access Points (APs) on your network, Nuclias Connect offers tremendous flexibility compared to traditional hardware-based unified management systems. Configuration can be done remotely. Network traffic analytics are available at a glance (in whole or in part). Load Balancing, Airtime Fairness, and Localized Throttling are enabled.

Nuclias Connect supports multi-tenancy, so network administrators can grant localized management authority for local networks. In addition, because APs can support 8 SSIDs per radio (16 SSIDs per dual band APs), administrators have the option of using one SSID to create a guest network for visitors.

Nuclias Connect provides direct AP discovery and provisioning when it shares the same Layer-2/Layer-3 network with a given AP, allowing users to find APs and import profiles with minimum effort, which can be applied as needed to groups or individual APs for even more effective configuration.

Since Nuclias Connect's software operates transparently on the network, an AP can be deployed anywhere in an NAT environment. Admins can provide and manage a variety of distributed deployments, including settings and admin account configuration for each deployment.

Nuclias Connect allows for multiple user authentications while enabling specific access control configurations for each SSID, giving admins the option of configuring separate internal networks for different subnets, while enabling more advanced Value-Added Services, such as Captive Portal or Wi-Fi Hotspot.

## **Nuclias Connect Key Features**

- Free-to-Download Management Software
- Searchable Event Log and Change Log
- License-Free Access Points
- Traffic Reporting & Analytics
- Authentication via Customizable Captive Portal, 802.1x and RADIUS Server, POP3, LDAP
- Remote Config. & Batch Config.
- Multilingual Support
- Intuitive Interface
- Multi-Tenant & Role-Based Administration
- Payment Gateway (PayPal) Integration and Front-Desk Ticket Management

For more information on how to use Nuclias Connect with the DAP-2682, please refer to the Nuclias Connect User Guide.

## **Package Contents**

- DAP-2682 802.11ac Power over Ethernet (PoE) Access Point
- Mounting Brackets
- Ceiling Brackets
- Quick Install Guide

Note: No PSU supplied. To power the units use a D-Link 802.3at PoE switch or the D-Link DPE-301GI PoE injector.

## **System Requirements**

- Computers with Windows®, Macintosh®, or Linux-based operating systems with an installed Ethernet Adapter
- Internet Explorer 11, Safari 7, Firefox 28, or Google Chrome 33 and above (for configuration)

# Hardware Overview

## Connections



LEDs

C - Contraction of the second	

1 Power/Status		Solid Red	Indicates the access point has malfunctioned.
		Blinking Red	This LED will blink during boot-up.
		Solid Green	Indicates that the DAP-2682 is working properly.

2 Power Receptor Connect the supplied power adapter. (*Note: no used, replaced by PoE)		
3	LAN (PoE) Port	Connect to a Power over Ethernet (PoE) switch or router via an Ethernet cable.
4	LAN Port	Connect to your network with an Ethernet cable.

## Basic Installation Hardware Setup

To power on the DAP-2682, you can use ONE of the following methods:

1. Plug one end of your Ethernet cable into the LAN port of the DAP-2682, and the other end into a port on a 802.3 at PoE switch.

2. Purchase a DPE-301GI PoE injector separately if you need to connect the access point without a 802.3at PoE Switch.

#### Configure the access point



To set up and manage the DAP-2682, use one of the following methods:

1. Connect the access point and your computer to the same PoE switch. Manage the access point from the computer. Enter *dap2682.local* in the address field of your browser.

Log in to the Administration Web pages. The default login information is:

Username: admin

Password: admin

2. Connect the access point and your computer via DPE-301GI PoE injector. Manage the access point from the computer. Enter *dap2682.local* in the address field of your browser.

Log in to the Administration Web pages. The default login information is:

Username: admin

Password: admin

# **Setup Wizard**

The first login instance displays the System Settings window which requires a change in password. Additional settings include the System Time and System Country functions.

After logging in to the user interface, fill in the New Password and Confirm New Password fields.

In the System Time function, select **Using Network Time Protocol (NTP)** or **Manually** to define the system time. If required, click the Daylight Saving Offset drop-down menu and select the value (minutes).

- Setting NTP System Time: Before trying to configure NTP check, perform a ping test with the NTP server. In the NTP Server field, enter the NTP server to use. Then click the Time Zone drop-down menu and select the appropriate time zone.
- Setting System Time Manually: From the System Date drop-down menu, select the Year, Month, and Day along with the Hour and Minutes appropriate for the AP.
- Enable Daylight Saving: Click the radio button to enable the daylight savings time (DST) function. Set the DST start (24 hours) and end (24 hours) time by clicking on the drop-down menus and setting the Month, Week, Day, Hour, and Minute of the DST starting days.

Once the settings are configured, click **Update** button to accept the configuration and proceed to the main interface menu page.

PROVIDE SYSTEM SETTI	NGS
These settings apply to this ac	cess point.
No. December 1	
New Password	
Confirm New Password	
System Time	<ul> <li>○ Using Network Time Protocol(NTP)</li> <li>● Manually</li> </ul>
System Date	2019 February 20 0
System Time(24 HR)	12 🛛 : 12 🔲
Enable Daylight Saving	
DST Start(24 HR)	First Sunday in January at 00 0
DST End(24 HR)	First Sunday in January at 00 0
Daylight Offset(minutes)	0
System Country	Select a Country
Update	

# Web User Interface

The DAP-2682 supports an elaborate web user interface where the user can configure and monitor the device. Launch a web browser, type *dap2680.local* in the address field and then press Enter to login. Most of the configurable settings are located in the left menu of the web GUI which contains sections called **Basic Settings**, **Advanced Settings** and **Status**.

D-Link <sup>®</sup>				DAP-2682
🔶 Home 🌋 Maintenanc	e 🔻 📙 Configu	ıration 👻 💝 System	💋 Logout	🕐 Help
DAP-2682	System Informat	ion		
Advanced Settings	Model Name Firmware Version System Name Location System Time Up Time Operation Mode(2.4GHz) Operation Mode(5GHz) MAC Address(2.4GHz) MAC Address(5GHz) LAN IP Address Router Mode			

## Wireless

On the wireless settings page, you can set up the basic wireless configuration for the access point. The user can choose from 4 different wireless modes:

Access Point - Used to create a wireless LAN

WDS with AP - Used to connect multiple wireless networks while still functioning as a wireless access point

WDS - Used to connect multiple wireless networks

Wireless Client - Used when the access point needs to act as a wireless network adapter for an Ethernet enabled device

## **Access Point Mode**

Wireless Band: Select either 2.4 GHz or 5 GHz from the drop-down

menu.

**Note:** 2.4GHz and 5GHz bands should be configured individually with the following settings, each of which can have a different SSID, channel, authentication, etc.

Mode: Select Access Point from the drop-down menu.

Network Name (SSID): Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network. The SSID can be up to 32 characters and is case-sensitive.

SSID Visibility: Select Enable to broadcast the SSID across the network, thus making it visible to all network users. Select Disable to hide the SSID from the network.

Auto Channel Selection: This feature when enabled automatically selects the channel that provides the best wireless performance. The channel selection process only occurs when the AP is booting up. To manually select a channel, set this option to **Disable** and select a channel from the drop-down menu.



**Channel:** To change the channel, first toggle the *Auto Channel Selection* setting to **Disable**, and then use the drop-down menu to make the desired selection.

Note: The wireless adapters will automatically scan and match the wireless settings.

- Channel Width: Allows you to select the channel width you would like to operate in 2.4GHz and 5GHz. Use the drop-down menu to choose 20 MHz or Auto 20/40 MHz or Auto 20/40/80 MHz.
- Authentication: Use the drop-down menu to choose Open System, Enhanced Open, Enhanced Open, WPA-Personal, WPA-Enterprise, or 802.1x.
  - Select Open System, Enhanced Open, Enhanced Open or Open, to communicate the key across the network (WEP).
  - Select WPA-Personal to secure your network using a password and dynamic key changes. No RADIUS server is required.
  - Select **WPA-Enterprise** to secure your network with the inclusion of a RADIUS server.
  - Select **802.1X** if your network is using port-based Network Access Control.

**Note:** The default Open System authentication allows wireless connection without requiring user authentication. It is highly recommended that you encrypt your network using one of the security methods other than the default setting.

## WDS with AP Mode

Wireless Band: Select either 2.4GHz or 5GHz from the drop-down menu.

- Mode: WDS with AP mode is selected from the drop-down menu.
- Network Name (SSID): Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.
  - SSID Visibility: Enable or Disable SSID visibility. Enabling this feature broadcasts the SSID across the network, thus making it visible to all network users.
- Auto Channel Selection: Enabling this feature automatically selects the channel that will provide the best wireless performance. This feature is not supported in WDS with AP mode. The channel selection process only occurs when the AP is booting up.
  - **Channel:** All devices on the network must share the same channel. To change the channel, use the drop-down menu to make the desired selection. (Note: The wireless adapters will automatically scan and match the wireless settings.)
  - Channel Width: Allows you to select the channel width you would like to operate in 2.4GHz and 5GHz. Use the dropdown menu to choose 20 MHz or Auto 20/40 MHz or Auto 20/40/80 MHz.



AP MAC Address: Enter the MAC addresses of the APs on your network that will serve as bridges to wirelessly connect multiple networks.

Site Survey: Click on the Scan button to search for available wireless networks, then click on the available network that you want to connect with.

Authentication: Use the drop-down menu to choose Open System or WPA-Personal.

- Select Open System to communicate the key across the network.
- Select WPA-Personal to secure your network using a password and dynamic key changes. No RADIUS server is required.

**Note:** It is highly recommended that you use WPA-Personal to encrypt your network.

## WDS Mode

Wireless Band: Select either 2.4GHz or 5GHz from the drop-down menu.

Mode: WDS is selected from the drop-down menu.

- Network Name (SSID): Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.
  - SSID Visibility: Enable or Disable SSID visibility. Enabling this feature broadcasts the SSID across the network, thus making it visible to all network users.
- Auto Channel Selection: Enabling this feature automatically selects the channel that will provide the best wireless performance. This feature is not supported in WDS mode.
  - **Channel:** All devices on the network must share the same channel. To change the channel, use the drop-down menu to make the desired selection.
  - Channel Width: Allows you to select the channel width you would like to operate in 2.4GHz and 5GHz. Use the dropdown menu to choose 20 MHz or Auto 20/40 MHz or Auto 20/40/80 MHz.
  - AP MAC Address: Enter the MAC addresses of the APs on your network that will serve as bridges to wirelessly connect multiple networks.

Wireless Settings	
Wireless Band	2.4GHz 🔻
Mode	WDS T
Network Name (SSID)	dlink
Auto Channel Selection	Enable 🔻
Channel	6 •
Channel Width	Auto 20/40 MHz 🔻
AP MAC Address	
Site Survey	Scan
Authentication	Open System 🔻
Key Settings Encryption Key Type Key Index(1~4) Network Key Confirm Key	Disable Enable       HEX     Key Size     64 Bits       1     (0-9,a-z,A-Z,~!@#\$%^&*()_+`-={}[];'\:" ,./<>?)
	Save

Site Survey: Click on the Scan button to search for available wireless networks, then click on the available network that you want to connect with.

#### Authentication: Use the drop-down menu to choose **Open System** or **WPA-Personal**.

- Select Open System to communicate the key across the network.
- Select WPA-Personal to secure your network using a password and dynamic key changes. No RADIUS server is required.

**Note:** It is highly recommended that you use WPA-Personal to encrypt your network.

## **Wireless Client Mode**

Wireless Band: Select either 2.4 GHz or 5 GHz from the drop-down menu.

**Mode:** Wireless Client is selected from the drop-down menu.

Network Name (SSID): Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is dlink. The SSID can be easily changed to connect to an existing wireless network.

SSID Visibility: This option is unavailable in Wireless Client mode.

Auto Channel Selection: This option is unavailable in Wireless Client mode.

Channel: This option is unavailable in Wireless Client mode.

Channel Width: This option is unavailable in Wireless Client mode.

- Site Survey: Click on the Scan button to search for available wireless networks, then click on the available network that you want to connect with.
- Authentication: Use the drop-down menu to choose Open System or WPA-Personal.

• Select **Open System** to communicate the key across the network.

• Select **WPA-Personal** to secure your network using a password and dynamic key changes. No RADIUS server is required.

**Note:** It is highly recommended that you use WPA-Personal to encrypt your network.

Wireless Setting	IS			
Wireless Band	2.4GHz 💌			
Mode	Wireless Client 💌			
Network Name (SSID)	dlink			
SSID Visibility	Enable 😒			
Auto Channel Selection	Enable 😒			
Channel	1 💌			
Channel Width	Auto 20/40 MHz 💉			
Site Survey				
				Scan
CH Signal	BSSID	Security	SSID	
0 1 78%	00:21:91:84:DD:69	WEP	DAP-1522	<u>^</u>
0 1 100%	00:18:02:6D:B2:E0	OPEN	kay2553	
O 1 100%	00:21:91:4F:7A:70	OPEN	dlink	
<ul> <li>1 62%</li> <li>2 64%</li> </ul>	00:22:80:F8:4F:FF 00:05:5D:35:20:64	OPEN OPEN	6666-P dlink	
0 2 78%	00:18:84:A5:23:3D	OPEN	FON_Kay	~
			_ ,	
Authentication	Open System 💉			
Key Settings Encryption	Disable	Enable		
Key Type	HEX V	CHADIE	Key Size 64 Bits 🔽	
Key Index(1~4)	1 -			
Network Key				
Confirm Key		-		
	1			
Wireless MAC Clone Enable				
MAC Source	Auto			
MAC Address			Scan	
	MAC Address			

## **Wireless Security**

Wireless security is a key concern for any wireless network. Unlike any other networking methods, wireless networks broadcast it's presence for anyone to connect to it. Today, wireless security has advanced to a level where it is virtually impenetrable.

