

## NBAR2 HTTP-Based Visibility Dashboard

The NBAR2 HTTP-based Visibility Dashboard provides a web interface displaying network traffic data and related information. The information is presented in an intuitive, interactive graphical format.

- Finding Feature Information, on page 1
- Overview of NBAR2 HTTP-based Visibility Dashboard, on page 1
- Configuring NBAR2 HTTP-Based Visibility Dashboard, on page 3
- Example: NBAR2 HTTP-Based Visibility Dashboard, on page 4
- Accessing the Visibility Dashboard, on page 4
- Additional References for NBAR2 HTTP-Based Visibility Dashboard, on page 5
- Feature Information for NBAR2 HTTP-Based Visibility Dashboard, on page 5

## **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 <a href="https://www.cisco.com/go/cfn">www.cisco.com/go/cfn</a>. An account on Cisco.com is not required.

### **Overview of NBAR2 HTTP-based Visibility Dashboard**

The NBAR2 HTTP-based Visibility Dashboard provides a graphical display of network information, such as network traffic details and bandwidth utilization. The Visibility Dashboard includes interactive charts and a graph of bandwidth usage.

The basic workflow for using the Visibility Dashboard is:

- 1. Using the procedure described in Configuring NBAR2 HTTP-Based Visibility Dashboard, on page 3, configure the router to provide information for the Visibility Dashboard. This includes:
  - Enabling an HTTP server.
  - Setting up the router service that collects and stores traffic data.
  - Specifying an interface to monitor.

- Enabling protocol discovery.
- 2. In a browser, connect to the Visibility Dashboard web interface to display traffic information for the monitored interface(s), using the router IP address or hostname, and appending /flash/nbar2/home.html.

Example: 10.56.1.1/flash/nbar2/home.html

See Accessing the Visibility Dashboard, on page 4.

- 3. The HTTP server that operates with the Visibility Dashboard requires HTTP command access to the router to collect traffic data to present in the dashboard. Specifically, the HTTP server executes show ip nbar CLI commands on the router to collect the data. Access is provided to the Visibility Dashboard HTTP server by one of the following methods:
  - Providing "privilege 15" general access to the router.

Use the **ip http authentication enable** CLI command on the router to set a password. When logging into the Visibility Dashboard web interface, use the specified password. No username is required.

• Setting a local username and password for the router.

Use the **ip http authentication local** command to set a local username/password providing HTTP command access. When logging into the Visibility Dashboard web interface, enter the specified username and password.

#### Example configuration:

```
Device(config) #ip http authentication enable
Device(config) #ip http authentication local
Device(config) #username cisco
Device(config) #password n449rbpsvq
```

• Using an Authentication, Authorization, and Accounting (AAA) server.

The AAA server manages accounts, including username/password credentials. When logging into the Visibility Dashboard web interface, enter the username and password for an account managed by the AAA server.

**Note**: The account must include authorization to execute **show ip nbar** commands on the router. If the account does not provide this authorization, a user could log in and pass authentication, but no traffic data would be available from the router. The Visibility Dashboard would appear in the browser, but showing no information.

IIIII NBAR2 Visibility Dashboard 2.0 Dashboard CPU utilization: Up time: 1 week, 27 minutes PP Version Device na ASR1001-X-main OS Version 2016-11-28\_15.00\_obarash Device: ASR1001-X 0.5% Interface GigabitEthernet0/0/ 

Direction All 15:20 15:39 Usage Applications: 60 Discovered 214 0Kbps Miscellaneous Web 39.7MB Remote Desktop Pro TCP 3389 18.87 27.3MB 2.4MB 24.9MB 53, 80, 443, 15.01 21.7MB 1.0MB 20.8MB 14.98 21.7MB 0B 21.7MB

Figure 1: Visibility Dashboard

## **Configuring NBAR2 HTTP-Based Visibility Dashboard**

#### Before you begin

The HTTP-based Visibility Dashboard uses the Protocol Discovery feature. For details about Protocol Discovery, see How to Enable Protocol Discovery.

#### **SUMMARY STEPS**

- 1. enable
- 2. configure terminal
- 3. ip http server
- 4. ip nbar http-services
- 5. interface gigabitethernet interface
- 6. ip nbar protocol-discovery

#### **DETAILED STEPS**

	Command or Action	Purpose
Step 1	enable	Enables privileged EXEC mode. Enter a password if
	Example:	prompted.
	Device>enable	
Step 2	configure terminal	Enters global configuration mode.
	Example:	

	Command or Action	Purpose
	Device#configure terminal	
Step 3	ip http server	Enables an HTTP server. The server operates with the Visibility Dashboard, providing the data collected by the router.
	Example:	
	Device(config)#ip http server	
Step 4	ip nbar http-services	Configures the HTTP services to collect traffic data and
	Example:	store it in a database.
	Device(config)#ip nbar http-services	
Step 5	interface gigabitethernet interface	Specifies an interface to monitor.
	Example:	
	Device(config)#interface gigabitethernet 0/0/2	
Step 6	ip nbar protocol-discovery	Enables protocol discovery. For more information, see How to Enable Protocol Discovery.
	Example:	
	Device(config)#ip nbar protocol-discovery	

## **Example: NBAR2 HTTP-Based Visibility Dashboard**

#### **Example: Enabling NBAR2 HTTP-Services**

Device> enable
Device# configure terminal
Device(config)# ip nbar http-services
Device(config)# end

## **Accessing the Visibility Dashboard**

In a browser with access to the router, connect to the Visibility Dashboard web interface to display traffic information for the monitored interface(s), using the router IP address or hostname, and appending /flash/nbar2/home.html. This string is shown in the CLI help for ip nbar http-services by typing: ip nbar?

#### **Options**:

- http://<router-IP-address>/flash/nbar2/home.html
- http://<router-hostname>/flash/nbar2/home.html

#### Example:

http://10.56.1.1/flash/nbar2/home.html

# Additional References for NBAR2 HTTP-Based Visibility Dashboard

#### **Related Documents**

Related Topic	Document Title
Cisco IOS commands	Cisco IOS Master Command List, All Releases

#### **Technical Assistance**

Description	Link
The Cisco Support website provides extensive online resources, including documentation and tools for troubleshooting and resolving technical issues with Cisco products and technologies.	http://www.cisco.com/cisco/web/support/index.html
To receive security and technical information about your products, you can subscribe to various services, such as the Product Alert Tool (accessed from Field Notices), the Cisco Technical Services Newsletter, and Really Simple Syndication (RSS) Feeds.	
Access to most tools on the Cisco Support website requires a Cisco.com user ID and password.	

## FeatureInformationforNBAR2HTTP-BasedVisibilityDashboard

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 NBAR2 HTTP-Based Visibility Dashboard

Feature Name	Releases	Feature Information
NBAR2 HTTP-Based Visibility Dashboard	Cisco IOS XE Release 3.16S	The NBAR2 HTTP-based Visibility Dashboard provides a web interface displaying network traffic data and related information. The information is presented in an intuitive, interactive graphical format.  The following command was modified or introduced by this feature: <b>ip nbar http-services</b>

Feature Information for NBAR2 HTTP-Based Visibility Dashboard