

DAP-3662

Version 1.10

Wireless AC1200 Concurrent Dual Band Outdoor PoE Access Point



User Manual

Business Class Networking

Table of Contents

Product Overview	4	Performance	30
Package Contents.....	4	Wireless Resource Control.....	32
System Requirements.....	4	Multi-SSID.....	34
Introduction	5	VLAN Settings	36
Features and Benefits.....	6	VLAN Port List.....	37
Hardware Overview	7	VLAN Add/Edit	38
Front	7	PVID Setting.....	39
Back	8	Intrusion.....	40
Bottom.....	9	Schedule	41
Wireless Basics	10	Internal RADIUS Server	42
Installation	11	ARP Spoofing Prevention	43
Installation Considerations	11	Bandwidth Optimization	44
Four Operational Modes	12	AP Array.....	46
Connect to your Network.....	13	AP Array Scan	46
Configuration	15	Configuration Settings.....	47
Wireless Settings.....	17	Auto-RF.....	51
Access Point Mode	17	Load Balance	52
WDS with AP Mode	19	Captive Portal	53
WDS Mode	21	Authentication Settings-Web Redirection Only ..	53
Wireless Client Mode.....	23	Authentication Settings- Username/Password....	54
WPA-Personal Authentication.....	25	Authentication Settings- Passcode	55
WPA-Enterprise Authentication.....	26	Authentication Settings- Remote RADIUS.....	56
802.1X authentication.....	27	Authentication Settings- LDAP	57
LAN	28	Authentication Settings- POP3.....	58
IPv6	29	Login Page Upload.....	59
Advanced Settings	30	IP Filter Settings.....	60

Table of Contents

MAC Bypass	61	SNMP Settings	81
DHCP Server	62	Ping Control Setting	81
Dynamic Pool Settings.....	62	Central WiFiManager Settings.....	81
Static Pool Setting	64	Firmware and SSL Certification Upload.....	82
Current IP Mapping List.....	65	Configuration File	83
Filters.....	66	Time and Date.....	84
Wireless MAC ACL	66	Configuration.....	85
WLAN Partition	67	Save and Activate	85
Traffic Control.....	68	Discard Changes	85
Uplink/Downlink Setting	68	System	86
QoS.....	69	System Settings.....	86
Traffic Manager.....	70	Help	87
Status	71	Troubleshooting	88
Device Information	71	Antenna Pattern	91
Client Information	72	Technical Specifications	92
WDS Information	73		
Channel Analyze	74		
Stats	75		
Ethernet.....	75		
Wireless Traffic Stats.....	76		
Log	77		
View Log.....	77		
Log Settings.....	78		
Maintenance	79		
Administrator Settings.....	79		
Limit Administrator.....	79		
System Name Settings	79		
Login Settings	80		
Console Settings	80		

Package Contents

- DAP-3662 Wireless AC1200 Concurrent Dual Band Outdoor PoE Access Point
- Installation CD-ROM
- Installation Guide
- PoE Injector
- Power Adapter (48 V/ 0.5 A)
- Mounting kit (Wall/Pole Mount)
 - Stainless steel mount base x 1
 - Stainless tie back straps x 2
 - Wall screw x 4
 - Wall plug x 4
 - Stainless mount screw (hexagonal hole)
- Hexagon Socket Spanner (Security screw)
- Two LAN Port Waterproof Enclosure
- Grounding Wire

Warning: Using a power adapter with different specifications than the one included with the DAP-3662 will cause damage and void the warranty for this product. If any of the above items are missing, please contact your reseller.

System Requirements

Network Requirements	<ul style="list-style-type: none"> • IEEE 802.11n/g wireless clients (AP/bridge modes) • IEEE 802.11n/g wireless router or access point (client mode)
Web-based Configuration Utility Requirements	<p>Computer with the following:</p> <ul style="list-style-type: none"> • Windows®, Macintosh, or Linux-based operating system <p>Browser Requirements:</p> <ul style="list-style-type: none"> • Internet Explorer Version 7.0, Chrome 12, Safari 4, or Firefox 12 and above (for web-based configuration)

Introduction

D-Link, an industry pioneer in wireless networking, introduces a solution for businesses seeking to deploy next generation draft 802.11n LANs. D-Link unveils its new Wireless AC1200 Concurrent Dual Band Outdoor PoE Access Point (DAP-3662), designed specifically for business-class environments such as large or enterprise corporations to provide secure and manageable dual-band wireless LAN options for network administrators.

Versatile Access Point

The Wireless AC1200 Concurrent Dual Band Outdoor PoE Access Point allows network administrators to deploy a highly manageable and extremely robust dual-band wireless network. All new embedded four dual-band antennas design can provide optimal wireless coverage in either 2.4 GHz (802.11g and 802.11n) or 5 GHz (802.11a, 802.11n, and 802.11ac) bands. Enclosed in a plenum-rated metal chassis, the DAP-3662 adheres to strict fire codes for placement in air passageways. For advanced installations, this new high-speed access point has integrated 802.3af Power over Ethernet (PoE) support, allowing installation of this device in areas where power outlets are not readily available.

Enhanced Performance

The DAP-3662 delivers reliable wireless performance with maximum wireless signal rates of up to 866 in 5 Ghz and 300 Mbps in 2.4 Ghz wireless band. This, coupled with support for Wi-Fi Multimedia™ (WMM) Quality of Service features, makes it an ideal access point for audio, video, and voice applications. Additionally, the DAP-3662 supports load balance features to ensure maximum performance.

Security

To help maintain a secure wireless network, the DAP-3662 provides the latest in wireless security technologies by supporting both Personal and Enterprise versions of WPA and WPA2 (802.11i) with support for RADIUS server backend. To further protect your wireless network, MAC Address Filtering, Wireless LAN segmentation, Disable SSID Broadcast, Rogue AP Detection, and Wireless Broadcast Scheduling are also included.

The Wireless AC1200 Concurrent Dual Band Outdoor PoE Access Point includes support for up to 16 VLANs for implementing multiple SSIDs to further help segment users on the network. The DAP-3662 also includes a wireless client isolation mechanism, which limits direct client-to-client communication.

Features and Benefits

- Four different operation modes - Capable of operating in one of four different operation modes to meet your wireless networking needs: Access Point(AP), WDS with AP, WDS, or Wireless Client.
- Faster wireless networking with the 802.11ac standard to provide a maximum wireless signal rate of up to 1200 Mbps*.
- Backward compatible with the 802.11a/b/g/n standard to maximum flexibility when migrating your network.
- Better security with WPA - The DAP-3662 can securely connect wireless clients on the network using WPA (Wi-Fi Protected Access) to provide a much higher level of security for your data and communications than its previous versions.
- Central WiFiManager management software - The real-time display of the network's topology and AP's information makes network configuration and management quick and simple.
- SNMP for management - The DAP-3662 is not just fast, but also supports SNMP v1 and v2c for better network management. Superior wireless AP manager software is bundled with the DAP-3662 for network configuration and firmware upgrade. Systems administrators can also set up the DAP-3662 easily with the Web-based configuration.
- Utilizes OFDM technology (Orthogonal Frequency Division Multiplexing).
- Supports 802.3af Power over Ethernet.
- Includes two 10/100/1000 Ethernet port.
- Operates in the 2.4~2.5 GHz or 5.15~5.85 GHz** frequency ranges.
- Web-based interface for managing and configuring.

*Maximum wireless signal rate derived from IEEE Standard 802.11g, 802.11a and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

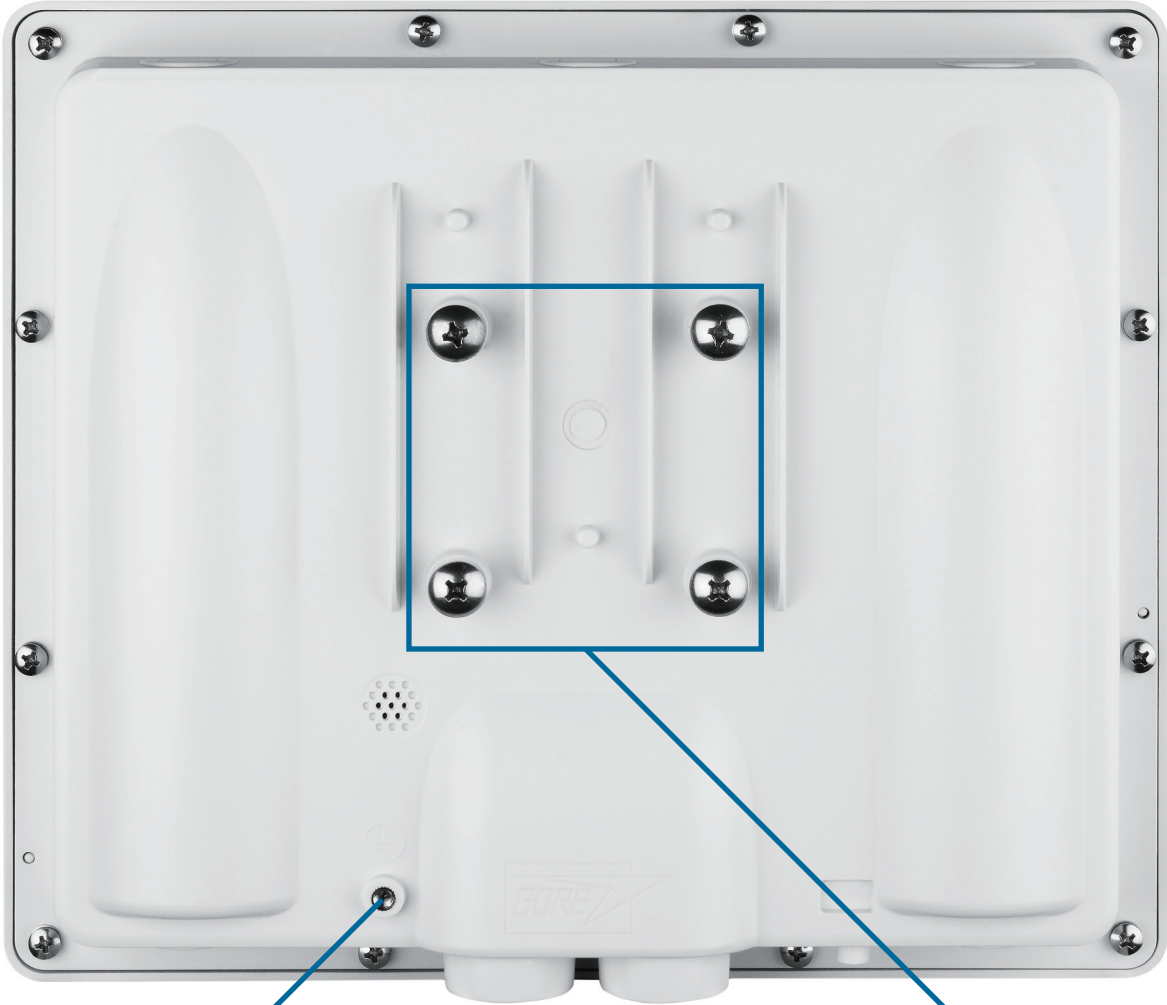
**Please note that operating frequency ranges vary depending on the regulations of individual countries and jurisdictions. The DAP-3662 isn't supported in the 5.25~5.35 GHz and 5.47 ~ 5.725 GHz frequency ranges in some regions.

Hardware Overview

Front



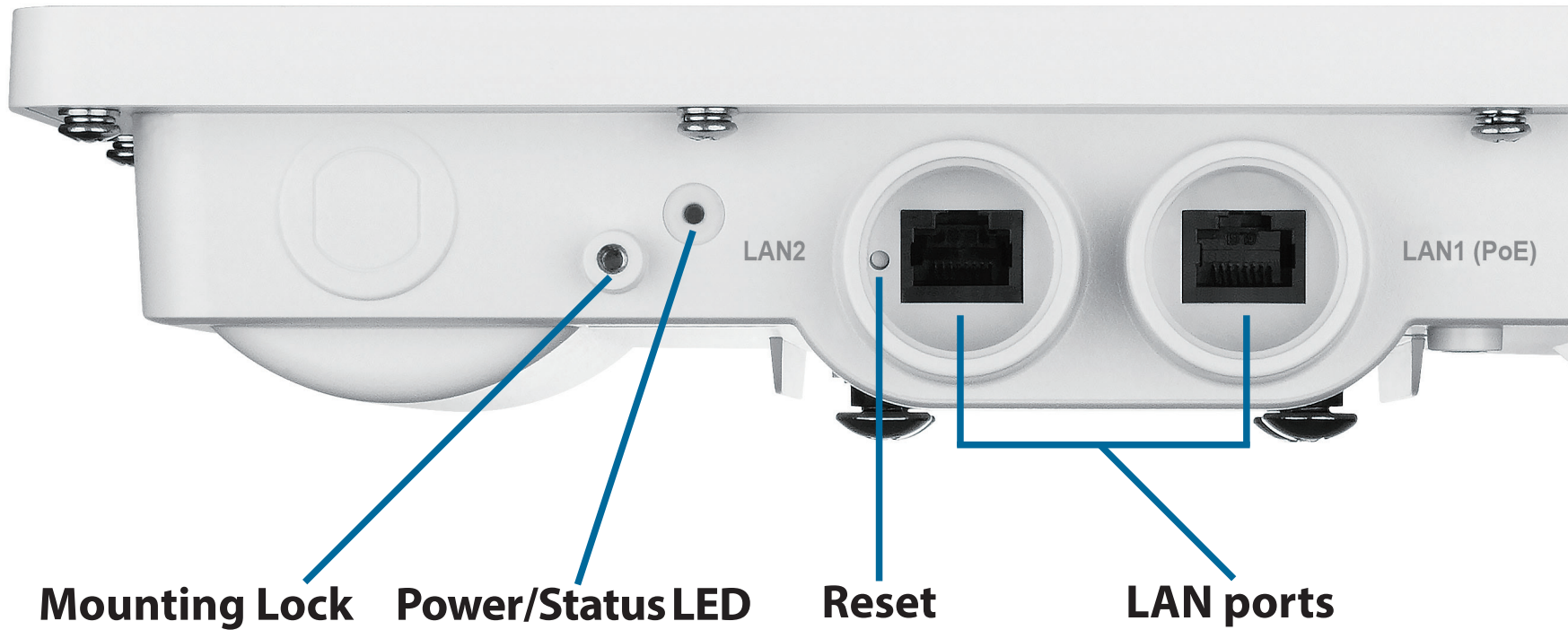
Back



Grounding Wire Connection

Wall/Pole Mount

Bottom



Wireless Basics

D-Link wireless products are based on industry standards to provide high-speed wireless connectivity that is easy to use within your home, business or public access wireless networks. D-Link wireless products provides you with access to the data you want, whenever and wherever you want it. Enjoy the freedom that wireless networking can bring to you.

WLAN use is not only increasing in both home and office environments, but in public areas as well, such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are allowing people to work and communicate more efficiently. Increased mobility and the absence of cabling and other types of fixed infrastructure have proven to be beneficial to many users.

Wireless adapter cards used on laptop and desktop systems support the same protocols as Ethernet adapter cards, allowing wireless users to use the same applications as those used on a wired network.

People use WLAN technology for many different purposes:

Mobility - Productivity increases when people can have access to data in any location within the operating range of their WLAN. Management decisions based on real-time information can significantly improve the efficiency of a worker.

Low implementation costs - WLANs are easy to set up, manage, change and relocate. Networks that frequently change can benefit from WLAN's ease of implementation. WLANs can operate in locations where installation of wiring may be impractical.

Installation and network expansion - By avoiding the complications of troublesome cables, a WLAN system can be fast and easy during installation, especially since it can eliminate the need to pull cable through walls and ceilings. Wireless technology provides more versatility by extending the network beyond the home or office.

Inexpensive solution - Wireless network devices are as competitively priced as conventional Ethernet network devices. The DAP-3662 saves money by providing users with multi-functionality configurable in four different modes.

Scalability - Configurations can be easily changed and range from Peer-to-Peer networks, suitable for a small number of users to larger Infrastructure networks to accommodate hundreds or thousands of users, depending on the number of wireless devices deployed.

Installation

Installation Considerations

The D-Link wireless device lets you access your network using a wireless connection from virtually anywhere within the operating range of your wireless network. Keep in mind, however, that the number, thickness and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

1. Keep the number of walls and ceilings between the D-Link device and other network devices to a minimum - each wall or ceiling can reduce your adapter's range from 3-90 feet (1-30 meters.) Position your devices so that the number of walls or ceilings is minimized.
2. Be aware of the direct line between network devices. A wall that is 1.5 feet thick (.5 meters), at a 45-degree angle appears to be almost 3 feet (1 meter) thick. At a 2-degree angle it looks over 42 feet (14 meters) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
3. Building materials make a difference. A solid metal door or aluminum studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete will degrade your wireless signal.
4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
5. If you are using 2.4 GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone is not in use.

Four Operational Modes

Operation Mode (Only supports 1 mode at a time)	Function
Access Point (AP)	Create a wireless LAN
WDS with AP	Wirelessly connect multiple networks while still functioning as a wireless AP
WDS	Wirelessly connect multiple networks
Wireless Client	AP acts as a wireless network adapter for your Ethernet enabled device

Connect to your Network

To power the access point, you can use one of the following 3 methods:

Method 1 - Power on by PoE switch.

Method 2 - Power on by PoE kit.

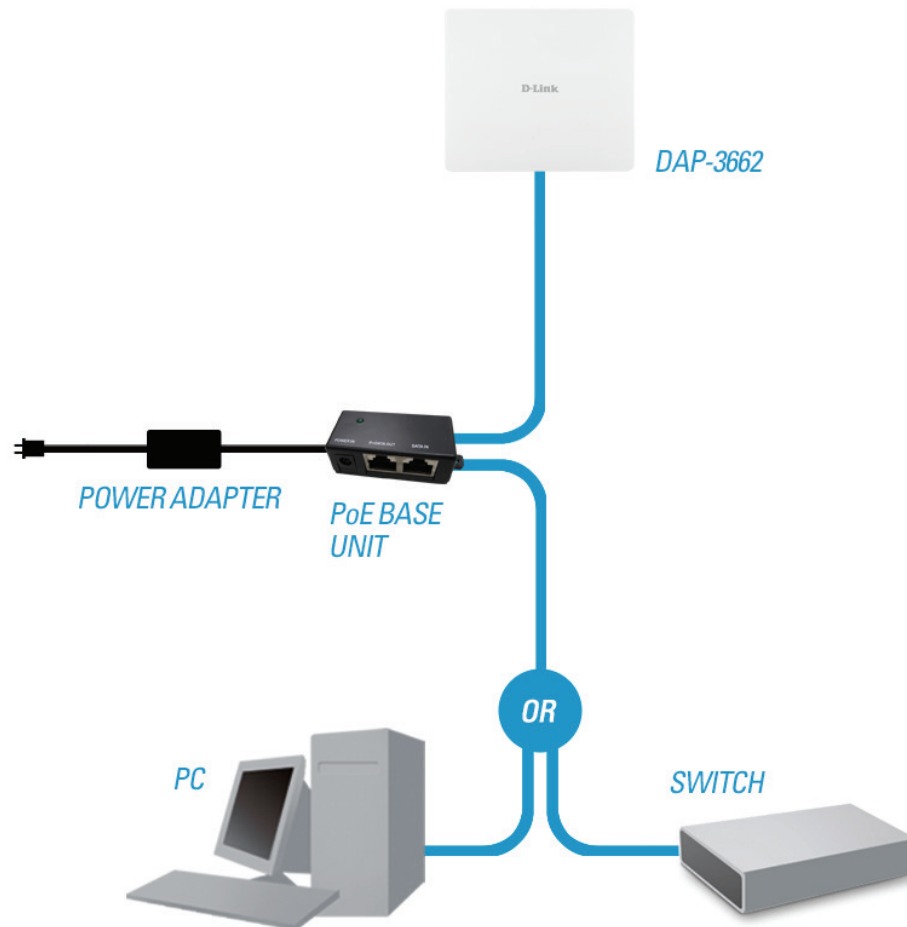
Method 1

1. Connect one end of your Ethernet cable into the LAN1 (PoE) port on the DAP-3662 and then connect the other end to your PoE switch.



Method 2

1. Connect one end of an Ethernet cable into the **Data In** port on the PoE injector and the other end into one port on your switch, router, or computer.
2. Connect one end of an Ethernet cable into the **P+Data Out** port on the PoE base unit and the other end into the **LAN1 (PoE)** port on the DAP-3662 access point.
3. Use the supplied power adapter. Connect the power adapter to the **Power In** receptor on the PoE adapter.
4. Connect the power cable to the power adapter and then connect the other end into a power outlet.



