Monitoring Phone Systems

Cisco IP Phone Status

This section describes how to view model information, status messages, and network statistics on the Cisco IP Phone 8800 series.

- Model Information: Displays hardware and software information about the phone.
- Status menu: Provides access to screens that display the status messages, network statistics, and statistics for the current call.

You can use the information that displays on these screens to monitor the operation of a phone and to assist with troubleshooting.

You can also obtain much of this information, and obtain other related information, remotely through the phone web page.

For more information about troubleshooting, see Troubleshooting.

Display Phone Information Window

To display the Model Information screen, follow these steps.

Procedure

Step 1 Press **Applications** ⚙.

Step 2 Select **Phone Information**.

If the user is connected to a secure or authenticated server, a corresponding icon (lock or certificate) displays in the Phone Information Screen to the right of the server option. If the user is not connected to a secure or authenticated server, no icon appears.

Step 3 To exit the Model Information screen, press **Exit**.

Phone Information Fields

The following table describes the phone information settings.

Table 1: Phone Information Settings

Option	Description
Model number	Model number of the phone.
IPv4 Address	IP address of the phone.
Host name	Host name of the phone.
Active load	Version of firmware currently installed on the phone. The user can press **Details** for more information.
Inactive load	Inactive load appears only when a download is in progress. A download icon and a status of "Upgrade in Progress" or "Upgrade Failed" also display. If a user presses **Details** during an upgrade, the download filename and components are listed. A new firmware image can be set to download in advance of a maintenance window. Thus instead of waiting for all of the phones to download the firmware, the system switches more rapidly between resetting an existing load to Inactive status and installing the new load. When the download is complete, the icon changes to indicate the completed status; and a check mark displays for a successful download, or an "X" displays for a failed download. If possible, the rest of the loads continue to download.
Last upgrade	Date of the most recent firmware upgrade.
Active server	Domain name of the server to which the phone is registered.
Stand-by server	Domain name of the standby server.

Display Status Menu

The Status menu includes the following options, which provide information about the phone and phone operations:

- Status Messages: Displays the Status Messages screen, which shows a log of important system messages.
- Ethernet Statistic: Displays the Ethernet Statistics screen, which shows Ethernet traffic statistics.
- Wireless Statistics: Displays the Wireless Statistics screen, if applicable.
- Call Statistics: Displays counters and statistics for the current call.

- Current Access Point: Displays the Current Access Point screen, if applicable.

To display the Status menu, perform these steps:

Procedure

Step 1 To display the Status menu, press **Applications** .

Step 2 Select **Admin settings** > **Status**.

Step 3 To exit the Status menu, press **Exit**.

Display Status Messages Window

The Status Messages window displays the 30 most recent status messages that the phone has generated. You can access this screen at any time, even if the phone has not finished starting up.

Procedure

Step 1 Press **Applications** .

Step 2 Select **Admin settings** > **Status** > **Status messages**.

Step 3 To remove the current status messages, press **Clear**.

Step 4 To exit the Status Messages screen, press **Exit**.

Status Messages Fields

The following table describes the status messages that display on the Status Messages screen of the phone.

Table 2: Status Messages on the Cisco Unified IP Phone

Message	Description	Possible explanation and actio
CFG TFTP Size Error	The configuration file is too large for file system on the phone.	Power cycle the phone.
Checksum Error	Downloaded software file is corrupted.	Obtain a new copy of the phon the TFTPPath directory. You sh this directory when the TFTP s otherwise, the files may be cor
Could not acquire an IP address from DHCP	The phone has not previously obtained an IP address from a DHCP Server. This can occur when you perform an out of box or factory reset.	Confirm that the DHCP server address is available for the pho
CTL and ITL installed	The CTL and ITL files are installed on the phone.	None. This message is informa file nor the ITL file was install

Message	Description	Possible explanation and action
CTL Installed	A certificate trust list (CTL) file is installed in the phone.	None. This message is informatior was not installed previously.
CTL update failed	The phone could not update the certificate trust list (CTL) file.	Problem with the CTL file on the T
DHCP timeout	DHCP server did not respond.	Network is busy: The errors should the network load reduces. No network connectivity between t phone: Verify the network connect DHCP server is down: Check confi Errors persist: Consider assigning
DNS timeout	DNS server did not respond.	Network is busy: The errors should the network load reduces. No network connectivity between phone: Verify the network connect DNS server is down: Check configu
DNS unknown host	DNS could not resolve the name of the TFTP server or Cisco Unified Communications Manager.	Verify that the host names of the T Unified Communications Manager in DNS. Consider using IP addresses rather
Duplicate IP	Another device is using the IP address that is assigned to the phone.	If the phone has a static IP address assigned a duplicate IP address. If you are using DHCP, check the configuration.
Erasing CTL and ITL files	Erasing CTL or ITL file.	None. This message is informatior

Error update locale	One or more localization files could not be found in the TFTPPath directory or were not valid. The locale was not changed.	From Cisco Unified Operating Syste that the following files are located the TFTP File Management:
		• Located in subdirectory with locale:
		  • tones.xml
		• Located in subdirectory with s
		  • glyphs.xml
		  • dictionary.xml
		  • kate.xml

Message	Description	Possible explanation and actio
File not found <Cfg File>	The name-based and default configuration file was not found on the TFTP Server.	The configuration file for a pho is added to the Cisco Unified C database. If the phone does not Communications Manager data generates a **`CFG File Not`** • Phone is not registered wi Communications Manage You must manually add th Communications Manage phones to autoregister. Se for details. • If you are using DHCP, ve is pointing to the correct T • If you are using static IP ad of the TFTP server.
File Not Found <CTLFile.tlv>	This message displays on the phone when the Cisco Unified Communications Manager cluster is not in secure mode.	No impact; the phone can still Communications Manager.
IP address released	The phone is configured to release the IP address.	The phone remains idle until it reset the DHCP address.
ITL installed	The ITL file is installed in the phone.	None. This message is informat not installed previously.
Load rejected HC	The application that was downloaded is not compatible with the phone hardware.	Occurs if you attempted to inst this phone that did not support phone. Check the load ID that is assign Unified Communications Man **Phone**). Reenter the load that c
No default router	DHCP or static configuration did not specify a default router.	If the phone has a static IP add router is configured. If you are using DHCP, the DH a default router. Check the DH
No DNS server IP	A name was specified but DHCP or static IP configuration did not specify a DNS server address.	If the phone has a static IP add server is configured. If you are using DHCP, the DH a DNS server. Check the DHC
No Trust List installed	The CTL file or the ITL file is not installed on the phone.	The trust list is not configured Communications Manager, whi by default.

