

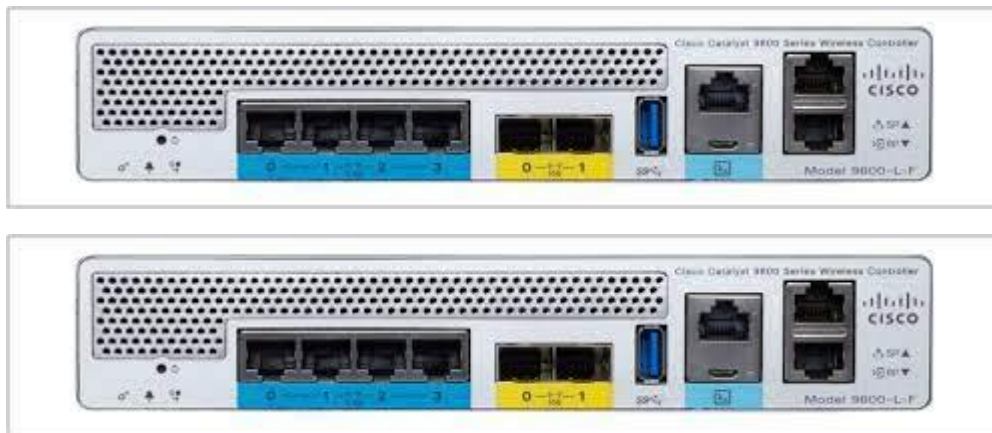
## **CISCO WLC Configuration:**

I got opportunity to deploy and configure Cisco Wireless Controller (Catalyst 9800) in several organizations. I have made a SOP to configure WLC and make it functional in a network infrastructure. This is just a procedure, clients can customize the policies and other rules based on their requirements.

**WLC:** A Cisco Wireless LAN Controller (WLC) is a network device that manages and controls a group of wireless access points (APs). WLCs are responsible for tasks such as:

- Authenticating and authorizing wireless clients
- Enforcing security policies
- Managing wireless network traffic
- Providing network resiliency
- Troubleshooting wireless network problems

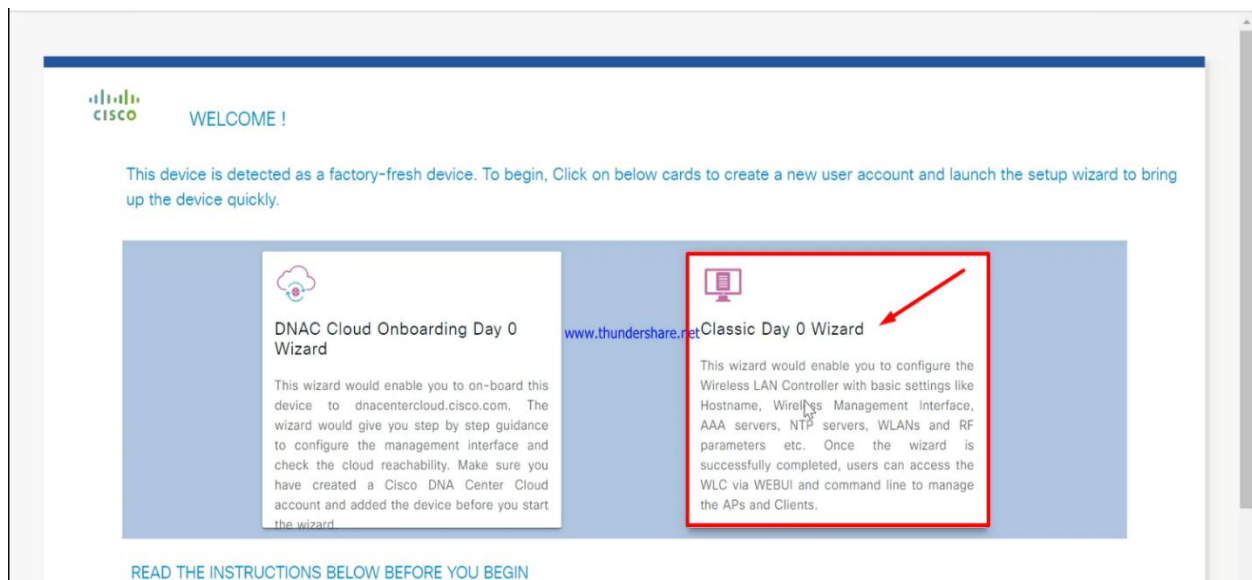
WLCs are typically deployed in enterprise environments where there are a large number of wireless clients and APs. They can be either hardware or software appliances.



## **Day 0 Express Setup:**

The Cisco Catalyst 9800 Wireless Controller provides a simplified first time out of box installation and configuration interface for all series of wireless controllers. This section provides a set of instructions to help easily setup the wireless controller to operate in a small, medium, or large network wireless environment, where access point(s) can join and together as a simple solution and provide various services, such as corporate employee or guest wireless access on the network.

### **Accessing Day 0 Express Setup using Web UI: Select Day 0 Wizard:**



**Step 2** Once you are logged into the controller, in the **General Settings** screen, with the help of the checklist, fill in the following:

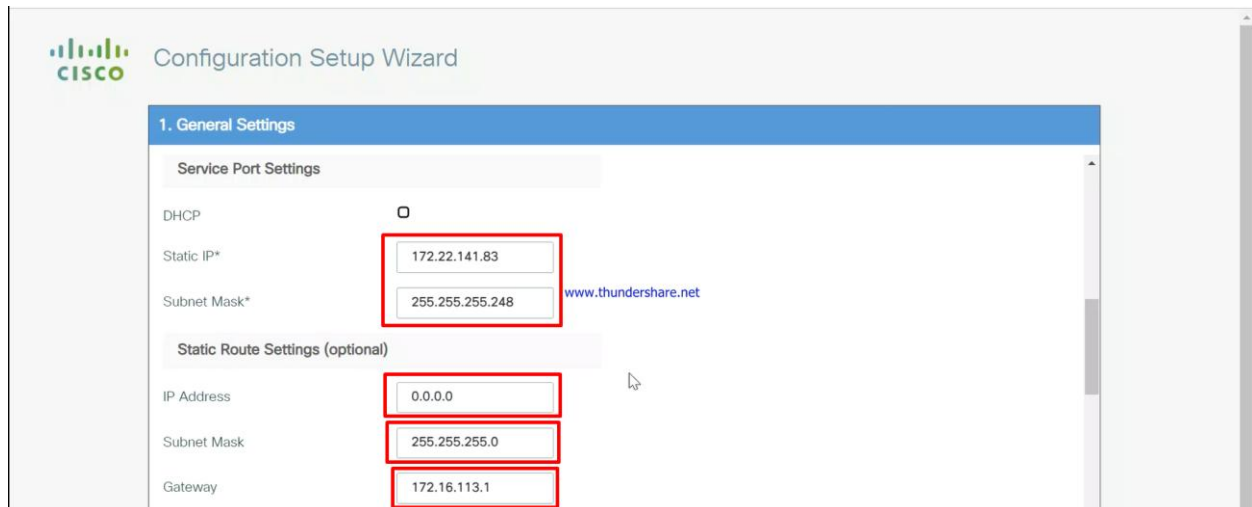
- ☐ Deployment mode – standalone, Active or Standby
- ☐ Country Code
- ☐ Date
- ☐ Time/ Time zone
- ☐ NTP servers
- ☐ AAA Servers
- ☐ Wireless Management Settings
  - Port number
  - VLAN
- ☐ IPv4
  - Wireless Management IP
  - Subnet mask
  - Default gateway
  - Management VLAN DHCP Server
- ☐ IPv6
  - IPv6 Address

