



Cisco Nexus Data Broker Release Notes, Release 3.8.1

This document describes the features, caveats, and limitations on Cisco Nexus Data Broker for Release 3.8.1.

Use this document with documents listed in *Related Documentation*.

Online History Change Table

Date	Description
January 9, 2020	Added CSCvs50998 to the list of known caveats.
December 12, 2019	Updated the deployment mode for Cisco Nexus 9200 Series switch.
December 10, 2019	Created the release notes for Release 3.8.1

Introduction

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Introduction

Visibility into application traffic is important for infrastructure operations to maintain security and compliance, and to perform resource planning and troubleshooting. 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 (NDB) 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.

Cisco NDB also provides a software-defined, programmable solution to perform inline inspection of the network traffic for monitoring and visibility purpose. Inline traffic inspection is performed on specific traffic by redirecting it through multiple security tools before it enters or exits a network.

New and Changed Information

This section lists the new and changed software features in Cisco Nexus Data Broker Release 3.8.1:

- Remote source enhancements to use physical L3 interface
- NX-API support for slice
- Sorting of members in the port-group
- Sorting/filtering of default connections based on the installation status

Guidelines and Limitations

This section lists guidelines and limitations for features in Cisco Nexus Data Broker Release 3.8.1:

- Cisco NDB Openflow embedded is not supported on Cisco Nexus 3000/9000 series switches running 7.0(3)I6.1 and 7.0(3)I7.1 NXOS image.
- Dry Run feature is disabled by default. To enable this feature, see Cisco NDB Configuration Guide.
- Default deny ACL on all ports and Default ISL deny ACL on ISL ports is enabled by default for Cisco NDB ,Release 3.6 and later releases. To disable this feature, refer the Cisco Nexus Data Broker Configuration Guide, Release 3.8 or Cisco Nexus Data Broker Deployment Guide, Release 3.8.
- By default, NDB cluster URL is <https://<NDBIP>:8443>.
- NDB supports Google Chrome version 45.x and later, FireFox version 45.x and later, and Internet Explorer version 11 and later.
- The switchport mode trunk and spanning-tree bpdudfilter enable command should be enabled for all switch ports on all Cisco NDB managed switches.
- Cisco Nexus switches managed by Cisco NDB in NX-API mode must have LLDP feature enabled. Disabling LLDP may cause inconsistencies and require switch rediscovery for NX-API switches

Unsupported Features

- For secured communication between Cisco NDB and switch through HTTPS, start Cisco NXB in TLS mode for the first time only. Subsequent Cisco NDB restarts does not require TLS mode. For more details, refer to Cisco Nexus Data Broker Configuration Guide.
- The TLS KeyStore and TrustStore passwords are sent to the Cisco Nexus Data Broker so it can read the password-protected TLS KeyStore and TrustStore files only through HTTPS.

```
./xnc config-keystore-passwords [--user {user} --password {password} --url {url} --verbose --prompt --keystore-password {keystore_password} --truststore-password {truststore_password}.
```

Here default URL to be - https://Nexus_Data_Broker_IP:8443

- For the Cisco NDB cluster deployment, the roundtrip delay between the cluster nodes should be less than 50 milliseconds. If the round trip delay is more, the Cisco NDB cluster behavior is unpredictable and inconsistent.
- Cisco Nexus 92XX devices does not support the QnQ, you cannot use this switch in the Multi switch environment.
- A Cisco NDB instance can support either the OpenFlow or NX-API configuration mode, it does not support both configuration modes in the same Cisco NDB instance.
- VLAN based IP filtering is not supported for Nexus Series switch with NX-OS Release 7.0(3)I6.1. Hence, the filtering fails when you filter the traffic for the following series of switches: 92160YC-X,92300YC, 9272Q, 92304Q, and 9236C.
- Do not configure TACACS on the Cisco NDB switches. You can configure it only for authentication and authorization. It is not to be used for accounting.
- For Cisco NDB Release 3.7, Cisco NX-OS Release 7.0(3)I5(1), 7.0(3)I5(2), and 7.0(3)I7(2) are not recommended for NX-API deployment and Cisco NX-OS Release 7.0(3)I5(1) and 7.0(3)I5(2) are not recommended OpenFlow deployments.
- Cisco NDB Embedded will be supported on NX-OS 7.0(I4).1 onwards, and 7.0(3)I6.1 onwards. For more information, see the [Nexus Data Broker Hardware and Software Interoperability Matrix](#) section.