Message	Description	Possible explanation and action
Phone failed to register. Cert key size is not FIPS compliant.	FIPS requires that the RSA server certificate is 2048 bits or greater.	Update the certificate.
Restart requested by Cisco Unified Communications Manager	The phone is restarting due to on a request from Cisco Unified Communications Manager.	Configuration changes were likely Cisco Unified Communications M pressed so that the changes take ef
TFTP access error	TFTP server is pointing to a directory that does not exist.	If you are using DHCP, verify that pointing to the correct TFTP serve If you are using static IP addresses TFTP server.
TFTP error	The phone does not recognize an error code that the TFTP server provided.	Contact Cisco TAC.
TFTP timeout	TFTP server did not respond.	Network is bus: The errors should r the network load reduces. No network connectivity between phone: Verify the network connect TFTP server is down: Check confi
Timed Out	Supplicant attempted 802.1X transaction but timed out to due the absence of an authenticator.	Authentication typically times out configured on the switch.
Trust List update failed	Update of the CTL and ITL files failed.	Phone has CTL and ITL files install the new CTL and ITL files. Possible reasons for failure: • Network failure occurred. • TFTP server was down. • The new security token that w and the TFTP certificate that are introduced, but are not ava and ITL files in the phone. • Internal phone failure occurre Possible solutions: • Check network connectivity. • Check whether the TFTP serv functioning normally. • If the Transactional Vsam Se supported on Cisco Unified Co check whether the TVS server normally. • Verify whether the security to are valid. Manually delete the CTL and ITL solutions fail; reset the phone.

Message	Description	Possible explanation and actio
Trust List updated	The CTL file, the ITL file, or both files are updated.	None. This message is informa
Version error	The name of the phone load file is incorrect.	Make sure that the phone load
XmlDefault.cnf.xml, or .cnf.xml corresponding to the phone device name	Name of the configuration file.	None. This message indicates th file for the phone.

Related Topics

Cisco Unified Communications Manager Documentation

Display Network Information Screen

Use the information displayed on the Network Info screen to resolve connection issues on a phone.

A message is displayed on the phone if a user has trouble connecting to a phone network.

Procedure

Step 1 To display the Status menu, press **Applications** .

Step 2 Select **Admin settings** > **Status** > **Status messages**.

Step 3 Select **Network Info**.

Step 4 To exit Network Info, press **Exit**.

Display Network Statistics Screen

The Networks Statistics screen displays information about the phone and network performance.

To display the Network Statistics screen, follow these steps:

Procedure

Step 1 Press **Applications** .

Step 2 Select **Admin settings**>**Status**>**Network statistics**.

Step 3 To reset the Rx Frames, Tx Frames, and Rx Broadcasts statistics to 0, press **Clear**.

Step 4 To exit the Ethernet Statistics screen, press **Exit**.

Ethernet Statistics Information

The following tables describe the information in the Ethernet Statistics screen.

Table 3: Ethernet Statistics Information

Item	Description
Rx Frames	Number of packets that the phone received.
Tx Frames	Number of packets that the phone sent.
Rx Broadcasts	Number of broadcast packets that the phone received.
Restart Cause	Cause of the last reset of the phone. Specifies one of the following values: • Initialized • TCP-timeout • CM-closed-TCP • TCP-Bad-ACK • CM-reset-TCP • CM-aborted-TCP • CM-NAKed • KeepaliveTO • Failback • Phone-Keypad • Phone-Re-IP • Reset-Reset • Reset-Restart • Phone-Reg-Rej • Load Rejected HC • CM-ICMP-Unreach • Phone-Abort
Elapsed Time	Amount of time that has elapsed since the phone last rebooted.
Port 1	Link state and connection of the Network port. For example, **`Auto 100 Mb Full-Duplex`** means that the Network port is in a link-up state and has autonegotiated a full-duplex, 100-Mbps connection.
Port 2	Link state and connection of the PC port.
DHCP state (IPv4 / IPv6)	• In IPv4-only mode, displays only the DHCPv4 state, such as DHCP BOUND. • In IPv6-mode, displays only the DHCPv6 state, such as ROUTER ADVERTISE. • DHCPv6 state information is displayed.

The following tables describe the messages that appear for DHCPv4 and DHCPv6 states.

Table 4: DHCPv4 ethernet statistics messages

DHCPv4 state	Description
CDP INIT	CDP is not bound or WLAN is not in service
DHCP BOUND	DHCPv4 is BOUND
DHCP DISABLED	DHCPv4 is disabled
DHCP INIT	DHCPv4 is INIT
DHCP INVALID	DHCPv4 is INVALID; this is initial state
DHCP RENEWING	DHCPv4 is RENEWING
DHCP REBINDING	DHCPv4 is REBINDING
DHCP REBOOT	DHCPv4 is init-reboot
DHCP REQUESTING	DHCPv4 is requesting
DHCP RESYNC	DHCPv4 is RESYNCH
DHCP WAITING COLDBOOT TIMEOUT	DHCPv4 is booting
DHCP UNRECOGNIZED	Unrecognized DHCPv4 state
DISABLED DUPLICATE IP	Duplicated IPv4 Address
DHCP TIMEOUT	DHCPv4 Timeout
IPV4 STACK TURNED OFF	Phone is in IPv6-only mode with IPv4 Stack turned off
ILLEGAL IPV4 STATE	Illegal IPv4 state and should not happen

Table 5: DHCPv6 ethernet statistics messages

DHCPv6 State	Description
CDP INIT	CDP is initializing
DHCP6 BOUND	DHCPv6 is BOUND
DHCP6 DISABLED	DHCPv6 is DISABLED
DHCP6 RENEW	DHCPv6 is renewing
DHCP6 REBIND	DHCPv6 is rebinding
DHCP6 INIT	DHCPv6 is initializing
DHCP6 SOLICIT	DHCPv6 is soliciting
DHCP6 REQUEST	DHCPv6 is requesting