There are mainly two forms of wireless encryption and they are called Wired Equivalent Privacy (WEP) and Wi-Fi Protected Access (WPA). WEP was the first security method developed. It is a low level encryption but better than now encryption. WPA is the newest encryption standard and with the advanced WPA3 standard, wireless networks have finally reach a point where the security is strong enough to give users peace of mind when installing wireless networks.

**Note:** The default Open System authentication allows wireless connection without requiring user authentication. It is highly recommended that you encrypt your network using one of the security methods other than the default setting.

### Wired Equivalent Privacy (WEP)

WEP Open System will send a request to the access point and if the key used matches the one configured on the access point, the access point will return a success message back to the wireless client. If the key does not match the one configured on the access point, the access point will deny the connection request from the wireless client.

Encryption:Use the radio button to disable or enable<br/>encryption.Wireless SettingKey Type:Select HEX\*\* or ASCII\*.ModeKey Size:Select 64 Bits or 128 Bits.Network Name (SSID)Key Index (1-4):Select the 1st through the 4th key to be<br/>the active key.Select the 1st through the 4th key to be<br/>the active key.Channel SelectionKey:Input up to four keys for encryption. You<br/>will select one of these keys in the Key<br/>Index drop-down menu.Key Index(1~4)

\*\*Hexadecimal (HEX) digits consist of the numbers 0-9 and the letters A-F.

\*ASCII (American Standard Code for Information Interchange) is a code that represents English letters using numbers ranging from 0-127.

Wireless Band	2.4GHz 💉		
Mode	Access Point		
Network Name (SSID)	dlink		
SSID Visibility	Enable 💌		
Auto Channel Selection	Disable 💌		
Channel	1 💌		
Channel Width	20 MHz 💉		
Authentication	Open System 💉		
Key Settings			
Encryption	🔿 Disable 🛛 💿 Enable		
Кеу Туре	HEX 💌	Key Size	64 Bits 💌
Key Index(1~4)	1 💌		
Network Key	•••••		
Confirm Key	•••••		

#### Wi-Fi Protected Access (WPA / WPA2 / WPA3)

WPA was created by the Wi-Fi Alliance to address the limitations and weaknesses found in WEP. This protocol is mainly based on the 802.11i standard. There are also two variations found in WPA called WPA-Personal (PSK) and WPA-Enterprise (EAP).

WPA-EAP requires the user to install a RADIUS Server on the network for authentication. WPA-Personal does not require the user to install a RADIUS Server on the network.

Comparing WPA-PSK with WPA-EAP, WPA-PSK is seen as a weaker authentication but comparing WPA-PSK to WEP, WPA-PSK is far more secure than WEP. WPA-EAP is the highest level of wireless security a user can use for wireless today.

WPA2/WPA3 are upgrades of WPA. WPA2/WPA3 yet again solves some possible security issues found in WPA. WPA2/WPA3 have two variations called WPA2/WPA3-Personal (PSK) and WPA2/WPA3-Enterprise (EAP) which are the same as found with WPA.

- WPA Mode: When WPA-Personal is selected for Authentication type, you must also select a WPA mode from the drop-down menu: AUTO (WPA or WPA2), WPA2 or WPA3, WPA2 Only or WPA3 Only.
- **Cipher Type:** When you select WPA-Personal, you must also select AUTO, AES, or TKIP from the drop-down menu.
- **Group Key Update:** Select the interval during which the group key will be valid. The default value of 3600 is recommended.
  - Pass Phrase: When you select WPA-Personal, enter a Pass Phrase in the corresponding field.

Wireless Settings	Ċ
Wireless Band	2.4GHz 🗸
Mode	Access Point
Network Name (SSID)	dlink
SSID Visibility	Enable 🗸
Auto Channel Selection	Enable 🗸
Channel	6 🗸
Channel Width	20 MHz 🗸
Authentication	WPA-Personal
PassPhrase Settings	
WPA Mode	AUTO (WPA or WPA2) V
Cipher Type	Auto V Group Key Update Interval 3600 (Sec)
Manual	O Periodical Key Change
Activated From	Sun 💙 : 00 💙 : 00 💙
Time Interval	1 (1~168)hour(s)
PassPhrase	
Confirm PassPhrase	
	notice: 8~63 in ASCII or 64 in Hex.
	(0-9,a-z,A-Z,~!@#\$%^&*()_+`-={}[];'\:" ,,/<>?)
	Save

#### Section 3 - Configuration

WPA Mode: When WPA-Enterprise is selected, you must also Wireless Settings select a WPA mode from the drop-down menu: AUTO (WPA or WPA2) or WPA2 Only. Wireless Band 2.4GHz 🗸 Mode Access Point V **Cipher Type:** When WPA-Enterprise is selected, you must also Network Name (SSID) dlink select a cipher type from the drop-down menu: SSID Visibility Enable 🗸 Auto, AES, or TKIP. Auto Channel Selection Enable 🗸 Channel 6 V **Group Key Update** Select the interval during which the group key Channel Width 20 MHz ~ Interval: will be valid, 3600 is the recommended value as Authentication WPA-Enterprise ~ a lower interval may reduce data transfer rates. — RADIUS Server Settings – WPA Mode AUTO (WPA or WPA2) ~ Network Access Enable or disable Microsoft Network Access Group Key Update Interval 3600 Cipher Type Auto 🗸 (Sec) Protection: Protection. Network Access Protection Network Access Disable O Enable Protection **RADIUS Server:** Enter the IP address of the RADIUS server to be RADIUS Server Mode used in authenticate. RADIUS Server External O Internal Primary RADIUS Server Setting **RADIUS Port:** Enter the RADIUS port. RADIUS Port 1812 RADIUS Server RADIUS Secret **RADIUS Secret:** Enter the shared secret to be used between the (0-9,a-z,A-Z,~!@#\$%^&\*()\_+`-={}[];'\:"|,./<>?) Backup RADIUS Server Setting (Optional) radius server and the DAP to authenticate. RADIUS Server RADIUS Port 1812 RADIUS Secret Accounting Mode: Click the drop-down menu to enable or disable (0-9,a-z,A-Z,~!@#\$%^&\*()\_+`-={}[];'\:"|,./<>?) the accounting mode. Primary Accounting Server Setting Accounting Mode Disable 🗸 Accounting Server: Enter the IP address of the accounting server. Accounting Port 1813 Accounting Server Accounting Secret **Accounting Port:** Enter the accounting port. (0-9,a-z,A-Z,~!@#\$%^&\*() +`-={}[];'\:"|,./<>?) Backup Accounting Server Setting (Optional) Accounting Server Accounting Port 1813 Accounting Secret: Enter the accounting secret. Accounting Secret (0-9,a-z,A-Z,~!@#\$%^&\*() +`-={}[];'\:"|,./<>?) Save: Save the updated configuration. Click **Configuration** > **Save and Activate** to make Save changes permanent.

## LAN

LAN is short for Local Area Network. This is considered your internal network. These are the IP settings of the LAN interface for the DAP-2682. These settings may be referred to as private settings. You may change the LAN IP address if needed. The LAN IP address is private to your internal network and cannot be seen on the Internet.

- Get IP From: Dynamic IP (DHCP) is chosen here. Choose this option if you have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.
- **IP Address:** Assign a static IP address that is within the IP address range of your network.

Enter the subnet mask. All devices in the network must **Subnet Mask:** share the same subnet mask.

Enter the IP address of the gateway/router in your **Default Gateway:** network.

Enter a DNS server IP address. This is usually the local IP **DNS**: address of your gateway/router.



### IPv6

#### Enable IPv6: Check to enable IPv6

Get IP From: Dynamic IP is chosen here. Choose this option the DAP-2682 can get IPv6 address automatically or use Static to set IPv6 address manually. When **Auto** is selected, the other fields here will be grayed out.

IPv6 Address: Enter the LAN IPv6 address used here.

**Prefix:** Enter the LAN subnet prefix length value used here.

Default Gateway: Enter the LAN default gateway IPv6 address used here.

IPv6 Settings		
Get IP From	Dynamic IP (DHCP) 🗸	
IPv6 Address		
Prefix		
Default Gateway		
		Save

## **Advanced Settings**

In the Advanced Settings Section the user can configure advanced settings concerning Performance, Wireless Resource, Multi-SSID, VLAN, Intrusion, Schedule, Internal RADIUS Server, ARP Spoofing Prevention, Bandwidth Optimization, Captive Portal, DHCP Server, Filters and Traffic Control. The following pages will explain settings found in the Advanced Settings section in more detail.

D-Link <sup>°</sup>				DAP-2682
🛕 Home 🥻 Maintenanc	e 👻 📙 Configu	ration 👻 👙 System	💋 Logout	🕐 Help
Home       Maintenanc         DAP-2682       Basic Settings         Wireless       LAN         IPv6       Advanced Settings         Advanced Settings       Wireless Resource         Wireless Resource       Multi-SSID         VLAN       Intrusion         Schedule       Internal RADIUS Server         ARP Spoofing Prevention       Bandwidth Optimization         Captive Portal       DHCP Server         IP Filters       Traffic Control         Status       Status	System Information Model Name Firmware Version System Name Location System Time Up Time Operation Mode(2.4GHz)	DAP-2682 v1.00 19:48:09 04/18/2020 dap2682 05/29/2020 12:15:51 2 Days, 00:4:13	Logout	

### Performance

On the Performance Settings page the users can configure more advanced settings concerning the wireless signal and hosting.

Wireless Band: Select either 2.4GHz or 5GHz.

Wireless: Use the drop-down menu to turn the wireless function On or Off.

- Wireless Mode: The different combination of clients that can be supported include Mixed 802.11n, 802.11g and 802.11b, Mixed 802.11g and 802.11b and 802.11n Only in the 2.4 GHz band and Mixed 802.11ac, Mixed 802.11n, 802.11a, 802.11a only, and 802.11n Only in the 5 GHz band. Please note that when backwards compatibility is enabled for legacy (802.11a/g/b) clients, degradation of 802.11n wireless performance is expected.
  - Data Rate\*: Indicate the base transfer rate of wireless adapters on the wireless LAN. The AP will adjust the base transfer rate depending on the base rate of the connected device. If there are obstacles or interference, the AP will step down the rate. This option is enabled in Mixed 802.11g and 802.11b mode (for 2.4 GHz) and 802.11a only mode (for 5 GHz). The choices available are Best (Up to 54), 54, 48, 36, 24, 18, 12, 9, 6 for 5 GHz and Best (Up to 54), 54, 48, 36, 24, 18, 12, 9, 6, 11, 5.5, 2 or 1 for 2.4 GHz.
- Beacon Interval (40-500): Beacons are packets sent by an access point to synchronize a wireless network. Specify a value in milliseconds. The default (100) is recommended. Setting a higher beacon interval can help to save the power of wireless clients, while setting a lower one can help a wireless client connect to an access point faster.

Wireless band	2.4GHz 🔻	
Wireless	On T	
Wireless Mode	Mixed 802.11n, 802.11g and 802.11b 🔻	
Data Rate	Best(Up to 600) V (Mbps)	
Beacon Interval (40-500)	100	
DTIM Interval (1-15)	1	
Transmit Power	100% ▼	
WMM (Wi-Fi Multimedia)	Enable V	
Ack Time Out (2.4GHz, 48~200)	48 (µS)	
Short GI	Enable V	
IGMP Snooping	Disable 🔻	
Multicast Rate	Disable  (Mbps)	
Multicast Bandwidth Control	Disable 🔻	
Maximum Multicast Bandwidth	100 kbps	
HT20/40 Coexistence	Enable V	
Transfer DHCP Offer to Unicast	Enable V	
		Save

DTM Interval (1-15): Select a Delivery Traffic Indication Message setting between 1 and 15. 1 is the default setting. DTIM is a countdown informing clients of the next window for listening to broadcast and multicast messages.

- **Transmit Power:** This setting determines the power level of the wireless transmission. Transmitting power can be adjusted to eliminate overlapping of wireless area coverage between two access points where interference is a major concern. For example, if wireless coverage is intended for half of the area, then select 50% as the option. Use the drop-down menu to select 100%, 50%, 25%, or 12.5%.
- WMM (Wi-Fi Multimedia): WMM stands for Wi-Fi Multimedia. Enabling this feature will improve the user experience for audio and video applications over a Wi-Fi network.

Ack Time Out To effectively optimize throughput over long distance links enter a value for Acknowledgement Time Out between 25 and 200 (2.4 GHZ, 48~200): microseconds for 5 GHz or from 48 to 200 microseconds for 2.4 GHz in the field provided.

- Short GI: Select Enable or Disable. Enabling a short guard interval can increase throughput. However, be aware that it can also increase the error rate in some installations due to increased sensitivity to radio-frequency installations.
- IGMP Snooping: Select Enable or Disable. Internet Group Management Protocol allows the AP to recognize IGMP queries and reports sent between routers and an IGMP host (wireless STA). When IGMP snooping is enabled, the AP will forward multicast packets to an IGMP host based on IGMP messages passing through the AP.

Multicast Rate : Select the multicast rate to adjust multicast packet data rates.

Multicast Bandwidth Adjust the multicast packet data rate here. The multicast rate is supported in AP mode, (2.4 GHZ and 5 GHZ) and WDS Control: with AP mode, including Multi-SSIDs.

Maximum Multicast Set the multicast packets' maximum bandwidth pass through rate from the Ethernet interface to the Access Point. Bandwidth :

- HT20/40 Coexistence : Enable this option to reduce interference from other wireless networks in your area. If the channel width is operating at 40 MHz and there is another wireless network's channel overlapping and causing interference, the Access Point will automatically change to 20 MHz.
- Transfer DHCP Offer to Enable to transfer the DHCP Offer to Unicast from LAN to WLAN. It is suggested to enable this function if stations number is larger Unicast : than 30.

