



# Configuring Cisco IOS IP SLAs HTTP Operations

---

**First Published: August 14, 2006**

**Last Updated: January 6, 2011**

This module describes how to configure a Cisco IOS IP Service Level Agreements (SLAs) HTTP operation to monitor the response time between a Cisco device and an HTTP server to retrieve a web page. The IP SLAs HTTP operation supports both the normal GET requests and customer RAW requests. This module also demonstrates how the results of the HTTP operation can be displayed and analyzed to determine how an HTTP server is performing.

## Finding Feature Information

Your software release may not support all the features documented in this module. For the latest feature information and caveats, see the release notes for your platform and software release. To find information about the features documented in this module, and to see a list of the releases in which each feature is supported, see the [“Feature Information for IP SLAs HTTP Operations”](#) section on page 15.

Use Cisco Feature Navigator to find information about platform support and Cisco software image support. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.

## Contents

- [Restrictions for IP SLAs HTTP Operations, page 2](#)
- [Information About IP SLAs HTTP Operations, page 2](#)
- [How to Configure IP SLAs HTTP Operations, page 2](#)
- [Configuration Examples for IP SLAs HTTP Operations, page 12](#)
- [Additional References, page 13](#)
- [Feature Information for IP SLAs HTTP Operations, page 15](#)



---

**Americas Headquarters:**  
**Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA**

© 2006-2010 Cisco Systems, Inc. All rights reserved.

## Restrictions for IP SLAs HTTP Operations

- IP SLAs HTTP operations support only HTTP/1.0.
- HTTP/1.1 is not supported for any IP SLAs HTTP operation, including HTTP RAW requests.

## Information About IP SLAs HTTP Operations

- [HTTP Operation, page 2](#)

### HTTP Operation

The HTTP operation measures the round-trip time (RTT) between a Cisco device and an HTTP server to retrieve a web page. The HTTP server response time measurements consist of three types:

- DNS lookup—RTT taken to perform domain name lookup.
- TCP Connect—RTT taken to perform a TCP connection to the HTTP server.
- HTTP transaction time—RTT taken to send a request and get a response from the HTTP server. The operation retrieves only the home HTML page.

The DNS operation is performed first and the DNS RTT is measured. Once the domain name is found, a TCP Connect operation to the appropriate HTTP server is performed and the RTT for this operation is measured. The final operation is an HTTP request and the RTT to retrieve the home HTML page from the HTTP server is measured. One other measurement is made and called the time to first byte which measures the time from the start of the TCP Connect operation to the first HTML byte retrieved by the HTTP operation. The total HTTP RTT is a sum of the DNS RTT, the TCP Connect RTT, and the HTTP RTT.

For GET requests, IP SLAs will format the request based on the specified URL. For RAW requests, IP SLAs requires the entire content of the HTTP request. When a RAW request is configured, the raw commands are specified in HTTP RAW configuration mode. A RAW request is flexible and allows you to control fields such as authentication. An HTTP request can be made through a proxy server.

The results of an HTTP operation can be useful in monitoring your web server performance levels by determining the RTT taken to retrieve a web page.

## How to Configure IP SLAs HTTP Operations

- [Configuring an HTTP GET Operation on the Source Device, page 2](#) (required)
- [Configuring an HTTP RAW Operation on the Source Device, page 7](#) (required)
- [Scheduling IP SLAs Operations, page 8](#) (required)

### Configuring an HTTP GET Operation on the Source Device

**Note**

---

This operation does not require an IP SLAs Responder on the destination device.

---

Perform only one of the following tasks:

- [Configuring a Basic HTTP GET Operation on the Source Device, page 3](#)
- [Configuring an HTTP GET Operation with Optional Parameters on the Source Device, page 4](#)

## Configuring a Basic HTTP GET Operation on the Source Device

### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ip sla operation-number**
4. **http {get | raw} url [name-server ip-address] [version version-number] [source-ip {ip-address | hostname}] [source-port port-number] [cache {enable | disable}] [proxy proxy-url]**
5. **frequency seconds**
6. **end**

### DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>enable</b>  <b>Example:</b> Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
Step 2	<b>configure terminal</b>  <b>Example:</b> Router# configure terminal	Enters global configuration mode.
Step 3	<b>ip sla operation-number</b>  <b>Example:</b> Router(config)# ip sla 10	Begins configuration for an IP SLAs operation and enters IP SLA configuration mode.
Step 4	<b>http {get   raw} url [name-server ip-address] [version version-number] [source-ip {ip-address   hostname}] [source-port port-number] [cache {enable   disable}] [proxy proxy-url]</b>  <b>Example:</b> Router(config-ip-sla)# http get http://198.133.219.25	Defines an HTTP operation and enters IP SLA configuration mode.

