Using the Web Graphical User Interface

Prerequisites for Using the Web GUI

Wired Web UI (Device Manager) System Requirements

Hardware Requirements

Table 1: Minimum Hardware Requirements

Processor Speed	DRAM	Number of Colors	Resolution	Font Size
233 MHz minimum [1]	512 MB [2]	256	1024 x 768	Small

[1] We recommend 1 GHz.
[2] We recommend 1 GB DRAM.

Software Requirements

- – Windows 7, Windows Vista, Windows XP, Windows 2003, or Windows 2000

- – Microsoft Internet Explorer 6.0 and 7.0, and Mozilla Firefox up to version 26.0, with JavaScript enabled.

Wireless Web UI Software Requirements

- Operating Systems

    - Windows 7

    - Windows 8

> • Mac OS X 10.8

• Browsers:

> • Google Chrome, version 35
>
> • Microsoft Internet Explorer, versions 10 or 11
>
> • Mozilla Firefox, version 30 or later
>
> • Safari, version 6.1

Information About Using The Web GUI

A web browser, or graphical user interface (GUI), is built into each switch.

You can use either the service port interface or the management interface to access the GUI. We recommend that you use the service-port interface. Click Help at the top of any page in the GUI to display online help. You might need to disable your browser's pop-up blocker to view the online help.

Web GUI Features

The switch web GUI supports the following:

The Configuration Wizard—After initial configuration of the IP address and the local username/password or auth via the authentication server (privilege 15 needed), the wizard provides a method to complete the initial wireless configuration. Start the wizard through Configuration -> Wizard and follow the nine-step process to configure the following:

- Admin Users
- SNMP System Summary
- Management Port
- Wireless Management
- RF Mobility and Country code
- Mobility configuration
- WLANs
- 802.11 Configuration
- Set Time

The Monitor tab:

- Displays summary details of switch, clients, and access points.
- Displays all radio and AP join statistics.
- Displays air quality on access points.
- Displays list of all Cisco Discovery Protocol (CDP) neighbors on all interfaces and the CDP traffic information.
- Displays all rogue access points based on their classification-friendly, malicious, ad hoc, classified, and unclassified.

The Configuration tab:

- Enables you to configure the switch for all initial operation using the web Configuration Wizard. The wizard allows you to configure user details, management interface, and so on.

- Enables you to configure the system, internal DHCP server, management, and mobility management parameters.
- Enables you to configure the switch, WLAN, and radios.
- Enables you to configure and set security policies on your switch.
- Enables you to access the switch operating system software management commands.

The Administration tab enables you to configure system logs.

Connecting the Console Port of the Switch

Before you begin

Before you can configure the switch for basic operations, you need to connect it to a PC that uses a VT-100 terminal emulation program (such as HyperTerminal, ProComm, Minicom, or Tip).

Step 1 Connect one end of a null-modem serial cable to the switch's RJ-45 console port and the other end to your PC's serial port.

Step 2 Plug the AC power cord into the switch and a grounded 100 to 240 VAC, 50/60-Hz electrical outlet. Turn on the power supply. The bootup script displays operating system software initialization (code download and power-on self-test verification) and basic configuration. If the switch passes the power-on self-test, the bootup script runs the configuration wizard, which prompts you for basic configuration input.

Step 3 Enter **yes**. Proceed with basic initial setup configuration parameters in the CLI setup wizard. Specify the IP address for the service port which is the gigabitethernet 0/0 interface.

After entering the configuration parameters in the configuration wizard, you can access the Web GUI. Now, the switch is configured with the IP address for service port.

Logging On to the Web GUI

Step 1 Enter the switch IP address in your browser's address bar. For a secure connection, enter https://**ip-address**. For a less secure connection, enter http://**ip-address**.

Step 2 When prompted, enter a valid username and password and click **OK**.

Note The administrative username and password that you created in the configuration wizard are case sensitive. The default username is admin, and the default password is cisco.

The Accessing page appears.

Enabling Web and Secure Web Modes

Step 1   Choose **Configuration** > **Controller** > **Switch** > **Management** > **Protocol Management** > **HTTP-HTTPS**.

The **HTTP-HTTPS Configuration** page appears.

Step 2   To enable web mode, which allows users to access the switch GUI using "http://ip-address," choose Enabled from the HTTP Access drop-down list. Otherwise, choose Disabled. Web mode (HTTP) is not a secure connection.

Step 3   To enable secure web mode, which allows users to access the switch GUI using "https://ip-address," choose Enabled from the HTTPS Access drop-down list. Otherwise, choose Disabled. Secure web mode (HTTPS) is a secure connection.

