Cisco Nexus Dashboard Release Notes, Release 3.0.1

Contents

In this era of digital transformation and business resiliency, continuous innovation is critical for organizations to succeed, and experiencing downtime along the way is not an option. Users increasingly demand more features, better usability, reliability, and environmental sustainability from the applications they use. This document describes the new features, issues, and limitations for the Cisco Nexus Dashboard software.

For more information, see the "Related Content" section of this document.

Note: The documentation set for this product strives to use bias-free language. For the purposes of this documentation set, bias-free is defined as language that does not imply discrimination based on age, disability, gender, racial identity, ethnic identity, sexual orientation, socioeconomic status, and intersectionality. Exceptions may be present in the documentation due to language that is hardcoded in the user interfaces of the product software, language used based on RFP documentation, or language that is used by a referenced third-party product.

Date	Description
January 24, 2024	Additional open issue CSCwi63356.
January 23, 2024	Updated the "Changes in Behavior" section with information on 4-node cluster upgrades with Nexus Dashboard Insights service.
September 19, 2023	Added support for CIMC 4.3(2.230207).
September 12, 2023	Release 3.0(1i) became available. Updated issue CSCwd48788 as resolved in release 3.0(1f).
August 22, 2023	Release 3.0(1f) became available.

New Software Features

This release adds the following new features:

Product Impact	Feature	Description
Base Functionality	Support for pure IPv6 and dual stack IPv4/IPv6 configurations	While prior releases supported either pure IPv4 or dual stack IPv4/IPv6 for management network only, this release adds support for pure IPv6 or dual stack IPv4/IPv6 configurations for the cluster nodes and services. Note that this feature is supported for greenfield deployments only.
Security	NTP Authentication	Nexus Dashboard now supports NTP authentication using symmetrical keys.
Reliability	Additional Syslog Messages	The following additional events can now be streamed to a Syslog server: • Cluster node is unreachable. • Cluster node is rebooted. • All audit events. • NTP is not synchronized.

Product Impact	Feature	Description
		• BGP peers are not reachable.
Ease of Use	UI look-and-feel improvements	This release adds product GUI improvements, including the getting started journey map.

Changes in Behavior

If you are installing or upgrading to this release, you must consider the following:

- If you are running Nexus Dashboard Insights service in a virtual Nexus Dashboard cluster, you must deploy a new Nexus Dashboard virtual cluster to install Nexus Dashboard Insights release 6.3(1).

  Virtual Nexus Dashboard deployment for NDI release 6.3.1 requires a greenfield installation of Nexus Dashboard cluster. Upgrade of virtual Nexus Dashboard cluster to run NDI release 6.3.1 is not supported.

- If you are running Nexus Dashboard Insights service in a physical Nexus Dashboard cluster, you must upgrade to release 3.0(1i) of Nexus Dashboard before upgrading the Insights service to 6.3(1).

  Nexus Dashboard release 3.0(1f) does not support any existing Nexus Dashboard Insights releases; to install or upgrade the Insight service, you must use Nexus Dashboard release 3.0(1i).

- If you are running Nexus Dashboard Insights service in a 4-node physical cluster, you can simply upgrade the cluster and the service to this release as you typically would and continue using the 4-node cluster.

  Nexus Dashboard release 3.0(1) with Nexus Dashboard Insights supports only 3-node and 6-node profiles for greenfield deployments. However, if you are upgrading an existing 4-node cluster from release 2.x without changing your current scale, you can continue using it with release 3.0(1).

- Virtual Nexus Dashboard clusters do not support cohosting of multiple services in this Nexus Dashboard release.

  For detailed cohosting information, see the Nexus Dashboard Capacity Planning tool.

- Before upgrading your existing Nexus Dashboard cluster to this release, you must disable all services running in the cluster.

  You must keep the services disabled until the platform is upgraded to this release and then upgrade the services to the releases compatible with this Nexus Dashboard release before re-enabling them.

- After upgrading to this release, you must upgrade all the services to the versions compatible with this Nexus Dashboard release.

  For compatible releases, see the Cisco Nexus Dashboard and Services Compatibility Matrix.

