Model Information Status and Statistics

Model Information

To display model information, choose **About device** in the Settings application. The Model Information screen includes the items that are listed in the following table.

Table 1: Model Information for Cisco DX Series Devices

Item	Description
Status	Submenu that provides additional information about the device.
Cisco user guide	Provides link to documentation.
Legal information	Includes open-source licenses.
Model number	Model number.
Android version	Indicates version of Android.
Kernel version	Linux kernel number.
Build number	Current software build.
SELinux status	Indicates enforcing or permissive.
Cisco load information	
Active load	Version of firmware that is currently installed.
Last upgrade	Date of the most recent firmware upgrade.

Item	Description
Note An "Upgrade Progress" message appears under "Cisco load information" group if the device is upgrading.	
Cisco Unified Communications Manager	
Active server	DNS or IP address of the server to which the device is registered.
Standby Server	DNS or IP address of the standby server.
Cisco Collaboration Problem Reporting Tool	
Cisco Collaboration Problem Reporting Tool	Tool for reporting problems. Tap to select and enter date, time, problem application problem description, and customer support email address. Tap **Create email report** to gather log information and send to support.

If the user is connected to a secure or authenticated server, a corresponding icon (lock or certificate) is displayed on the home screen to the right of the server option. If the user is not connected to a secure or authenticated server, no icon appears.

Device Status

To display the device status, choose **About device** > **Status** in the Settings application.

Table 2: Device Status

Item	Description
Status Messages	Provides the Status Messages screen, which shows a log of important system messages.
MDN	Indicates device mobile directory number.
IP address	Indicates device IP address.
Wi-Fi MAC address	Provides the MAC address of the current Wi-Fi connection.
Ethernet MAC address	Provides the MAC address of the current Ethernet connection.
Bluetooth address	Provides the MAC address of the Bluetooth chipset.
DHCP information	Displays DHCP information screen.
Up time	Run time for the device.
Current access point	Provides the Current access point screen, if applicable.

Item	Description
Ethernet Statistics	Provides the Ethernet statistics screen, which shows Ethernet traffic statistics.
WLAN statistics	Provides the WLAN statistics screen if applicable.
Call statistics (audio)	Provides counters and statistics for the audio portion of the current call.
Call statistics (video)	Provides counters and statistics for the video portion of the current call.
Call statistics (presentation)	Provides counters and statistics for the presentation portion of the current call.

Status Messages

The Status Messages screen lists the 50 most recent status messages that the device has generated. The following table describes the status messages that might appear. This table also includes actions you can take to address errors.

To display the Status messages screen, tap **Status messages**.

To remove current status messages, tap **Clear**.

To exit the Status messages screen, tap **OK**.

Table 3: Status Messages

Message	Description	Possible Explanation and Action
CFG TFTP Size Error	The configuration file is too large for file system.	Power cycle the device.
Checksum Error	Downloaded software file is corrupted.	Obtain a new copy of the device firmware and place it in the TFTPPath directory. Copy files into this directory only when the TFTP server software is shut down; otherwise, the files may be corrupted.

Message	Description	Possible Explanation and Action
DHCP timeout	DHCP server did not respond.	• Network is busy - The errors resolve themselves when the network load reduces. • No network connectivity between the DHCP server and the device - Verify the network connections. • DHCP server is down - Check configuration of DHCP server. • Errors persist - Consider assignment of a static IP address.
DNS timeout	DNS server did not respond.	• Network is busy - The errors resolve themselves when the network load reduces. • No network connectivity between the DNS server and the device - Verify the network connections. • DNS server is down - Check configuration of DNS server.
DNS unknown host	DNS could not resolve the name of the TFTP server or Cisco Unified Communications Manager.	• Verify that the hostnames of the TFTP server or Cisco Unified Communications Manager are configured properly in DNS. • Consider use of IP addresses rather than hostnames.
Duplicate IP	Another device is using the IP address that is assigned to the device.	• If the device has a static IP address, verify that you have not assigned a duplicate IP address. • If you are using DHCP, check the DHCP server configuration.

Message	Description	Possible Explanation and Action
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 Communications Manager, check that the following files are located within subdirectories in TFTP File Management: • Located in subdirectory with same name network locale: ◦ tones.xml • Located in subdirectory with same name user locale: ◦ glyphs.xml ◦ dictionary.xml ◦ kate.xml
File not found <Cfg File>	The name-based and default configuration file was not found on the TFTP Server.	The configuration file is created when the device is added to the Cisco Unified Communications Manager database. If the device has not been added to the Cisco Unified Communications Manager database, the TFTP server generates a `CFG File Not Found` response. • The device is not registered with Cisco Unified Communications Manager. You must manually add the device to Cisco Unified Communications Manager if you are not allowing devices to auto-register. • If you are using DHCP, verify that the DHCP server is pointing to the correct TFTP server. • If you are using static IP addresses, check configuration of the TFTP server.
IP address released	The device is configured to release its IP address.	The device remains idle until it is power cycled or until you reset the DHCP address.
Load rejected HC	The application that was downloaded is not compatible with the device.	Occurs if you were attempting to install a version of software on this device that did not support hardware changes on this device. Check the load ID assigned to the device (from Cisco Unified Communications Manager, choose **Device** > **Phone**). Reenter the load that is displayed on the device.

