

# How to Setup DWS-3024 Wireless Switch

Default IP Address of the switch: 10.90.90.90

Username: admin

Password: blank (nothing)

## How to create VLANs

Select LAN tab from the navigation panel and traverse down to DWS-3024 > L2 Features > VLAN > VLAN Configuration.

Select Create from the VLAN ID and Name pull down menu. Enter the VLAN ID, VLAN Name (optional) and include the participating ports in this VLAN by selecting Include in the Participation pull down menu of each port as shown below. Then click Submit at the bottom of the page.

The screenshot shows the D-Link DWS-3024 web interface. The navigation tree on the left includes: LAN, WLAN, Administration, L2 Features, Forwarding DB Configuration, VLAN, Port Configuration, Protocol-based VLAN, IP Subnet-based VLAN, MAC-based VLAN, Double VLAN, Reset Configuration, Protected Ports, Filters, GARP, Trunking, IGMP Snooping, Spanning Tree, DHCP Filtering, LLDP, L3 Features, QoS, ACL, Security, and Monitoring. The main configuration area is titled 'VLAN Configuration' and contains the following fields:

- VLAN ID and Name: Create
- VLAN ID: 2 (1 to 3965)
- VLAN Name: RD
- VLAN Type: Static

Slot/Port	Status	Participation	Tagging
All			
0/1		Include	Untagged
0/2		Include	Untagged
0/3		Include	Untagged
0/4		Include	Untagged
0/5		Include	Untagged
0/6		Include	Untagged
0/7		Include	Untagged
0/8		Include	Untagged
0/9		Include	Untagged
0/10		Include	Untagged
0/11		Autodetect	Untagged
0/12		Autodetect	Untagged
0/13		Autodetect	Untagged
0/14		Autodetect	Untagged

## How to configure Port VLAN ID (PVID)

Select LAN tab from the navigation panel and traverse down to DWS-3024 > L2 Features > VLAN > Port Configuration. For each port participating in a VLAN, enter the Port VLAN ID and select Submit as shown below.

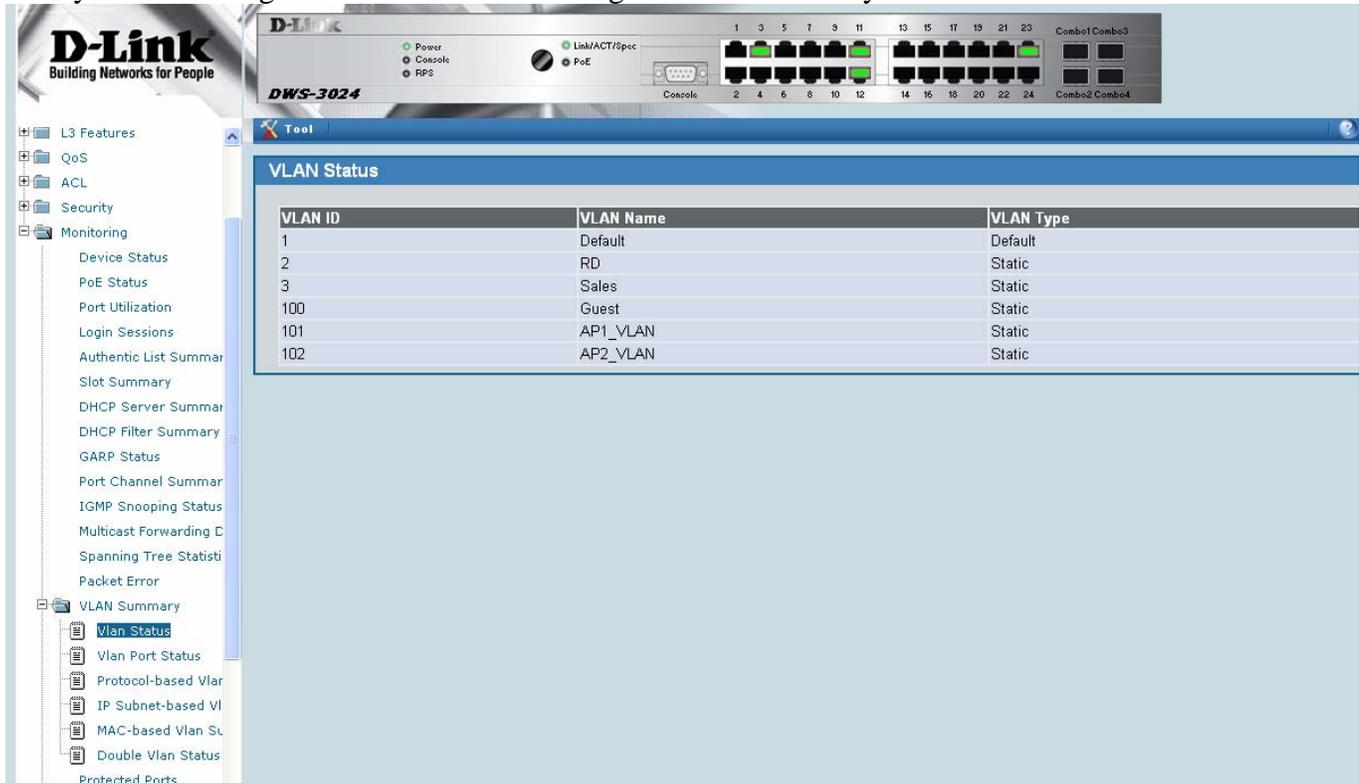


The screenshot shows the D-Link DWS-3024 web interface. The navigation tree on the left is expanded to LAN > VLAN > Port Configuration. The main content area displays the 'VLAN Port Configuration' form with the following fields:

- Slot/Port: 0/1
- Port VLAN ID: 2 (range 1 to 3965)
- Acceptable Frame Types: Admit All
- Ingress Filtering: Disable
- Port Priority: 0 (range 0 to 7)

A 'Submit' button is located at the bottom of the form.

Verify VLAN configuration under > Monitoring > VLAN Summary > VLAN Status.



The screenshot shows the D-Link DWS-3024 web interface. The navigation tree on the left is expanded to L3 Features > Monitoring > VLAN Summary > VLAN Status. The main content area displays the 'VLAN Status' table:

VLAN ID	VLAN Name	VLAN Type
1	Default	Default
2	RD	Static
3	Sales	Static
100	Guest	Static
101	AP1_VLAN	Static
102	AP2_VLAN	Static

Verify VLAN port configuration under Monitoring > VLAN Summary >VLAN Port Status.

The screenshot shows the D-Link DWS-3024 web interface. The left navigation pane is expanded to 'Monitoring' > 'VLAN Summary' > 'Vlan Port Status'. The main content area displays a table titled 'Listing of all Ports on the Switch'.

Slot/Port	Port VLAN ID	Acceptable Frame Types	Ingress Filtering	Port Priority
0/1	2	Admit All	Disabled	0
0/2	2	Admit All	Disabled	0
0/3	2	Admit All	Disabled	0
0/4	2	Admit All	Disabled	0
0/5	2	Admit All	Disabled	0
0/6	2	Admit All	Disabled	0
0/7	2	Admit All	Disabled	0
0/8	2	Admit All	Disabled	0
0/9	2	Admit All	Disabled	0
0/10	2	Admit All	Disabled	0
0/11	101	Admit All	Disabled	0
0/12	1	Admit All	Disabled	0
0/13	3	Admit All	Disabled	0
0/14	3	Admit All	Disabled	0
0/15	3	Admit All	Disabled	0
0/16	3	Admit All	Disabled	0
0/17	3	Admit All	Disabled	0
0/18	3	Admit All	Disabled	0
0/19	3	Admit All	Disabled	0
0/20	3	Admit All	Disabled	0
0/21	100	Admit All	Disabled	0
0/22	100	Admit All	Disabled	0
0/23	102	Admit All	Disabled	0
0/24	1	Admit All	Disabled	0

## How to configure VLAN Routing

Select the LAN tab from the navigation panel and traverse down to DWS-3024 > L3 Features > VLAN Routing Configuration. Then, for each VLAN you created previously, enter the VLAN ID and select Create. This creates a logical routing interface (4/1, 4/2, etc.) for each VLAN.

The screenshot shows the D-Link DWS-3024 web interface. The left navigation pane is expanded to 'LAN' > 'VLAN Routing Configuration'. The main content area displays the 'VLAN Routing Configuration' form.

**VLAN Routing Configuration**

VLAN ID:  (1 to 3965)

Slot/Port:

MAC Address:

IP Address:

Subnet Mask:

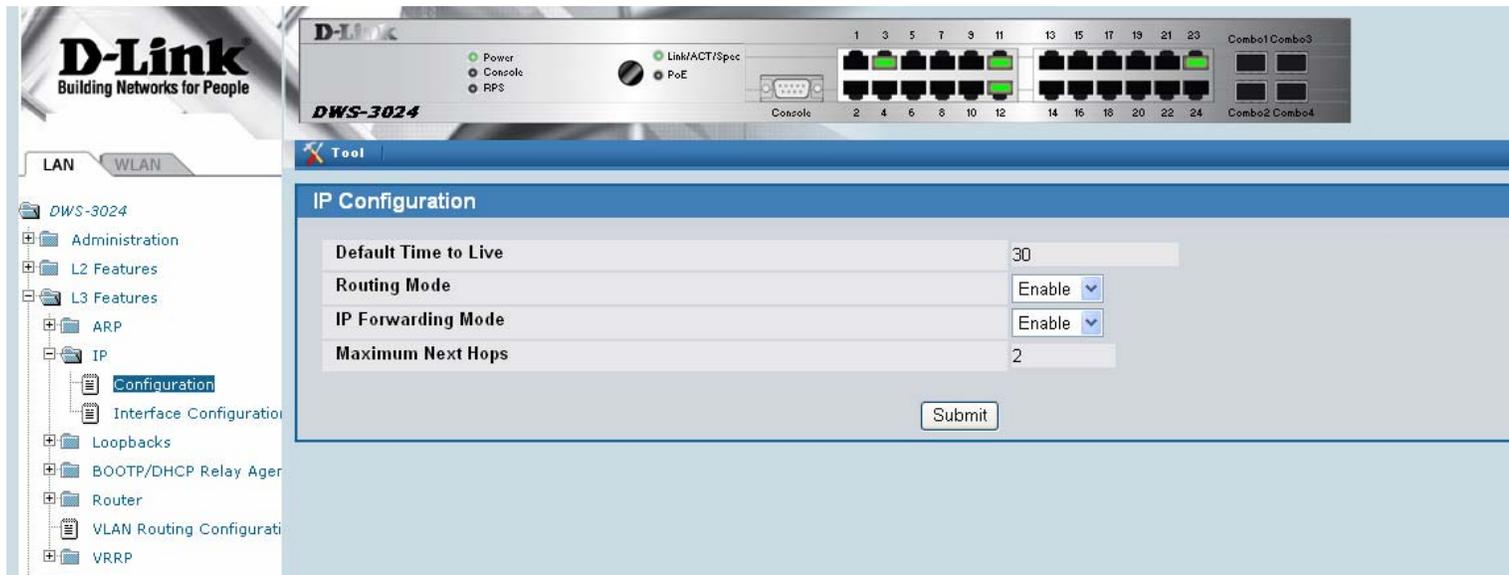
After creating the logical interfaces, you can get the interface numbers by selecting the LAN tab from the navigation panel and traversing down to DWS-3024 > Monitoring > L3 Status > VLAN Routing Summary.

