

DAP-2360

Version 2.0

Air Premier[®] N PoE Access Point with Plenum-rated Chassis
Wireless N PoE Access Point with Plenum-rated Chassis
無線基地台

User Manual

Business Class Networking

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Package Contents

- D-Link DAP-2360 AirPremier® N PoE Access Point with Plenum-rated Chassis/
Wireless N PoE Access Point with Plenum-rated Chassis
DAP-2360無線基地台
- Power Adapter
- CAT5 Ethernet Cable
- CD-ROM with User Manual
- Install Guide

Note: Using a power supply with a different voltage rating than the one included with the DAP-2360 will cause damage and void the warranty for this product.



System Requirements

- Computers with Windows®, Macintosh®, or Linux-based operating systems with an installed Ethernet Adapter
- For configuration, the following web browsers are supported:
 - Microsoft® Internet Explorer® 6.0 and higher
 - Mozilla Firefox 3.0 and higher
 - Google™ Chrome 2.0 and higher
 - Apple Safari 3.0 and higher

Introduction

The DAP-2360 802.11n AP increases productivity by allowing you to work faster and more efficiently. With the DAP-2360, bandwidth-intensive applications like graphics or multimedia will benefit significantly because large files are now able to move across the network quickly.

The DAP-2360 is capable of operating in one of four different wireless networking modes: access point, WDS (Wireless Distribution System) with AP, WDS, or Wireless Client mode.

Use less wiring, enjoy increased flexibility, save time and money with PoE (Power over Ethernet). With PoE, the DAP-2360 shares power and data over the CAT5 cable, making the setup of your network less expensive and more convenient.

An ideal solution for quickly creating and extending a wireless local area network (WLAN) in offices or other workplaces, trade shows, and special events, the DAP-2360 provides data transfer rates up to 300Mbps. (The 802.11n standard is backwards compatible with 802.11g and 802.11b devices.)

WPA/WPA2 is offered in two options: Enterprise (used for corporations) and Personal (used for home users).

WPA-Personal and WPA2-Personal are directed towards home users who do not have the server-based equipment required for user authentication. This method of authentication is similar to WEP because you define a "Pre-Shared Key" on the wireless router/AP. Once the pre-shared key is confirmed and satisfied at both the client and access point, access is then granted. The encryption method used is referred to as the Temporal Key Integrity Protocol (TKIP), which offers per-packet dynamic hashing. It also includes an integrity checking feature which ensures that the packets were not tampered with during wireless transmission.

WPA-Enterprise and WPA2-Enterprise are ideal for businesses that already have existing security infrastructures established.

Management and security implementation can now be centralized on a server participating on the network. Utilizing 802.1X with a RADIUS (Remote Authentication Dial-in User Service) server, a network administrator can define a list of authorized users who can access the wireless LAN. When attempting to access a wireless LAN with WPA-Enterprise configured, the new client will be requested to enter a username with a password. If the new client is authorized by the administration, and enters the correct username and password, then access is granted. In the case where an employee leaves the company, the network administrator is able to remove the previous employee from the authorized list to avoid compromising the network.

EAP (Extensible Authentication Protocol) is available through the Windows® XP operating system. You will need to use the same type of EAP protocol on all devices in your network when using the 802.1X feature.

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

Features

- **Four different operation modes** - Capable of operating in one of four different operation modes to meet your wireless networking needs: Access Point, WDS with AP, WDS, or Wireless Client.
- Faster wireless networking with the 802.11n standard to provide a maximum wireless signal rate of up to 300 Mbps*.
- Compatible with the 802.11b standard to provide a wireless data rate of up to 11Mbps, allowing you to migrate your system to the 802.11n and 802.11g standards on your own schedule without sacrificing connectivity.
- Compatible with the 802.11g standard to provide a wireless data rate of up to 54Mbps in the 2.4GHz frequency range.
- Better security with WPA - The DAP-2360 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.
- **D-Link Central WiFiManager 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-2360 is not just fast, but also supports SNMP v.3 for better network management.
- Utilizes OFDM technology (Orthogonal Frequency Division Multiplexing).
- Supports 802.3af Power over Ethernet.
- Supports one 10/100/1000M Ethernet port.
- Operates in the 2.4 ~ 2.4835GHz frequency ranges.
- Web-based interface for managing and configuring.

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

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-2360 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.

Standards-Based Technology

The DAP-2360 Wireless Access Point utilizes the 802.11b, 802.11g, and 802.11n standards.

The IEEE 802.11n standard is an extension of the 802.11b and 802.11g standards that came before it. It increases the maximum wireless signal rate up to 300Mbps* within the 2.4GHz bands, utilizing OFDM technology.

This means that in most environments - within the specified range of this device - you will be able to transfer large files quickly, or even watch a movie in MPEG format over your network without noticeable delays. This technology works by transmitting high-speed digital data over a radio wave utilizing OFDM (Orthogonal Frequency Division Multiplexing) technology. OFDM works by splitting the radio signal into multiple smaller sub-signals that are then simultaneously transmitted at different frequencies to the receiver. OFDM reduces the amount of crosstalk (interference) in signal transmissions.

The D-Link DAP-2360 will automatically sense the best possible connection speed to ensure the greatest possible speed and range.

IEEE 802.11n offers the most advanced network security features available today, including WPA.

*Maximum wireless signal rate derived from IEEE Standard 802.11n and 802.11g specifications. Actual data throughput may vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead can lower actual data throughout rate.

Wireless Installation Considerations

The D-Link AirPremier® N wireless access point 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 access point 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 the 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 2.4GHz 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 2.4GHz 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.

Hardware Overview



Power Receptacle

The supplied power adapter connects here.

Reset Button

A pinhole button located beside the Ethernet socket is used to reset the system or restore the factory default settings.

Note: After resetting the unit, you will still be able to access the data on your hard drives.

LAN (PoE) Port

An Ethernet port that connects the unit to a network. This port can also be used to supply power to this unit using Power over Ethernet.



Power LED

This light will be solid green when the unit is powered on.

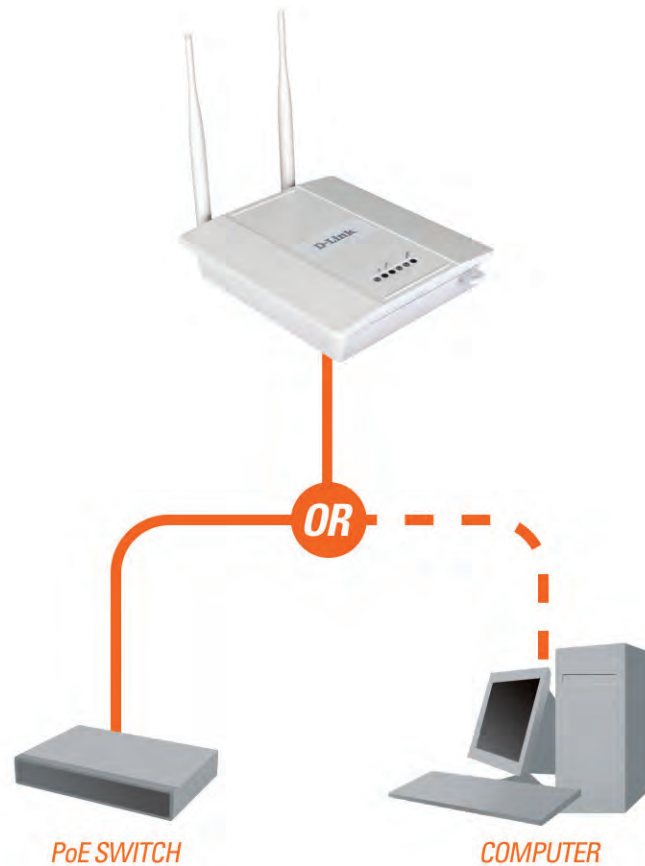
2.4 GHz LED

This light will be flickering green when the 2.4GHz frequency is in use.

LAN LED

This light will be flickering green when there is active LAN traffic.