Configuration

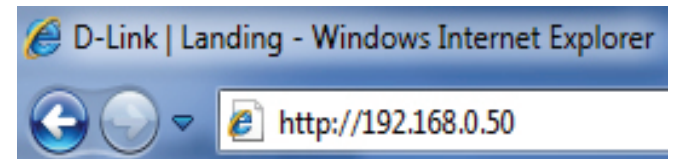
To configure the DAP-3662, use a computer that is connected to the DAP-3662 with an Ethernet cable.

Step 1 - Disable the **Access the Internet using a proxy server** function. To disable this function, go to **Control Panel > Internet Options > Connections > LAN Settings** and uncheck the enable box.

Step 2 - Open your web browser.

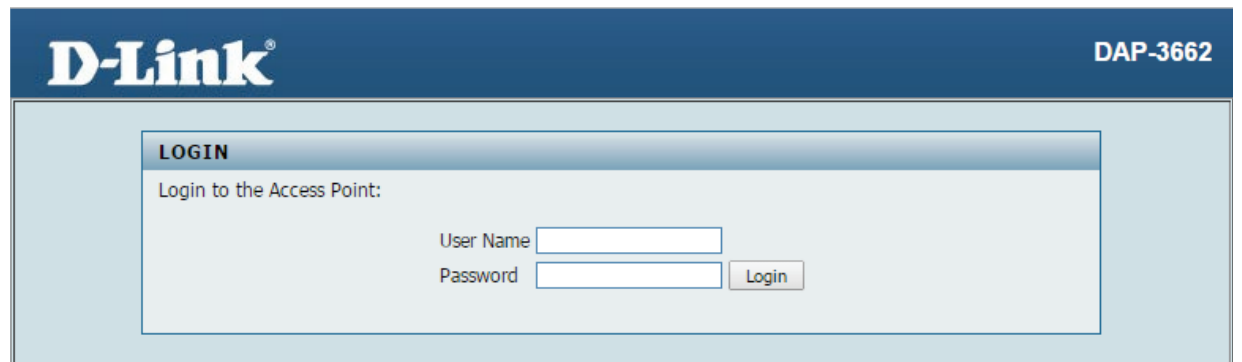
Step 3 - Type the IP address of the DAP-3662 in the address field (**http://192.168.0.50**) and press **Enter**. Make sure that the IP addresses of the DAP-3662 and your computer are in the same subnet.

Note: *If you have changed the default IP address assigned to the DAP-3662, make sure to enter the correct IP address.*



Step 4 - Enter admin for the User Name and then click **Login**. By default the password is blank.

Note: *If you have changed the password, make sure to enter the correct password.*



Section 3 - Configuration

After successfully logging into the DAP-3662 the following window will appear:

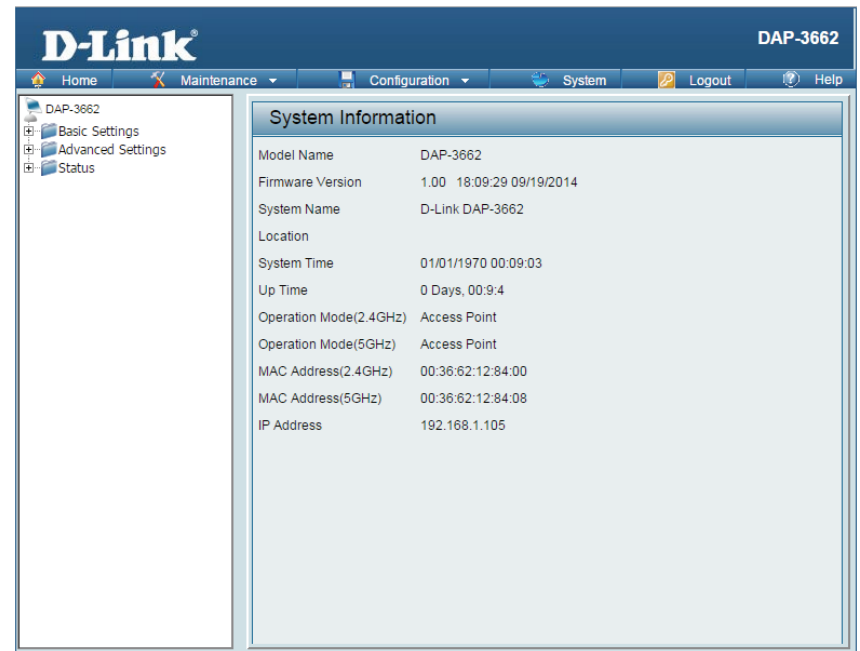
When making changes on most of the configuration windows in this section, use either the **Apply** button or the **Save** button to save your configuration changes.



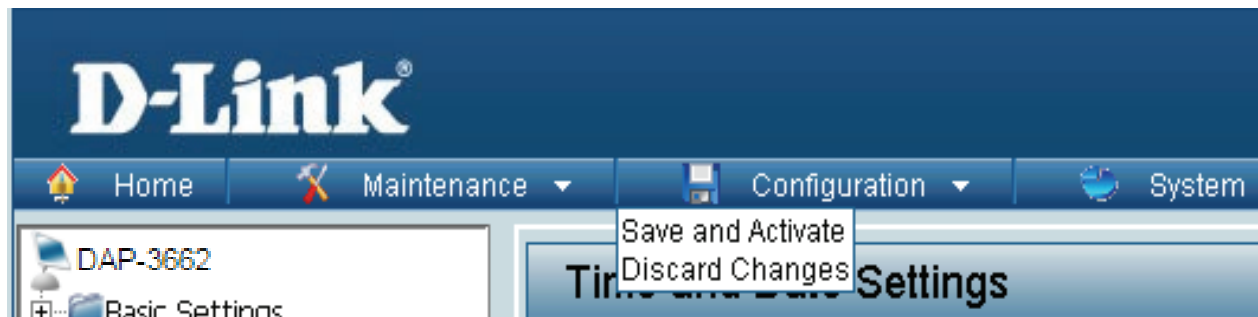
Click the **Apply** button to configure changes.



Click the **Save** button to configure changes.



Alternatively, click the **Save and Activate** option on the Configuration drop-down menu at the top of each DAP-3662 window. This will cause the DAP-3662 to save and reboot.



Wireless Settings

Access Point Mode

In Access Point mode, the DAP-3662 functions as a wireless AP. After configuring the desired settings, click the **Save** button.

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

Mode: Select **Access Point** from the drop-down menu. The other three choices are **WDS with AP**, **WDS**, and **Wireless Client**.

Network Name (SSID): Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's default setting is **dlink**. The SSID can easily be 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: **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 provides the best wireless performance. **Enable** is set by default. 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, 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.

The screenshot displays the D-Link DAP-3662 configuration interface. The main content area is titled "Wireless Settings" and contains the following fields and options:

- Wireless Band:** 2.4GHz
- Mode:** Access Point
- Network Name (SSID):** dlink
- SSID Visibility:** Enable
- Auto Channel Selection:** Enable
- Channel:** 1
- Channel Width:** 20 MHz
- Authentication:** Open System
- Key Settings:**
 - Encryption:** Disable Enable
 - Key Type:** HEX
 - Key Size:** 64 Bits
 - Key Index(1~4):** 1
 - Network Key:** [Empty text box]
 - Confirm Key:** [Empty text box]

A "Save" button is located at the bottom right of the configuration area.

Channel Width: Allows selection of the channel width you would like to operate in. **20 MHz** and **Auto 20/40 MHz** allow both 802.11n and non-802.11n wireless devices on your network when the wireless mode is Mixed 802.11 b/g/n in 2.4G and Mixed 802.11 a/n in 5G. When the channel width is set to **Auto 20/40 MHz**, then 802.11n wireless devices are allowed to transmit data using 40 MHz.

Authentication: Select **Open System** to communicate the key across the network.
Select **Shared Key** to limit communication to only those devices that share the same WEP settings. If multi-SSID is enabled, this option is not available.
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.

For more information about the different types of Authentication offered on the DAP-3662 and the respective settings of each, please go to the first page of the "Authentication" explanations, which begins on page 23.

WDS with AP Mode

In WDS with AP mode, the DAP-3662 wirelessly connects multiple networks while still functioning as a wireless AP. After completing the desired settings, click the **Save** button to let your changes take effect.

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

Mode: Select **WDS with AP** mode 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 easily be 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: **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 provides the best wireless performance. **Enable** is set by default. 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, 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 selection of the channel width you would like to operate in. **20 MHz** and **Auto 20/40 MHz** allow both 802.11n and non-802.11n wireless devices on your network when the wireless mode is Mixed 802.11 b/g/n in 2.4G and Mixed 802.11 a/n in 5G. When the channel width is set to **Auto 20/40 MHz**, then 802.11n wireless devices are allowed to transmit data using 40 MHz.

The screenshot displays the D-Link DAP-3662 configuration interface. The main content area is titled "Wireless Settings".

- Wireless Band:** 2.4GHz
- Mode:** WDS with AP
- Network Name (SSID):** dlink
- SSID Visibility:** Enable
- Auto Channel Selection:** Disable
- Channel:** 1
- Channel Width:** 20 MHz

The **WDS** section includes a "Remote AP MAC Address" field with eight input boxes numbered 1 through 8.

The **Site Survey** section features a "Scan" button and a table with the following headers: CH, RSSI, BSSID, Security, and SSID. The table body is currently empty.

The **Authentication** section is set to "Open System". Under "Key Settings":

- Encryption:** Disable (selected), Enable
- Key Type:** HEX
- Key Index(1~4):** 1
- Key Size:** 64 Bits
- Network Key:** [Empty text box]
- Confirm Key:** [Empty text box]

 A validation message below the confirm key field reads: (0-9,a-z,A-Z,~!@#%&*0_+':\|,./</p>
</div>
<div data-bbox="41 941 243 964" data-label="Page-Footer>D-Link DAP-3662 User Manual</div>
<div data-bbox="937 941 966 964" data-label="Page-Footer>19</div>

Remote AP MAC Address: Allows selection of the channel width you would like to operate in. **20 MHz** and **Auto 20/40 MHz** allow both 802.11n and non-802.11n wireless devices on your network when the wireless mode is Mixed 802.11 b/g/n in 2.4G and Mixed 802.11 a/n in 5G. 802.11n wireless devices are allowed to transmit data using 40 MHz when the channel width is **Auto 20/40 MHz**.

Site Survey: Manually enter the MAC addresses of the APs on your network that will serve as bridges to wirelessly connect multiple networks. You may also click the **Scan** button to search for available wireless networks, then click on the available network that you want to connect to.

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

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

Select **Shared Key** to limit communication to only those devices that share the same WEP settings. If multi-SSID is enabled, this option is not available.

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

For more information about the different types of Authentication offered on the DAP-3662 and the respective settings of each, please go to the first page of the "Authentication" explanations, which begins on page 23.

WDS Mode

In WDS mode, the DAP-3662 wirelessly connects multiple networks, without functioning as a wireless AP. After completing the desired settings, click the **Save** button to let your changes take effect.

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

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

Network Name Service Set Identifier (SSID) is the name designated for a (SSID): 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 selection of the channel width you would like to operate in. **20 MHz** and **Auto 20/40 MHz** allow both 802.11n and non-802.11n wireless devices on your network when the wireless mode is Mixed 802.11 b/g/n in 2.4G and Mixed 802.11 a/n in 5G. 802.11n wireless devices are allowed to transmit data using 40 MHz when the channel width is **Auto 20/40 MHz**.

The screenshot shows the D-Link DAP-3662 configuration interface. The 'Wireless Settings' section is active, displaying the following configuration options:

- Wireless Band:** 2.4GHz
- Mode:** WDS
- Network Name (SSID):** dlink
- SSID Visibility:** Enable
- Auto Channel Selection:** Disable
- Channel:** 1
- Channel Width:** 20 MHz

Below these settings, there is a 'WDS' section with 'Remote AP MAC Address' fields (1-8) and a 'Site Survey' section with a 'Scan' button. A table for the site survey results is visible, with columns for CH, RSSI, BSSID, Security, and SSID.

The 'Authentication' section is set to 'Open System'. The 'Key Settings' section shows 'Encryption' set to 'Disable', 'Key Type' set to 'HEX', 'Key Index' set to '1', and 'Key Size' set to '64 Bits'. There are input fields for 'Network Key' and 'Confirm Key' with a validation hint: (0-9,a-z,A-Z,~!@#%&*0_+`~=:;'\",./<>?).

A 'Save' button is located at the bottom right of the configuration page.

Remote 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 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**, **Shared Key**, or **WPA-Personal**.

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

Select **Shared Key** to limit communication to only those devices that share the same WEP settings.

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

Wireless Client Mode

In Wireless Client mode, the DAP-3662 functions as a wireless client on a wireless network in which an AP already exists. After completing the desired settings, click the **Save** button to let your changes take effect.

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: Enabling this feature automatically selects the channel that will provide the best wireless performance. This feature is not supported in Wireless Client mode.

Channel: The channel used will be displayed, and follow the root AP.

Channel Width: This option is unavailable in wireless client mode.

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

The screenshot shows the D-Link DAP-3662 configuration interface. The 'Wireless Settings' section is active, displaying the following configuration:

- 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

Below these settings is a 'Site Survey' section with a 'Scan' button. A table is provided to display survey results:

CH	RSSI	BSSID	Security	SSID

The 'Authentication' section is set to 'Open System'. Under 'Key Settings', 'Encryption' is set to 'Disable', 'Key Type' is 'HEX', and 'Key Size' is '64 Bits'. The 'Key Index' is '1'. There are input fields for 'Network Key' and 'Confirm Key' with a validation pattern: (0-9,a-z,A-Z,~!@#%&*0_+`- =0[];'|\:./<>?).

The 'Wireless MAC Clone' section has 'Enable' checked, 'MAC Source' set to 'Auto', and input fields for 'MAC Address' with a 'Scan' button. Below this is another empty table for 'MAC Address'.

A 'Save' button is located at the bottom right of the configuration page.

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.

For more information about the different types of Authentication offered on the DAP-3662 and the respective settings of each, please go to the first page of the Authentication explanations which begins on page 23.

Wireless MAC Clone

Enable: Click the box to enable the Wireless MAC Clone feature. Enabling this option allows the user to manually assign the source MAC address to packets forwarded by the DAP-3662. If disabled, the packet's source MAC address field will be automatically selected as the DAP-3662's MAC address.

MAC Source: Use the drop-down menu to select either **Auto** or **Manual**.

MAC Address: If you selected **Manual** for the MAC Source above, you can either click the **Scan** button to search for all available devices connected to your DAP-3662's Ethernet port or manually enter a MAC address in the space provided.

WPA-Personal Authentication

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 Only**, or **WPA Only**. WPA and WPA2 use different algorithms. **AUTO (WPA or WPA2)** allows you to use both WPA and WPA2.

Cipher Type: When you select WPA-Personal, you must also 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** is recommended.

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

Confirm

PassPhrase: Retype the Passphrase entered above in the corresponding field.

The screenshot shows the 'Wireless Settings' configuration window. The 'Authentication' dropdown is set to 'WPA-Personal'. Under 'PassPhrase Settings', 'WPA Mode' is set to 'AUTO (WPA or WPA2)', 'Cipher Type' is 'Auto', and 'Group Key Update Interval' is '3600 (Seconds)'. The 'Manual' radio button is selected. The 'Activated From' field is set to 'Sun : 00 : 00'. The 'Time Interval' is '1 (1~168)hour(s)'. There are two empty text boxes for 'PassPhrase' and 'Confirm PassPhrase'. A 'Save' button is at the bottom right. A notice at the bottom states: 'notice: 8~63 in ASCII or 64 in Hex. (0-9,a-z,A-Z,~,!@#%&^&*()_+`-={[]:;'\',./,<>?)'.

WPA-Enterprise Authentication

WPA Mode: When **WPA-Enterprise** is selected, you must also select 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.

Cipher Type: When WPA-Enterprise is selected, you must also select a cipher type from the drop-down menu: **Auto**, **AES**, or **TKIP**.

Group Key Update Interval: Select the interval during which the group key will be valid. The recommended value is **1800**, as a lower interval may reduce data transfer rates.

Network Access Protection: Enable or disable Microsoft Network Access Protection. Enabling this will make the DAP-3662 a NAP enforcement point if you are running the Network Policy Server (NPS) service in Windows Server 2008.

RADIUS Server: Enter the IP address of the RADIUS server. Click External if the RADIUS server is on your network or Internal if you are using the RADIUS server on the DAP-3662.

RADIUS Port: Enter the RADIUS port (**1812** is the default).

RADIUS Secret: Enter the RADIUS secret.

Accounting Mode: Select if you want to use a different server for accounting.

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

Accounting Port: Enter the Accounting port (**1813** is the default).

Accounting Secret: Enter the Accounting secret.

The screenshot shows the 'Wireless Settings' configuration page. The 'Authentication' section is set to 'WPA-Enterprise'. Under 'RADIUS Server Settings', 'WPA Mode' is set to 'AUTO (WPA or WPA2)', 'Cipher Type' is 'Auto', and 'Group Key Update Interval' is '3600 (Seconds)'. The 'Network Access Protection' section has 'Network Access Protection' set to 'Disable'. The 'RADIUS Server Mode' section has 'RADIUS Server' set to 'External'. The 'Primary RADIUS Server Setting' section has 'RADIUS Server' and 'RADIUS Secret' fields, with 'RADIUS Port' set to '1812'. The 'Backup RADIUS Server Setting (Optional)' section has 'RADIUS Server' and 'RADIUS Secret' fields, with 'RADIUS Port' set to '1812'. The 'Primary Accounting Server Setting' section has 'Accounting Mode' set to 'Disable', 'Accounting Server' and 'Accounting Secret' fields, and 'Accounting Port' set to '1813'. The 'Backup Accounting Server Setting (Optional)' section has 'Accounting Server' and 'Accounting Secret' fields, and 'Accounting Port' set to '1813'. The 'Wireless Band' is set to '2.4GHz', 'Mode' is 'Access Point', 'Network Name (SSID)' is 'dlink', 'SSID Visibility' is 'Enable', 'Auto Channel Selection' is 'Enable', 'Channel' is '1', and 'Channel Width' is '20 MHz'. 'Captive Profile' is set to 'Disable'.

Note: You can input the secondary RADIUS server and accounting server settings if you have a backup RADIUS and accounting server.

802.1X authentication

Key Update Interval: Select the interval (in seconds) during which the key will be valid.

RADIUS Server: Enter the IP address of the RADIUS server. Click **External** if the RADIUS server is on your network or **Internal** if you are using the RADIUS server on the DAP-3662.

RADIUS Port: Enter the RADIUS port (**1812** is the default).

RADIUS Secret: Enter the RADIUS secret.

Accounting Mode: Select if you want to use a different server for accounting.

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

Accounting Port: Enter the Accounting port (**1813** is the default).

Accounting Secret: Enter the Accounting secret.

Note: You can input the secondary RADIUS server and accounting server settings if you have a backup RADIUS and accounting server.

The screenshot shows the 'Wireless Settings' configuration window. The 'Authentication' dropdown is set to '802.1X'. Under 'RADIUS Server Settings', the 'Key Update Interval' is set to 300 seconds. The 'RADIUS Server Mode' is set to 'External'. The 'Primary RADIUS Server Setting' has fields for 'RADIUS Server', 'RADIUS Port' (1812), and 'RADIUS Secret'. Below it is the 'Backup RADIUS Server Setting (Optional)' with similar fields. The 'Primary Accounting Server Setting' has fields for 'Accounting Server', 'Accounting Port' (1813), and 'Accounting Secret'. Below it is the 'Backup Accounting Server Setting (Optional)' with similar fields. A 'Save' button is located at the bottom right.

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-3662. 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. After completing the desired LAN settings, click the **Save** button to let your changes take effect.