The screenshot shows the D-Link DWS-3024 web interface. The navigation panel on the left includes a tree view where 'VLAN Routing Summary' is selected under 'L3 Status'. The main content area displays the 'VLAN Routing Summary' page, which contains a table with the following data:

VLAN ID	Slot/Port	MAC Address	IP Address	Subnet Mask
2	4/1	00:17:9A:95:00:C2	192.168.2.254	255.255.255.0
3	4/2	00:17:9A:95:00:C2	192.168.3.254	255.255.255.0
100	4/3	00:17:9A:95:00:C2	192.168.100.254	255.255.255.0
101	4/4	00:17:9A:95:00:C2	192.168.101.254	255.255.255.0
102	4/5	00:17:9A:95:00:C2	192.168.102.254	255.255.255.0

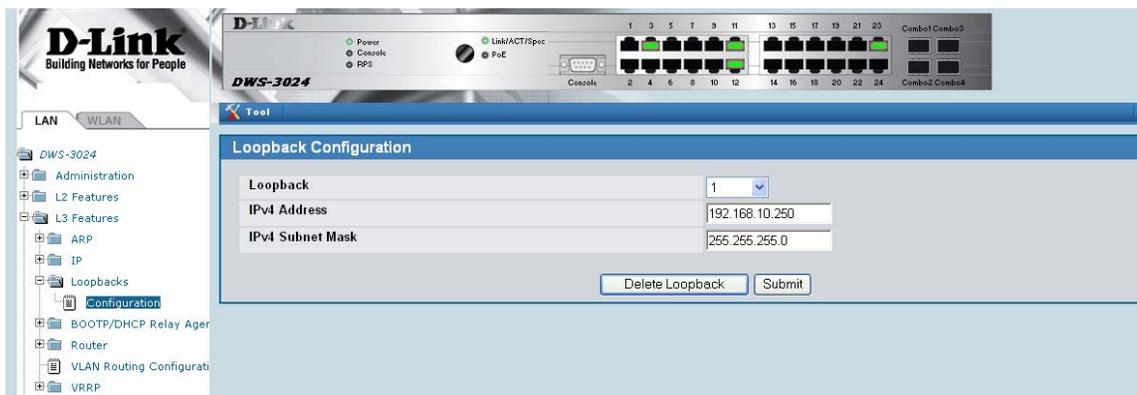
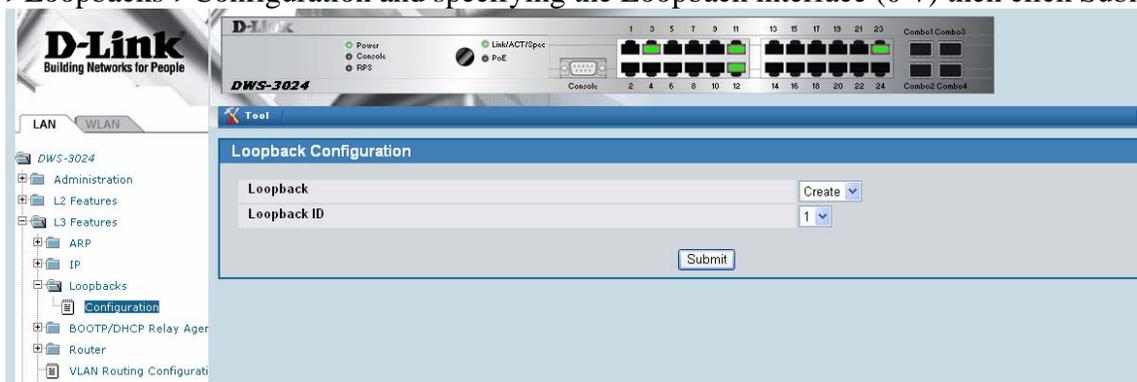
## How to Enable Global Routing Mode

Select the LAN tab from the navigation panel and traverse down to DWS-3024 >L3 Features > IP > Configuration, enable Routing mode and click Submit. This must be enabled to allow you to route between any interfaces on the switch. It must also be enabled if the switch is used as L3 device.



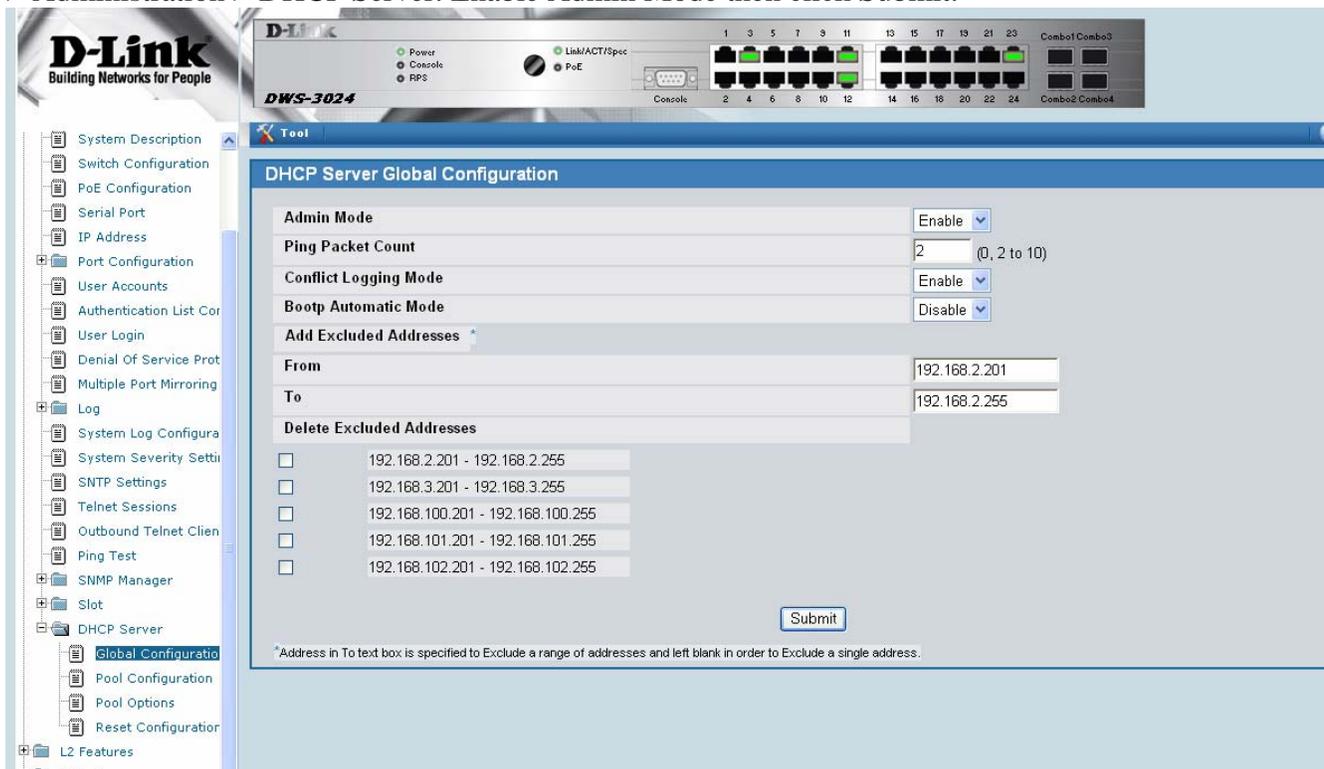
## How to enable Loopback Interface Configuration

A loopback interface must be configured for the Wireless Switch to isolate it from other functions that may use it. A key benefit is that it stays up independent of the physical port status. The loopback interface is created on its own subnet and static routes must be configured by traversing to DWS-3024->L3 Features->Loopbacks->Configuration and specifying the Loopback interface (0-7) then click Submit.



## How to configure DHCP Server

To configure the DHCP server, select LAN tab from the navigation panel and traverse down to DWS-3024 > Administration > DHCP Server. Enable Admin Mode then click Submit.



The screenshot shows the D-Link DWS-3024 web interface. The navigation panel on the left is expanded to 'DHCP Server' > 'Global Configuration'. The main content area displays the 'DHCP Server Global Configuration' form. The 'Admin Mode' dropdown is set to 'Enable'. The 'Ping Packet Count' is set to '2'. The 'Conflict Logging Mode' is set to 'Enable'. The 'Bootp Automatic Mode' is set to 'Disable'. The 'Add Excluded Addresses' section has a table with the following entries:

From	To
192.168.2.201	192.168.2.255

The 'Delete Excluded Addresses' section has a table with the following entries:

<input type="checkbox"/>	192.168.2.201 - 192.168.2.255
<input type="checkbox"/>	192.168.3.201 - 192.168.3.255
<input type="checkbox"/>	192.168.100.201 - 192.168.100.255
<input type="checkbox"/>	192.168.101.201 - 192.168.101.255
<input type="checkbox"/>	192.168.102.201 - 192.168.102.255

A 'Submit' button is located at the bottom right of the form. A note at the bottom states: '\*Address in To text box is specified to Exclude a range of addresses and left blank in order to Exclude a single address.'

Then go to LAN tab from the navigation panel and traverse down to DWS-3024 > Administration > DHCP Server > Pool Configuration.



The screenshot shows the D-Link DWS-3024 web interface. The navigation panel on the left is expanded to 'DHCP Server' > 'Pool Configuration'. The main content area displays the 'DHCP Server Pool Configuration' form. The 'Pool Name' dropdown is set to 'VLAN2'. The 'Type of Binding' dropdown is set to 'Dynamic'. The 'Network Number' is '192.168.2.0', the 'Network Mask' is '255.255.255.0', and the 'Prefix Length' is '0-32'. The 'Lease Time' dropdown is set to 'Specified Duration'. The 'Days' field is '1', 'Hours' is '0', and 'Minutes' is '0'. The 'Default Router Addresses' field contains '192.168.2.254'. The 'DNS Server Addresses' section is empty.

## How to configure WLAN

Select the WLAN tab from the left pane and traverse down the navigation tree to DWS-3024 > Administration > Basic Setup. Then select the Global tab in the right pane and check Enable Wireless Switch and select the appropriate Country code and then click the Next button to submit the request and move to the Discovery page.

