



Monitoring Cisco Cius Remotely

From the **Cisco Cius** web page you can view a variety of information about the device, including:

- Device information
- Network setup information
- Ethernet statistics
- WLAN setup
- Device logs
- Streaming statistics

This chapter describes the information that you can obtain from Cisco Cius web page. You can use this information to remotely monitor the operation of Cisco Cius and to assist with troubleshooting.

You can also obtain much of this information directly from Cisco Cius. For more information, see [Viewing Model Information Status and Statistics on Cisco Cius](#).

For more information about troubleshooting Cisco Cius, see [Troubleshooting and Maintenance](#).

This chapter comprises the following topics:

- [Accessing the Web Page for Cisco Cius, page 1](#)
- [Enabling and Disabling Web Page Access, page 3](#)
- [Device Information, page 3](#)
- [Network Setup, page 4](#)
- [Network Statistics, page 9](#)
- [Device Logs, page 12](#)
- [Streaming Statistics, page 12](#)

Accessing the Web Page for Cisco Cius

To access the web page for Cisco Cius, perform these steps.



Note If you cannot access the web page, it may be disabled (the page is disabled by default). See the [Enabling and Disabling Web Page Access](#), on page 3 for more information.

Procedure

Step 1 Obtain the IP address of Cisco Cius using one of these methods:

- Search for the Cius in Cisco Unified Communications Manager Administration by choosing **Device > Phone**. Cisco Cius devices registered with Cisco Unified Communications Manager display the IP address on the Find and List Phones window and at the top of the Phone Configuration window.
- On Cisco Cius, choose **Settings > About Cius > Status > DHCP Information** and get the IP address for either Wi-Fi or Ethernet.

Step 2 Open a web browser and enter the following URL, where IP_address is the IP address of Cisco Cius: `http://<IP_address>` or `https://<IP_address>` (depending on the protocol supported by Cisco Cius)

The web page for Cisco Cius includes these topics:

- Device Information - Provides device settings and related information for Cisco Cius. For more information, see [Device Information](#), on page 3.
- Network Setup - Provides network setup information and information about other Cisco Cius settings. For more information, see [Network Setup](#), on page 4.
- Ethernet Statistics - Includes the following hyperlinks, which provide information about network traffic:
 - Ethernet Information - Provides information about Ethernet traffic. For more information, see the [Network Statistics](#), on page 9.
 - Access - Provides information about network traffic to and from Cisco Cius. For more information, see [Network Statistics](#), on page 9.
 - Network - Provides information about network traffic to and from Cisco Cius. For more information, see [Network Statistics](#), on page 9.
- WLAN Setup
- Device Logs - Includes the following hyperlinks, which provide information that you can use for troubleshooting:
 - Console Logs - Includes hyperlinks to individual log files. For more information, see [Device Logs](#), on page 12.
 - Core Dumps - Includes hyperlinks to individual dump files. For more information, see [Device Logs](#), on page 12.
 - Status Messages - Provides up to the 10 most recent status messages that Cisco Cius has generated since it was last powered up. For more information, see [Device Logs](#), on page 12.
 - Debug Display - Provides debug messages that might be useful to Cisco Technical Assistance Center (TAC) if you require assistance with troubleshooting. For more information, see [Device Logs](#), on page 12.

- Streaming Statistics - Includes the Audio and Video statistics, Stream 1, Stream 2, Stream 3, Stream 4, Stream 5 and Stream 6 hyperlinks, which display a variety of streaming statistics. For more information, see [Streaming Statistics, on page 12](#).

Enabling and Disabling Web Page Access

For security purposes, access to the web pages for Cisco Cius is disabled by default. This prevents access to the web pages described in this chapter and to the Cisco Unified Communications Manager User Options web pages.

To enable access to the web pages for Cisco Cius, follow these steps from Cisco Unified Communications Manager Administration.

