



# Configuration Verification

---

**Revised: December 21, 2009**

This chapter describes the **show** commands that you can use to display and verify your configuration.



**Note**

---

For more information see the following command references:

[Cisco IOS Debug Command Reference](#)  
[Cisco IOS IP Addressing Services Command Reference](#)  
[Cisco IOS IP Application Services Command Reference](#)  
[Cisco IOS IP Multicast Command Reference](#)  
[Cisco IOS IP Routing Protocols Command Reference](#)  
[Cisco IOS LAN Switching Command Reference](#)  
[Cisco IOS NetFlow Command Reference](#)  
[Cisco IOS Quality of Service Solutions Command Reference](#)  
[Cisco IOS Security Command Reference](#)  
[Cisco IOS Voice Command Reference](#)  
[Cisco IOS Master Command List, Release 12.4T](#)

Use the [Command Lookup Tool](#) (registered customers only) for more information on the commands used in this document.

---

## Contents

- [General Configuration Verification, page 2](#)
- [QoS Verification, page 3](#)
- [Routing Verification, page 3](#)
- [Security Verification, page 4](#)
- [Voice Verification, page 5](#)
- [Cisco Unity Express Verification, page 7](#)
- [Cisco Wide Area Application Services Verification, page 7](#)

# General Configuration Verification

- **show adjacency summary**  
This command displays a summary of Cisco Express Forwarding (CEF) adjacency information.
- **show clock**  
This command displays the time and date from the system software clock.
- **show interfaces status**  
This command displays the interface status or a list of interfaces in an error-disabled state on LAN ports only.
- **show interfaces summary**  
This command displays a summary of statistics for one interface or for all interfaces that are configured on a networking device.
- **show ip cache flow**  
This command displays a summary of the NetFlow accounting statistics.
- **show ip flow export**  
This command displays the status and the statistics for NetFlow accounting data export, including the main cache and all other enabled caches.
- **show ip wccp**  
This command displays global statistics related to Cisco Web Cache Communication Protocol (Cisco WCCP).
- **show logging**  
This command displays the state of system logging (syslog) and the contents of the standard system logging buffer.
- **show memory dead**  
This command displays statistics on memory allocated by processes that have terminated.
- **show memory debug leaks**  
This command displays detected memory leaks.
- **show memory free**  
This command displays statistics about free memory when Cisco IOS software or Cisco IOS Software Modularity images are running.
- **show mls qos interface policers**  
This command displays all the policers configured on the interface, their settings, and the number of policers unassigned.
- **show ntp status**  
This command displays statistics for the Network Time Protocol (NTP) server.
- **show processes cpu**  
This command displays detailed CPU utilization statistics (CPU use per process) when Cisco IOS software or Cisco IOS Software Modularity images are running.

- **show processes memory**

This command shows the amount of memory used by each system process in Cisco IOS software or Cisco IOS Software Modularity images.

- **show spanning-tree**

This command displays Spanning Tree information for the specified Spanning Tree instances.

## QoS Verification

- **show class-map**

This command displays all class maps and their matching criteria.

- **show ip nbar protocol-discovery**

This command displays the statistics gathered by the Network Based Application Recognition (NBAR) protocol discovery feature.

- **show mls qos**

This command displays multilayer switching (MLS) quality of service (QoS) information.

- **show mls qos interface**

This command displays QoS information for the specified interface.

- **show mls qos maps**

This command displays information about the QoS mapping.

- **show policy-map**

This command displays the configurations of all classes for a specified service policy map or all classes for all existing policy maps.

- **show policy-map interface**

This command displays the statistics and the configurations of the input and output policies that are attached to an interface.

## Routing Verification

- **show bfd neighbors**

This command displays a line-by-line listing of existing Bidirectional Forwarding Detection (BFD) adjacencies.

- **show ip bgp**

This command displays entries in the Border Gateway Protocol (BGP) routing table.

- **show ip bgp neighbors**

This command displays information about BGP and TCP connections to neighbors.

- **show ip bgp summary**

This command displays the status of all BGP connections.

- **show ip dhcp binding**

This command displays address bindings on the Cisco IOS DHCP server.