### **Wireless Resource**

The Wireless Resource Control window is used to configure the wireless connection settings so that the device can detect the better wireless connection in your environment.

- Airtime Fairness: Click the drop-down menu to enable or disable the airtime fairness function.
  - **Band Steering:** Click the drop-down menu to enable the band steering function. When the wireless clients support both 2.4GHz and 5GHz and the 2.4GHz signal is not strong enough, the device will use 5GHz as higher priority.
  - Wireless Band: Click the drop-down menu to select the wireless band, 2.4GHz or 5GHz.
- Connection Limit: Click the drop-down menu to enable or disable the connection limit function. The option is for load balancing. This determines whether to limit the number of users accessing this device. The exact number is entered in the User Limit field below. This feature allows the user to share the wireless network traffic and the client using multiple APs. If this function is enabled and when the number of users exceeds this value, or the network utilization of this AP exceeds the percentage that has been specified, the DAP-2682 will not allow clients to associate with the AP.
- User Limit (0 64): This function is only available when Connection Limit is enabled. Set the maximum amount of users that are allowed access (0 - 64 users) to the device using the specified wireless band.



**11n Preferred:** This function is only available when Connection Limit is enabled. Use the drop-down menu to enable the 11n Preferred function. The wireless clients with 802.11n protocol will have higher priority to connect to the device.

**Network Utilization:** Click the drop-down menu to set the maximum utilization of this access point for service. The DAP-2682 will not allow any new clients to associate with the AP if the utilization exceeds the value the user specifies. When this network utilization threshold is reached, the device will pause for one minute to allow network congestion to dissipate.

Aging out: Use the drop-down menu to select the criteria for disconnecting the wireless clients.

- RSSI Threshold: When Aging out is RSSI, click the drop-down menu to select the percentage of RSSI. When the RSSI of wireless clients is lower than the specified percentage, the device disconnects the wireless clients. The function is only available when Aging out is RSSI.
- Data Rate Threshold: When Aging out is Data Rate, click the drop-down menu to select the threshold of data rate. When the data rate of wireless clients is lower than the specified number, the device disconnects the wireless clients. The function is only available when Aging out is Data Rate.
  - ACL RSSI: Click the drop-down menu to enable the ACL RSSI function. When enabled, the device denies the connection request from the wireless clients with the RSSI lower than the specified threshold below.
- ACL RSSI Threshold: Click the drop-down menu to set the ACL RSSI Threshold.
  - Save: Click to save the updated configuration. To make the updates permanent, click **Configuration > Save and Activate**.

## Multi-SSID

The device supports up to eight multiple Service Set Identifiers per radio. You can set the Primary SSID in the Basic > Wireless section. The SSID's factory default setting is dlink. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.

Enable Multi-SSID: Check to enable support for multiple SSIDs.

Enable Priority: Check to enable the Priority function.

#### Band: Select 2.4GHz or 5GHz.

- Index: You can select up to seven multi-SSIDs. With the Primary SSID, you have a total of eight multi-SSIDs per radio.
- **SSID:** Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.

Enable or Disable SSID visibility. Enabling this feature broadcasts the SSID **SSID Visibility:** across the network, thus making it visible to all network users.

The Multi-SSID security can be Open System, WPA-Personal, or WPA-Enterprise. For a detailed description of the Open System parameters please go to pages Security: 19. For a detailed description of the WPA-Personal parameters please go to page 20. For a detailed description of the WPA-Enterprise parameters please go to page 21.

Note: It is highly recommended that you encrypt your network for all SSIDs in Multi-SSID configuration.

**Priority:** Select the priority level of the SSID selected.

WMM (Wi-Fi	WMM stands for Wi-Fi Multimedia. Enabling this feature will improve the user experience for audio and video applications over a Wi-Fi
Multimedia):	network.

Multi-SSID Se	ettings
Enable Multi-SSID	Enable Priority
Band	2.4 GHz 🔻
Index	Primary SSID V
SSID	dlink
SSID Visibility	Enable 🔻
Security	Open System 🔻
Priority	0 🔻
WMM (Wi-Fi Multim	edia) Enable 🔻
Key Settings	
Encryption	Disable     Enable
Кеу Туре	HEX V Key Size 64 Bits V
Key Index(1~4)	1 .
Network Key	
Confirm Key	
	$(0-9,a-Z,A-Z,\sim!@\#$\%^&*()_+`-={}[];'\:" ,./<>?)$
	Add
	SSID Band Encryption Delete
Primary SSID	dlink 2.4 GHz None
	Save

Encryption: When you select Open System, toggle between Enable and Disable. If Enable is selected, the Key Type, Key Size, Key Index (1~4), Key, and Confirm Keys must also be configured.

Key Type: Select HEX or ASCII.

Key Size: Select 64-bit or 128-bit.

Key Index (1-4): Select from the 1st to 4th key to be set as the active key.

Key: Input up to four keys for encryption. You will select one of these keys in the Key Index drop-down menu.

WPA Mode: When you select either WPA-Personal or WPA-Enterprise, you must also choose a WPA mode from the drop-down menu: AUTO (WPA or WPA2), WPA2 Only, or WPA Only. WPA and WPA2 use different algorithms. AUTO (WPA or WPA2) allows you to use both WPA and WPA2. In addition, you must configure Cipher Type, and Group Key Update Interval.

**Cipher Type:** Select Auto, AES, or TKIP from the drop-down menu.

Group Key Update Interval: Select the interval during which the group key will be valid. The default value of 1800 seconds is recommended.

Pass Phrase: When you select WPA-Personal, please enter a Pass Phrase in the corresponding field.

Confirm Pass Phrase: When you select WPA-Personal, please re-enter the Pass Phrase entered in the previous item in the corresponding field.

RADIUS Server: When you select WPA-Enterprise, enter the IP address of the RADIUS server. In addition, you must configure RADIUS Port and RADIUS Secret.

**RADIUS Port:** Enter the RADIUS port.

**RADIUS Secret:** Enter the RADIUS secret.

Accounting Mode: Click the drop-down menu to enable or disable the accounting mode.

Accounting Server: Enter the IP address of the accounting server.

## VLAN

### **VLAN List**

The DAP-2682 supports VLANs. VLANs can be created with a Name and VID. Mgmt (TCP stack), LAN, Primary/Multiple SSID, and WDS connection can be assigned to VLANs as they are physical ports. Any packet which enters the DAP-2682 without a VLAN tag will have a VLAN tag inserted with a PVID. The VLAN List tab displays the current VLANs.

VLAN Status: Use the radio button to toggle to Enable. Next, go to the Add/Edit VLAN tab to add or modify an item on the VLAN List tab.

VLAN Mode: The current VLAN mode is displayed.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

**VID:** Displays the VID of the VLAN.

VLAN Name: Displays the name of the VLAN.

Untag VLAN Ports Displays the untagged ports.

Tag VLAN Ports: Displays the tagged ports.

Edit: Clink the icon to edit the current VLAN.

**Delete:** Click the icon to delete the current VLAN.

	: Oisable : Static(2.4G),		e	Save
VLAN List	Port List	Add/Edit VLAN	PVID Setting	
	Name	Untag VLAN Ports	Tag VLAN Ports	Edit Delete
1 defau	lt	Mgmt, LAN, Primary(2.4G), S-1(2.4G), S-2(2.4G), S-3(2.4G), S- 4(2.4G), S-5(2.4G), S- 6(2.4G), S-7(2.4G), Primary(5G), S-1(5G), S- 2(5G), S-3(5G), S-4(5G), S-5(5G), S-6(5G), S-7(5G)		2 0

### **Port List**

The Port List tab displays the current ports. If you want to configure the guest and internal networks on a Virtual LAN (VLAN), the switch and DHCP server you are using must also support VLANs. As a prerequisite step, configure a port on the switch for handling VLAN tagged packets as described in the IEEE 802.1Q standard.

- VLAN Status: Use the radio button to toggle to Enable. Next, go to the Add/Edit VLAN tab to add or modify an item on the VLAN List tab.
- VLAN Mode: Displays the current VLAN mode.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.
- **Port Name:** The name of the port is displayed in this column.

Tag VID: The Tagged VID is displayed in this column.

- Untag VID: The Untagged VID is displayed in this column.
  - **PVID:** The Port VLAN Identifier is displayed in this column.

VLAN Status : 💿	Disable O Enabl	a Save	
VLAN Mode : Stat	ic(2.4G), Static(5G)		
VLAN List Port	t List Add/Edi	VLAN PVID Setting	a
Port Name	Tag VID	Untag VID	PVID
Mgmt		1	1
LAN		1	1
Primary(2.4G)		1	1
Primary(5G)		1	1
S-1(2.4G)		1	1
S-2(2.4G)		1	1
S-3(2.4G)		1	1
S-4(2.4G)		1	1
S-5(2.4G)		1	1
S-6(2.4G)		1	1
S-7(2.4G)		1	1
S-1(5G)		1	1
S-2(5G)		1	1
S-3(5G)		1	1
S-4(5G)		1	1
S-5(5G)		1	1
S-6(5G)		1	1
S-7(5G)		1	1

### Add/Edit VLAN

The Add/Edit VLAN tab is used to configure VLANs. Once you have made the desired changes, click the Save button to let your changes take effect.

VLAN Status:	Use the radio button to toggle to Enable.
VLAN Mode:	Displays the current VLAN mode.
VLAN ID:	Provide a number between 1 and 4094 for the Internal VLAN.

- VLAN Name: Enter the VLAN to add or modify.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

VLAN Settings									
VLAN Status :      Disable VLAN Mode : Static(2.4G)						C	Sav	/e	
VLAN List Port List	Add	/Edit VI	AN	PV	ID Sett	ing			
						_			
VLAN ID (VID)		Name							
	elect All	Mgmt	LAN						
Untag	All	•	•						_
Tag Not Member	All		0						-
-2.4GHz	All								
MSSID Port	Select All	Primar	v S-1	S-2	S-3	S-4	S-5	S-6	S-7
Untag	All	0	0	0	0	0	0	0	0
Tag	All	0	0	0	0	0	0	0	
Not Member	All								
5GHz									
	Select All	Primar		S-2	S-3	S-4	S-5	S-6	S-7
Untag	All	0	0	0	0	0	0	0	•
Tag	All	0	0	0	0	0	0	0	
Not Member	All								
								S	ave

#### **PVID Settings**

The PVID Setting tab is used to enable/disable the Port VLAN Identifier Auto Assign Status as well as to configure various types of PVID settings. Click the Save button to let your changes take effect.

VLAN Status:	Use the radio but Enable and Disab	ton to toggle between lle.

- **VLAN Mode:** Displays the current VLAN mode.
- **PVID Auto Assign Status:** Use the radio button to toggle PVID auto assign status to Enable.

VLAN Settings	3			
VLAN Status : VLAN Mode : Stati VLAN List Por	c(2.4G), Static(5G)		Sav D Setting	re
PVID Auto Assign 5	Status Disable Port Mgmt PVID 1			
MSSID Port PVID 	Primary S-1	S-2 S-3 S-4	4 S-5 S-6	S-7
MSSID Port PVID	Primary S-1	S-2 S-3 S- 1 1	4 S-5 S-6	S-7
				Save

### Intrusion

The Wireless Intrusion Protection window is used to set APs as All, Valid, Neighborhood, Rogue, and New. Click the Save button to let your changes take effect.

#### Wireless Band: Select 2.4GHz or 5GHz.

AP List: Click the drop-down menu to select All, Valid, Neighbor, Rogue, and New.

The following is a definition of the listed AP categories:

- Valid: An AP which is authenticated to the network with encryption is classified as valid.
- Neighbor: A detected AP with a weak signal strength is classified as a suspect neighbor.
- Rogue: An AP that has been installed on the secure network without explicit authorization.
- New: An alternative category.

From the AP List select a detected AP and click **Set as Valid, Set as Neighborhood, Set as Rogue,** or **Set as New** to manually define the category type for the AP. Alternatively, click the radio button to mark all new access points as valid or rogue.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

Wireless Intru	ision Prote	ection			
Wireless Band	2.4GHz ▼				
Detect					
AP List					
🔳 Type Ba	nd CH	SSID	BSSID	Last Seen	Status
	as Neighborhood ess Points as V	Set as Rogue	Set as New		
-		ogue Access Points	;		
				C	Save

## Schedule

The Wireless Schedule Settings window is used to add and modify scheduling rules on the device. Click the Save button to let your changes take effect.

- Wireless Schedule: Use the drop-down menu to enable the device's scheduling feature.
  - Name: Enter a name for the new scheduling rule in the field provided.
  - Index: Use the drop-down menu to select the desired SSID.
  - **SSID:** This read-only field indicates the current SSID in use. To create a new SSID, go to the Wireless Settings window (Basic Settings > **Wireless**).
  - **Day(s):** Toggle the radio button between All Week and Select Day(s). If the second option is selected, check the specific days you want the rule to be effective on.
  - All Day(s): Check this box to have your settings apply 24 hours a day.
  - Start Time: Enter the beginning hour and minute, using a 24-hour clock.
  - **End Time:** Enter the ending hour and minute, using a 24-hour clock.