Connect Power over Ethernet (PoE)

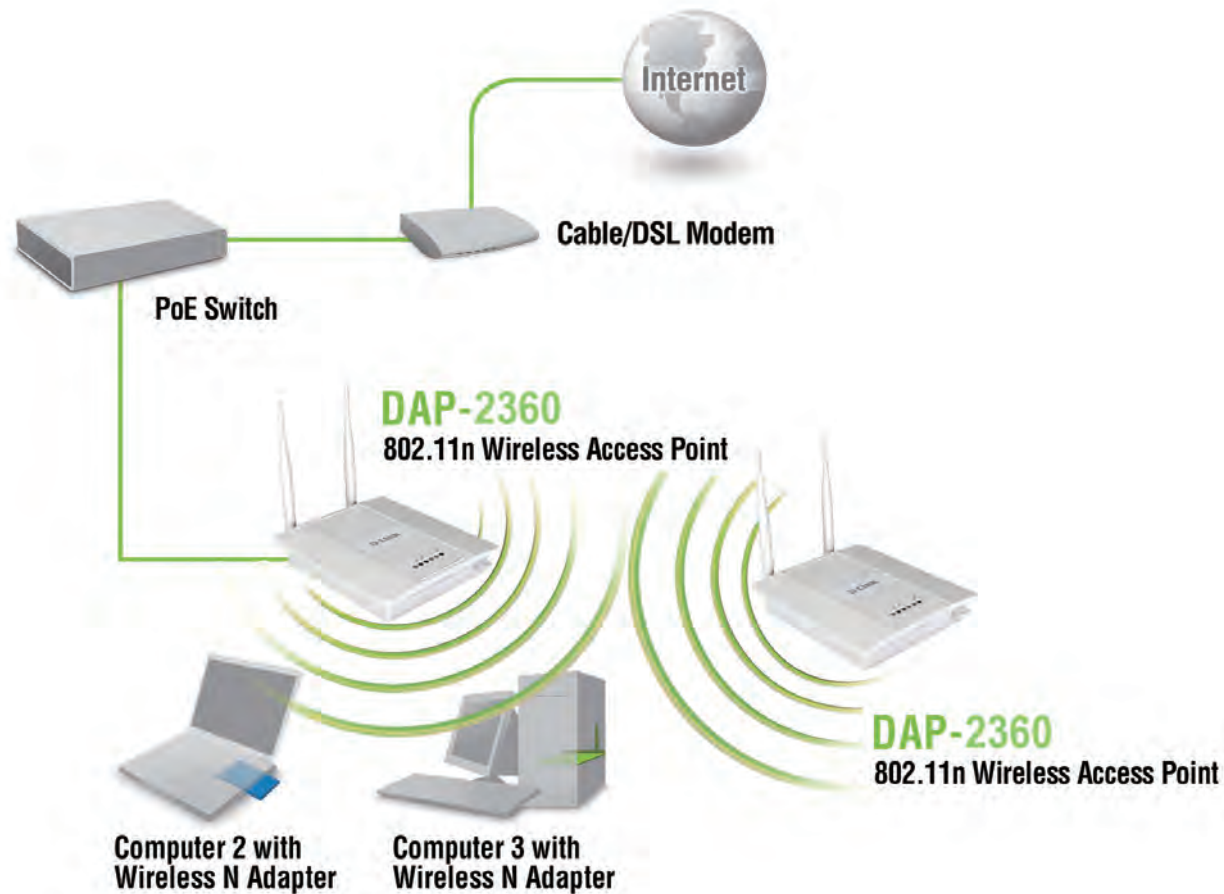


Connect one end of an Ethernet cable (included with your access point) to the LAN port on the DAP-2360 and the other end of the Ethernet cable to either your computer or to your PoE switch. The AP can be powered on by a PoE switch or by the power adapter shipped with the AP.

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

Getting Started



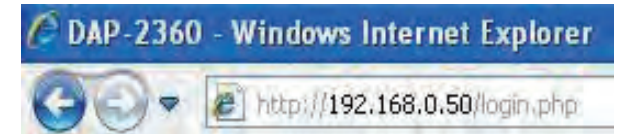
1. You will need broadband Internet access.
2. Consult with your cable or DSL provider for proper installation of the modem.
3. Connect the cable or DSL modem to a router. See the printed Install Guide included with your router.
4. If you are connecting a desktop computer to your network, install a wireless PCI adapter into an available PCI slot on your desktop computer.
5. Install the drivers for your wireless CardBus adapter into a laptop computer.

Configuration

To configure the DAP-2360, use a computer that is connected to the DAP-2360 with an Ethernet cable (see the *Network Layout diagram*).

Launch your web browser.

Type the IP address of the DAP-2360 in the address field (**http://192.168.0.50**) and press **Enter**. Make sure that the IP addresses of the DAP-2360 and your computer are in the same subnet.



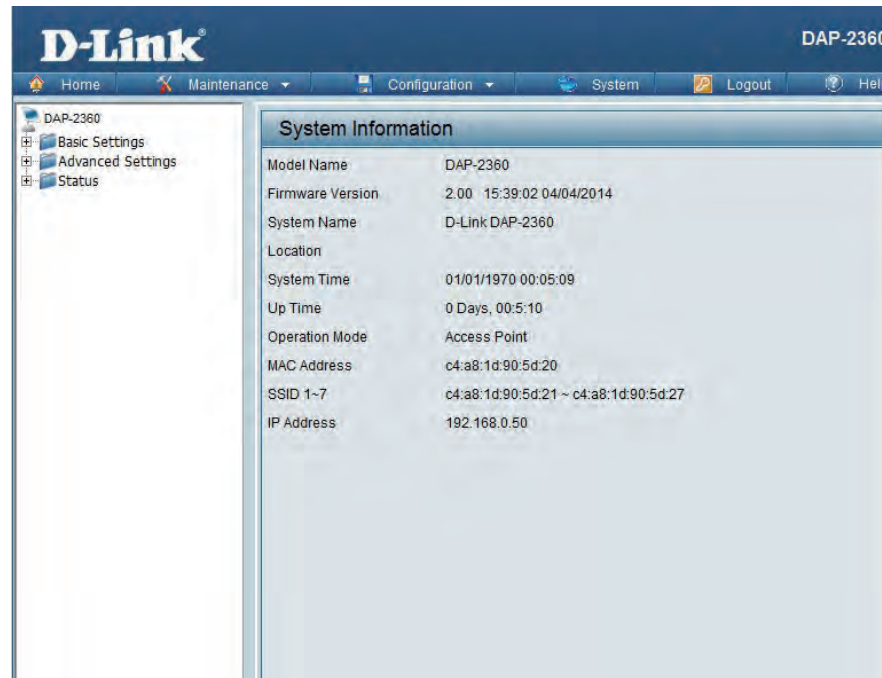
Note: If you have changed the default IP address assigned to the DAP-2360, make sure to enter the correct IP address.

Enter the user name (**admin**) and your password. Leave the password field blank by default and click **Login**.

A screenshot of the D-Link DAP-2360 login page. The page has a dark blue header with the "D-Link" logo on the left and "DAP-2360" on the right. Below the header is a light blue box with a "LOGIN" section. Inside this section, it says "Login to the Access Point:". There are two input fields: "User Name" and "Password". The "User Name" field contains the text "admin". The "Password" field is empty. To the right of the "Password" field is a "Login" button.

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

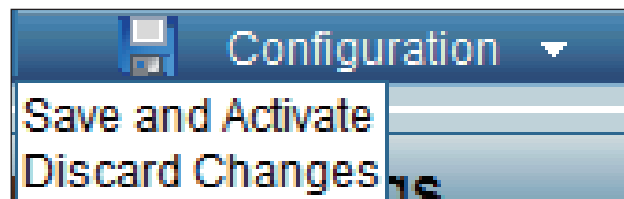
After successfully logging into the DAP-2360, the following screen will appear:



Save and Activate Settings

When making changes on most of the configuration screens in this section, use the  button at the bottom of each screen to save (not activate) your configuration changes.

You may change settings to multiple pages before activating. Once you are finished, click the **Configuration** button located at the top of the page and then click **Save and Activate**.