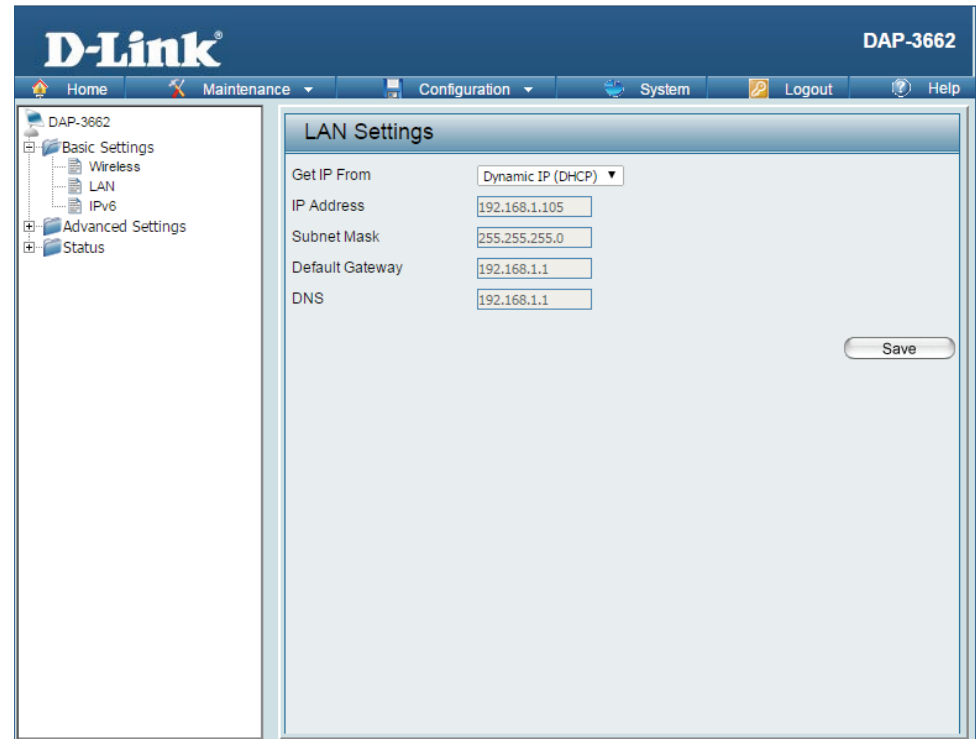
Get IP From: Select **Static IP (Manual)** if you do not have a DHCP server on your network, or if you wish to assign a static IP address to the DAP-3662. When **Dynamic IP (DHCP)** is selected, the other fields here will be grayed out. Please allow about 2 minutes for the DHCP client to be functional once this selection is made.

IP Address: The default IP address is **192.168.0.50**. 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.

Default Gateway: Enter the IP address of the gateway in your network. If there is a router/gateway in your network, please enter its IP address.

DNS: Enter a DNS server IP address of your choice. In most cases, enter the LAN IP of your router.



The screenshot displays the D-Link DAP-3662 web interface. The top navigation bar includes 'Home', 'Maintenance', 'Configuration', 'System', 'Logout', and 'Help'. The left sidebar shows a tree view with 'Basic Settings' (Wireless, LAN, IPv6) and 'Advanced Settings' (Status). The main content area is titled 'LAN Settings' and contains the following fields:

Get IP From	Dynamic IP (DHCP)
IP Address	192.168.1.105
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS	192.168.1.1

A 'Save' button is located at the bottom right of the settings area.

IPv6

The IPv6 function allows you access DAP-3662 using an IPv6 address.

Enable IPv6: Check this box to enable IPv6.

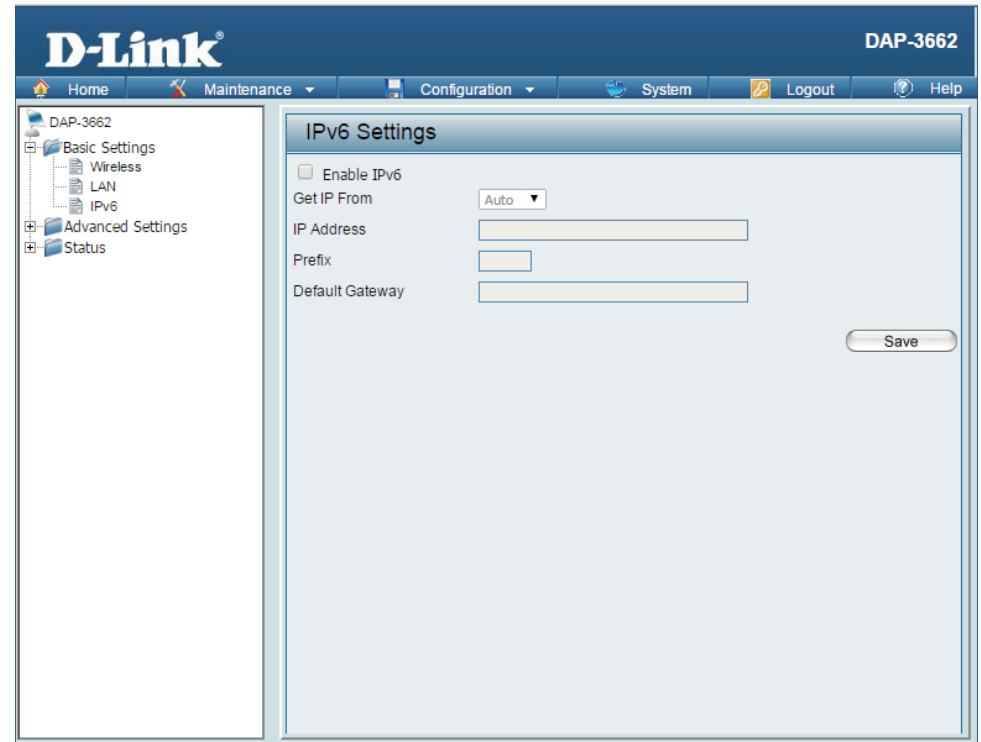
Get IP From: Select either **Static** to enter your own IP address or **Auto** to be automatically assigned by a DHCP server or IPv6 gateway.

IP Address: Assign an IPv6 IP address.

Prefix: The Prefix is used to determine what subnet an IP address belongs to. It must be 0~128..

Default Gateway: Enter the default gateway address. This is usually the IP address of your router.

Note: If IPv6 is enabled, AP Array, QoS, and Traffic Manager will all be disabled. Also, AP Client mode will change to AP mode.



The screenshot displays the D-Link web interface for the DAP-3662 device. The top navigation bar includes 'Home', 'Maintenance', 'Configuration', 'System', 'Logout', and 'Help'. The left sidebar shows a tree view with 'Basic Settings' (Wireless, LAN, IPv6) and 'Advanced Settings' (Status). The main content area is titled 'IPv6 Settings' and contains the following fields:

- Enable IPv6
- Get IP From: Auto (dropdown menu)
- IP Address: [text input field]
- Prefix: [text input field]
- Default Gateway: [text input field]
- Save (button)

Advanced Settings

Performance

The Performance Settings window offers a number of user-controlled settings designed to optimize the performance of the DAP-3662. After completing the desired settings, click the **Save** button to let your changes take effect.

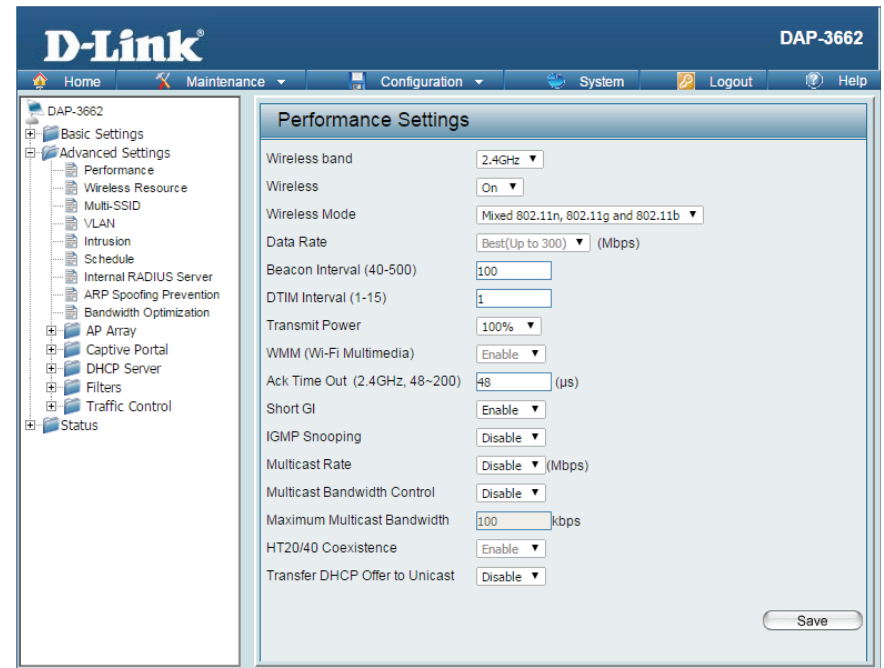
Wireless Band: Select either 2.4 GHz or 5 GHz.

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 802.11n and 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**, and **6** for 5 GHz and **Best (Up to 54)**, **54**, **48**, **36**, **24**, **18**, **12**, **9**, **6**, **11**, **5.5**, **2** and **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.



*Maximum wireless signal rate derived from IEEE Standard 802.11g, 802.11a and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

Section 3 - Configuration

DTIM 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 (2.4 GHZ) or Ack Time Out (5 GHZ): To effectively optimize throughput over long distance links enter a value for Acknowledgement Time Out between **25** and **200** microseconds for 5 GHz or from **48** to **200** microseconds in the 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: Adjust the multicast packet data rate here. The multicast rate is supported in **AP mode**, (2.4 GHz and 5 GHz) and **WDS with AP mode**, including Multi-SSIDs.

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

Maximum Multicast Bandwidth : Set the multicast packets maximum bandwidth pass through rate from the Ethernet interface to the DAP-3662.

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 over-lapping and causing interference, the DAP-3662 will automatically change to 20 MHz.

Transfer DHCP Offer to Unicast : Enable to transfer the DHCP Offer to Unicast from LAN to WLAN, suggest to enable this function if stations number is larger than 30.

Wireless Resource Control

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.

Wireless band: Select **2.4 GHz** or **5 GHz**.

Band Steering: Use the drop-down menu to **Enable** the 5G Preferred function. When the wireless clients support both 2.4 GHz and 5 GHz and the 2.4 GHz signal is not strong enough, the device will use 5G as higher priority.

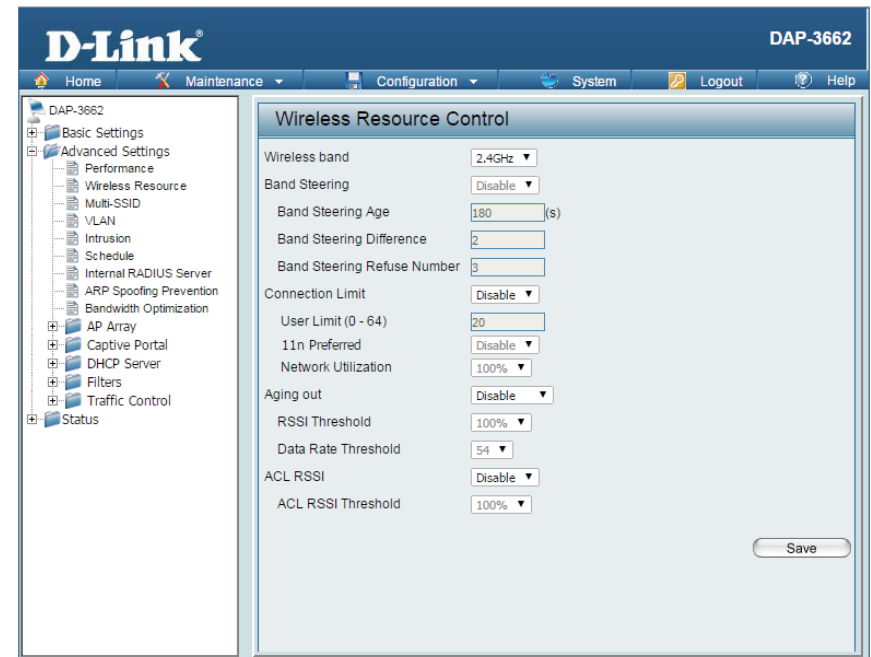
Band Steering Age: Enter the time in seconds to specify the interval of updating information.

Band Steering Difference: The 5G preferred difference value is equal to the number of 5 GHz wireless client connections minus the number of 2.4 GHz wireless client connections. If the number of 5 GHz wireless client connections minus the number of 2.4 GHz wireless client connections exceed this value, the extra 5 GHz wireless client connections will be forced to connect to the 2.4 GHz band and not the 5 GHz band.

Band Steering Refuse Number: Enter the maximum 5G connection attempts allowed before the 5G preferred function will be disabled for the wireless station connection.

Connection Limit: Select **Enable** or **Disable**. This is an option 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-3662 will not allow clients to associate with the AP.

User Limit: Set the maximum amount of users that are allowed access (zero to 64 users) to the device using the specified wireless band. The default setting is 20.



11n Preferred: 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: Set the maximum utilization of this access point for service. The DAP-3662 will not allow any new clients to associate with the AP if the utilization exceeds the value the user specifies. Select a utilization percentage between 100%, 80%, 60%, 40%, 20%, or 0%. When this network utilization threshold is reached, the device will pause one minute to allow network congestion to dissipate.

Aging out: Use the drop-down menu to select the criteria of disconnecting the wireless clients. Available options are **RSSI** and **Data Rate**.

RSSI Threshold: When **RSSI** is selected in the **Aging out** drop-down menu, select the percentage of RSSI here. When the RSSI of wireless clients is lower than the specified percentage, the device disconnects the wireless clients.

Data Rate Threshold: When **Data Rate** is selected in the **Aging out** drop-down menu, select the threshold of data rate here. When the data rate of wireless clients is lower than the specified number, the device disconnects the wireless clients.

ACL RSSI: Use the drop-down menu to **Enable** the 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: Set the ACL RSSI Threshold.

Multi-SSID

The device supports up to eight multiple Service Set Identifiers. 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. When the information for the new SSID is finished, click the **Add** button. Click the **Save** button to let your changes take effect.

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

Enable Priority: Check to enable the priority feature.

Band: This read-only value is the current band setting.

Index: You can select up to seven multi-SSIDs. With the Primary SSID, you have a total of eight multi-SSIDs.

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

Security: The Multi-SSID security can be **Open System**, **WPA-Personal**, **WPA-Enterprise**, or **802.1X**. For a detailed description of the Open System parameters please go to page 23. For a detailed description of the WPA-Personal parameters please go to page 24. For a detailed description of the WPA-Enterprise parameters please go to page 25. For a detailed description of the 802.1X parameters please go to page 26.

Multi-SSID Settings

Enable Multi-SSID Enable Priority

Wireless Settings

Band: 2.4 GHz

Index: Primary SSID

SSID: dlink

SSID Visibility: Enable

Security: Open System

Priority: 0

WMM (Wi-Fi Multimedia): Enable

Captive Profile: Disable

Add

Index	SSID	Band	Encryption	Delete
Primary SSID	dlink	2.4 GHz	None	

Save

Priority: When the Enable Priority check box is checked at the top of this window, this drop-down menu is used to select a priority between **0** and **7**.

WMM (Wi-Fi Multimedia): Select **Enable** to provide basic Quality of Service features.

Captive Profile: Enable or disable captive profile for user authentication.

VLAN Settings

The DAP-3662 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-3662 without a VLAN tag will have a VLAN tag inserted with a PVID. Once you have made the desired settings, click the **Save** button to let your changes take effect.

The VLAN List tab displays the current VLANs.

VLAN Status: Click the **Enable** button. 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.

D-Link DAP-3662

Home Maintenance Configuration System Logout Help

VLAN Settings

VLAN Status : Disable Enable Save

VLAN Mode : Static(2.4G), Static(5G)

VLAN List	Port List	Add/Edit VLAN	PVID Setting
1	default	Mgmt, LAN1, LAN2, 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), W-1(2.4G), W-2(2.4G), W-3(2.4G), W-4(2.4G), W-5(2.4G), W-6(2.4G), W-7(2.4G), W-8(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), W-1(5G), W-2(5G), W-3(5G), W-4(5G), W-5(5G), W-6(5G), W-7(5G), W-8(5G)	

VLAN 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. Once you have made the desired settings, click the **Save** button to let your changes take effect.

VLAN Status: Click the **Enable** radio button. Next, click the **Add/Edit VLAN** tab to add or modify an item on the VLAN List tab.

VLAN Mode: The current VLAN mode is displayed.

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 Settings

VLAN Status : Disable Enable Save

VLAN Mode : Static(2.4G), Static(5G)

VLAN List	Port List	Add/Edit VLAN	PVID Setting
Port Name	Tag VID	Untag VID	PVID
Mgmt	1	1	1
LAN1	1	1	1
LAN2	1	1	1
Primary(2.4G)	1	1	1
Primary(5G)	1	1	1
S-1(2.4G)	1	1	1
S-2(2.4G)	1	1	1
S-3(2.4G)	1	1	1
S-4(2.4G)	1	1	1
S-5(2.4G)	1	1	1
S-6(2.4G)	1	1	1
S-7(2.4G)	1	1	1
W-1(2.4G)	1	1	1
W-2(2.4G)	1	1	1
W-3(2.4G)	1	1	1
W-4(2.4G)	1	1	1
W-5(2.4G)	1	1	1
W-6(2.4G)	1	1	1
W-7(2.4G)	1	1	1
W-8(2.4G)	1	1	1

VLAN Add/Edit

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

VLAN Status: Click the **Enable** radio button.

VLAN Mode: The current VLAN mode is displayed.

VLAN ID (VID): Provide a number between **1** and **4094** for the Internal VLAN.

VLAN Name: Enter the VLAN to add or modify.

VLAN Settings

VLAN Status : Disable Enable Save

VLAN Mode : Static(2.4G), Static(5G)

VLAN List | Port List | **Add/Edit VLAN** | PVID Setting

VLAN ID (VID) VLAN Name

Port	Select All	Mgmt	LAN1	LAN2
Untag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not Member	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2.4GHz

MSSID Port	Select All	Primary	S-1	S-2	S-3	S-4	S-5	S-6	S-7
Untag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not Member	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

WDS Port	Select All	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8
Untag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not Member	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5GHz

MSSID Port	Select All	Primary	S-1	S-2	S-3	S-4	S-5	S-6	S-7
Untag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not Member	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

WDS Port	Select All	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8
Untag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tag	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not Member	All	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Save

PVID Setting

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. Once you have made the desired settings, click the **Save** button to let your changes take effect.

VLAN Status: Click the **Enable** radio button.

VLAN Mode: The current VLAN mode is displayed.

PVID Auto Assign Status: Use the radio button to toggle PVID auto assign status to Enable.

VLAN Settings

VLAN Status : Disable Enable Save

VLAN Mode : Static(2.4G), Static(5G)

VLAN List | Port List | Add/Edit VLAN | **PVID Setting**

PVID Auto Assign Status Disable Enable

Port	Mgmt	LAN1	LAN2
PVID	1	1	1

2.4GHz

MSSID Port	Primary	S-1	S-2	S-3	S-4	S-5	S-6	S-7
PVID	1	1	1	1	1	1	1	1
WDS Port	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8
PVID	1	1	1	1	1	1	1	1

5GHz

MSSID Port	Primary	S-1	S-2	S-3	S-4	S-5	S-6	S-7
PVID	1	1	1	1	1	1	1	1
WDS Port	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8
PVID	1	1	1	1	1	1	1	1

Save

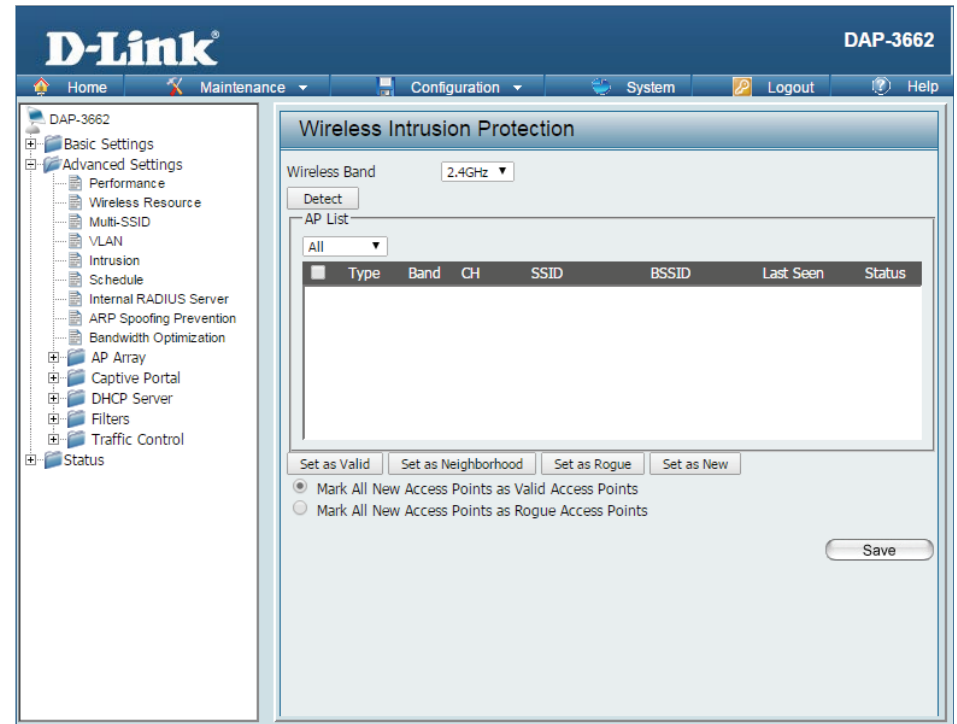
Intrusion

The Wireless Intrusion Protection window is used to set APs as All, Valid, Neighborhood, Rogue, and New. Once you have made the desired settings, click the **Save** button to let your changes take effect.