/ireless Schedule	Disable	e 🗸				
Add Schedule Ru	e					
lame			]			
ndex	Primary SSI	D 2.4G 🛩				
SID	dlink		]			
Day(s)	O All Week	All Week  Select Day(s)				
	Sun 🗌	Mon 🗌 Tue	Wed Thu	Fri Sat		
All Day(s)						
Start Time	:	(hour:r	ninute, 24 hour tim	e)		
End Time	:	: (hour:minute, 24 hour time) Overnight				
	Add Cl	ear				
Schedule Rule Lis	t					
Name SS In	ID SSID lex	Day(s)	Time Frame	Wireless Edit (		

## **Internal RADIUS Server**

The DAP-2682 features a built-in RADIUS server. Once you have finished adding a RADIUS account, click the Save button to let your changes take effect. The newly-created account will appear in this RADIUS Account List. The radio buttons allow the user to enable or disable the RADIUS account. Click the icon in the delete column to remove the RADIUS account. We suggest you limit the number of accounts below 30.

- User Name: Enter a name to authenticate user access to the internal RADIUS server.
- **Password:** Enter a password to authenticate user access to the internal RADIUS server. The length of your password should be 8~64.
  - Status: Toggle the drop-down menu between Enable and Disable.

RADIUS Account List: Displays the list of users.

Internal RADIUS Server									
Add RADIUS Account									
User Name Password									
Status	Enable 🔻								
RADIUS Account list									
User Name		Enable	Disable	Delete					
			(	Save					
# **ARP Spoofing Prevention**

The ARP Spoofing Prevention feature allows users to add IP/MAC address mapping to prevent ARP spoofing attacks.

ARP Spoofing Prevention: This drop-down allows you to enable the ARP spoofing prevention function.

Add: Click to create a defined rule.

Clear: Click to clear a defined rule.

Gateway IP Address: Enter a gateway IP address.

Gateway MAC Address: Enter a gateway MAC address.

Delete All: Click to delete all gateway entries.

Edit: Click to edit the selected gateway entry.

**Delete:** Click to delete the gateway entry.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

ARP Spoofing Pre	vention Settings	
ARP Spoofing Prevention	Disable V	
Add Gateway Addres	s	
Gateway IP Address		
Gateway MAC Address		
	Add Clear	
Gateway Address Lis	t	
Total Entries: 0		Delete All
Gateway IP Address	Gateway MAC Address	Edit Delete
		Save

# **Bandwidth Optimization**

The Bandwidth Optimization window allows the user to manage the bandwidth of the device and arrange the bandwidth for various wireless clients. When the Bandwidth Optimization rule is finished, click the **Add** button. To discard the Add Bandwidth Optimization Rule settings, click the **Clear** button. Click the **Save** button to let your changes take effect.

Enable Bandwidth Optimization:	Use the drop-down menu to Enable the Bandwidth Optimization function.
Downlink Bandwidth:	Enter the downlink bandwidth of the device in Mbits per second.
Uplink Bandwidth:	Enter the uplink bandwidth of the device in Mbits per second.
Allocate average BW for each station:	AP will distribute average bandwidth for each client.
Allocate maximum BW for each station:	Specify the maximum bandwidth for each connected client. Reserve certain bandwidth for future clients.
Allocate different BW for a/b/g/n stations:	The weight of 11b/g/n and 11a/n client are 10%/20%/70% and 20%/80%. AP will distribute different bandwidth for 11a/b/g/n clients.
Allocate specific BW for SSID:	All clients share the total bandwidth.
Rule Type:	Use the drop-down menu to select the type that is applied to the rule. Available options are: Allocate average BW for each station, Allocate maximum BW for each station, Allocate different BW for 1a/b/g/n stations, and Allocte specific BW for

Bandwidth Opti	mization			
Enable Bandwidth Optimi	zation Disable	¥		
Downlink Bandwidth	80	Mbits/sec		
Uplink Bandwidth	80	Mbits/sec		
Add Bandwidth Op	otimization Ru	le		
Rule Type	Allocate average B	W for each station	Ŧ	
Band	2.4 GHz ▼			
SSID Index	Primary SSID V			
Downlink Speed	Kbits	/sec 🔻		
Uplink Speed	Kbits	/sec 🔻		
	Add Clear			
Bandwidth Optimiz	zation Rules			
Band Type	SSID Index	Downlink Speed	Uplink Speed	Edit Del
	INCEX			
			(	Save

SSID.

- Band: Use the drop-down menu to toggle the wireless band between 2.4GHz and 5GHz.
- SSID Index: Use the drop-down menu to select the SSID for the specified wireless band.
- Downlink Speed: Enter the limitation of the downloading speed in either Kbits/sec or Mbits/sec for the rule.
  - **Uplink Speed:** Enter the limitation of the uploading speed in either Kbits/sec or Mbits/sec for the rule.
    - Add: Click to create a defined rule.
    - **Clear:** Click to remove the settings from the menu interface.
    - Edit: Click to edit the selected gateway entry.
    - **Delete:** Click to delete the gateway entry.
      - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

# **Captive Portal**

### Authentication Settings-Web Redirection Only

The Captive Portal is a built-in web authentication server. When a station connects to an AP, the web browser will be redirected to a web authentication page. In this window, users can view and configure the Captive Portal settings. After selecting Web Redirection Only as the Authentication Type, we can configure the redirection website URL that will be applied to each wireless client in this network.

Session timeout(1-1440):	can be from 1 to 1440 minutes. By default, this	Captive Portal Aut	hentication	
	value is 60 minutes.	Session Timeout (1-1440)	60 Minute(s)	
Band:	Select 2.4GHz or 5GHz.	Band	2.4GHz 🔻	
		SSID Index	Primary SSID V	
SSID Index:	Select the SSID for this Authentication.	Authentication Type	Disable <b>v</b>	
Authentication Type:	Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the Web Redirection option.	Band SSID	Index Captive Profile	Save Edit Delete
Web Redirection State:	The default setting is Enable when you select <b>Web Redirection Only</b> .			
URL Path:	Select whether to use either HTTP or HTTPS here. After selecting either http:// or https://, enter the URL of the website that will be used in the space provided.			
IPIF Status:	Select to <b>Enable</b> or <b>Disable</b> the Captive Portal with its IP interface feature here.			
VLAN Group:	Enter the VLAN Group ID here.			

- Get IP From: Static IP (Manual) is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.
- IP Address: Assign a static IP address that is within the IP address range of your network.
- Subnet Mask: Enter the subnet mask. All devices in the network must share the same subnet mask.

Enter the IP address of the gateway/router in **Gateway:** your network.

Enter a DNS server IP address. This is usually **DNS**: the local IP address of your gateway/router.

Click to edit the selected entry.

#### Edit:

Click to delete the entry.

#### **Delete:**

Click to save the updated configuration.

Save: To make the updates permanent, click Configuration > Save and Activate.

#### Authentication Settings- Username/Password

The Captive Portal is a built-in web authentication server. When a station connects to an AP, the web browser will be redirected to a web authentication page. In this window, users can view and configure the Captive Portal settings. After selecting Username/Password as the Authentication Type, we can configure the Username/Password authentication that will be applied to each wireless client in this network.

Session timeout(1-1440):	Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.	S
Band:	Select 2.4GHz or 5GHz.	S A
SSID Index:	Select the SSID for this Authentication.	
Authentication Type:	Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the Username/Password option.	
Web Redirection State:	Disable is default setting. Select Enable to enable the website redirection feature.	
URL Path:	Select whether to use HTTP or HTTPS. After selecting either http://or https://, enter the URL of the website that will be used in the space provided.	
IPIF Status:	Select to Enable or Disable the Captive Portal with its IP interface feature here.	L
VLAN Group:	Enter the VLAN Group ID here.	

Captive Portal Au Session Timeout (1-1440)	60 Minute(s)
Band	2.4GHz V
SSID Index	
	Primary SSID V
Authentication Type — Web Redirection Interface	Username/Password  Cottings
Web Redirection State	Disable V
URL Path	http:// V
IP Interface Settings	nttp:// *
IPIF Status	Disable 🔻
VLAN Group	
Get IP From	Static IP(Manual)
IP Address	
Subnet Mask	
Gateway	
DNS	
Username/Password Setti	ngs
Username	
Password	
	Add Clear
	Username Edit Delete
1	
	Save
	Save
Band SSID	Index Captive Profile Edit Delete

- Get IP From: Static IP (Manual) is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.
- IP Address: Assign a static IP address that is within the IP address range of your network.
- Subnet Mask: Enter the subnet mask. All devices in the network must share the same subnet mask.
  - Gateway: Enter the IP address of the gateway/router in your network.
    - **DNS:** Enter a DNS server IP address. This is usually the local IP address of your gateway/router.
  - Username: Enter the username for the new account here.
  - Password: Enter the password for the new account here.
    - Add: Click to create a defined rule.
    - **Clear:** Click to remove the settings from the menu interface.
    - Edit: Click to edit the selected gateway entry.
    - **Delete:** Click to delete the gateway entry.
    - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

### Authentication Settings- Passcode

The Captive Portal is a built-in web authentication server. When a station connects to an AP, the web browser will be redirected to a web authentication page. In this window, users can view and configure the Captive Portal settings. After selecting Passcode as the Authentication Type, you can configure the Passcode authentication that will be applied to each wireless client in this network.

	Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.	Ca Sessio
Band:	Select 2.4GHz or 5GHz.	Band SSID I
SSID Index:	Select the SSID for this Authentication.	Auther Wel
Authentication Type:	Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the Passcode option.	URI IP : IPIF VLA Get
Web Redirection State:	The default setting is Disable. Select Enable to enable the website redirection feature.	IP A Sub Gat
URL Path:	Select whether to use HTTP or HTTPS here. After selecting either http:// or https://, enter the URL of the website that will be used in the space provided.	DNS Pas Pas Dur
IPIF Status:	Select to Enable or Disable the Captive Portal with its IP interface feature here.	Las Use
VLAN Group:	Enter the VLAN Group ID here.	De

Captive Portal Aut	hentication
Session Timeout (1-1440)	60 Minute(s)
Band	2.4GHz T
SSID Index	Primary SSID V
Authentication Type	Passcode 🔻
Web Redirection Interface	Settings
Web Redirection State	Disable 🔻
URL Path	http:// 🔻
IP Interface Settings	
IPIF Status	Disable 🔻
VLAN Group	
Get IP From	Static IP(Manual)
IP Address	
Subnet Mask	
Gateway	
DNS	
Passcode Settings	
Passcode Quantity	
Duration	Hour
Last Active Time	Year 2020 V Month Jan V Day 1 V Hour 1:00 V
User Limit	
	Add Clear
Delete All	
Passcode [	Duration Last Active Time User Limit Delete

- Get IP From: Static IP (Manual) is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.
- IP Address: Assign a static IP address that is within the IP address range of your network.
- Subnet Mask: Enter the subnet mask. All devices in the network must share the same subnet mask.
  - Gateway: Enter the IP address of the gateway/router in your network.
    - **DNS:** Enter a DNS server IP address. This is usually the local IP address of your gateway/router.
- **Passcode Quantity:** Enter the number of ticket that will be used here.
  - **Duration:** Enter the duration value, in hours, for this passcode.
  - Last Active Day: Select the last active date for this passcode here. Year, Month and Day selections can be made.
    - **User Limit:** Enter the maximum amount of users that can use this passcode at the same time

Add:	Click to create a defined rule.
Clear:	Click to remove the settings from the menu interface.
Delete All:	Click to delete all passcode setting entries
Edit:	Click to edit the selected entry.
Delete:	Click to delete the entry.
Save:	Click to save the updated configuration. To make

Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

#### **Authentication Settings- Remote RADIUS**

The Captive Portal is a built-in web authentication server. When a station connects to an AP, the web browser will be redirected to a web authentication page. In this window, users can view and configure the Captive Portal settings. After selecting Remote RADIUS as the Authentication Type, you can configure the Remote RADIUS authentication that will be applied to each wireless client in this network.

	Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.
Band:	Select 2.4GHz or 5GHz.
SSID Index:	Select the SSID for this Authentication.
Authentication Type:	Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the Remote RADIUS option.
Web Redirection State:	The default setting is Disable. Select Enable to enable the website redirection feature.
URL Path:	Select whether to use either HTTP or HTTPS here. After selecting either http:// or https://, enter the URL of the website that will be used in the space provided.
IPIF Status:	Select to Enable or Disable the Captive Portal with its IP interface feature here.
VLAN Group:	Enter the VLAN Group ID here.

Session Timeout (1-1440)	60 Minute(s)	
Band	5GHz V	
SSID Index	Primary SSID V	
Authentication Type	Remote RADIUS V	
Web Redirection Interface	Settings	
Web Redirection State	Disable 🗸	
URL Path	http:// 🗸	
IP Interface Settings		
IPIF Status	Disable 🗸	
VLAN Group		
Get IP From	Static IP(Manual) V	
IP Address		
Subnet Mask		
Gateway		
DNS		
Remote RADIUS Settings		
Radius Server Settings		
Radius Server	Radius Port 1812	
Radius Secret		
Remote RADIUS Type	SPAP V	
Secondary radius Serve	r Settings	
Radius Server	Radius Port 1812	
Radius Secret		
Remote RADIUS Type	SPAP V	
Third radius Server Set	ings	
Radius Server	Radius Port 1812	
Radius Secret		
Remote RADIUS Type	SPAP V	
	Sav	е
Band SSID	Index Captive Profile Edit D	ele
		crc
		_

- Get IP From: Static IP (Manual) is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.
- IP Address: Assign a static IP address that is within the IP address range of your network.
- Subnet Mask: Enter the subnet mask. All devices in the network must share the same subnet mask.
  - Gateway: Enter the IP address of the gateway/router in your network.
    - **DNS:** Enter a DNS server IP address. This is usually the local IP address of your gateway/router.
- Radius Server: Enter the RADIUS server's IP address here
  - Radius Port: Enter the RADIUS server's port number here
  - Radius Port: Enter the RADIUS server's shared secret here
- **Remote Radius Type:** Select the remote RADIUS server type here. Currently, only SPAP will be used.
  - **Edit:** Click to edit the selected entry.
  - **Delete:** Click to delete the entry.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

### **Authentication Settings- LDAP**

The Captive Portal is a built-in web authentication server. When a station connects to an AP, the web browser will be redirected to a web authentication page. In this window, users can view and configure the Captive Portal settings. After selecting LDAP as the Authentication Type, you can configure the LDAP authentication that will be applied to each wireless client in this network.

	Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.	
Band:	Select 2.4GHz or 5GHz.	
SSID Index:	Select the SSID for this Authentication.	
Authentication Type:	Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the LDAP option.	
Web Redirection State:	The default setting is Disable. Select Enable to enable the website redirection feature.	
URL Path:	Select whether to use either HTTP or HTTPS here. After selecting either http:// or https://, enter the URL of the website that will be used in the space provided.	
IPIF Status:	Select to Enable or Disable the Captive Portal with its IP interface feature here.	
VLAN Group:	Enter the VLAN Group ID here.	
Get IP From:	Static IP (Manual) is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP- 2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.	

Minute(s)
: IP(Manual)
: IP(Manual)
le 🗸
(ou=,dc=)
(ex.cn)
Save
Captive Profile Edit Delet

IP Address:	Assign a static IP address that is within the IP address range of your network.
Subnet Mask:	Enter the subnet mask. All devices in the network must share the same subnet mask.
Gateway:	Enter the IP address of the gateway/router in your network.
DNS:	Enter a DNS server IP address. This is usually the local IP address of your gateway/router.
Server:	Enter the LDAP server's IP address or domain name here.
Port:	Enter the LDAP server's port number here.
Authenticate Mode:	Select the authentication mode here. Options to choose from are Simple and TLS.
Username:	Enter the LDAP server account's username here.
Password:	Enter the LDAP server account's password here.
Base DN:	Enter the administrator's domain name here
Account Attribute:	Enter the LDAP account attribute string here. This string will be used to search for clients.
Identity:	Enter the identity's full path string here. Alternatively, select the Auto Copy checkbox to automatically add the generic full path of the web page in the identity field.
Edit:	Click to edit the selected entry.
Delete:	Click to delete the entry.
Save:	Click to save the updated configuration. To make the updates permanent, click Configuration > <b>Save and Activate.</b>

#### **Authentication Settings- POP3**

The Captive Portal is a built-in web authentication server. When a station connects to an AP, the web browser will be redirected to a web authentication page. In this window, users can view and configure the Captive Portal settings. After selecting POP3 as the Authentication Type, you can configure the POP3 authentication that will be applied to each wireless client in this network.

	Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.
Band:	Select 2.4GHz or 5GHz.
SSID Index:	Select the SSID for this Authentication.
Authentication Type:	Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the POP3 option.
Web Redirection State:	The default setting is Disable. Select Enable to enable the website redirection feature.
URL Path:	Select whether to use either HTTP or HTTPS here. After selecting either http:// or https://, enter the URL of the website that will be used in the space provided.
IPIF Status:	Select to Enable or Disable the Captive Portal with its IP interface feature here.

**VLAN Group:** Enter the VLAN Group ID here.

ession Timeout (1-1440)	60 Minute(s)
and	5GHz V
SID Index	Primary SSID V
uthentication Type	
Web Redirection Interface	
Web Redirection State	Disable 🗸
URL Path	http:// 🗸
IP Interface Settings	
IPIF Status	Disable 🗸
/LAN Group	
Get IP From	Static IP(Manual) V
IP Address	
Subnet Mask	
Gateway	
DNS	
POP3 Settings	
Server	
Port	110
Connection Type	None V
	Hone ·
	Save
Band SSID	Index Captive Profile Edit Delete

- Get IP From: Static IP (Manual) is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2682. When Dynamic IP (DHCP) is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.
- IP Address: Assign a static IP address that is within the IP address range of your network.
- Subnet Mask: Enter the subnet mask. All devices in the network must share the same subnet mask.
  - Gateway: Enter the IP address of the gateway/router in your network.
    - **DNS:** Enter a DNS server IP address. This is usually the local IP address of your gateway/router.
    - Server: Enter the POP3 server's IP address or domain name here.
      - **Port:** Port: Enter the POP server's port number here.
- **Connection Type:** Select the connection type here. Options to choose from are None and SSL/TLS.
  - Edit: Click to edit the selected entry.
  - **Delete:** Click to delete the entry.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

### Login Page Upload

In this window, users can upload a custom login web page that will be used by the captive portal feature. Click the **Browse** button to navigate to the login style located on the managing computer and then click the **Upload** button to initiate the upload.

Upload Login Style From Local Hard Drive:	In this field the path to the login style file that will be uploaded is be displayed. Alternatively, the path can be manually entered here.
Login Page Style List :	Select the wireless band and login style that will be used in each SSID here. Click the download button to download the template file for the login page and click the delete button to delete the template file.

Click to save the updated configuration.

Save: To make the updates permanent, click Configuration > Save and Activate.

Upload Login Style From Local Hard Drive	Upload Login Style From Local Hard Drive				
Upload Login Style from file : Choose File No file chosen Upload					
The Left space 457216 Byte(s)					
Login Page Style List					
Wireless Band 2.4GHz V					
ID Style Name Pri S-1 S-2 S-3 S-4 S-5 S-6 S-7	Download Del				
1 pages_default.tar • • • • • • • •					
2 pages_headerpic.tar O O O O O O O O					
3 pages_license.tar 0 0 0 0 0 0 0 0					
,					
	Save				

### **MAC Bypass**

The DAP-2682 features a wireless MAC Bypass. Once finished editing these settings, click the Save button to let the changes take effect.

Wireless Band: Select the wireless band for MAC Bypass.

SSID Index: Select the SSID for MAC Bypass.

MAC Address: Enter each MAC address that you wish to include in your bypass list, and click Add.

MAC Address List: When a MAC address is entered, it appears in this list. Highlight a MAC address and click the Delete icon to remove it from this list.

**Upload File:** To upload a MAC bypass list file, click Browse and navigate to the MAC bypass list file saved on the computer, and then click Upload.

Load MAC File to Local To download MAC bypass list file, click Download Hard Driver: and to save the MAC bypass list.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

MAC Bypass Setti	ngs
Wireless Band	2.4GHz V
SSID Index	Primary SSID V
MAC Address	
ID MAC Address	Delete
Upload MAC File	
Upload File :	Choose File No file chosen Upload
Download MAC File Load MAC File to Local Hard Driver :	Download

# **DHCP Server**

### **Dynamic Pool Settings**

The DHCP address pool defines the range of the IP address that can be assigned to stations in the network. A Dynamic Pool allows wireless stations to receive an available IP with lease time control. If needed or required in the network, the DAP-2682 is capable of acting as a DHCP server.

Function Enable/Disable: Dynamic Host Configuration Protocol (DHCP) assigns dynamic IP addresses to devices on the network. This protocol simplifies network management and allows new wireless devices to receive IP addresses automatically without the need to manually assign new IP addresses. Select Enable to allow the DAP-2682 to function as a DHCP server.

IP Assigned From: Input the first IP address available for assignment on your network.

IP Pool Range(1-254): Enter the number of IP addresses available for assignment. IP addresses are increments of the IP address specified in the "IP Assigned From" field.

Dynamic Pool Settings	
DHCP Server Control	
Function Enable/Disable	Disable 🔻
Dynamic Pool Settings	
IP Assigned From	192.168.0.20
IP Pool Range(1-254)	235
Subnet Mask	255.255.255.0
Gateway	192.168.0.50
WINS	192.168.0.50
DNS	192.168.0.50
Domain Name	dlink-ap
Lease Time (60 - 31536000 sec)	604800
	Save

- Subnet Mask: All devices in the network must have the same subnet mask to communicate. Enter the subnet mask for the network here.
  - Gateway: Enter the IP address of the gateway on the network.
    - WINS: Specify the Windows Internet Naming Service (WINS) server address for the wireless network. WINS is a system that determines the IP address of a network computer that has a dynamically assigned IP address.
    - **DNS:** Enter the IP address of the Domain Name System (DNS) server. The DNS server translates domain names such as www.dlink.com into IP addresses.

Domain Name: Enter the domain name of the network, if applicable. (An example of a domain name is: www.dlink.com.)

Lease Time: The lease time is the period of time before the DHCP server will assign new IP addresses.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

## **Static Pool Setting**

The DHCP address pool defines the range of IP addresses that can be assigned to stations on the network. A static pool allows specific wireless stations to receive a fixed IP without time control.

Function Enable/Disable: Dynamic Host Configuration Protocol (DHCP) assigns IP addresses to wireless devices on the network. This protocol simplifies network management and allows new wireless devices to receive IP addresses automatically without the need to manually assign IP addresses. Select Enable to allow the DAP-2682 to function as a DHCP server.

Assigned IP: Use the Static Pool Settings to assign the same IP address to a device every time you start up. The IP addresses assigned in the Static Pool list must NOT be in the same IP range as the Dynamic Pool. After you have assigned a static IP address to a device via its MAC address, click Apply; the device will appear in the Assigned Static Pool at the bottom of the screen. You can edit or delete the device in this list.

Assigned MAC Address: Enter the MAC address of the device requesting association here.

Subnet Mask: Define the subnet mask of the IP address specified in the "IP Assigned From" field.

Static Pool Settings	
DHCP Server Control	
Function Enable/Disable	Enable 💌
Static Pool Setting	
Host Name	
Assigned IP	
Assigned MAC Address	
Subnet Mask	255.255.255.0
Gateway	
WINS	
DNS	
Domain Name	dlink-ap
	Save
Host Name MAC Address	IP Address Edit Delete

- Gateway: Specify the Gateway address for the wireless network.
  - WINS: Specify the Windows Internet Naming Service (WINS) server address for the wireless network. WINS is a system that determines the IP address of a network computer with a dynamically assigned IP address, if applicable.
  - **DNS:** Enter the DNS server address for your wireless network.

Domain Name: Specify the domain name for the network.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

## **Current IP Mapping List**

This window displays information about the current assigned DHCP dynamic and static IP address pools. This information is available when you enable the DHCP server on the AP and assign dynamic and static IP address pools.

	These are IP address pools the DHCP server has	Current IP Mapping List
Profile:	assigned using the dynamic pool setting.	Current DHCP Dynamic Pools
<b>Binding MAC Address:</b>	The MAC address of a device on the network that is assigned an IP address from the DHCP	Host Name Binding MAC Address Assigned IP Address Lease Time
	dynamic pool.	Current DHCP Static Pools Host Name Binding MAC Address Assigned IP Address
Assigned IP Address:	The current corresponding DHCP-assigned IP address of the device.	
Lease Time:	The length of time that the dynamic IP address will be valid.	
Current DHCP Static Pools:	These are the IP address pools of the DHCP server assigned through the static pool settings.	
Binding MAC Address:	The MAC address of a device on the network that is within the DHCP static IP address pool.	
Assigned IP Address:	The current corresponding DHCP-assigned static IP address of the device.	
<b>Binding MAC Address:</b>	The MAC address of a device on the network	
	that is assigned an IP address from the DHCP dynamic pool.	
Assigned IP Address:	The current corresponding DHCP-assigned static IP address of the device.	
Save:	Click to save the updated configuration. To make the updates permanent, click	

Configuration > Save and Activate.

## **Filters**

### Wireless MAC ACL

This page allows the user to configure Wireless MAC ACL settings for access control.

Wireless Band: Displays the current wireless band rate.

Access Control List: Select Disable to disable the filters function.

Select **Accept** to accept only those devices with MAC addresses in the Access Control List. All other devices not on the list will be rejected.

Select **Reject** to reject the devices with MAC addresses on the Access Control List. All other devices not on the list will be accepted.

- **SSID Index:** Click the drop-down menu to select the SSID for the specified wireless band.
- MAC Address: Enter each MAC address that you wish to include in your filter list, and click **Apply**.
- MAC Address List: When you enter a MAC address, it appears in this list. Highlight a MAC address and click Delete to remove it from this list.

#### **Current Client**

- Information: This table displays information about all the current connected stations.
- **Upload File:** To upload an ACL list fle, click Browse and navigate to the ACL list file saved on the computer, and then click Upload.

#### Load MAC File to Local

Hard Driver: To download the ACL list, click Download and to save the ACL list.

Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

Wireless MAC AC	Settings	_	_	_
Wireless Band	2.4GHz 🔻	Тс	otal : 512 Used	1:0
Access Control List	Disable 🔻			
SSID Index	Primary SSID V			
MAC Address	:	:	]: 📃 🧲	Add
ID MAC Address Current Client Information MAC Address SSID	Band	Delete Authentication	Signal	Add
Upload ACL File				
Upload File :	Choose File No f	file chosen	Upload	
Download ACL File Load ACL File to Local Hard Driver :	Download			
				Save

### **WLAN Partition**

This page allows the user to configure a WLAN Partition.

Wireless Band: Displays the current wireless bar	۱d.
--	-----

- Link Integrity: Select Enable or Disable. If the Ethernet connection between the LAN and the AP is disconnected, enabling this feature will cause the wireless segment associated with the AP to be disassociated from the AP.
- Ethernet WLAN Access: The default is Enable. When disabled, all data from the Ethernet to associated wireless devices will be blocked. Wireless devices can still send data to the Ethernet.
- Internal Station Connection: The default value is Enable, which allows stations to intercommunicate by connecting to a target AP. When disabled, wireless stations cannot exchange data on the same Multi-SSID. In Guest mode, wireless stations cannot exchange data with any station on your network.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

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nable
able

### **IP Filter Settings**

Enter the IP address or network address that will be used in the IP filter rule (e.g. an IP address like 192.168.70.66 or a network address like 192.168.70.0). This IP address or network will be inaccessible to wireless clients in this network.