	Command or Action	Purpose
Step 5	<b>frequency</b> <i>seconds</i>  <b>Example:</b> Router(config-ip-sla-http)# frequency 90	(Optional) Sets the rate at which a specified IP SLAs HTTP operation repeats. The default and minimum frequency value for an IP SLAs HTTP operation is 60 seconds.
Step 6	<b>end</b>  <b>Example:</b> Router(config-ip-sla-http)# end	Exits to privileged EXEC mode.

## Configuring an HTTP GET Operation with Optional Parameters on the Source Device

### SUMMARY STEPS

1. **enable**
2. **configure terminal**
3. **ip sla** *operation-number*
4. **http** {**get** | **raw**} *url* [**name-server** *ip-address*] [**version** *version-number*] [**source-ip** {*ip-address* | *hostname*}] [**source-port** *port-number*] [**cache** {**enable** | **disable**}] [**proxy** *proxy-url*]
5. **history buckets-kept** *size*
6. **history distributions-of-statistics-kept** *size*
7. **history enhanced** [**interval** *seconds*] [**buckets** *number-of-buckets*]
8. **history filter** {**none** | **all** | **overThreshold** | **failures**}
9. **frequency** *seconds*
10. **history hours-of-statistics-kept** *hours*
11. **http-raw-request**
12. **history lives-kept** *lives*
13. **owner** *owner-id*
14. **history statistics-distribution-interval** *milliseconds*
15. **tag** *text*
16. **threshold** *milliseconds*
17. **timeout** *milliseconds*
18. **tos** *number*
19. **end**

## DETAILED STEPS

	Command or Action	Purpose
Step 1	<b>enable</b>  <b>Example:</b> Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"><li>Enter your password if prompted.</li></ul>
Step 2	<b>configure terminal</b>  <b>Example:</b> Router# configure terminal	Enters global configuration mode.
Step 3	<b>ip sla operation-number</b>  <b>Example:</b> Router(config)# ip sla 10	Begins configuration for an IP SLAs operation and enters IP SLA configuration mode.
Step 4	<b>http {get   raw} url [name-server ip-address] [version version-number] [source-ip {ip-address   hostname}] [source-port port-number] [cache {enable   disable}] [proxy proxy-url]</b>  <b>Example:</b> Router(config-ip-sla)# http get http://198.133.219.25	Defines an HTTP operation and enters IP SLA configuration mode.
Step 5	<b>history buckets-kept size</b>  <b>Example:</b> Router(config-ip-sla-http)# history buckets-kept 25	(Optional) Sets the number of history buckets that are kept during the lifetime of an IP SLAs operation.
Step 6	<b>history distributions-of-statistics-kept size</b>  <b>Example:</b> Router(config-ip-sla-http)# history distributions-of-statistics-kept 5	(Optional) Sets the number of statistics distributions kept per hop during an IP SLAs operation.
Step 7	<b>history enhanced [interval seconds] [buckets number-of-buckets]</b>  <b>Example:</b> Router(config-ip-sla-http)# history enhanced interval 900 buckets 100	(Optional) Enables enhanced history gathering for an IP SLAs operation.
Step 8	<b>history filter {none   all   overThreshold   failures}</b>  <b>Example:</b> Router(config-ip-sla-http)# history filter failures	(Optional) Defines the type of information kept in the history table for an IP SLAs operation.