Unsupported Features

The following features are not supported in the embedded deployment mode of Cisco Nexus Data Broker:

- Adding another NDB device
- Adding APIC for ACI SPAN session
- Adding production device for the SPAN session
- Configuring SPAN session
- Configuring copy device
- Configuring copy sessions
- Scheduling Configuration Backup
- NDB High availability is not supported
- TLS communication between the NDB controller and the switches is not supported

Compatibility Information

- Secured communication between the browser and NDB controller is not supported

Compatibility Information

Cisco Nexus Data Broker, Release 3.8.1 supports the following operating systems for the fully visibility software sensors:

Device Model	Cisco Nexus Data Broker Minimum Version	Supported Deployment Mode	Supported Use Cases
Cisco Nexus 3000 Series Switch	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation and In-line redirection
Cisco Nexus 3100 Series Switch	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation and In-line redirection
Cisco Nexus 3164Q Series Switch	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 3200 Series Switch	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation only In-line redirection
Cisco Nexus 3500 Series Switch	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 9200 Series Switch	Cisco Nexus Data Broker 3.1 or later	Centralized and Embedded Note: Cisco Nexus 9200 Series switches support only one switch deployment.	Tap/SPAN aggregation only
Cisco Nexus 9300 Series Switch	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation and In-line redirection
Cisco Nexus 9300-EX Series Switch	Cisco Nexus Data Broker 3.1 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 9300-FX Series Switch	Cisco Nexus Data Broker 3.5 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 9332C Series Switch	Cisco Nexus Data Broker 3.8 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 9364C Series Switch	Cisco Nexus Data Broker 3.8 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 9500 Series Switch Supported Modules: <ul style="list-style-type: none"> N9K-X9464TX 	Cisco Nexus Data Broker 3.0 or later	Centralized and Embedded	Tap/SPAN aggregation only

Cisco Nexus 9500-EX Series Switch Supported Modules: <ul style="list-style-type: none">▪ N9K-X97160YC-EX▪ N9K-X9732C-EX	Cisco Nexus Data Broker 3.5 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 9500-FX Series Switch	Cisco Nexus Data Broker 3.5 or later	Centralized and Embedded	Tap/SPAN aggregation only
Cisco Nexus 31100 Series Switch	Cisco Nexus Data Broker 3.7 or later	Centralized and Embedded	Tap/SPAN aggregation and In-line redirection
Cisco Nexus 9300-FX2 Series Switch	Cisco Nexus Data Broker 3.7 or later	Centralized and Embedded	Tap/SPAN aggregation only

Cisco NDB Hardware and Software Interoperability Matrix

The following table lists the hardware and software interoperability matrix for Cisco NDB, Release 3.8.1:

Nexus Switch Model(s)	Implementation Tyoe	Supported NX-OS Versions	OpenFlow Agent
3048/3064/3172	OpenFlow	6.0(2)U6(x), I2(x), and I3(x)	1.1.5
3048/3064/3172	OpenFlow	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	2.14
3046/3064	NX-API	6.0(2)U6(x), 7.0(3)I4(1) to 7.0(3)I4(8b)	Not supported
3172	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2) to 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
3164	OpenFlow	Not supported	Not supported
3164	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable

3232	OpenFlow	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	2.14
3232	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
3548	OpenFlow	6.0(2)A6(x) and 6.0(2)A8(x). I7(5) and I7(5a), and 9.3(1) (OF agent is not required) 7.0(3)I7(2) to 7.0(3)I7(6)	1.1.5
3548	NX-API	Not supported	Not supported
92160/92304	OpenFlow	Not supported	Not supported
92160/92304	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
9372/9396/93128	OpenFlow	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	2.14
9372/9396/93128	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
9364C/9332C	NX-API	9.2(3) to 9.2(4) and 9.3(1) to 9.3(5), 9.3(7)	NA
9364C/9332C	OpenFlow	Not supported	Not supported
93180LC-EX / 93108TC-EX / 93180YC-EX	OpenFlow	Not supported	Not supported
93180LC-EX / 93108TC-EX / 93180YC-EX	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	NA

Supported APIC Versions

93108TC-FX / 93180YC-FX	OpenFlow	Not supported	Not supported
93108TC-FX / 93180YC-FX	NX-API	7.0(3)I7(1) to 7.0(3)I7(6), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
9504/9508/9516	OpenFlow	Not supported	Not supported
9504/9508/9516	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(2)	Not applicable
31108TC-V / 31108PC-V	NX-API	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7))	Not applicable
31108TC-V / 31108PC-V	OpenFlow	7.0(3)I4(1) to 7.0(3)I4(9), 7.0(3)I6(1), 7.0(3)I7(2)) to 7.0(3)I7(7), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
9336C-FX2 / 93240YC-FX2	NX-API	7.0(3)I7(5), 7.0(3)I7(5a), 7.0(3)I7(6), 7.0(3)I7(9), 9.2(1) to 9.2(4), 9.3(1) to 9.3(5), 9.3(7)	Not applicable
N9K-C93360YC-FX2	NX-API	9.3(1) to 9.3(5), 9.3(7)	Not applicable

Supported APIC Versions

The following table lists the APIC versions supported on Cisco NDB for Release 3.8.1:

APIC Version	Cisco NDB (Minimum Version)	Supported Deployment Mode
1.1, 1.2 and 2.0	NDB 3.0	Centralized only
2.X	NDB 3.1 and above	Centralized only
4.X	NDB 3.7 and above	Centralized only

Verified Scalability Limits

The following table lists the scalability limits for centralized deployment on Cisco:

Caveats

Description	Small	Medium	Large
Number of switches used for Tap and SPAN aggregation	25	50	75

Caveats

Note: All caveats listed in this document are those that were reported against the Cisco NDB.

