



# Classifying Network Traffic Using NBAR Features Roadmap

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This features roadmap lists the Cisco IOS features related to Network-Based Application Recognition (NBAR) that are documented in the *Cisco IOS Quality of Service Solutions Configuration Guide*; the roadmap also maps the features to the documents in which they appear. The roadmap is organized so that you can select your release train and see the features in that release. Find the feature name that you are searching for and click on the URL in the “Where Documented” column to access the document containing that feature.

Many legacy features have been incorporated into the configuration files, and these features may not have entries in this roadmap. In addition, information in this roadmap supports other software releases or platforms. For the latest feature information and caveats, see the release notes for your platform and software release.

## Feature and Release Support

Table 1 lists NBAR-related feature support for the following Cisco IOS software release trains:

- [Cisco IOS Releases 12.2T, 12.3, and 12.3T](#)
- [Cisco IOS Release 12.2ZY](#)
- [Cisco IOS Releases 12.4 and 12.4T](#)
- [Cisco IOS XE Release 2](#)

Use Cisco Feature Navigator to find information about platform support and software image support. Cisco Feature Navigator enables you to determine which Cisco IOS, Catalyst OS, and Cisco IOS XE software images support a specific software release, feature set, or platform. To access Cisco Feature Navigator, go to <http://www.cisco.com/go/cfn>. An account on Cisco.com is not required.



**Note**

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Table 1 lists only the Cisco IOS software release that introduced support for a given feature in a given Cisco IOS software release train. Unless noted otherwise, subsequent releases of that Cisco IOS software release train also support that feature.

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Table 1 lists the most recent release of each software train first and the features in alphabetical order within the release.

**Table 1 Supported NBAR-Related Features**

Release	Feature Name	Feature Description	Where Documented
<b>Cisco IOS Releases 12.2T, 12.3, and 12.3T</b>			
12.3(4)T	NBAR Extended Inspection for HTTP Traffic	Allows NBAR to scan TCP ports that are not well known and identify HTTP traffic that traverses these ports.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a>
	NBAR PDLM Versioning	Enables the ability to verify the Cisco IOS and NBAR Packet Description Language Module (PDLM) versions for ensuring software compatibility.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Adding Application Recognition Modules”</a>
	NBAR User-Defined Custom Application Classification	Provides the ability to identify TCP- or UDP-based applications by using a character string or value. The character string or value is used to match traffic within the packet payload.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Creating a Custom Protocol”</a>
12.2(15)T	NBAR Protocol Discovery MIBs	<p>NBAR Protocol Discovery MIBs expand the capabilities of NBAR Protocol Discovery by providing the following new Protocol Discovery functionality through SNMP:</p> <ul style="list-style-type: none"> <li>• Enable or disable Protocol Discovery per interface.</li> <li>• Display Protocol Discovery statistics.</li> <li>• Configure and view multiple top-n tables that list protocols by bandwidth usage.</li> <li>• Configure thresholds based on traffic of particular NBAR-supported protocols or applications that report breaches and send notifications when these thresholds are crossed.</li> </ul>	<a href="#">Network-Based Application Recognition Protocol Discovery Management Information Base</a>
	NBAR Real-Time Transport Protocol Payload Classification	Enables stateful identification of real-time audio and video traffic.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a>

**Table 1** Supported NBAR-Related Features (continued)

Release	Feature Name	Feature Description	Where Documented
<b>Cisco IOS Release 12.2ZY</b>			
12.2(18)ZYA1	Non-intrusive Protocol Discovery	Non-intrusive Protocol Discovery enables the Catalyst 6500 series switch that is equipped with a Supervisor 32/programmable intelligent services accelerator (PISA) to perform protocol discovery in out-of-band (that is, offline) mode. In offline mode, a copy of the network traffic is used to discover the application protocols that are operating on an interface.	<a href="#">“Classifying Network Traffic Using NBAR”</a>
12.2(18)ZYA	NBAR—Network-Based Application Recognition	Integrates NBAR and Firewall Service Module (FWSM) functionality on the Catalyst 6500 series switch that is equipped with a Supervisor 32/programmable intelligent services accelerator (PISA). Provides support for Layer 2 Etherchannels and supports additional protocols.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Enabling Protocol Discovery”</a> <a href="#">“Configuring NBAR Using the MQC”</a> The following commands were modified: <b>ip nbar protocol-discovery</b> , <b>match protocol (NBAR)</b> , <b>show ip nbar protocol-discovery</b> .
12.2(18)ZY2	NBAR—Network-Based Application Recognition (Hardware Accelerated Quality of Service (QoS) for NBAR Classification on PISA)	Enhances NBAR functionality on the Catalyst 6500 series switch that is equipped with a Supervisor 32/programmable intelligent services accelerator (PISA).	<a href="#">“Classifying Network Traffic Using NBAR”</a>
12.2(18)ZY	NBAR—Network-Based Application Recognition (Hardware Accelerated NBAR)	Enables NBAR functionality on the Catalyst 6500 series switch that is equipped with a Supervisor 32/PISA.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a>

**Table 1** Supported NBAR-Related Features (continued)

Release	Feature Name	Feature Description	Where Documented
<b>Cisco IOS Releases 12.4 and 12.4T</b>			
12.4(4)T	QoS: DirectConnect PDLM	Provides support for the DirectConnect PDLM and protocol. The DirectConnect protocol can now be recognized when using the Modular Quality of Service (QoS) Command-Line Interface (CLI) (MQC) to classify traffic.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a> <a href="#">“Adding Application Recognition Modules”</a>
	QoS: Skype Classification	Provides support for the Skype protocol. The Skype protocol can now be recognized when using the MQC to classify traffic.  <b>Note</b> For Cisco IOS Release 12.4(4)T, Cisco supports only Skype version 1. Other versions of Skype are supported in later Cisco IOS releases.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a>
12.4(2)T	NBAR—BitTorrent PDLM	Provides support for the BitTorrent PDLM and protocol. The BitTorrent protocol can now be recognized when using the MQC to classify traffic.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a> <a href="#">“Adding Application Recognition Modules”</a>
	NBAR—Citrix ICA Published Applications	Enables NBAR to classify traffic on the basis of the Citrix Independent Computing Architecture (ICA) published application name and tag number.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a>
	NBAR—Multiple Matches Per Port	Provides the ability for NBAR to distinguish between values of an attribute within the traffic stream of a particular application on a TCP or UDP port.	<a href="#">“Classifying Network Traffic Using NBAR”</a> <a href="#">“Configuring NBAR Using the MQC”</a> <a href="#">“Creating a Custom Protocol”</a>
<b>Cisco IOS XE Release 2</b>			
Cisco IOS XE Release 2.1	NBAR—Network-Based Application Recognition	Provides support for the Protocol Discovery MIB and stateful identification of real-time audio and video traffic (Real-time Transport Protocol Payload Classification). Also provides support for additional protocols.	<a href="#">“Classifying Network Traffic Using NBAR”</a>  The following command was modified: <b>match protocol (NBAR)</b> .

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