- Wireless Band: Click the drop-down menu to select the wireless band, 2.4GHz or 5GHz.
  - **SSID Index:** Click the drop-down menu to select the SSID for the IP filter.
  - Filter State: Click the drop-down menu to enable or disable the filter state. By default this feature is disabled.
  - IP Address: Enter the IP address or network address.
- Subnet Mask: Enter the subnet mask of the IP address or networks address.
- IP Address List: When an IP address is entered, it appears in the list. Highlight an IP address and click **Delete** icon to remove it from the list.
- Upload IP Filter File: To upload the IP filter list file, click Choose File and navigate to the IP filter list file saved on the computer, and then click Upload.
- **Download IP Filter File:** To download the IP Filter list file, click **Download** and to save the IP filter list.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

IP Filter Settings		
Wireless Band	5GHz 🔻	
SSID Index	Primary SSID V	
Filter State	Disable 🔻	
IP Address		
Subnet Mask		
	Add	
ID IP Address	Subnet Mask	Delete
Upload IP Filter File		
Upload File :	Choose File No file chosen Upload	
Download IP Filter File		
Load IP Filter File to Local Hard Driver :	Download	
		Save

# Traffic Control Uplink/Downlink Setting

The uplink/downlink setting allows users to customize the downlink and uplink interfaces including specifying downlink/uplink bandwidth rates in Mbits per second. These values are also used in the QoS and Traffic Manager windows. Once the desired uplink and downlink settings are finished, click the **Save** button to let your changes take effect.

Downlink Bandwidth: The downlink bandwidth in Mbits per second.

Uplink Bandwidth: The uplink bandwidth in Mbits per second.

Click to save the updated configuration. Save: To make the updates permanent, click Configuration > Save and Activate.

Uplink and Do	wnlink Setting	9		
Ethernet	Downlink	Uplink		
2.4GHz	5GHz			
Downlink Interface				
Primary-ssid	Multi-ssid1	Multi-ssid2	Multi-ssid3	
Multi-ssid4	Multi-ssid5	Multi-ssid6	Multi-ssid7	
Uplink Interface —				
Primary-ssid	Multi-ssid1	Multi-ssid2	Multi-ssid3	
Multi-ssid4	Multi-ssid5	Multi-ssid6	Multi-ssid7	
Downlink Bandwidth(1~ Uplink Bandwidth(1~17		Mbits/sec		
		,,		Save

# QoS

Quality of Service (QoS) enhances the experience of using a network by prioritizing the traffic of different applications. The DAP-2682 supports four priority levels. Once the desired QoS settings are finished, click the **Save** button to let your changes take effect.

**Enable QoS:** Check this box to allow QoS to prioritize traffic. Use the drop-down menus to select the four levels of priority. Click the Save button when you are finished.

**Downlink Bandwidth:** The downlink bandwidth in Mbits per second. This value is entered in the Uplink/Downlink Setting window.

Uplink Bandwidth: The uplink bandwidth in Mbits per second. This value is entered in the Uplink/Downlink Setting window.

ACK/DHCP/ICMP/DNS Click the drop-down menu to select the level of Priority: priority for the selected rule.

- Web Traffic Priority: Click the drop-down menu to select the level of priority for the selected rule.
- FTP Traffic Priority: Click the drop-down menu to select the level of priority for the selected rule.
- User Defined-1/2/3/4 Click the drop-down menu to select the level of **Priority:** priority for the selected rule.
- Other Traffic Priority: Click the drop-down menu to select the level of priority for the selected rule.
  - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

able QoS						
Ivanced QoS						
wnlink Bandwidth	100 M	bits/sec				
ink Bandwidth	100 M	bits/sec				
K/DHCP/ICMP/DNS prity	Highest Priori	ty 💙 Limit	100 %	Port	53,67,68,54	6,547
il Traffic Priority	Second Priorit	y 💙 Limit	100 %	Port	25,110,465,	,995
b Traffic Priority	Third Priority	✓ Limit	100 %	Port	80,443,3128	8,8080
Traffic Priority	Low Priority	✓ Limit	100 %	Port	20,21	
r Defined-1 Priority	Highest Priori	by 💙 🛛 Limit	100 %	Port	0 -	0
er Defined-2 Priority	Second Priorit	y 🗡 Limit	100 %	Port	0 -	0
er Defined-3 Priority	Third Priority	✓ Limit	100 %	Port	0 -	0
er Defined-4 Priority	Low Priority	🗠 Limit	100 %	Port	0 -	0
ner Traffic Priority	Low Priority	✓ Limit	100 %			

# **Traffic Manager**

The traffic manager feature allows users to create traffic management rules that specify how to deal with listed client traffic and specify downlink/ uplink speeds for new traffic manager rules. Click the **Save** button to let your changes take effect.

Traffic Manager: Use the drop-down menu to Enable the traffic manager feature.

- Unlisted Client Traffic: Select Deny or Forward to determine how to deal with unlisted client traffic.
- **Downlink Bandwidth:** The downlink bandwidth in Mbits per second. This value is entered in the Uplink/Downlink Setting window.
  - Uplink Bandwidth: The uplink bandwidth in Mbits per second. This value is entered in the Uplink/Downlink Setting window.

Name: Enter the name of the traffic manager rule.

- Client IP (optional): Enter the client IP address of the traffic manager rule.
- Client MAC (optional): Enter the client MAC address of the traffic manager rule.
  - Downlink Speed: Enter the downlink speed in Mbits per second.
    - Uplink Speed: Enter the uplink speed in Mbits per second.
      - Save: Click to save the updated configuration. To make the updates permanent, click Configuration > Save and Activate.

Traffic Manage	ər	
Traffic Manager Unlisted Clients Traffic Downlink Bandwidth Uplink Bandwidth	Disable  Deny  Forward Mbits/sec Mbits/sec	
Add Traffic Mana	ger Rule	
Name Client IP(optional) Client MAC(optional) Downlink Speed Uplink Speed	Mbits/sec Add Clear	
Traffic Manager F	Rules	
Name Clier	IT IP Client MAC	Downlink Speed Uplink Speed Edit Del

# Status

In the Status Section the user can monitor and view the configuration settings of the access point. Here the user can also view statistics about client information, WDS information and more. The following pages will explain settings found in the Status section in more detail.

D-Link			DAP-2682
🔶 Home 🛛 🔏 Maintenanc	e 🔻 📙 Configuration	🕶 😻 System 💹 Logout	🕐 Help
DAP-2682	Device Information		
Basic Settings     Advanced Settings     Status	Ethernet MAC Address:	Firmware Version:v1.00 58:d5:6e:06:60:e0	
📄 Device Information	Wireless MAC Address(2.4GHz):	Primary: 58:d5:6e:06:60:e0	
Client Information		SSID 1~7: 58:d5:6e:06:60:e1 ~ 58:d5:6e:06:60:e7	,
📄 Channel Analyze	Wireless MAC Address(5GHz):	Primary: 58:d5:6e:06:60:e8	
Ethernet	Wileless MAC Address(JGH2).		
WLAN	Ethernet	SSID 1~7: 58:d5:6e:06:60:e9 ~ 58:d5:6e:06:60:ef	
🗄 🃁 🃁 Log	IP Address	172.17.6.71	
	Subnet Mask	255 255 255 0	
	Gateway	172.17.6.254	
	DNS Wireless (2.4GHz)	192.168.168.249 192.168.168.201	
	Network Name (SSID)	dlink	
	Channel	6	
	Data Rate	Auto	
	Security Wireless (5GHz)	None	
	Network Name (SSID)	dlink	
	Channel	157	
	Data Rate	Auto	
	Security	None	
	Device Status	None	
	CPU Utilization	6%	
	Memory Utilization	54%	
	Nuclias Connect		
	Connection Status	Disconnect	
	Server IP/PORT		
	Group ID		

# **Device Information**

This page displays information like firmware version, Ethernet and wireless parameters, as well as the information regarding CPU and memory utilization.

**Device Information:** This read-only window displays the configuration settings of the DAP-2682, including the firmware version and the device's MAC address.

Device Information	
	Firmware Version:v1.00
Ethernet MAC Address:	58:d5:6e:06:60:e0
Wireless MAC Address(2.4GHz):	Primary: 58:d5:6e:06:60:e0
	SSID 1~7: 58:d5:6e:06:60:e1 ~ 58:d5:6e:06:60:e7
Wireless MAC Address(5GHz):	Primary: 58:d5:6e:06:60:e8
	SSID 1~7: 58:d5:6e:06:60:e9 ~ 58:d5:6e:06:60:ef
Ethernet	
IP Address	172.17.6.71
Subnet Mask	255.255.255.0
Gateway	172.17.6.254
DNS	192.168.168.249 192.168.168.201
Wireless (2.4GHz)	
Network Name (SSID)	dlink
Channel	6
Data Rate	Auto
Security	None
Wireless (5GHz)	
Network Name (SSID)	dlink
Channel	157
Data Rate	Auto
Security	None
Device Status	
CPU Utilization	6%
Memory Utilization	54%
Nuclias Connect	
Connection Status	Disconnect
Server IP/PORT	
Group ID	

# **Client Information**

This page displays the associated client's SSID, MAC, band, authentication method, signal strength, and power saving mode for the DAP-2682 network.

Client Information:	This window displays the wireless client information for clients currently connected to the DAP-2682.	Client
SSID:	Displays the SSID of the client.	Client
MAC:	Displays the MAC address of the client.	
Band:	Displays the wireless band that the client is connected to.	
Authentication:	Displays the type of authentication being used.	
RSSI:	Displays the client's signal strength.	
Power Saving Mode:	Displays the status of the power-saving feature.	
System Info:	Displays the associated clients' OS information for the network.	

Client Informa	tion					
Client Information	Station as	sociation (2	2.4GHz): 0			
SSID	MAC	Band	Authentication	RSSI	Power Saving Mode	System Info
Client Information	Station as	sociation(5	iGHz): 0			
SSID	MAC	Band	Authentication	RSSI	Power Saving Mode	System Info

# **WDS Information Page**

This page displays the access point's SSID, MAC, band, authentication method, signal strength, and status for the DAP-2682's Wireless Distribution System network.

WDS Information:	This window displays the Wireless Distribution System information for clients currently	WDS Informat	ion			
	connected to the DAP-2682.	WDS Information Name MAC	Channel : (2.407 Gl	Hz) Authentication	Signal	Status
Name:	Displays the SSID of the client.	WDS Information Name MAC	Channel : (5 GHz)	Authentication	Signal	Status
MAC:	Displays the MAC address of the client.					
Authentication:	Displays the type of authentication being used.					
Signal:	Displays the client's signal strength.					
Status:	Displays the status of the power saving feature.					

# **Channel Analyze**

#### Wireless Band: Select either 2.4Ghz or 5GHz.

- **Detect:** Click the Detect button to scan.
- AP List: This will list the transmitting channels and quality.

Channel Analy	ze			
Wireless Band	2.4GHz 🗸			
Detect				
Wireless Summary				
AP List				
CH AP Num	Total Rssi	Total Load	Noise Floor	Evaluation
* There are only	three non-overlapp	ed channels in 2.4	IG band, respective	ely 1,6 and 11.

# **Statistics Ethernet Traffic Statistics**

Displays wired interface network traffic information.

Ethernet Traffic Statistics: This page displays transmitted and received count statistics for packets and bytes.

Ethernet Traffic Statistics		
		Clear Refresh
Transmitted Count		
Transmitted Packet Count	61636	
Transmitted Bytes Count	17344420	
Dropped Packet Count	0	
Received Count		
Received Packet Count	3833433	
Received Bytes Count	516739261	
Dropped Packet Count	610	

# **WLAN Traffic Statistics**

Displays throughput, transmitted frame, received frame, and error information for the AP network.

WLAN Traffic Statistics:	This page displays wireless network
	statistics for data throughput,
	transmitted and received frames, and
	frame errors.

WLAN Traffic Statistics		
	2.4GHz	Clear Refresh
Transmitted Count		
Transmitted Packet Count	9584	143366
Transmitted Bytes Count	1526001	131426184
Dropped Packet Count	3668072	0
Transmitted Retry Count	0	0
Received Count		
Received Packet Count	594	41518
Received Bytes Count	115357	
Dropped Packet Count	0	
Received CRC Count	3890220	0
Received Decryption Error Count	0	
Received MIC Error Count	0	
Received PHY Error Count	6252039	

# Log **View Log**

The AP's embedded memory holds logs here. The log information includes but is not limited to the following items: cold start AP, upgrading firmware, client association with APs, and web login. The web page holds up to 500 logs.

**View Log:** The AP's embedded memory displays system and network messages including a time stamp and message type. The log information includes but is not limited to the following items: cold start AP, upgrading firmware, client association with APs, and web login. The web page holds up to 500 logs.