Procedure

- Step 1** Choose **Device > Phone**.
 - Step 2** Specify the criteria to find Cisco Cius and click **Find**, or click **Find** to display a list of all phones.
 - Step 3** Click the device name to open the Phone Configuration window for the device.
 - Step 4** Scroll down to the Product Specific Configuration section. From the **Web Access** drop-down list, choose **Enabled**.
 - Step 5** Click **Save**.
- Note** Some features, such as Cisco Quality Report Tool, do not function properly without access to Cisco Cius web pages. Disabling web access also affects any serviceability application that relies on web access, such as CiscoWorks.
- To disable a previously enabled web page, see the preceding steps about enabling access. Follow the same steps, but choose **Disabled** in Step 4 to disable the web page.

Device Information

The Device Information area on Cisco Cius web page includes device settings and related information for Cisco Cius. The following table describes these items.

To display the Device Information area, access the web page for Cisco Cius as described in the [Accessing the Web Page for Cisco Cius, on page 1](#), and then click the **Device Information** hyperlink.

Table 1: Device Information Area Items

Item	Description
MAC Address	Ethernet MAC Address of Cisco Cius
WLAN MAC Address	IP Address for Wi-Fi connection

Item	Description
Host Name	Unique, fixed name that is automatically assigned to Cisco Cius based on its MAC address
Phone DN	Directory number assigned to Cisco Cius
Version	Identifier of the firmware running on Cisco Cius
Dock Firmware	Identifier of the firmware running on the attached media station
Hardware Revision	Revision value of Cisco Cius hardware
Serial Number	Unique serial number of Cisco Cius
Model Number	Model number of Cisco Cius
Message Waiting	Indicates if there is a voice message waiting on the primary line for Cisco Cius.
UDI	Provides the following Cisco Unique Device Identifier (UDI) information about Cisco Cius: <ul style="list-style-type: none"> • Device Type - Indicates hardware type • Device Description - Provides the name of Cisco Cius associated with the indicated model type • Serial Number - Specifies the unique serial number of Cisco Cius.
Time	Time obtained from the Date/Time Group in Cisco Unified Communications Manager to which Cisco Cius belongs
Time Zone	Time zone obtained from the Date/Time Group in Cisco Unified Communications Manager to which Cisco Cius belongs
Date	Date obtained from the Date/Time Group in Cisco Unified Communications Manager to which Cisco Cius belongs

Network Setup

The Network Setup area on Cisco Cius web page provides network setup information and information about other Cisco Cius settings. The following table describes these items.

You can view and set many of these items from the Network Setup menu on the Cisco Cius. For more information, see [Configuring Settings on Cisco Cius](#).

To display the Network Setup area, access the web page for Cisco Cius as described in the [Accessing the Web Page for Cisco Cius, on page 1](#), and then click the **Network Setup** hyperlink.

Table 2: Network Setup Items

Item	Description
DHCP Server	IP address of the Dynamic Host Configuration Protocol (DHCP) server from which Cisco Cius obtains its IP address.
MAC Address (Ethernet MAC Address)	Media Access Control (MAC) address of Cisco Cius.
Host Name	Host name that the DHCP server assigned to Cisco Cius.
Domain Name	Name of the Domain Name System (DNS) domain in which Cisco Cius resides.
IP Address	Internet Protocol (IP) address of Cisco Cius.
Subnet Mask	Subnet Mask used by Cisco Cius.
Subnet Mask	Subnet Mask used by Cisco Cius.
DNS Server 1-3	Primary Domain Name System (DNS) server (DNS Server 1) and optional backup DNS servers (DNS Server 2–3) used by Cisco Cius.
Operational VLAN ID	Auxiliary Virtual Local Area Network (VLAN) configured on a Cisco Catalyst switch in which Cisco Cius is a member.
Admin. VLAN ID	Auxiliary VLAN in which Cisco Cius is a member.
SW Port Speed	Speed and duplex of the switch port, where: <ul style="list-style-type: none"> • A - Auto Negotiate • 10H - 10-BaseT/half duplex • 10F - 10-BaseT/full duplex • 100H - 100-BaseT/half duplex • 100F - 100-BaseT/full duplex • 1000F - 1000-BaseT/full duplex • No Link - No connection to the switch port