	<b>Command or Action</b>	<b>Purpose</b>
<b>Step 9</b>	<p><b>frequency</b> <i>seconds</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# frequency 90</p>	(Optional) Sets the rate at which a specified IP SLAs HTTP operation repeats. The default and minimum frequency value for an IP SLAs HTTP operation is 60 seconds.
<b>Step 10</b>	<p><b>history hours-of-statistics-kept</b> <i>hours</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# history hours-of-statistics-kept 4</p>	(Optional) Sets the number of hours for which statistics are maintained for an IP SLAs operation.
<b>Step 11</b>	<p><b>http-raw-request</b></p> <p><b>Example:</b> Router(config-ip-sla-http)# http-raw-request</p>	(Optional) Explicitly specifies the options for a GET request for an IP SLAs HTTP operation.
<b>Step 12</b>	<p><b>history lives-kept</b> <i>lives</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# history lives-kept 5</p>	(Optional) Sets the number of lives maintained in the history table for an IP SLAs operation.
<b>Step 13</b>	<p><b>owner</b> <i>owner-id</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# owner admin</p>	(Optional) Configures the Simple Network Management Protocol (SNMP) owner of an IP SLAs operation.
<b>Step 14</b>	<p><b>history statistics-distribution-interval</b> <i>milliseconds</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# history statistics-distribution-interval 10</p>	(Optional) Sets the time interval for each statistics distribution kept for an IP SLAs operation.
<b>Step 15</b>	<p><b>tag</b> <i>text</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# tag TelnetPollServer1</p>	(Optional) Creates a user-specified identifier for an IP SLAs operation.
<b>Step 16</b>	<p><b>threshold</b> <i>milliseconds</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# threshold 10000</p>	(Optional) Sets the upper threshold value for calculating network monitoring statistics created by an IP SLAs operation.
<b>Step 17</b>	<p><b>timeout</b> <i>milliseconds</i></p> <p><b>Example:</b> Router(config-ip-sla-http)# timeout 10000</p>	(Optional) Sets the amount of time an IP SLAs operation waits for a response from its request packet.

	Command or Action	Purpose
Step 18	<code>tos number</code>  <b>Example:</b> Router(config-ip-sla-http)# tos 160	(Optional) Defines a type of service (ToS) byte in the IP header of an IP SLAs operation.
Step 19	<code>end</code>  <b>Example:</b> Router(config-ip-sla-http)# end	Exits to privileged EXEC mode.

## Configuring an HTTP RAW Operation on the Source Device



### Note

This operation does not require an IP SLAs Responder on the destination device.

### SUMMARY STEPS

1. `enable`
2. `configure terminal`
3. `ip sla operation-number`
4. `http {get | raw} url [name-server ip-address] [version version-number] [source-ip {ip-address | hostname}] [source-port port-number] [cache {enable | disable}] [proxy proxy-url]`
5. `http-raw-request`
6. Enter the required HTTP 1.0 command syntax.
7. `end`

### DETAILED STEPS

	Command or Action	Purpose
Step 1	<code>enable</code>  <b>Example:</b> Router> enable	Enables privileged EXEC mode. <ul style="list-style-type: none"> <li>• Enter your password if prompted.</li> </ul>
Step 2	<code>configure terminal</code>  <b>Example:</b> Router# configure terminal	Enters global configuration mode.
Step 3	<code>ip sla operation-number</code>  <b>Example:</b> Router(config)# ip sla 10	Begins configuration for an IP SLAs operation and enters IP SLA configuration mode.

	Command or Action	Purpose
Step 4	<pre>http {get   raw} url [name-server ip-address] [version version-number] [source-ip {ip-address   hostname}] [source-port port-number] [cache {enable   disable}] [proxy proxy-url]</pre> <p><b>Example:</b> Router(config-ip-sla)# http raw http://198.133.219.25</p>	Defines an HTTP operation.
Step 5	<pre>http-raw-request</pre> <p><b>Example:</b> Router(config-ip-sla)# http-raw-request</p>	Enters HTTP RAW configuration mode.
Step 6	<p>Enter the required HTTP 1.0 command syntax.</p> <p><b>Example:</b> Router(config-ip-sla-http)# GET /en/US/hmpgs/index.html HTTP/1.0\r\n\r\n</p>	Specifies all the required HTTP 1.0 commands.
Step 7	<pre>end</pre> <p><b>Example:</b> Router(config-ip-sla-http)# end</p>	Exits to privileged EXEC mode.

## Scheduling IP SLAs Operations

### Restrictions

- The frequency of all operations scheduled in a multioperation group must be the same.
- Operation ID numbers are limited to a maximum of 125 characters. Do not give large integer values as operation ID numbers.