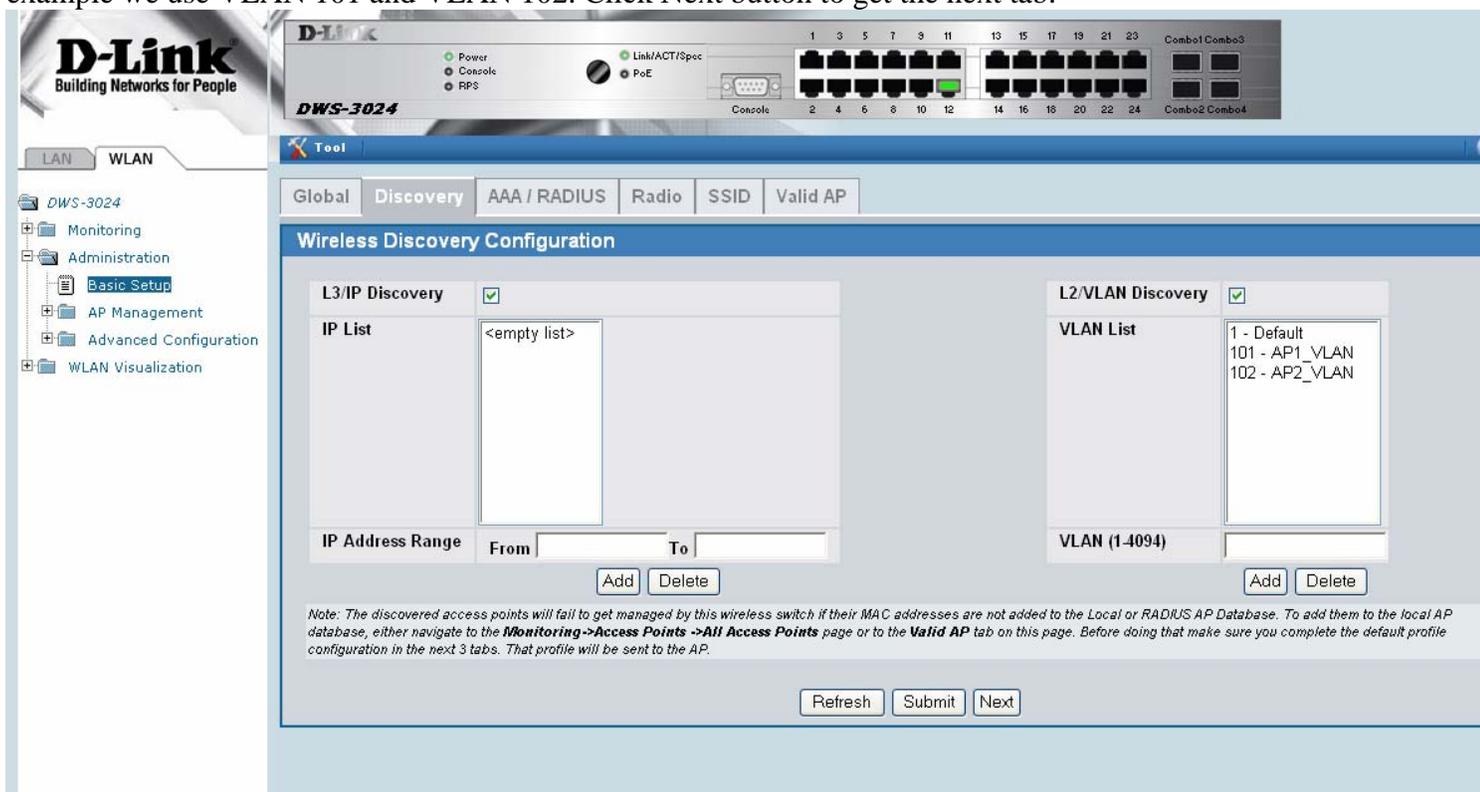


The screenshot shows the D-Link DWS-3024 web interface. The left navigation pane is expanded to 'WLAN' and 'Basic Setup'. The main content area is titled 'Wireless Global Configuration' and includes the following fields:

Enable WLAN Switch	<input checked="" type="checkbox"/>
WLAN Switch Operational Status	Enabled
IP Address	192.168.10.250
AP Authentication	<input type="checkbox"/>
AP MAC Validation	<input checked="" type="radio"/> Local <input type="radio"/> RADIUS
Country Code	AU - Australia

Buttons at the bottom include 'Refresh', 'Submit', and 'Next'.

Then add your VLANs for the access points to the L2/VLAN Discovery list and click on Add button. In this example we use VLAN 101 and VLAN 102. Click Next button to get the next tab.



The screenshot shows the D-Link DWS-3024 web interface. The left navigation pane is expanded to 'WLAN' and 'Basic Setup'. The main content area is titled 'Wireless Discovery Configuration' and includes the following fields:

L3/IP Discovery	<input checked="" type="checkbox"/>
IP List	<empty list>
IP Address Range	From <input type="text"/> To <input type="text"/>
	<input type="button" value="Add"/> <input type="button" value="Delete"/>
L2/VLAN Discovery	<input checked="" type="checkbox"/>
VLAN List	1 - Default 101 - AP1_VLAN 102 - AP2_VLAN
VLAN (1-4094)	<input type="text"/>
	<input type="button" value="Add"/> <input type="button" value="Delete"/>

Buttons at the bottom include 'Refresh', 'Submit', and 'Next'.

*Note: The discovered access points will fail to get managed by this wireless switch if their MAC addresses are not added to the Local or RADIUS AP Database. To add them to the local AP database, either navigate to the **Monitoring->Access Points ->All Access Points** page or to the **Valid AP** tab on this page. Before doing that make sure you complete the default profile configuration in the next 3 tabs. That profile will be sent to the AP.*

Then in AAA/RADIUS tab, you can setup your Radius server information.

The screenshot shows the D-Link DWS-3024 configuration interface. The top navigation bar includes 'Global', 'Discovery', 'AAA / RADIUS', 'Radio', 'SSID', and 'Valid AP'. The 'AAA / RADIUS' tab is selected, displaying the 'Wireless Default AAA/RADIUS Configuration' page. The page is divided into two main sections: 'RADIUS' and 'MAC Authentication'.  
**RADIUS Section:**  
 - IP Address: 192.168.0.249  
 - Secret: [masked] [Edit]  
 - Accounting:   
**MAC Authentication Section:**  
 - Default Action:  Allow  Deny  
 - Allow MAC List: <empty list>  
 - MAC Address: [empty field]  
 - Buttons: Add, Delete, Refresh, Submit, Next

Click Next.

The screenshot shows the D-Link DWS-3024 configuration interface with the 'Radio' tab selected. The page is titled 'Wireless Default Radio Configuration'. It features two configuration sections for 802.11a and 802.11g.  
**802.11a Section:**  
 - State:  On  Off  
 - Super A: Disable  
 - RTS Threshold (bytes): 2347 (0 to 2347)  
 - Load Balancing:   
 - Load Utilization (%): 60 (1 to 100)  
 - RF Scan Other Channels:   
 - RF Scan Interval (secs): 60 (30 to 120)  
 - RF Scan Sentry:   
 - RF Scan Sentry Channels:  802.11a  802.11b/g  
 - Rate Sets (Mbps): 6 9 12 18 24 36 48 54  
 - Basic:          
 - Supported:          
 - Mode: 802.11a  
 - Maximum Clients: 256 (0 to 256)  
 - DTIM Period (# beacons): 10 (1 to 255)  
 - Beacon Period (msecs): 100 (20 to 2000)  
 - Automatic Channel:   
 - Limit Channels:   
 - Automatic Power:   
 - Initial Power (%): 100  
**802.11g Section:**  
 - State:  On  Off  
 - Super G: Disable  
 - RTS Threshold (bytes): 2347 (0 to 2347)  
 - Load Balancing:   
 - Load Utilization (%): 60 (1 to 100)  
 - RF Scan Other Channels:   
 - RF Scan Interval (secs): 60 (30 to 120)  
 - RF Scan Sentry:   
 - RF Scan Sentry Channels:  802.11a  802.11b/g  
 - Mode: 802.11g  
 - Maximum Clients: 256 (0 to 256)  
 - DTIM Period (# beacons): 10 (1 to 255)  
 - Beacon Period (msecs): 100 (20 to 2000)  
 - Automatic Channel:   
 - Automatic Power:   
 - Initial Power (%): 100

To View or Change the wireless settings click on the Edit button.

The screenshot shows the 'Wireless Default VAP Configuration' page for a D-Link DWS-3024 device. The interface includes a navigation menu on the left with options like 'Monitoring', 'Administration', 'Basic Setup', 'AP Management', 'Advanced Configuration', and 'WLAN Visualization'. The main content area shows a table of network configurations. The '2 - D-LINK-NET1' entry is selected, and its 'Edit' button is highlighted. The table has the following columns: Network, VLAN, L3 Tunnel, Hide SSID, and Security.

Network	VLAN	L3 Tunnel	Hide SSID	Security
<input type="checkbox"/> 1 - Guest Network	1-Default	Disabled	Disabled	WPA Personal
<input checked="" type="checkbox"/> 2 - D-LINK-NET1	100-D-LINK-NET1	Disabled	Disabled	WPA Personal
<input checked="" type="checkbox"/> 3 - D-LINK-NET2	200-D-LINK-NET2	Disabled	Disabled	WPA Enterprise
<input type="checkbox"/> 4 - Managed SSID 4	1-Default	Disabled	Disabled	None
<input type="checkbox"/> 5 - Managed SSID 5	1-Default	Disabled	Disabled	None
<input type="checkbox"/> 6 - Managed SSID 6	1-Default	Disabled	Disabled	None
<input type="checkbox"/> 7 - Managed SSID 7	1-Default	Disabled	Disabled	None
<input type="checkbox"/> 8 - Managed SSID 8	1-Default	Disabled	Disabled	None

Buttons at the bottom: Refresh, Submit, Next

The screenshot shows the 'Wireless Network Configuration' page for a D-Link DWS-3024 device. The page displays a form for configuring network settings. The 'Submit' button is highlighted. The form includes the following fields and options:

