



NBAR Customized Assistance Based on SSL or HTTP

NBAR Customized Assistance based on SSL or HTTP feature enables the user to customize Secure Sockets Layer (SSL) traffic based on the hostname that is found either in the Server Name field in the Client Hello extensions or in the Common Name field in the digital certificate that the client sends to the server, and to customize HTTP traffic based on signatures that have hostnames.

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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.

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.

NBAR Customized Assistance Based on SSL or HTTP Overview

Network-Based Application Recognition (NBAR) supports the use of custom protocols to identify custom applications. Custom protocols support static port-based protocols and applications that NBAR does not support. NBAR Customized Assistance based on SSL or HTTP feature enables the user to customize Secure Sockets Layer (SSL) traffic based on the hostname that is found either in the Server Name field in the Client

Hello extensions or in the Common Name field in the digital certificate that the client sends to the server and to customize HTTP traffic based on signatures that have hostnames.

How to configure NBAR Customization Assistance Based on SSL or HTTP

Configuring NBAR Customized Assistance based on SSL or HTTP

SUMMARY STEPS

1. `enable`
2. `configure terminal`
3. `ip nbar classification auto-learn [top-hosts | top-ports]`
4. `ip nbar classification auto-learn top-ports sample-rate N`
5. `exit`
6. `show ip nbar classification auto-learn [top-hosts | top-ports] N [Detailed]`
7. `clear ip nbar classification auto-learn [top-hosts | top-ports] statistics`
8. `clear ip nbar classification auto-learn top-hosts restart`

DETAILED STEPS

	Command or Action	Purpose
Step 1	<p><code>enable</code></p> <p>Example:</p> <pre>Device> enable</pre>	<p>Enables privileged EXEC mode.</p> <ul style="list-style-type: none"> • Enter your password if prompted.
Step 2	<p><code>configure terminal</code></p> <p>Example:</p> <pre>Device# configure terminal</pre>	<p>Enters global configuration mode.</p>
Step 3	<p><code>ip nbar classification auto-learn [top-hosts top-ports]</code></p> <p>Example:</p> <pre>Device (config)# ip nbar classification auto-learn top-hosts Device (config)# ip nbar classification auto-learn top-ports</pre>	<ul style="list-style-type: none"> • (Optional) Enables Network Based Application Recognition's (NBAR's) ability to reveal the top hosts in the network traffic that is classified as generic. • (Optional) Enables Network Based Application Recognition's (NBAR's) ability to reveal the list of top server-side ports in the network traffic that is classified as generic.

	Command or Action	Purpose
Step 4	<p>ip nbar classification auto-learn top-portssample-rate <i>N</i></p> <p>Example: Device (config)# ip nbar classification auto-learn top-ports sample-rate 5</p>	(Optional) Enables Network Based Application Recognition's (NBAR's) ability to change the sampling rate of top server-side ports in the network traffic.
Step 5	<p>exit</p> <p>Example: Device (config)# exit</p>	Exits global configuration mode.
Step 6	<p>show ip nbar classification auto-learn [top-hosts top-ports] <i>N</i>[Detailed]</p> <p>Example: Device# show ip nbar classification auto-learn top-hosts 10 detailed Device# show ip nbar classification auto-learn top-ports 25</p>	<p>Prints the detailed output from the top hosts.</p> <p>Displays the statistics and database of the top hosts that are classified as generic and ports as unknown.</p>
Step 7	<p>clear ip nbar classification auto-learn [top-hosts top-ports] <i>statistics</i></p> <p>Example: Device# clear ip nbar classification auto-learn top-hosts statistics Device# clear ip nbar classification auto-learn top-ports statistics</p>	<ul style="list-style-type: none"> • Clears the display of statistics and database of the top hosts of the network traffic classified as generic. • Clears the statistics of top-ports of the network traffic classified as unknown, however, the top-ports database remains unchanged.
Step 8	<p>clear ip nbar classification auto-learn top-hosts restart</p> <p>Example: Device# clear ip nbar classification auto-learn top-ports restart</p>	Clears the display of top-ports statistics and database of traffic classified as unknown.

Configuration Examples for NBAR Customized Assistance Based on SSL or HTTP

Example: Configuring NBAR Customized Assistance Based on SSL or HTTP

```
Device> enable
Device# configuration terminal
Device (config)# ip nbar classification auto-learn top-hosts
Device (config)# exit
```

Additional References for NBAR Customized Assistance Based on SSL or HTTP

Related Documents

Related Topic	Document Title
Cisco IOS commands	Cisco IOS Master Commands List, All Releases
QoS commands: complete command syntax, command modes, command history, defaults, usage guidelines, and examples	Cisco IOS Quality of Service Solutions Command Reference

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.	http://www.cisco.com/cisco/web/support/index.html

Feature Information for NBAR Customization Assistance Based on SSL or HTTP

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 NBAR Customization Assistance Based on SSL or HTTP

Feature Name	Releases	Feature Information
Show unclassified port stats	Cisco IOS XE Release 3.16S	<p>NBAR Customized Assistance based on SSL or HTTP feature enables the user to customize Secure Sockets Layer (SSL) traffic based on the ports that is found either in the Server Name field in the Client Hello extensions or in the Common Name field in the digital certificate that the client sends to the server, and to customize HTTP traffic based on signatures that have port names.</p> <p>The following commands were introduced or modified: ip nbar classification auto-learn top-ports, ip nbar classification auto-learn top-ports sample-rate, show ip nbar classification auto-learn top-ports, clear ip nbar classification auto-learn top-ports restart, and clear ip nbar classification auto-learn top-ports statistics</p>

