

Fine-Grain NBAR for Selective Applications

By default NBAR operates in the fine-grain mode, offering NBAR's full application recognition capabilities. Used when per-packet reporting is required, fine-grain mode offers a troubleshooting advantage. Cisco recommends using fine-grain mode only when detailed Layer 7 metrics is required to be extracted by NBAR for critical applications. The Fine-Grain NBAR for Selective Applications feature enables a customer to dynamically monitor critical applications including collection of detailed Layer 7 metrics. The feature helps troubleshoot slowness in a particular application while the rest of the applications are running in coarse-grain mode and thus preventing any impact on the performance of the system.

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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.

Information About Fine-Grain NBAR for Selective Applications

Overview of Fine-Grain NBAR for Selective Applications

NBAR provides two levels of application recognition-coarse-grain and fine-grain. By default NBAR operates in the fine-grain mode, offering NBAR's full application recognition capabilities. The default NBAR fine-grain mode is equivalent to NBAR functionality and performance prior to introduction of separate fine-grain and coarse-grain modes. This provides full backward compatibility for existing configurations.

Used when per-packet reporting is required, fine-grain mode offers a troubleshooting advantage. Cisco recommends using fine-grain mode only when detailed Layer 7 metrics is required to be extracted by NBAR for critical applications. The fine-grain NBAR for Selective Applications feature enables a customer to dynamically monitor critical applications including collection of detailed Layer 7 metrics. The feature helps troubleshoot slowness in a particular application while the rest of the applications are running in in coarse-grain mode and thus preventing any impact on the performance of the system.

How to Configure Fine-Grain NBAR for Selective Applications

Configuring Fine-Grain NBAR for Selective Applications

SUMMARY STEPS

- 1. enable
- 2. configure terminal
- 3. ip nbar classification granularity fine-grain protocol protocol-name
- 4. exit
- 5. show ip nbar classification granularity protocol protocol-name

DETAILED STEPS

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode.
	Example:	• Enter your password if prompted.
	Device> enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	
	Device# configure terminal	
Step 3	ip nbar classification granularity fine-grain protocol protocol-name	Configures the fine-grain NBAR classification mode and specifies the protocol name which represents an application.
	Example:	
	Device(config)# ip nbar classification granularity fine-grain protocol 3pc	7
Step 4	exit	Exits the global configuration mode and enters privileged
	Example:	EXEC mode.
	Router(config)# exit	

	Command or Action	Purpose
Step 5	show ip nbar classification granularity protocol protocol-name	Displays the currently configured NBAR classification mode.
	Example:	
	Device(config) # show ip nbar classification granularity protocol 3pc	

Configuration Examples for Fine-Grained NBAR for Selective Applications

Example: Fine-Grain NBAR for Selective Applications

The following example shows how to configure the fine-grain classification mode of NBAR and select a protocol name that represents an application:

```
Device> enable
Device# configuration terminal
Device(config)# ip nbar classification granularity fine-grain protocol 3cp
Device(config)# exit
```

Example: Verifying the Fine-Grain NBAR for Selective Applications

The following example shows how to verify the classification granularity of the currently configured protocol:

Additional References for Fine-Grain NBAR for Selective Applications

Related Documents

Related Topic	Document Title	
Cisco IOS commands	Cisco IOS Master Command List, All Releases	
AVC Configuration	AVC Configuration 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 Fine-Grain NBAR for Selective Applications

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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Table 1: Feature Information for Fine-Grain NBAR for Selective Applications

Feature Name	Releases	Feature Information
Fine-Grain NBAR for Selective Applications	Cisco IOS XE Release 3.15S	By default NBAR operates in the fine-grain mode, offering NBAR's full application recognition capabilities. Used when per-packet reporting is required, fine-grain mode offers a troubleshooting advantage. Cisco recommends using fine-grain mode only when detailed Layer 7 metrics is required to be extracted by NBAR for critical applications. The fine-grain NBAR for Selective Applications feature enables a customer to dynamically monitor critical applications including collection of detailed Layer 7 metrics. The feature helps troubleshoot slowness in a particular application while the rest of the applications are running in coarse-grain mode and thus preventing any impact on the performance of the system.
		introduced or modified: ip nbar custom.

Feature Information for Fine-Grain NBAR for Selective Applications