The screenshot shows the '1. General Settings' screen of the Cisco Configuration Setup Wizard. The fields and their values are as follows:

Field	Value
Deployment Mode	Standalone
Country	BD
Date	09 Oct 2023
Time / Timezone	14:21:48, Bangladesh
NTP Servers	Enter NTP Server

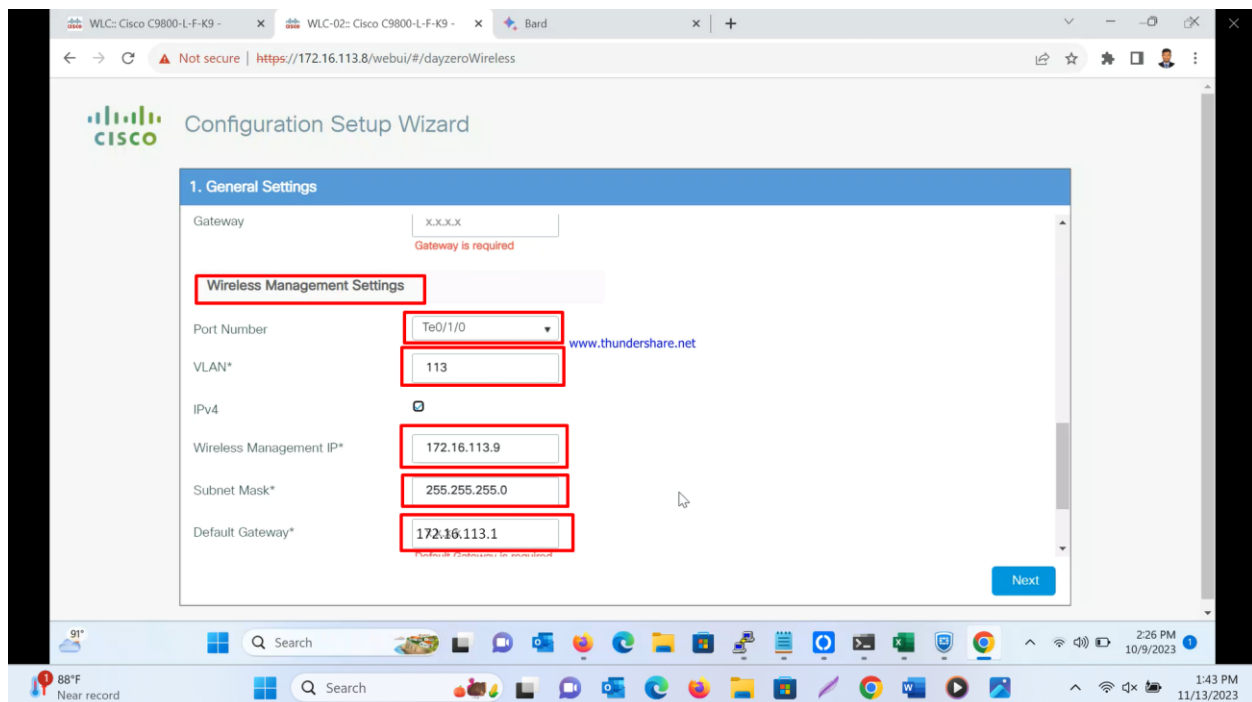
Red boxes highlight the Deployment Mode, Country, and Time / Timezone fields. A watermark 'www.thundershare.net' is visible in the background.

**Service Port Configuration:** The service port on a Cisco Wireless LAN Controller (WLC) is used for out-of-band management and troubleshooting. The service port is typically configured with a static IP address and is not reachable by wireless clients.



The image shows the '1. General Settings' page of the Cisco Configuration Setup Wizard. The 'Service Port Settings' section has 'DHCP' unchecked. 'Static IP\*' is set to '172.22.141.83' and 'Subnet Mask\*' is '255.255.255.248'. The 'Static Route Settings (optional)' section has 'IP Address' set to '0.0.0.0', 'Subnet Mask' set to '255.255.255.0', and 'Gateway' set to '172.16.113.1'. A red box highlights the Static IP and Subnet Mask fields. A red box highlights the IP Address, Subnet Mask, and Gateway fields. A watermark 'www.thundershare.net' is visible.

**Wireless Management Settings:** The Wireless Management Interface (WMI) is a dedicated interface on a Cisco Wireless LAN Controller (WLC) that is used for managing and configuring wireless access points (APs). The WMI is typically configured with a separate IP address and VLAN from the controller's management interface. This helps to isolate the WMI traffic from other types of traffic on the network and to improve the security of the wireless network.



The image shows the '1. General Settings' page of the Cisco Configuration Setup Wizard, specifically the 'Wireless Management Settings' section. The 'Gateway' field is set to 'X.X.X.X' with a red error message 'Gateway is required'. The 'Wireless Management Settings' section has 'Port Number' set to 'Te0/1/0', 'VLAN\*' set to '113', 'IPv4' checked, 'Wireless Management IP\*' set to '172.16.113.9', 'Subnet Mask\*' set to '255.255.255.0', and 'Default Gateway\*' set to '172.16.113.1'. A red box highlights the 'Wireless Management Settings' section header. A red box highlights the 'Port Number' and 'VLAN\*' fields. A red box highlights the 'Wireless Management IP\*', 'Subnet Mask\*', and 'Default Gateway\*' fields. A red box highlights the 'Default Gateway\*' field. A watermark 'www.thundershare.net' is visible. The 'Next' button is at the bottom right. The browser address bar shows 'https://172.16.113.8/webui/#/dayzeroWireless'. The Windows taskbar at the bottom shows the date '11/13/2023' and time '1:43 PM'.