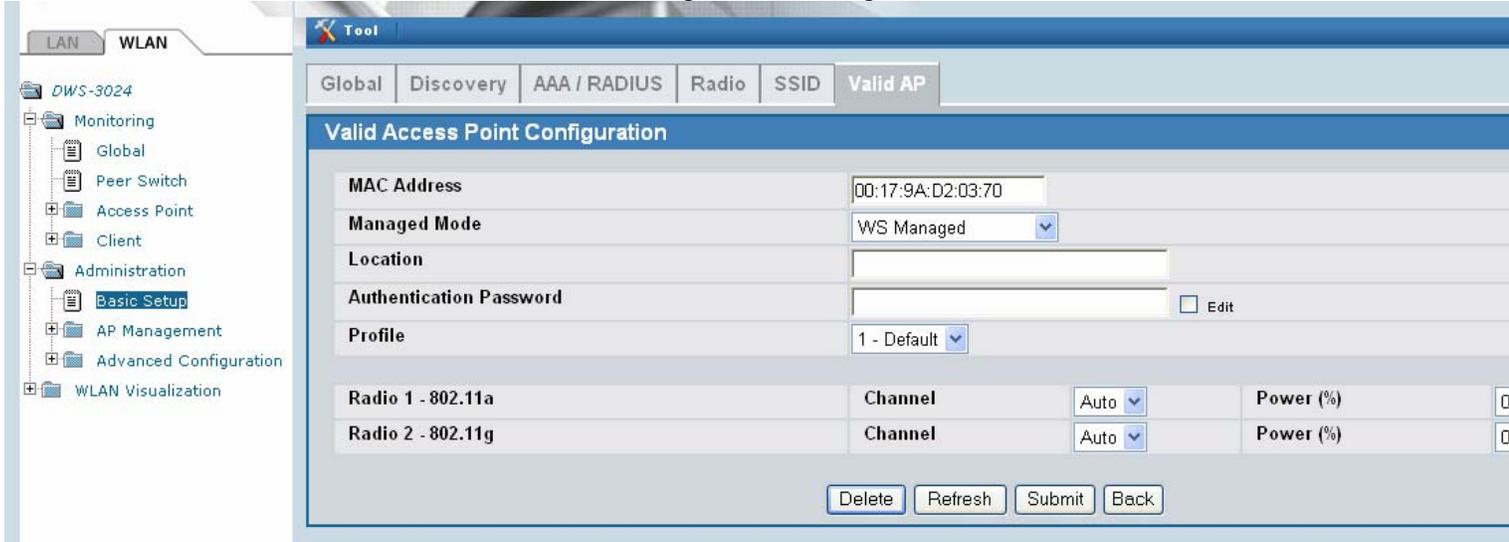
- SSID: D-LINK-NET1
- Hide SSID:
- VLAN: 100 (1 to 4094)
- L3 Tunnel:
- L3 Tunnel Status: None
- L3 Tunnel Subnet: 0.0.0.0
- L3 Tunnel Mask: 255.255.255.0
- MAC Authentication:  Local  Radius  Disable
- RADIUS IP Address: 0.0.0.0  Use Profile
- RADIUS Secret:   Edit
- RADIUS Accounting:
- Security:  None  WEP  WPA/WPA2
- WPA Versions:  WPA  WPA2
- WPA Ciphers:  TKIP  CCMP(AES)
- WPA Key Type: ASCII
- Passphrase: aaaaaaaaaa

Buttons at the bottom: Clear, Refresh, Submit

Click Submit button to proceed to the Valid AP tab.



You can click on AP's MAC address to view or change other settings.



Click on Valid AP tab again->click on AP's Profile and you can see the QoS menu.



**D-Link Building Networks for People**

**DWS-3024**

Power, Console, RPS, Link/ACT/Spec, PoE

LAN | **WLAN**

- DWS-3024
  - Monitoring
  - Administration
    - Basic Setup
    - AP Management
      - Reset
      - RF Management
      - Software Download
      - Advanced
    - Advanced Configuration
  - WLAN Visualization

Tool

Summary | **Default**

Global | Radio | SSID | **QoS**

### Access Point Profile QoS Configuration

AP Profile 1-Default

1-802.11a  2-802.11g

**AP EDCA Parameters**

Queue	AIFS (msecs)	cwMin (msecs)	cwMax (msecs)	Max. Burst (µsecs)
Data 0 (Voice)	1	3	7	1500
Data 1 (Video)	1	7	15	3000
Data 2 (Best Effort)	3	15	63	0
Data 3 (Background)	7	15	1023	0

WMM Mode

**Station EDCA Parameters**

Queue	AIFS (msecs)	cwMin (msecs)	cwMax (msecs)	TXOP Limit (msecs)
Data 0 (Voice)	2	3	7	47
Data 1 (Video)	2	7	15	94
Data 2 (Best Effort)	3	15	63	0
Data 3 (Background)	7	15	1023	0

Refresh Submit

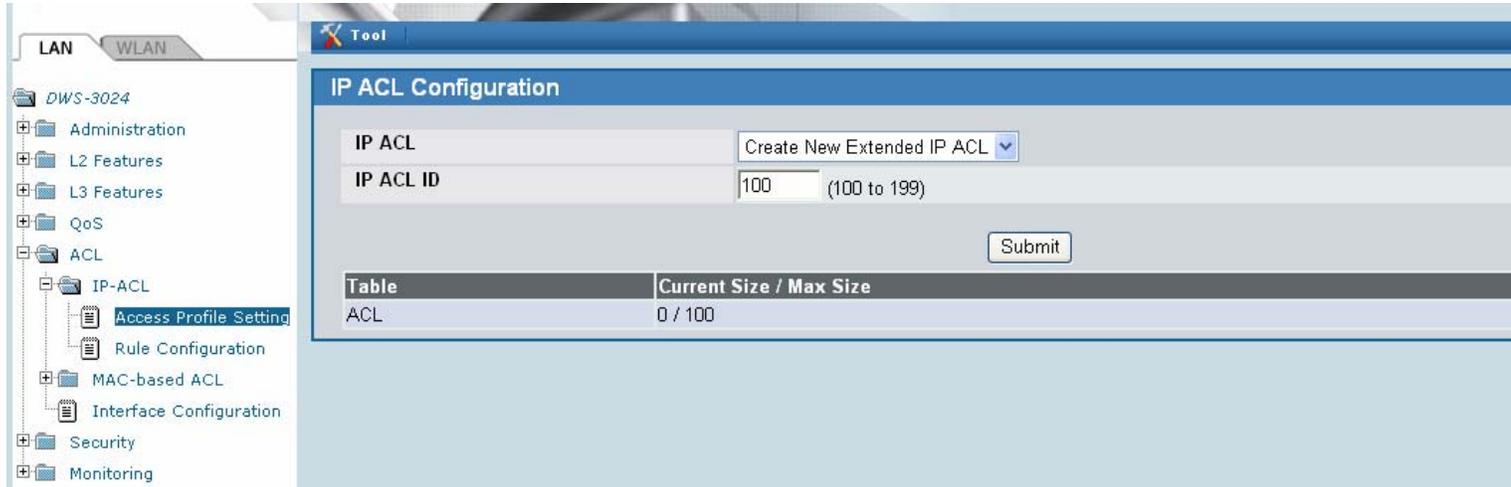
## How to Enable ACL

ACL can block IP traffic between wireless clients which access the network through different SSIDs.

Go to LAN tab > ACL > IP-ACL > Access Profile Setting.

From the IP ACL field, select Create New Extended ACL from the drop-down list.

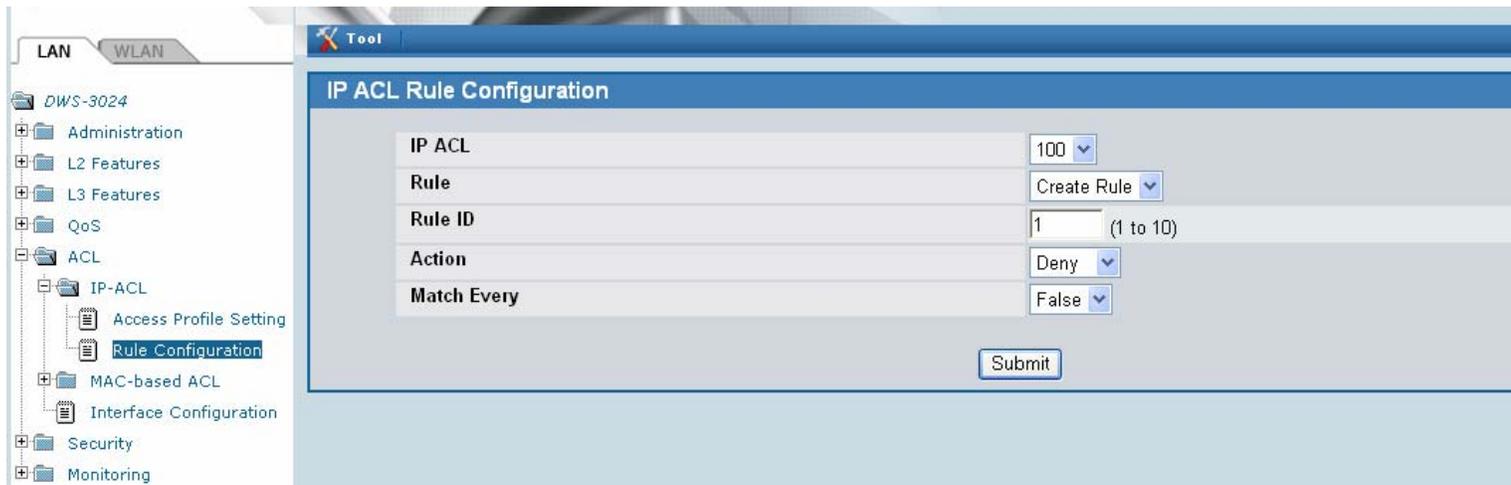
Enter 100 in the IP ACL ID field then click Submit.



The screenshot shows the 'IP ACL Configuration' page. On the left is a navigation tree with 'LAN' selected and 'WLAN' as an alternative. Under 'LAN', the path is 'DWS-3024' > 'ACL' > 'IP-ACL' > 'Access Profile Setting'. The main content area has a title bar 'Tool' and 'IP ACL Configuration'. It contains two input fields: 'IP ACL' with a dropdown menu set to 'Create New Extended IP ACL' and 'IP ACL ID' with a text box containing '100' and a range '(100 to 199)'. A 'Submit' button is located below these fields. At the bottom, there is a table showing the current state of ACLs.

