NBAR Protocol Discovery

Introduction to NBAR Protocol Discovery

The NBAR Protocol Discovery feature provides an easy way of discovering the application protocols passing through an interface. Network Based Application Recognition (NBAR) determines which protocols and applications are currently running on the network. With Protocol Discovery, you can discover any protocol traffic that is supported by NBAR and obtain statistics that are associated with that protocol.

NBAR provides several classification features that identify applications and protocols from Layer 4 through Layer 7. NBAR is also used in Cisco Application Visibility and Control (AVC). With AVC, NBAR provides better application performance through better QoS and policing, and provides finer visibility about the network that is being used.

Configuring NBAR Protocol Discovery

Follow the procedure given below to enable protocol discovery:

Procedure

	Command or Action	Purpose
Step 1	**configure terminal** **Example:** `Device# configure terminal`	Enters global configuration mode.

Step 2	**wireless profile policy** *profile-policy*
	Example:
	`Device(config)# wireless profile policy`
	` nbar-proto-policy`
		Configures a WLAN policy profile and enters wireless policy configuration mode.

	Command or Action	**Purpose**
Step 3	**central switching** **Example:** `Device(config-wireless-policy)# central switching`	Configures the wireless policy profile for central switching. **Note** NBAR Protocol Discovery is supported in local mode (central switching) and in FlexConnect (central switching) mode.
Step 4	**ip nbar protocol-discovery** **Example:** `Device(config-wireless-policy)# ip nbar protocol-discovery`	Enables application recognition on the wireless policy profile by activating the NBAR2 engine.

Verifying Protocol Discovery Statistics

To view protocol discovery statistics, use the following command:

```
Device# show ip nbar protocol-discovery wlan wlan-profile-name

wlan_profile_name (iif_id 0xF0400002)

Last clearing of "show ip nbar protocol-discovery" counters 00:07:12


                        Input                   Output
                        -----                   ------
   Protocol             Packet Count            Packet Count
                        Byte Count              Byte Count
                        5min Bit Rate (bps)     5min Bit Rate (bps)
                        5min Max Bit Rate (bps) 5min Max Bit Rate (bps)
   --------------------- ----------------------- -----------------------
   unknown              22                      0
                        4173                    0
                        0                       0
                        2000                    0
   dhcp                 3                       2
                        1166                    724
                        0                       0
                        0                       0
   ping                 2                       2
                        204                     236
                        0                       0
                        0                       0
   Total                27                      4
                        5543                    960
                        0                       0
                        2000                    0
```

To clear protocol discovery statistics, use the following command:

```
Device# clear ip nbar protocol-discovery wlan wlan-profile-name
```