**dot11 24ghz and 5ghz shutdown:**

```
COM7 - PuTTY
WLC-02(config)#
WLC-02(config)#ap
WLC-02(config)#ap
Oct 9 14:41:18.987: %SYS-5-CONFIG_P: Configured programmatically by process Exec from console as console
% Incomplete command.

WLC-02(config)#
WLC-02(config)#
WLC-02(config)#ap cou
WLC-02(config)#ap country ?
WORD Enter the country code (e.g. US,MX,IN) upto a maximum of 20 countries

WLC-02(config)#ap dot
WLC-02(config)#ap dot11 ?
24ghz Configures 802.11b parameters.
5ghz Configures 802.11a parameters.

WLC-02(config)#ap dot11 24
WLC-02(config)#ap dot11 24ghz sh
WLC-02(config)#ap dot11 24ghz shutdown
Disabling the 802.11b network may strand mesh APs.
Are you sure you want to continue? (y/n)[y]: y
WLC-02(config)#
```

```
COM7 - PuTTY
Oct 9 14:41:18.987: %SYS-5-CONFIG_P: Configured programmatically by process Exec from console as console
% Incomplete command.

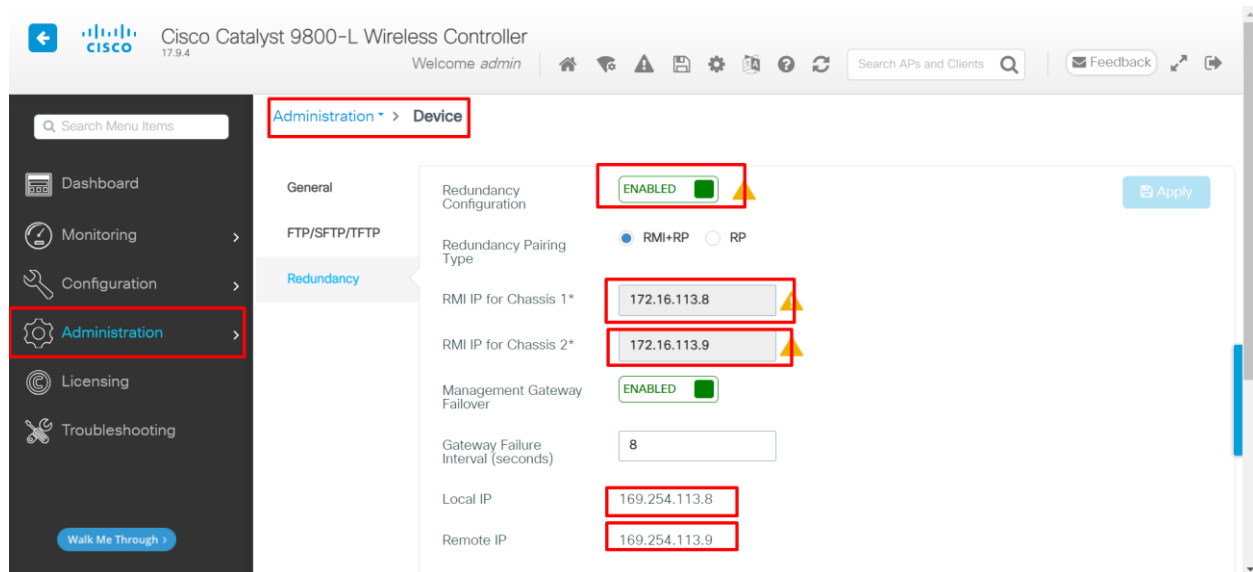
WLC-02(config)#
WLC-02(config)#
WLC-02(config)#ap cou
WLC-02(config)#ap country ?
WORD Enter the country code (e.g. US,MX,IN) upto a maximum of 20 countries

WLC-02(config)#ap dot
WLC-02(config)#ap dot11 ?
24ghz Configures 802.11b parameters.
5ghz Configures 802.11a parameters.

WLC-02(config)#ap dot11 24
WLC-02(config)#ap dot11 24ghz sh
WLC-02(config)#ap dot11 24ghz shutdown
Disabling the 802.11b network may strand mesh APs.
Are you sure you want to continue? (y/n)[y]: y
WLC-02(config)#ap dot11 5ghz shutdown
Disabling the 802.11a network may strand mesh APs.
Are you sure you want to continue? (y/n)[y]: y
WLC-02(config)#
```

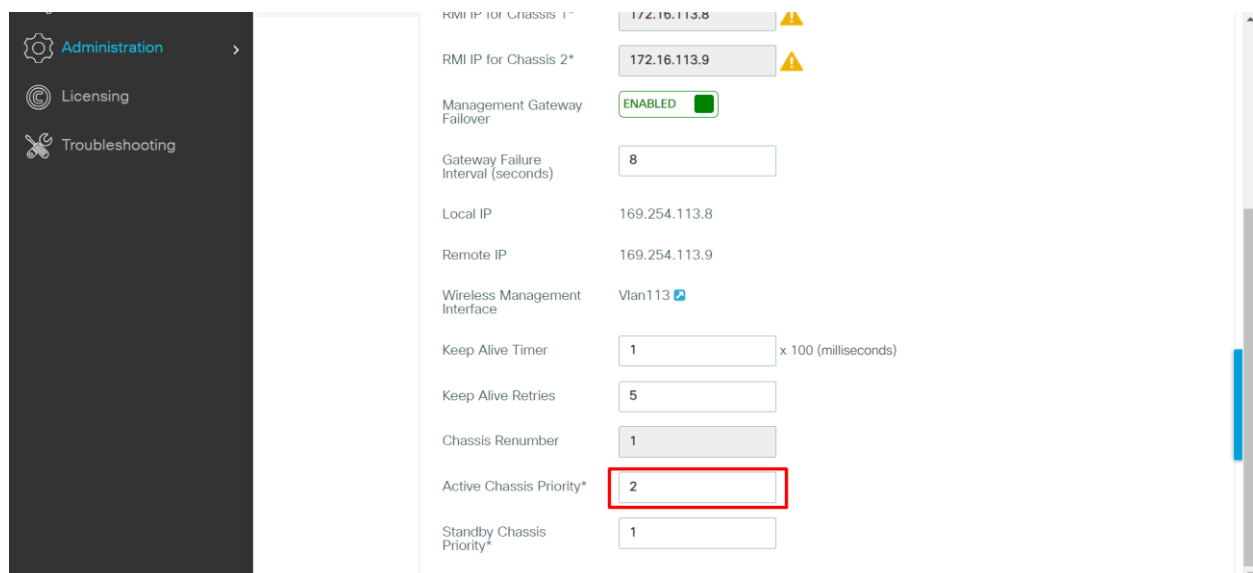
**Step 3: Device HA Configuration:** Administration > Device > Redundancy

High Availability (HA) is a feature of Cisco Wireless LAN Controllers (WLCs) that allows two WLCs to operate as a single logical controller. This provides redundancy and load balancing, which can improve the performance and reliability of the wireless network.