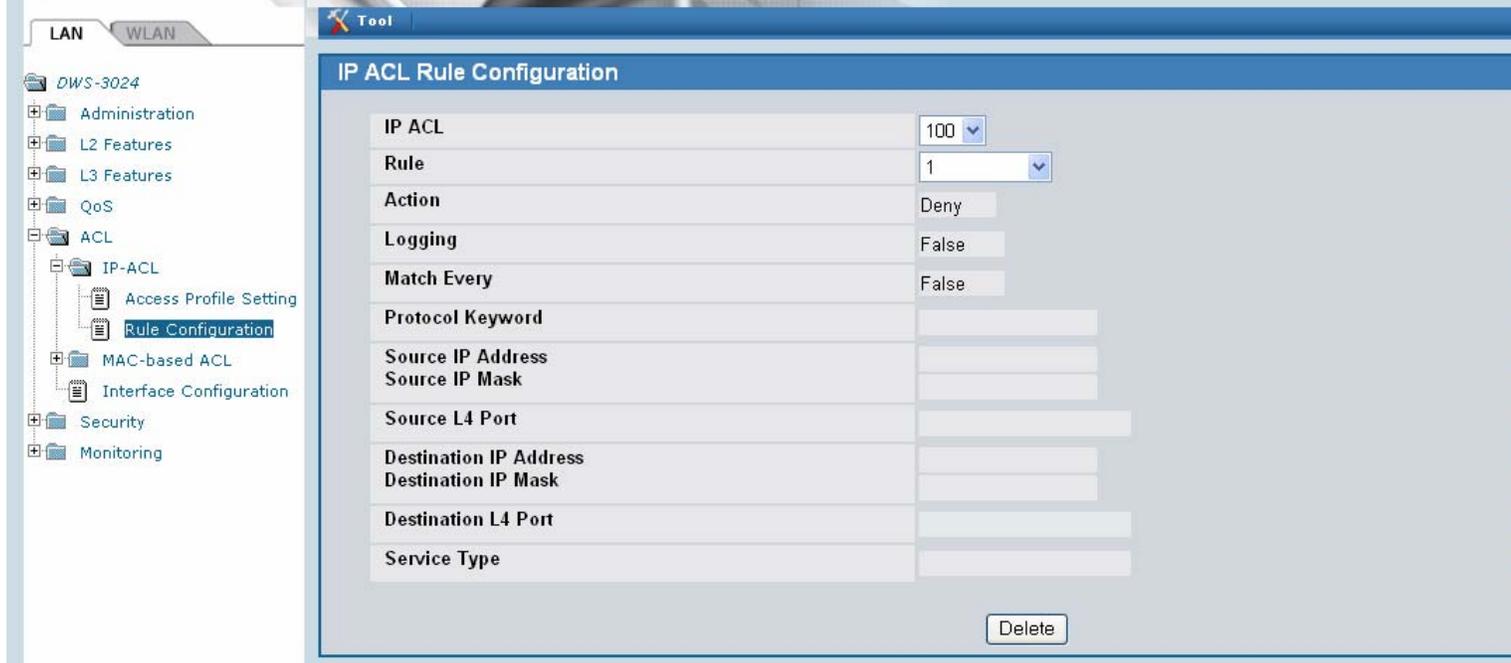
Table	Current Size / Max Size
ACL	0 / 100

Then from the Rule Configuration page, enter 1 as the Rule ID, Deny as the Action, and click Submit.



The screenshot shows the 'IP ACL Rule Configuration' page. The navigation tree on the left is the same as in the previous screenshot, but the path is 'LAN' > 'ACL' > 'IP-ACL' > 'Rule Configuration'. The main content area has a title bar 'Tool' and 'IP ACL Rule Configuration'. It contains five input fields: 'IP ACL' with a dropdown set to '100', 'Rule' with a dropdown set to 'Create Rule', 'Rule ID' with a text box containing '1' and a range '(1 to 10)', 'Action' with a dropdown set to 'Deny', and 'Match Every' with a dropdown set to 'False'. A 'Submit' button is located at the bottom right.

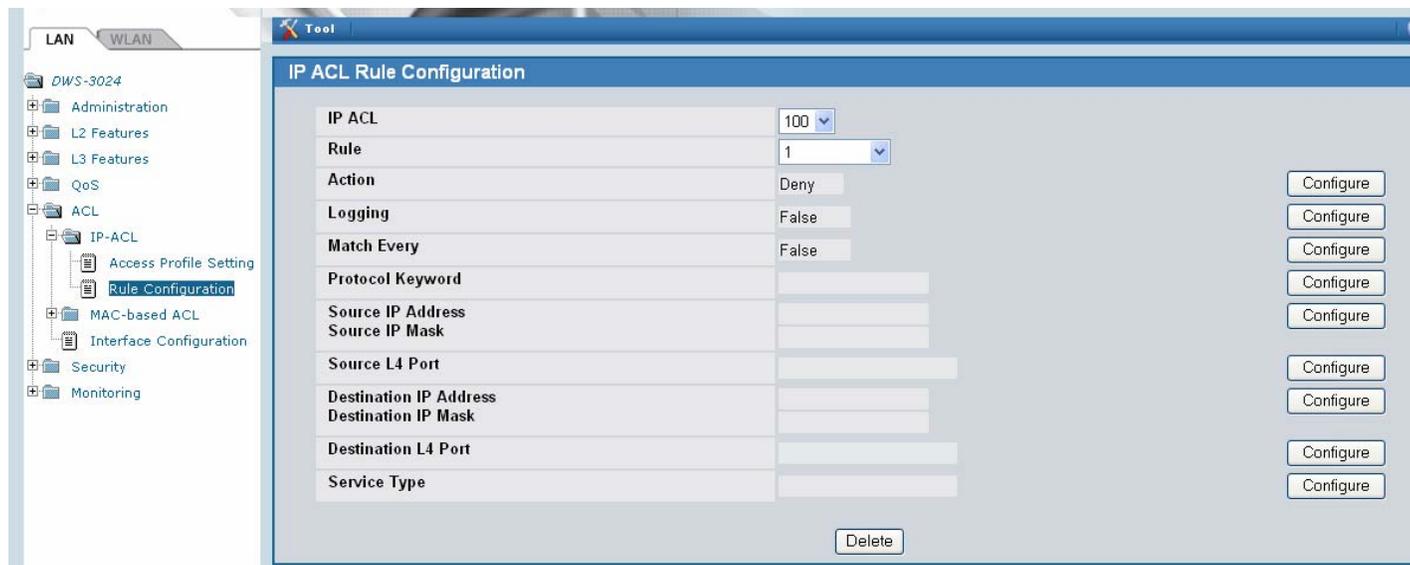
Click the Configure button associated with the appropriate fields and enter the criteria to deny IP traffic from clients on the D-LINK-NET1 network to clients on the D-LINK-NET2 network (in this example).



Clicking Protocol Keyword field will show the screen below and you can select the protocol type.



Then click on Configure button opposite to Source IP Address and Source IP Mask and enter the IP address of the SSID's network and wildcard subnet mask then click Submit.



Then click on Configure button opposite Destination IP Address and Destination IP Mask and enter the IP address of the SSID's network and wildcard subnet mask. Click Submit.

**IP ACL Rule Configuration**

IP ACL	100	
Rule	1	
Action	Deny	<input type="button" value="Configure"/>
Logging	False	<input type="button" value="Configure"/>
Match Every	False	<input type="button" value="Configure"/>
Protocol Keyword		<input type="button" value="Configure"/>
Source IP Address		<input type="button" value="Configure"/>
Source IP Mask		
Source L4 Port		<input type="button" value="Configure"/>
Destination IP Address		<input type="button" value="Configure"/>
Destination IP Mask		
Destination L4 Port		<input type="button" value="Configure"/>
Service Type		<input type="button" value="Configure"/>

**IP ACL Rule Configuration**

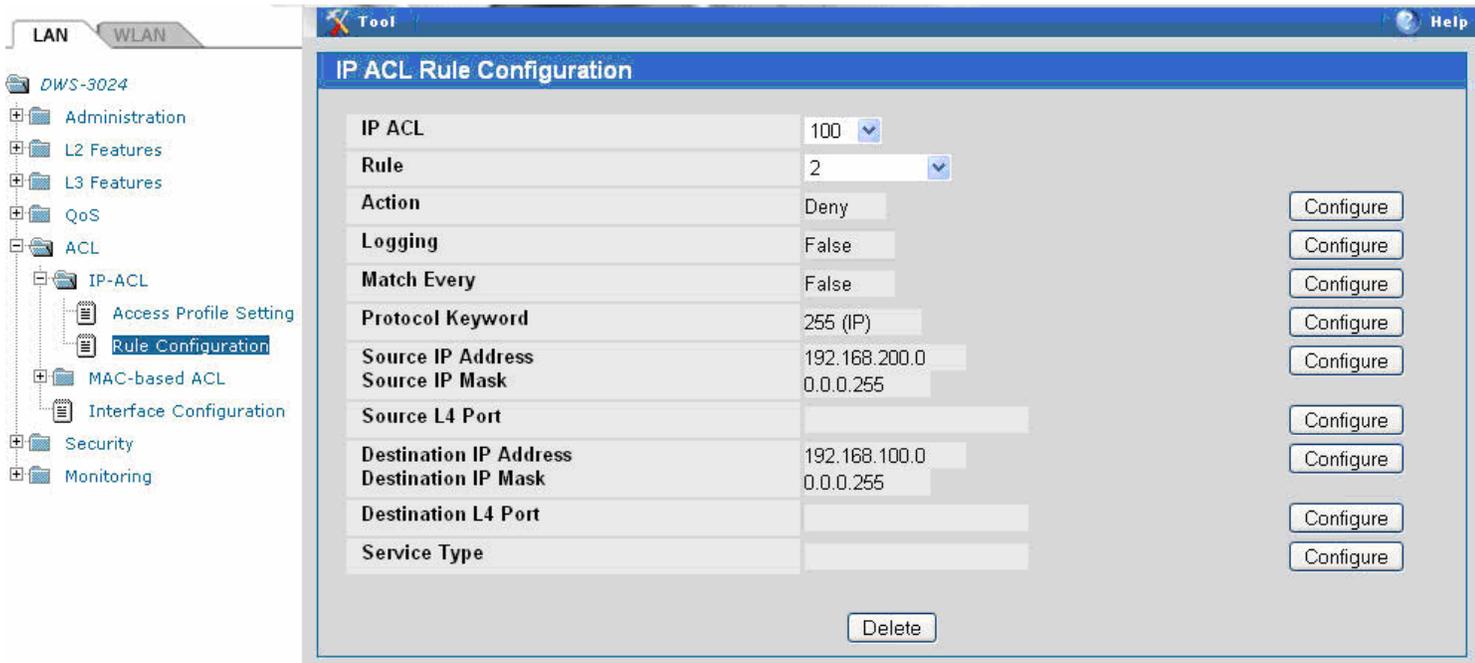
IP ACL	100
Rule	1
Destination IP Address	192.168.200.0
Destination IP Mask	0.0.0.255

## Rule 1

**IP ACL Rule Configuration**

IP ACL	100	
Rule	1	
Action	Deny	<input type="button" value="Configure"/>
Logging	False	<input type="button" value="Configure"/>
Match Every	False	<input type="button" value="Configure"/>
Protocol Keyword	255 (IP)	<input type="button" value="Configure"/>
Source IP Address	192.168.100.0	<input type="button" value="Configure"/>
Source IP Mask	0.0.0.255	
Source L4 Port		<input type="button" value="Configure"/>
Destination IP Address	192.168.200.0	<input type="button" value="Configure"/>
Destination IP Mask	0.0.0.255	
Destination L4 Port		<input type="button" value="Configure"/>
Service Type		<input type="button" value="Configure"/>