Basic Settings

Wireless

Access Point mode

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

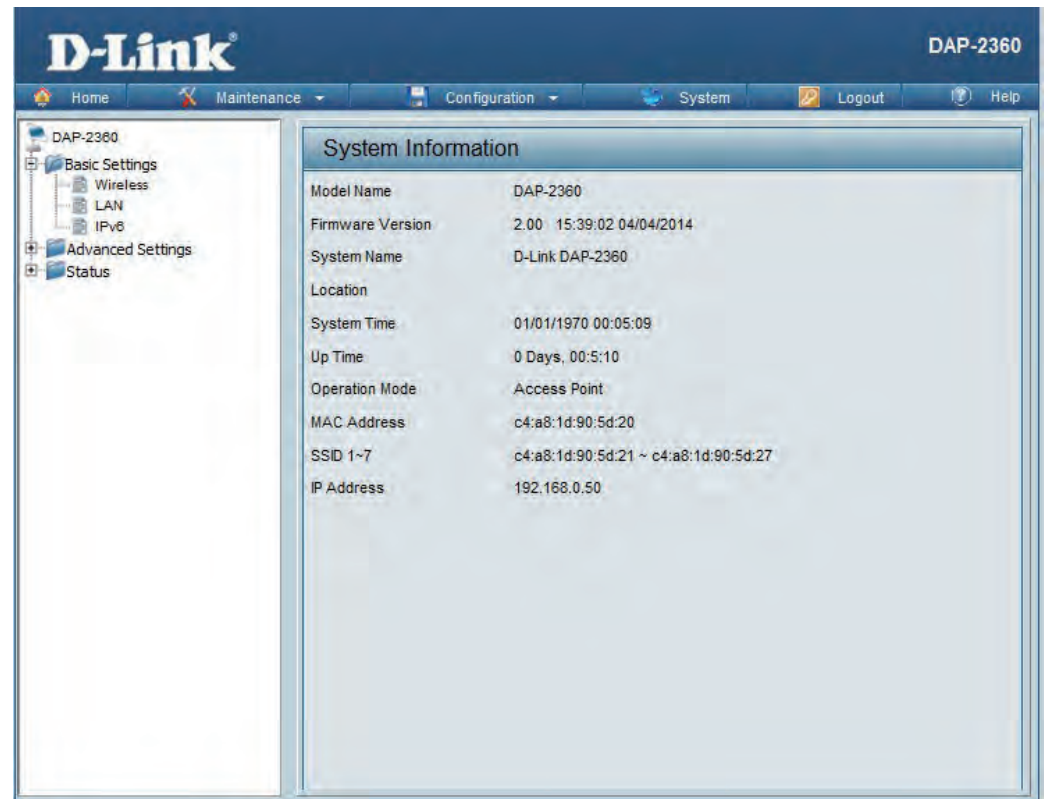
Network Name (SSID): Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network. The SSID can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

SSID Visibility: **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 you to select the channel width you would like to operate in. Select 20 MHz if you are not using any 802.11n wireless clients. Auto 20/40 MHz allows you to connect to both 802.11n and 802.11b/g wireless devices on your network.
Authentication:	Use the drop-down menu to choose Open System, Shared Key, WPA-Personal, WPA-Enterprise, or 802.11x. 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 to secure your network using 802.1x authentication.

WDS with AP mode

In WDS with AP mode, the DAP-2360 wirelessly connects multiple networks while still functioning as a wireless AP.

- Wireless Band:** Select **2.4GHz** from the drop-down menu.
- Mode:** **WDS with AP** mode is selected from the drop-down menu.
- Network Name (SSID):** Service Set Identifier (SSID) is the name designated for a specific wireless local area network (WLAN). The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.
- SSID Visibility:** **Enable** or **Disable** SSID visibility. Enabling this feature broadcasts the SSID across the network, thus making it visible to all network users.
- Auto Channel Selection:** Enabling this feature automatically selects the channel that will provide the best wireless performance. This feature is not supported in WDS with AP mode. The channel selection process only occurs when the AP is booting up.
- Channel:** To change the channel, use the drop-down menu to make the desired selection. (Note: The wireless adapters will automatically scan and match the wireless settings.)
- Channel Width:** Indicates whether the device is capable of 20MHz operation only or both 20MHz and 40MHz operation.

The screenshot displays the D-Link DAP-2360 configuration interface. The 'Wireless Settings' tab is active. The 'Wireless Band' is set to 2.4GHz, 'Mode' is WDS with AP, 'Network Name (SSID)' is dlink, 'SSID Visibility' is Enable, 'Auto Channel Selection' is Disable, 'Channel' is 11, 'Channel Width' is 20 MHz, and 'Captive Profile' is Disable. The 'WDS Remote AP MAC Address' section has eight empty input fields. The 'Site Survey' section includes a 'Scan' button and a table with columns CH, RSSI, BSSID, Security, and SSID. The 'Authentication' is set to Open System. The 'Key Settings' section shows 'Encryption' as Disable, 'Key Type' as HEX, 'Key Index' as 1~4, 'Network Key' as an empty field, and 'Confirm Key' as an empty field. A 'Save' button is located at the bottom right.

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

WDS mode

In WDS mode, the DAP-2360 wirelessly connects multiple networks, without functioning as a wireless AP.

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

The screenshot shows the D-Link DAP-2360 configuration interface. The top navigation bar includes Home, Maintenance, Configuration (selected), System, Logout, and Help. The left sidebar shows a tree view with Basic Settings (selected), Wireless, LAN, IPv6, Advanced Settings, and Status. The main content area is titled 'Wireless Settings' and contains the following fields:

- Wireless Band:** 2.4GHz (dropdown)
- Mode:** WDS (dropdown)
- Network Name (SSID):** dlink (text input)
- SSID Visibility:** Enable (dropdown)
- Auto Channel Selection:** Disable (dropdown)
- Channel:** 11 (dropdown)
- Channel Width:** 20 MHz (dropdown)
- Captive Profile:** Disable (dropdown)
- WDS Section:**
 - Remote AP MAC Address:** Eight input fields labeled 1 through 8.
 - Site Survey:** A button labeled 'Scan'.
 - Table:** A table with columns CH, RSSI, BSSID, Security, and SSID. The table is currently empty.
- Authentication:** Open System (dropdown)
- Key Settings:**
 - Encryption:** Disable (radio button selected), Enable (radio button)
 - Key Type:** HEX (dropdown)
 - Key Index(1~4):** 1 (dropdown)
 - Network Key:** (text input)
 - Confirm Key:** (text input)
 - Key Size:** 64 Bits (dropdown)

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

Authentication: Use the drop-down menu to choose **Open System**, **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

- | | |
|--------------------------------|---|
| Wireless Band: | Select 2.4GHz 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 matches the AP that the DAP-2360 is connected to when set to Wireless Client mode. |
| Channel Width: | Use the drop-down menu to choose 20 MHz or Auto 20/40 MHz . |
| Site Survey: | Click on the Scan button to search for available wireless networks, then click on the available network that you want to connect with.
Use the drop-down menu to choose Open System or WPA-Personal . |
| Authentication: | 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. |
| Enable: | Check to enable clone MAC. This feature will allow you to change the MAC address of the access point to the MAC address of a client. |
| MAC Source: | Select the MAC source from the drop-down menu. |
| MAC Address: | Enter the MAC address that you would like to assign to the access point. |

[illegible]

Open System/Shared Key Authentication

- Encryption:** Use the radio button to disable or enable encryption.
- Key Type*:** Select **HEX** or **ASCII**.
- Key Size:** Select **64 Bits** or **128 Bits**.
- Key Index (1-4):** Select the 1st through the 4th key to be the active key.
- Key:** Input up to four keys for encryption. You will select one of these keys in the Key Index drop-down menu.

The screenshot displays the D-Link DAP-2360 configuration interface. The left sidebar shows a tree view with 'Basic Settings' (Wireless, LAN, IPv6), 'Advanced Settings', and 'Status'. The main content area is titled 'Wireless Settings'. It includes the following fields and options:

- Wireless Band:** 2.4GHz
- Mode:** Access Point
- Network Name (SSID):** dlink
- SSID Visibility:** Enable
- Auto Channel Selection:** Enable
- Channel:** 11
- Channel Width:** 20 MHz
- Captive Profile:** Disable
- Authentication:** Open System
- Key Settings:**
 - Encryption:** ☒ Disable ☐ Enable
 - Key Type:** HEX
 - 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. A legend at the bottom indicates the allowed characters for the keys: (0-9,a-z,A-Z,~,!@#\$\$%^&*0_+`-={};'\":,./<>?)

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

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

WPA/WPA2-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: Select the interval during which the group key will be valid. The default value of **1800** is recommended. Select **Manual** to enter your key (PassPhrase).

Periodical Key Change: You can select **Periodical Key Change** to have the access point automatically change your PassPhrase. Enter the Activate From time and the time in hours to change the key.

