



Maintenance

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Basic Reset

Performing a basic reset of a Cisco IP Phone provides a way to recover if the phone experiences an error and provides a way to reset or restore various configuration and security settings.

The following table describes the ways to perform a basic reset. You can reset a phone after the phone has started up. Choose the operation that is appropriate for your situation.

Table 1: Basic Reset Method

Operation	Action	Explanation
Restart phone	Press Services, Applications, or Directories and then press ***#** .	Resets any user and network setup changes that you have made, but that the phone has not written to its Flash memory, to previously saved settings, then restarts the phone.

Reset the Phone to the Factory Settings from the Keypad

You can reset the phone to the factory settings. The reset clears all the phone parameters.

Procedure

	Command or Action	Purpose
Step 1	Remove power from the phone in one of these ways: <ul style="list-style-type: none">• Unplug the power adapter.	

	Command or Action	Purpose
	<ul style="list-style-type: none"> Unplug the LAN cable. 	
Step 2	Press the pound (#) key and plug the phone in.	
Step 3	When prompted, enter the following key sequence:	123456789*0# The phone resets.

Perform Factory Reset from Phone Menu

To perform a factory reset of a phone,

Procedure

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- Step 1** Press **Applications**.
- Step 2** Choose **Admin Settings > Reset All**.
If required, unlock the phone options.
- Step 3** Choose **Yes** and press **Select**.
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Related Topics

[Apply Phone Password](#)

Voice Quality Monitoring

To measure the voice quality of calls that are sent and received within the network, Cisco IP Phones use these statistical metrics that are based on concealment events. The DSP plays concealment frames to mask frame loss in the voice packet stream.

- Concealment Ratio metrics: Show the ratio of concealment frames over total speech frames. An interval conceal ratio is calculated every 3 seconds.
- Concealed Second metrics: Show the number of seconds in which the DSP plays concealment frames due to lost frames. A severely “concealed second” is a second in which the DSP plays more than five percent concealment frames.



Note

Concealment ratio and concealment seconds are primary measurements based on frame loss. A Conceal Ratio of zero indicates that the IP network is delivering frames and packets on time with no loss.

You can access voice quality metrics from the Cisco IP Phone using the Call Statistics screen or remotely by using Streaming Statistics.

Voice Quality Troubleshooting Tips

When you observe significant and persistent changes to metrics, use the following table for general troubleshooting information.

Table 2: Changes to Voice Quality Metrics

Metric change	Condition
Conceal Ratio and Conceal Seconds increase significantly	Network impairment from packet loss or high jitter.
Conceal Ratio is near or at zero, but the voice quality is poor.	<ul style="list-style-type: none"> Noise or distortion in the audio channel such as echo or audio levels. Tandem calls that undergo multiple encode/decode such as calls to a cellular network or calling card network. Acoustic problems coming from a speakerphone, handsfree cellular phone or wireless headset. <p>Check packet transmit (TxCnt) and packet receive (RxCnt) counters to verify that voice packets are flowing.</p>
MOS LQK scores decrease significantly	<p>Network impairment from packet loss or high jitter levels:</p> <ul style="list-style-type: none"> Average MOS LQK decreases may indicate widespread and uniform impairment. Individual MOS LQK decreases may indicate bursty impairment. <p>Cross-check the conceal ratio and conceal seconds for evidence of packet loss and jitter.</p>
MOS LQK scores increase significantly	<ul style="list-style-type: none"> Check to see if the phone is using a different codec than expected (RxType and TxType). Check to see if the MOS LQK version changed after a firmware upgrade.



Note

Voice quality metrics do not account for noise or distortion, only frame loss.

Cisco IP Phone Cleaning

To clean your Cisco IP Phone, use only a dry soft cloth to gently wipe the phone and the phone screen. Do not apply liquids or powders directly to the phone. As with all non-weatherproof electronics, liquids and powders can damage the components and cause failures.

When the phone is in sleep mode, the screen is blank and the Select button is not lit. When the phone is in this condition, you can clean the screen, as long as you know that the phone will remain asleep until after you finish cleaning.