DHCPv6 State	Description
DHCP6 RELEASING	DHCPv6 is releasing
DHCP6 RELEASED	DHCPv6 is released
DHCP6 DISABLING	DHCPv6 is disabling
DHCP6 DECLINING	DHCPv6 is declining
DHCP6 DECLINED	DHCPv6 is declined
DHCP6 INFOREQ	DHCPv6 is INFOREQ
DHCP6 INFOREQ DONE	DHCPv6 is INFOREQ DONE
DHCP6 INVALID	DHCPv6 is INVALID; this is initial state
DISABLED DUPLICATE IPV6	DHCP6 is DISABLED, but DUPLICATE IPV6 DETECTED
DHCP6 DECLINED DUPLICATE IP	DHCP6 is DECLINED -- DUPLICATE IPV6 DETECTED
ROUTER ADVERTISE., (DUPLICATE IP)	Duplicated autoconfigured IPv6 address
DHCP6 WAITING COLDBOOT TIMEOUT	DHCPv6 is booting
DHCP6 TIMEOUT USING RESTORED VAL	DHCPv6 timeout, using the value saved in flash memory
DHCP6 TIMEOUT CANNOT RESTORE	DHCP6 timeout and there is no backup from flash memory
IPV6 STACK TURNED OFF	Phone is in IPv4-only mode with IPv6 Stack turned off
ROUTER ADVERTISE., (GOOD IP)	
ROUTER ADVERTISE., (BAD IP)	
UNRECOGNIZED MANAGED BY	IPv6 Address is not from router or DHCPv6 server
ILLEGAL IPV6 STATE	Illegal IPv6 state and should not happen

Display Wireless Statistics Screen

This procedure only applies to the wireless Cisco IP Phone 8861.

To display the Wireless Statistics screen, follow these steps:

Procedure

Step 1 Press **Applications** .

Step 2 Select **Admin settings**>**Status** > **Wireless Statistics**.

Step 3 To reset the Wireless statistics to 0, press **Clear**.

Step 4 To exit the Wireless Statistics screen, press **Exit**.

WLAN Statistics

The following table describes the WLAN statistics on the phone.

Table 6: WLAN Statistics on the Cisco Unified IP Phone

Item	Description
tx bytes	Number of bytes that the phone transmitted.
rx bytes	Number of bytes that the phone received.
tx packets	Number of packets that the phone transmitted.
rx packets	Number of packets that the phone received.
tx packets dropped	The number of packets dropped during transmission.
rx packets dropped	The number of packets dropped during reception.
tx packets errors	The number of erroneous packets that phone transmitted.
rx packets errors	The number of erroneous packets that phone received.
Tx frames	The number of successfully transmitted MSDU.
tx multicast frames	The nunber of successfully transmitted multicast MSDU.
tx retry	The number of MSDU that is successfully transmitted after one or more retransmissions.
tx multi retry	The number of multicast MSDU that is successfully transmitted after one or more retransmissions.
tx failure	This number of MSDU that is not transmitted successfully due to the number of transmit attempts exceeding the retry limit.
rts succeess	This counter shall increment when a CTS is received in response to an RTS.
rts failure	This counter shall increment when a CTS is not received in response to an RTS.
ack failure	This counter shall increment when an ACK is not received when expected.
rx duplicate frames	The number of received frame that the Sequence Control field indicates is a duplicate.
rx fraagmented packets	The number of successfully received MPDU of type Data or Management.
Roaming count	The number of succesful roaming.

Display Call Statistics Window

You can access the Call Statistics screen on the phone to display counters, statistics, and voice-quality metrics of the most recent call.

Note You can also remotely view the call statistics information by using a web browser to access the Streaming Statistics web page. This web page contains additional RTCP statistics that are not available on the phone.

A single call can use multiple voice streams, but data is captured for only the last voice stream. A voice stream is a packet stream between two endpoints. If one endpoint is put on hold, the voice stream stops even though the call is still connected. When the call resumes, a new voice packet stream begins, and the new call data overwrites the former call data.

Procedure

Step 1 Press **Applications** .

Step 2 Select **Admin settings** > **Status** > **Call statistics**.

Step 3 To exit the Call Statistics screen, press **Exit**.

Call Statistics Fields

The following table describes the items on the Call Statistics screen.

Table 7: Call Statistics items for the Cisco Unified Phone

Item	Description
Receiver codec	Type of received voice stream (RTP streaming audio from codec): • G.729 • G.722 • G722.2 AMR-WB • G.711 mu-law • G.711 A-law • iLBC • Opus • iSAC

Item	Description
Sender codec	Type of transmitted voice stream (RTP streaming audio from codec): • G.729 • G.722 • G722.2 AMR-WB • G.711 mu-law • G.711 A-law • iLBC. • Opus • iSAC
Receiver size	Size of voice packets, in milliseconds, in the receiving voice stream (RTP streaming audio).
Sender size	Size of voice packets, in milliseconds, in the transmitting voice stream.
Receiver packets	Number of RTP voice packets that were received since voice stream opened. **Note** This number is not necessarily identical to the number of RTP voice packets that were received since the call began because the call might have been placed on hold.
Sender packets	Number of RTP voice packets that were transmitted since voice stream opened. **Note** This number is not necessarily identical to the number of RTP voice packets that were transmitted since the call began because the call might have been placed on hold.
Avg jitter	Estimated average RTP packet jitter (dynamic delay that a packet encounters when going through the network), in milliseconds, that was observed since the receiving voice stream opened.
Max jitter	Maximum jitter, in milliseconds, that was observed since the receiving voice stream opened.
Receiver discarded	Number of RTP packets in the receiving voice stream that were discarded (bad packets, too late, and so on). **Note** The phone discards payload type 19 comfort noise packets that Cisco Gateways generate, because they increment this counter.
Receiver lost packets	Missing RTP packets (lost in transit).
Voice-Quality Metrics	

Item	Description
Cumulative conceal ratio	Total number of concealment frames divided by total number of speech frames that were received from start of the voice stream.
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 seconds	Number of seconds that have concealment events (lost frames) from the start of the voice stream (includes severely concealed seconds).
Severely conceal seconds	Number of seconds that have more than 5 percent concealment events (lost frames) from the start of the voice stream.
Latency	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.

Display Current Access Point Window

The Current Access Point screen displays statistics about the access point that the Cisco IP Phone 8861 uses for wireless communications.

Procedure

Step 1 Press **Applications** .

Step 2 Select **Admin settings** > **Status** > **Current Access Point**.

Step 3 To exit the Current Access Point screen, press **Exit**.

Current Access Points Fields

The following table describes the fields in the Current Access Point screen.

Table 8: Current Access Point Items

Item	Description
AP name	Name of the AP, if it is CCX-compliant; otherwise, the MAC address displays here.
MAC address	MAC address of the AP.
Frequency	The latest frequency where this AP was observed.
Current channel	The latest channel where this AP was observed.
Last RSSI	The latest RSSI in which this AP was observed.