The screenshot shows the 'Administration' > 'Device' configuration page for a Cisco Catalyst 9800-L Wireless Controller. The 'Redundancy' tab is selected. The 'Redundancy Configuration' section shows 'ENABLED' with a green status indicator. The 'Redundancy Pairing Type' is set to 'RMI+RP'. The 'RMI IP for Chassis 1\*' is 172.16.113.8 and the 'RMI IP for Chassis 2\*' is 172.16.113.9. The 'Management Gateway Failover' is 'ENABLED'. The 'Gateway Failure Interval (seconds)' is 8. The 'Local IP' is 169.254.113.8 and the 'Remote IP' is 169.254.113.9. A blue 'Apply' button is in the top right.

Configuration Item	Value
Redundancy Configuration	ENABLED
Redundancy Pairing Type	RMI+RP
RMI IP for Chassis 1*	172.16.113.8
RMI IP for Chassis 2*	172.16.113.9
Management Gateway Failover	ENABLED
Gateway Failure Interval (seconds)	8
Local IP	169.254.113.8
Remote IP	169.254.113.9



The screenshot shows the 'Administration' > 'Device' configuration page for a Cisco Catalyst 9800-L Wireless Controller. The 'Redundancy' tab is selected. The 'Redundancy Configuration' section shows 'ENABLED' with a green status indicator. The 'Redundancy Pairing Type' is set to 'RMI+RP'. The 'RMI IP for Chassis 1\*' is 172.16.113.8 and the 'RMI IP for Chassis 2\*' is 172.16.113.9. The 'Management Gateway Failover' is 'ENABLED'. The 'Gateway Failure Interval (seconds)' is 8. The 'Local IP' is 169.254.113.8 and the 'Remote IP' is 169.254.113.9. The 'Wireless Management Interface' is 'Vlan113'. The 'Keep Alive Timer' is 1 x 100 (milliseconds). The 'Keep Alive Retries' is 5. The 'Chassis Renumber' is 1. The 'Active Chassis Priority\*' is 2 and the 'Standby Chassis Priority\*' is 1. A blue 'Apply' button is in the top right.

Configuration Item	Value
RMI IP for Chassis 1*	172.16.113.8
RMI IP for Chassis 2*	172.16.113.9
Management Gateway Failover	ENABLED
Gateway Failure Interval (seconds)	8
Local IP	169.254.113.8
Remote IP	169.254.113.9
Wireless Management Interface	Vlan113
Keep Alive Timer	1 x 100 (milliseconds)
Keep Alive Retries	5
Chassis Renumber	1
Active Chassis Priority*	2
Standby Chassis Priority*	1

Cisco Catalyst 9800-L Wireless Controller 17.9.4  
Welcome admin

Administration > Device

Search Menu Items

Dashboard  
Monitoring  
Configuration  
Administration  
Licensing  
Troubleshooting

Walk Me Through >

General

FTP/SFTP/TFTP

Redundancy

Redundancy Configuration

Redundancy Pairing Type

RMI IP for Chassis 1\*

RMI IP for Chassis 2\*

Management Gateway Failover

Gateway Failure Interval (seconds)

Local IP

Remote IP

Apply

ENABLED

RMI+RP RP

172.16.113.8

172.16.113.9

ENABLED

8

169.254.113.8

169.254.113.9

Administration >

Licensing

Troubleshooting

RMI IP for Chassis 1\*

RMI IP for Chassis 2\*

Management Gateway Failover

Gateway Failure Interval (seconds)

Local IP

Remote IP

Wireless Management Interface

Keep Alive Timer

Keep Alive Retries

Chassis Renumber

Active Chassis Priority\*

Standby Chassis Priority\*

172.16.113.8

172.16.113.9

ENABLED

8

169.254.113.8

169.254.113.9

Vlan113

1 x 100 (milliseconds)

5

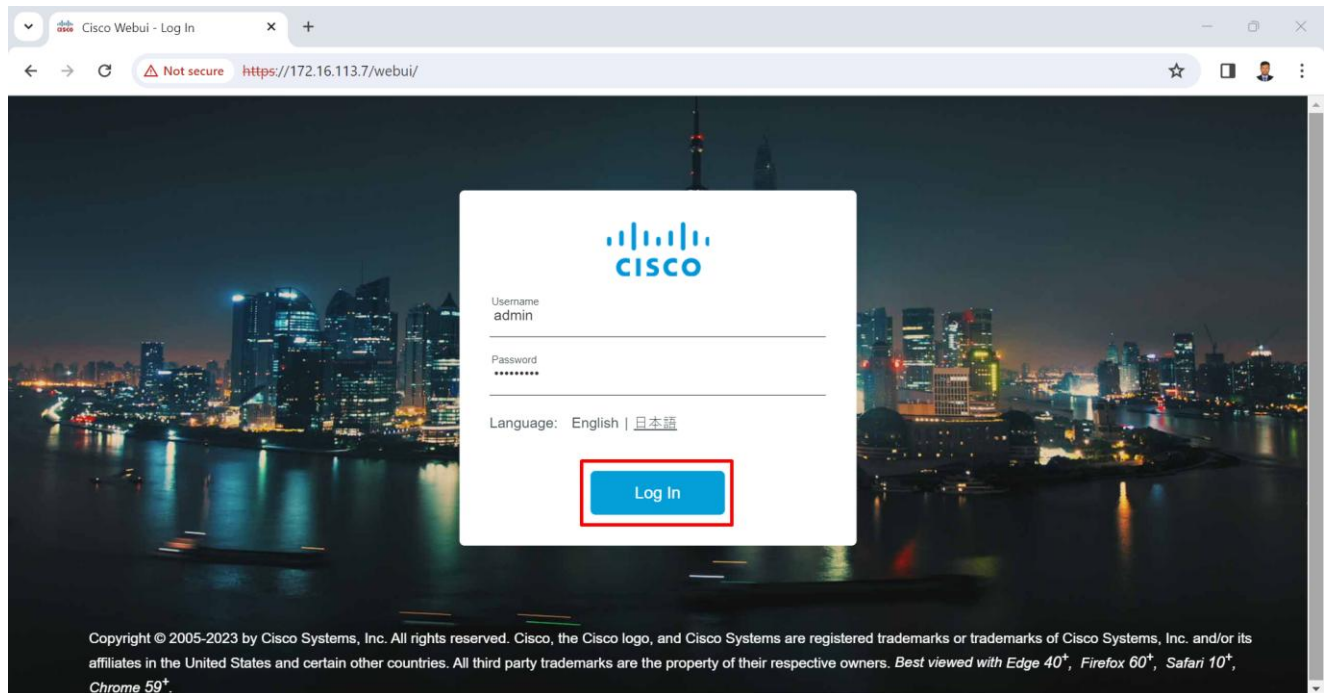
1

1

1

## Login to Wireless-LAN-Controller

To Access or Login, the WLC Manager type in the browser <https://172.16.113.7> That is Virtual IP Address for Two WLC Like Primary & Secondary because that was Configured HA.