Step 4   Choose to track the device in the IP Device Tracking check box.

Step 5   Choose to enable the trust point in the Enable check box.

Step 6   Choose the trustpoints from the Trustpoints drop-down list.

Step 7   Enter the amount of time, in seconds, before the web session times out due to inactivity in the HTTP Timeout-policy (1 to 600 sec) text box.

The valid range is from 1 to 600 seconds.

Step 8   Enter the server life time in the Server Life Time (1 to 86400 sec) text box.

The valid range is from1 to 86400 seconds.

Step 9   Enter the maximum number of connection requests that the server can accept in the Maximum number of Requests (1 to 86400) text box.

The valid range is from 1 to 86400 connections.

Step 10   Click **Apply**.

Step 11   Click **Save Configuration**.

Configuring the Switch Web GUI

The configuration wizard enables you to configure basic settings on the switch. You can run the wizard after you receive the switch from the factory or after the switch has been reset to factory defaults. The configuration wizard is available in both GUI and CLI formats.

Step 1   Connect your PC to the service port and configure an IPv4 address to use the same subnet as the switch. The switch is loaded with IOS XE image and the service port interface is configured as gigabitethernet 0/0.

Step 2   Start Internet Explorer 10 (or later), Firefox 2.0.0.11 (or later), or Google Chrome on your PC and enter the management interface IP address on the browser window. The management interface IP address is same as the gigabitethernet 0/0 (also known as service port interface). When you log in for the first time, you need to enter HTTP username and password. By default, the username is **admin** and the password is **cisco**.

You can use both HTTP and HTTPS when using the service port interface. HTTPS is enabled by default and HTTP can also be enabled.

When you log in for the first time, the **Accessing Cisco Switch Accessing Cisco Controller <Model Number> <Hostname>** page appears.

Step 3   On the **Accessing Cisco SwitchAccessing Cisco Controller** page, click the **Wireless Web GUI** link to access switch web GUI **Home** page.

Step 4   Choose **Configuration** > **Wizard** to perform all steps that you need to configure the switch initially.

The **Admin Users** page appears.

Step 5   On the **Admin Users** page, enter the administrative username to be assigned to this switch in the User Name text box and the administrative password to be assigned to this switch in the Password and Confirm Password text boxes. Click **Next**.

The default username is **admin** and the default password is **cisco**. You can also create a new administrator user for the switch. You can enter up to 24 ASCII characters for username and password.

The **SNMP System Summary** page appears.

Step 6   On the **SNMP System Summary** page, enter the following SNMP system parameters for the switch, and click **Next**:

- Customer-definable switch location in the Location text box.

- Customer-definable contact details such as phone number with names in the Contact text box.

- Choose **enabled** to send SNMP notifications for various SNMP traps or **disabled** not to send SNMP notifications for various SNMP traps from the SNMP Global Trap drop-down list.

- Choose **enabled** to send system log messages or **disabled** not to send system log messages from the SNMP Logging drop-down list.

Note   The SNMP trap server, must be reachable through the distribution ports (and not through the gigabitethernet0/0 service or management interface).

The **Management Port** page appears.

Step 7   In the **Management Port** page, enter the following parameters for the management port interface (gigabitethernet 0/0) and click **Next**.

- Interface IP address that you assigned for the service port in the IP Address text box.

- Network mask address of the management port interface in the Netmask text box.

- The IPv4 Dynamic Host Configuration Protocol (DHCP) address for the selected port in the IPv4 DHCP Server text box.

The **Wireless Management** page appears.

Step 8   In the **Wireless Management** page, enter the following wireless interface management details, and click **Next**.

- Choose the interface—VLAN, or Ten Gigabit Ethernet from the Select Interface drop-down list.

- VLAN tag identifier, or 0 for no VLAN tag in the VLAN id text box.

- IP address of wireless management interface where access points are connected in the IP Address text box.

- Network mask address of the wireless management interface in the Netmask text box.

- DHCP IPv4 IP address in the IPv4 DHCP Server text box.

When selecting VLAN as interface, you can specify the ports as –Trunk or Access ports from the selected list displayed in the Switch Port Configuration text box.

The **RF Mobility and Country Code** page appears.

Step 9 In the **RF Mobility and Country Code** page, enter the RF mobility domain name in the RF Mobility text box, choose current country code from the Country Code drop-down list, and click **Next**. From the GUI, you can select only one country code.

> **Note** Before configuring RF grouping parameters and mobility configuration, ensure that you refer to the relevant conceptual content and then proceed with the configuration.

The **Mobility Configuration** page with mobility global configuration settings appears.