Item	Description
Beacon interval	Number of time units between beacons. A time unit is 1.024 ms.
Capability	This field contains a number of subfields that are used to indicate requested or advertised optional capabilities.
Basic rates	Data rates that the AP requires and the AP at which the station must be capable of operating.
Optional rates	Data rates that the AP supports and the AP that are optional for the station to operate at.
Supported VHT(rx) rates	VHT Supported RX MCS Set received from AP.
Supported VHT(tx) rates	VHT Supported TX MCS Set received from AP.
Supported HT MCS	HT Supported MCS Set received from AP.
DTIM period	Every nth beacon is a dtime period. After each DTIM beacon, the AP sends any broadcast or multicast packets that are queued for power-save devices.
Country code	A two-digit country code. Country information might not be display if the country information element (IE) is not present in the beacon.
Channels	A list of supported channels (from the country IE).
Power constraint	The amount of power by which the maximum transmit power should be reduced from the regulatory domain limit.
Power limit	Maximum transmit power in dBm that is permitted for that channel.
Channel utilization	The percentage of time, normalized to 255, in which the AP sensed the medium was busy, as indicated by the physical or virtual carrier sense (CS) mechanism.
Station count	The total number of STAs currently associated with this AP.
Admission capacity	An unsigned integer that specifies the remaining amount of medium time that is available through explicit admission control, in units of 32 microseconds per second. If the value is 0, the AP does not support this information element and the capacity is unknown.
WMM supported	Support for Wi-Fi multimedia extensions.
UAPSD Supported	The AP supports Unscheduled Automatic Power Save Delivery. May only be available if WMM is supported. This feature is critical for talk time and for achieving maximum call density on the wireless IP Phone.
Proxy ARP	CCX-compliant AP supports responding to IP ARP requests on behalf of the associated station. This feature is critical to standby time on the wireless IP Phone.
CCX version	If the AP is CCX compliant, this field shows the CCX version.

Item	Description
Best Effort	Contains information related to the Best Effort queue.
Background	Contains information related to the Background queue.
Video	Contains information related to the Video queue.
Voice	Contains information related to the Voice queue.

Cisco IP Phone Web Page

Each Cisco IP Phone has a web page from which you can view a variety of information about the phone, including:

- Device information: Displays device settings and related information for the phone.
- Network setup: Displays network setup information and information about other phone settings.
- Network statistics: Displays hyperlinks that provide information about network traffic.
- Device logs: Displays hyperlinks that provide information that you can use for troubleshooting.
- Streaming statistic: Displays hyperlinks that display a variety of streaming statistics.
- System: Displays a hyperlink to restart the phone.

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

You can also obtain much of this information directly from a phone.

Access Web Page for Phone

To access the web page for a phone, follow these steps:

Note If you cannot access the web page, it may be disabled by default.

Procedure

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

a) Search for the phone in Cisco Unified Communications Manager Administration by choosing **Device** > **Phone**. Phones that register 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.

b) On the Cisco IP Phone, press **Applications** , choose **Admin settings** > **Network setup** > **Ethernet setup** > **IPv4 setup**, and then scroll to the IP Address field.

Step 2 Open a web browser and enter the following URL, where *IP_address* is the IP address of the Cisco IP Phone:

`http://`*IP_address*

Device Information

The Device information area on a phone web page displays device settings and related information for the phone. The following table describes these items.

Note Some of the items in the following table do not apply to all phone models.

To display the **Device information** area, access the web page for the phone as described in Access Web Page for Phone, on page 16, and then click the **Device information** hyperlink.

Table 9: Device Information Area Items

Item	Description
Service mode	The service mode for the phone.
Service name	The domain for the service.
Service state	The current state of the service.
MAC Address	Media Access Control (MAC) address of the phone.
Host name	Unique, fixed name that is automatically assigned to the phone based on the MAC address.
Phone DN	Directory number that is assigned to the phone.
App load ID	Application firmware version that is running on the phone.
Boot load ID	Boot firmware version.
Version	Identifier of the firmware that is running on the phone.
Key expansion module 1	Identifier for the first key expansion module, if applicable. Applicable to Cisco IP Phone 8851, 8851NR, 8861, 8865, and 8865NR.
Key expansion module 2	Identifier for the second key expansion module, if applicable. Applicable to Cisco IP Phone 8851, 8851NR, 8861, 8865, and 8865NR.
Key expansion module 3	Identifier for the third key expansion module, if applicable. Applicable to Cisco IP Phone 8851, 8851NR, 8861, 8865, and 8865NR.
Hardware revision	Minor revision value of the phone hardware.
Serial number	Unique serial number of the phone.
Model number	Model number of the phone.

Item	Description
Message waiting	Indicates whether is a voice message is waiting on the primary line for this phone.
UDI	Displays the following Cisco Unique Device Identifier (UDI) information about the phone: • Device type—Indicates hardware type. For example, phone displays for all phone models. • Device description—Displays the name of the phone associated with the indicated model type. • Product identifier—Specifies the phone model. • Version ID (VID)—Specifies the major hardware version number. • Serial number—Displays the unique serial number of the phone.
Key expansion module UDI	Cisco Unique Device Identifier (UDI) of the key expansion module. Applicable to Cisco IP Phone 8851, 8851NR, 8861, 8865, and 8865NR.

Name of the Headset	Displays the name of the attached Cisco headset in the left column. The right column contains this information:
	• Port—Displays how the headset connects to the phone.
	  • USB
	  • AUX
	• Version—Displays the headset firmware version.
	• Radio range—Displays the strength configured for the DECT radio. Applicable to the Cisco Headset 560 Series only.
	• Bandwidth—Displays if the headset uses Wide band or Narrow band. Applicable to the Cisco Headset 560 Series only.
	• Bluetooth—Displays if Bluetooth is enabled or disabled. Applicable to the Cisco Headset 560 Series only.
	• Conference—Displays if the conference feature is enabled or disabled. Applicable to the Cisco Headset 560 Series only.
	• Firmware source—Displays the permitted firmware upgrade method:
	  • Restrict to UCM only
	  • Allow from UCM or Cisco Cloud
	Applicable to the Cisco Headset 560 Series only.

Time	Time for the Date/Time Group to which the phone belongs. This information comes from Cisco Unified Communications Manager.