- The default CIMC password for Nexus Dashboard physical nodes based on the UCS-225-M6 hardware is "Insieme123".
- Nexus Dashboard does not support platform downgrades.

Open Issues

This section lists the open issues. Click the bug ID to access the Bug Search Tool and see additional information about the issue. The "Exists In" column of the table specifies the releases in which the issue exists.

Bug ID	Description	Exists in
CSCvx93124	You may see the following error: [2021-04-13 13:48:20,170] ERROR Error while appending records to stats-6 in dir /data/services/kafka/data/0 (kafka.server.LogDirFailureChannel) java.io.IOException: No space left on device	3.0(1f) and later
CSCwf91890	You may see an "Invalid key, key must be PEM encoded PKCS1 or PKCS8 private key" error on the login screen when login is attempted after disaster recovery (DR) is completed.	3.0(1f) and later
CSCwe65177	In rare cases a system may remain in an unhealthy state after reboot or upgrade because kubernetes is unable to launch new containers. This will show up as pods having persistent ContainerCreate errors over the course of 10 or more minutes, which do not resolve on their own.	3.0(1f) and later
CSCwh13418	When performing a manual upgrade, you may get 'Could not clear stale upgrade data' error while running the 'acs installer post-update' command.	3.0(1f) and later
CSCwh28363	After a clean reboot of a node, the node can fail to come up. Additional reboot can resolve the issue.	3.0(1f) and later
CSCwh23260	The pods in event manager namespace are crashing or are not in ready state	3.0(1f) and later
CSCwh53145	The in-product documentation that is available from the Nexus Dashboard help center contains a number of broken links.	3.0(1f) and later
CSCwi63356	High memory utilization on some but not all nodes after node failover.	3.0(1f) and later

Resolved Issues

This section lists the resolved issues. Click the bug ID to access the Bug Search tool and see additional information about the issue. The "Fixed In" column of the table specifies whether the bug was resolved in the base release or a patch release.

Bug ID	Description	Fixed in
CSCwe71125	If you restart multiple services at the same time, you may encounter a "Failed to enable service" error in the UI. Additionally, you may see a "Cannot support required scale for this service on current Nexus Dashboard deployment. However, service can be started with limited capacity. Please check the documentation for more details". This error message doesn't reflect the real issue with the system, and the scale configuration may be still valid.	3.0(1f)
CSCwd48788	Error during local tar file upload for RHEL platform.	3.0(1f)

Known Issues

This section lists known behaviors. Click the Bug ID to access the Bug Search Tool and see additional information about the issue.

Bug ID	Description
CSCvy62110	For Nexus Dashboard nodes connected to Catalyst switches packets are tagged with vlan0 even though no VLAN is specified. This causes no reachability over the data network. In this case, 'switchport voice vlan dot1p' command must be added to the switch interfaces where the nodes are connected.
CSCvw39822	On power cycle system lvm initialization may fail due to a slowness in the disks.
CSCvw48448	Upgrade fails and cluster is in diverged state with one or more nodes on the target version.
CSCvw57953	When the system is being recovered with a clean reboot of all nodes, the admin login password will be reset to the day0 password that is entered during the bootstrap of the cluster.
CSCvw70476	When bringing up ND cluster first time, all three primary nodes need to join Kafka cluster before any primary node can be rebooted. Failing to do so, 2 node cluster doesn't become healthy as Kafka cluster requires 3 nodes to be in Kafka cluster first time.
CSCvx89368	After ND upgrade, there will be still pods belonging to the older version running on the cluster.
CSCvx98282	Pods in pending state for a long period upon restart. These pods are usually stateful sets that require specific node placement and capacity must be available on the specific node they are first scheduled. This happens when multiple applications are installed on the same ND cluster and the ND capacity overloaded.
CSCvu21304	Intersight device connector connects to the Intersight over the Cisco Application Services Engine Out-Of-Band Management.
CSCwe04619	The 'acs health' command may show a service as unhealthy and kubectl (available in the Tech Support collection) shows the service is in ContainerCreateError state.
CSCwd84875	Two Nodes RMA requires manual intervention.
CSCwb31373	After node failover, kubernetes scheduling may be unable to find appropriate resources for the pods in an app. The symptom is that the app health will not converge and kubectl commands will show unhealthy pods.