Step 10 In the **Mobility Configuration** page, view and enter the following mobility global configuration settings, and click **Next**.

- Displays Mobility Controller in the Mobility Role text box.

- Displays mobility protocol port number in the Mobility Protocol Port text box.

- Displays the mobility group name in the Mobility Group Name text box.

- Displays whether DTLS is enabled in the DTLS Mode text box.

  DTLS is a standards-track Internet Engineering Task Force (IETF) protocol based on TLS.

- Displays mobility domain identifier for 802.11 radios in the Mobility Domain ID for 802.11 radios text box.

- Displays the number of members configured on the switch in the Mobility Domain Member Count text box.

- To enable the controller as a Mobility Oracle, select the Mobility Oracle Enabled check box.

  > **Note** Only the controller can be configured as Mobility Oracle. You cannot configure the switch as Mobility Oracle.

  The Mobility Oracle is optional, it maintains the client database under one complete mobility domain.

- The amount of time (in seconds) between each ping request sent to an peer switch in the Mobility Keepalive Interval (1-30)sec text box.

  Valid range is from 1 to 30 seconds, and the default value is 10 seconds.

- Number of times a ping request is sent to an peer switch before the peer is considered to be unreachable in the Mobility Keepalive Count (3-20) text box.

  The valid range is from 3 to 20, and the default value is 3.

- The DSCP value that you can set for the mobility switch in the Mobility Control Message DSCP Value (0-63) text box.

  The valid range is 0 to 63, and the default value is 0.

The **WLANs** page appears.

Step 11 In the **Mobility Configuration** page, view and enter the following mobility global configuration settings, and click **Next**.

- Choose **Mobility Controller** or **Mobility Agent** from the Mobility Role drop-down list:

- If Mobility Agent is chosen, enter the mobility controller IP address in the Mobility Controller IP Address text box and mobility controller IP address in the Mobility Controller Public IP Address text box.

- If Mobility Controller is chosen, then the mobility controller IP address and mobility controller public IP address are displayed in the respective text boxes.

- Displays mobility protocol port number in the Mobility Protocol Port text box.

- Displays the mobility switch peer group name in the Mobility Switch Peer Group Name text box.

- Displays whether DTLS is enabled in the DTLS Mode text box.

  DTLS is a standards-track Internet Engineering Task Force (IETF) protocol based on TLS.

- Displays mobility domain identifier for 802.11 radios in the Mobility Domain ID for 802.11 radios text box.

- The amount of time (in seconds) between each ping request sent to an peer switch in the Mobility Keepalive Interval (1-30)sec text box.

  Valid range is from 1 to 30 seconds, and the default value is 10 seconds.

- Number of times a ping request is sent to an peer switch before the peer is considered to be unreachable in the Mobility Keepalive Count (3-20) text box.

  The valid range is from 3 to 20, and the default value is 3.

- The DSCP value that you can set for the mobility switch in the Mobility Control Message DSCP Value (0-63) text box.

  The valid range is 0 to 63, and the default value is 0.

- Displays the number of mobility switch peer group member configured in the Switch Peer Group Members Configured text box.

The **WLANs** page appears.

Step 12 In the **WLANs** page, enter the following WLAN configuration parameters, and click **Next**.

- WLAN identifier in the WLAN ID text box.

- SSID of the WLAN that the client is associated with in the SSID text box.

- Name of the WLAN used by the client in the Profile Name text box.

The **802.11 Configuration** page appears.

Step 13 In the **802.11 Configuration** page, check either one or both 802.11a/n/ac and 802.11b/g/n check boxes to enable the 802.11 radios, and click **Next**.

The **Set Time** page appears.

Step 14 In the **Set Time** page, you can configure the time and date on the switch based on the following parameters, and click **Next**.

- Displays current timestamp on the switch in the Current Time text box.

- Choose either Manual or NTP from the Mode drop-down list.

  On using the NTP server, all access points connected to the switch, synchronizes its time based on the NTP server settings available.

• Choose date on the switch from the Year, Month, and Day drop-down list.

• Choose time from the Hours, Minutes, and Seconds drop-down list.

• Enter the time zone in the Zone text box and select the off setting required when compared to the current time configured on the switch from the Offset drop-down list.

The **Save Wizard** page appears.

Step 15 In the **Save Wizard** page, you can review the configuration settings performed on the switch using these steps, and if you wish to change any configuration value, click **Previous** and navigate to that page.

You can save the switch configuration created using the wizard only if a success message is displayed for all the wizards. If the **Save Wizard** page displays errors, you must recreate the wizard for initial configuration of the switch.