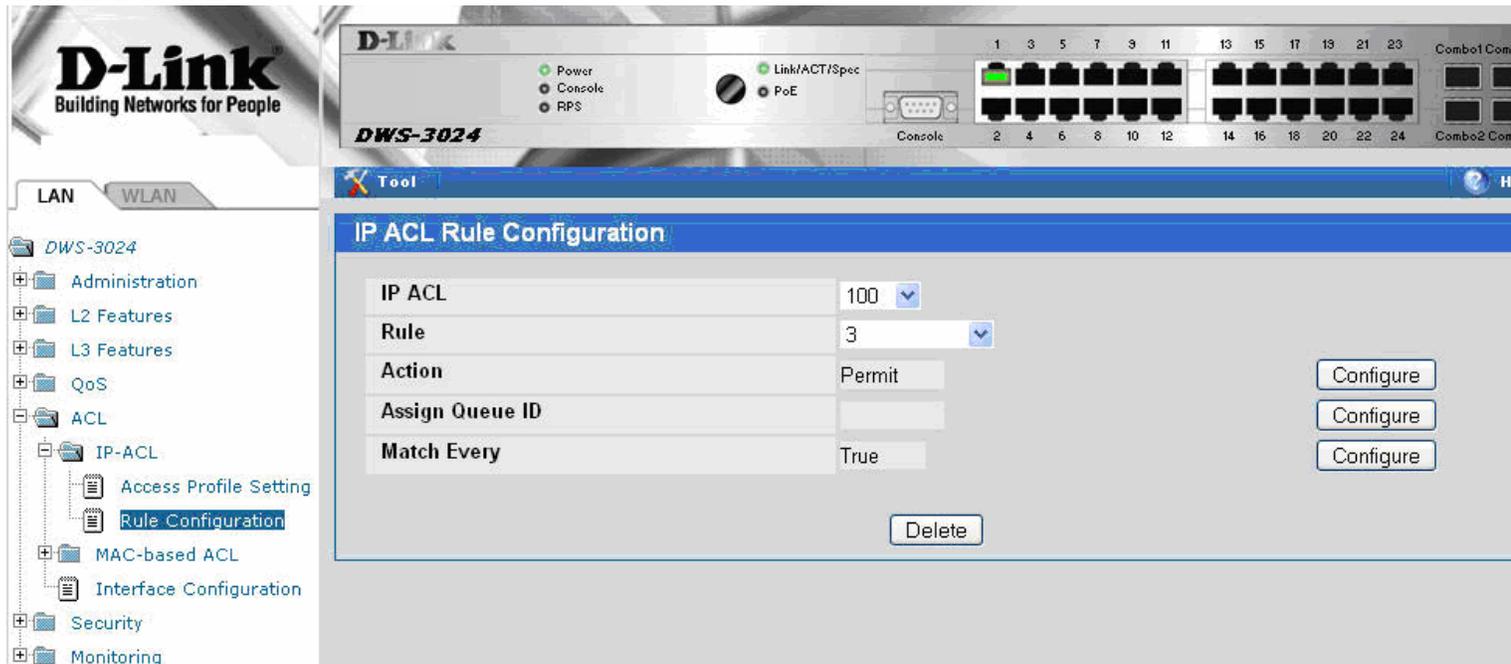
## Rule 2



### Rule 3:

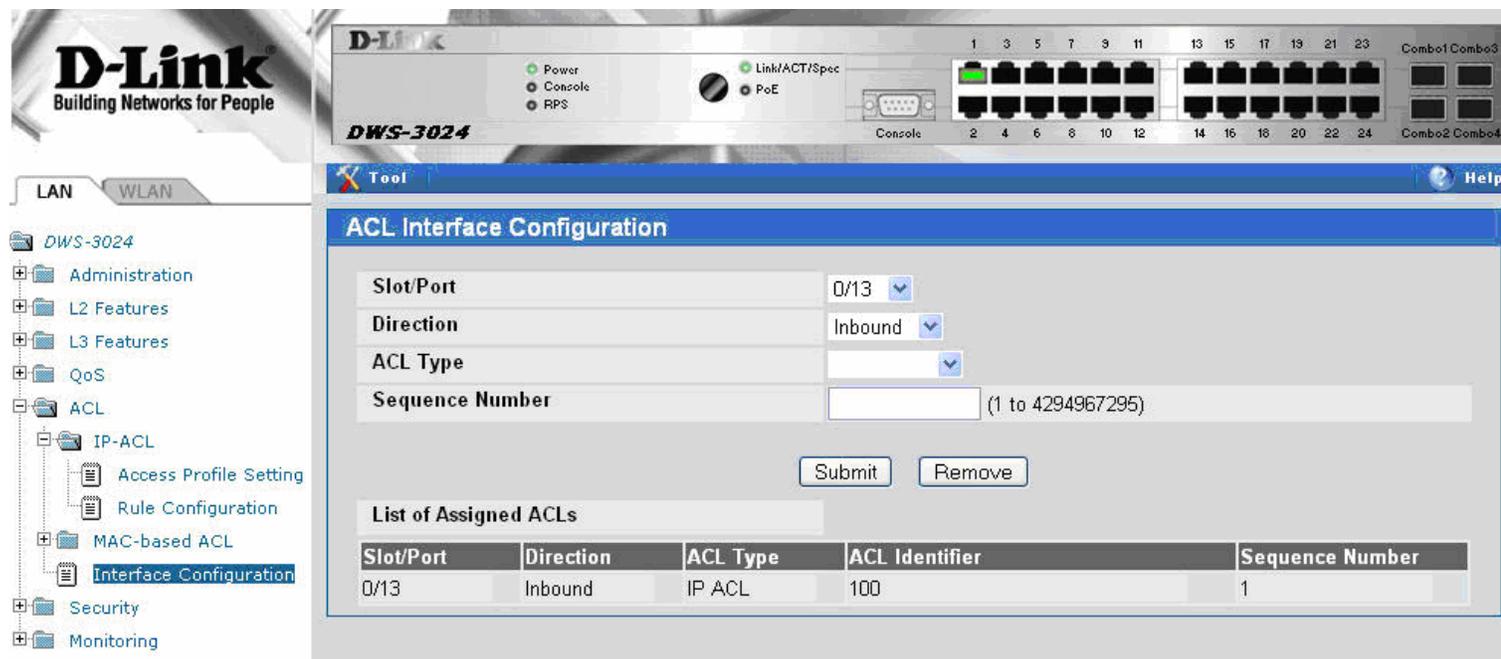
Create Rule 3 to allow all other type of traffic between any source and any destination since there is an implicit “deny all” rule at the end of every ACL. From the Rule drop-down menu, select Create.

Enter 3 into the Rule ID field, Permit into the Action field, and True in the Match Every field, and then click Submit.



Next you must attach the ACL to port 0/1 and port 0/13 so that the rules are applied to the appropriate wireless client traffic that goes through the APs connected to the switch.

From the ACL > Interface Configuration page Select port 0/1 from the Slot/Port drop-down menu. Select IP ACL as the ACL Type. Enter 1 as the sequence number, and click Submit. Repeat the steps to associate ACL 100 with port 0/13.



The screenshot shows the D-Link DWS-3024 switch configuration interface. The top part of the image shows the physical switch with its ports and status indicators. The main part of the image is the web-based configuration page for the switch. The page is titled "ACL Interface Configuration" and has a left-hand navigation menu with categories like LAN, WLAN, Administration, L2 Features, L3 Features, QoS, ACL, IP-ACL, MAC-based ACL, Security, and Monitoring. The "ACL" category is expanded, and "Interface Configuration" is selected. The configuration form includes the following fields:

- Slot/Port: 0/13
- Direction: Inbound
- ACL Type: (empty dropdown)
- Sequence Number: (empty text box) (1 to 4294967295)

There are "Submit" and "Remove" buttons below the form. Below the form is a table titled "List of Assigned ACLs":

Slot/Port	Direction	ACL Type	ACL Identifier	Sequence Number
0/13	Inbound	IP ACL	100	1

## How to Manage the Access Points

After the switch discovers the AP's, they will appear on the Failed list because the MAC addresses of the AP's are not configured in the Valid AP database.

Connect the Access Points to the port you specified on VLAN of the switch.

Wait about 60 seconds and click Monitoring > Access Points > Authentication Failed Access Points.

Select the AP's to be managed and click Manage to add them to the Valid AP database.



The screenshot shows the D-Link switch management interface for a DWS-3024 switch. The left sidebar shows the navigation menu with 'Monitoring' > 'Access Point' > 'Authentication Failed A' selected. The main content area displays a table titled 'Authentication Failed Access Points' with the following data:

MAC Address	IP Address	Last Failure Type	Age
<input type="checkbox"/> 00:17:9a:d2:00:60	192.168.22.1	No Database Entry	0d:00:00:17

Below the table are three buttons: 'Delete All', 'Manage', and 'Refresh'.



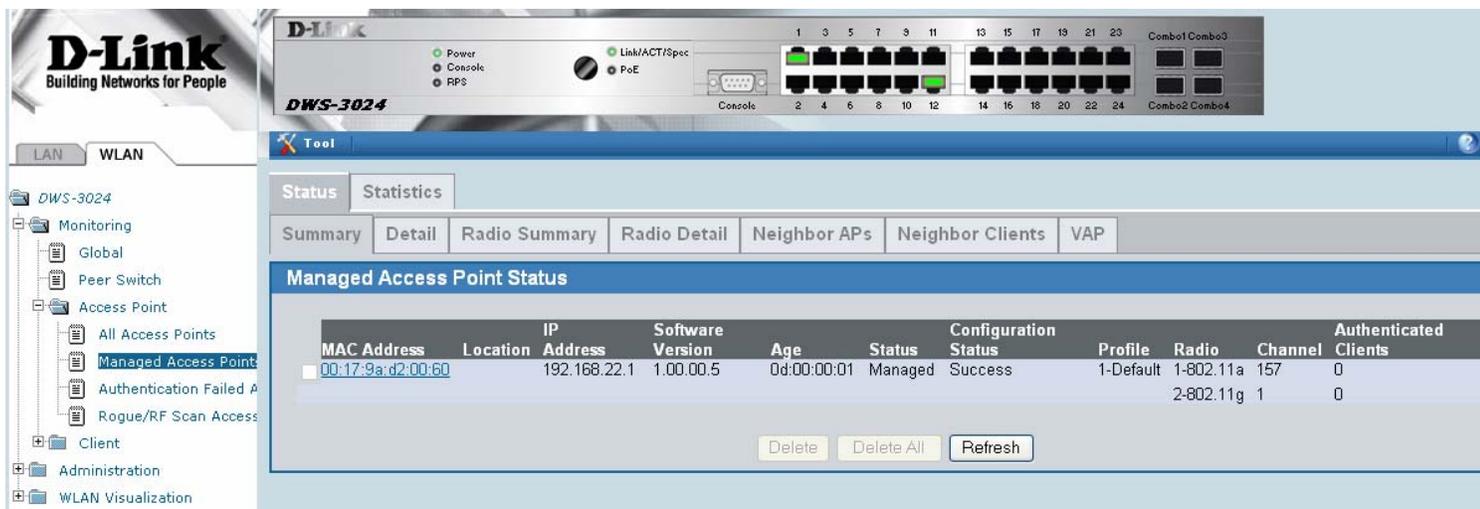
The screenshot shows a Microsoft Internet Explorer dialog box with a warning icon and the following text:

The selected APs will be configured with the default profile and will get managed at the next discovery cycle starting in 30 seconds after the current iteration of the discovery list:  
00:17:9a:d2:00:60

An 'OK' button is located at the bottom center of the dialog box.

