



# Cisco IOS IP SLAs Features Roadmap

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This roadmap lists the features documented in the Cisco IOS IP SLAs configuration guide and maps them to the modules in which they appear.

## Feature and Release Support

Table 1 lists Cisco IOS IP SLAs feature support for Cisco IOS Releases 12.3T and 12.4.

Only features that were introduced or modified in Cisco IOS Release 12.3(14)T or a later release appear in the table. *Not all features may be supported in your Cisco IOS software release.*

Cisco IOS software images are specific to a Cisco IOS software release, a feature set, and a platform. Use Cisco Feature Navigator to find information about platform support and Cisco IOS software image support. Access Cisco Feature Navigator at <http://www.cisco.com/go/fn>. You must have an account on Cisco.com. If you do not have an account or have forgotten your username or password, click **Cancel** at the login dialog box and follow the instructions that appear.



**Note**

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Table 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

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**Table 1** Supported Cisco IOS IP SLAs Features

Release	Feature Name	Feature Description	Where Documented
12.3(14)T	IP SLAs DHCP Operation	The Cisco IOS IP SLAs Dynamic Host Control Protocol (DHCP) operation allows you to schedule and measure the network response time between a Cisco device and a DHCP server to obtain an IP address.	“IP SLAs—Analyzing IP Service Levels Using the DHCP Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsdhcp.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsdhcp.htm</a>
	IP SLAs DLSw+ Operation	The Cisco IOS IP SLAs Data Link Switching Plus (DLSw+) operation allows you to schedule and measure the DLSw+ protocol stack and network response time between DLSw+ peers	“IP SLAs—Analyzing IP Service Levels Using the DLSw+ Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsdlsw.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsdlsw.htm</a>
	IP SLAs DNS Operation	The Cisco IOS IP SLAs Domain Name System (DNS) operation allows you to measure the difference between the time taken to send a DNS request and receive a reply.	“IP SLAs—Analyzing IP Service Levels Using the DNS Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsdns.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsdns.htm</a>
	IP SLAs FTP Operation	The Cisco IOS IP SLAs File Transfer Protocol (FTP) operation allows you to measure the network response time between a Cisco device and an FTP server to retrieve a file.	“IP SLAs—Analyzing IP Service Levels Using the FTP Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsftp.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsftp.htm</a>
	IP SLAs HTTP Operation	The Cisco IOS IP SLAs Hypertext Transfer Protocol (HTTP) operation allows you to measure the network response time between a Cisco device and an HTTP server to retrieve a web page.	“IP SLAs—Analyzing IP Service Levels Using the HTTP Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hshttp.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hshttp.htm</a>
	IP SLAs ICMP Echo Operation	The Cisco IOS IP SLAs Internet Control Message Protocol (ICMP) echo operation allows you to measure end-to-end network response time between a Cisco device and other devices using IP.	“IP SLAs—Analyzing IP Service Levels Using the ICMP Echo Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsicmp.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsicmp.htm</a>

**Table 1** Supported Cisco IOS IP SLAs Features (continued)

Release	Feature Name	Feature Description	Where Documented
12.3(14)T (continued)	IP SLAs ICMP Path Echo Operation	The Cisco IOS IP SLAs Internet Control Message Protocol (ICMP) path echo operation allows you to measure end-to-end and hop-by-hop network response time between a Cisco device and other devices using IP.	“IP SLAs—Analyzing IP Service Levels Using the ICMP Path Echo Operation” <a href="http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hspaecho.htm">http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hspaecho.htm</a>
	IP SLAs Multioperation Scheduler	The IP SLAs Multioperation Scheduler feature provides a highly scalable infrastructure for Cisco IOS IP SLAs by allowing you to schedule multiple IP SLAs operations using a single command.	“IP SLAs—Multiple Operation Scheduling” <a href="http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsmulti.htm">http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsmulti.htm</a>
	IP SLAs Path Jitter Operation	The Cisco IOS IP SLAs Internet Control Message Protocol (ICMP) path jitter operation allows you to measure hop-by-hop jitter (inter-packet delay variance).	“IP SLAs—Analyzing IP Service Levels Using the ICMP Path Jitter Operation” <a href="http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hspth jit.htm">http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hspth jit.htm</a>
	IP SLAs Proactive Threshold Monitoring	Cisco IOS IP SLAs proactive threshold monitoring capability allows you to configure an IP SLAs operation to react to certain measured network conditions.	“IP SLAs—Proactive Threshold Monitoring” <a href="http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsthresh.htm">http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsthresh.htm</a>
	IP SLAs TCP Connect Operation	The Cisco IOS IP SLAs Transmission Control Protocol (TCP) connect operation allows you to measure the network response time taken to perform a TCP Connect operation between a Cisco device and other devices using IP.	“IP SLAs—Analyzing IP Service Levels Using the TCP Connect Operation” <a href="http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hstcpc.htm">http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hstcpc.htm</a>
	IP SLAs UDP Echo Operation	The Cisco IOS IP SLAs User Datagram Protocol (UDP) echo operation allows you to measure end-to-end network response time between a Cisco device and other devices using IP	“IP SLAs—Analyzing IP Service Levels Using the UDP Echo Operation” <a href="http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsudpe.htm">http://www.cisco.com/uncvercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsudpe.htm</a>

**Table 1** Supported Cisco IOS IP SLAs Features (continued)

Release	Feature Name	Feature Description	Where Documented
12.3(14)T (continued)	IP SLAs UDP Jitter Operation	The Cisco IOS IP SLAs User Datagram Protocol (UDP) jitter operation allows you to measure round-trip delay, one-way delay, one-way jitter, one-way packet loss, and connectivity in networks that carry UDP traffic.	“IP SLAs—Analyzing IP Service Levels Using the UDP Jitter Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsjitter.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsjitter.htm</a>
	IP SLAs VoIP Call Setup (Post Dial Delay) Monitoring	The Cisco IOS IP SLAs Voice over IP (VoIP) call setup operation allows you to measure network response time for setting up a VoIP call.	“IP SLAs—Analyzing IP Service Levels Using the VoIP Call Setup Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hspddly.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hspddly.htm</a>
	IP SLAs VoIP Gatekeeper Delay Monitoring	The Cisco IOS IP SLAs Voice over IP (VoIP) gatekeeper registration delay operation allows you to measure the average, median, or aggregated network response time of registration attempts from a VoIP gateway to a VoIP gatekeeper device.	“IP SLAs—Analyzing IP Service Levels Using the VoIP Gatekeeper Registration Delay Operation” <a href="http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsgkdly.htm">http://www.cisco.com/univercd/cc/td/doc/product/software/ios124/124cg/hsla_c/hsgkdly.htm</a>

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