This section includes the following topics:

- [NDB Resolved Caveats](#)
- [NDB Open Caveats](#)
- [NX-OS Known Caveats](#)

NDB Resolved Caveats

The following table lists the Resolved Caveat in Release 3.8.1 Click the bug ID to access the Bug Search tool and see additional information about the bug.

Bug ID	Description
CSCvi33830	Unable to configure ports/connections after creating slice user.

NDB Open Caveats

The following table lists the open caveats in the Cisco Release 3.8.1 Click the bug ID to access the Bug Search tool and see additional information about the bug.

Bug ID	Description
CSCvm65172	Direction change should be supported while editing span session.

Caveats

CSCv47961	Port configuration fails while importing the json file with unsupported characters in the description.
CSCvg26989	Export operation does not retrieve Node specific configuration.
CSCvg29188	Limitations in uploading a configuration that has redirections (bi-directional).
CSCvg10351	NDB Server backup entries are not shown in the UI after the upgrade.
CSCvk39789	“ Could not commit transaction ” exception thrown at NDB.
CSCvs06129	Connection in failed state post upgrading NDB from 2.x, 3.0 and 3.1 to 3.8.1 and above.
CSCvs34338	Slice is not compatible with Auxiliary devices, Swagger APIs, and Span Management (ACI/PS)

NX-OS Known Caveats

The following table lists the known caveats from the previous releases. Click the bug ID to access the Bug Search tool and see additional information about the bug.

Bug ID	Description
CSCvo85210	Can't match MAC address in IP packet, it will hit deny any any in IP ACLs.
CSCvg61822	Need Error handling for feature SFLOW with ERSPAN destination since they are mutually exclusive.
CSCvo21594	TapAgg: MPLS traffic with TTL=0 gets flooded without MPLS label being stripped off.
CSCvo21059	MPLS tapagg should allow deny ace without redirection option.
CSCvd15455	Openflow - Portchannel links are not seen on NDB, Release 2.1.
CSCvc87992	Connections are not matched with the VLAN ID of source ports on ISL links with an IPv6 filter.
CSCvn52641	Disk space not reclaimed in switch I7.x versions while uninstalling Embedded NDB.
CSCvs50998	IP ACL with UDF match removes internal VLAN tag in Cisco NX-OS Release 9.3(2).
CSCvr01876	Re-direct STP, CDP packets similar to LLDP port for Openflow.
CSCvs59353	After device reload guestshell activation fails due to low memory on devices for NXOS 9.x.x version.
CSCvs75586	IP/GRE traffic not matching TapAgg ACL in 9.2(3).
CSCvs79485	After an upgrade the odd vlan-id numbers are written incorrectly in TCAM 9.3(3).
CSCvt14639	Not able to convert Layer 2 ports to layer 3 in 9.3(3).
CSCvt03231	ACL with HTTP tcp-option-length redirect statement are not matching traffic correctly in 9.3(3).
CSCvt37799	ERSPAN Dest doesn't work when L2 port with mode tap-aggregation is converted to L3 port in 9.3(3).
CSCvt92735	After reloading switch N9372PX-118 in GS it takes more time to send interface details to NDB server.

Related Documentation

CSCvv22414	9508/9516--with 4k VLAN scale modules go to powered down state when upgrading to 9.3.3 and above.
CSCvx45678	After device reload guestshell activation fails due to low memory on devices for NXOS 9.3(5) version.
CSCvx32214	Dot1q-tunnel(QinQ) is not programmed correctly for port-channel members in NXOS 9.3(5).
CSCvx79293	Not seeing timestamptag on interface after configuring the cmds on C9504 platform in nxos 9.3.7.
CSCvy16218	Username is shown as 'guestshell' irrespective of user executes the guestshell.

Related Documentation

The entire Cisco NDB documentation set is available at the following URL:

<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 and gathering additional information**, see the monthly **What's New in Cisco Product Documentation**, which also lists all new and revised Cisco technical documentation, at:

<https://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Open a service request online at:

<https://tools.cisco.com/ServiceRequestTool/create/launch.do>

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