To verify the status of AP's click Monitoring > Access Point > Managed Access Points.

To view the local Valid AP database click Administration > Basic Setup, then click the Valid AP tab.



The screenshot shows the D-Link switch management interface for a DWS-3024 switch. The left sidebar shows the navigation menu with 'Monitoring' > 'Access Point' > 'Managed Access Point' selected. The main content area displays a table titled 'Managed Access Point Status' with the following data:

MAC Address	Location	IP Address	Software Version	Age	Status	Configuration Status	Profile	Radio	Channel	Authenticated Clients
<input type="checkbox"/> 00:17:9a:d2:00:60		192.168.22.1	1.00.00.5	0d:00:00:01	Managed	Success	1-Default	1-802.11a	157	0
							2-802.11g	1		0

Below the table are three buttons: 'Delete', 'Delete All', and 'Refresh'.

LAN WLAN

DWS-3024

- Monitoring
- Administration
  - Basic Setup
  - AP Management
  - Advanced Configuration
- WLAN Visualization

Tool

Global Discovery AAA / RADIUS Radio SSID Valid AP

### Valid Access Point Summary

MAC Address	Location	Managed Mode	Profile
<input type="checkbox"/> 00:17:9A:D2:00:60		WS Managed	<a href="#">1-Default</a>
<input type="checkbox"/> 00:17:9A:D2:03:70		WS Managed	<a href="#">1-Default</a>

## How to set Static IP on Access Points

By default the Access Point is set to obtain IP address automatically via DHCP. You can disable DHCP client and assign static IP on the AP by accessing it through Telnet using CLI.

Default IP address: 10.90.90.91

Username: admin

Password: admin

Steps:

1. Set your computer with an IP from 10.0.0.0/8 subnet. Physically connect your PC to the AP.
2. Telnet to the AP by using the default IP address of 10.90.90.91.
3. Enter the following command to change the IP address:  
set management static-ip 192.168.0.3 (for example)  
set management static-mask 255.255.255.0
4. Your Telnet session will drop after changing the AP's address. Telnet to the AP again by using the new IP address (192.168.0.3 in our example). Make sure your PC's IP address is on the same subnet as well.
5. Enter the following command to disable DHCP:  
set management dhcp-status down
6. Enter the command "save-running" to save the current AP configuration.
7. Enter the command "Exit" to logout.

## How to reset Managed Access Point

Select the AP you want to reset and make sure to tick the box then click Reset button.



The screenshot shows the D-Link DWS-3024 web interface. The top part displays the physical device with its ports and status indicators. Below that, the 'Managed AP Reset' page is shown, featuring a table with the following data:

MAC Address	Location	IP Address	Status	Reset Status
<input checked="" type="checkbox"/> 00:17:9a:d2:00:60		192.168.22.1	Managed	Not Started

Buttons for 'Reset', 'Reset All', and 'Refresh' are located below the table.

## How to upgrade firmware in the Access Point

You will need to have a TFTP Server software running on a computer on your network. Log into the DWS-3024 and select WLAN tab. Go to Administration > AP Management > Software Download.

Specify the IP address of the TFTP Server, the location of the firmware file and the file name.

You can update firmware on several Access Points simultaneously.

Click on Start to proceed with the update. Wait for about 12 minutes for the upgrade process to finish.



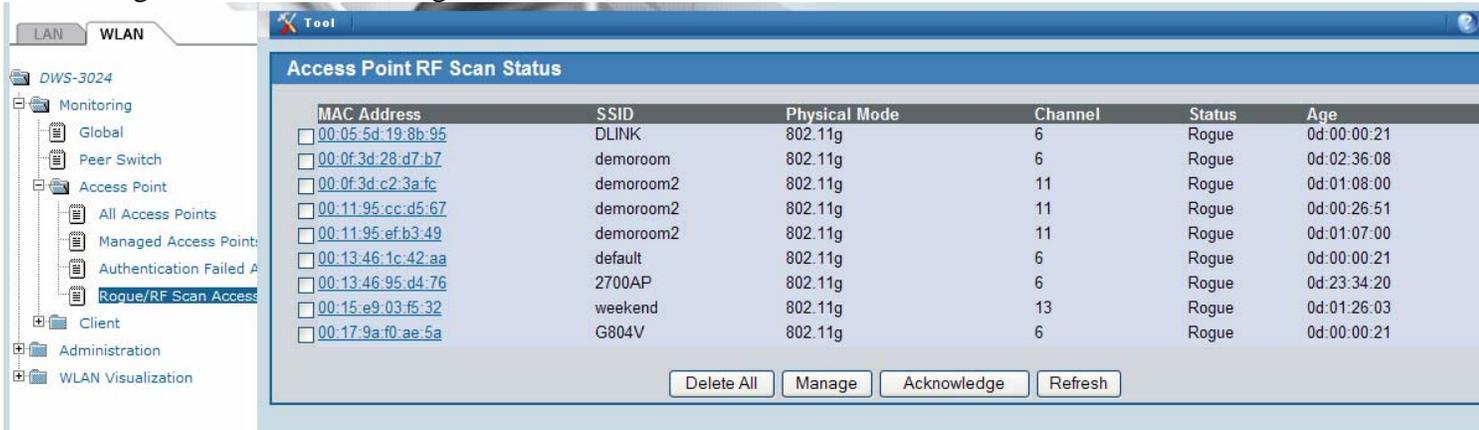
The screenshot shows the D-Link DWS-3024 web interface. The left navigation pane is expanded to 'WLAN' > 'Administration' > 'AP Management' > 'Software Download'. The main content area is titled 'Wireless Software Download' and contains the following fields:

- Server Address: 0.0.0.0
- File Path: (empty)
- File Name: (empty)
- Group Size: 10 (1 to 48)
- Managed AP: All

Below the fields is a red note: "Note: It takes about 12 minutes for the upgrade process to complete for an AP. After that the AP will become managed again." At the bottom are 'Start' and 'Refresh' buttons.

## Rogue AP Detection

To check the rogue AP list, select the WLAN tab from the navigation panel and traverse down to Monitoring > Access Points > Rogue/RF Scan Access Points.



The screenshot shows the D-Link DWS-3024 web interface with the 'WLAN' tab selected. The left navigation pane is expanded to 'Monitoring' > 'Access Points' > 'Rogue/RF Scan Access Points'. The main content area is titled 'Access Point RF Scan Status' and displays a table of detected rogue APs.

MAC Address	SSID	Physical Mode	Channel	Status	Age
<input type="checkbox"/> 00-05-5d-19-8b-95	DLINK	802.11g	6	Rogue	0d:00:00:21
<input type="checkbox"/> 00-0f-3d-28-d7-b7	demoroom	802.11g	6	Rogue	0d:02:36:08
<input type="checkbox"/> 00-0f-3d-c2-3a-fc	demoroom2	802.11g	11	Rogue	0d:01:08:00
<input type="checkbox"/> 00-11-95-cc-d5-67	demoroom2	802.11g	11	Rogue	0d:00:26:51
<input type="checkbox"/> 00-11-95-ef-b3-49	demoroom2	802.11g	11	Rogue	0d:01:07:00
<input type="checkbox"/> 00-13-46-1c-42-aa	default	802.11g	6	Rogue	0d:00:00:21
<input type="checkbox"/> 00-13-46-95-d4-76	2700AP	802.11g	6	Rogue	0d:23:34:20
<input type="checkbox"/> 00-15-e9-03-f5-32	weekend	802.11g	13	Rogue	0d:01:26:03
<input type="checkbox"/> 00-17-9a-f0-ae-5a	G804V	802.11g	6	Rogue	0d:00:00:21

At the bottom of the table are buttons for 'Delete All', 'Manage', 'Acknowledge', and 'Refresh'.

## WLAN Visualization

The WLAN Visualization component is an optional feature that graphically shows information about the wireless network. WLAN Visualization uses a Java applet to display D-Link WLAN Controller Switches, D-Link Access Points, other access points, and associated wireless clients. The WLAN Visualization tool can help you visualize where the AP's are in relationship to the building.

WLAN Visualization can help administrators do the following:

- Track how managed AP's are deployed graphically.
- Monitor the wireless network status via the dynamic updated diagram.
- Access visual information, such as how AP's are placed, how many clients are associated to a certain AP, and where rogue AP's are located graphically.