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

D-Link DAP-2360

Home Maintenance Configuration System Logout Help

Wireless Settings

Wireless Band: 2.4GHz

Mode: Access Point

Network Name (SSID): dlink

SSID Visibility: Enable

Auto Channel Selection: Enable

Channel: 11

Channel Width: 20 MHz

Captive Profile: Disable

Authentication: WPA-Personal

PassPhrase Settings

WPA Mode: AUTO (WPA or WPA2)

Cipher Type: Auto

Group Key Update Interval: 3600 (Seconds)

☒ Manual ☐ Periodical Key Change

Activated From: Sun : 00 : 00

Time Interval: 1 (1~168)hour(s)

PassPhrase:

Confirm PassPhrase:

notice: 8~63 in ASCII or 64 in Hex.
(0-9,a-z,A-Z,!@#\$%^&*0_+~='":;.,/<>?)

Save

WPA/WPA2-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 . A lower interval may reduce data transfer rates.
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Network Access Protection:	Enable or disable Microsoft Network Access Protection.
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RADIUS Server: Enter the IP address of the RADIUS server.

RADIUS Port: Enter the RADIUS port.

RADIUS Secret: Enter the RADIUS secret.

D-Link®		DAP-2360
Home	Maintenance	Configuration
System		Logout
		Help
DAP-2360 - Basic Settings - Wireless - LAN - IPv6 - Advanced Settings - Status		
Wireless Settings Wireless Band: ZigBee Mode: Access Point Network Name (SSID): dlink SSID Visibility: Enable Auto Channel Selection: Enable Channel: 11 Channel Width: 20 MHz Captive Profile: Disable Authentication: WPA-Enterprise RADIUS Server Settings WPA Mode: AUTO (WPA or WPA2) Cipher Type: Auto Group Key Update Interval: 3600 (Seconds) Network Access Protection Network Access Protection: ☒ Disable ☐ Enable RADIUS Server Mode RADIUS Server: ☒ External ☐ Internal Primary RADIUS Server Setting RADIUS Server: RADIUS Port: 1812 RADIUS Secret: (0-9,a-z,A-Z,!@#%&^*&_+~-'=0[];'"/,<>?) Backup RADIUS Server Setting (Optional) RADIUS Server: RADIUS Port: 1812 RADIUS Secret: (0-9,a-z,A-Z,!@#%&^*&_+~-'=0[];'"/,<>?) Primary Accounting Server Setting Accounting Mode: Disable Accounting Server: Accounting Port: 1813 Accounting Secret: (0-9,a-z,A-Z,!@#%&^*&_+~-'=0[];'"/,<>?) Backup Accounting Server Setting (Optional) Accounting Server: Accounting Port: 1813 Accounting Secret: (0-9,a-z,A-Z,!@#%&^*&_+~-'=0[];'"/,<>?) Save		

802.1x Authentication

Key Update Interval: Select the interval during which the group key will be valid (**300** is the recommended value). A lower interval may reduce data transfer rates.

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

RADIUS Port: Enter the RADIUS port.

RADIUS Secret: Enter the RADIUS secret.

D-Link DAP-2360

Home Maintenance Configuration System Logout Help

Wireless Settings

Wireless Band: 2.4GHz
 Mode: Access Point
 Network Name (SSID): dlink
 SSID Visibility: Enable
 Auto Channel Selection: Enable
 Channel: 11
 Channel Width: 20 MHz
 Captive Profile: Disable
 Authentication: 802.1X

RADIUS Server Settings
 Key Update Interval: 300 (Seconds)

RADIUS Server Mode
 RADIUS Server: ☒ External ☐ Internal

Primary RADIUS Server Setting
 RADIUS Server: RADIUS Port: 1812
 RADIUS Secret:
(0-9,a-z,A-Z,~!@#%&^*0_+ '-=0[];'\'",./<>?)

Backup RADIUS Server Setting (Optional)
 RADIUS Server: RADIUS Port: 1812
 RADIUS Secret:
(0-9,a-z,A-Z,~!@#%&^*0_+ '-=0[];'\'",./<>?)

Primary Accounting Server Setting
 Accounting Mode: Disable
 Accounting Server: Accounting Port: 1813
 Accounting Secret:
(0-9,a-z,A-Z,~!@#%&^*0_+ '-=0[];'\'",./<>?)

Backup Accounting Server Setting (Optional)
 Accounting Server: Accounting Port: 1813
 Accounting Secret:
(0-9,a-z,A-Z,~!@#%&^*0_+ '-=0[];'\'",./<>?)

Save

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-2360. These settings may be referred to as private settings. You may change the LAN IP address if needed. The LAN IP address is private to your internal network and cannot be seen on the Internet.

Get IP From: **Static IP (Manual)** is chosen here. Choose this option if you do not have a DHCP server in your network, or if you wish to assign a static IP address to the DAP-2360. When **Dynamic IP (DHCP)** is selected, the other fields here will be grayed out. Please allow about two 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 gateway in your network, please enter an IP address within the range of your network.

DNS: Enter the DNS IP address used here.

The screenshot shows the D-Link DAP-2360 web interface. The top navigation bar includes links for Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view with Basic Settings (Wireless, LAN, IPv6), Advanced Settings, and Status. The main content area is titled 'LAN Settings'. It features a 'Get IP From' dropdown menu set to 'Static IP (Manual)'. Below this are four input fields: 'IP Address' (192.168.0.50), 'Subnet Mask' (255.255.255.0), 'Default Gateway', and 'DNS'. A 'Save' button is located at the bottom right of the form.

IPv6

- Enable IPv6:** Check to enable the IPv6
- Get IP From:** Auto is chosen here. Choose this option the DAP-2360 can get IPv6 address automatically or use Static to set IPv6 address manually. When Auto is selected, the other fields here will be grayed out.
- IP Address:** Enter the LAN IPv6 address used here.
- Prefix:** Enter the LAN subnet prefix length value used here.
- Default Gateway:** Enter the LAN default gateway IPv6 address used here.

The screenshot shows the D-Link DAP-2360 web interface. The top navigation bar includes links for Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view with categories: Basic Settings (Wireless, LAN, IPv6), Advanced Settings, and 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

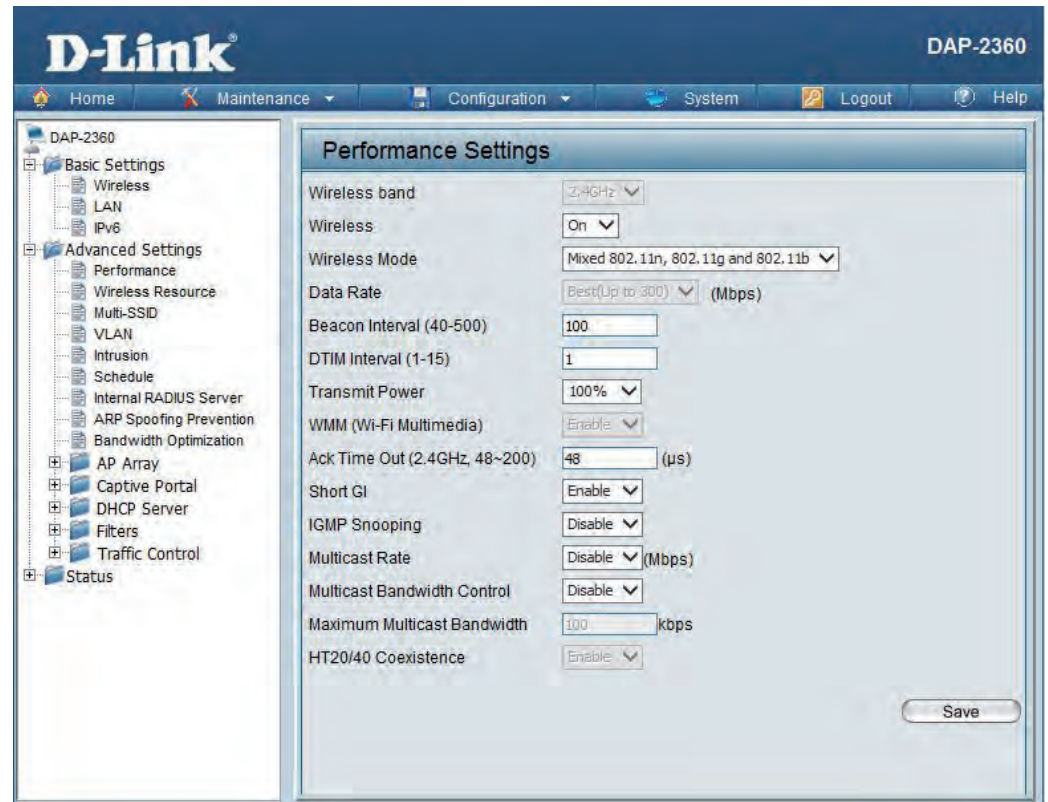
Advanced Settings

Performance

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**. Please note that when backwards compatibility is enabled for legacy (802.11g/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. The choices available are **Best (Up to 54), 54, 48, 36, 24, 18, 12, 9, 6, 11, 5.5, 2** or **1**.