Item	Description
PC Port Speed	<p>Speed and duplex of the switch port, where:</p> <ul style="list-style-type: none"> • A - Auto Negotiate • 10H - 10-BaseT/half duplex • 10F - 10-BaseT/full duplex • 100H - 100-BaseT/half duplex • 100F - 100-BaseT/full duplex • 1000F - 1000-BaseT/full duplex • No Link - No connection to the switch port
PC VLAN	<p>VLAN used to identify and remove 802.1P/Q tags from packets sent to the PC.</p>
CUCM Server 1-5	<p>Host names or IP addresses, in prioritized order, of the Cisco Unified Communications Manager servers with which Cisco Cius can register. An item can also show the IP address of an SRST router that is capable of providing limited Cisco Unified Communications Manager functionality, if such a router is available.</p> <p>For an available server, an item shows the Cisco Unified Communications Manager server IP address and one of the following states:</p> <ul style="list-style-type: none"> • Active - Cisco Unified Communications Manager server from which Cisco Cius is currently receiving call-processing services. • Standby - Cisco Unified Communications Manager server to which Cisco Cius switches if the current server becomes unavailable. • Blank - No current connection to this Cisco Unified Communications Manager server. <p>An item may also include the Survivable Remote Site Telephony (SRST) designation, which identifies an SRST router capable of providing Cisco Unified Communications Manager functionality with a limited feature set. This router assumes control of call processing if all other Cisco Unified Communications Manager servers become unreachable. The SRST Cisco Unified Communications Manager always appears last in the list of servers, even if it is active. You configure the SRST router address in the Device Pool section in Cisco Unified Communications Manager Configuration window.</p>
Information URL	<p>URL of the help text that appears on Cisco Cius.</p>
Directories URL	<p>URL of the server from which Cisco Cius obtains directory information.</p>
Messages URL	<p>URL of the server from which Cisco Cius obtains message services.</p>
Services URL	<p>URL of the server from which Cisco Cius obtains services.</p>

Item	Description
Forwarding Delay	The time that is spent in the listening and learning state.
DHCP Enabled	Indicates whether DHCP is being used by Cisco Cius.
DHCP Address Released	Indicates the setting of the DHCP Address Released option on Cisco Cius Network Configuration menu.
TFTP Server 1	Primary Trivial File Transfer Protocol (TFTP) server used by Cisco Cius.
TFTP Server 2	Backup Trivial File Transfer Protocol (TFTP) server used by Cisco Cius.
Alternate TFTP	Indicates whether Cisco Cius is using an alternative TFTP server.
Idle URL	URL that Cisco Cius displays when Cisco Cius has not been used for the time specified by Idle URL Time, and no menu is open.
Idle URL Time	Number of seconds that Cisco Cius has not been used and no menu is open before the XML service specified by Idle URL is activated.
Proxy Server URL	URL of proxy server, which makes HTTP requests to non-local host addresses on behalf of Cisco Cius HTTP client and provides responses from the non-local host to Cisco Cius HTTP client.
Authentication URL	URL that Cisco Cius uses to validate requests made to Cisco Cius web server.
User Locale	User locale associated with Cisco Cius user. Identifies a set of detailed information to support users, including language, font, date, and time formatting, and alphanumeric keyboard text information.
Network Locale	Network locale associated with Cisco Cius user. Identifies a set of detailed information to support Cisco Cius in a specific location, including definitions of the tones and cadences used by Cisco Cius.
User Locale Version	Version of the user locale loaded on Cisco Cius.
Network Locale Version	Version of the network locale loaded on Cisco Cius.
PC Port Disabled	Indicates whether the PC port on Cisco Cius media station is enabled or disabled.
GARP Enabled	Indicates whether Cisco Cius learns MAC addresses from Gratuitous ARP responses.
Video Capability Enabled	Indicates whether Cisco Cius can participate in video calls.
Voice VLAN Enabled	Indicates whether Cisco Cius allows a device attached to the PC port to access the Voice VLAN.
DSCP for Call Control	DSCP IP classification for call control signaling.