### SUMMARY STEPS

1. **enable**
2. **configure terminal**

For individual IP SLAs operations only:

3. **ip sla schedule** *operation-number* [**life** {**forever** | *seconds*}] [**start-time** {*hh:mm[:ss]* [*month day* | *day month*] | **pending** | **now** | **after** *hh:mm:ss*}] [**ageout** *seconds*] [**recurring**]

For multioperation scheduler only:

4. **ip sla group schedule** *group-operation-number operation-id-numbers* **schedule-period** *schedule-period-range* [**ageout** *seconds*] [**frequency** *group-operation-frequency*] [**life** {**forever** | *seconds*}] [**start-time** {*hh:mm[:ss]* [*month day* | *day month*] | **pending** | **now** | **after** *hh:mm:ss*}]
5. **exit**
6. **show ip sla group schedule**

## 7. show ip sla configuration

### DETAILED STEPS

	Command or Action	Purpose
Step 1	<p><b>enable</b></p> <p><b>Example:</b> Router&gt; enable</p>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> <li>Enter your password if prompted.</li> </ul>
Step 2	<p><b>configure terminal</b></p> <p><b>Example:</b> Router# configure terminal</p>	<p>Enters global configuration mode.</p>
Step 3	<p><b>ip sla schedule</b> <i>operation-number</i> [<b>life</b> {<b>forever</b>   <i>seconds</i>}] [<b>start-time</b> {<i>hh:mm[:ss]</i> [<i>month day</i>   <i>day month</i>]   <b>pending</b>   <b>now</b>   <b>after</b> <i>hh:mm:ss</i>}] [<b>ageout</b> <i>seconds</i>] [<b>recurring</b>]</p> <p><b>Example:</b> Router(config)# ip sla schedule 8 start-time now life forever</p>	<p>For individual IP SLAs operations only:</p> <p>Configures the scheduling parameters for an individual IP SLAs operation.</p>
Step 4	<p><b>ip sla group schedule</b> <i>group-operation-number operation-id-numbers</i> <b>schedule-period</b> <i>schedule-period-range</i> [<b>ageout</b> <i>seconds</i>] [<b>frequency</b> <i>group-operation-frequency</i>] [<b>life</b> {<b>forever</b>   <i>seconds</i>}] [<b>start-time</b> {<i>hh:mm[:ss]</i> [<i>month day</i>   <i>day month</i>]   <b>pending</b>   <b>now</b>   <b>after</b> <i>hh:mm:ss</i>}]</p> <p><b>Example:</b> Router(config)# ip sla group schedule 1 3,4,6-9</p>	<p>For multioperation scheduler only:</p> <p>Specifies an IP SLAs operation group number and the range of operation numbers to be scheduled in global configuration mode.</p> <ul style="list-style-type: none"> <li>The frequency of all operations scheduled in the operation group should be the same.</li> <li>The operation ID numbers are limited to a maximum of 125 characters. Do not use large integer values as operation ID numbers.</li> </ul>
Step 5	<p><b>exit</b></p> <p><b>Example:</b> Router(config)# exit</p>	<p>Exits to privileged EXEC mode.</p>
Step 6	<p><b>show ip sla group schedule</b></p> <p><b>Example:</b> Router# show ip sla group schedule</p>	<p>(Optional) Displays the IP SLAs group schedule details.</p>
Step 7	<p><b>show ip sla configuration</b></p> <p><b>Example:</b> Router# show ip sla configuration</p>	<p>(Optional) Displays the IP SLAs configuration details.</p>

### Examples

The following sample output shows the configuration of all the IP SLAs parameters (including defaults) for the HTTP RAW operation number 8.

```

Router# show ip sla configuration 8

Complete Configuration Table (includes defaults)
Entry Number: 8
Owner:
Tag:
Type of Operation to Perform: http
Reaction and History Threshold (milliseconds): 5000
Operation Frequency (seconds): 90
Operation Timeout (milliseconds): 5000
Verify Data: FALSE
Status of Entry (SNMP RowStatus): active
Protocol Type: httpAppl
Target Address:
Source Address: 0.0.0.0
Target Port: 0
Source Port: 0
Request Size (ARR data portion): 1
Response Size (ARR data portion): 1
Control Packets: enabled
Loose Source Routing: disabled
LSR Path:
Type of Service Parameters: 0x0
HTTP Operation: raw
HTTP Server Version: 1.0
URL: http://198.133.219.25
Proxy:
Raw String(s):
GET /en/US/hmpgs/index.html HTTP/1.0\r\n\r\n

Cache Control: enabled
Life (seconds): infinite - runs forever
Next Scheduled Start Time: Start Time already passed
Entry Ageout (seconds): never
Connection Loss Reaction Enabled: FALSE
Timeout Reaction Enabled: FALSE
Threshold Reaction Type: never
Threshold Falling (milliseconds): 3000
Threshold Count: 5
Threshold Count2: 5
Reaction Type: none
Verify Error Reaction Enabled: FALSE
Number of Statistic Hours kept: 2
Number of Statistic Paths kept: 1
Number of Statistic Hops kept: 1
Number of Statistic Distribution Buckets kept: 1
Statistic Distribution Interval (milliseconds): 20
Number of History Lives kept: 0
Number of History Buckets kept: 15
Number of History Samples kept: 1
History Filter Type: none