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

Beacon Interval (25-500):	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.
DTM Interval (1-15):	Select a Delivery Traffic Indication Message setting between 1 and 15 . The default value is 1 . 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, 64~200):	To effectively optimize throughput over long distance links, enter a value for Acknowledgement Time Out from 64 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.
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, when the number of users exceeds this value, the DAP-2360 will not allow clients to associate with the AP.
User Limit (0-64):	Set the maximum amount of users that are allowed access (0-64 users). To use this feature, the Connection Limit above must be enabled. For most users, a limit of 10 is recommended. The default setting is 20 .
Multicast Rate for 2.4G Band	Select the multicast rate for 2.4G band. The choices available are 130,117,78,65,58.5,54, 52,48, 39,36, 26,24, 19.5,18, 13,12, 9, 6.5,6, 11, 5.5, 2 or 1.

Wireless Resource

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

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

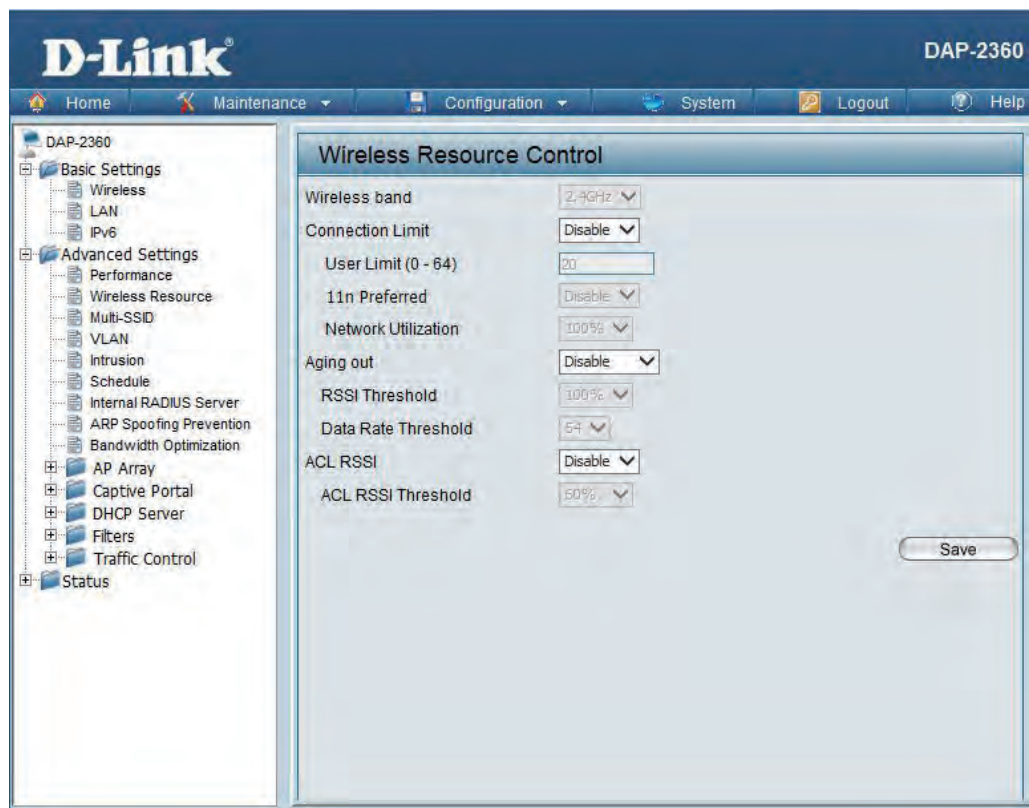
Band Steering: Use the drop-down menu to **Enable** the 5G Preferred function. When the wireless clients support both 2.4GHz and 5GHz and the 2.4GHz signal is not strong enough, the device will use 5G as higher priority.

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 5GHz wireless client connections minus the number of 2.4GHz wireless client connections. If the number of 5GHz wireless client connections minus the number of 2.4GHz wireless client connections exceed this value, the extra 5GHz wireless client connections will be forced to connect to the 2.4GHz band and not the 5GHz 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-2660 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-2660 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 four multiple Service Set Identifiers. In the **Basic > Wireless** section, you can set the Primary SSID. The SSID's factory default setting is **dlink**. The SSID can be easily changed to connect to an existing wireless network or to establish a new wireless network.

- Enable Multi-SSID:

Check to enable support for multiple SSIDs.
- Band:

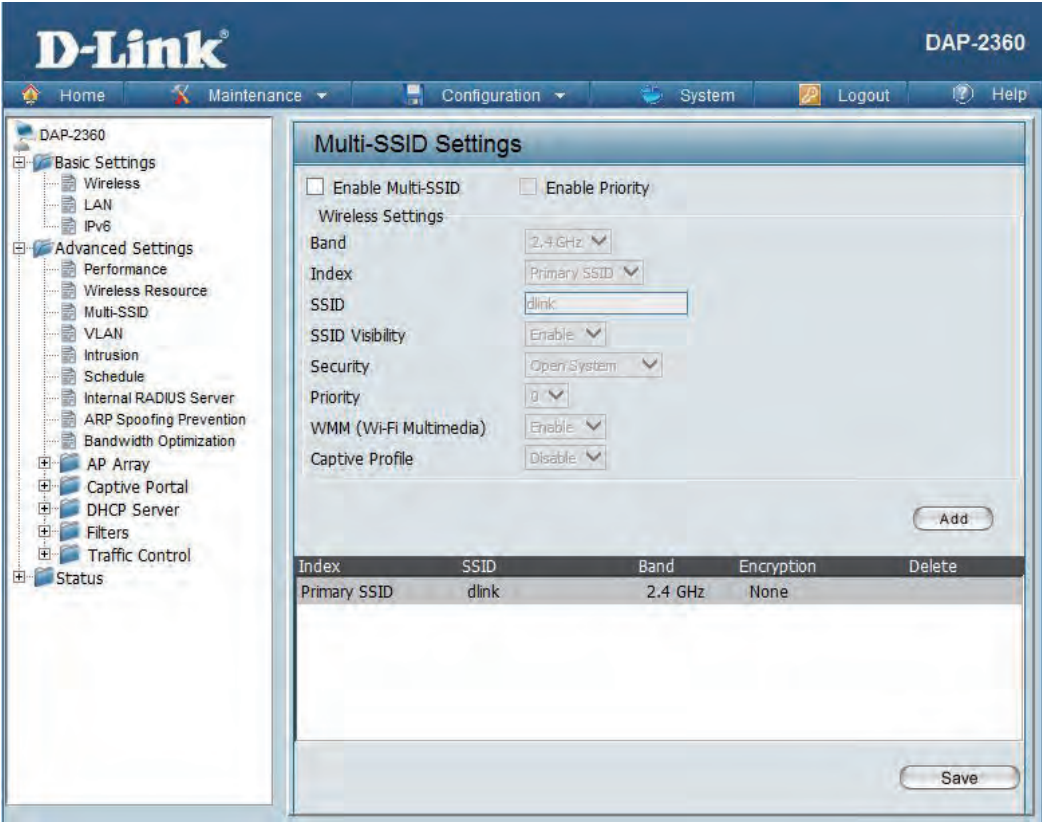
This read-only value is the current band setting.
- Index:

You can select up to three multi-SSIDs. With the Primary SSID, you have a total of four 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 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.
- 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 25. For a detailed description of the WPA-Personal parameters, please go to page 26. For a detailed description of the WPA-Enterprise parameters, please go to page 27. For a detailed description of the O802.1x parameters, please go to page 28.