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

Detect: Click this button to initiate a scan of the network.

AP List: The choices include **All**, **Valid**, **Neighbor**, **Rogue**, and **New**.



Schedule

The Wireless Schedule Settings window is used to add and modify scheduling rules on the device. When the information for the new schedule rule is finished, click the **Add** button. To discard the new schedule rule settings, click the **Clear** button. 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 settings apply 24 hours a day. If the settings are not to apply 24 hours a day, enter the desired starting and ending times in the next two fields.

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.

D-Link DAP-3662

Home Maintenance Configuration System Logout Help

DAP-3662

- Basic Settings
- Advanced Settings
 - Performance
 - Wireless Resource
 - Multi-SSID
 - VLAN
 - Intrusion
 - Schedule
 - Internal RADIUS Server
 - ARP Spoofing Prevention
 - Bandwidth Optimization
- AP Array
- Captive Portal
- DHCP Server
- Filters
- Traffic Control
- Status

Wireless Schedule Settings

Wireless Schedule

Add Schedule Rule

Name

Index

SSID

Day(s) All Week Select Day(s)

Sun Mon Tue Wed Thu Fri Sat

All Day(s)

Start Time : (hour:minute, 24 hour time)

End Time : (hour:minute, 24 hour time) Overnight

Schedule Rule List

Name	SSID Index	SSID	Day(s)	Time Frame	Wireless Edit	DEL
+: To the end time of the next day overnight.						

Internal RADIUS Server

The DAP-3662 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: Select **Enable** or **Disable** from the drop-down menu.

The screenshot displays the D-Link DAP-3662 web interface. The top navigation bar includes 'Home', 'Maintenance', 'Configuration', 'System', 'Logout', and 'Help'. The left sidebar shows a tree view of configuration options, with 'Internal RADIUS Server' selected. The main content area is titled 'Internal RADIUS Server' and contains two sections: 'Add RADIUS Account' and 'RADIUS Account list'. The 'Add RADIUS Account' section has input fields for 'User Name' and 'Password', and a 'Status' dropdown menu set to 'Enable'. The 'RADIUS Account list' section is currently empty, with columns for 'User Name', 'Enable', 'Disable', and 'Delete'. A 'Save' button is located at the bottom right of the configuration area.

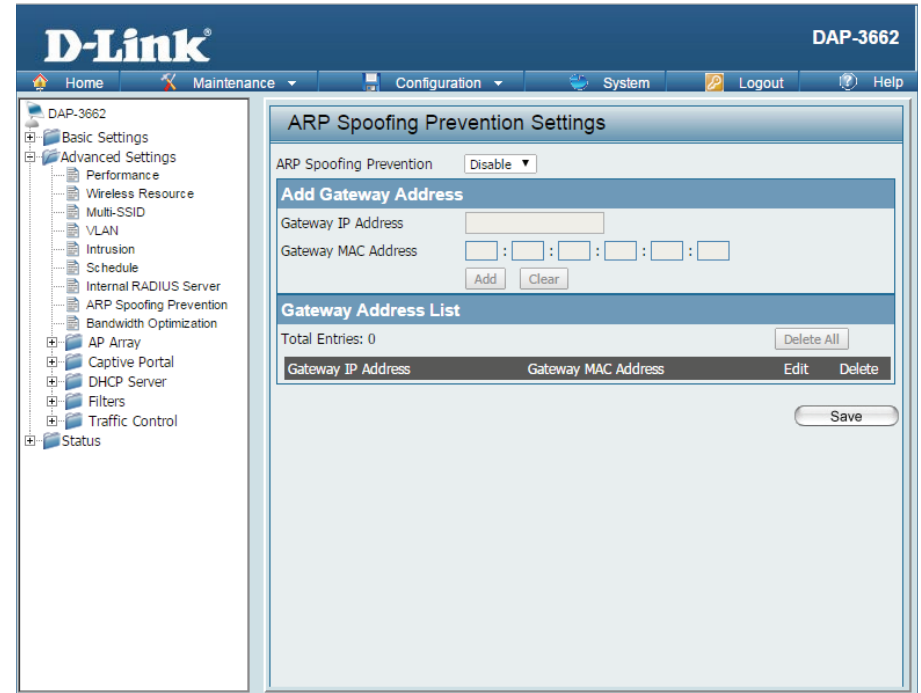
ARP Spoofing Prevention

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

ARP Spoofing Prevention: This check box allows you to enable the arp spoofing prevention function.

Gateway IP Address: Enter a gateway IP address.

Gateway MAC Address: Enter a gateway MAC address.



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 802.11b/g/n and 802.11a/n client are 10%/20%/70% ; 20%/80%. AP will distribute different bandwidth for 802.11a/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 Allocate specific BW for SSID.

Use the drop-down menu to toggle the wireless

The screenshot displays the D-Link DAP-3662 web interface. The main configuration area is titled "Bandwidth Optimization". It features a navigation tree on the left with categories like Basic Settings, Advanced Settings, and Bandwidth Optimization. The main content area includes the following elements:

- Enable Bandwidth Optimization:** A dropdown menu currently set to "Disable".
- Downlink Bandwidth:** A text input field containing "80" with the unit "Mbits/sec".
- Uplink Bandwidth:** A text input field containing "80" with the unit "Mbits/sec".
- Add Bandwidth Optimization Rule:** A section with a dropdown for "Rule Type" (set to "Allocate average BW for each station"), a "Band" dropdown (set to "2.4 GHz"), an "SSID Index" dropdown (set to "Primary SSID"), and input fields for "Downlink Speed" and "Uplink Speed" (both in "Kbits/sec"). "Add" and "Clear" buttons are present.
- Bandwidth Optimization Rules:** A table with columns: Band, Type, SSID Index, Downlink Speed, Uplink Speed, Edit, and Del. The table is currently empty.
- Save:** A button at the bottom right of the configuration area.

Band: band between 2.4 GHz and 5 GHz.

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.

AP Array

AP Array Scan

The AP Array window is used to create up to 32 APs on a local network to be organized into a single group in order to increase ease of management. Click the Save button to let your changes take effect. Central WiFiManager and AP Array are mutually exclusive functions.

Enable AP Array: Select the check box to enable the AP array function. The three modes that are available are Master, Backup Master, and Slave. APs in the same array will use the same configuration. The configuration will sync the Master AP to the Slave AP and the Backup Master AP when a Slave AP and a Backup Master AP join the AP array.

AP Array Name: Enter an AP array name for the group here.

AP Array Password: Enter an AP array password for the group here. This password must be the same on all the APs in the group.

Scan AP Array List: Click this button to initiate a scan of all the available APs currently on the network.

Connection Status: Display the AP array connection status.

AP Array List: This table displays the current AP array status for the following parameters: Array Name, Master IP, MAC, Master, Backup Master, Slave, and Total.

Current Members: This table displays all the current array members. The DAP-3662 AP array feature supports up to eight AP array members.

The screenshot shows the D-Link DAP-3662 web interface. The main configuration area is titled "AP Array Scan" and includes the following elements:

- Enable AP Array (Version:2.0)
- Mode selection: Master, Backup Master, Slave
- AP Array Name:
- AP Array Password:
- Scan AP Array List:
- Connection Status: Disconnect
- AP Array List table:

Array Name	Master IP	MAC	Master	Backup Master	Slave	Total

Current Members table:

Index	Role	IP Address	MAC Address	Location

A "Save" button is located at the bottom right of the configuration area.

Configuration Settings

In the AP array configuration settings windows, users can specify which settings all the APs in the group will inherit from the master AP. Make the required selection in this window and click the Save button to accept the changes made.

- Enable AP Array Configuration:** Select to Enable or Disable the AP array configuration feature here.
- Wireless Basic Settings:** Select this option to specify the basic wireless settings that the APs in the group will inherit.
- Wireless Advanced Settings:** Select this option to specify the advanced wireless settings that the APs in the group will inherit.
- Multiple SSID & VLAN:** Select this option to specify the multiple SSIDs and VLAN settings that the APs in the group will inherit.
- Advanced Functions:** Select this option to specify the other advanced settings that the APs in the group will inherit.
- Administration Settings:** Select this option to specify the administrative settings that the APs in the group will inherit.

The screenshot shows the 'AP Array Configuration' window. At the top, there is a section for 'Enable AP Array Configuration' with a dropdown menu set to 'Enable' and a 'Clear all' button. Below this are five expandable sections, each with a checkbox:

- Wireless Basic Settings
- Wireless Advanced Settings
- Multiple SSID & VLAN
- Advanced Functions
- Administration Settings

A 'Save' button is located at the bottom right of the window.

Wireless Basic Settings

Network Name (SSID): Select this option to use the same SSID.

SSID Visibility: Select this option to enable SSID visibility.

Auto Channel Selection: Select this option to use auto channel selection.

Channel Width: Select this option to use the same channel width.

Security: Select this option to use the same wireless security.

Captive Profile: Select this option to use the same captive profile settings.

Band: Select this option to use the same wireless band.

Wireless Basic Settings <input checked="" type="checkbox"/>			
Network Name (SSID)	<input checked="" type="checkbox"/>	SSID Visibility	<input checked="" type="checkbox"/>
Auto Channel Selection	<input checked="" type="checkbox"/>	Channel Width	<input checked="" type="checkbox"/>
Security	<input checked="" type="checkbox"/>	Captive Profile	<input checked="" type="checkbox"/>
Band	<input checked="" type="checkbox"/>		

Wireless Advanced Settings

Wireless: Select this option to use the same wireless settings.

Wireless Mode: Select this option to use the same wireless mode.

Data Rate: Select this option to use the same data rate.

Beacon Interval: Select this option to use the same beacon interval.

DTIM Interval: Select this option to use the same DTIM interval.

Transmit Power: Select this option to use the same transmit power.

WMM (Wi-Fi Multimedia): Select this option to use the same WMM settings.

Ack Time Out: Select this option to use the same ACK timeout value.

Wireless ACL: Select this option to use the same wireless ACL settings.

Wireless Advanced Settings <input checked="" type="checkbox"/>			
Wireless	<input checked="" type="checkbox"/>	Wireless Mode	<input checked="" type="checkbox"/>
Data Rate	<input checked="" type="checkbox"/>	Beacon Interval	<input checked="" type="checkbox"/>
DTIM Interval	<input checked="" type="checkbox"/>	Transmit Power	<input checked="" type="checkbox"/>
WMM (Wi-Fi Multimedia)	<input checked="" type="checkbox"/>	Ack Time Out	<input checked="" type="checkbox"/>
Wireless ACL	<input checked="" type="checkbox"/>	Short GI	<input checked="" type="checkbox"/>
Link Integrity	<input checked="" type="checkbox"/>	Connection Limit	<input checked="" type="checkbox"/>
IGMP Snooping	<input checked="" type="checkbox"/>		

Short GI: Select this option to use the same short GI settings.

Link Integrity: Select this option to use the same link integrity settings.

Connection Limit: Select this option to use the same connection limit value.

IGMP Snooping:: Select this option to use the same IGMP snooping settings.

Multiple SSID & VLAN

SSID: Select this option to use the same multi-SSIDs.

SSID Visibility: Select this option to use the same SSID visible.

Security: Select this option to use the same wireless security settings.

Multiple SSID & VLAN <input checked="" type="checkbox"/>			
SSID	<input checked="" type="checkbox"/>	SSID Visibility	<input checked="" type="checkbox"/>
Security	<input checked="" type="checkbox"/>	WMM	<input checked="" type="checkbox"/>
Captive Profile	<input checked="" type="checkbox"/>	VLAN	<input checked="" type="checkbox"/>

WMM: Select this option to use the same WMM settings.

Captive Profile: Select this option to use the same captive profile settings.

VLAN: Select this option to use the same VLAN settings.

Advanced Functions

Schedule Settings: Select this option to use the same schedule settings.

QoS Settings: Select this option to use the same Quality of Service settings.

Log Settings: Select this option to use the same log settings.

Time and Date Settings: Select this option to use the same time and date settings.

Advanced Functions <input checked="" type="checkbox"/>			
Schedule Settings	<input checked="" type="checkbox"/>	QoS Settings	<input checked="" type="checkbox"/>
Log Settings	<input checked="" type="checkbox"/>	Time and Date Settings	<input checked="" type="checkbox"/>
ARP Spoofing Prevention	<input checked="" type="checkbox"/>	Bandwidth Optimization	<input checked="" type="checkbox"/>
Captive Portal	<input checked="" type="checkbox"/>	Auto RF	<input checked="" type="checkbox"/>
Load Balance	<input checked="" type="checkbox"/>	DHCP server Settings	<input checked="" type="checkbox"/>

ARP Spoofing Prevention: Select this option to use the same ARP spoofing prevention settings.

Bandwidth Optimization: Select this option to use the same bandwidth optimization settings.

Captive Portal: Select this option to use the same captive portal settings.

Auto RF: Select this option to use the same auto-RF settings.

Load Balance: Select this option to use the same load balancing settings.

DHCP Server Settings: Select this option to use the same DHCP server settings.

Administration Settings

System Name Settings: Select this option to use the same system name.

SNMP Settings: Select this option to use the same SNMP settings.

Login Settings: Select this option to use the same login settings.

Console Settings: Select this option to use the same console settings.

Limit Administrator: Select this option to use the same limit administrator settings.

Ping Control Setting: Select this option to use the same ping control settings.

Administration Settings <input checked="" type="checkbox"/>	
System Name Settings <input checked="" type="checkbox"/>	SNMP Settings <input checked="" type="checkbox"/>
Login Settings <input checked="" type="checkbox"/>	Console Settings <input checked="" type="checkbox"/>
Limit Administrator <input checked="" type="checkbox"/>	Ping Control Setting <input checked="" type="checkbox"/>

Auto-RF

In this windows, users can view and configure the automatic radio frequency settings as well as configure the the auto-initiate period and threshold values. Click the Save button to accept the changes made.

Enable: Auto-RF: Select to Enable or Disable the auto-RF feature here.

Initiate Auto-RF: Click the Auto-RF Optimize button to initiate the auto-RF optimization feature.

Auto-Initiate: Select the Enable or Disable the auto-initiate feature here.

Auto-Initiate Period: After enabling the auto-initiate option, the auto-initiate period value can be entered here. This value must be between 1 and 24 hours.

RSSI Threshold: Select the RSSI threshold value here. This value is listed in the drop-down menu in increments of 10% from 10% to 100%.

RF Report Frequency: Enter the RF report frequency value here.

The screenshot shows a configuration window titled "Auto-RF". It contains the following settings:

- Enable Auto-RF: Disable (dropdown menu)
- Initiate Auto-RF: Auto-RF Optimize (button)
- Auto-Initiate: Disable (dropdown menu)
- Auto-Initiate Period: 24 (hours) (text input)
- RSSI Threshold: 40% (dropdown menu)
- RF Report Frequency: 10 (Seconds) (text input)

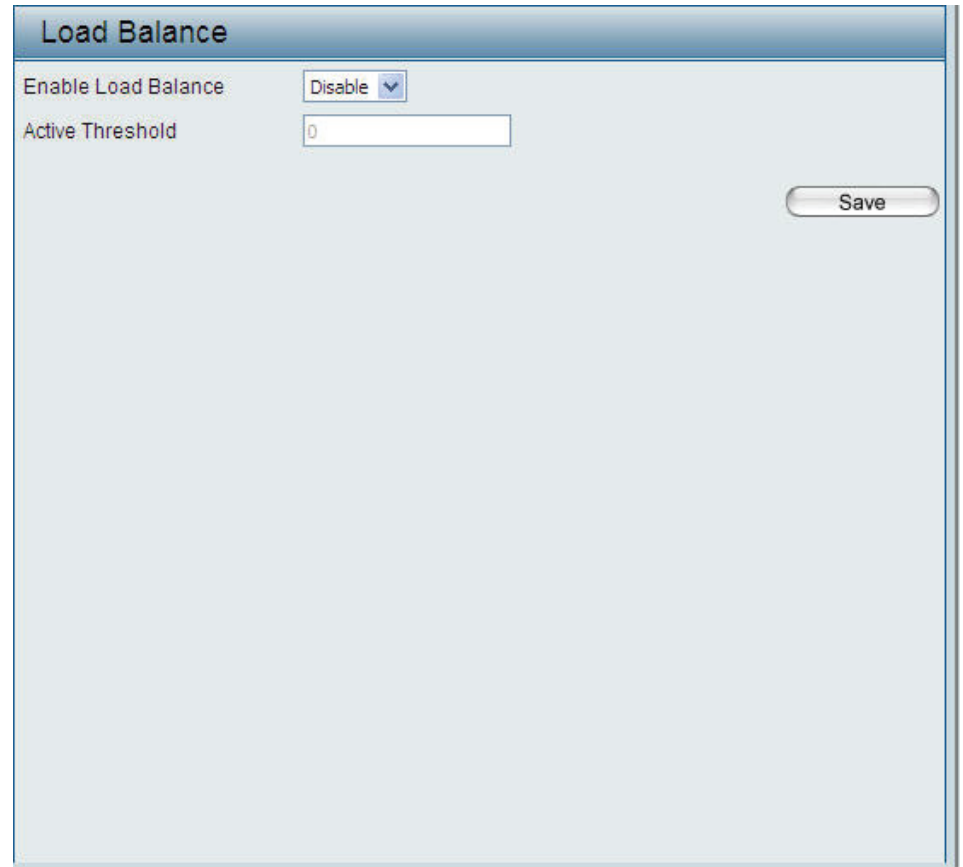
A "Save" button is located at the bottom right of the window.

Load Balance

In this window, users can view and configure the AP array's load balancing settings. Click the Save button to accept the changes made.

Enable Load Balance: Select to Enable or Disable the load balance feature here.

Active Threshold: Enter the active threshold value here.



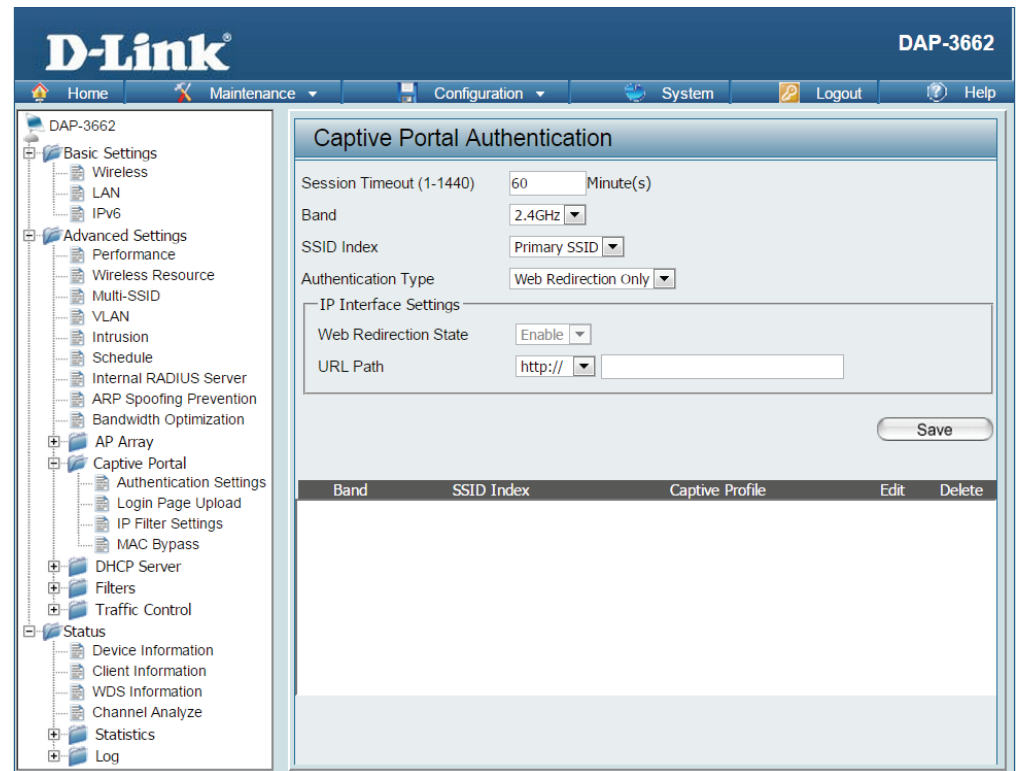
The screenshot shows a configuration window titled "Load Balance". It contains two main settings: "Enable Load Balance" with a dropdown menu currently set to "Disable", and "Active Threshold" with a text input field containing the value "0". A "Save" button is located in the bottom right corner of the window.

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, user 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) :** 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.
- 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 Web Redirection option.
- Web Redirection State :** Default setting is Enable when select Web Redirection Only.
- 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.



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, user 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.