## Wireless-Controller Inventory Checking:

Monitoring > General > System > Inventory

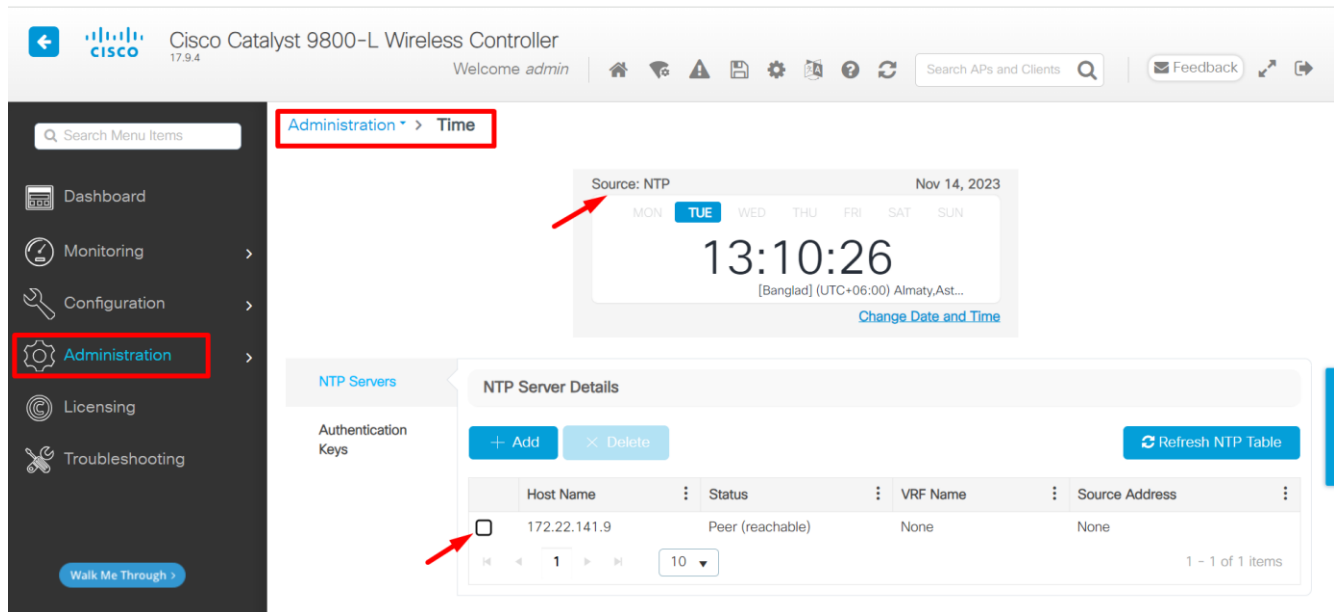
Name	Description	PID	VID	Serial Number
Chassis 1	Cisco C9800-L-F-K9 Chassis	C9800-L-F-K9	02	FCL2717000L
Chassis 1 Power Supply Module 0	Cisco Catalyst Wireless Controller 12V DC Generic Power Supply	PWR-12V	N/A	N/A
Chassis 1 Fan Tray	Cisco C9800-L-F-K9 Fan Tray	C9800-L-F-K9-FAN	N/A	N/A
module 0	Cisco C9800-L-F-K9 Modular Interface Processor	C9800-L-F-K9	N/A	N/A
SPA subslot 0/0	Front Panel bay-0 4 ports 2.5 Gigabitethernet Module	BUILT-IN-4x2_5GE	V01	N/A
SPA subslot 0/1	Front Panel bay-1 2 ports Ten/Gigabitethernet Module	BUILT-IN-2x10GE-F	V01	N/A
subslot 0/1 transceiver 0	SFP+ 10GBASE-SR	SFP-10G-SR	V03	ACW25463H1T
module R0	Cisco C9800-L-F-K9 Route Processor	C9800-L-F-K9	02	FCL2717000L
module F0	Cisco C9800-L-F-K9 Embedded Services Processor	C9800-L-F-K9	N/A	N/A
Chassis 2	Cisco C9800-L-F-K9 Chassis	C9800-L-F-K9	02	FCL271401TA
Chassis 2 Power Supply Module 0	Cisco Catalyst Wireless Controller 12V DC Generic Power Supply	PWR-12V	N/A	N/A
Chassis 2 Fan Tray	Cisco C9800-L-F-K9 Fan Tray	C9800-L-F-K9-FAN	N/A	N/A

1 - 12 of 12 items



## Set Date & Time-Zone/ NTP Server:

Administration > Time



The screenshot displays the Cisco Catalyst 9800-L Wireless Controller interface. The top navigation bar includes the Cisco logo, version 17.9.4, and a welcome message for 'admin'. The left sidebar contains navigation links: Dashboard, Monitoring, Configuration, Administration (highlighted with a red box), Licensing, and Troubleshooting. The main content area is titled 'Administration > Time' (also highlighted with a red box). It features a large digital clock showing '13:10:26' on 'Nov 14, 2023', with the source set to 'NTP' (indicated by a red arrow). Below the clock, the 'NTP Servers' section is visible, containing an 'Add' button and a table of NTP server details. The table has columns for Host Name, Status, VRF Name, and Source Address. A single entry is shown: Host Name '172.22.141.9', Status 'Peer (reachable)', VRF Name 'None', and Source Address 'None'. A red arrow points to the checkbox in the first column of this table. The table also includes pagination controls showing '1' of 1 items.

Source: NTP Nov 14, 2023

MON TUE WED THU FRI SAT SUN

13:10:26

[Banglad] (UTC+06:00) Almaty,Ast...

[Change Date and Time](#)

NTP Servers

NTP Server Details

Authentication Keys

+ Add - Delete Refresh NTP Table

	Host Name	Status	VRF Name	Source Address
<input type="checkbox"/>	172.22.141.9	Peer (reachable)	None	None

1 - 1 of 1 items

## Enable Management Access in Wireless-Lan-Controller:

### Enable HTTP/HTTPS Access:

Administration > Management > HTTP/HTTPS > Netconf/VTY Configuration Enable/Disable > Apply

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration interface. The breadcrumb navigation path is highlighted in red: Administration > Management > HTTP/HTTPS/Netconf/VTY. The left sidebar shows the 'Administration' menu item highlighted in red. The main content area displays the 'HTTP/HTTPS Access Configuration' section. In this section, 'HTTP Access' is set to 'ENABLED' and 'HTTPS Access' is also set to 'ENABLED', both with green toggle switches. The 'HTTP Port' is set to 80 and the 'HTTPS Port' is set to 443. The 'Personal Identity Verification' is set to 'DISABLED' and the 'Authentication' is set to 'local'. Below this is the 'HTTP Trust Point Configuration' section, where 'Enable Trust Point' is set to 'ENABLED'. To the right, the 'Timeout Policy Configuration' section shows settings for HTTP Timeout-policy (secs) at 180, Session Idle Timeout (secs) at 600, Server Life Time (secs) at 180, and Max Number of Requests at 25. The 'VTY' section shows 'VTY Line' set to 'Ex: 0 or 1-5' and 'VTY Transport Mode' set to 'None'. An 'Apply' button is located at the top right of the configuration area.