Priority:	Check the Enable Priority box at the top of this window to enable. Select the priority from the drop-down menu.
WMM (Wi-Fi Multimedia):	Select Enable or Disable .
Encryption:	When you select Open System , toggle between Enable and Disable . If Enable is selected, the Key Type, Key Size, Key Index (1~4), Key, and Confirm Keys must also be configured.
Key Type:	Select HEX or ASCII .
Key Size:	Select 64 Bits or 128 Bits .
Key Index (1-4):	Select from the 1st to 4th key to be set as the active key.
Key:	Input up to four keys for encryption. You will select one of these keys in the Key Index drop-down menu.
WPA Mode:	When you select either WPA-Personal or WPA-Enterprise , you must also choose a WPA mode from the drop-down menu: AUTO (WPA or WPA2) , WPA2 Only , or WPA Only . WPA and WPA2 use different algorithms. AUTO (WPA or WPA2) allows you to use both WPA and WPA2. In addition, you must configure Cipher Type and Group Key Update Interval.
Cipher Type:	Select Auto , AES , or TKIP from the drop-down menu.
Group Key Update Interval:	Select the interval during which the group key will be valid. The default value of 1800 seconds is recommended.
PassPhrase:	When you select WPA-Personal , please enter a PassPhrase in the corresponding field.
Confirm PassPhrase:	When you select WPA-Personal , please re-enter the PassPhrase entered in the previous item in the corresponding field.
RADIUS Server:	When you select WPA-Enterprise , enter the IP address of the RADIUS server. In addition, you must configure RADIUS Port and RADIUS Secret.
RADIUS Port:	Enter the RADIUS port.
RADIUS Secret:	Enter the RADIUS secret.

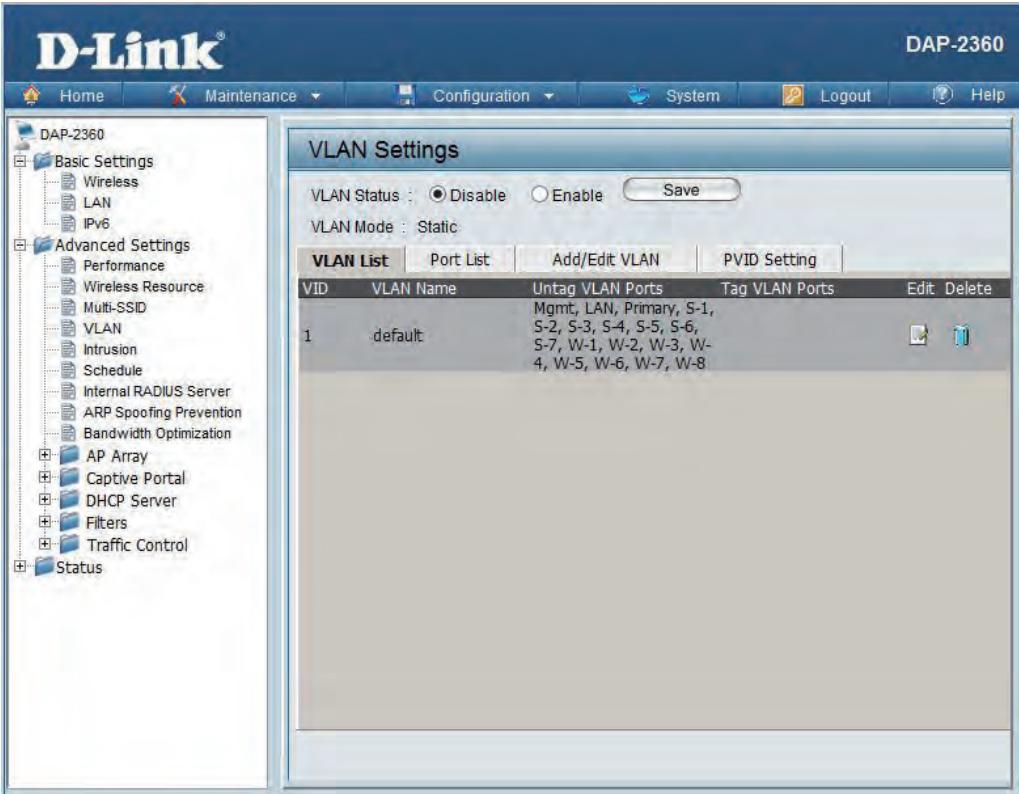
VLAN

VLAN List

The DAP-2360 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-2360 without a VLAN tag will have a VLAN tag inserted with a PVID.

The VLAN List tab displays the current VLANs.

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



Port List

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

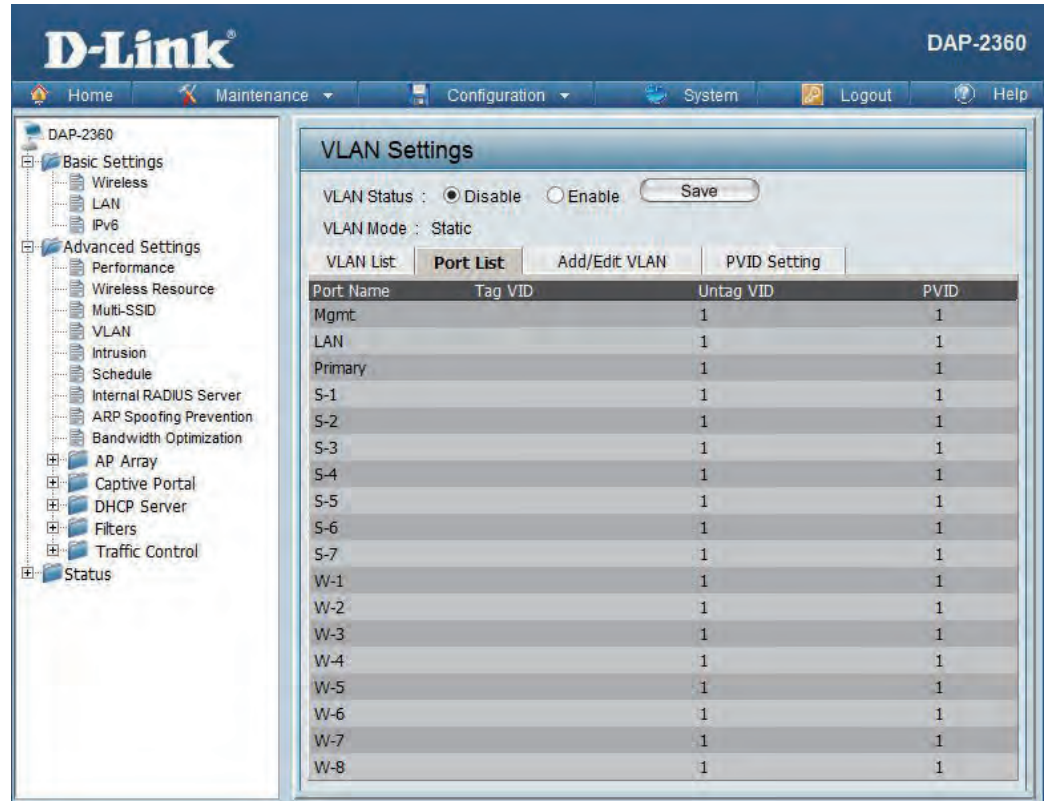
VLAN Status: Use the radio button to toggle to Enable. Next, go to the **Add/Edit VLAN** tab to add or modify an item on the **VLAN List** tab.

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.



The screenshot shows the D-Link DAP-2360 web interface. The left sidebar contains a tree view with categories like Basic Settings, Advanced Settings, and Status. The main content area is titled 'VLAN Settings'. It includes options for 'VLAN Status' (Disable/Enable) and 'VLAN Mode' (Static). Below these are four tabs: 'VLAN List', 'Port List' (selected), 'Add/Edit VLAN', and 'PVID Setting'. The 'Port List' tab displays a table with the following data:

Port Name	Tag VID	Untag VID	PVID
Mgmt		1	1
LAN		1	1
Primary		1	1
S-1		1	1
S-2		1	1
S-3		1	1
S-4		1	1
S-5		1	1
S-6		1	1
S-7		1	1
W-1		1	1
W-2		1	1
W-3		1	1
W-4		1	1
W-5		1	1
W-6		1	1
W-7		1	1
W-8		1	1

Add/Edit VLAN

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

- VLAN Status:** Use the radio button to toggle to Enable.
- VLAN ID:** Provide a number between 1 and 4094 for the Internal VLAN.
- VLAN Name:** Enter the VLAN to add or modify.