Item	Description
DSCP IP classification for call control signaling.	DSCP IP classification for Cisco Cius configuration transfer.
DSCP for Services	DSCP IP classification for Cisco Cius-based services.
Security Mode	The security mode set for Cisco Cius.
Web Access Enabled	Indicates whether web access is enabled (Yes) or disabled (No) for Cisco Cius.
Span to PC Port	Indicates whether Cisco Cius will forward packets transmitted and received on the network port to the access port.
CDP on PC Port	Indicates whether CDP is supported on the PC port (default is enabled). When CDP is disabled in Cisco Unified Communications Manager, a warning is displayed, indicating that disabling CDP on the PC port prevents CVTA from working. The current PC and switch port CDP values are shown on the Settings menu.
CDP on SW Port	Indicates whether CDP is supported on the switch port (default is enabled). Enable CDP on the switch port for VLAN assignment for Cisco Cius, power negotiation, QoS management, and 802.1x security. Enable CDP on the switch port when Cisco Cius is connected to a Cisco switch. When CDP is disabled in Cisco Unified Communications Manager, a warning is presented, indicating that CDP disabled on the switch port only if Cisco Cius is connected to a non-Cisco switch. The current PC and switch port CDP values are shown on the Settings menu.
LLDP-MED: SW Port	Indicates whether Link Layer Discovery Protocol Media Endpoint Discovery (LLDP-MED) is enabled on the switch port.
LLDP: PC Port	Indicates whether Link Layer Discovery Protocol (LLDP) is enabled on the PC port.
LLDP Power Priority	Advertises Cisco Cius power priority to the switch, enabling the switch to appropriately provide power to Cisco Cius. Settings include: <ul style="list-style-type: none"> • Unknown - Default • Low • High • Critical
LLDP Asset ID	Identifies the asset ID assigned to Cisco Cius for inventory management.

Item	Description
Switch Port Remote Configuration	Allows the administrator to configure the speed and function of the Cisco Cius table port remotely by using Cisco Unified Communications Manager Administration.
PC Port Remote Configuration	Allows the administrator to configure the speed and function of the Cisco Cius table port remotely by using Cisco Unified Communications Manager Administration.

Network Statistics

The following network statistics hyperlinks on Cisco Cius web page provide information about network traffic on Cisco Cius. To display a network statistics area, access the web page for Cisco Cius as described in the [Accessing the Web Page for Cisco Cius, on page 1](#).

- Ethernet Information - Provides information about Ethernet traffic. The first table describes the items in this area.
- Access area - Provides information about network traffic to and from Cisco Cius. The second table describes the items in this area.
- Network area - Provides information about network traffic to and from Cisco Cius. The second table describes the items in this area.

To display a network statistics area, access the web page for Cisco Cius as described in the [Accessing the Web Page for Cisco Cius, on page 1](#), and then click the **Ethernet Information**, the **Access**, or the **Network** hyperlink.

Table 3: Ethernet Information Items

Item	Description
Tx Frames	Total number of packets transmitted by Cisco Cius
Tx broadcast	Total number of broadcast packets transmitted by Cisco Cius
Tx multicast	Total number of multicast packets transmitted by Cisco Cius
Tx unicast	Total number of unicast packets transmitted by Cisco Cius
Rx Frames	Total number of packets received by Cisco Cius
Rx broadcast	Total number of broadcast packets received by Cisco Cius
Rx multicast	Total number of multicast packets received by Cisco Cius
Rx unicast	Total number of unicast packets received by Cisco Cius

Item	Description
Rx PacketNoDes	Total number of shed packets caused by no Direct Memory Access (DMA) descriptor

Table 4: Access Area and Network Area Items

Item	Description
Rx totalPkt	Total number of packets received by Cisco Cius
Rx crcErr	Total number of packets received with CRC failed
Rx alignErr	Total number of packets received between 64 and 1522 bytes in length with a bad Frame Check Sequence (FCS)
Rx multicast	Total number of multicast packets received by Cisco Cius
Rx broadcast	Total number of broadcast packets received by Cisco Cius
Rx unicast	Total number of unicast packets received by Cisco Cius
Rx shortErr	Total number of FCS error packets or Align error packets received that are less than 64 bytes in size
Rx shortGood	Total number of good packets received that are less than 64 bytes size
Rx longGood	Total number of good packets received that are greater than 1522 bytes in size
Rx longErr	Total number of FCS error packets or Align error packets received that are greater than 1522 bytes in size
Rx size64	Total number of packets received, including bad packets, that are between 0 and 64 bytes in size
Rx size65to127	Total number of packets received, including bad packets, that are between 65 and 127 bytes in size
Rx size128to255	Total number of packets received, including bad packets, that are between 128 and 255 bytes in size
Rx size256to511	Total number of packets received, including bad packets, that are between 256 and 511 bytes in size
Rx size512to1023	Total number of packets received, including bad packets, that are between 512 and 1023 bytes in size
Rx size1024to1518	Total number of packets received, including bad packets, that are between 1024 and 1518 bytes in size