### SSH Configuration:

```
line con 0
  exec-timeout 0 0
  stopbits 1
line aux 0
line vty 0 4
  length 0
  transport input ssh
line vty 5 15
  transport input ssh
!
```

## WLC Ethernet Configuration: Set IP address in Interfaces.

### Configuration > Interface > Ethernet

Not secure | https://192.168.20.2/webui/#/physicalInterface

Cisco Catalyst 9800-L Wireless Controller 17.6.5

Welcome admin

Search Menu Items

Dashboard

Monitoring

**Configuration**

Administration

Licensing

Troubleshooting

Walk Me Through

Interface

- Logical
- Ethernet**
- Wireless
- Layer2
  - Discovery Protocols
  - VLAN
  - VTP
- Radio Configurations
  - CleanAir
  - High Throughput
  - Media Parameters
  - Network
  - Parameters
  - RRM
- Routing Protocols
  - Static Routing
- Security
  - AAA

Services

- AireOS Config Translator
- Application Visibility
- Cloud Services
- Custom Application
- IOx
- Location
- mDNS
- Multicast
- NetFlow
- Python Sandbox
- QoS
- RA Throttle Policy
- Tags & Profiles
  - AP Join
  - EoGRE
  - Flex
  - Policy
  - Remote LAN
  - RF/Radio
  - Tags

Create VRF-Lite

Address	IPv6 Address	Layer	Description
ed	Unassigned	L2/L3	
ed	Unassigned	L2/L3	
ed	Unassigned	L2/L3	
ed	Unassigned	L2/L3	
ed	Unassigned	L2/L3	Connected to Core S...
2,150	Unassigned	L3	

1 - 7 of 7 items

Cisco Catalyst 9800-L Wireless Controller 17.9.4

Welcome admin

Search Menu Items

Dashboard

Monitoring

**Configuration**

Administration

Licensing

Troubleshooting

Walk Me Through

Configuration > Interface > Ethernet

Create VRF-Lite

Name	Admin Status	Operational Status	IPv4 Address	IPv6 Address	Layer	Description
TwoGigabitEthernet0/0/0	+	-	unassigned	Unassigned	L2/L3	undefined
TwoGigabitEthernet0/0/1	+	-	unassigned	Unassigned	L2/L3	undefined
TwoGigabitEthernet0/0/2	+	-	unassigned	Unassigned	L2/L3	undefined
TwoGigabitEthernet0/0/3	+	-	unassigned	Unassigned	L2/L3	undefined
<b>TenGigabitEthernet0/1/0</b>	+	+	unassigned	Unassigned	L2/L3	
TenGigabitEthernet0/1/1	+	-	unassigned	Unassigned	L2/L3	
GigabitEthernet0	+	-	unassigned	Unassigned	L3	

1 10

1 - 7 of 7 items

Interactive Help



**VLAN Interface Configuration:** Configure VLAN 113 for AP VLAN  
Configuration > Layer 2 > VLAN > SVI

← → ↻ Not secure | https://192.168.20.2/webui/#/vlan

Cisco Catalyst 9800-L Wireless Controller 17.6.5

Welcome admin

Search APs and Clients

Search Menu Items

Dashboard

Monitoring

**Configuration**

Administration

Licensing

Troubleshooting

Walk Me Through

Interface

- Logical
- Ethernet
- Wireless
- Layer2
  - Discovery Protocols
  - VLAN**
  - VTP
- Radio Configurations
  - CleanAir
  - High Throughput
  - Media Parameters
  - Network
  - Parameters
  - RRM
- Routing Protocols
  - Static Routing
- Security
  - AAA

Services

- AireOS Config Translator
- Application Visibility
- Cloud Services
- Custom Application
- IOx
- Location
- mDNS
- Multicast
- NetFlow
- Python Sandbox
- QoS
- RA Throttle Policy

Tags & Profiles

- AP Join
- EoGRE
- Flex
- Policy
- Remote LAN
- RF/Radio
- Tags

Address	IPv6 Address	Description
assigned	Unassigned	
2.168.20.2	Unassigned	Wireless_Mgmt
1.200.2	Unassigned	

1 - 3 of 3 items

Cisco Catalyst 9800-L Wireless Controller 17.9.4

Welcome admin

Search APs and Clients

Feedback

Search Menu Items

Dashboard

Monitoring

**Configuration**

Administration

Licensing

Troubleshooting

Walk Me Through

Configuration > Layer2 > VLAN

SVI VLAN VLAN Group

+ Add × Delete

	Name	Admin Status	Operational Status	IPv4 Address	IPv6 Address	Description
<input type="checkbox"/>	Vlan1	↑	↓	unassigned	Unassigned	
<input type="checkbox"/>	Vlan113	↑	↑	172.16.113.7	Unassigned	
<input type="checkbox"/>	Vlan208	↑	↑	172.16.208.7	Unassigned	

1 10

1 - 3 of 3 items

## VLAN Interface Configuration: Configure Different VLAN for Multiple SSID.

Configuration > Layer 2 > VLAN > VLAN

Search Menu Items

Dashboard

Monitoring

**Configuration**

Administration

Licensing

Troubleshooting

Configuration > Layer2 > VLAN

SVI **VLAN** VLAN Group

+ Add - Delete

VLAN ID	Name	Status	Ports
<input type="checkbox"/> 1	default	active	Tw0/0/0, Tw0/0/1, Tw0/0/2, Tw0/0/3, Te0/1/1
<input type="checkbox"/> 101	ide-plandiv_b1wifi	active	
<input type="checkbox"/> 104	wifi_user_ide_plandiv_01	active	
<input type="checkbox"/> 107	ide-plandiv_b17wifi	active	
<input type="checkbox"/> 113	Wireless_MGT	active	
<input type="checkbox"/> 119	ide-plandiv_necwifi	active	
<input type="checkbox"/> 150	wifi_user_ide_plandiv_02	active	
<input type="checkbox"/> 152	guest_wifi_user	active	
<input type="checkbox"/> 208	PLANDIV_1	active	
<input type="checkbox"/> 216	PLANDIV_2	active	
<input type="checkbox"/> 220	PLANDIV_3	active	

1 - 11 of 11 items

## Route Configuration:

Configuration > Routing Protocols > Static Routing

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration interface. The breadcrumb navigation path is Configuration > Routing Protocols > Static Routing. The left sidebar shows the Configuration menu item highlighted. The main content area displays a table for Static Routing configuration with the following columns: IP Type, Prefix, Prefix Mask, Next Hop IP/Interface, Metric / Administrative Distance, and Vrf Name. A red arrow points to the 'Add' button. The table shows one entry for IPv4 with a prefix of 0.0.0.0, a mask of 0.0.0.0, and a next hop of 172.16.113.1. The page number 1 is shown at the bottom right.