- **show ip dhcp server statistics**  
This command displays Cisco IOS DHCP server statistics.
- **show ip eigrp neighbors**  
This command displays neighbors discovered by Enhanced Interior Gateway Routing Protocol (EIGRP).
- **show ip mroute active**  
This command displays the contents of the multicast routing (mroute) table. Displays the rate that active sources are sending to multicast groups, in kilobits per second.
- **show ip mroute count**  
This command displays the contents of the multicast routing (mroute) table. Displays statistics about the group and source, including number of packets, packets per second, average packet size, and bytes per second.
- **show ip nat translations**  
This command displays active Network Address Translations (NATs).
- **show ip nat statistics**  
This command displays NAT statistics.
- **show ip ospf neighbors**  
This command displays Open Shortest Path First (OSPF)–neighbor information on a per-interface basis.
- **show ip route**  
This command displays the current state of the routing table.

## Security Verification

- **show crypto engine accelerator statistics**  
This command displays a summary of the configuration information for the crypto accelerator.
- **show crypto engine connections active**  
This command displays a summary of the configuration information for the crypto engine connections.
- **show crypto gdoi**  
This command displays information about a Group Domain of Interpretation (GDOI) configuration.
- **show crypto gdoi ipsec sa**  
This command displays information about the IPsec security association (SA) for all group members.
- **show crypto ipsec sa**  
This command displays the settings used by current SAs.
- **show crypto isakmp sa**  
This command displays current Internet Key Exchange (IKE) SAs.
- **show crypto session**  
This command displays status information for active crypto sessions.

- **show ip ips interfaces**  
This command displays the Cisco IOS Intrusion Prevention System (IPS) interface configuration.
- **show ip ips sessions**  
This command displays the Cisco IOS IPS session-related information.
- **show ip ips signatures**  
This command displays the Cisco IOS IPS signature information, such as which signatures are disabled and marked for deletion.
- **show ip ips statistics**  
This command displays the Cisco IOS IPS information such as the number of packets audited and the number of alarms sent.
- **show policy-map type inspect**  
This command displays a specified policy map.
- **show policy-map type inspect zone-pair**  
This command displays the runtime inspect type policy map statistics and other information such as sessions existing on a specified zone pair.
- **show standby**  
This command displays Hot Standby Router Protocol (HSRP) information.
- **show webvpn gateway**  
This command displays the status of a Secure Socket Layer (SSL) Virtual Private Network (VPN) gateway.
- **show webvpn context**  
This command displays the operational status and configuration parameters for SSL VPN context configurations.
- **show webvpn session context**  
This command displays a list of active SSL VPN user sessions for only the named context.
- **show webvpn session user**  
This command displays detailed information about the named SSL VPN user session.
- **show webvpn stats**  
This command displays SSL VPN application and network statistics.
- **show zone-pair security**  
This command displays the source zone, destination zone, and policy attached to the zone pair.
- **show zone security**  
This command displays information about the security zone, including the name and description.

## Voice Verification

- **show call active voice brief**  
This command displays a truncated version of call information for voice calls in progress.

- **show call-manager-fallback all**

This command displays the Cisco Unified Communications Manager fallback configuration and statistics.
- **show dial-peer voice summary**

This command displays a short summary of information for each voice dial peer.
- **show dspfarm**

This command displays digital signal processor (DSP) farm-service information such as operational status and DSP resource allocation for transcoding and conferencing.
- **show dspfarm dsp all**

This command displays DSP-farm DSP global information.
- **show ephone offhook**

This command displays information and packet counts for the phones that are currently off hook.
- **show ephone registered**

This command displays the status of registered phones.
- **show ephone summary**

This command displays brief information about Cisco IP Phones.
- **show rtpspi call**

This command displays Real-time Transport Protocol (RTP) service provider interface active call details.
- **show sccp all**

This command displays all Skinny Client Control Protocol (SCCP) global information, such as administrative and operational status.
- **show sccp connections summary**

This command displays a summary of the number of sessions and connections based on the service type under the SCCP application.
- **show sip-ua status registrar**

This command displays status for the SIP user agent (UA) registrar clients.
- **show telephony-service all**

This command displays detailed configuration for phones, voice ports, and dial peers in a Cisco Unified Communications Manager Express (Cisco Unified CME) system.
- **show voice call status**

This command displays the status of active calls.
- **show voice call summary**

This command displays the current settings and state of voice ports on the Cisco router, regardless of port activity.
- **show voice dsp**

This command displays the current status or selective statistics of DSP voice channels.
- **show voice port summary**

This command displays a summary of configuration information for all voice ports.