Message	Description	Possible Explanation and Action
No default router	DHCP or static configuration did not specify a default router.	• If the device has a static IP address, verify that the default router has been configured. • If you are using DHCP, the DHCP server has not provided a default router. Check the DHCP server configuration.
No DNS server IP	A name was specified but DHCP or static IP configuration did not specify a DNS server address.	• If the device has a static IP address, verify that the DNS server has been configured. • If you are using DHCP, the DHCP server has not provided a DNS server. Check the DHCP server configuration.
No Trust List installed	The CTL file or the ITL file is not installed on the device.	The Trust List is not configured on Cisco Unified Communications Manager, which does not support security by default. For more information about the Trust List, see the *Cisco Unified Communications Manager Security Guide*.
Restart requested by Cisco Unified Communications Manager	The device is restarting based on a request from Cisco Unified Communications Manager.	Configuration changes have likely been made to the device in Cisco Unified Communications Manager, and **Apply** has been pressed so that the changes take effect.
TFTP access error	TFTP server is pointing to a directory that does not exist.	• If you are using DHCP, verify that the DHCP server is pointing to the correct TFTP server. • If you are using static IP addresses, check configuration of TFTP server.
TFTP error	The device does not recognize an error code that the TFTP server provided.	Contact Cisco Technical Assistance Center (TAC).
TFTP timeout	TFTP server did not respond.	• Network is busy - The errors resolve themselves when the network load diminishes. • No network connectivity between the TFTP server and the device - Verify the network connections. • TFTP server is down - Check configuration of TFTP server.

Message	Description	Possible Explanation and Action
Timed Out	Supplicant attempted 802.1X transaction but timed out due to the absence of an authenticator.	Authentication typically times out if 802.1X is not configured on the switch.
Trust List update failed, verification failure	Updating CTL and ITL files failed.	Message displayed in case of error.
Version error	The name of the load file is incorrect.	Make sure that the device load file has the correct name.
XmlDefault.cnf.xml, or .cnf.xml corresponding to the device name	Name of the configuration file.	None. This configuration file provides an informational message that indicates the name of the configuration file.

Ethernet Statistics

The Ethernet Statistics screen provides information about the device and network performance. The following table describes the information that appears on this screen.

To display Ethernet Statistics, choose **About device** > **Status** > **Ethernet statistics** in the Settings application.

To reset the Rx Frames, Tx Frames, and Rx Broadcasts statistics to 0, tap **Clear**.

To exit the Ethernet statistics screen, tap **OK**.

Table 4: Ethernet Statistics Message Information

Item	Description
Rx Frames	Number of packets received
Tx Frames	Number of packets sent
Rx Broadcasts	Number of broadcast packets received
Port 1	Speed and duplex for switch port
Port 2	Speed and duplex for PC port
CDP status	Current CDP status

WLAN Statistics

The WLAN Statistics screen provides statistics about the device and WLAN. The following table describes the information that appears on this screen.

To display the WLAN Statistics screen, choose **About device** > **Status** > **WLAN statistics**.

To exit the WLAN statistics screen, tap **OK**.

Table 5: WLAN Statistics

Item	Description
tx bytes	Number of bytes transmitted
rx bytes	Number of bytes received
tx packets	Number of data packets transmitted
rx packets	Number of data packets received
tx packets dropped	Number of transmitted data packets dropped
rx packets dropped	Number of received data packets dropped
tx packet errors	Number of transmitted data packet errors
rx packet errors	Number of received data packet errors
Tx frames	Number of frames transmitted
tx multicast frames	Number of frames transmitted as broadcast or multicast
tx retry	Number of messages retransmitted a single time being acknowledged by the receiving device
tx multi retry	Number of transmit retries prior to success
tx failure	Number of frames that failed to be transmitted
rts success	A corresponding CTS was received
rts failure	Number of frames that failed to be received.
ack failure	Access point did not acknowledge a transmission
rx duplicate frames	Number of duplicate multicast packets transmitted
rx fragmented packets	Number of fragmented packets received
roaming count	Number of times roamed from current access point

Audio Call Statistics

Access Call Statistics (audio) on the device to display counters, statistics, and voice-quality metrics for the most recent call.

Note You can use a web browser to access the Streaming Statistics web page and remotely view the call statistics information. This web page contains additional RTP Control Protocol (RTCP) statistics that are not available on the device.

A single call can have multiple voice streams, but data is captured only for 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.

To display Call Statistics (audio) for information about the latest voice stream, choose **Settings** > **About device** > **Status** > **Call statistics (audio)**.

The following table lists and describes the items that the Call statistics (audio) screen provides.

Table 6: Call Statistics Items

Item	Description
Rcvr codec	Type of voice stream received (RTP streaming audio from codec): AAC-LD, G.722, iSAC, G.711 u-law, G.711 A-law, iLBC and G.729.
Sender codec	Type of voice stream transmitted (RTP streaming audio from codec): AAC-LD, G.722, iSAC, G.711 u-law, G.711 A-law, iLBC and G.729.
Rcvr 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.
Rcvr packets	Number of RTP voice packets received since voice stream was opened. **Note** This number is not necessarily identical to the number of RTP voice packets received since the call began, because the call might have been placed on hold.
Sender packets	Number of RTP voice packets transmitted since voice stream was opened. **Note** This number is not necessarily identical to the number of RTP voice packets 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, observed since the receiving voice stream was opened.

Item	Description
Max jitter	Maximum jitter, in milliseconds, observed since the receiving voice stream was opened.
Rcvr discarded	Number of RTP packets in the receiving voice stream that have been discarded (bad packets, too late, and so on). **Note** The device discards payload type 19 comfort noise packets that Cisco gateways generate, which increments this counter.
Rcvr lost packets	Missing RTP packets (lost in transit).
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 voice activity detection (VAD) is in use, 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 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.
Sender DSCP	DSCP value for sender SIP signaling packets
Receiver DSCP	DSCP value for receiver SIP signaling packets
Sender RTCP DSCP	DSCP value for sender RTP packets
Receiver RTCP DSCP	DSCP value for sender RTP packets