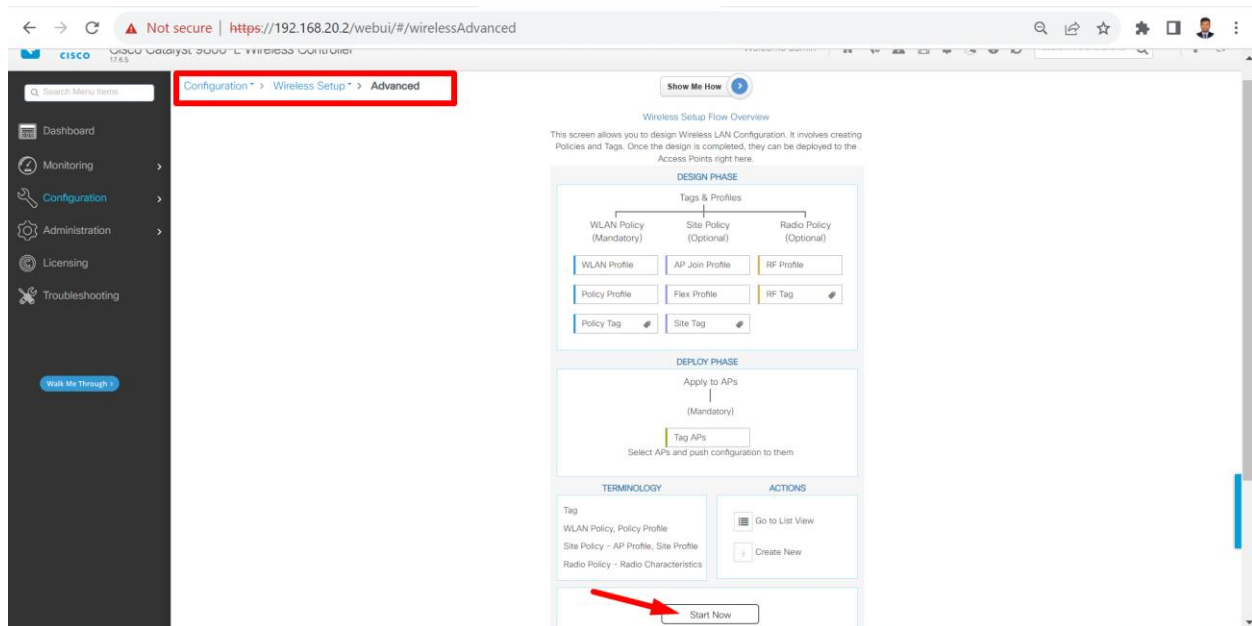
IP Type	Prefix	Prefix Mask	Next Hop IP/Interface	Metric / Administrative Distance	Vrf Name
IPv4	0.0.0.0	0.0.0.0	172.16.113.1		

**Policy Configuration:** Policy configuration on Cisco Wireless LAN Controllers (WLCs) is used to control how wireless clients connect to the network and how traffic is routed.

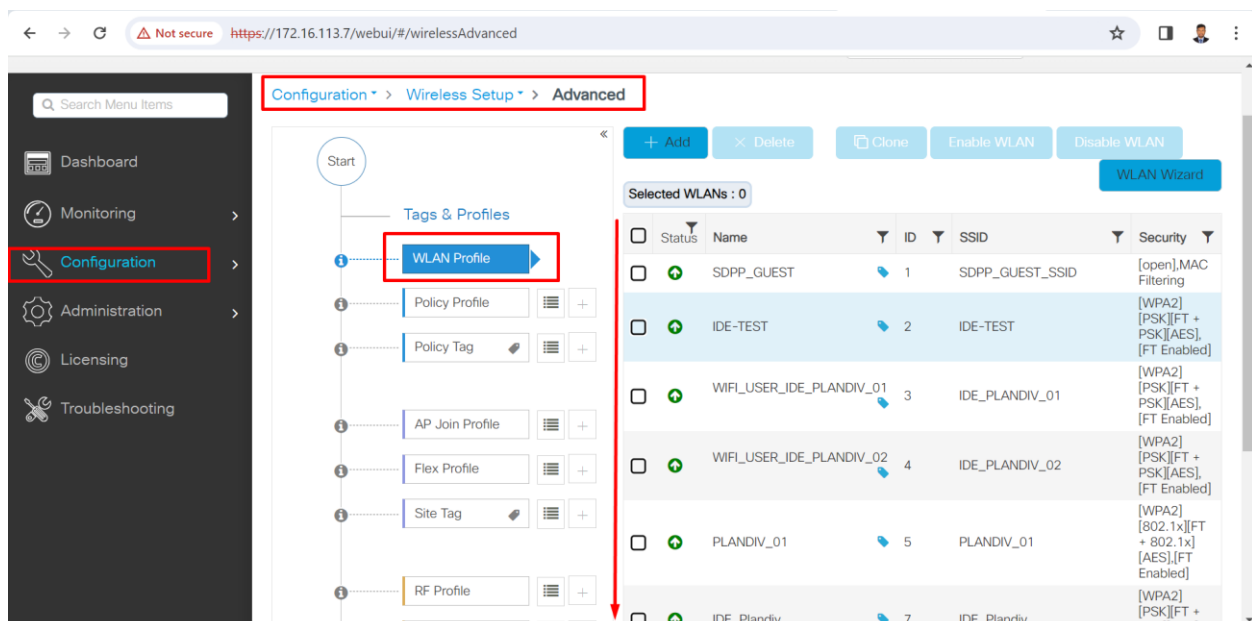
Configuration > Wireless Setup > Advanced

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration interface. The breadcrumb navigation path is Configuration > Wireless Setup > Advanced. The left sidebar shows the Configuration menu item highlighted. The main content area displays various configuration options for Wireless Setup, including Radio Configurations, Tags & Profiles, Routing Protocols, Security, and Wireless Setup. The 'Advanced' option under Wireless Setup is highlighted. The page shows various status indicators and charts, including a 'Radio Count by Mode' chart and an 'Access Point Join Summary' chart.

Configuration > Wireless Setup > Advanced > Start Now



**WLAN Profile Configuration:** A WLAN profile on a Cisco Wireless LAN Controller (WLC) is a set of parameters that define how a WLAN will operate. This includes parameters such as the SSID, security settings, and bandwidth allocation.





**Policy Profile Configuration:** A policy profile on a Cisco Wireless LAN Controller (WLC) is a set of parameters that define how traffic from wireless clients will be handled. This includes parameters such as the VLAN assignment, QoS settings, and DHCP configuration.

