Wireless LAN Controller:

- o WLAN controller manages wireless network access points that allow wireless devices.
- o WLAN controller automatically handles the configuration of wireless access points.
- o WLAN controller consolidated management for entire wireless network in one place.
- o WLAN controllers automatically configure access points both locally and remotely.
- o WLAN controller & AP work in concert to provide network connectivity to wireless clients.
- o WLC has two main GUI presentations, one for monitoring & one for advanced configuration.



Virtual Gateway IP Address:

The WLC has a virtual interface that it uses for mobility management. This includes DHCP relay, guest web authentication, VPN termination, and some other features. The WLC only uses this IP address in communication between the WLC and wireless clients. It has to be a valid IP address but shouldn't be an IP address that is in use on the Internet or your LAN.

Management Interface:

The management interface is the default interface used to access and manage the WLC. The management interface is also used by the access points to communicate with the WLC. The management interface IP address is the only ping-able IP address and is used by administrators to manage the WLC. Administrators can log into the WLC's configuration GUI by entering the management interface IP address in a web browser and logging into the system.

Service-Port Interface:

Service-port interface is used for out-of-band management of the controller. If management workstation is in a remote subnet, it may be necessary to add a IPv4 route on the controller in order to manage the controller from the remote workstation.

Mobility /RF Group:

Mobility / RF Group allows multiple wireless controllers to be clustered into one logical Controller group to allow dynamic RF adjustments and roaming for wireless clients.

Wireless LAN Controller Configuration:

```
Would you like to terminate autoinstall? [yes]: yes
System Name [Cisco_01:00:01] (31 characters max): WLC
Enter Administrative User Name (24 characters max): admin
Enter Administrative Password (3 to 24 characters): *******
Re-enter Administrative Password
Service Interface IP Address Configuration [static][DHCP]: static
Service Interface IP Address: 1.1.1.1
Service Interface Netmask: 255.0.0.0
Management Interface IP Address: 192.168.100.240
Management Interface Netmask: 255.255.255.0
Management Interface Default Router: 192.168.100.254
Management Interface VLAN Identifier (0 = untagged):
Management Interface Port Num [1 to 1]: 1
Management Interface DHCP Server IP Address: 192.168.100.254
Virtual Gateway IP Address: 2.2.2.2
Mobility/RF Group Name: mobility
Network Name (SSID): FirstSSID
Configure DHCP Bridging Mode [yes][NO]:
Allow Static IP Addresses [YES][no]:
Configure a RADIUS Server now? [YES][no]: no
Enter Country Code list (enter 'help' for a list of countries) [US]:
Enable 802.11b Network [YES][no]:
Enable 802.11a Network [YES][no]:
Enable 802.11g Network [YES][no]:
Enable Auto-RF [YES][no]:
Configure a NTP server now? [YES][no]: no
Configure the system time now? [YES][no]: no
Would you like to configure IPv6 parameters[YES][no]: no
Configuration correct? If yes, system will save it and reset. [yes][NO]: yes
User: admin
Password:******
(Cisco Controller) > show interface summary
(Cisco Controller) >ping 192.168.100.254
(Cisco Controller) >config network webmode enable
(Cisco Controller) >config network secureweb enable
(Cisco Controller) >save
```

Wireless LAN Controller Menu:



Monitor Tab:

The Monitor tab on the menu bar enables you to access the controller and access points' summary details. You can view information about the following from the Monitor tab: Summary, Access Points, Cisco CleanAir, Statistics, Cisco Discovery Protocol, Rogues, Redundancy, Clients, Sleeping Clients, Multicast Groups, Applications, Lync, Local Profiling

WLANS Tab:

WLAN tab on menu bar enables to create, configure, and delete wireless local area networks (WLANs) on your Cisco WLC. Use the left navigation pane to access specific WLAN parameters.

Controller Tab:

This tab on the menu bar enables you to access the Cisco WLC configuration details. General Inventory, Interfaces, Interface Groups, Multicast, Network Routes, Redundancy, Internal DHCP Server Mobility Management, Ports, NTP, CDP, PMIPv6, IPv6, mDNS, Advanced, Voice etc.

Wireless Tab:

The Wireless tab on the menu bar provides access to the Cisco Wireless LAN Solution wireless network configuration.

Security Tab:

The Security tab on the menu bar enables you to configure and set security policies on your Cisco Wireless LAN Controller.

Management Tab:

This tab on the menu bar enables you to access the Cisco WLC management details.

Commands Tab:

This tab on the menu bar enables you to access the controller operating system software management commands.