View Log			
First Page Last Page Previous Next Clear Page 1 of 14			
Time	Priority	Message	
Jun 3 10:39:01	[SYSACT]	Web login success from 172.17.6.10	
Jun 3 10:26:56	[SYSACT]	Web login success from 172.17.6.10	
Jun 3 10:15:37	[SYSACT]	Web login success from 172.17.6.10	
Jun 3 09:55:05	[Wireless]	External DHCP Server assign IP 172.17.6.88 TO Mac :8c:16:45:5d:8c:9e	
Jun 3 09:51:42	[Wireless]	External DHCP Server assign IP 172.17.6.120 TO Ma c:54:e1:ad:76:b4:95	
Jun 3 09:43:47	[Wireless]	External DHCP Server assign IP 172.17.6.129 TO Ma c:ec:f4:bb:20:56:1a	
Jun 3 09:41:05	[Wireless]	External DHCP Server assign IP 172.17.6.69 TO Mac :94:c6:91:b2:50:53	
Jun 3 09:38:37	[Wireless]	External DHCP Server assign IP 172.17.6.80 TO Mac :54:e1:ad:7b:16:a3	
Jun 3 09:35:43	[Wireless]	External DHCP Server assign IP 172.17.6.95 TO Mac :54:e1:ad:a1:c2:f1	
Jun 3 09:31:35	[Wireless]	External DHCP Server assign IP 172.17.6.17 TO Mac :50:7b:9d:01:b1:e8	
Jun 3 09:21:35	[Wireless]	External DHCP Server assign IP 172.17.6.22 TO Mac :04:0e:3c:41:2f:00	
Jun 3 09:18:59	[Wireless]	External DHCP Server assign IP 172.17.6.18 TO Mac :44:37:e6:52:6e:85	
Jun 3 09:12:14	[Wireless]	External DHCP Server assign IP 172.17.6.121 TO Ma c:8c:16:45:5d:90:d8	
Jun 3 09:09:53	[Wireless]	External DHCP Server assign IP 172.17.6.14 TO Mac :64:00:6a:6e:a2:b2	
Jun 3 09:09:40	[Wireless]	External DHCP Server assign IP 172.17.6.74 TO Mac :54:e1:ad:98:b6:e4	
Jun 3 09:08:41	[Wireless]	External DHCP Server assign IP 172.17.6.57 TO Mac :28:d2:44:cb:8b:d7	
Jun 3 08:58:34	[Wireless]	External DHCP Server assign IP 172.17.6.97 TO Mac :94:c6:91:8c:c0:8e	
Jun 3 08:54:16	[Wireless]	External DHCP Server assign IP 172.17.6.13 TO Mac :94:c6:91:07:e6:e7	
## Log Settings

Enter the log server's IP address to send the log to that server. Check or uncheck System Activity, Wireless Activity, or Notice to specify what kind of log type you want it to log.

Log Server/IP Address:	Enter the IP address of the server you would like to send the DAP-2682 log to.	Log Settings
Log Type:	Check the box for the type of activity you want to log. There are three types: System Activity, Wireless Activity, and Notice.	Log Settings Log Server Setti Log Server / IP Address Log Type
EU directive Syslog Server Settings:	Enter the IP address of the syslog server you would like to send the DAP-2682 log to.	EU directive Sys Log Server / IP Address
E-mail Notification:	Support Simple Mail Transfer Protocol for log schedule and periodical change key. It can not support Gmail SMTP port 465. Please set to Gmail SMTP port 25 or 587.	Email Notificat Email Notification Outgoing mail serv Authentication SSL/TLS From Email Address To Email Address Email Server Addre SMTP Port User Name Password Confirm Password
		Commenssword

Log Settings	
Log Settings	
Log Server Settings	
Log Server / IP Address	
Log Type 🗹 System A	Activity
Wireless	Activity
Notice	
EU directive Syslog Server Sett	ings
Log Server / IP Address	
	I
Email Notification	
Email Notification	Enable
Outgoing mail server (SMTP)	Internal 🗸
Authentication	Enable
SSL/TLS	Enable
From Email Address	
To Email Address	
Email Server Address	
SMTP Port	
User Name	
Password	
Confirm Password	
Email Log Schedule	
Schedule	0 V hours or when Log is full
	Save

## Section 3 - Configuration

	Click the drop-down menu to select the SMTP server type; options include: Internal, Gmail,Hotmail.	
Authentication:	Check the box to enable the authentication of the email notification.	
SSL/TLS:	Check the box to enable the SSL/TLS function.	
From Email Address:	Enter the email address.	
To Email Address:	Enter the email address.	
Email Server Address:	Enter the email server address.	
SMTP Port:	Enter the SMTP port.	
User Name:	Enter the name of the new user entry.	
Password:	Enter the password set for the email notification.	
Confirm Password:	Retype the password entry to confirm the password.	
E-mail Log Schedule:	Use the drop-down menu to set the email log schedule.	
Save:	Click to save the updated configuration. To make the updates permanent, click Configuration > <b>Save and Activate.</b>	

# **Maintenance Section**

In the Status Section the user can monitor and view configuration settings of the access point. Here the user can also view statistics about client information, WDS information and more. The following pages will explain settings found in the maintenance section in more detail.



## Administration

### **Limit Administrator**

Check one or more of the eight main categories to display the various hidden administrator parameters and settings displayed on the next five pages. Each of the eight main categories display various hidden administrator parameters and settings.

Limit Administrator VLAN Check the box provided and the

- **ID:** enter the specific VLAN ID that the administrator will be allowed to log in from.
- Limit Administrator IP: Check to enable the Limit Administrator IP address.
  - IP Range: Enter the IP address range that the administrator will be allowed to log in from and then click the Add button.

Administration Settings				
Limit Administrator 🧧				
Limit Administrator VLAN ID Limit Administrator IP IP Range	Enable     Enable     From:     Add	1	To:	
Item From	То	Delete		
System Name Settings				
Login Settings 🗖				
Console Settings				
SNMP Settings				
Ping Control Setting				
LED Settings				
DDP Control Setting				
Router Setting				
Country Settings				
Nuclias Connect Setting				
			Save	

#### System Name Settings

Each of the eight main categories display various hidden administrator parameters and settings.

System Name:	The name of the device. The default name is dap2682.	
Location:	The physical location of the device, e.g.	

- **Location:** The physical location of the device, e.g. 72nd Floor, D-Link HQ.
- MDNS Name : The MDNS name of the device. The default MDNS name is dap2682.

System Name Settings	<ul><li>✓</li></ul>
System Name	dap2682
Location	

## **Login Settings**

Each of the eight main categories display various hidden administrator parameters and settings.

Login Name: Enter a user name. The default is admin.

New Password: When changing your password, enter the new password here. The password is case-sensitive. "A" is a different character than "a." The length should be between 0 and 12 characters.

Login Settings 🗹	
Login Name	admin
New Password	
Confirm Password	Apply New Password

**Confirm Password:** Enter the new password a second time for confirmation purposes.

## **Console Settings**

Each of the eight main categories display various hidden administrator parameters and settings.

- Status: Status is enabled by default. Uncheck the box to disable the console.
- **Console Protocol:** Select the type of protocol you would like to use, Telnet or SSH.

Console Settings		
Status	Enable	
Console Protocol	⊙ Telnet ○ SSH	
Timeout	3 Mins 💌	

**Time-out:** Set to 1 Min, 3 Mins, 5 Mins, 10 Mins, 15 Mins or Never.

#### **SNMP Settings**

Each of the eight main categories display various hidden administrator parameters and settings.

Status:	Check the box to enable the SNMP functions. This is disabled by default.
Public Community String:	Enter the public SNMP community string.
Private Community String:	Enter the private SNMP community string.
Trap Status:	Check the box to enable the Trap function. This is disabled by default.
Trap Server IP:	Enter the Trap sever IP address.

SNMP Settings 🔽	
Status	Enable
SNMPv2 Settings	
Public Community String	public (0-9,a-z,A-Z,~!@\$%^*()_+-{}{]:,.<>?)
Private Community String	private (0-9,a-z,A-Z,~!@\$%^*()_+-{}[]:,.<>?)
Trap Status	Enable
Trap Server	(IP Address or Domain Name)

### **Ping Control Setting**

Each of the eight main categories display various hidden administrator parameters and settings.

Status: Status is enabled by default. Uncheck the box to disable ping control.

2	Ping Control Setting	✓	
	Status		✓ Enable

## **LED Settings**

Each of the eight main categories display various hidden administrator parameters and settings

LED Status: Select the LED on/off you would like to use.

LED Settings 🗹		
LED Status	● On ○ Off	

### **DDP Setting**

Each of the eight main categories display various hidden administrator parameters and settings.

Status is enabled by default. Uncheck the box to disable DDP control.

e	DDP Control Setting 🔽	
	Status	Enable

#### **Router Settings**

Each of the eight main categories display various hidden administrator parameters and settings.

Select on/off for the Router Status. Select weither or not to use PoE.

Router Setting 🔽	
Router Status	◯ On
WAN Port	O LAN(POE) 💿 LAN

## **Country Setting**

Select a Country: Choose from drop down list country where device is located.

Country Settings 🖉		
Select a Country	Taiwan	¥

## **Nuclias Connect Settings**

The Nuclias Connect section is used to create a set of APs on the Internet to be organized into a single group in order to increase ease of management. Nuclias Connect and AP Array are mutually exclusive functions.

**Enable Nuclias Connect:** Click the drop-down menu to enable or disable Nuclias Connect.

**Note:** To save the new configuration settings to the firmware, click **Configuration** > **Save and Activate**, otherwise click **Discard Changes** to delete any setting change.

Nuclias Connect Setting	<b>V</b>
Enable Nuclias Connect	Disable 🔻

## Firmware and SSL Upload

This page allows the user to perform a firmware upgrade. This upgrades the software running on the hardware used by the access point. This is a useful feature that prevents future bugs and allows for new features to be added to this product. Please go to your local D-Link website to see if there is a newer version firmware available.

Firmware and SSL You can upload files to the access per Certification Upload:		Firmware
		Update Firmw
Upload Firmware from Local Hard Drive:	The current firmware version is displayed above the file location field. After the latest firmware is downloaded, click on the "Choose File" button to locate the new firmware. Once the file is selected, click on the "Open" and "Upload" buttons to begin updating the firmware. Please don't turn the power off while upgrading.	Upload Firmwar Language Pac Upload : Update SSL Co
Language Pack Upgrade :	After you have downloaded a language pack to your local drive, click "Choose File." Select the language pack and click "Open" and "Upload" to complete the upgrade.	Upload Certifica Upload Key Fro
Upload SSL Certification from Local Hard Drive:	After you have downloaded a SSL certification to your local drive, click "Choose File." Select the certification and click "Open" and "Upload" to complete the upgrade.	

Firmware and SSL Certification Upload				
Update Firmware From Lo	cal Hard Driv	ve		
	Firmware Ve	rsion v1.00		
Upload Firmware From File :	Choose File	No file chosen	Upload	
Language Pack Upgrade				
Upload :	Choose File	No file chosen	Upload	
Update SSL Certification F	rom Local Ha	ard Drive		
Upload Certificate From File :	Choose File	No file chosen	Upload	
Upload Key From File :	Choose File	No file chosen	Upload	
opidad Rey From File .	01100361116	No me chosen	opioad	

## **Configuration File Upload**

This page allows the user to back up and recover the current configuration of the access point in case of a unit failure.

Configuration File Upload and Download:	You can upload and download configuration files of the access point.	Configuration File Upload and Download Upload Configuration File
Upload Configuration File:	Browse to the saved configuration file you have in your local drive and click "Open" and "Upload" to update the configuration.	Upload File : Choose File No file chosen Upload Download Configuration File Load Settings to Local Hard Drive Download
Download Configuration File:	Click "Download" to save the current configuration file to your local disk. Note that if you save one configuration file with the administrator's password now, after resetting your DAP-2682 and then updating to this saved configuration file, the password will be gone.	Upload Nuclias Connect Network File Upload File : Choose File No file chosen Upload
Upload CWM File :	Browse to the saved CWM file you have in your local drive and click "Open" and "Upload" to upload the CWM file .	

## **Time and Date Settings**

Enter the NTP server IP, choose the time zone, and enable or disable daylight saving time.

Current Time	Displays the current time and date settings.	
current mine.	Displays the current time and dute settings.	
Enable NTP Server:	Check to enable the AP to get system time from an NTP server from the Internet.	Ti Ci A
NTP Server:	Enter the NTP server IP address.	Er N
Time Zone:	Use the drop-down menu to select your correct Time Zone.	Ti
Enable Daylight Saving:	Check the box to enable Daylight Saving Time.	D
	A user can either manually set the time for the AP here, or click the Copy Your Computer's Time Settings button to copy the time from the computer in use (Make	Di

sure that the computer's time is set correctly).

Time Configuration			
Current Time	06/03/2020 11:24:44		
Automatic Time Cor	inguration		
NTP Server			
Time Zone	(GMT+08:00) Kuala Lumpur, Singapore	~	
Set the Date and Time Manually			
Date And Time		Day 3 V Second 44 V	
	Copy Your Computer's Time Settings		
Daylight Configurati	on		
Enable Daylight Saving			
Daylight Saving Offset	15 🗸		
	Month Week Day H	lour Minute	
Daylight Saving Dates	DST Start Jan 💙 1st 💙 Sun 💙	12 am 🌱 🛛 💙	
	DST End Jan 💙 Ist 💙 Sun 💙	12 am 💙 🛛 💙	
		Save	

# **Configuration and System**

These are the remaining options to choose from in the top menu. **Configuration** allows the user to save and activate or discard the configurations. **System** allows the user to restart the unit, perform a factory reset or clear the language pack settings. **Logout** allows the user to safely log out from the access point's web configuration. **Help** allows the user to read more about the given options to configure without the need to consult the manual. The following pages will explain settings found in the configuration and system section in more detail.

D-L	ink				DAP-2682
🔶 Home	🕺 Maintenance 👻	🚽 Configuration 👻	💝 System	💋 Logout	🕐 Help
		Configuration  Save and Activate Discard Changes		n 2010 e current browser cor e disconnected if you c	

# **System Settings**

On this page the user can restart the unit, perform a factory reset of the access point or clear the added language pack.

Restart the Device:	Click Restart to restart the DAP-2682.
	Click Restore to restore the DAP-2682 back to factory default settings.
Clear Language Pack:	Click to clear the current language pack.



# Help

The help page is useful to view a brief description of a function available on the access point in case the manual is not present.

Help: Scroll down the Help page for topics and explanations.

