Searching for Access Points

Information About Searching for Access Points

You can search for specific access points in the list of access points on the All APs page. To do so, you create a filter to display only access points that meet certain criteria (such as MAC address, status, access point mode, and certificate type). This feature is especially useful if your list of access points spans multiple pages, preventing you from viewing them all at once.

Searching the AP Filter (GUI)

Step 1 Choose **Monitor** > **Access Point Summary**> **All APs** > **Details** to open the All APs page.

This page lists all of the access points joined to the controller. For each access point, you can see its name, MAC address, uptime, status, operating mode, certificates, OfficeExtend access point status, and access point submode.

The total number of access points appears in the upper right-hand corner of the page. If the list of access points spans multiple pages, you can access these pages by clicking the page number links. Each page shows up to 20 access points.

Step 2 Click **Change Filter** to open the Search AP dialog box.

Step 3 Select one or more of the following check boxes to specify the criteria used when displaying access points:

- **MAC Address**—The MAC address of an access point.

Note When you enable the MAC Address filter, the other filters are disabled automatically. When you enable any of the other filters, the MAC Address filter is disabled automatically.

- **AP Name**—Enter the name of an access point.

- **AP Model**—Enter the model name of an access point.

- **IP Address**—Enter the IP address of an access point.

- **Operating Status**—Select one or more of the following check boxes to specify the operating status of the access points:

  - **UP**—The access point is up and running.

    Note   When the APs are in downloading state, during which time the APs are nonfunctional due to no configuration on the APs, the WLC GUI shows these AP radios in UP state on the Monitor page.

  - **DOWN**—The access point is not operational.

  - **REG**—The access point is registered to the controller.

  - **DEREG**—The access point is not registered to the controller.

  - **DOWNLOAD**—The controller is downloading its software image to the access point.

- **Port Number**—Enter the controller port number to which the access point is connected.

- **Admin Status**—Choose **Enabled** or **Disabled** to specify whether the access points are enabled or disabled on the controller.

- **AP Mode**—Select one or more of the following options to specify the operating mode of the access points:

  - **Local—The default option.**

    Note   The 600 OEAP series access point uses only local mode.

    When an access point in local mode connects to a Cisco Flex 7500 Series Controller, it does not serve clients. The access point details are available in the controller. To enable an access point to serve clients or perform monitoring-related tasks when connected to the Cisco Flex 7500 Series Controller, the access point mode must be in FlexConnect or monitor mode. Use the following command to automatically convert access points to a FlexConnect mode or monitor mode on joining the controller:

    config ap autoconvert {**flexconnect** | **monitor** | **disable**}

    All access points that connect to the controller will either be converted to FlexConnect mode or monitor mode depending on the configuration provided.

  - **FlexConnect**—This mode is used for 1040, 1130, 1140, 1240, 1250, 1260, 1600, 2600, 3500, 3600, and 800 access points.

  - **REAP**—This mode is the remote edge lightweight access point.

  - **Monitor**—This mode is the monitor-only mode.

  - **Rogue Detector**—This mode monitors the rogue APs on wire. It does not transmit or receive frames over the air or contain rogue APs.

    Note   Information about rogues that are detected is not shared between controllers. Therefore, we recommend that every controller has its own connected rogue detector AP when rogue detector APs are used.

  - **Sniffer**—The access point starts sniffing the air on a given channel. It captures and forwards all the packets from the clients on that channel to a remote machine that runs Airopeek or Wireshark (packet analyzers for IEEE 802.11 wireless LANs). It includes information on the time stamp, signal strength, packet size, and so on.

    Note   The Bridge option is displayed only if the AP is bridge capable.

Note If the AP mode is set to "Bridge" and the AP is not REAP capable, an error appears.

Note In the access point sniffer, the server to which the data is to be sent should be on the same VLAN as the wireless controller management VLAN otherwise an error will be displayed.

- **Bridge**—This mode sets the AP mode to "Bridge" if you are connecting a Root AP.

- **SE-Connect**—This mode allows you to connect to spectrum expert and it allows the access point to perform spectrum intelligence.

  Note Spectrum intelligence is supported on , 2600 and 3600 series access points. 1260 series access points does not support the spectrum intelligence.

  Note When an access point is configured in SE-Connect mode, the access point reboots and rejoins the controller. Access points that are configured in this mode do not serve the client.

- **Flex+Bridge**— The standalone mode support is applicable when the AP is in this mode.

- **Certificate Type**—Select one or more of the following check boxes to specify the types of certificates installed on the access points:

  - **MIC**—Manufactured-installed certificate

  - **SSC**—Self-signed certificate

  - **LSC**—Local significant certificate

    Note See the Authorizing Access Points section for more information about these certificate types.

- **Primary S/W Version**—Select this check box to enter the primary software version number

- **Backup S/W Version**—Select this check box to enter the secondary software version number.

Step 4 Click **Apply**.

Only the access points that match your search criteria appear on the All APs page, and the Current Filter parameter at the top of the page specifies the filter used to generate the list (for example, MAC Address:00:1d:e5:54:0e:e6, AP Name:pmsk-ap, Operational Status: UP, Status: Enabled, and so on).

Note If you want to remove the filters and display the entire access point list, click **Clear Filter**.

Monitoring the Interface Details

Step 1 Choose **Monitor** > **Summary** > **All APs**. The All APs > Details page appears.