Item	Description
Time zone	Time zone for the Date/Time Group to which the phone belongs. This information comes from Cisco Unified Communications Manager.
Date	Date for the Date/Time Group to which the phone belongs. This information comes from Cisco Unified Communications Manager.
System free memory	Amount of unused memory on the phone
Java heap free memory	Amount of free internal Java heap memory
Java pool free memory	Amount of free internal Java pool memory
FIPS mode enabled	Indicates if the Federal Information Processing Standard (FIPS) Mode is enabled.

Network Setup

The Network setup area on a phone web page displays network setup information and information about other phone settings. The following table describes these items.

You can view and set many of these items from the Network Setup menu on the Cisco IP Phone.

Note Some of the items in the following table do not apply to all phone models.

To display the **Network Setup** area, access the web page for the phone as described in Access Web Page for Phone, on page 16, and then click the **Network setup** hyperlink.

Table 10: Network Setup Area Items

Item	Description
MAC address	Media Access Control (MAC) address of the phone.
Host name	Host name that the DHCP server assigned to the phone.
Domain name	Name of the Domain Name System (DNS) domain in which the phone resides.
DHCP server	IP address of the Dynamic Host Configuration Protocol (DHCP) server from which the ph the IP address.
BOOTP server	Indicates whether the phone obtains the configuration from a Bootstrap Protocol (BootP)
DHCP	Indicates whether the phone uses DHCP.
IP address	Internet Protocol (IPv4) address of the phone.
Subnet mask	Subnet mask that the phone uses.
Default router	Default router used that the phone uses.

Item	Description
DNS server 1–3	Primary Domain Name System (DNS) server (DNS Server 1) and optional backup DNS serve Server 2 and 3) that the phone uses.
Alternate TFTP	Indicates whether the phone is using an alternative TFTP server.
TFTP server 1	Primary Trivial File Transfer Protocol (TFTP) server used that the phone uses.
TFTP server 2	Backup Trivial File Transfer Protocol (TFTP) server used that the phone uses.
DHCP address released	Indicates the setting of the DHCP address rReleased option on the phone Network Configurati
Operational VLAN ID	Operational Virtual Local Area Network (VLAN) that is configured on a Cisco Catalyst swit which the phone is a member.
Admin VLAN ID	Auxiliary VLAN in which the phone is a member.
CUCM server1–5	Host names or IP addresses, in prioritized order, of the Cisco Unified Communications Manage with which the phone can register. An item can also show the IP address of an SRST router t capable of providing limited Cisco Unified Communications Manager functionality, if such a available. For an available server, an item shows the Cisco Unified Communications Manager server IP and one of the following states: • Active—Cisco Unified Communications Manager server from which the phone is curre receiving call-processing services • Standby—Cisco Unified Communications Manager server to which the phone switches current server becomes unavailable • Blank—No current connection to this Cisco Unified Communications Manager server An item may also include the Survivable Remote Site Telephony (SRST) designation, which i an SRST router capable of providing Cisco Unified Communications Manager functionality limited feature set. This router assumes control of call processing if all other Cisco Unified Communications Manager servers become unreachable. The SRST Cisco Unified Communi Manager always appears last in the list of servers, even if it is active. You configure the SRS address in the Device Pool section in Cisco Unified Communications Manager Configuration
Information URL	URL of the help text that appears on the phone.
Directories URL	URL of the server from which the phone obtains directory information.
Messages URL	URL of the server from which the phone obtains message services.
Services URL	URL of the server from which the phone obtains Cisco Unified IP Phone services.
Idle URL	URL that the phone displays when the phone is idle for the time that the Idle URL Time field and no menu is open.
Idle URL time	Number of seconds that the phone is idle and no menu is open before the XML service that t URL specifies activates.
Proxy server URL	URL of proxy server, which makes HTTP requests to nonlocal host addresses on behalf of th HTTP client and provides responses from the nonlocal host to the phone HTTP client.

Item	Description
Authentication URL	URL that the phone uses to validate requests that are made to the phone web server.
SW port setup	Speed and duplex of the switch port, where: • 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 port setup	Speed and duplex of the PC port, where: • 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 PC port
PC port disabled	Indicates whether the PC port on the phone is enabled or disabled.
User locale	User locale that associates with the phone user. Identifies a set of detailed information to su including language, font, date and time formatting, and alphanumeric keyboard text infor
Network locale	Network locale that associates with the phone user. Identifies a set of detailed informatio the phone in a specific location, including definitions of the tones and cadences that the p
User locale version	Version of the user locale that is loaded on the phone.
Network locale version	Version of the network locale that is loaded on the phone.
Speaker enabled	Indicates whether the speakerphone is enabled on the phone.
GARP enabled	Indicates whether the phone learns MAC addresses from Gratuitous ARP responses.
Span to PC port	Indicates whether the phone forwards packets that are transmitted and received on the net the access port.
Video capability enabled	Indicates whether the phone can participate in video calls when it connects to an appropriat camera.
Voice VLAN enabled	Indicates whether the phone allows a device that is attached to the PC port to access the V
PC VLAN enabled	VLAN that identifies and removes 802.1P/Q tags from packets that are sent to the PC.
Auto line select enabled	Identifies if the phone automatically selects a line when the phone goes off hook.
DSCP protocol control	DSCP IP classification for call control signaling.

Item	Description
DSCP for configuration	DSCP IP classification for any phone configuration transfer.
DSCP for services	DSCP IP classification for phone-based services.
Security mode (nonsecure)	Security mode that is set for the phone.
Web access enabled	Indicates whether web access is enabled (Yes) or disabled (No) for the phone.
SSH access enabled	Indicates if the SSH port has been enabled or disabled.
CDP: SW Port	Indicates whether CDP support exists on the switch port (default is enabled). Enable CDP on the switch port for VLAN assignment for the phone, power negotiation, QoS management, and 802.1x security. Enable CDP on the switch port when the phone connects to a Cisco switch. When CDP is disabled in Cisco Unified Communications Manager, a warning is presented, in that CDP should be disabled on the switch port only if the phone connects to a non-Cisco sw The current PC and switch port CDP values are shown on the Settings menu.
CDP: 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 displays to i that disabling CDP on the PC port prevents CVTA from working. The current PC and switch port CDP values are shown in the Settings menu.
LLDP-MED:SW Port	Indicates whether Link Layer Discovery Protocol Media Endpoint Discovery (LLDP-MED) is on the switch port.
LLDP-MED:PC Port	Indicates whether LLDP-MED is enabled on the PC port.
LLDP Power Priority	Phone power priority to the switch, thus enabling the switch to appropriately provide power t phones. Settings include: • Unknown: This is the default value. • Low • High • Critical
LLDP Asset ID	Asset ID that is assigned to the phone for inventory management.
CTL file	MD5 hash of the CTL file.
ITL file	The ITL file contains the initial trust list.
ITL signature	MD5 hash of the ITL file
CAPF server	CPF server in use
TVS	The main component of Security by Default. Trust Verification Services (TVS) enables Cisco IP Phones to authenticate application servers, such as EM services, directory, and MIDlet, du HTTPS establishment.