Item	Description
Rx tokenDrop	Total number of packets dropped due to lack of resources (for example, FIFO overflow)
Tx excessDefer	Total number of packets delayed from transmitting due to medium being busy
Tx lateCollision	Number of times that collisions occurred later than 512 bit times after the start of packet transmission
Tx totalGoodPkt	Total number of good packets (multicast, broadcast, and unicast) received by Cisco Cius
Tx Collisions	Total number of collisions that occurred while a packet was being transmitted
Tx excessLength	Total number of packets not transmitted because the packet experienced 16 transmission attempts
Tx broadcast	Total number of broadcast packets transmitted by Cisco Cius
Tx multicast	Total number of multicast packets transmitted by Cisco Cius
LLDP FramesOutTotal	Total number of LLDP frames sent out from Cisco Cius
LLDP AgeoutsTotal	Total number of LLDP frames that have been timed out in cache
LLDP FramesDiscardedTotal	Total number of LLDP frames that are discarded when any of the mandatory TLVs is missing or out of order or contains out-of-range string length
LLDP FramesInErrorsTotal	Total number of LLDP frames received with one or more detectable errors
LLDP FramesInTotal	Total number of LLDP frames received on Cisco Cius
LLDP TLVDiscardedTotal	Total number of LLDP TLVs that are discarded
LLDP TLVUnrecognizedTotal	Total number of LLDP TLVs that are not recognized on Cisco Cius
CDP Neighbor Device ID	Identifier of a device connected to this port discovered by CDP protocol
CDP Neighbor IP Address	IP address of the neighbor device discovered by CDP protocol
CDP Neighbor Port	Neighbor device port to which Cisco Cius is connected discovered by CDP protocol
LLDP Neighbor Device ID	Identifier of a device connected to this port discovered by LLDP protocol
LLDP Neighbor IP Address	IP address of the neighbor device discovered by LLDP protocol
LLDP Neighbor Port	Neighbor device port to which Cisco Cius is connected discovered by LLDP protocol

Item	Description
Port Information	Speed and duplex information

Device Logs

The following device logs hyperlinks on Cisco Cius web page provide information you can use to help monitor and troubleshoot Cisco Cius. To access a device log area, access the web page for Cisco Cius as described in [Accessing the Web Page for Cisco Cius, on page 1](#).

- **Console Logs** - Includes hyperlinks to individual log files. The console log files include the current syslog, archived logs from the inactive load, logs from the last reboot, archived logs for the current load, and compressed collections of logs generated by the Problem Report Tool.
- **Core Dumps** - Includes hyperlinks to individual dump files. The core dumps (tombstone_xx) include data from application crashes. The ANR file (traces.txt) includes data for applications the Cius OS determines to be not responding and the user chooses to terminate the application.
- **Status Messages** - Includes up to the 50 most recent status messages that Cisco Cius has generated since it was last powered up. You can also see this information from the Status Messages screen on the device. [Status Messages Screen](#) describes the status messages that can appear.
- **Debug Display** - Includes debug messages that might be useful to Cisco TAC if you require assistance with troubleshooting.

Streaming Statistics

Cisco Cius streams information when it is on a call or running a service that sends or receives audio or data.

The streaming statistics areas on Cisco Cius web page provide information about the streams.

To display a Streaming Statistics area, access the web page for Cisco Cius as described in [Accessing the Web Page for Cisco Cius, on page 1](#), and then click a **Stream** hyperlink.

The following table describes the items in the Streaming Statistics areas.

Table 5: Streaming Statistics Area Items

Item	Description
Remote Address	IP address and UDP port of the destination of the stream.
Local Address	IP address and UDP port of Cisco Cius.
Start Time	Internal time stamp indicating when Cisco Unified Communications Manager requested that Cisco Cius start transmitting packets.
Stream Status	Indication of whether streaming is active or not.

