

Guide Contents
Troubleshooting Cisco IOS Voice Overview
Debug Command Output on Cisco IOS Voice Gateways
Filtering Troubleshooting Output
Cisco VoIP Internal Error Codes
Troubleshooting Cisco IOS Voice Telephony
Troubleshooting Cisco IOS Voice Protocols
Troubleshooting Cisco IOS Telephony Applications
Monitoring the Cisco IOS Voice Network
Cause Codes and Debug Values

Voice port testing commands allow you to force voice ports into specific states for testing.



Contents

- [1 Detector-Related Function Tests](#)
- [2 Loopback Function Tests](#)
- [3 Tone Injection Tests](#)
- [4 Relay-Related Function Tests](#)
- [5 Fax/Voice Mode Tests](#)

Detector-Related Function Tests


Using the **test voice port detector** command, you are able to force a particular detector into an on or off state, perform tests on the detector, and then return the detector to its original state.

To configure this feature, enter these commands beginning in privileged EXEC mode:

	Command	Purpose
1.	Router# test voice port <i>slot/subunit/port</i> detector { m-lead battery-reversal loop-current ring tip-ground ring-ground ring-trip } { on off }	Identifies the voice port you want to test. <ul style="list-style-type: none"> • Enter a keyword for the detector under test and specify whether to force it to the on or off state.  Note: For each signaling type (E&M, FXO, FXS), only the applicable keywords are displayed. The disable keyword is displayed only when a detector is in the forced state.
2.	Router# test voice port <i>slot/subunit/port</i> detector { m-lead battery-reversal loop-current ring tip-ground ring-ground ring-trip } disable	Identifies the voice port on which you want to end the test. <ul style="list-style-type: none"> • Enter a keyword for the detector under test and the keyword disable to end the forced state.  Note: For each signaling type (E&M, FXO, FXS), only the applicable keywords are displayed. The disable keyword is displayed only when a detector is in the forced state.



Loopback Function Tests

To establish loopbacks on a voice port, enter the following commands beginning in privileged EXEC mode:

	Command	Purpose
1.	Router# test voice port slot/subunit/port loopback {local network}	Identifies the voice port you want to test and enters a keyword for the loopback direction.  Note: A call must be established on the voice port under test.
2.	Router# test voice port slot/subunit/port loopback disable	Identifies the voice port on which you want to end the test and enters the keyword disable to end the loopback.


Tone Injection Tests

To inject a test tone into a voice port, enter the following commands beginning in privileged EXEC mode:

	Command	Purpose
1.	Router# test voice port slot/subunit/port inject-tone {local network} {1000hz 2000hz 200hz 3000hz 300hz 3200hz 3400hz 500hz quiet}	Identifies the voice port you want to test and enter keywords for the direction to send the test tone and for the frequency of the test tone.  Note: A call must be established on the voice port under test.
2.	Router# test voice port slot/subunit/port inject-tone disable	Identifies the voice port on which you want to end the test and enter the keyword disable to end the test tone.  Note: The disable keyword is available only if a test condition is already activated.

Relay-Related Function Tests

To test relay-related functions on a voice port, enter the following commands beginning in privileged EXEC mode:

	Command	Purpose
1.	Router# test voice port slot/subunit/port relay {e-lead loop ring-ground battery-reversal power-denial ring tip-ground} {on off}	Identifies the voice port you want to test. <ul style="list-style-type: none">• Enter a keyword for the relay under test and specify whether to force it to the on or off state.  Note: For each signaling type (E&M, FXO, FXS), only the applicable keywords are displayed. The disable keyword is displayed only when a relay is in the forced state.
2.	Router# test voice port slot/subunit/port relay {e-lead loop ring-ground battery-reversal power-denial ring tip-ground} disable	Identifies the voice port on which you want to end the test. <ul style="list-style-type: none">• Enter a keyword for the relay under test, and the keyword disable to end the forced state.



Note: For each signaling type (E&M, FXO, FXS), only the applicable keywords are displayed. The **disable** keyword is displayed only when a relay is in the forced state.

Fax/Voice Mode Tests

The **test voice port switch fax** command forces a voice port into fax mode for testing. After you enter this command, you can use the **show voice call** or **show voice call summary** command to check whether the voice port is able to operate in fax mode. If no fax data is detected by the voice port, the voice port remains in fax mode for 30 seconds and then reverts automatically to voice mode.

The **disable** keyword ends the forced mode switch; however, the fax mode ends automatically after 30 seconds. The **disable** keyword is available only while the voice port is in fax mode.

To force a voice port into fax mode and return it to voice mode, enter the following commands, beginning in privileged EXEC mode:

	Command	Purpose
1.	Router# test voice port slot/subunit/port switch fax	Identifies the voice port you want to test. <ul style="list-style-type: none"> • Enter the keyword fax to force the voice port into fax mode.
2.	Router# test voice port slot/subunit/port switch disable	Identifies the voice port on which you want to end the test. <ul style="list-style-type: none"> • Enter the keyword disable to return the voice port to voice mode.