Working with Protocol Packs

NBAR2 Protocol Pack Overview

The NBAR2 Protocol Pack feature provides an easy way to load a protocol pack, which allows you to update Network-Based Application Recognition (NBAR) protocols on supported devices without having to replace the Cisco software on the device. NBAR2 protocol pack contains a set of signatures that are supported by NBAR.

Protocol packs provide the following features:

- They are easy to load.

- They are easy to upgrade and downgrade.

Protocol Pack Compatibility

NBAR2 Protocol packs are released for specific NBAR engine versions. You can load an NBAR2 protocol pack only if the NBAR engine version in the controller platform is the same as or higher than the engine version that the protocol pack is released for. However, you are strongly recommended to use the protocol pack that is the exact match for the engine.

A protocol pack is numbered in a format that is similar to this:
pp-AIR-7.6-**(NBAR Engine Number)-(Protocol Pack Version)**.pack

For example, the Wireless LAN Controller Release 7.6 uses NBAR engine version 13. Hence, protocol packs released for Release 7.6 will have a numbering that is similar to this:
pp-AIR-7.6-**13**-6.4.0.pack

Note   If you try to load an incompatible protocol pack on a controller, it will be rejected with an error message stating that the protocol pack is incompatible with the underlying NBAR software version. Any existing protocol pack on the controller, will remain active.

Downloading NBAR2 Protocol Packs

Use only the tested and certified protocol packs which are released on Cisco.com. You can download these protocol packs from this location:

http://software.cisco.com/download/navigator.html

Loading an NBAR2 Protocol Pack

Using FTP or TFPT, you can download newer versions of protocol packs into the controller.

Note You are recommended to download protocol packs into the controller only during maintenance. This is because during download the CPU usage will be quite high, which may cause disruptions in the network. It takes no more than three minutes for the download to complete and for the protocol pack to become operational. You do not need to reboot the controller after the download.

Procedure

Step 1 Enter this command to download a protocol pack:

transfer download datatype *avc-protocol-pack*

Information that is similar to the following is displayed:

```
Mode............................................ FTP
Data Type....................................... AVC Protocol Pack
FTP Server IP................................... xx.xxx.xxx.xx
FTP Server Port................................. 21
FTP Path........................................ <directory path>
FTP Filename.................................... AS_5500_7_5_1_47.aes
FTP Username.................................... cisco
FTP Password.................................... *********

Starting transfer of AVC Protocol Pack

This may take some time.
Are you sure you want to start? (y/N)
```

Step 2 Answer **y** at the prompt to start the download.

Viewing the Protocol Pack and AVC Engine Details

Protocol Pack Details

To view the name and version of the loaded protocol pack, enter this command:

show avc protocol-pack version

Information that is similar to the following is displayed:

```
AVC Protocol Pack Name: Advanced Protocol Pack
AVC Protocol Pack Version: 6.4
```

AVC Engine Details

Note An NBAR2 protocol pack can be installed on a device only if the NBAR engine version on the platform is the same as or later than the version required by the NBAR2 protocol pack.

To view the AVC engine version which the controller is using, enter this command:

show avc engine version

Information that is similar to the following is displayed:

```
AVC Engine Version: 13
```