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.

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** **Example:** `Device> enable`	Enables privileged EXEC mode. • Enter your password if prompted.
Step 2	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

Step 3	**ip nbar classification granularity fine-grain protocol** *protocol-name*
	
	Example:
	
	`Device(config)# ip nbar classification granularity`
	`  fine-grain protocol 3pc`
		Configures the fine-grain NBAR classification mode and specifies the protocol name which represents an application.

Step 4	**exit** **Example:** `Router(config)# exit`	Exits the global configuration mode and enters privileged EXEC mode.

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

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:

```
Device # show ip nbar classification granularity protocol 3pc

Protocol                Force mode
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3pc                     fine-grain
```

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

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. The following command was introduced or modified: **ip nbar custom**.