- **show voice register all**  
This command displays all Session Initiation Protocol (SIP) Cisco Unified Survivable Remote Site Telephony (Cisco Unified SRST) and Cisco Unified CME configurations and register information.
- **show voip rtp connections**  
This command displays (RTP) named event packets.

## Cisco Unity Express Verification

- **show ccn application**  
This command displays the currently configured applications.
- **show ccn engine**  
This command display details of the configured Cisco Unity Express software engine.
- **show ccn subsystem jtapi**  
This command display the JTAPI subsystem parameters.
- **show ccn subsystem sip**  
This command display the SIP subsystem parameters.
- **show system language installed**  
This command displays the languages that are available for use.
- **show voicemail configuration**  
This command displays the configured From address for outgoing e-mail.
- **show voicemail detail**  
This command displays the details for a general delivery mailbox or a subscriber with the name value.
- **show voicemail limits**  
This command displays default values for all mailboxes.
- **show voicemail mailboxes**  
This command displays all configured mailboxes and their current storage status.
- **show voicemail messages future**  
This command displays all messages scheduled for future delivery.
- **show voicemail users**  
This command lists all the local voice-mail subscribers.

## Cisco Wide Area Application Services Verification

- **show cifs auto-discovery**  
This command displays Common Internet File System (CIFS) autodiscovery status and run-time data.

- **show cifs cache**  
This command displays CIFS cache information.
- **show cifs connectivity peers**  
This command displays run-time information on edge-core connectivity and a list of connected cores.
- **show cifs sessions count**  
This command displays run-time information on active CIFS sessions and the number of pending CIFS requests.
- **show cifs sessions list**  
This command displays run-time information on active CIFS sessions and a list of connected CIFS sessions.
- **show device-mode**  
This command displays the configured or current device mode of a Cisco Wide Area Application Services (WAAS) device.
- **show disks details**  
This command displays detailed SMART disk monitoring information for Cisco WAAS device disks.
- **show egress-methods**  
This command displays the egress method that is configured and that is being used on a particular Cisco WAE.
- **show policy-engine status**  
This command displays high-level information about a Cisco Wide Area Application Engine (Cisco WAE): Cisco WAE's policy engine.
- **show policy-engine application classifier**  
This command displays information about the specified application classifier.
- **show statistics cifs**  
This command displays the CIFS statistics information.
- **show statistics dre**  
This command displays data redundancy elimination (DRE) general statistics for a Cisco WAE.
- **show statistics tfo**  
This command displays TFO statistics for a Cisco WAE.
- **show tfo auto-discovery**  
This command displays TFO auto discovery statistics for a Cisco WAE.
- **show tfo status**  
This command displays global Traffic Flow Optimization (TFO) status information for a Cisco WAE.
- **show tfo connections**  
This command displays Traffic Flow Optimization (TFO) connection information for a Cisco WAE.
- **show tfo connections summary**  
This command displays a summary list of TFO connections for a Cisco WAE.



- **show wccp**  
This command displays Cisco Web Cache Communication Protocol (Cisco WCCP) information for a Cisco WAE.
- **show wccp gre**  
This command displays Cisco WCCP generic routing encapsulation (GRE) packet-related information
- **show wccp routers**  
This command displays routers seen and not seen by this Cisco WAE.
- **show wccp status**  
This command displays the version of Cisco WCCP that is enabled and running.

## Additional Command Reference Documentation

See the following command references for more information:

- [Cisco IOS Configuration Fundamentals Command Reference](#)
- [Cisco IOS IP Addressing Services Command Reference](#)
- [Cisco IOS IP Application Services Command Reference](#)
- [Cisco IOS IP Multicast Command Reference](#)
- [Cisco IOS IP Routing Protocols Command Reference](#)
- [Cisco IOS LAN Switching Command Reference](#)
- [Cisco IOS NetFlow Command Reference](#)
- [Cisco IOS Quality of Service Solutions Command Reference](#)
- [Cisco IOS Security Command Reference](#)

The [Output Interpreter Tool \(registered customers only\)](#) (OIT) supports certain **show** commands. Use the OIT to view an analysis of the **show** command output.