Item	Description
TFTP server	The name of the TFTP Server used by the phone.
TFTP server	The name of the TFTP Server used by the phone.
Automatic port synchronization	Indicates if the phone automatically synchronizes port speed to eliminate packet loss.
Switch port remote configuration	Indicates if the SW port is remotely controlled.
PC port remote configuration	Indicates if the PC port is remotely controlled.
IP addressing mode	Identifies the addressing mode: • IPv4 Only • IPv4 and IPv6 • IPv6 Only
IP preference mode control	Indicates the IP address version that the phone uses during signaling with Cisco Unified Com Manager when both IPv4 and IPv6 are both available on the phone.
IP preference mode for media	
IPv6 auto configuration	Indicates that for media the device uses an IPv4 address to connect to the Cisco Unified Com Manager.
IPv6 duplicate address protection	
IPv6 accept redirect message	Indicates if phone accepts the redirect messages from the same router that is used for the number.
IPv6 reply multicast echo request	Indicates that the phone sends an Echo Reply message in response to an Echo Request m to an IPv6-only address.
IPv6 load server	Used to optimize installation time for phone firmware upgrades and off load the WAN by images locally, negating the need to traverse the WAN link for each phone's upgrade.
IPv6 log server	
IPv6 CAPF server	Indicates the IP address and port of the remote logging machine to which the phone sends lo
DHCPv6	Indicates the method that the phone uses to get the IPv6-only address. When DHCPv6 is enabled, the phone gets the IPv6 address either from DHCPv6 server or fi by RA sent by the IPv6-enabled router. And if DHCPv6 is disabled, the phone will not have (from DHCPv6 server) or stateless (from SLAAC) IPv6 address. **Note** Unlike DHCPv4, even DHCPv6 is disabled the phone can still generate a SLA if autoconfigure is enabled.

Item	Description
IPv6 address	Displays the current IPv6-only address of the phone. Two address formats are supported: • Eight sets of hexadecimal digits separated by colons X:X:X:X:X:X:X:X • Compressed format to collapse a single run of consecutive zero groups into a single gro represented by a double colon.
IPv6 prefix length	Displays the current IPv6-only prefix length for the subnet.
IPv6 default router	Displays the default IPv6 router used by the phone.
IPv6 DNS server 1–2	Displays the primary and secondary DNSv6 server used by the phone
IPv6 Alternate TFTP	Displays if an alternate IPv6 TFTP server is used.
IPv6 TFTP server 1–2	Displays the primary and secondary IPv6 TFTP server used by the phone.
IPv6 address released	Displays if the user has released the IPv6-related information.
EnergyWise power level	The power level that is used when the phone is sleeping.
EnergyWise domain	The EnergyWise domain that the phone is in.
DF_BIT	Indicates the DF bit setting for packets.

Network Statistics

The following Network statistics hyperlinks on a phone web page provide information about network traffic on the phone:

- Ethernet information: Displays information about Ethernet traffic.
- Access: Displays information about network traffic to and from the PC port on the phone.
- Network: Displays information about network traffic to and from the network port on the phone.

To display a Network statistics area, access the web page for the phone, and then click the **Ethernet Information**, the **Access**, or the **Network** hyperlink.

Ethernet Information Web Page

The following table describes the contents of the Ethernet information web page.

Table 11: Ethernet Information Items

Item	Description
Tx Frames	Total number of packets that the phone transmits.
Tx broadcast	Total number of broadcast packets that the phone transmits.
Tx multicast	Total number of multicast packets that the phone transmits.

Item	Description
Tx unicast	Total number of unicast packets that the phone transmits.
Rx Frames	Total number of packets received by the phone.
Rx broadcast	Total number of broadcast packets that the phone receives..
Rx multicast	Total number of multicast packets that the phone receives.
Rx unicast	Total number of unicast packets that the phone receives.
Rx PacketNoDes	Total number of shed packets that the no Direct Memory Access (DMA) descriptor causes.

Access and Network Web Pages

The following table describes the information in the Access and Network web pages.

Table 12: Access and Network Fields

Item	Description
Rx totalPkt	Total number of packets that the phone received.
Rx crcErr	Total number of packets that were received with CRC failed.
Rx alignErr	Total number of packets between 64 and 1522 bytes in length that were received and that have a bad Frame Check Sequence (FCS).
Rx multicast	Total number of multicast packets that the phone received.
Rx broadcast	Total number of broadcast packets that the phone received.
Rx unicast	Total number of unicast packets that the phone received.
Rx shortErr	Total number of received FCS error packets or Align error packets that are less than 64 bytes in size.
Rx shortGood	Total number of received good packets that are less than 64 bytes size.
Rx longGood	Total number of received good packets that are greater than 1522 bytes in size.
Rx longErr	Total number of received FCS error packets or Align error packets that are greater than 1522 bytes in size.
Rx size64	Total number of received packets, including bad packets, that are between 0 and 64 bytes in size.
Rx size65to127	Total number of received packets, including bad packets, that are between 65 and 127 bytes in size.
Rx size128to255	Total number of received packets, including bad packets, that are between 128 and 255 bytes in size.