Item	Description
Host Name	Unique, fixed name that is automatically assigned to Cisco Cius based on its MAC address.
Sender Packets	Total number of RTP data packets transmitted by Cisco Cius since starting this connection. The value is 0 if the connection is set to Receive Only.
Sender Octets	Total number of payload octets transmitted in RTP data packets by Cisco Cius since starting this connection. The value is 0 if the connection is set to Receive Only.
Sender Codec	Type of audio encoding used for the transmitted stream.
Sender Reports Sent (see note)	Number of times the RTCP Sender Report has been sent.
Sender Report Time Sent (see note)	Internal time stamp indication when the last RTCP Sender Report was sent.
Rcvr Lost Packets	Total number of RTP data packets that have been lost since starting receiving data on this connection. Defined as the number of expected packets less the number of packets received, where the number of received packets includes any that are late or duplicate. The value displays as 0 if the connection was set to Send Only.
Avg Jitter	Estimate of mean deviation of the RTP data packet inter-arrival time, measured in milliseconds. The value displays as 0 if the connection was set to Send Only.
Rcvr Codec	Type of audio encoding used for the received stream.
Rcvr Reports Sent (see note)	Number of times the RTCP Receiver Reports have been sent.
Rcvr Report Time Sent (see note)	Internal time stamp indication when a RTCP Receiver Report was sent.
Rcvr Packets	Total number of RTP data packets received by Cisco Cius since starting receiving data on this connection. Includes packets received from different sources if this is a multicast call. The value displays as 0 if the connection was set to Send Only.
Rcvr Octets	Total number of payload octets received in RTP data packets by the device since starting reception on the connection. Includes packets received from different sources if this is a multicast call. The value displays as 0 if the connection was set to Send Only.
Cumulative Conceal Ratio	Total number of concealment frames divided by total number of speech frames received from start of the voice stream.

Item	Description
Interval Conceal Ratio	Ratio of concealment frames to speech frames in preceding 3-second interval of active speech. If using voice activity detection (VAD), a longer interval might be required to accumulate 3 seconds of active speech.
Max Conceal Ratio	Highest interval concealment ratio from start of the voice stream.
Conceal Secs	Number of seconds that have concealment events (lost frames) from the start of the voice stream (includes severely concealed seconds).
Severely Conceal Secs	Number of seconds that have more than five percent concealment events (lost frames) from the start of the voice stream.
Latency (see note)	Estimate of the network latency, expressed in milliseconds. Represents a running average of the round-trip delay, measured when RTCP receiver report blocks are received.
Max Jitter	Maximum value of instantaneous jitter, in milliseconds.
Sender Size	RTP packet size, in milliseconds, for the transmitted stream.
Sender Reports Received (see note)	Number of times RTCP Sender Reports have been received.
Sender Report Time Received (see note)	Last time at which an RTCP Sender Report was received.
Rcvr Size	RTP packet size, in milliseconds, for the received stream.
Rcvr Discarded	RTP packets received from network but discarded from jitter buffers.
Rcvr Reports Received (see note)	Number of times RTCP Receiver Reports have been received.
Rcvr Report Time Received (see note)	Last time at which an RTCP Receiver Report was received.
Voice-Quality Metrics	
Cumulative Conceal Ratio	Total number of concealment frames divided by total number of speech frames received from start of the voice stream.
Interval Conceal Ratio	Ratio of concealment frames to speech frames in preceding three-second interval of active speech. If using voice activity detection (VAD), a longer interval might be required to accumulate 3 seconds of active speech.
Max Conceal Ratio	Highest interval concealment ratio from start of the voice stream.
Conceal Secs	Number of seconds that have concealment events (lost frames) from the start of the voice stream (includes severely concealed seconds).

Item	Description
Severely Conceal Secs	Number of seconds that have more than 5 percent concealment events (lost frames) from the start of the voice stream.

**Note**

When the RTP Control Protocol is disabled, no data generates for this field and therefore it displays as 0.

For more information, see [Configuring Settings on Cisco Cius](#).

