

Selective Enabling of Applications Using an HTTP or HTTPS Server

The Selective Enabling of Applications Using an HTTP or HTTPS Server feature eliminates a potential security vulnerability by providing a facility to enable selected HTTP and HTTP over Secure Socket Layer (HTTPS) services on both the Cisco IOS HTTP and HTTPS server infrastructure. This feature also provides the capability to view the current state of the HTTP and HTTPS services, including which services are enabled or disabled.

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Finding Feature Information

Your software release may not support all the features documented in this module. For the latest caveats and feature information, see Bug Search Tool and 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 table at the end of this module.

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

Information About Selective Enabling of Applications Using an HTTP or HTTPS Server

Selective Enabling of Applications Within the HTTP and HTTPS Infrastructure

The Selective Enabling of Applications Using an HTTP or HTTPS Server feature eliminates a potential security vulnerability by providing a facility to enable selected HTTP and HTTPS services on both the Cisco IOS HTTP and HTTPS server infrastructure. This feature also provides the capability to view the current state of the HTTP and HTTPS services, including which services are enabled or disabled.

Prior to this feature, HTTP or HTTPS applications running on a router or a switch, were either all enabled or all disabled when the HTTP server or HTTPS server was enabled or disabled, respectively (using the **ip http server** and **ip http secure-server** commands). In the situation where all HTTP or HTTPS applications were enabled, remote end-users were given potential access to services that could allow them to pose a potential security threat to service providers.

With this new feature, the Cisco IOS HTTP and HTTPS infrastructure provides a way to enable only selected HTTP and HTTPS applications to run on a router or a switch, thereby bypassing a potential security vulnerability. Selected HTTP and HTTPS applications can be enabled using the new **ip http** active-session-modules and **ip http secure-active-session-modules** configuration commands, respectively.



The maximum number of sessions that can be registered with the Cisco IOS HTTP or HTTPS server is 32.

How to Enable Selected Applications Using an HTTP or HTTPS Server

Enabling Selected HTTP Applications

Perform this task to selectively enable the HTTP applications that will service incoming HTTP requests from remote clients.

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- **3. ip http session-module-list** *list-name prefix-1* [*prefix-2,...,prefix-n*]
- 4. ip http active-session-modules {list-name | none | all}
- 5. end
- 6. show ip http server session-module

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
	Example:	Enter your password if prompted.
	Router> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Router# configure terminal	
Step 3	ip http session-module-list list-name prefix-1 [prefix-2,,prefix-n]	Defines a list of HTTP or HTTPS application names.
	Example:	
	Router(config) # ip http session-module-list list1 SCEP, HOME_PAGE	
Step 4	ip http active-session-modules {list-name none all}	Selectively enables HTTP applications that will service incoming HTTP requests from remote clients.
	Example: Router(config) # ip http active-session-modules list1	 The <i>listname</i> argument enables only those HTTP services configured in the list identified by the ip http session-module-list command to serve HTTP requests.
		• The keyword none disables all HTTP services from serving HTTP requests.
		The keyword all enables all HTTP services to serve HTTP requests.
Step 5	end	Ends your configuration session and returns to privileged EXEC mode.
	Example:	
	Router(config)# end	
Step 6	show ip http server session-module	(Optional) Displays information about all HTTP and HTTPS services available on the router or switch, including their current
	Example:	state of service, such as whether they are enabled or disabled.
	Router# show ip http server session-module	

Enabling Selected HTTPS Applications

Perform this task to selectively enable the HTTPS applications that will service incoming HTTPS requests from remote clients.

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- **3. ip http session-module-list** *list-name prefix-1* [*prefix-2,...,prefix-n*]
- 4. ip http secure-active-session-modules {list-name | none | all}
- 5 end
- 6. show ip http server session-module

DETAILED STEPS

	Command or Action	Purpose		
Step 1	enable	Enables privileged EXEC mode.		
	Example:	• Enter your password if prompted.		
	Router> enable			
Step 2	configure terminal	Enters global configuration mode.		
	Example:			
	Router# configure terminal			
Step 3	ip http session-module-list list-name prefix-1 [prefix-2,,prefix-n]	Defines a list of HTTP or HTTPS application names.		
	Example:			
	Router(config) # ip http session-module-list list1 SCEP, HOME_PAGE			
Step 4	ip http secure-active-session-modules {list-name none all}	Selectively enables HTTPS applications that will service incoming HTTPS requests from remote clients.		
	<pre>Example: Router(config) # ip http</pre>	 The <i>listname</i> argumentenables only those HTTPS services configured in the list identified by the ip http session-module-list command to serve HTTPS requests. 		
	secure-active-session-modules list1	The keyword none disables all HTTPS services from serving HTTPS requests.		
		The keyword all enables all HTTPS services to serve HTTPS requests.		