Item	Description
Rx size256to511	Total number of received packets, including bad packets, that are between 256 and 511 bytes in size.
Rx size512to1023	Total number of received packets, including bad packets, that are between 512 and 1023 bytes in size.
Rx size1024to1518	Total number of received packets, including bad packets, that are between 1024 and 1518 bytes in size.
Rx tokenDrop	Total number of packets that were dropped due to lack of resources (for example, FIFO overflow).
Tx excessDefer	Total number of packets that were delayed from transmitting due to busy medium.
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) that the phone received.
Tx Collisions	Total number of collisions that occurred while a packet was transmitted.
Tx excessLength	Total number of packets that were not transmitted because the packet experienced 16 transmission attempts.
Tx broadcast	Total number of broadcast packets that the phone transmitted.
Tx multicast	Total number of multicast packets that the phone transmitted.
LLDP FramesOutTotal	Total number of LLDP frames that the phone sent out.
LLDP AgeoutsTotal	Total number of LLDP frames that timed out in the cache.
LLDP FramesDiscardedTotal	Total number of LLDP frames that were discarded when any of the mandatory TLVs is missing, out of order, or contains out of range string length.
LLDP FramesInErrorsTotal	Total number of LLDP frames that were received with one or more detectable errors.
LLDP FramesInTotal	Total number of LLDP frames that the phone receives.
LLDP TLVDiscardedTotal	Total number of LLDP TLVs that are discarded.
LLDP TLVUnrecognizedTotal	Total number of LLDP TLVs that are not recognized on the phone.
CDP Neighbor Device ID	Identifier of a device connected to this port that CDP discovered.
CDP Neighbor IPv6 address	IP address of the neighbor device discovered that CDP protocol discovered.
CDP Neighbor Port	Neighbor device port to which the phone is connected discovered by CDP protocol.

Item	Description
LLDP Neighbor Device ID	Identifier of a device connected to this port discovered by LLDP discovered.
LLDP Neighbor IPv6 address	IP address of the neighbor device that LLDP protocol discovered.
LLDP Neighbor Port	Neighbor device port to which the phone connects that LLDP protocol discovered.
Port Information	Speed and duplex information.

Device Logs

The following Device log hyperlinks on a phone web page provide information that helps to monitor and troubleshoot the phone.

- Console logs: Includes hyperlinks to individual log files. The console log files include debug and error messages that the phone received.
- Core dumps: Includes hyperlinks to individual dump files. The core dump files include data from a phone crash.
- Status messages: Displays the 10 most recent status messages that the phone has generated since it last powered up. The Status Messages screen on the phone also displays this information.
- Debug display: Displays debug messages that might be useful to Cisco TAC if you require assistance with troubleshooting.

Streaming Statistics

A Cisco Unified IP Phone can stream information to and from up to three devices simultaneously. A phone streams information when it is on a call or is running a service that sends or receives audio or data.

The Streaming statistics areas on a phone web page provide information about the streams.

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

Table 13: Streaming Statistics area items

Item	Description
Remote address	IP address and UDP port of the destination of the stream.
Local address	IP address and UPD port of the phone.
Start time	Internal time stamp indicates when Cisco Unified Communications Manager request phone start transmitting packets.
Stream status	Indication of whether streaming is active or not.
Host name	Unique, fixed name that is automatically assigned to the phone based on the MAC a
Sender packets	Total number of RTP data packets that the phone transmitted since it started this co The value is 0 if the connection is set to receive-only mode.

Item	Description
Sender octets	Total number of payload octets that the phone transmitted in RTP data packets since it s this connection. The value is 0 if the connection is set to receive-only mode.
Sender codec	Type of audio encoding that is 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 as to when the last RTCP Sender Report was sent.
Rcvr lost packets	Total number of RTP data packets that have been lost since data reception started on th connection. Defined as the number of expected packets less the number of packets actu received, where the number of received packets includes any that are late or are duplicat value displays as 0 if the connection was set to send-only mode.
Avg jitter	Estimate of mean deviation of the RTP data packet interarrival time, measured in millise The value displays as 0 if the connection was set to send-only mode.
Receiver codec	Type of audio encoding that is used for the received stream.
Receiver reports sent (see note)	Number of times the RTCP Receiver Reports have been sent.
Receiver report time sent (see note)	Internal time-stamp indication as to when a RTCP Receiver Report was sent.
Rcvr packets	Total number of RTP data packets that the phone has received since data reception start this connection. Includes packets that were received from different sources if this call i multicast call. The value displays as 0 if the connection was set to send-only mode.
Rcvr octets	Total number of payload octets that the device received in RTP data packets since recep started on the connection. Includes packets that were received from different sources if t is a multicast call. The value displays as 0 if the connection was set to send-only mode.
MOS LQK	Score that is an objective estimate of the mean opinion score (MOS) for listening quality that rates from 5 (excellent) to 1(bad). This score is based on audible concealment ever are to frame loss in the preceding eight-second interval of the voice stream. For more infor see Voice Quality Monitoring. **Note** The MOS LQK score can vary due to the codec type that the Cisco Unifie Phone uses.
Avg MOS LQK	Average MOS LQK score that was observed for the entire voice stream.
Min MOS LQK	Lowest MOS LQK score that was observed from the start of the voice stream.

Item	Description
Max MOS LQK	Baseline or highest MOS LQK score that was observed from start of the voice strea These codecs provide the following maximum MOS LQK score under normal cond no frame loss: • G.711 yields 4.5. • G.729 A /AB yields 3.7.
MOS LQK version	Version of the Cisco proprietary algorithm that is used to calculate MOS LQK scor
Cumulative conceal ratio	Total number of concealment frames divided by total number of speech frames that we from the start of the voice stream.
Interval conceal ratio	Ratio of concealment frames to speech frames in the preceding 3-second interval of speech. If voice activity detection (VAD) is in use, a longer interval might be requir accumulate three seconds of active speech.
Max conceal ratio	Highest interval concealment ratio from the start of the voice stream.
Conceal secs	Number of seconds that have concealment events (lost frames) from the start of the vo (includes severely concealed seconds).
Severely conceal secs	Number of seconds that have more than five percent concealment events (lost frame start of the voice stream.
Latency (see note)	Estimate of the network latency, expressed in milliseconds. Represents a running av 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)	Most recent time when an RTCP Sender Report was received.
Receiver size	RTP packet size, in milliseconds, for the received stream.
Receiver discarded	RTP packets that were received from the network but were discarded from the jitter
Receiver reports received (see note)	Number of times RTCP Receiver Reports have been received.
Receiver report time received (see note)	Most recent time when an RTCP Receiver Report was received.
Rcvr encrypted	Indicates if the receiver is using encryption.
Sender encrypted	Indicates if the sender is using encryption.