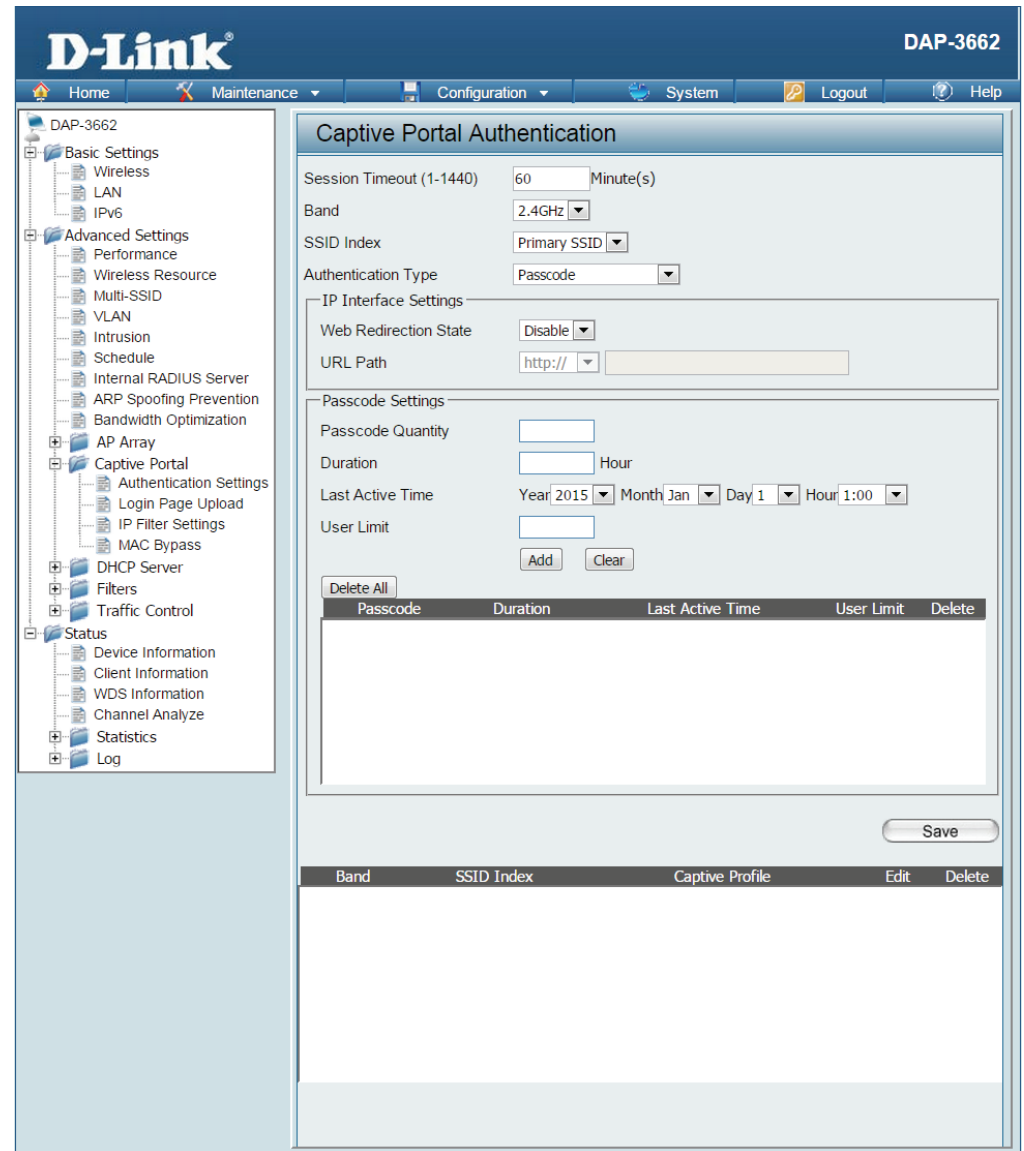
- Session timeout(1-1440) :** Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.
- Band :** Select 2.4GHz.
- SSID Index :** Select the SSID for this Authentication.
- Authentication Type :** Select the captive portal encryption type here. 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 :** Default is Disable or 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.
- Username:** Enter the username for the new account here.
- Password:** Enter the password for the new account here.



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, user can view and configure the Captive Portal settings. After selecting Passcode as the Authentication Type, we can configure the Passcode authentication that will be applied to each wireless client in this network.

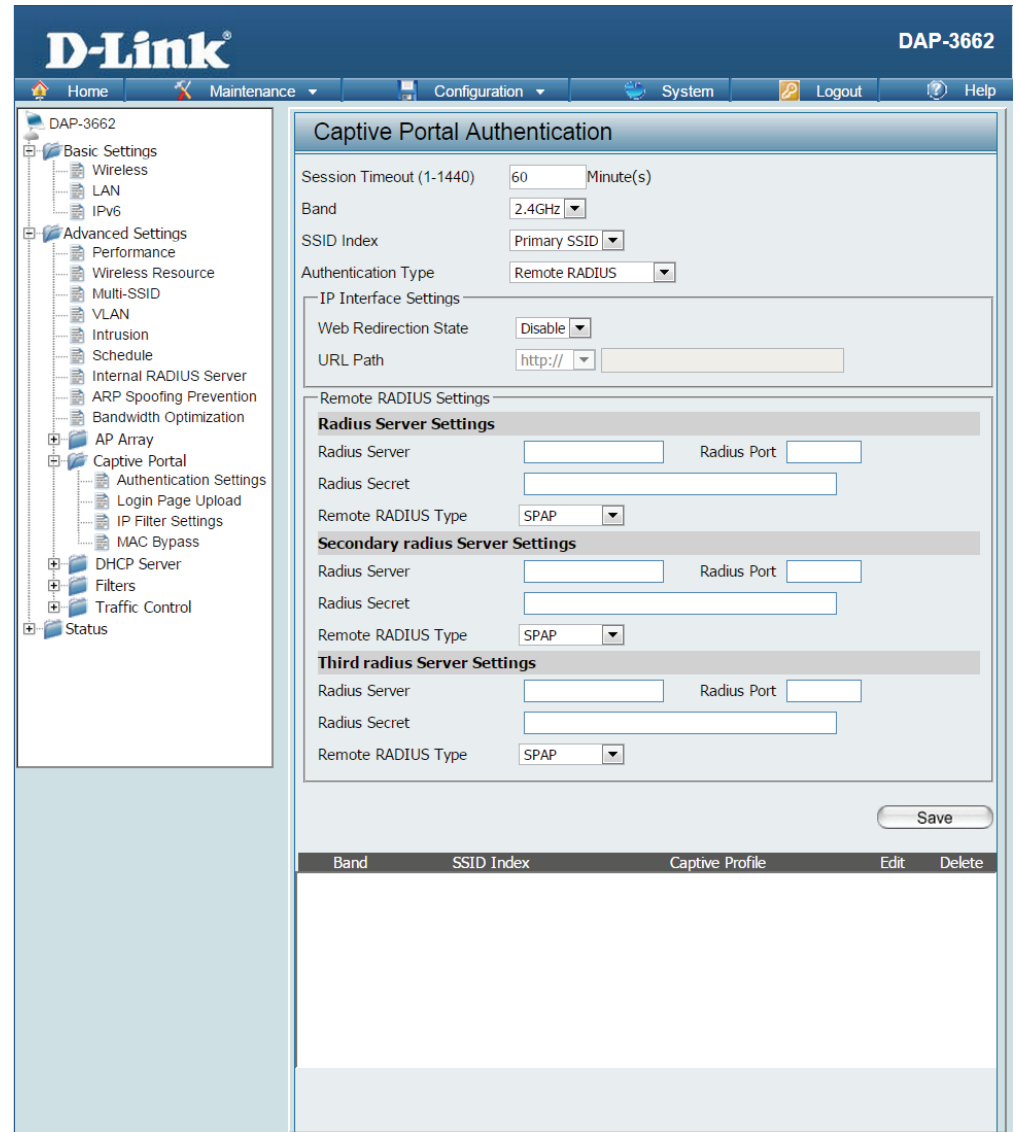
- Session timeout(1-1440) :** Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.
- Band :** Select 2.4GHz.
- SSID Index :** Select the SSID for this Authentication.
- Authentication Type :** Select the captive portal encryption type here. Options to choose from are Web Redirection, Username/Password, Passcode, Remote RADIUS, LDAP and POP3. In this section we'll discuss the Passcode option.
- Web Redirection State :** Default is Disable or 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.
- 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



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, user can view and configure the Captive Portal settings. After selecting Remote RADIUS as the Authentication Type, we can configure the Remote RADIUS authentication that will be applied to each wireless client in this network.

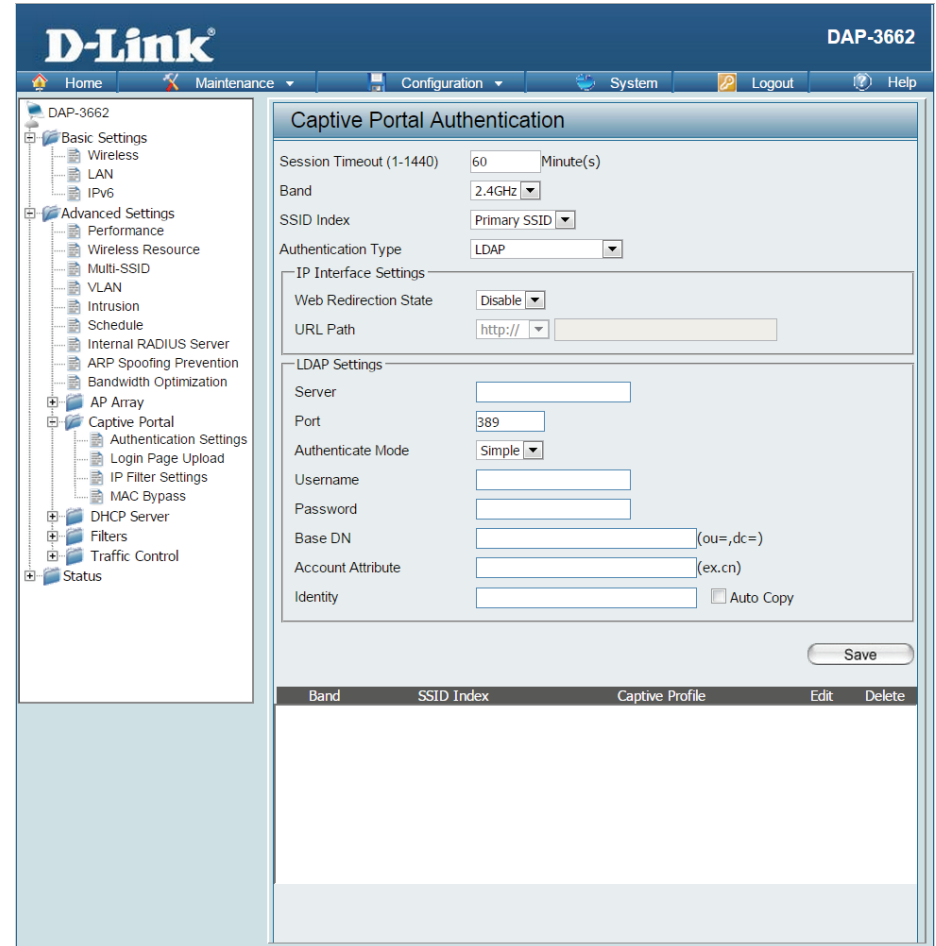
- Session timeout(1-1440) :** Enter the session timeout value here. This value can be from 1 to 1440 minutes. By default, this value is 60 minutes.
- Band :** Select 2.4GHz.
- SSID Index :** Select the SSID for this Authentication.
- Authentication Type :** Select the captive portal encryption type here. 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 :** Default is Disable or 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.
- 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.



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, user can view and configure the Captive Portal settings. After selecting LDAP as the Authentication Type, we can configure the LDAP 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.
- Band :** Select 2.4GHz.
- 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 :** Default is Disable or 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.
- 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.



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, user can view and configure the Captive Portal settings. After selecting POP3 as the Authentication Type, we can configure the POP3 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.
- Band :** Select 2.4GHz.
- 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 :** Default is Disable or 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.
- 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.

Captive Portal Authentication

Session Timeout (1-1440) Minute(s)

Band

SSID Index

Authentication Type

IP Interface Settings

Web Redirection State

URL Path

POP3 Settings

Server

Port

Connection Type

Band	SSID Index	Captive Profile	Edit	Delete

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, will 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 Download button to download the template file for login page and Click Del button to delete the template file.

The screenshot shows the D-Link DAP-3662 web interface. The main content area is titled "Login Page Upload". It features a section for "Upload Login Style From Local Hard Drive" with a file selection field and an "Upload" button. Below this, it shows "The Left space" as 458752 Byte(s). There is also a "Login Page Style List" section with a "Wireless Band" dropdown set to "2.4GHz". The table below lists three login page styles with their respective configurations and actions.

ID	Style Name	Pri	S-1	S-2	S-3	S-4	S-5	S-6	S-7	Download	Del
1	pages_default.tar	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
2	pages_headerpic.tar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		
3	pages_license.tar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		

A "Save" button is located at the bottom right of the configuration area.

IP Filter Settings

Enter the IP address or network address that will be used in the IP filter rule. For example, 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 :** Select 2.4GHz.
- IP Address:** Enter the IP address or network address
- Subnet Mask:** Enter the subnet mask of the IP address or networks address
- Upload IP Filter File:** To upload a IP filter list file, click Browse and navigate to the IP filter list file saved on the computer, and then click Upload.
- Download IP Filter File:** To download IP Filter list file, click Download and to save the IP Filter list.

The screenshot shows the D-Link DAP-3662 web interface. The main content area is titled "IP Filter Settings". It contains the following fields and controls:

- Wireless Band:** A dropdown menu set to "2.4GHz".
- SSID Index:** A dropdown menu set to "Primary SSID".
- IP Address:** A text input field.
- Subnet Mask:** A text input field.
- Add:** A button to add a new IP filter rule.

Below these fields is a table with the following columns: ID, IP Address, Subnet Mask, and Delete. The table is currently empty.

At the bottom of the page, there are two sections:

- Upload IP Filter File:** Includes a file selection button (labeled "選擇檔案" and "未選擇任何檔案") and an "Upload" button.
- Download IP Filter File:** Includes a "Download" button and a "Load IP Filter File to Local Hard Driver" option.

A "Save" button is located at the bottom right of the main content area.

MAC Bypass

The DAP-3662 features a wireless MAC Bypass. Once a user is finished with 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 Hard Driver:** To download MAC bypass list file, click Download and to save the MAC bypass list.

The screenshot shows the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of settings categories: Basic Settings, Advanced Settings (Performance, Wireless Resource, Multi-SSID, VLAN, Intrusion, Schedule, Internal RADIUS Server, ARP Spoofing Prevention, Bandwidth Optimization), AP Array, Captive Portal (Authentication Settings, Login Page Upload, IP Filter Settings, MAC Bypass), DHCP Server, Filters, Traffic Control, and Status. The main content area is titled "MAC Bypass Settings". It contains the following elements:

- Wireless Band:** A dropdown menu set to "2.4GHz".
- SSID Index:** A dropdown menu set to "Primary SSID".
- MAC Address:** A form with five input fields separated by colons, followed by an "Add" button.
- Table:** A table with three columns: "ID", "MAC Address", and "Delete". The table is currently empty.
- Upload MAC File:** A section with an "Upload File:" label, a "選擇檔案" (Choose File) button, a "未選擇任何檔案" (No file selected) status, and an "Upload" button.
- Download MAC File:** A section with a "Load MAC File to Local Hard Driver:" label and a "Download" button.
- Save:** A "Save" button at the bottom right of the settings area.

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. Once a user is finished, click the **Save** button to let the changes take effect.

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-3662 to function as a DHCP server.

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

The Range of Pool (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.

Subnet Mask: All devices in the network must have the same subnet mask to communicate. Enter the submask 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.

The screenshot shows the D-Link DAP-3662 web interface. The top navigation bar includes 'Home', 'Maintenance', 'Configuration', 'System', 'Logout', and 'Help'. The left sidebar shows a tree view of configuration options, with 'DHCP Server' expanded to show 'Dynamic Pool Settings'. The main content area is titled 'Dynamic Pool Settings' and contains the following configuration options:

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

A 'Save' button is located at the bottom right of the configuration area.

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.

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. Once a user is finished, click the **Save** button to let the changes take effect.

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-3662 to function as a DHCP server.

Host Name: Enter the name of the host computer in this text box.

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 **Save**; the device will appear in the Assigned Static Pool at the bottom of the window. 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.

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 Domain Name System (DNS) server address for the wireless network. The DNS server translates domain names such as www.dlink.com into IP addresses.

Domain Name: Specify the domain name for the network.

The screenshot shows the D-Link DAP-3662 web interface. The left sidebar contains a tree view with 'Static Pool Settings' selected. The main panel is titled 'Static Pool Settings' and includes the following fields:

- DHCP Server Control:** Function Enable/Disable (Dropdown: Disable)
- Static Pool Setting:**
 - Host Name: [Text Box]
 - Assigned IP: [Text Box]
 - Assigned MAC Address: [Text Box]
 - Subnet Mask: 255.255.255.0
 - Gateway: [Text Box]
 - WINS: [Text Box]
 - DNS: [Text Box]
 - Domain Name: dlink-ap

A 'Save' button is located at the bottom right of the settings area. Below the settings is a table with the following columns: Host Name, MAC Address, IP Address, Edit, and Delete.

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 DHCP server on the AP and assign dynamic and static IP address pools.

Current DHCP Dynamic Pools: These are IP address pools the DHCP server has assigned using the dynamic pool setting.

Binding MAC Address: 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 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.

The screenshot shows the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of the configuration menu, with the DHCP Server section expanded to show Dynamic Pool Settings, Static Pool Settings, and Current IP Mapping List. The main content area displays the 'Current IP Mapping List' configuration page, which is currently empty. The page has two sections: 'Current DHCP Dynamic Pools' and 'Current DHCP Static Pools'. Each section has a table header with columns for Host Name, Binding MAC Address, Assigned IP Address, and Lease Time (for dynamic pools).

Current DHCP Dynamic Pools			
Host Name	Binding MAC Address	Assigned IP Address	Lease Time

Current DHCP Static Pools		
Host Name	Binding MAC Address	Assigned IP Address

Filters

Wireless MAC ACL

The DAP-3662 features a wireless MAC Access Control List filter. Once a user is finished with these settings, click the **Save** button to let the changes take effect.

Wireless Band: Select the wireless band for Wireless MAC ACL.

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: Select the SSID for Wireless MAC ACL.

MAC Address: Enter each MAC address that you wish to include in your filter 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.

Current Client Information: This table displays information about all the current connected stations.

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

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

The screenshot shows the D-Link DAP-3662 configuration interface. The main content area is titled "Wireless MAC ACL Settings".

- Wireless Band:** 2.4GHz
- Access Control List:** Disable
- SSID Index:** Primary SSID
- MAC Address:** [] : [] : [] : [] : [] : [] (with an Add button)

Below these settings is a table for the MAC Address List:

ID	MAC Address	Delete

Below the table is the "Current Client Information" section, which contains a table with the following headers:

MAC Address	SSID	Band	Authentication	Signal	Add

At the bottom, there are two sections:

- Upload ACL File:** Includes an "Upload File:" label, a "Choose File" button (which shows "No file chosen"), and an "Upload" button.
- Download ACL File:** Includes a "Load ACL File to Local Hard Driver:" label and a "Download" button.

A "Save" button is located at the bottom right of the page.

WLAN Partition

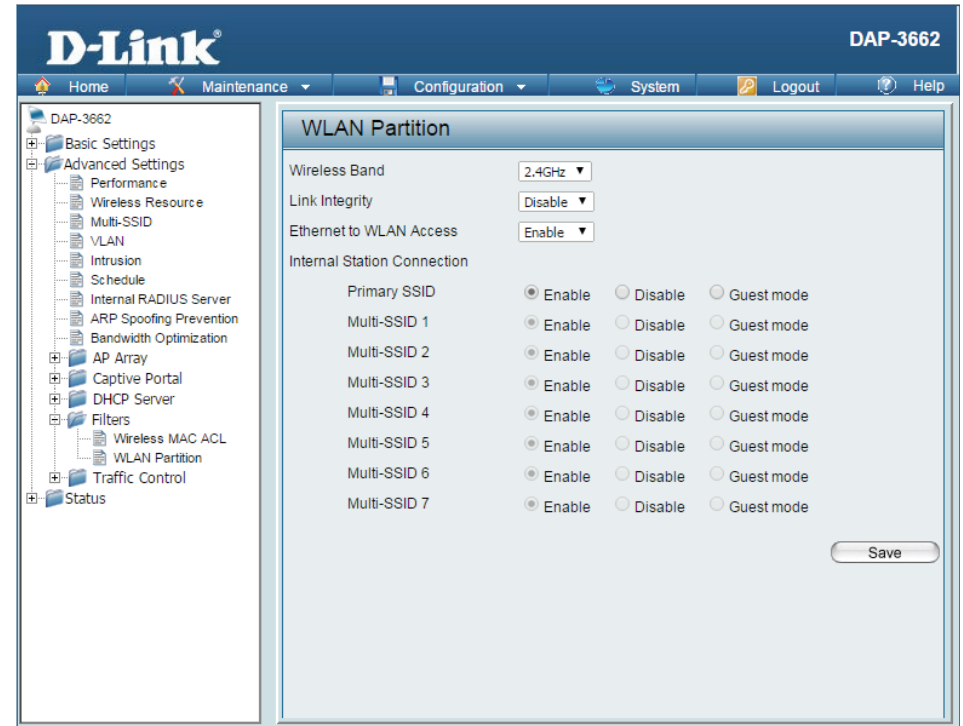
The DAP-3662 features a wireless partition. Once a user is finished with these settings, click the **Save** button to let the changes take effect.