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration page. The breadcrumb navigation is **Configuration > Wireless Setup > Advanced**. The left sidebar has **Configuration** highlighted. The main content area shows the **Tags & Profiles** section with a tree view on the left containing **WLAN Profile**, **Policy Profile** (highlighted with a red box), **Policy Tag**, **AP Join Profile**, **Flex Profile**, and **Site Tag**. The right pane displays a table of policy profiles.

Admin Status	Associated Policy Tags	Policy Profile Name	Description
<input type="checkbox"/>		IDE-Test	
<input type="checkbox"/>		Guest-Wifi	
<input type="checkbox"/>		PLAN_DIV01	
<input type="checkbox"/>		SDPP_GUEST	
<input type="checkbox"/>		PLANDIV_AAA	
<input type="checkbox"/>		ide-plandiv_wifi	
<input type="checkbox"/>		ide-plandiv_b11wifi	
<input type="checkbox"/>		ide-plandiv_b17wifi	
<input type="checkbox"/>		ide-plandiv_necwifi	ide-plandiv_necwifi
<input type="checkbox"/>		default-policy-profile	default policy profile

**Policy Tag:** Policy tags on a Cisco Wireless LAN Controller (WLC) are used to group WLAN profiles and policy profiles together. This can be useful for simplifying the management of your wireless network and for ensuring that wireless clients are always connected to the appropriate WLAN and policy profile.

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration page. The breadcrumb navigation is **Configuration > Wireless Setup > Advanced**. The left sidebar has **Configuration** highlighted. The main content area shows the **Tags & Profiles** section with a tree view on the left containing **WLAN Profile**, **Policy Profile**, **Policy Tag** (highlighted with a red box), **AP Join Profile**, **Flex Profile**, and **Site Tag**. The right pane displays a table of policy tags.

Policy Tag Name	Description
<input type="checkbox"/> PLANDIV_01	
<input type="checkbox"/> SDPP_GUEST	SSID
<input type="checkbox"/> default-policy-tag	default policy-tag

**AP Join Profile:** AP join profiles on a Cisco Wireless LAN Controller (WLC) are used to configure the parameters that access points (APs) use to join the WLC. This includes parameters such as the WLC's IP address, the AP's name and password, and the AP's role in the wireless network.

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration page. The breadcrumb navigation is Configuration > Wireless Setup > Advanced. The left sidebar shows the Configuration menu item highlighted. The main content area displays a tree view of configuration items, with AP Join Profile highlighted. The right pane shows the AP Join Profile configuration table.

AP Join Profile Name	Description
default-ap-profile	default ap profile
SDPP_GUEST_AP_JOIN_PRO	

### **RF Profile:**

RF profiles on a Cisco Wireless LAN Controller (WLC) are used to group access points (APs) together and configure their radio frequency (RF) settings. This can be useful for tailoring the RF performance of the wireless network to the specific needs of the environment.

The screenshot shows the Cisco Catalyst 9800-L Wireless Controller configuration page. The breadcrumb navigation is Configuration > Wireless Setup > Advanced. The left sidebar shows the Configuration menu item highlighted. The main content area displays a tree view of configuration items, with RF Profile highlighted. The right pane shows the RF Profile configuration table.

State	RF Profile Name	Band	Description
<input type="checkbox"/>	SDPP_ALL	6 GHz	
<input type="checkbox"/>	SDPP_GUEST	5 GHz	
<input type="checkbox"/>	SDPP_GUEST_2.4	2.4 GHz	
<input type="checkbox"/>	default-rf-profile-6ghz	6 GHz	default rfprofile for 6GHz radio
<input type="checkbox"/>	Low_Client_Density_rf_5gh	5 GHz	pre configured Low Client Density rf
<input type="checkbox"/>	High_Client_Density_rf_5gh	5 GHz	pre configured High Client Density r
<input type="checkbox"/>	Low_Client_Density_rf_24gh	2.4 GHz	pre configured Low Client Density rf
<input type="checkbox"/>	High_Client_Density_rf_24gh	2.4 GHz	pre configured High Client Density r
<input type="checkbox"/>	Typical_Client_Density_rf_5gh	5 GHz	pre configured Typical Density rpro
<input type="checkbox"/>	Typical_Client_Density_rf_24gh	2.4 GHz	pre configured Typical Client Densit

**Tag Aps:** Tag AP configuration on a Cisco Wireless LAN Controller (WLC) is used to group access points (APs) together and apply policy tags to them. This can be useful for simplifying the management of the wireless network and for ensuring that APs are configured with the correct policy tags.

The screenshot displays the Cisco WLC configuration interface. On the left, a configuration wizard shows a sequence of steps: 'Site Tag', 'RF Profile', 'Radio Profile', 'RF Tag', and 'Tag APs'. The 'Tag APs' step is currently selected and highlighted with a red rectangle. Below the wizard steps are 'Apply' and 'Done' buttons. The main area of the interface shows a table of access points (APs) that are being configured. The table has columns for AP ID, Model, MAC Address, Power, Location, Status, Registration, Policy Tag, and other configuration details. The table lists several APs, including BL1-3-1st-FI-AP-01, BL2-1st-FI-AP-02, BL1-0-1st-FI-AP-01, NEC-AP-01, BL1-2nd-FI-AP-01, and BL9-2nd-FI-AP-01. Each row represents an AP configuration entry.

AP ID	Model	MAC Address	Power	Location	Status	Registration	Policy Tag	Other
BL1-3-1st-FI-AP-01	C9115A-XE-C	4891.d5be.f0e40	FGL2L543	LocaI	Enab led	Regi ster ed	PLA NDI V_01	SDP P_G UES T_SI TE_ TAG
BL2-1st-FI-AP-02	C9115A-XE-C	6cd6.e342.7f00	FGL2L345	LocaI	Enab led	Regi ster ed	PLA NDI V_01	SDP P_G UES T_SI TE_ TAG
BL1-0-1st-FI-AP-01	C9115A-XE-C	6cd6.e342.8b20	FGL2L2ZB	LocaI	Enab led	Regi ster ed	PLA NDI V_01	SDP P_G UES T_SI TE_ TAG
NEC-AP-01	C9115A-XE-C	6cd6.e342.9560	FGL2L317	LocaI	Enab led	Regi ster ed	PLA NDI V_01	SDP P_G UES T_SI TE_ TAG
BL1-2nd-FI-AP-01	C9115A-XE-C	6cd6.e342.9620	FGL2L31K	LocaI	Enab led	Regi ster ed	PLA NDI V_01	SDP P_G UES T_SI TE_ TAG
BL9-2nd-FI-AP-01	C9115A-XE-C	6cd6.e342.9660	FGL2L344	LocaI	Enab led	Regi ster ed	PLA NDI V_01	SDP P_G UES T_SI TE_ TAG

