Overview

This chapter gives us an overview of the Cisco Nexus Dashboard Data Broker.

About Cisco Nexus Dashboard Data Broker

Visibility into application traffic has traditionally been important for infrastructure operations to maintain security, troubleshooting, and compliance and perform resource planning. With the technological advances and growth in cloud-based applications, it has become imperative to gain increased visibility into the network traffic. Traditional approaches to gain visibility into network traffic are expensive and rigid, making it difficult for managers of large-scale deployments.

Cisco Nexus Dashboard Data Broker with Cisco Nexus Switches provides a software-defined, programmable solution to aggregate copies of network traffic using Switched Port Analyzer (SPAN) or network Test Access Point (TAP) for monitoring and visibility. As opposed to traditional network taps and monitoring solutions, this packet-brokering approach offers a simple, scalable and cost-effective solution that is well-suited for customers who need to monitor higher-volume and business-critical traffic for efficient use of security, compliance, and application performance monitoring tools.

With the flexibility to use a variety of Cisco Nexus Switches and the ability to interconnect them to form a scalable topology provides the ability to aggregate traffic from multiple input TAP or SPAN ports, and replicate and forward traffic to multiple monitoring tools which may be connected across different switches. Using the Cisco NX-API agent to communicate to the switches, Cisco Nexus Dashboard Data Broker provides advance features for traffic management.

Cisco Nexus Dashboard Data Broker provides management support for multiple disjointed Cisco Nexus Dashboard Data Broker networks. You can manage multiple Cisco Nexus Dashboard Data Broker topologies that may be disjointed using the same application instance. For example, if you have 5 data centers and want to deploy an independent solution for each data center, you can manage all 5 independent deployments using a single application instance by creating a logical partition (network slice) for each monitoring network.

Note   Beginning with Release 3.10.1, Cisco Nexus Data Broker (NDB) has been renamed to Cisco Nexus Dashboard Data Broker. However, some instances of NDB are present in this document, to correspond with the GUI, and installation folder structure. References of NDB/ Nexus Data Broker/ Nexus Dashboard Data Broker can be used interchangeably.

Cisco Nexus Dashboard Data Broker Hardware and Software Interoperability Matrix

See the relevant *Cisco Nexus Dashboard Data Broker Release Notes* for the latest matrix.

Python Activator Scripts for NX-OS Images

The following table lists the Python Activator scripts and corresponding NX-OS Image names:

Note   The activator scripts are availble for download at: https://github.com/datacenter/nexus-data-broker.

Note   Check the Guestshell version using the **show guestshell** command. If the Guestshell version is 2.2 or earlier, either upgrade the Guestshell or destroy and re-run the script to start NDB embedded.

Table 1: Python Activator Scripts for NX-OS Images

Python activator script file name	NX-OS Image
NDBActivator4.0_9.3_plus.py	Cisco NXOS version 9.3(1) and above.

System Requirements

The following table lists the system requirements as per the deployment size for Cisco Nexus Dashboard Data Broker:

Table 2: System Requirements per Deployment Size

Description	Small	Medium	Large
CPUs (virtual or physical)	6-core	12-core	18-core
Memory	8 GB RAM	16 GB RAM	24 GB RAM

Description	Small	Medium	Large
Hard disk	Minimum of 40 GB of free space available on the partition on which the Cisco Nexus Dashboard Data Broker software is installed.		
Operating System	A recent 64-bit Linux distribution that supports Java, preferably Ubuntu, Fedora, or Red Hat.		
Other	Java Virtual Machine 1.8.		