```

The following sample output shows the configuration of all the IP SLAs parameters (including defaults) for the HTTP GET operation number 8.

```

Router# show ip sla configuration 8

Complete Configuration Table (includes defaults)
Entry Number: 8
Owner:
Tag: FLL-LA
Type of Operation to Perform: http
Reaction and History Threshold (milliseconds): 5000
Operation Frequency (seconds): 90

```

```
Operation Timeout (milliseconds): 5000
Verify Data: FALSE
Status of Entry (SNMP RowStatus): active
Protocol Type: httpAppl
Target Address:
Source Address: 0.0.0.0
Target Port: 0
Source Port: 0
Request Size (ARR data portion): 1
Response Size (ARR data portion): 1
Control Packets: enabled
Loose Source Routing: disabled
LSR Path:
Type of Service Parameters: 0x0
HTTP Operation: get
HTTP Server Version: 1.0
URL: http://198.133.219.25
Proxy:
Raw String(s):

Cache Control: enabled
Life (seconds): infinite - runs forever
Next Scheduled Start Time: Start Time already passed
Entry Ageout (seconds): never
Connection Loss Reaction Enabled: FALSE
Timeout Reaction Enabled: FALSE
Threshold Reaction Type: never
Threshold Falling (milliseconds): 3000
Threshold Count: 5
Threshold Count2: 5
Reaction Type: none
Verify Error Reaction Enabled: FALSE
Number of Statistic Hours kept: 2
Number of Statistic Paths kept: 1
Number of Statistic Hops kept: 1
Number of Statistic Distribution Buckets kept: 1
Statistic Distribution Interval (milliseconds): 20
Number of History Lives kept: 0
Number of History Buckets kept: 15
Number of History Samples kept: 1
History Filter Type: none
```

## Troubleshooting Tips

Use the **debug ip sla trace** and **debug ip sla error** commands to help troubleshoot issues with an IP SLAs operation.

## What to Do Next

To add proactive threshold conditions and reactive triggering for generating traps, or for starting another operation, to an IP SLAs operation, see [Configuring Proactive Threshold Monitoring](#).

To view and interpret the results of an IP SLAs operation use the **show ip sla statistics** command. Checking the output for fields that correspond to criteria in your service level agreement will help you determine whether the service metrics are acceptable.

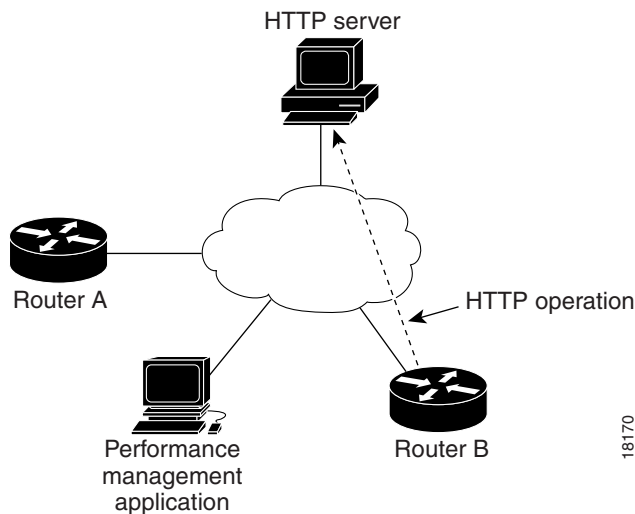
# Configuration Examples for IP SLAs HTTP Operations

- [Example: Configuring an HTTP GET Operation, page 12](#)
- [Example: Configuring an HTTP RAW Operation, page 12](#)
- [Example: Configuring an HTTP RAW Operation Through a Proxy Server, page 13](#)
- [Example: Configuring an HTTP RAW Operation with Authentication, page 13](#)

## Example: Configuring an HTTP GET Operation

The following example show how to create and configure operation number 8 as an HTTP GET operation. The destination URL IP address represents the www.cisco.com website. [Figure 1](#) depicts the HTTP GET operation.