Item	Description
Sender frames	Number of frames sent.
Sender partial frames	Number of partial frames sent.
Sender i frames	Number of I frames sent. I frames are used in video transmission.
Sender IDR frames	Number of instantaneous decoder refresh (IDR) frames sent. IDR frames are used in vi transmission.
Sender frame rate	Rate at which the sender is sending frames.
Sender bandwidth	Bandwidth for the sender.
Sender resolution	Video resolution of the sender.
Rcvr frames	Number of frames received
Rcvr partial frames	Number of partial frames received
Rcvr i frames	Number of I frames received.
Rcvr IDR frames	Number of IDR frames received.
Rcvr IFrames req	Number of requested IDR frames received
Rcvr frame rate	Rate at which the receiver is receiving frames.
Rcvr frames lost	Number of frames that were not received.
Rcvr frame errors	Number of frames that were not received.
Rcvr bandwidth	Bandwidth of the receiver.
Rcvr resolution	Video resolution of the receiver.
Domain	Domain that the phone resides in.
Sender joins	Number of times the sender joined.
Rcvr joins	Number of times the receiver joined
Byes	Number of “Bye” frames
Sender start time	Time that the sender started.
Rcvr start time	Time that the receiver started.
Row status	Whether the phone is streaming
Sender tool	Type of audio encoding used for the stream
Sender reports	RTCP Sender Reports
Sender report time	Last time at which an RTCP Sender Report was sent.

Item	Description
Rcvr Jitter	Maximum jitter of stream
Receiver tool	Type of audio encoding used for the stream
Rcvr reports	Number of times this streaming statistics report has been accessed from the web pa
Rcvr report time	Internal time stamp indicating when this streaming statistics report was generated
Is video	Indicates if the call was a video call or audio only.
Call ID	Identification of the call
Group ID	Identification of the group that the phone is in.

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

Request Information from the Phone in XML

For troubleshooting purposes, you can request information from the phone. The resulting information is in XML format. The following information is available:

- CallInfo is call session information for a specific line.
- LineInfo is line configuration information for the phone.
- ModeInfo is phone mode information.

Before you begin

Web access needs to be enabled to get the information.

The phone must be associated with a user.

Procedure

Step 1 For Call Info, enter the following URL in a browser: **`http://<phone ip address>/CGI/Java/CallInfo<x>`**

where

- *<phone ip address>* is the IP address of the phone
- *<x>* is the line number to obtain information about.

The command returns an XML document.

Step 2 For Line Info, enter the following URL in a browser: **`http://<phone ip address>/CGI/Java/LineInfo`**

where

- *<phone ip address>* is the IP address of the phone

The command returns an XML document.

Step 3 For Model Info, enter the following URL in a browser: **`http://<phone ip address>/CGI/Java/ModeInfo`**

where

- *<phone ip address>* is the IP address of the phone

The command returns an XML document.

Sample CallInfo Output

The following XML code is an example of the output from the CallInfo command.

```
<?xml version="1.0" encoding="UTF-8"?>
<CiscoIPPhoneCallLineInfo>
  <Prompt/>
  <Notify/>
  <Status/>
  <LineDirNum>1030</LineDirNum>
  <LineState>CONNECTED</LineState>
  <CiscoIPPhoneCallInfo>
     <CallState>CONNECTED</CallState>
     <CallType>INBOUND</CallType>
     <CallingPartyName/>
     <CallingPartyDirNum>9700</CallingPartyDirNum>
     <CalledPartyName/>
     <CalledPartyDirNum>1030</CalledPartyDirNum>
     <HuntPilotName/>
     <CallReference>30303060</CallReference>
     <CallDuration>12835</CallDuration>
     <CallStatus>null</CallStatus>
     <CallSecurity>UNAUTHENTICATED</CallSecurity>
     <CallPrecedence>ROUTINE</CallPrecedence>
     <FeatureList/>
   </CiscoIPPhoneCallInfo>
   <VisibleFeatureList>
     <Feature Position="1" Enabled="true" Label="End Call"/>
     <Feature Position="2" Enabled="true" Label="Show Detail"/>
   </VisibleFeatureList>
</CiscoIPPhoneCallLineInfo>
```

Sample LineInfo Output

The following XML code is an example of the output from the LineInfo command.

```
<CiscoIPPhoneLineInfo>
   <Prompt/>
   <Notify/>
   <Status>null</Status>
   <CiscoIPPhoneLines>
     <LineType>9</LineType>
     <lineDirNum>1028</lineDirNum>
```

```
      <MessageWaiting>NO</MessageWaiting>
      <RingerName>Chirp1</RingerName>
      <LineLabel/>
      <LineIconState>ONHOOK</LineIconState>
    </CiscoIPPhoneLines>
    <CiscoIPPhoneLines>
      <LineType>9</LineType>
      <lineDirNum>1029</lineDirNum>
      <MessageWaiting>NO</MessageWaiting>  <RingerName>Chirp1</RingerName>
      <LineLabel/>
      <LineIconState>ONHOOK</LineIconState>
    </CiscoIPPhoneLines>
    <CiscoIPPhoneLines>
      <LineType>9</LineType>
      <lineDirNum>1030</lineDirNum>
      <MessageWaiting>NO</MessageWaiting>
      <RingerName>Chirp1</RingerName>
      <LineLabel/>
      <LineIconState>CONNECTED</LineIconState>
    </CiscoIPPhoneLines>
    <CiscoIPPhoneLines>
      <LineType>2</LineType>
      <lineDirNum>9700</lineDirNum>
      <MessageWaiting>NO</MessageWaiting>
      <LineLabel>SD9700</LineLabel>
      <LineIconState>ON</LineIconState>
  </CiscoIPPhoneLines>
</CiscoIPPhoneLineInfo>
```


Sample ModeInfo Output

The following XML code is an example of the output from the ModeInfo command.


```
<?xml version="1.0" encoding="utf-8"?>
<CiscoIPPhoneModeInfo>
   <PlaneTitle>Applications</PlaneTitle>
   <PlaneFieldCount>12</PlaneFieldCount>
   <PlaneSoftKeyIndex>0</PlaneSoftKeyIndex>
   <PlaneSoftKeyMask>0</PlaneSoftKeyMask>
   <Prompt></Prompt>
   <Notify></Notify>
   <Status></Status>
   <CiscoIPPhoneFields>
      <FieldType>0</FieldType>
      <FieldAttr></FieldAttr>
      <fieldHelpIndex>0</fieldHelpIndex>
      <FieldName>Call History</FieldName>
      <FieldValue></FieldValue>
   </CiscoIPPhoneFields>
   <CiscoIPPhoneFields>
      <FieldType>0</FieldType>
      <FieldAttr></FieldAttr>
      <fieldHelpIndex>0</fieldHelpIndex>
      <FieldName>Preferences</FieldName>
      <FieldValue></FieldValue>
   </CiscoIPPhoneFields>
   ...
</CiscoIPPhoneModeInfo>
```