D-Link DAP-2360

Home Maintenance Configuration System Logout Help

VLAN Settings

VLAN Status : ☒ Disable ☐ Enable

VLAN Mode : Static

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

VLAN ID (VID) VLAN Name

Port	Select All	Mgmt	LAN
Untag	All	☐	☐
Tag	All	☐	☐
Not Member	All	☐	☐

MSSID Port	Select All	Primary	S-1	S-2	S-3	S-4	S-5	S-6	S-7
Untag	All	☐	☐	☐	☐	☐	☐	☐	☐
Tag	All	☐	☐	☐	☐	☐	☐	☐	☐
Not Member	All	☐	☐	☐	☐	☐	☐	☐	☐

WDS Port	Select All	W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8
Untag	All	☐	☐	☐	☐	☐	☐	☐	☐
Tag	All	☐	☐	☐	☐	☐	☐	☐	☐
Not Member	All	☐	☐	☐	☐	☐	☐	☐	☐

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. Click the **Save** button to let your changes take effect.

VLAN Status: Use the radio button to toggle between **Enable** and **Disable**.

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

The screenshot shows the D-Link DAP-2360 web interface. The left sidebar contains a tree view with categories: Basic Settings (Wireless, LAN, IPv6) and 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, and Status). The main content area is titled 'VLAN Settings' and includes tabs for VLAN List, Port List, Add/Edit VLAN, and PVID Setting (which is active). The PVID Setting tab contains the following configuration options:

- VLAN Status:** Radio buttons for ☒ Disable and ☐ Enable, with a Save button.
- VLAN Mode:** Static.
- PVID Auto Assign Status:** Radio buttons for ☒ Disable and ☐ Enable.
- Port Configuration Tables:**

Port	Mgmt	LAN
PVID	1	1

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

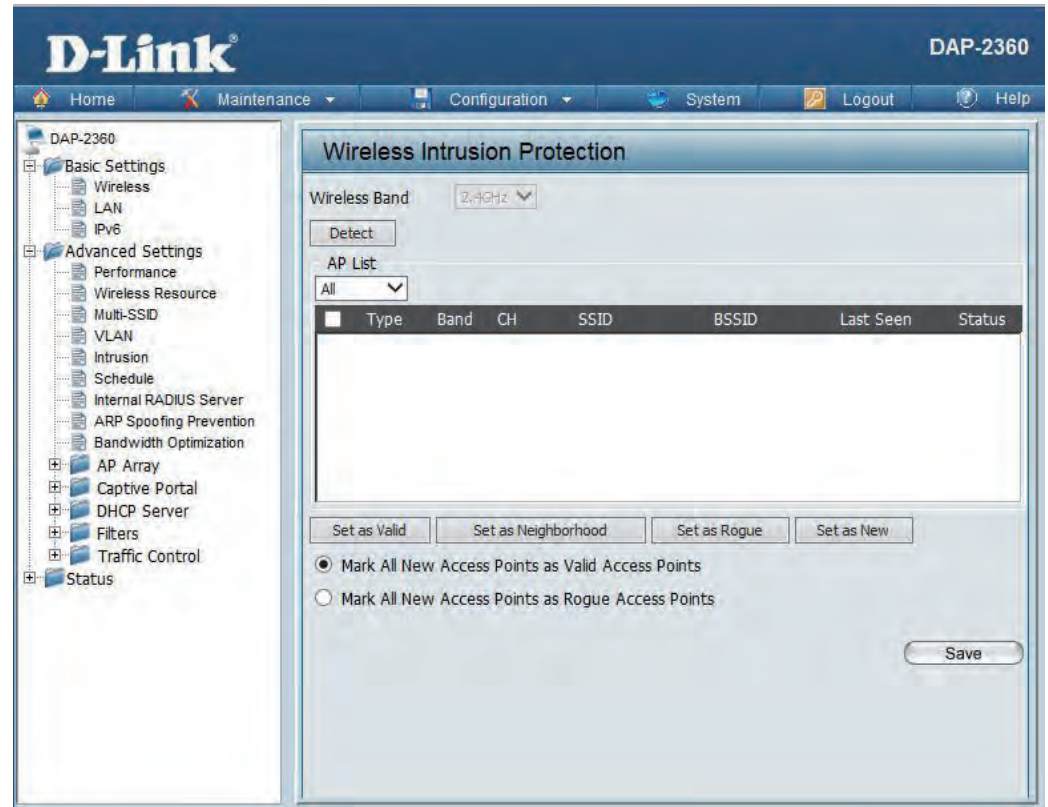
A Save button is located at the bottom right of the PVID Setting tab.

Intrusion

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

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

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



Schedule

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

Wireless Schedule:	Use the drop-down menu to enable the device's scheduling feature.
Name:	Enter a name for the new scheduling rule in the field provided.
Index:	Select the index from the drop-down menu.
SSID:	Enter the name of your wireless network (SSID).
Day(s):	Toggle the radio button between All Week and Select Day(s) . If the second option is selected, check the specific days you want the rule to be effective on.
All Day(s):	Check this box to have your settings apply 24 hours a day.
Start Time:	Enter the start time for your rule. If you selected All Day , this option will be greyed out.
End Time:	Enter the end time for your rule.
Add:	Click to add the rule to the list.
Schedule Rule List:	This section will display the list of created schedules.
Save:	Click the Save button to save your created rules.

D-Link DAP-2360

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Wireless Schedule Settings

Wireless Schedule: **Disable**

Add Schedule Rule

Name:

Index: **Primary SSID**

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-2360 features a built-in RADIUS server. Once you have finished adding a RADIUS account, click the Save button to let your changes take effect. The newly-created account will appear in this RADIUS Account List. The radio buttons allow the user to enable or disable the RADIUS account. Click the icon in the delete column to remove the RADIUS account. We suggest you limit the number of accounts below 30.

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

The screenshot shows the D-Link DAP-2360 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 under 'Advanced Settings'. The main content area is titled 'Internal RADIUS Server' and contains two sections: 'Add RADIUS Account' and 'RADIUS Account list'.

Add RADIUS Account

User Name:

Password:

Status:

RADIUS Account list

User Name	Enable	Disable	Delete

Save

ARP Spoofing Prevention

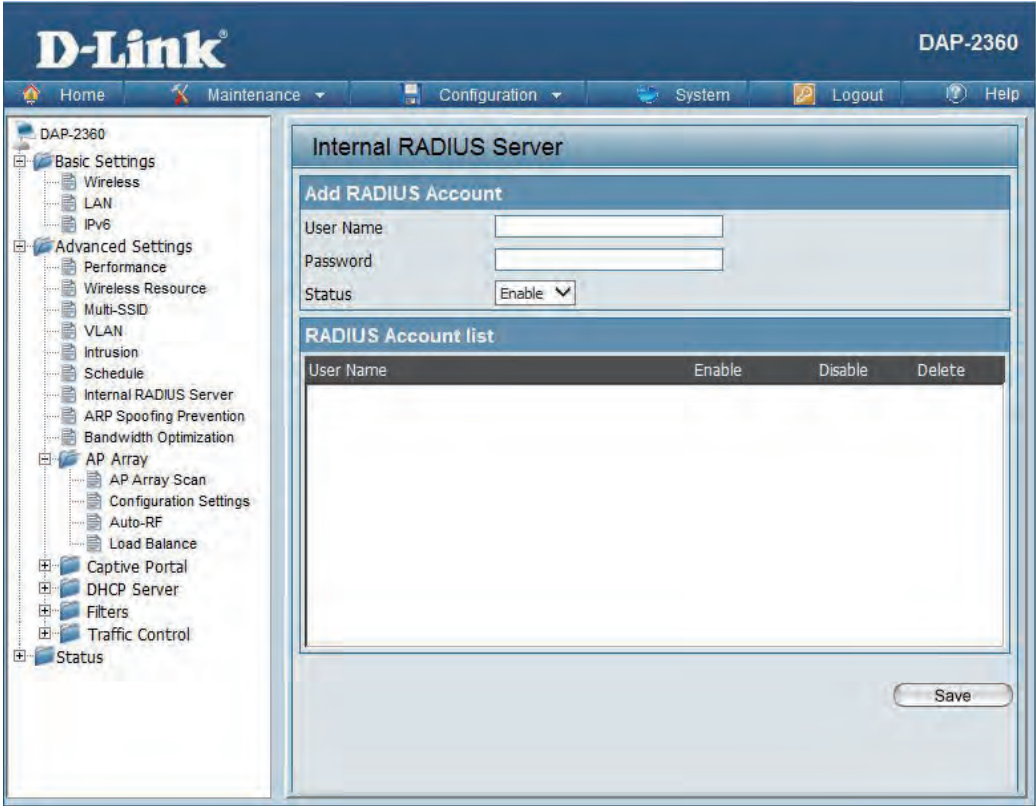
The ARP Spoofing Prevention feature allows users to add IP/MAC address mapping to prevent arp spoofing attack.