#### Basic Settings

#### Wireless Settings

Allow you to change the wireless settings to fit an existing wireless network orto customize your wireless network.

#### Wireless Band

Operating frequency band. Choose 2.4GHz for visibility to legacy devices and for longer range. Choose 5GHz for least interference; interference can hurt performance. This AP will operate one band at a time.

#### Application

This option allows the user to choose for indoor or outdoor mode at the 5G Band.

#### Mode

Select a function mode to configure your wireless network. Function modes include AP, WDS (Wireless Distribution System) with AP, WDS and Wireless Client. Function modes are designed to support various wireless network topology and applications.

#### Network Name (SSID)

Also known as the Service Set Identifier, this is the name designated for a specific wireless local area network (WLAN). The factory default setting is "dink". The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.

#### SSID Visibility

Indicate whether or not the SSID of your wireless network will be broadcasted. The default value of SSID Visibility is set to "Enable," which allow wireless clients to detect the wireless network. By changing this setting to "Disable," wireless clients can no longer detect the wireless network and can only connect if they have the correct SSID entered.

#### Auto Channel Selection

If you check Auto Channel Scan, everytime when AP is booting up, the AP will automatically find the best channel to use. This is enabled by default.

#### Channel

Indicate the channel setting for the DAP-2553. By default, the AP is set to Auto Channel Scan. The Channel can be changed to fit the channel setting for an existing wireless network or to customize the wireless network.

#### **Channel Width**

Allows you to select the channel width you would like to operate in. Select 20MHz if you are not using any 802.11n wireless clients. Auto 20/40MHz allows your to use both 802.11n and non-802.11n wireless devices in your network

#### Authentication

# **Technical Specifications**

#### Standards

- IEEE 802.11ac
- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11a
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3at
- IEEE 802.3x

#### **Network Management**

- Web Browser interface (HTTP, Secure HTTP (HTTPS))
- Nuclias Connect
- SNMP Support
- Command Line Interface (Telnet, Secure SSH Telnet)

#### Security

- WPA<sup>™</sup> Personal/Enterprise
- WPA2<sup>™</sup> Personal/Enterprise
- WPA3<sup>™</sup> Personal
- WEP™ 64-/128-bit

#### Wireless Frequency Range

• 2.4 to 2.4835 GHz and 5.15 to 5.85 GHz

#### **Operating Voltage**

• 12V/2.5A or 802.3at PoE

#### Antenna Type

• Four Dual Band Internal Antennas (2.4Ghz 3.7dBi & 5Ghz 4.8dBi)

### LEDs

• Power/Status

#### Temperature

- Operating: 0°C to 40°C
- Storing: -20°C to 65°C

#### Humidity

- Operating: 10%~90% (non-condensing)
- Storing: 5%~95% (non-condensing)

#### Certifications

- FCC Class B
- CE
- UL

#### Dimensions

- L = 190 mm (7.48 in)
- W = 190 mm (7.48 in)
- H = 43.7 mm (1.72 in)

# **Antenna Pattern**





# Warranty

Subject to the terms and conditions set forth herein, D-Link Systems, Inc. ("D-Link") provides this Limited Warranty:

- Only to the person or entity that originally purchased the product from D-Link or its authorized reseller or distributor, and
- Only for products purchased and delivered within the fifty states of the United States, the District of Columbia, U.S. Possessions or Protectorates, U.S. Military Installations, or addresses with an APO or FPO.

#### **Limited Warranty:**

D-Link warrants that the hardware portion of the D-Link product described below ("Hardware") will be free from material defects in workmanship and materials under normal use from the date of original retail purchase of the product, for the period set forth below ("Warranty Period"), except as otherwise stated herein.

- Hardware (excluding power supplies and fans): One (1) year
- Power supplies and fans: One (1) year
- Spare parts and spare kits: Ninety (90) days

The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to repair or replace the defective Hardware during the Warranty Period at no charge to the original owner or to refund the actual purchase price paid. Any repair or replacement will be rendered by D-Link at an Authorized D-Link Service Office. The replacement hardware need not be new or have an identical make, model or part. D-Link may, at its option, replace the defective Hardware or any part thereof with any reconditioned product that D-Link reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. Repaired or replacement hardware will be warranted for the remainder of the original Warranty Period or ninety (90) days, whichever is longer, and is subject to the same limitations and exclusions. If a material defect is incapable of correction, or if D-Link determines that it is not practical to repair or replace the defective Hardware, the actual price paid by the original purchaser for the defective Hardware will be refunded by D-Link upon return to D-Link of the defective Hardware. All Hardware or part thereof that is replaced by D-Link, or for which the purchase price is refunded, shall become the property of D-Link upon replacement or refund.

#### Limited Software Warranty:

D-Link warrants that the software portion of the product ("Software") will substantially conform to D-Link's then current functional specifications for the Software, as set forth in the applicable documentation, from the date of original retail purchase of the Software for a period of ninety (90) days ("Software Warranty Period"), provided that the Software is properly installed on approved hardware and operated as contemplated in its documentation. D-Link further warrants that, during the Software Warranty Period, the magnetic media on which D-Link delivers the Software will be free of physical defects. The customer's sole and exclusive remedy and the entire liability of D-Link and its suppliers under this Limited Warranty will be, at D-Link's option, to replace the non-conforming Software (or defective media) with software that substantially conforms to D-Link's functional specifications for the Software or to refund the portion of the actual purchase price paid that is attributable to the Software. Except as otherwise agreed by DLink in writing, the replacement Software is provided only to the original licensee, and is subject to the terms and conditions of the license granted by D-Link for the Software. Replacement Software will be warranted for the remainder of the original Warranty Period and is subject to the same limitations and exclusions. If a material non-conformance is incapable of correction, or if D-Link determines in its sole discretion that it is not practical to replace the non-conforming Software, the price paid by the original licensee for the non-conforming Software (and all copies thereof) is first returned to D-Link. The license granted respecting any Software for which a refund is given automatically terminates.

#### **Non-Applicability of Warranty:**

The Limited Warranty provided hereunder for Hardware and Software portions of D-Link's products will not be applied to and does not cover any refurbished product and any product purchased through the inventory clearance or liquidation sale or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product and in that case, the product is being sold "As-Is" without any warranty whatsoever including, without limitation, the Limited Warranty as described herein, notwithstanding anything stated herein to the contrary.

#### Submitting A Claim:

The customer shall return the product to the original purchase point based on its return policy. In case the return policy period has expired and the product is within warranty, the customer shall submit a claim to D-Link as outlined below:

- The customer must submit with the product as part of the claim a written description of the Hardware defect or Software nonconformance in sufficient detail to allow D-Link to confirm the same, along with proof of purchase of the product (such as a copy of the dated purchase invoice for the product) if the product is not registered.
- The customer must obtain a Case ID Number from D-Link Technical Support (USA 1-877-453-5465 or Canada 1-800-361-5265), who
  will attempt to assist the customer in resolving any suspected defects with the product. If the product is considered defective, the
  customer must obtain a Return Material Authorization ("RMA") number by completing the RMA form. Enter the assigned Case ID
  Number at https://rma.dlink.com/ (USA only) or https://rma.dlink.ca (Canada only).

- After an RMA number is issued, the defective product must be packaged securely in the original or other suitable shipping package to ensure that it will not be damaged in transit, and the RMA number must be prominently marked on the outside of the package. Do not include any manuals or accessories in the shipping package. D-Link will only replace the defective portion of the product and will not ship back any accessories.
- The customer is responsible for all in-bound shipping charges to D-Link. No Cash on Delivery ("COD") is allowed. Products sent COD will either be rejected by D-Link or become the property of D-Link. Products shall be fully insured by the customer and shipped to D-Link Systems, Inc.
- **USA residents** send to 17595 Mt. Herrmann, Fountain Valley, CA 92708. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via UPS Ground or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in the United States, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming.
- **Canadian residents** send to D-Link Networks, Inc., 2525 Meadowvale Boulevard Mississauga, Ontario, L5N 5S2 Canada. D-Link will not be held responsible for any packages that are lost in transit to D-Link. The repaired or replaced packages will be shipped to the customer via Purolator Canada or any common carrier selected by D-Link. Return shipping charges shall be prepaid by D-Link if you use an address in Canada, otherwise we will ship the product to you freight collect. Expedited shipping is available upon request and provided shipping charges are prepaid by the customer. D-Link may reject or return any product that is not packaged and shipped in strict compliance with the foregoing requirements, or for which an RMA number is not visible from the outside of the package. The product owner agrees to pay D-Link's reasonable handling and return shipping charges for any product that is not packaged and shipped in accordance with the foregoing requirements, or that is determined by D-Link not to be defective or non-conforming. RMA phone number: 1-800-361-5265 Hours of Operation: Monday-Friday, 9:00AM 9:00PM EST

#### What Is Not Covered:

The Limited Warranty provided herein by D-Link does not cover:

Products that, in D-Link's judgment, have been subjected to abuse, accident, alteration, modification, tampering, negligence, misuse, faulty installation, lack of reasonable care, repair or service in any way that is not contemplated in the documentation for the product, or if the model or serial number has been altered, tampered with, defaced or removed; Initial installation, installation and removal of the product for repair, and shipping costs; Operational adjustments covered in the operating manual for the product, and normal maintenance; Damage that occurs in shipment, due to act of God, failures due to power surge, and cosmetic damage; Any hardware, software, firmware or other products or services provided by anyone other than D-Link; and Products that have been purchased from inventory clearance or liquidation sales or other sales in which D-Link, the sellers, or the liquidators expressly disclaim their warranty obligation pertaining to the product.

While necessary maintenance or repairs on your Product can be performed by any company, we recommend that you use only an Authorized D-Link Service Office. Improper or incorrectly performed maintenance or repair voids this Limited Warranty.

#### **Disclaimer of Other Warranties:**

EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, THE PRODUCT IS PROVIDED "AS-IS" WITHOUT ANY WARRANTY OF ANY KIND WHATSOEVER INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

IF ANY IMPLIED WARRANTY CANNOT BE DISCLAIMED IN ANY TERRITORY WHERE A PRODUCT IS SOLD, THE DURATION OF SUCH IMPLIED WARRANTY SHALL BE LIMITED TO THE DURATION OF THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. EXCEPT AS EXPRESSLY COVERED UNDER THE LIMITED WARRANTY PROVIDED HEREIN, THE ENTIRE RISK AS TO THE QUALITY, SELECTION AND PERFORMANCE OF THE PRODUCT IS WITH THE PURCHASER OF THE PRODUCT.

### Limitation of Liability:

TO THE MAXIMUM EXTENT PERMITTED BY LAW, D-LINK IS NOT LIABLE UNDER ANY CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHER LEGAL OR EQUITABLE THEORY FOR ANY LOSS OF USE OF THE PRODUCT, INCONVENIENCE OR DAMAGES OF ANY CHARACTER, WHETHER DIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF GOODWILL, LOSS OF REVENUE OR PROFIT, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, FAILURE OF OTHER EQUIPMENT OR COMPUTER PROGRAMS TO WHICH D-LINK'S PRODUCT IS CONNECTED WITH, LOSS OF INFORMATION OR DATA CONTAINED IN, STORED ON, OR INTEGRATED WITH ANY PRODUCT RETURNED TO D-LINK FOR WARRANTY SERVICE) RESULTING FROM THE USE OF THE PRODUCT, RELATING TO WARRANTY SERVICE, OR ARISING OUT OF ANY BREACH OF THIS LIMITED WARRANTY, EVEN IF D-LINK HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE SOLE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY IS REPAIR, REPLACEMENT OR REFUND OF THE DEFECTIVE OR NONCONFORMING PRODUCT. THE MAXIMUM LIABILITY OF D-LINK UNDER THIS WARRANTY IS LIMITED TO THE PURCHASE PRICE OF THE PRODUCT COVERED BY THE WARRANTY. THE FOREGOING EXPRESS WRITTEN WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ANY OTHER WARRANTIES OR REMEDIES, EXPRESS, IMPLIED OR STATUTORY.

#### **Governing Law:**

This Limited Warranty shall be governed by the laws of the State of California. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This Limited Warranty provides specific legal rights and you may also have other rights which vary from state to state.

#### **Trademarks:**

D-Link is a registered trademark of D-Link Corporation/D-Link Systems, Inc. Other trademarks or registered trademarks are the property of their respective owners.

### **Copyright Statement:**

No part of this publication or documentation accompanying this product may be reproduced in any form or by any means or used to make any

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## **Federal Communication Commission Interference Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

For product available in the USA market, only channel 1~11 can be operated. Selection of other channels is not possible.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

#### **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 41 cm between the radiator & your body.

#### **MPORTANT NOTE:**

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 32cm between the radiator & your body.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

For detailed warranty information applicable to products purchased outside the United States, please contact the corresponding local D-Link office.

This device and it's antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.

## **IC statement:**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

## **IMPORTANT NOTE:**

Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device has been designed to operate with an antenna having a maximum gain of 5.1dBi. Antenna having a higher gain is strictly prohibited per regulations of Industry Canada. The required antenna impedance is 50 ohms.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage

#### Appendix E - Warranty

radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

Pour les produits disponibles aux États-Unis / Canada du marché, seul le canal 1 à 11 peuvent être exploités. Sélection d'autres canaux n'est pas possible. This device and it's antennas(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with IC multi-transmitter product procedures.

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnement en association avec une autre antenne ou transmetteur.

The device for the band 5150-5250 MHz is only for indoor usage to reduce potential for harmful interference to co-channel mobile satellite systems.

les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une

utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

# **Power Usage**

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted.

Network Standby: 3.12 watts

# Registration



Register your product online at www.onlineregister.com/dlink

Product registration is entirely voluntary and failure to complete or return this form will not diminish your warranty rights.