**Figure 1** HTTP Operation



### Router B Configuration

```
ip sla 8
  http get url http://198.133.219.25
!
ip sla schedule 8 start-time now
```

## Example: Configuring an HTTP RAW Operation

The following example shows how to configure an HTTP RAW operation. To use the RAW commands, enter HTTP RAW configuration mode by using the **http-raw-request** command in IP SLA configuration mode. The IP SLA HTTP RAW configuration mode is indicated by the (config-ip-sla-http) router prompt.

```
ip sla 8
  http raw url http://198.133.219.25
  http-raw-request
  GET /en/US/hmpgs/index.html HTTP/1.0\r\n
```

```

\r\n
end
ip sla schedule 8 life forever start-time now

```

## Example: Configuring an HTTP RAW Operation Through a Proxy Server

The following example shows how to configure an HTTP RAW operation through a proxy server. The proxy server is [www.proxy.cisco.com](http://www.proxy.cisco.com) and the HTTP server is [www.yahoo.com](http://www.yahoo.com).

```

ip sla 8
http raw url http://www.proxy.cisco.com
http-raw-request
GET http://www.yahoo.com HTTP/1.0\r\n
\r\n
end
ip sla schedule 8 life forever start-time now

```

## Example: Configuring an HTTP RAW Operation with Authentication

The following example shows how to configure an HTTP RAW operation with authentication.

```

ip sla 8
http raw url http://site-test.cisco.com
http-raw-request
GET /lab/index.html HTTP/1.0\r\n
Authorization: Basic btNpdGT4biNvoZe=\r\n
\r\n
end
ip sla schedule 8 life forever start-time now

```

## Additional References

### Related Documents

Related Topic	Document Title
Cisco IOS commands	<a href="#">Cisco IOS Master Commands List, All Releases</a>
Cisco IOS IP SLAs commands	<a href="#">Cisco IOS IP SLAs Command Reference</a>
Cisco IOS IP SLAs: general information	“Cisco IOS IP SLAs Overview” chapter of the <a href="#">Cisco IP SLAs Configuration Guide</a> .

### Standards

Standards	Title
No new or modified standards are supported by this feature, and support for existing standards has not been modified by this feature.	—

## MIBs

MIBs	MIBs Link
CISCO-RTTMON-MIB	To locate and download MIBs for selected platforms, Cisco IOS releases, and feature sets, use Cisco MIB Locator found at the following URL: <a href="http://www.cisco.com/go/mibs">http://www.cisco.com/go/mibs</a>

## RFCs

RFCs	Title
No new or modified RFCs are supported by this feature, and support for existing RFCs has not been modified by this feature.	—

## Technical Assistance

Description	Link
The Cisco Support and Documentation website provides online resources to download documentation, software, and tools. Use these resources to install and configure the software and to troubleshoot and resolve technical issues with Cisco products and technologies. Access to most tools on the Cisco Support and Documentation website requires a Cisco.com user ID and password.	<a href="http://www.cisco.com/cisco/web/support/index.html">http://www.cisco.com/cisco/web/support/index.html</a>

# Feature Information for IP SLAs HTTP Operations

Table 1 lists the features in this module and provides links to specific configuration information.

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.



**Note**

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

**Table 1** Feature Information for IP SLAs HTTP Operations

Feature Name	Releases	Feature Information
IP SLAs HTTP Operation	12.2(31)SB2 12.2(33)SRB1 12.2(33)SXH 12.3(14)T 15.0(1)S Cisco IOS XE 3.1.0SG	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.

Cisco and the Cisco Logo are trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and other countries. A listing of Cisco's trademarks can be found at [www.cisco.com/go/trademarks](http://www.cisco.com/go/trademarks). Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1005R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in illustrative content is unintentional and coincidental.

© 2006-2010 Cisco Systems, Inc. All rights reserved.

