

NBAR Web-based Custom Protocols

The NBAR Web-based Custom Protocols feature provides the mechanism to define custom protocols to match based on HTTP URL and/or host name.

- Finding Feature Information, on page 1
- Restrictions for NBAR Web-based Custom Protocols, on page 1
- Information About NBAR Web-based Custom Protocols, on page 2
- How to Define NBAR Web-based Custom Protocols Match, on page 2
- Configuration Examples for NBAR Web-based Custom Protocols, on page 3
- Additional References for NBAR Web-based Custom Protocols, on page 3
- Feature Information for NBAR Web-based Custom Protocols, on page 4

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.

Restrictions for NBAR Web-based Custom Protocols

The HTTP URL and the Host name defined for custom protocol match should be unique. The length of the protocol name should be at least 4 characters long and the prefix of the protocol name should be different from the prefixes of any other protocol name.

Information About NBAR Web-based Custom Protocols

Overview of NBAR Web-based Custom Protocols

The NBAR Web-based Custom Protocols feature provides the mechanism to define custom protocols to match the traffic based on HTTP URL and/or host name.

All 120 custom protocols can be defined to match based on HTTP URL and/or host name. While matching web-based custom protocols, the custom protocol that has both HTTP URL and the host name defined has the highest priority, followed by HTTP URL as the second priority, and then followed by Host name as the last priority. Matching a web-based sub-protocol has higher priority than matching any type of web-based custom protocol, for example the **match protocol** *http url http-url* command has a higher priority than a custom priority with the same URL configuration.

How to Define NBAR Web-based Custom Protocols Match

Defining a Web-based Custom Protocol Match

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- **3.** ip nbar custom custom-protocol-name http { host host-name | url http-url [host host-name] } [id selector-id]
- 4. end

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 nbar custom custom-protocol-name http { host	Defines web-based custom protocol match.
	<i>host-name</i> url <i>http-url</i> [host <i>host-name</i>] } [id <i>selector-id</i>]	• Enter the custom protocol name and any other optional keywords and arguments.
	Example:	

	Command or Action	Purpose	
	Router(config)# ip nbar custom app_sales1 http url www.example.com	Note To add a custom protocol, use the ip nbar custom command. To enable the protolcol, use the match protocol command or ip nbar protocol discovery command.	
Step 4	end	(Optional) Exits global configuration mode.	
	Example:		
	Router(config)# end		

Configuration Examples for NBAR Web-based Custom Protocols

Examples: Defining Web-based Custom Protocol Match

The following example displays how to match a custom protocol based on http url:

```
Router> enable
Router# configure terminal
Router(config)# ip nbar custom app_sales1 http url www.example.com
```

The following example displays how to match a custom protocol that contains the string 'example' as a part of host name:

Router> enable
Router# configure terminal
Router(config)# ip nbar custom app_sales1 http host *example*

Additional References for NBAR Web-based Custom Protocols

Related Documents

Related Topic	Document Title	
Cisco IOS commands	Cisco IOS Master Command List, All Releases	
Custom Protocols	Creating a Custom Protocol module	

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.	

Feature Information for NBAR Web-based Custom Protocols

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.

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Feature Name	Releases	Feature Information
NBAR Web-based Custom Protocols Scalability	Cisco IOS XE Release 3.13S	The NBAR Web-based Custom Protocols Scalability feature enables defining custom protocols match based on http host name and/or url. The following command was introduced or modified: ip nbar custom .

Table 1: Feature Information for NBAR Web-based Custom Protocols