Step 2 Click the **Interfaces** tab.

Step 3 Click on the available Interface name. The Interface Details page appears.

Step 4 The Interface Details page displays the following parameter details.

Table 1: Interfaces Parameters Details

Button	Description
AP Name	Name of the access point.
Link Speed	Speed of the interference in Mbps.
RX Bytes	Total number of bytes in the error-free packets received on the interface.
RX Unicast Packets	Total number of unicast packets received on the interface.
RX Non-Unicast Packets	Total number of nonunicast or multicast packets received on the interface.
Input CRC	Total number of CRC error in packets while receiving on the interface.
Input Errors	Sum of all errors in the packets while receiving on the interface.
Input Overrun	Number of times the receiver hardware was incapable of handling received data to a hardware buffer because the input rate exceeded the receiver's capability to handle that data.
Input Resource	Total number of resource errors in packets received on the interface.
Runts	Number of packets that are discarded because they are similar to the medium's minimum packet size.
Throttle	Total number of times the interface advised a sending NIC that it was overwhelmed by packets being sent and to slow the pace of delivery.
Output Collision	Total number of packet retransmitted due to an Ethernet collision.
Output Resource	Resource errors in packets transmitted on the interface.
Output Errors	Errors that prevented the final transmission of packets out of the interface.
Operational Status	Operational state of the physical ethernet interface on the AP.
Duplex	Interface's duplex mode.
TX Bytes	Number of bytes in the error-free packets transmitted on the interface.
TX Unicast Packets	Total number of unicast packets transmitted on the interface.

Button	Description
TX Non-Unicast Packets	Total number of nonunicast or multicast packets transmitted on the interface.
Input Aborts	Total number of packets terminated while receiving on the interface.
Input Frames	Total number of packets received incorrectly that has a CRC error and a noninteger number of octets on the interface.
Input Drops	Total number of packets dropped while receiving on the interface because the queue was full.
Unknown Protocol	Total number of packets discarded on the interface due to an unknown protocol.
Giants	Number of packets that are discarded because they exceeded the medium's maximum packet size.
Interface Resets	Number of times that an interface has been completely reset.
Output No Buffer	Total number of packets discarded because there was no buffer space.
Output Underrun	Number of times the transmitter has been running faster than the router can handle.
Output Total Drops	Total number of packets dropped while transmitting from the interface because the queue was full.

Searching for Access Point Radios

Information About Searching for Access Point Radios

You can search for specific access point radios in the list of radios on the 802.11a/n Radios page or the 802.11b/g/n Radios page. You can access these pages from the Monitor tab on the menu bar when viewing access point radios or from the Wireless tab on the menu bar when configuring access point radios. To search for specific access point radios, you create a filter to display only radios that meet certain criteria (such as radio MAC address, access point name, or CleanAir status). This feature is especially useful if your list of access point radios spans multiple pages, which prevents you from viewing them all at once.

Searching for Access Point Radios (GUI)

Step 1 Perform either of the following:

• Choose **Monitor** > **Access Points Summary** > **802.11a/n (or 802.11b/g/n)** > **Radios** > **Details** to open the 802.11a/n (or 802.11b/g/n) Radios page.

• Choose **Wireless** > **Access Points** > **Radios** > **802.11a/n** (or **802.11b/g/n**) to open the 802.11a/n (or 802.11b/g/n) Radios page.

These pages show all of the 802.11a/n or 802.11b/g/n access point radios that are joined to the controller and their current settings.

The total number of access point radios appears in the upper right-hand corner of the page. If the list of radios spans multiple pages, you can access these pages by clicking the page number links. Each page shows up to 25 access point radios.

Note In a Cisco Unified Wireless Network environment, the 802.11a/n and 802.11b/g/n radios should not be differentiated based on their Base Radio MAC addresses, as they may have the same addresses. Instead, the radios should be differentiated based on their physical addresses.

Step 2 Click **Change Filter** to open the **Search AP** dialog box.

Step 3 Select one of the following check boxes to specify the criteria used when displaying access point radios:

• **MAC Address**—Base radio MAC address of an access point radio.

• **AP Name**—Access point name.

Note When you enable the MAC address filter, the other filters are disabled automatically. When you enable any of the other filters, the MAC address filter is disabled automatically.

• **CleanAir Status**—Select one or more of the following check boxes to specify the operating status of the access points:

• **UP**—The spectrum sensor for the access point radio is currently operational.

• **DOWN**—The spectrum sensor for the access point radio is currently not operational because an error has occurred. The most likely reason for the error is that the access point radio is disabled.

• **ERROR**—The spectrum sensor for the access point radio has crashed, making CleanAir monitoring nonoperational for this radio. We recommend rebooting the access point or disabling CleanAir functionality on the radio.

• **N/A**—The access point radio is not capable of supporting CleanAir functionality. Currently, only Cisco Aironet 3500 series access point radios can be configured for Cisco CleanAir.

Step 4 Click **Find** to commit your changes. Only the access point radios that match your search criteria appear on the 802.11a/n Radios page or the 802.11b/g/n Radios page, and the Current Filter parameter at the top of the page specifies the filter used to generate the list (for example, MAC Address:00:1e:f7:75:0a:a0 or AP Name:pmsk-ap).

Note If you want to remove the filter and display the entire access point radio list, click **Clear Filter**.