Wireless Band: Displays the current wireless band.

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 to 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.



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.

The screenshot displays the D-Link DAP-3662 web interface. The top navigation bar includes 'Home', 'Maintenance', 'Configuration', 'System', 'Logout', and 'Help'. The left sidebar shows a tree view of configuration options, with 'Traffic Control' and 'Uplink/Downlink Settings' selected. The main content area is titled 'Uplink and Downlink Setting' and features two tabs: '2.4GHz' (selected) and '5GHz'. Below the tabs are two sections: 'Downlink Interface' and 'Uplink Interface'. Each section contains a grid of checkboxes for 'Primary-ssid', 'Multi-ssid1' through 'Multi-ssid7', and 'WDS1' through 'WDS8'. At the bottom of the page, there are two input fields: 'Downlink Bandwidth(1~300)' and 'Uplink Bandwidth(1~300)', both set to '100' Mbits/sec. A 'Save' button is located in the bottom right corner.

QoS

Quality of Service (QoS) enhances the experience of using a network by prioritizing the traffic of different applications. The DAP-3662 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.

The screenshot shows the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of the configuration menu, with 'QoS' selected under 'Traffic Control'. The main content area is titled 'QoS' and contains the following settings:

- Enable QoS:**
- Advanced QoS:**
 - Downlink Bandwidth: Mbits/sec
 - Uplink Bandwidth: Mbits/sec
 - ACK/DHCP/ICMP/DNS Priority: Limit: % Port:
 - Web Traffic Priority: Limit: % Port:
 - Mail Traffic Priority: Limit: % Port:
 - Ftp Traffic Priority: Limit: % Port:
 - User Defined-1 Priority: Limit: % Port: -
 - User Defined-2 Priority: Limit: % Port: -
 - User Defined-3 Priority: Limit: % Port: -
 - User Defined-4 Priority: Limit: % Port: -
 - Other Traffic Priority: Limit: %

A **Save** button is located at the bottom right of the configuration area.

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 speed 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.

The screenshot shows the D-Link DAP-3662 web interface. The main configuration area is titled 'Traffic Manager'. It includes the following settings:

- Traffic Manager: (dropdown menu)
- Unlisted Clients Traffic: Deny Forward
- Downlink Bandwidth: Mbits/sec
- Uplink Bandwidth: Mbits/sec

Below these settings is the 'Add Traffic Manager Rule' section, which contains the following fields:

- Name:
- Client IP(optional):
- Client MAC(optional):
- Downlink Speed: Mbits/sec
- Uplink Speed: Mbits/sec

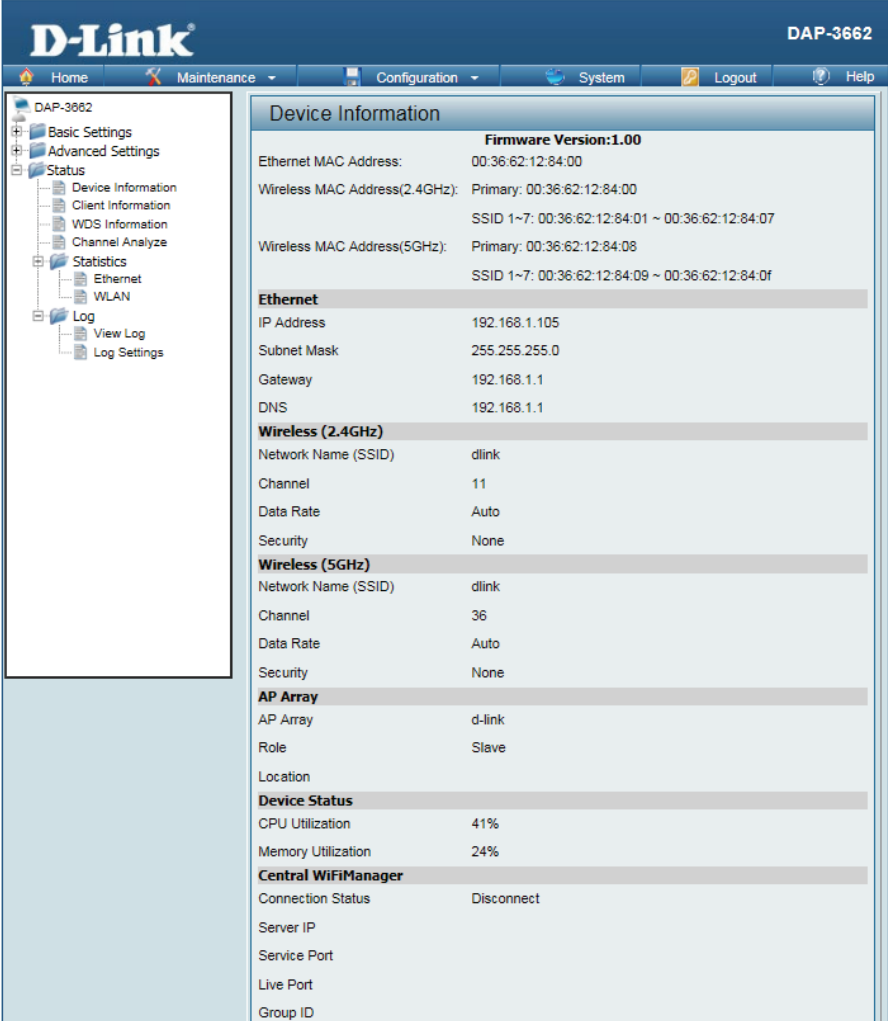
At the bottom of the 'Add Traffic Manager Rule' section are 'Add' and 'Clear' buttons. Below this is the 'Traffic Manager Rules' section, which contains a table with the following columns:

Name	Client IP	Client MAC	Downlink Speed	Uplink Speed	Edit	Del
<input type="button" value="Save"/>						

Status

Device Information

Device Information: This read-only window displays the configuration settings of the DAP-3662, including the firmware version and the device's MAC address.



The screenshot shows the D-Link web interface for the DAP-3662. The left sidebar contains a navigation tree with the following items: DAP-3662, Basic Settings, Advanced Settings, Status, Device Information, Client Information, WDS Information, Channel Analyze, Statistics, Ethernet, WLAN, Log, View Log, and Log Settings. The main content area is titled 'Device Information' and displays the following data:

Firmware Version: 1.00	
Ethernet MAC Address:	00:36:62:12:84:00
Wireless MAC Address(2.4GHz):	Primary: 00:36:62:12:84:00
	SSID 1~7: 00:36:62:12:84:01 ~ 00:36:62:12:84:07
Wireless MAC Address(5GHz):	Primary: 00:36:62:12:84:08
	SSID 1~7: 00:36:62:12:84:09 ~ 00:36:62:12:84:0f
Ethernet	
IP Address	192.168.1.105
Subnet Mask	255.255.255.0
Gateway	192.168.1.1
DNS	192.168.1.1
Wireless (2.4GHz)	
Network Name (SSID)	dlink
Channel	11
Data Rate	Auto
Security	None
Wireless (5GHz)	
Network Name (SSID)	dlink
Channel	36
Data Rate	Auto
Security	None
AP Array	
AP Array	d-link
Role	Slave
Location	
Device Status	
CPU Utilization	41%
Memory Utilization	24%
Central WiFiManager	
Connection Status	Disconnect
Server IP	
Service Port	
Live Port	
Group ID	

Client Information

Client Information: This window displays the wireless client information for clients currently connected to the DAP-3662.

The following information is available for each client communicating with the DAP-3662.

SSID: Displays the SSID of the 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 (received signal strength indicator).

Power Saving

Mode: Displays the status of the power saving feature.

The screenshot shows the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of configuration options, with 'Client Information' selected under the 'Status' section. The main content area is titled 'Client Information' and displays two tables for station associations.

Client Information						
Station association (2.4GHz) : 0						
SSID	MAC	Band	Authentication	RSSI	Power Saving Mode	
Client Information						
Station association(5GHz) : 0						
SSID	MAC	Band	Authentication	RSSI	Power Saving Mode	

WDS Information

WDS Information: This window displays the Wireless Distribution System information for clients currently connected to the DAP-3662.

The following information is available for each client communicating with the DAP-3662.

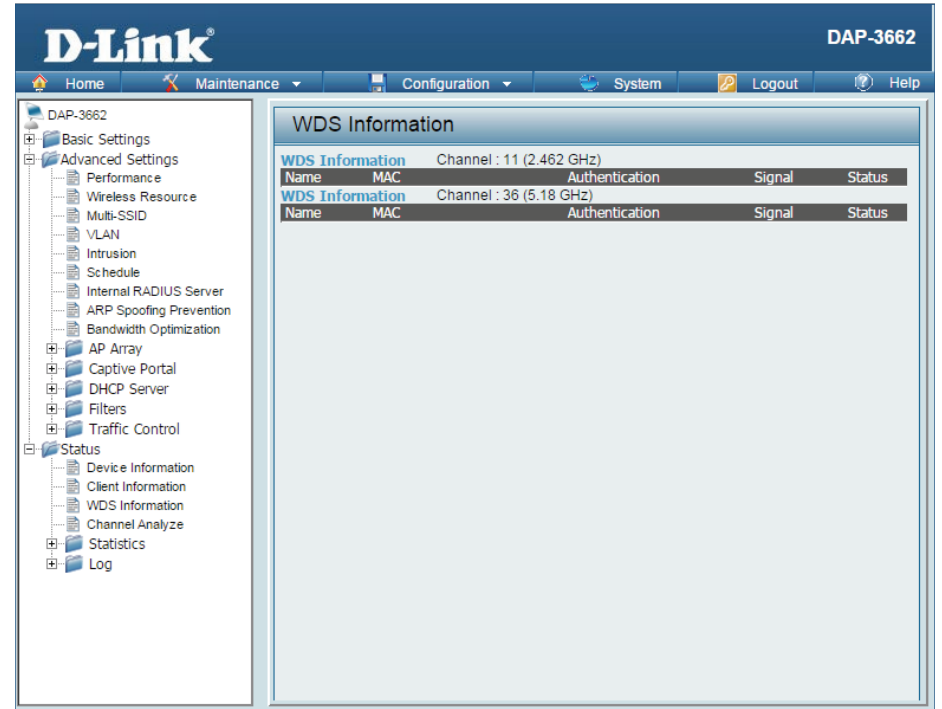
Name: Displays the name of the client.

MAC: Displays the MAC address of the client.

Authentication: Displays the type of authentication being used.

Signal: Displays the WDS link signal strength.

Status: Displays the status of the power saving feature.



The screenshot shows the D-Link DAP-3662 configuration interface. The left sidebar contains a navigation tree with categories like Basic Settings, Advanced Settings, and Status. The main content area is titled 'WDS Information' and displays two tables of client information for different channels.

WDS Information Channel : 11 (2.462 GHz)				
Name	MAC	Authentication	Signal	Status

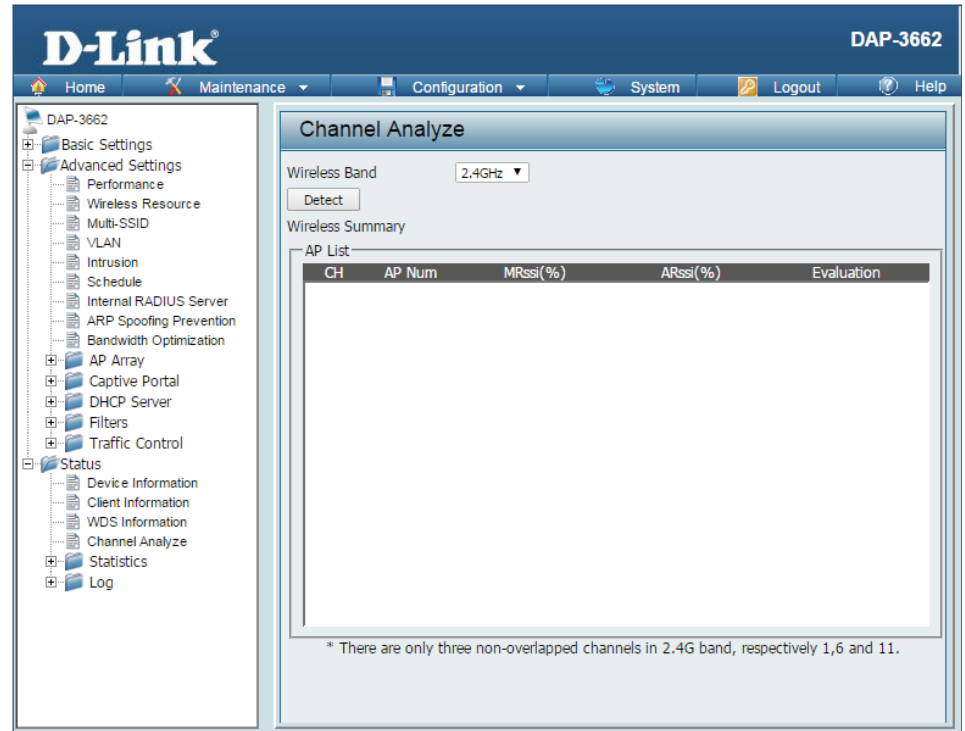
WDS Information Channel : 36 (5.18 GHz)				
Name	MAC	Authentication	Signal	Status

Channel Analyze

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

Detect: Click the **Detect** button to scan.

AP List: This will list the transmitting channels and quality.



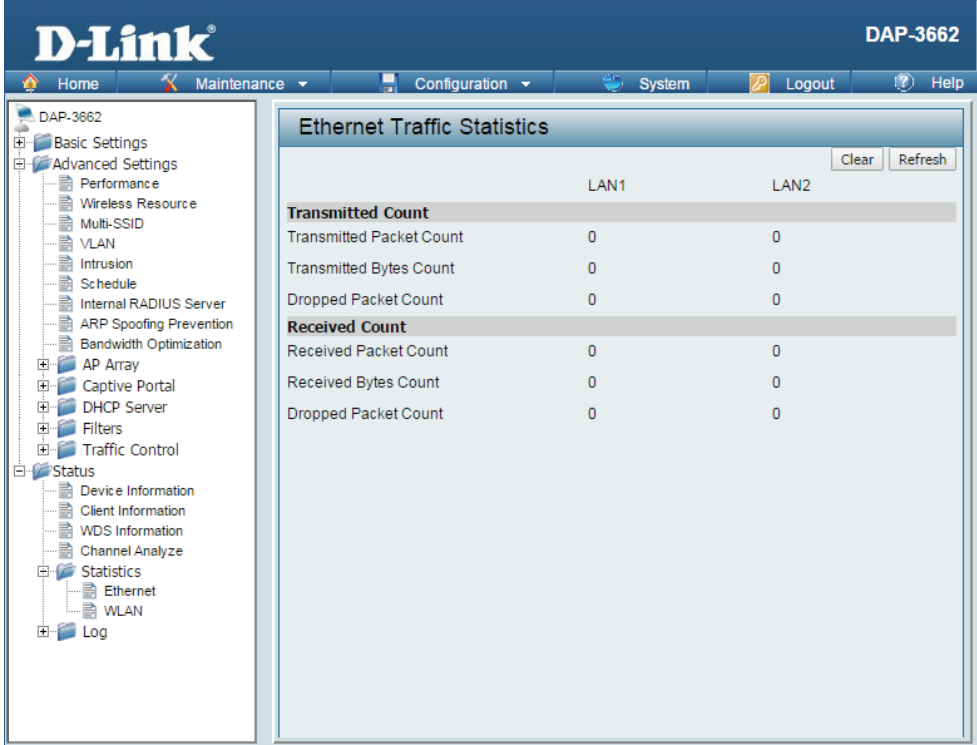
The screenshot displays the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of configuration options, with 'Channel Analyze' selected under the 'Status' section. The main content area is titled 'Channel Analyze' and features a 'Wireless Band' dropdown menu set to '2.4GHz' and a 'Detect' button. Below this is a 'Wireless Summary' section and an 'AP List' table. The table has five columns: CH, AP Num, MRssi(%), ARssi(%), and Evaluation. A note at the bottom states: '* There are only three non-overlapped channels in 2.4G band, respectively 1,6 and 11.'

CH	AP Num	MRssi(%)	ARssi(%)	Evaluation
----	--------	----------	----------	------------

Stats

Ethernet

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

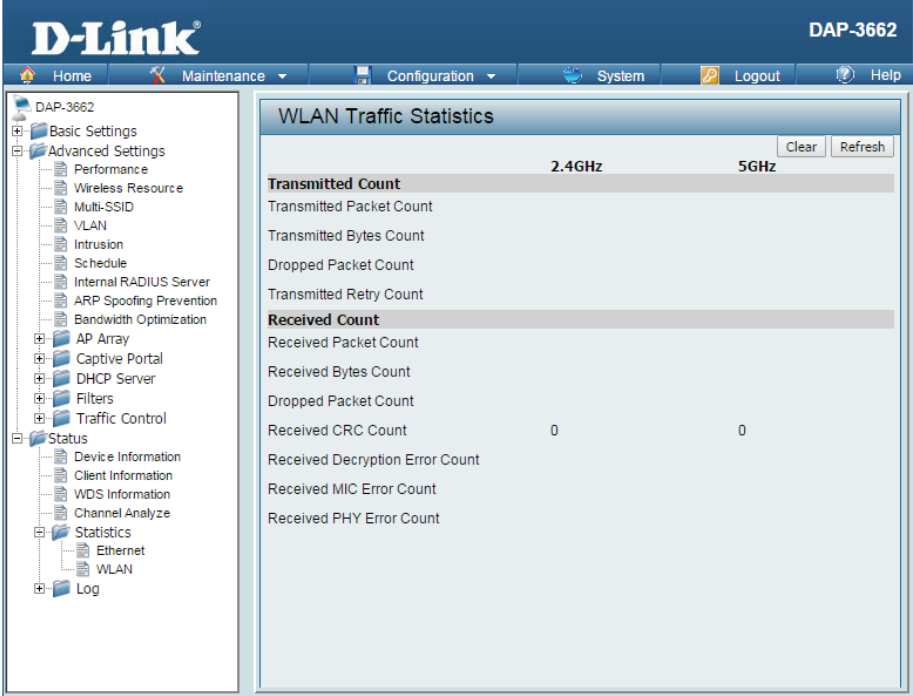


The screenshot displays the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of the configuration menu, with 'Status' expanded to show 'Statistics' and 'Ethernet' selected. The main content area is titled 'Ethernet Traffic Statistics' and contains a table with columns for LAN1 and LAN2. The table shows zero counts for all metrics: Transmitted Packet Count, Transmitted Bytes Count, Dropped Packet Count, Received Packet Count, Received Bytes Count, and Dropped Packet Count. There are 'Clear' and 'Refresh' buttons in the top right of the table area.