	Command or Action	Purpose
Step 5	end	Ends your configuration session and returns the CLI to Privileged Exec mode.
	Example:	
	Router(config)# end	
Step 6	show ip http server session-module	(Optional) Displays information about all HTTP and HTTPS services available on the router or switch, including their current
	Example:	state of service, such as whether they are enabled or disabled.
	Router# show ip http server session-module	

Configuration Examples for Selective Enabling of Applications Using an HTTP or HTTPS Server

Example: Enabling Selected HTTP and HTTPS Applications

The following configuration sample shows a configuration with different set of services available for HTTP and HTTPS requests. In this example, all HTTP applications are enabled for providing services to remote clients, but for HTTPS services, only the HTTPS applications defined in list1 (Simple Certificate Enrollment Protocol [SCEP] and HOME_PAGE) are enabled.

```
ip http session-module-list list1 SCEP,HOME_PAGE
ip http active-session-modules all
ip http server
ip http secure-server
ip http secure-active-session-modules list1
```

Example: Verifying HTTP and HTTPS Applications

The following example shows how to list the HTTP and HTTPS applications that have been selectively enabled or disabled using the **ip http session-module-list** *list-name prefix-1* [*prefix-2,...,prefix-n*] command:

Device# show ip http server session-module

HTTP server application session modules:				
Session module Name	Handle	Status	Secure-status	Description
HOME PAGE	2	Active	Active	IOS Homepage Server
GSI3D3FD3DC-wsma	6	Active	Active	wsma infra
HTTP IFS	1	Active	Active	HTTP based IOS File Server
BANNER PAGE	3	Active	Active	HTTP Banner Page Server
WEB EXEC	4	Active	Active	HTTP based IOS EXEC Server
IXI	5	Active	Active	IOS XML Infra Application Server
GSI3D31BCA4-wsma	7	Active	Active	wsma infra
EXTERN	9	Active	Active	External Distributed HTTP server
dot11	30	Active	Active	dot11
links	31	Active	Active	links
tgconfig	32	Active	Active	tgconfig

system	33	Active	Active	system
javascript	34	Active	Active	javascript
css	35	Active	Active	css
images	36	Active	Active	images
wlan	37	Active	Active	wlan
wireless	38	Active	Active	wireless



The applications that can be enabled or disabled vary based on the platform and applications that register with HTTP infra during run time. HTTP infra provides a web interface that is referred to as legacy WebUI. This WebUI provides links to the following applications:

- Diagnostic log
- HTML access to command-line interface
- Connectivity test —ping interface
- · Platform utilities
- Show tech support
- Extended ping
- Any platform-specific home page
- Contact information

Additional References for Selective Enabling of Applications Using an HTTP or HTTPS Server

Related Documents

Related Topic	Document Title
Additional HTTP configuration information	Using the Cisco Web Browser User Interface
Additional HTTPS configuration information	HTTPS - HTTP Server and Client with SSL 3.0
Additional HTTP and HTTPS commands	Cisco IOS Network Management Command Reference

Technical Assistance

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.	http://www.cisco.com/public/support/tac/home.shtml
To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.	
Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	

Feature Information for Selective Enabling of Applications Using an HTTP or HTTPS Server

The following table provides release information about the feature or features described in this module. This table 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.

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

Table 1: Feature Information for Selective Enabling of Applications Using an HTTP or HTTPS Server

Feature Name	Releases	Feature Information
Selective Enabling of Applications Using an HTTP or HTTPS Server	12.3(14)T	The Selective Enabling of Applications Using an HTTP or HTTPS Server feature eliminates a potential security vulnerability by providing a facility to enable selected HTTP and HTTP over Secure Socket Layer (HTTPS) services on both the Cisco IOS HTTP and HTTPS server infrastructure. This feature also provides the capability to view the current state of the HTTP and HTTPS services, including which services are enabled or disabled.

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