Cisco Nexus Data Broker Release Notes, Release 2.0

September 30, 2014

This document describes the features, system requirements, and limitations for the Cisco Nexus Data Broker 2.0.

Contents

This document includes the following sections:

Introduction

Visibility into application traffic has traditionally been important for infrastructure operations to maintain security, troubleshooting, and compliance, and to 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 Data Broker with Cisco Nexus Switches provides a software-defined, programmable solution to aggregate copies of network traffic using SPAN or network taps 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 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.

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

Features

Cisco Nexus Data Broker 2.0 provides the following:

- A scalable topology for Test Access Point (TAP) and Switched Port Analyzer (SPAN) port aggregation.
- Support for Q-in-Q to tag input source TAP and SPAN ports.
- Symmetric load balancing.
- Rules for matching monitoring traffic based on Layer 1 through Layer 4 information.
- The ability to replicate and forward traffic to multiple monitoring tools.
- Time stamp tagging using Precision Time Protocol (PTP).
- Reaction to changes in the TAP/SPAN aggregation network.
- Security features, such as role-based access control (RBAC), and integration with an external Active Directory (AD) using RADIUS or TACACS for authentication, authorization, and accounting (AAA).
- End-to-end path visibility, including both port and flow level statistics for troubleshooting.
- Robust Representational State Transfer (REST) API and a web-based GUI for all functions.
- Support for Cisco Plug-in for OpenFlow, version 1.0 and Cisco One Platform Kit (onePK), version 1.3.0.
- Embedded application support for Cisco Nexus 3000 and 3100 Series switches.

With Cisco Nexus Data Broker you can:

- Classify SPAN and TAP ports.
- Add monitoring devices to capture network traffic.
- Filter which traffic should be monitored.
- Redirect packets from a single or multiple SPAN or TAP ports to multiple monitoring devices through delivery ports.
- Restrict which users can view and modify the monitoring system.
- Connect to Cisco onePK agents for which Cisco onePK devices have been configured.
- Configure these additional features, depending on the type of switch:
  - Set VLAN ID on Cisco Nexus 3000 and 3100 Series switches.
  - Enable symmetric load balancing on Cisco Nexus 3000 Series switches.
  - Enable Q-in-Q on Cisco Nexus 3000 and 3100 Series switches.

New Features

Cisco Nexus Data Broker 2.0 provides the following new features:

- Support for entry of a VLAN range when creating a filter.
- Ability to clone filters and rules.
- Ability to assign multiple filters to a rule.
- Ability to configure both allow and deny filters for the same rule.
- Enable time stamp tagging using PTP on Cisco Nexus 3500 Series switches.
- Display flow and port statistics for devices in the Cisco Nexus Data Broker main user interface.
- Display flow statistics per rule and per device per rule.
- Inter-switch link (ISL) utilization information available in the topology diagram and in the rule path.
- Enable packet truncation on input ports on Cisco Nexus 3500 Series switches.
- Support for Cisco Nexus 3500, 7000, and 7700 Series switches.
- Embedded application support for Cisco Nexus 3500 Series switches.

Scale Information

Table 1 lists the scale limits for Cisco Nexus Data Broker.

Table 1 Scale Limits

Description	Small	Medium	Large
Number of devices	100	300	500
Number of slices	25	100	200
Number of proactive flows	10,000	50,000	100,000

System Requirements

Table 2 lists the system requirements for Cisco Nexus Data Broker 2.0.

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
Hard disk	Minimum of 40 GB of free space available on the partition on which the Cisco NDB software is installed.		
Operating system	A recent 64-bit Linux distribution that supports Java, preferably Ubuntu, Fedora, or Red Hat.		
Other	Java Virtual Machine 1.7 or later.		

Supported Web Browsers

The following web browsers are supported for Cisco Nexus Data Broker 2.0:

- Firefox 18.x and later versions
- Chrome 24.x and later versions

Note Javascript 1.5 or a later version must be enabled in your browser.

Related Documentation

For more information, see the related documents at the following link:

http://www.cisco.com/c/en/us/support/cloud-systems-management/nexus-data-broker/tsd-products-support-series-home.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html.

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