	LAN1	LAN2
Transmitted Count		
Transmitted Packet Count	0	0
Transmitted Bytes Count	0	0
Dropped Packet Count	0	0
Received Count		
Received Packet Count	0	0
Received Bytes Count	0	0
Dropped Packet Count	0	0

Wireless Traffic Stats

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



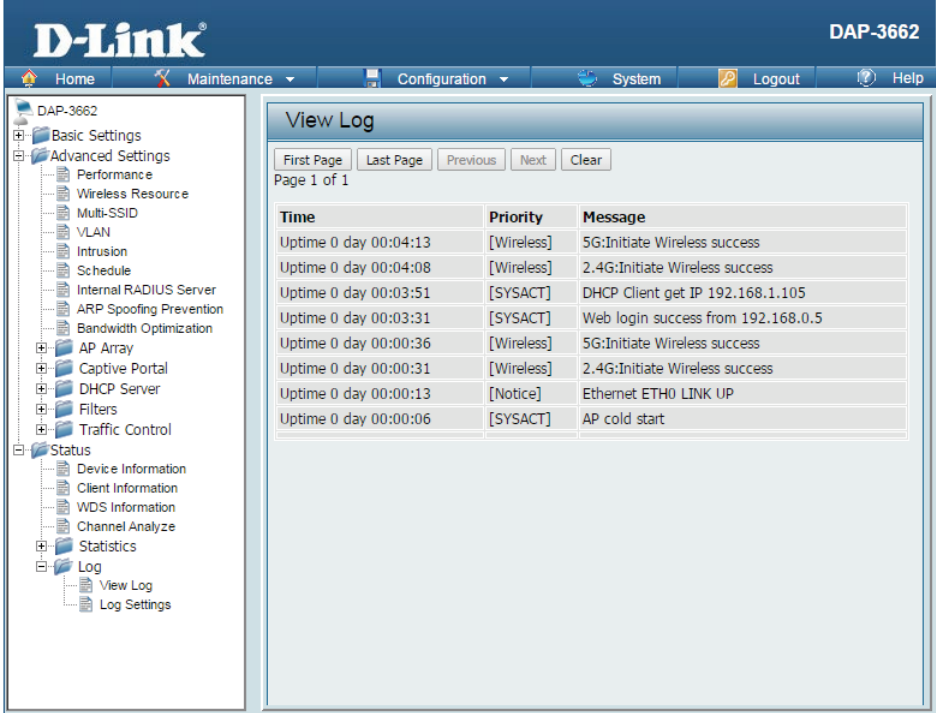
The screenshot shows the D-Link DAP-3662 web interface. The left sidebar contains a navigation tree with categories like Basic Settings, Advanced Settings, Performance, Wireless Resource, Multi-SSID, VLAN, Intrusion, Schedule, Internal RADIUS Server, ARP Spoofing Prevention, Bandwidth Optimization, AP Array, Captive Portal, DHCP Server, Filters, Traffic Control, Status, Device Information, Client Information, WDS Information, Channel Analyze, Statistics, Ethernet, WLAN, and Log. The main content area is titled "WLAN Traffic Statistics" and features a "Clear" and "Refresh" button. Below the title, there are two columns for "2.4GHz" and "5GHz". The statistics are divided into "Transmitted Count" and "Received Count".

	2.4GHz	5GHz
Transmitted Count		
Transmitted Packet Count		
Transmitted Bytes Count		
Dropped Packet Count		
Transmitted Retry Count		
Received Count		
Received Packet Count		
Received Bytes Count		
Dropped Packet Count		
Received CRC Count	0	0
Received Decryption Error Count		
Received MIC Error Count		
Received PHY Error Count		

Log

View Log

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 associate and disassociate with AP, and web login. The web page holds up to 500 logs.



The screenshot shows the D-Link DAP-3662 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar menu is expanded to show the 'Log' section, which includes 'View Log' and 'Log Settings'. The main content area displays the 'View Log' page with a table of log entries.

Time	Priority	Message
Uptime 0 day 00:04:13	[Wireless]	5G:Initiate Wireless success
Uptime 0 day 00:04:08	[Wireless]	2.4G:Initiate Wireless success
Uptime 0 day 00:03:51	[SYSACT]	DHCP Client get IP 192.168.1.105
Uptime 0 day 00:03:31	[SYSACT]	Web login success from 192.168.0.5
Uptime 0 day 00:00:36	[Wireless]	5G:Initiate Wireless success
Uptime 0 day 00:00:31	[Wireless]	2.4G:Initiate Wireless success
Uptime 0 day 00:00:13	[Notice]	Ethernet ETH0 LINK UP
Uptime 0 day 00:00:06	[SYSACT]	AP cold start

Log Settings

Log Server/IP Address: Enter the IP address of the server you would like to send the DAP-3662 log to.

Log Type: Check the box for the type of activity you want to log. There are three types: System Activity, Wireless Activity, and Notice.

Email Notification: Check the box to enable Simple Mail Transfer Protocol.

From Email Address: Enter the e-mail address of the e-mail/SMTP sender.

To Email Address: Enter the e-mail address of the e-mail/SMTP recipient.

Email Server Address: Enter the IP address of the e-mail/SMTP server.

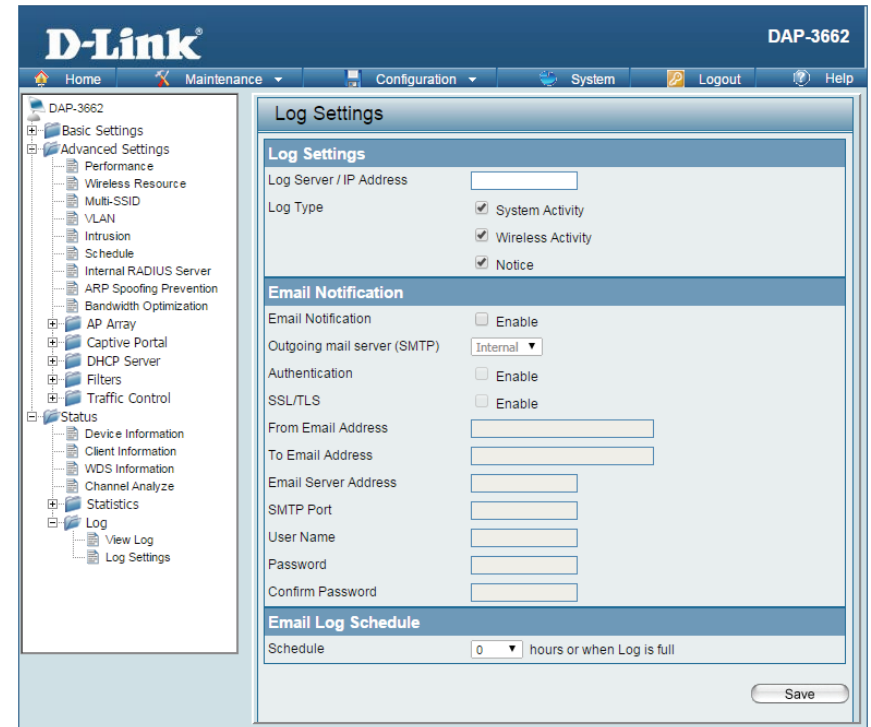
SMTP Port: Enter the desired SMTP port number. The default value is 25.

User Name: Enter a user name for the SMTP server.

Password: Enter a password for the SMTP server.

Confirm Password: Confirm the password for the SMTP server by retyping it.

Schedule: Use the drop-down menu to set the e-mail log schedule.



Maintenance Administrator Settings

Check one or more of the six main categories to display the various hidden administrator parameters and settings displayed on the next six windows.

Limit Administrator

Limit Administrator Check the box and then enter the specific VLAN ID that the **VLAN ID:** administrator will be allowed to log in from.

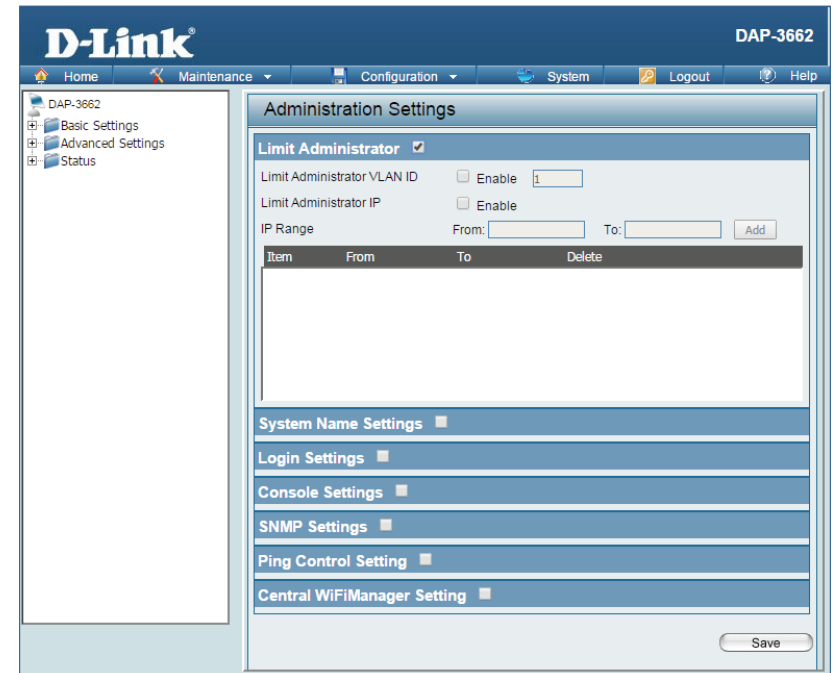
Limit Administrator IP: Check to enable the Limit Administrator IP address.

IP Range: Enter the IP address range that the administrator will be allowed to log in from and then click the **Add** button.

System Name Settings

System Name: The name of the device. The default name is **D-Link DAP-3662**.

Location: The physical location of the device, e.g. "office".

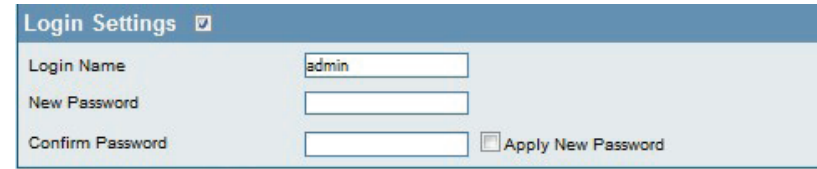


Login Settings

User 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.

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



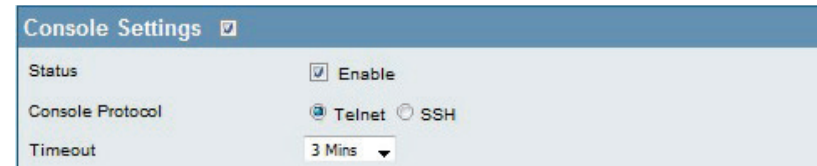
The screenshot shows the 'Login Settings' configuration page. It has a blue header with the title 'Login Settings' and a checkmark icon. Below the header, there are three input fields: 'Login Name' with the value 'admin', 'New Password' (empty), and 'Confirm Password' (empty). To the right of the 'Confirm Password' field is a checkbox labeled 'Apply New Password'.

Console Settings

Status: Status is enabled by default. Uncheck the box to disable the console port.

Console Protocol: Select the type of protocol you would like to use: **Telnet** or **SSH**.

Timeout: Set to **1 Min**, **3 Mins**, **5 Mins**, **10 Mins**, **15 Mins** or **Never**.



The screenshot shows the 'Console Settings' configuration page. It has a blue header with the title 'Console Settings' and a checkmark icon. Below the header, there are three settings: 'Status' with a checked checkbox and the text 'Enable', 'Console Protocol' with radio buttons for 'Telnet' (selected) and 'SSH', and 'Timeout' with a dropdown menu showing '3 Mins'.

SNMP Settings

Status: Check the box to enable the SNMP functions. This is enabled by default.

Public Community String: Enter the public SNMP community string.

Private Community String: Enter the private SNMP community string.

Check the box to enable the trap status.

Trap Status:

Trap Server IP: Enter the trap server IP address. This is the IP address of the SNMP manager to receive traps sent from the wireless access point.

The screenshot shows two configuration panels. The first panel, titled "SNMP Settings" with a checked checkbox, contains the following fields: "Status" with an unchecked "Enable" checkbox, "Public Community String" with a text box containing "public", "Private Community String" with a text box containing "private", "Trap Status" with a checked "Enable" checkbox, and "Trap Server IP" with an empty text box. The second panel, titled "Ping Control Setting" with a checked checkbox, contains the "Status" field with a checked "Enable" checkbox. A "Save" button is located at the bottom right of the interface.

Ping Control Setting

Status: Check the box to enable Ping control. Ping works by sending ICMP "echo request" packets to the target host and listening for ICMP echo response replies. The default is enabled.

Central WiFiManager Settings

Enable Central WiFiManager : Select to enable or disable the Central WiFiManager.

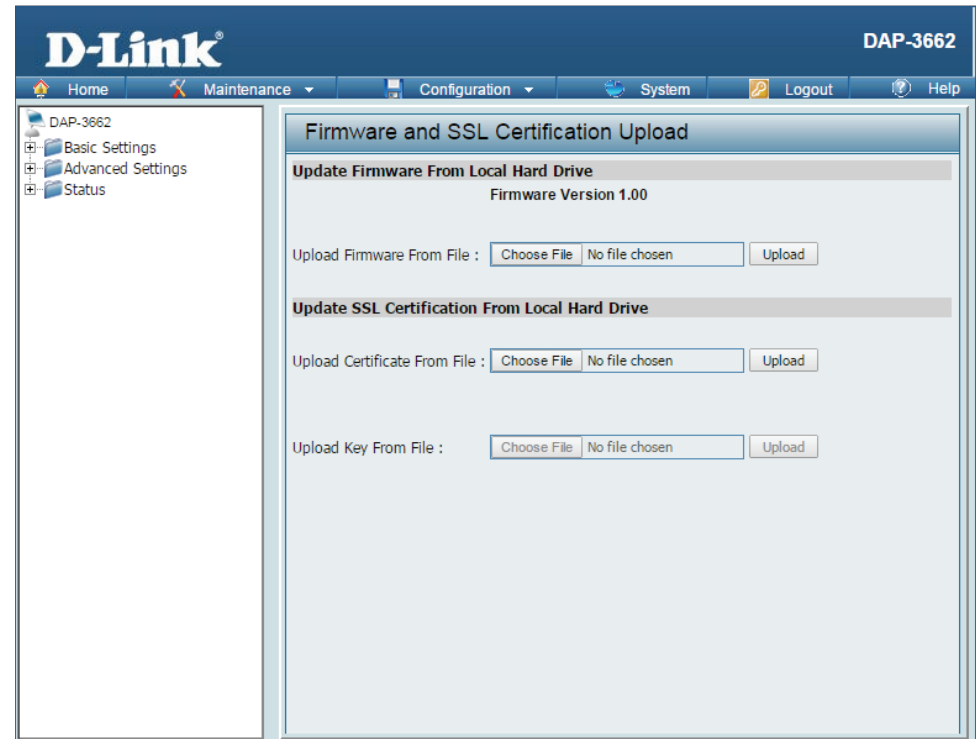
The screenshot shows a configuration panel titled "Central WiFiManager Setting" with a checked checkbox. It contains the "Enable Central WiFiManager" field with a dropdown menu currently set to "Disable".

Firmware and SSL Certification Upload

Upload Firmware From Local Hard Drive: The current firmware version is displayed above the file location field. After downloading the most recent version of firmware for the DAP-3662 from <http://dlink.com/support> to your local computer, use the **Browse** button to locate the firmware file on your computer. Click **Upload** to update the firmware version. Please don't turn the power off while upgrading.

Language Pack Upgrade: Click **Browse** to locate the language pack upgrade on your local computer. After selecting and opening the file, click **Upload** to upload the file to the DAP-3662.

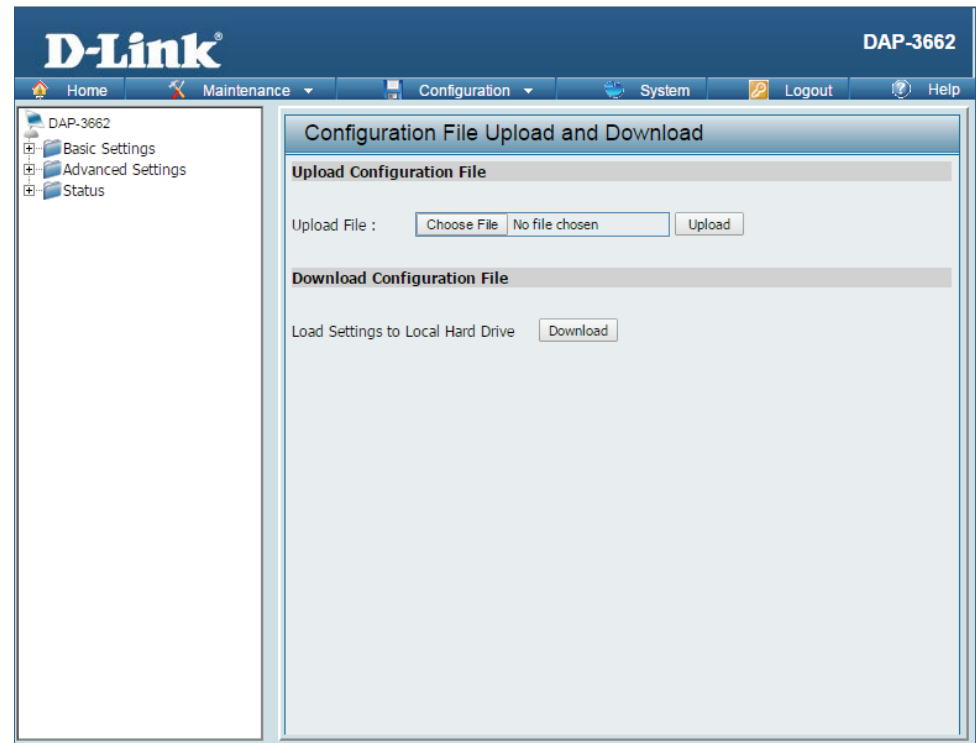
Upload SSL Certification From Local Hard Drive: Click **Browse** to locate the SSL Certification file on your local computer. After selecting and opening the file, click **Upload** to upload the file to the DAP-3662.



Configuration File

Upload File: Click the **Browse** button to locate a previously saved configuration file on your local computer. After selecting the file, click **Upload** to apply the configuration settings to the DAP-3662.

Download Configuration File: Click **Download** to save the current DAP-3662 configuration to your local computer. Note that if you save one configuration with the administrator's password now, after resetting your DAP-3662, and then updating to this saved configuration file, the password will be gone.



Time and Date

Current Time: Displays the current time and date settings.

Enable NTP Server: Check to enable the AP to get system time from an NTP server from the Internet.

NTP Server: Enter the NTP server IP address.

Time Zone: Use the drop-down menu to select your correct Time Zone.

Enable Daylight

Saving: Check the box to enable Daylight Saving Time.

Daylight Saving Dates: Use the drop-down menu to select the correct Daylight Saving offset.

Set the Date and Time Manually: 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 sure that the computer's time is set correctly).

Time and Date Settings

Time Configuration

Current Time	01/01/1970 00:31:38
--------------	---------------------

Automatic Time Configuration

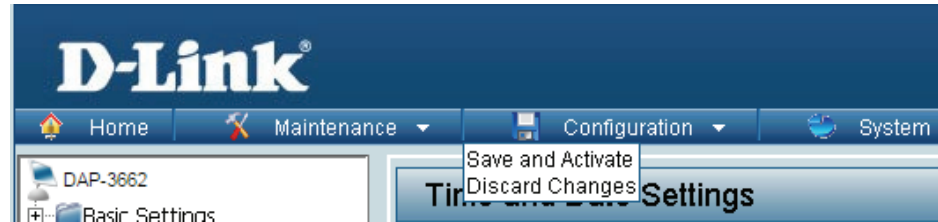
Enable NTP Server	<input type="checkbox"/>																	
NTP Server	<input type="text"/>																	
Time Zone	(GMT+08:00) Ulaan Bataar ▼																	
Enable Daylight Saving	<input type="checkbox"/>																	
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 15%;">Month</th> <th style="width: 15%;">Week</th> <th style="width: 15%;">Day of Week</th> <th style="width: 15%;">Current Time</th> </tr> </thead> <tbody> <tr> <td>Daylight Saving Dates</td> <td>DST Start</td> <td>Jan ▼</td> <td>1st ▼</td> <td>Sun ▼</td> <td>12 am ▼</td> </tr> <tr> <td></td> <td>DST End</td> <td>Jan ▼</td> <td>1st ▼</td> <td>Sun ▼</td> <td>12 am ▼</td> </tr> </tbody> </table>			Month	Week	Day of Week	Current Time	Daylight Saving Dates	DST Start	Jan ▼	1st ▼	Sun ▼	12 am ▼		DST End	Jan ▼	1st ▼	Sun ▼	12 am ▼
	Month	Week	Day of Week	Current Time														
Daylight Saving Dates	DST Start	Jan ▼	1st ▼	Sun ▼	12 am ▼													
	DST End	Jan ▼	1st ▼	Sun ▼	12 am ▼													

Set the Date and Time Manually

Date And Time	Year	2012	Month	Aug ▼	Day	22 ▼
	Hour	10 ▼	Minute	5 ▼	Second	48 ▼
<input type="button" value="Copy Your Computer's Time Settings"/>						

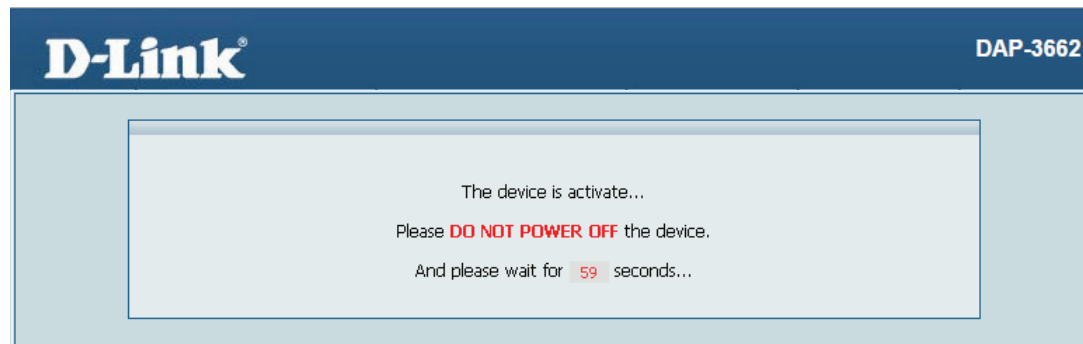
Configuration

Save and Activate

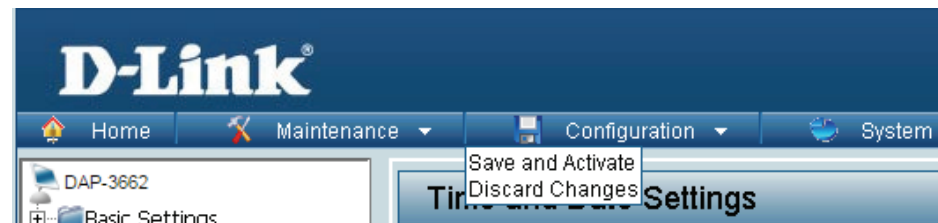


The drop-down Configuration menu allows users to save the current changes and reboot the DAP-3662 by clicking "Save and Activate".