- 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.

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.

Allocate average BW for each station:

AP will distribute average bandwidth for each client.

Allocate maximum BW for each station:

Specify the maximum bandwidth for each connected client. Reserve certain bandwidth for future clients.

Allocate different BW for a/b/g/n stations:

The weight of 11b/g/n and 11a/n client are 10%/20%/70% ; 20%/80%. AP will distribute different bandwidth for 11a/b/g/n clients.

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Home Maintenance Configuration System Logout Help

Bandwidth Optimization

Enable Bandwidth Optimization:

Downlink Bandwidth: Mbits/sec

Uplink Bandwidth: Mbits/sec

Add Bandwidth Optimization Rule

Rule Type:

Band:

SSID Index:

Downlink Speed: Kbits/sec

Uplink Speed: Kbits/sec

Bandwidth Optimization Rules

Band	Type	SSID Index	Downlink Speed	Uplink Speed	Edit	Del

Allocate specific BW for SSID:	All clients share the total bandwidth.
Band:	Use the drop-down menu to toggle the wireless band between 2.4GHz and 5GHz.
SSID Index:	Use the drop-down menu to select the SSID for the specified wireless band.
Downlink Speed:	Enter the limitation of the downloading speed in either Kbits/sec or Mbits/sec for the rule.
Uplink Speed:	Enter the limitation of the uploading speed in either Kbits/sec or Mbits/sec for the rule.

The screenshot shows the D-Link DAP-2360 web interface. The top navigation bar includes Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar shows a tree view of configuration options: Basic Settings (Wireless, LAN, IPv6), Advanced Settings (Performance, Wireless Resource, Multi-SSID, VLAN, Intrusion, Schedule, Internal RADIUS Server, ARP Spoofing Prevention, Bandwidth Optimization, AP Array, AP Array Scan, Configuration Settings, Auto-RF, Load Balance), Captive Portal, DHCP Server, Filters, Traffic Control, and Status. The main content area is titled 'Bandwidth Optimization'. It features a section for 'Enable Bandwidth Optimization' with a 'Disable' dropdown. Below this are input fields for 'Downlink Bandwidth' and 'Uplink Bandwidth', both set to '80 Mbits/sec'. A section titled 'Add Bandwidth Optimization Rule' contains dropdowns for 'Rule Type' (set to 'Allocate average BW for each station'), 'Band' (set to '2.4 GHz'), and 'SSID Index' (set to 'Primary SSID'). It also has input fields for 'Downlink Speed' and 'Uplink Speed', both set to 'Kbits/sec', and 'Add' and 'Clear' buttons. At the bottom, there is a table titled 'Bandwidth Optimization Rules' with columns: Band, Type, SSID Index, Downlink Speed, Uplink Speed, Edit, and Del. The table is currently empty. A 'Save' button is located at the bottom right of the interface.

AP Array

An AP array is a set of devices on a network that are organized into a single group to increase ease of management.

Enable Array: This check box allows the user 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 a name for the AP array you have created.

AP Array Password: Enter a password that will be used to access the AP array you have created.

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

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 Array Members: This table displays all the current array members. The DAP-2360 AP array feature supports up to eight AP array members.

D-Link DAP-2360

Home Maintenance Configuration System Logout Help

AP Array

☐ Enable AP Array

Master Backup Master ☒ Slave

AP Array Name:

AP Array Password:

Scan AP Array List:

Connection Status: Disconnect

AP Array List

Array Name	Master IP	MAC	Master	Backup Master	Slave	Total

Current Members

Index	Role	IP Address	MAC Address	Location

Synchronized Parameters

Wireless Basic Settings ☐

Wireless Advanced Setting ☐

Multiple SSID & VLAN ☐

Advanced Functions ☐

Administration Settings ☐

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-2660 AP array feature supports up to eight AP array members.

D-Link DAP-2360

Home Maintenance Configuration System Logout Help

AP Array Scan Version:2.0

☐ Enable AP Array

☐ Master ☐ Backup Master ☒ Slave

AP Array Name:

AP Array Password:

Scan AP Array List:

Connection Status: Disconnect

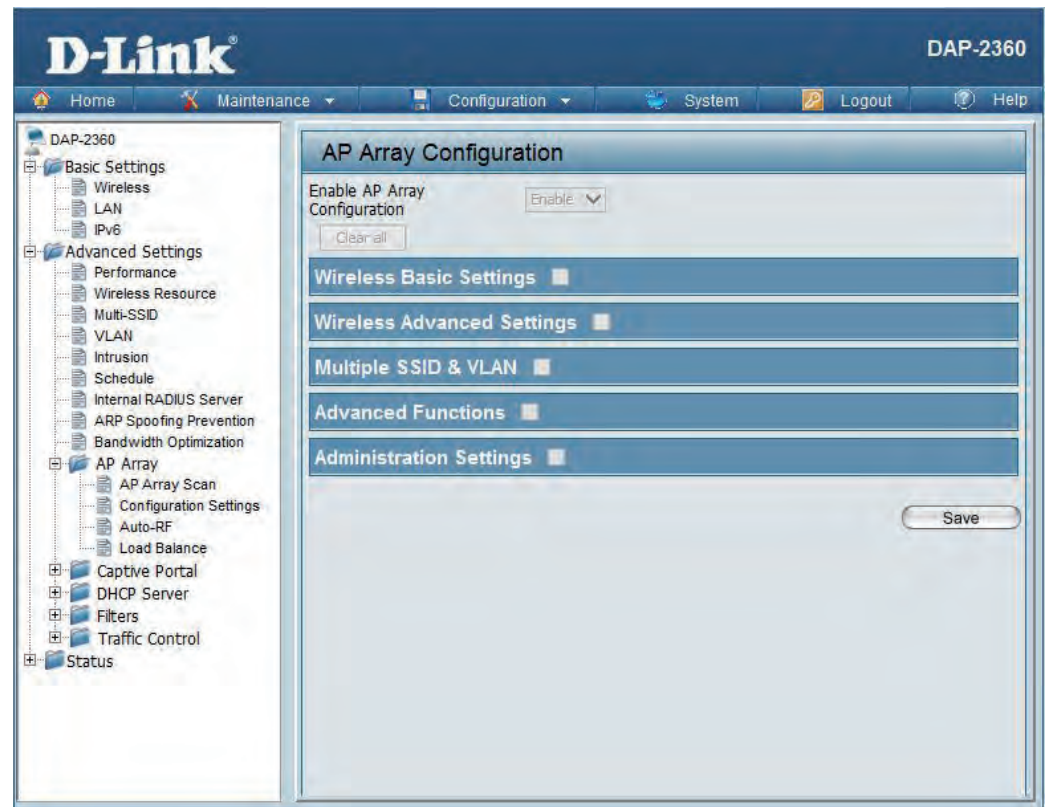
Array Name	Master IP	MAC	Master	Backup Master	Slave	Total

Current Members				
Index	Role	IP Address	MAC Address	Location

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 configure 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.



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 the D-Link DAP-2360 configuration web interface. The top navigation bar includes links for Home, Maintenance, Configuration, System, Logout, and Help. The left sidebar displays a tree view of configuration categories: Basic Settings (Wireless, LAN, IPv6), Advanced Settings (Performance, Wireless Resource, Multi-SSID, VLAN, Intrusion, Schedule, Internal RADIUS Server, ARP Spoofing Prevention, Bandwidth Optimization), AP Array (AP Array Scan, Configuration Settings, Auto-RF, Load Balance), Captive Portal, DHCP Server, Filters, Traffic Control, and Status. The main content area is titled 'Auto-RF' and contains the following settings:

- Enable Auto-RF:** A dropdown menu currently set to 'Disable'.
- Initiate Auto-RF:** A button labeled 'Auto-RF Optimize'.
- Auto-Initiate:** A dropdown menu currently set to 'Disable'.
- Auto-Initiate Period:** A text input field containing '24' followed by '(hours)'.
- RSSI Threshold:** A dropdown menu currently set to '40%'.
- RF Report Frequency:** A text input field containing '10' followed by '(Seconds)'.

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

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.