Compatibility

Nexus Dashboard release 3.0(1f) does not support any existing Nexus Dashboard Insights releases; to install or upgrade the Insight service, you must use Nexus Dashboard release 3.0(1i).

For Cisco Nexus Dashboard services compatibility information, see the [Cisco Nexus Dashboard and Services Compatibility Matrix](#).

For Cisco Nexus Dashboard cluster sizing guidelines and the list of supported services for each cluster form factor, see the [Nexus Dashboard Capacity Planning](#) tool.

Physical Nexus Dashboard nodes support Cisco UCS-220-M5 and UCS-225-M6 servers. Physical Nexus Dashboard nodes must be running a supported version of Cisco Integrated Management Controller (CIMC). This release supports CIMC releases 4.2(3b), 4.2(3e), and 4.3(2.230207).

VMware vMotion is not supported for Nexus Dashboard nodes deployed in VMware ESX.

Cisco UCS-C220-M3 and earlier servers are not supported for Virtual Nexus Dashboard clusters.

Browser Compatibility

The Cisco Nexus Dashboard and services UI is intended to be compatible with the most recent desktop version of most common browsers, including Chrome, Firefox, Edge, and Safari. In most cases, compatibility will extend one version behind their most recent release.

While not designed for compatibility with mobile devices, most mobile browsers are still able to render majority of Nexus Dashboard and services UI. However, using the above-listed browsers on a desktop or laptop is recommended. Mobile browsers aren't officially supported by Cisco Nexus Dashboard and services.

Verified Scalability Limits

The following table lists the maximum verified scalability limits for the Nexus Dashboard platform.

Category	Scale
Number of primary and worker nodes in a cluster	Depends on cluster form factor and the specific services enabled in the cluster. See the [Nexus Dashboard Capacity Planning](#) tool for detailed information.
Number of standby nodes in a cluster	For physical cluster, up to 2 standby nodes For virtual and cloud clusters, standby nodes are not supported
Sites per cluster	Depends on the specific services deployed in the cluster: • For Nexus Dashboard Orchestrator, see the [Nexus Dashboard Orchestrator Verified Scalability Guide](#) for a specific release. • For Nexus Dashboard Fabric Controller, see the [Verified Scalability Guide for Cisco Nexus Dashboard Fabric Controller](#) for a specific release. • For Nexus Dashboard Insights, see the [Release Notes](#) for a specific release.

Category	Scale
Admin users	50
Operator users	1000
Service instances	4
API sessions	2000 for Nexus Dashboard and Nexus Dashboard Orchestrator 100 for Nexus Dashboard Insights
Login domains	8
Clusters connected via multi-cluster connectivity	4
Sites across all clusters connected via multi-cluster connectivity	12
Maximum latency between any two clusters connected via multi-cluster connectivity	500ms

Related Content

Document	Description
Cisco Nexus Dashboard Release Notes	Provides release information for the Cisco Nexus Dashboard product.
Nexus Dashboard Capacity Planning	Provides cluster sizing guidelines based on the type and number of services you plan to run in your Nexus Dashboard as well as the target fabrics' sizes.
Nexus Dashboard and Services Compatibility Matrix	Provides Cisco Nexus Dashboard and Services compatibility information for specific Cisco Nexus Dashboard, services, and fabric versions.
Cisco Nexus Dashboard Hardware Setup Guide for UCS-C220-M5 Servers Cisco Nexus Dashboard Hardware Setup Guide for UCS-C225-M6 Servers	Provides information on physical server specifications and installation.
Cisco Nexus Dashboard Deployment Guide	Provides information on Cisco Nexus Dashboard software deployment.
Cisco Nexus Dashboard User Guide	Describes how to use Cisco Nexus Dashboard.
Cisco Nexus Dashboard and Services APIs	API reference for the Nexus Dashboard and services.

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