If the "Save and Activate" option is selected, the following window will appear to display how many seconds remain before the save settings and reboot system action is completed.



Discard Changes



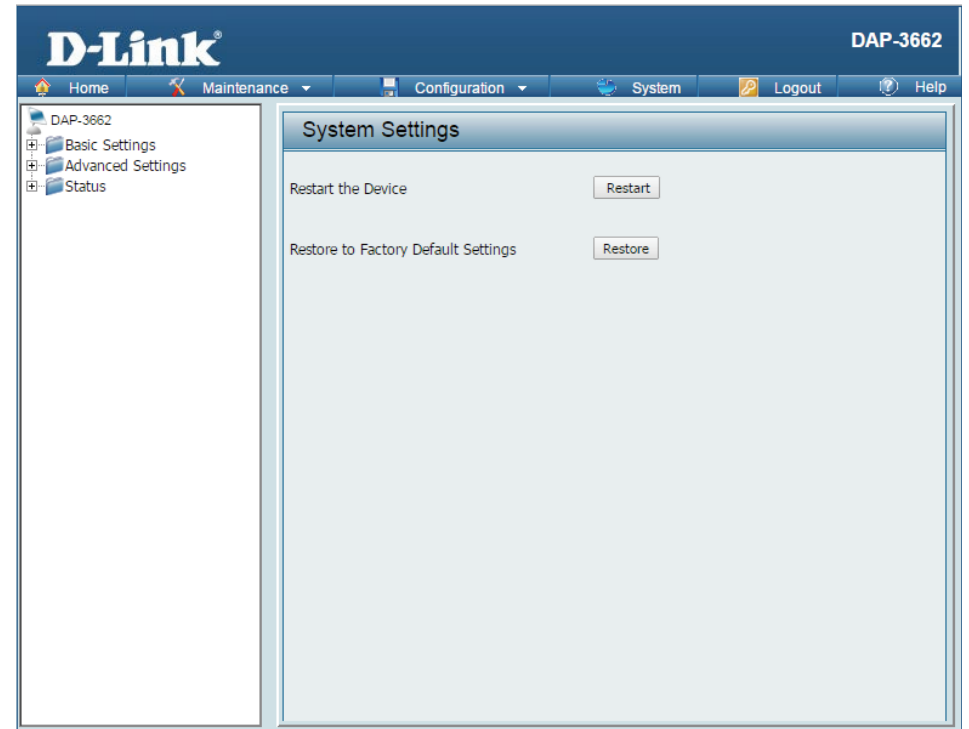
The drop-down Configuration menu allows users to drop the latest changes by clicking "Discard Changes."

System System Settings

Restart the Device: Click **Restart** to restart the DAP-3662.

Restore to Factory Default Settings: Click **Restore** to restore the DAP-3662 back to factory default settings.

Clear Language Pack: Click **Clear** to remove the DAP-3662 language pack.



Help

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 or to 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 two bands at a time.

Mode

Select a function mode to configure your wireless network. Function modes include Access Point, 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 "dlink". 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-2690. 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.

Troubleshooting

This chapter provides solutions to problems that can occur during the installation and operation of the DAP-3662. We will cover various aspects of the network setup, especially the network adapters. Please read the following if you are having any technical difficulties.

Note: *It is recommended that you use an Ethernet connection to configure the DAP-3662.*

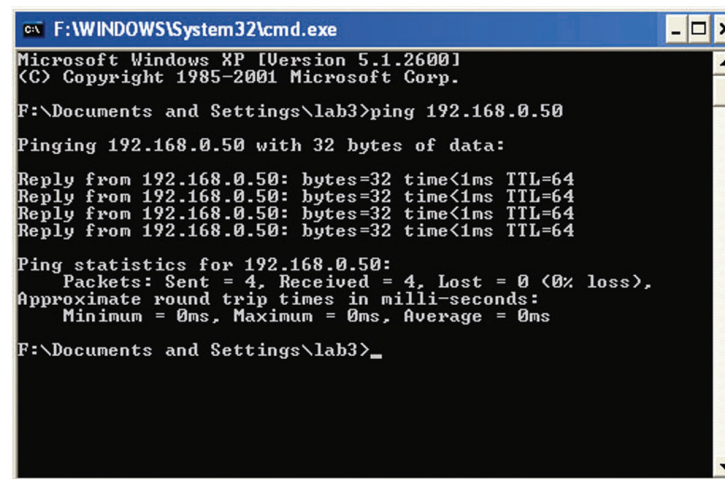
1. The computer used to configure the DAP-3662 cannot access the Configuration menu.

- Check if the LAN LED on the DAP-3662 is ON. If the LED is not ON, check if the cable for the Ethernet connection is securely inserted.
- Check if the Ethernet adapter is working properly. Please see item 3 of this Troubleshooting section to check that the drivers for the network adapters are loaded properly.
- Check if the IP address is in the same range and subnet as the DAP-3662.

Note: *The default IP address of the DAP-3662 is 192.168.0.50. All the computers on the network must have a unique IP address in the same range, e.g. 192.168.0.x. Any computers that have identical IP addresses will not be visible on the network. They must all have the same subnet mask, e.g. 255.255.255.0.*

- Perform a Ping test to make sure that the DAP-3662 is responding. Go to **Start > Run**, type **cmd**, and then press **Enter**. At the DOS prompt, type **ping 192.168.0.50**. A successful ping will show four replies.

Note: *If you have changed the default IP address, make sure to ping the correct IP address assigned to the DAP-3662.*



```
ex F:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

F:\Documents and Settings\lab3>ping 192.168.0.50

Pinging 192.168.0.50 with 32 bytes of data:

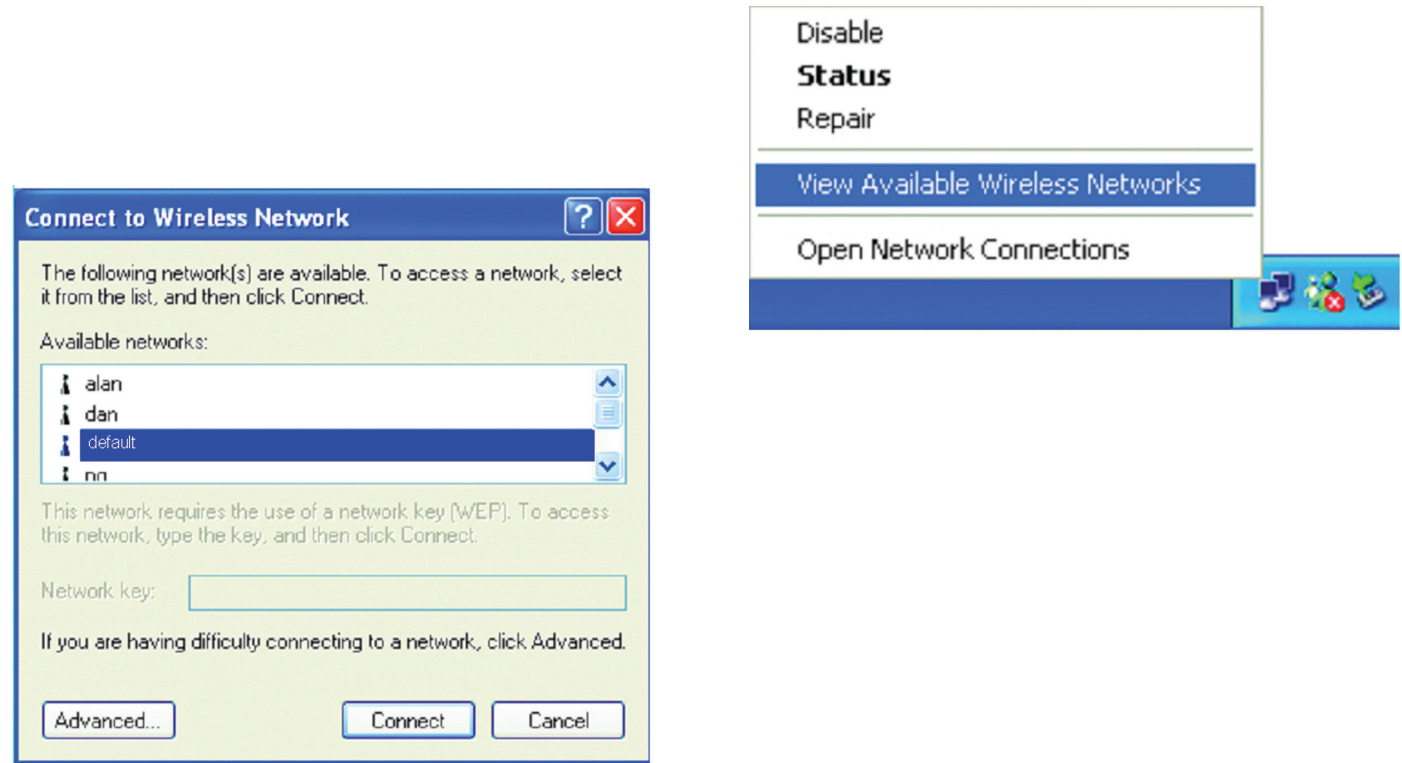
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64
Reply from 192.168.0.50: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.50:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

F:\Documents and Settings\lab3>_
```

2. The wireless client cannot access the Internet within Infrastructure mode.

Make sure the wireless client is associated and joined with the correct access point. To check this connection, right-click on the *Local Area Connection* icon in the taskbar and select **View Available Wireless Networks**. The *Connect to Wireless Network* screen will appear. Please make sure you have selected the correct available network, as shown in the illustrations below.



- Check that the IP address assigned to the wireless adapter is within the same IP address range as the access point and gateway. Since the DAP-3662 has an IP address of 192.168.0.50, wireless adapters must have an IP address in the same range, e.g. 192.168.0.x. Each device must have a unique IP address; there may be no two devices with the same IP address. The subnet mask must be the same for all the computers on the network. To check the IP address assigned to the wireless adapter, double-click the Local Area Connection icon in the taskbar, then select the Support tab and the IP address will be displayed.
- If it is necessary to assign a Static IP Address to the wireless adapter. If you are entering a DNS Server address, you must also enter the Default Gateway Address. *Remember that if you have a DHCP-capable router, you will not need to assign a static IP address.*

3. What variables may cause my wireless products to lose reception?

D-Link products let you access your network from virtually anywhere you want, however, the positioning of the products within your environment will affect its wireless range.

4. Why does my wireless connection keep dropping?

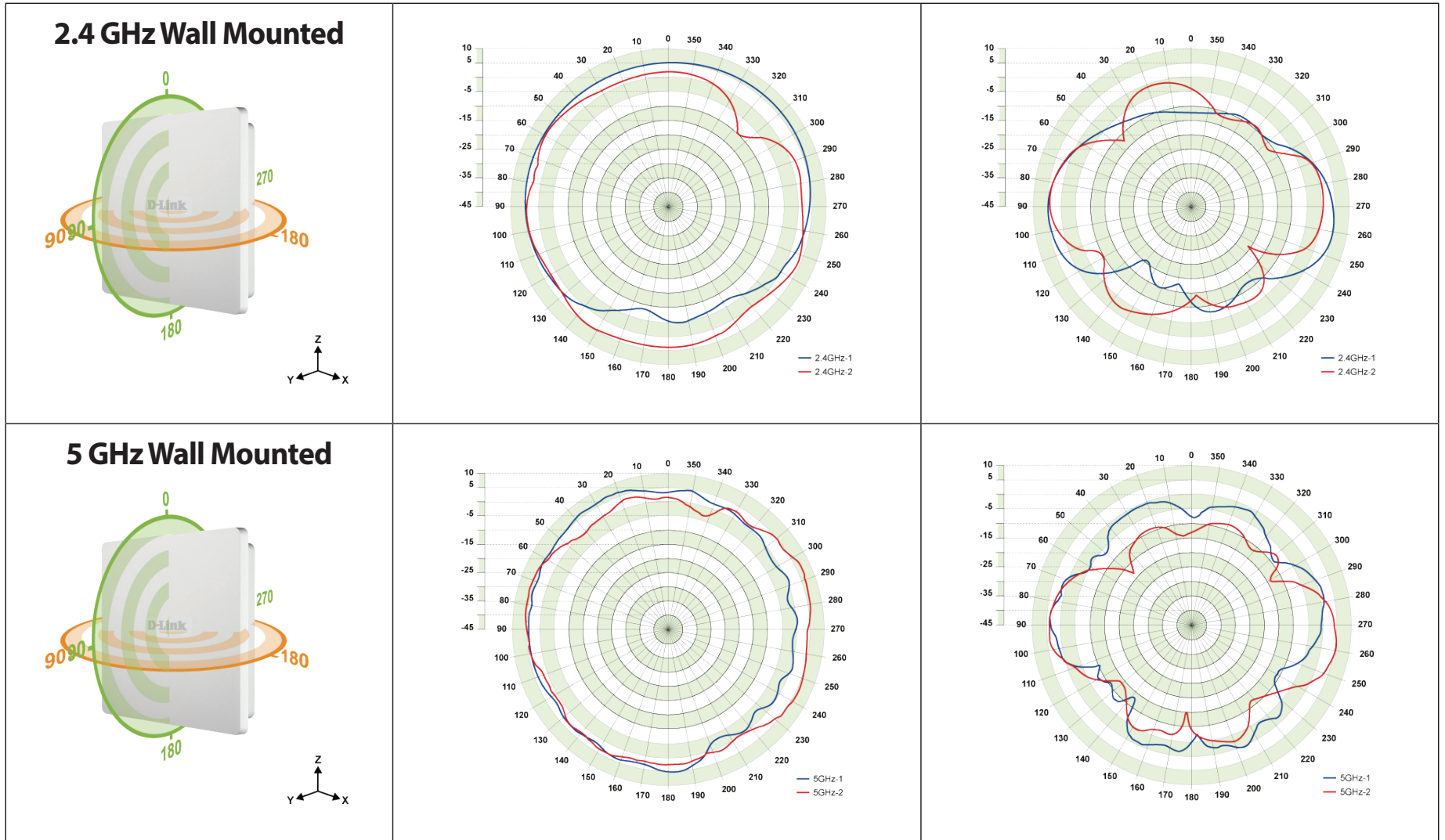
- Antenna Orientation - try different antenna orientations for the DAP-3662. Try to keep the antenna at least 6 inches away from the wall or other objects.
- If you are using 2.4 GHz cordless phones, X-10 equipment or other home security systems, ceiling fans, or lights, your wireless connection will degrade dramatically or even drop. Try changing the channel of your router, access point and wireless adapter to a different channel to avoid interference.
- Keep your product away - at least 3-6 feet - from electrical devices that generate RF noise like microwaves, monitors, electric motors, etc.

5. Why can't I get a wireless connection?

If you have enabled encryption on the DAP-3662, you must also enable encryption on all wireless clients in order to establish a wireless connection.

- Make sure that the SSID on the AP and the wireless client are exactly the same. If they are not, wireless connection cannot be established.
- Move the DAP-3662 and the wireless client into the same room and then test the wireless connection.
- Disable all security settings.
- Turn off your DAP-3662 and the client. Turn the DAP-3662 back on again, and then turn on the client.
- Make sure that all devices are set to Infrastructure mode.
- Check that the LED indicators are indicating normal activity. If not, check that the AC power and Ethernet cables are firmly connected.
- Check that the IP address, subnet mask, gateway, and DNS settings are correctly entered for the network.
- If you are using 2.4 GHz cordless phones, X-10 equipment, or other home security systems, ceiling fans, or lights, your wireless connection will degrade dramatically or drop altogether. Try changing the channel on your DAP-3662, and on all the devices in your network to avoid interference.
- Keep your product away - at least 3-6 feet - from electrical devices that generate RF noise like microwaves, monitors, electric motors, etc.

Antenna Pattern



Technical Specifications

Standards

- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n
- IEEE 802.11ac
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3af

Network Management

- Web Browser interface
 - HTTP
 - Secure HTTP (HTTPS)
- AP Array
- Central WiFiManager
- SNMP Support
 - Private MIB
- Command Line Interface
 - Telnet
 - Secure SSH Telnet

Security

- WPA™ Personal/Enterprise
- WPA2™ Personal/Enterprise
- WEP™ 64-/128-bit
- SSID Broadcast Disable
- MAC Address Access Control

Wireless Frequency Range

- 2.4 to 2.4835 GHz and 5.15 to 5.85 GHz**

Operating Voltage

- 48 V/0.5A Power Adapter or 802.3af PoE

Omni antenna

Two embedded 6dBi gain @ 2.4GHz
Two embedded 6dBi gain @ 5 GHz

LEDs

- Power
- Status

Temperature

- Operating: -30°C to 60°C
- Storing: -30°C to 65°C

Humidity

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

Certifications

- FCC
- CE
- IC
- C-Tick
- UL
- WiFi

Dimensions

- L = 277.11 mm
- W = 240.03 mm
- H = 50.04 mm

*Maximum wireless signal rate derived from IEEE Standard 802.11g, 802.11a and 802.11n specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

**Please note that operating frequency ranges vary depending on the regulations of individual countries and jurisdictions. The DAP-3662 isn't supported in the 5.25~5.35 GHz and 5.47 ~ 5.725 GHz frequency ranges in some regions.

Federal Communication Commission Interference Statement

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.

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.

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

This device and its 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.

IMPORTANT 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 23 cm between the radiator & your body.

FCC NOTICE: To comply with FCC part 15 rules in the United States, the system must be professionally installed to ensure compliance with the Part 15 certification. It is the responsibility of the operator and professional installer to ensure that only certified systems are deployed in the United States. The use of the system in any other combination (such as co-located antennas transmitting the same information) is expressly forbidden.

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 interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

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

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.

Dynamic Frequency Selection (DFS) for devices operating in the bands 5250- 5350 MHz, 5470-5600 MHz and 5650-5725 MHz
Sélection dynamique de fréquences (DFS) pour les dispositifs fonctionnant dans les bandes 5250-5350 MHz, 5470-5600 MHz et 5650-5725 MHz

The maximum antenna gain permitted (for devices in the bands 5250-5350 MHz and 5470-5725 MHz) to comply with the e.i.r.p. limit.
le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250-5350 MHz et 5470-5725 MHz doit se conformer à la limite de p.i.r.e.

Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250-5350 MHz et 5650-5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

IMPORTANT NOTE:

IC Radiation Exposure Statement:

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 23 cm between the radiator & your body.

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 23 cm de distance entre la source de rayonnement et votre corps.

This radio transmitter (Model: DAP-3662A1) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list,

having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Le présent émetteur radio (Model: DAP-3662A1) a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna list:

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)	
					2.4GHz	5GHz
1	Grand-Tek	OA-58-06-03	Embedded Antenna	I-PEX	-	6.2
2	Grand-Tek	OA-58-05-02	Embedded Antenna	I-PEX	-	6.2
3	Grand-Tek	OA-24-05-06	Embedded Antenna	I-PEX	6.1	-
4	Grand-Tek	OA-24-04-02	Embedded Antenna	I-PEX	4.8	-

Note: The EUT has four antennas.

NCC警語:

- (1) 「經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得自變更頻率、加大功率或變更原設計之特性及功能」。
- (2) 「低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾」。
- (3) 「不致造成違反低功率電波輻射性電機管理辦法之所有控制、調整及開關之使用方法」。
- (4) 「對任何可能造成違反管理辦法規定之調整予以警告，或建議由具有發射機維修專長之技術人員執行或由其直接監督及負責」。
- (5) 「對任何可能造成違反管理辦法之零件(晶體、半導體等)置換之警告」。
- (6) 「電磁波曝露量MPE標準值1mW/cm²，本產品使用時建議應距離人體：23 cm」。