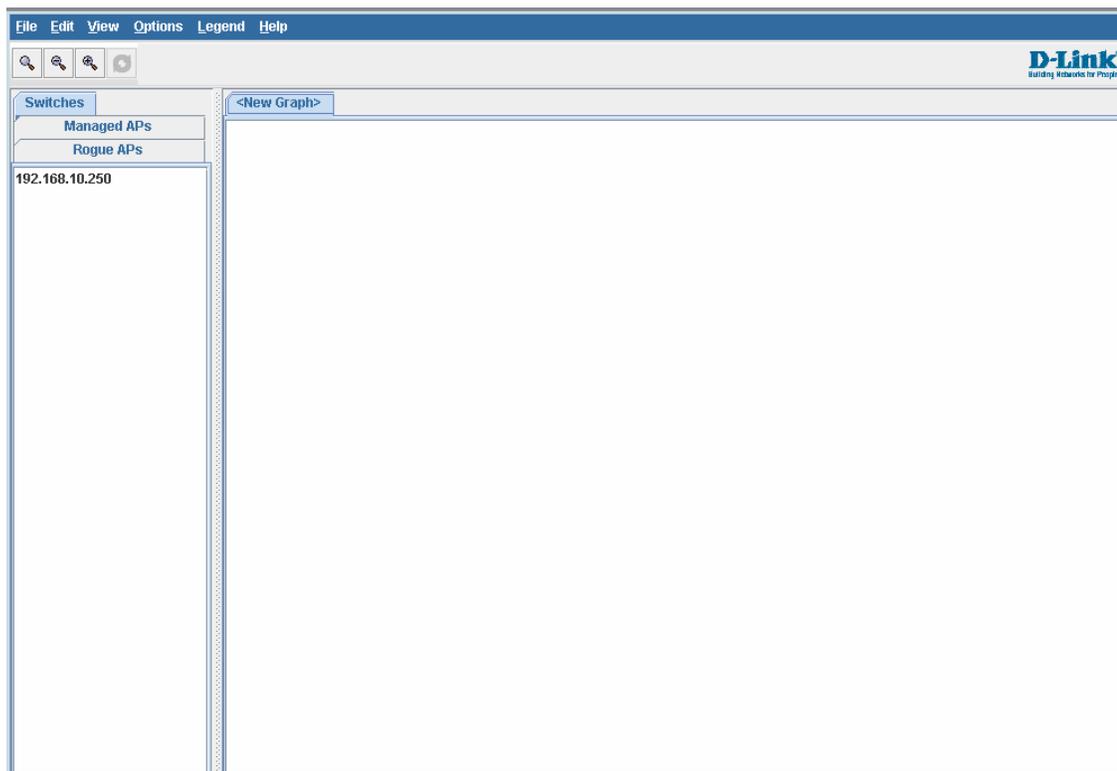
Before launching WLAN visualization tool, you need to upload a floor plan image file to Wireless Switch first. It can be done by selecting the WLAN tab from the navigation panel and traversing down to Administration > WLAN Visualization > Download Image.

### Note:

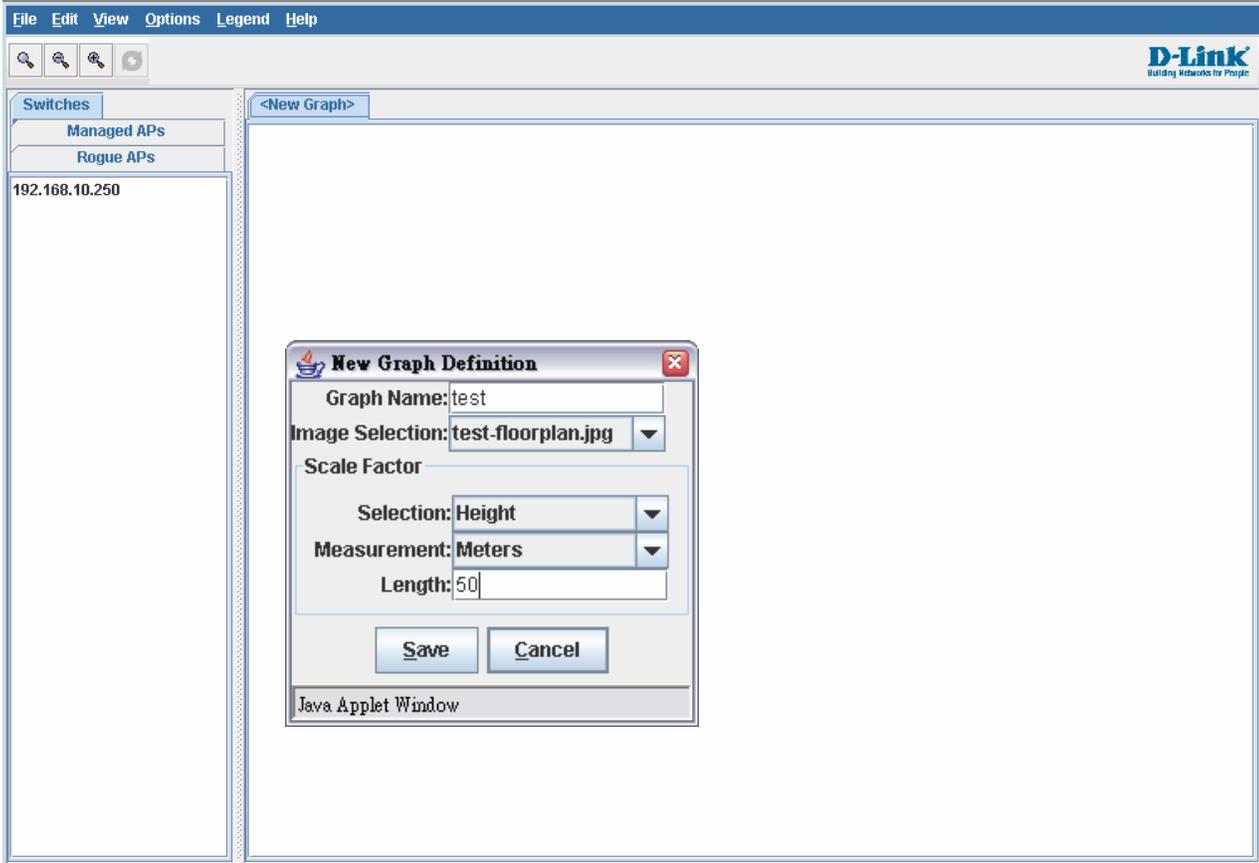
When you try to upload your own floor plan image file to Wireless Switch, it is recommended that the file size is smaller than 150KB.

The RF power display in this tool is only for reference, and it doesn't intend to reflect the real RF status because that requires the input of materials of office blocks and walls or ceilings and complex computing and simulation accordingly.

The Network visualization can be launched by selecting the WLAN tab from the navigation panel and traversing down to Administration > WLAN Visualization > WLAN. When you first launch this tool, you'll see a blank one as below.



Go to “Edit” and select “New Graph”. Specify the required settings and press “Save”.



After that you should be able to see your image:

The screenshot displays a network management application interface. At the top, there is a menu bar with 'File', 'Edit', 'View', 'Options', 'Legend', and 'Help'. Below the menu bar is a toolbar with icons for search, zoom, and refresh. The main window is titled '<New Graph> test' and shows a detailed floor plan of a building. The floor plan is divided into numerous rooms, each labeled with a number and its square footage (S.F.). The rooms are arranged in a grid-like pattern, with a central area containing a 'VIDEOCONFERENCING & TRAINING ROOM', 'WOMEN', 'MEN', 'ELEVATORS', 'RECEPTION AREA', 'HQ SUPPORT STAFF', and 'BREAK & WORK ROOM'. The rooms are numbered 1 through 53, with room 53 labeled 'HQ OPERATIONS'. The floor plan also shows 'N. BROADWAY' on the right side. On the left side of the interface, there is a sidebar with a tree view showing 'Switches', 'Managed APs', and 'Rogue APs'. The 'Rogue APs' list contains 20 entries, each with a MAC address and a corresponding room number from the floor plan. The MAC addresses are: 00:03:2D:12:34:34, 00:03:7F:BE:F1:05, 00:06:05:04:11:B2, 00:09:5B:B9:0E:79, 00:0A:E9:0F:08:BA, 00:0B:85:13:43:42, 00:0C:43:25:73:C3, 00:0D:54:A0:B9:ED, 00:0F:3D:47:7F:F7, 00:0F:3D:F9:6C:9A, 00:11:22:33:44:55, 00:11:95:A3:76:B8, 00:11:95:A3:76:B9, 00:11:95:A3:76:BA, 00:11:95:FE:AD:07, 00:12:00:60:42:82, 00:13:46:7C:57:AF, 00:13:46:87:D5:66, 00:13:46:90:54:56, 00:13:46:90:55:37, 00:13:49:26:C4:6D, 00:15:E9:72:37:C8, 00:15:E9:EE:CE:F0, 00:15:F2:9E:C6:0C, 00:15:F2:B1:4F:F2, 00:16:CA:F4:C0:B2, and 00:17:31:21:06:1B.

You can start to drag and drop the items from left hand side tab including Switches, Managed APs and Rogue APs. Then you can go to View > AP Power Display and select Show 802.11b/g.

Example:

The screenshot displays a network management application interface. At the top, there is a menu bar with 'File', 'Edit', 'View', 'Options', 'Legend', and 'Help'. Below the menu bar is a toolbar with icons for search, zoom, and refresh. The D-Link logo is visible in the top right corner with the tagline 'Building Networks for People'. The main interface is divided into two primary sections: a list of APs on the left and a floor plan on the right.

**Managed APs:**

- 00:03:2D:12:34:34
- 00:03:7F:BE:F1:05
- 00:06:05:04:11:B2
- 00:09:5B:B9:0E:79
- 00:0A:E9:0F:08:BA
- 00:0B:85:13:43:42
- 00:0C:43:25:73:C3
- 00:0D:54:A0:B9:ED
- 00:0F:3D:47:7F:F7
- 00:0F:3D:F9:6C:9A
- 00:11:22:33:44:55
- 00:11:95:A3:76:B8
- 00:11:95:A3:76:B9
- 00:11:95:A3:76:BA
- 00:11:95:FE:AD:07
- 00:12:00:60:42:82
- 00:13:46:7C:57:AF
- 00:13:46:87:D5:66
- 00:13:46:90:54:56
- 00:13:46:90:55:37
- 00:13:49:26:C4:6D
- 00:15:E9:72:37:C8
- 00:15:E9:EE:CE:F0
- 00:15:F2:9E:C6:0C
- 00:15:F2:B1:4F:F2
- 00:16:CA:F4:C0:B2
- 00:17:31:21:06:1B

**Rogue APs:**

(This section is currently empty in the screenshot.)

**Floor Plan:**

The floor plan shows a building layout with rooms numbered 1 through 53. Each room is labeled with its number and square footage (S.F.). Key areas include:

- Rooms 1-10: 272 S.F., 160 S.F., 272 S.F.
- Rooms 11-17: 256 S.F., 160 S.F., 160 S.F., 160 S.F., 160 S.F., 160 S.F., 160 S.F.
- Rooms 18-28: 240 S.F., 145 S.F., 225 S.F., 150 S.F., 150 S.F., 150 S.F., 150 S.F., 225 S.F., 150 S.F., 289 S.F., 140 S.F.
- Rooms 29-36: 140 S.F., 140 S.F., 140 S.F., 140 S.F., 140 S.F., 210 S.F., 140 S.F., 224 S.F.
- Rooms 37-43: 140 S.F., 140 S.F., 140 S.F., 140 S.F., 140 S.F., 140 S.F., 140 S.F.
- Rooms 44-53: 208 S.F., 170 S.F., 170 S.F., 140 S.F., 160 S.F., 140 S.F., 256 S.F.

Other labeled areas include: VIDEOCONFERENCING & TRAINING ROOM, WOMEN, MEN, ELEVATORS, RECEPTION AREA, HQ OPERATIONS, HQ SUPPORT STAFF, and BREAK & WORK ROOM. A vertical label 'N. BROADWAY' is positioned on the right side of the plan.