Cisco Nexus Dashboard Insights Release Notes, Release 6.1.x for Cisco ACI

Contents

Cisco Nexus Dashboard Insights (Nexus Dashboard Insights) service provides assurance, advisory, troubleshooting capabilities to address the operational needs of networks in a data center.

This document describes the features, issues, and limitations for Nexus Dashboard Insights on Cisco Nexus Dashboard.

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

Date	Description
June 7, 2022	Release 6.1.2 became available.
May 12, 2022	Added content to Changes in Behavior.
May 9, 2022	Release 6.1.1 became available.

New Software Features

Feature	Description
Service deployment profile simplification	When you start the Nexus Dashboard Insights service, the deployment profile is now automatically selected based on the intent defined in the in the **Network Scale** area of Cluster Configuration in Nexus Dashboard.
VMware vCenter integration	Add VMware vCenter integration to collect data and metrics of the virtual machines and hosts monitored by VMware vCenter.
Nexus Dashboard Orchestrator integration	You can see anomalies specific to the Orchestrator service assurance, raise anomalies for inconsistencies across sites, see aggregated anomalies and more.
Explore for Nexus Dashboard Orchestrator assurance	You can explore site-to-site connectivity.
Syslog support	We support the export of anomalies and advisories in syslog format.
Metadata update support for air-gap environment	With metadata support for air-gap environment, if Nexus Dashboard is not connected to Cisco secure cloud, you can upload the latest metadata to Nexus Dashboard Insights periodically in a secure and trusted way.
Software and Hardware conformance dashboard	In the Software and Hardware Conformance dashboard you can view the status of the overall software and hardware conformance inventory for a site.
Firmware update analysis for data collection type **Upload File**	The offline script collects additional information from Cisco APIC which is required for firmware update analysis for offline sites when the required arguments are specified.
L4-L7 traffic path visibility	You have expanded visibility in the Flow Path to L4-L7 external devices such as firewalls.
Pre-Change Analysis file-size scale change	The maximum change file size, to run a Pre-Change Analysis job, has increased.
View compliance requirement	You can view details of the associated Compliance Requirement by choosing an integrated compliance-specific anomaly.
Check code for anomalies	You can filter anomalies by check code and the results are displayed in the anomalies table.

Feature	Description
Column customizations	You can use the Customize Columns feature in tables to customize your table columns so that the settings persist during the login instance and subsequent logins.
Multi-Site traffic path	BETA FEATURE: You can stitch together flows from across two different sites in a Site Group into one single view.
Advisory metadata updates	Biweekly advisory metadata update is now available.

Changes in Behavior

Starting from Nexus Dashboard Insights release 6.1.1, new Anomalies of severity **Information** will not be displayed in the GUI. When you upgrade to Nexus Dashboard Insights release 6.1.1, Information Anomalies that was generated prior to upgrade will be displayed in the GUI.

Open Issues

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

Bug ID	Description	Exists In
CSCvr32097	LLDP transmit receive packets statistics graph displays the same values regardless of the selected time range.	6.1.1 and 6.1.2
CSCvv31282	If there is single chip spine in the flow path then it is not reported in the flow path summary.	6.1.1 and 6.1.2
CSCvw03887	In flow analytics the health score on the flow records is displayed as healthy even when ingress flow records are not available.	6.1.1 and 6.1.2
CSCvw05400	After reaching the 500 flows limit, any extra flows will not be reported. These un-programmed extra flows will not be reported even when we delete few of the programmed flows.	6.1.1 and 6.1.2
CSCvw24739	In flow analytics page, PC and vPC interface ID are displayed instead of port name.	6.1.1 and 6.1.2
CSCvz52746	Tenant, VRF and EPG details will not be reported in Flow Browse or Details page if Q-in-Q flow is monitored using Netflow in Nexus Dashboard Insights.	6.1.1 and 6.1.2
CSCvy33992	Aborted DAGs does not indicate that there is partial data in Nexus Dashboard Insights GUI.	6.1.1 and 6.1.2
CSCvz07734	Duplicate endpoint Anomalies in Nexus Dashboard Insights.	6.1.1 and 6.1.2
CSCvz29928	Inconsistency in counts from aggregate view to primary affected objects view for anomalies.	6.1.1 and 6.1.2
CSCvz67522	Nexus Dashboard Insights does not model Endpoint Security Groups and related rules.	6.1.1 and 6.1.2

Bug ID	Description	Exists In
	Stale Policy CAM rules and Enforced VRF policy violation anomaly will be displayed in Nexus Dashboard Insights	
CSCvz52902	The Explorer "Can" query, "Can EPG:A talk to EPG:B?" may sometimes include in the Policy Table additional incorrect rules as the ones allowing the communication. However, the correct rule that allows the communication is always present in the table.	6.1.1 and 6.1.2
CSCwa13919	The anomaly record from the summary view may show the status of anomaly that is different than the one shown in analyze page or details view.	6.1.1 and 6.1.2
CSCwb39004	Nexus Dashboard Orchestrator job schedule and Inter-Site view in the anomaly table usability issues	6.1.1 and 6.1.2
CSCwb43792	vCenter anomalies are not exported as part of email export, when basic or advanced option is selected.	6.1.1 and 6.1.2
CSCwa86961	When L4-L7 intra VRF traffic is going through spine switches, Nexus Dashboard Insights flow path summary might not show spine switch information like spine name and interface names.	6.1.1 and 6.1.2
CSCwb02805	In Nexus Dashboard Insights, flow path information for L4-L7 traffic does not show the L3Out service leaf switch information.	6.1.1 and 6.1.2
CSCwb32920	On a scale setup when analysis is running, sometimes anomalies and the details view has a different anomaly name for a very small set of anomalies.	6.1.1 and 6.1.2
CSCwb41846	As part of Nexus Dashboard Orchestrator Explore workflow, in Endpoint table 'unknown epgs' is displayed in the EPGs column.	6.1.1 and 6.1.2
CSCwb59867	Assurance anomalies are not exported as part of email export, when basic or advanced option is selected.	6.1.1 and 6.1.2
CSCwb28067	If same EPG name is used across tenants in ACI sites, then flow path stitching and its details could be incorrect. This could impact forward, and reverse path stitch shown in flow pages of Nexus Dashboard Insights.	6.1.1 and 6.1.2
CSCwb61160	Certain devices would indicate a "Failed" bug scan status with a generic "Borg error".	6.1.1 and 6.1.2
CSCwb66891	For L3Out to EPG intra-VRF L4-L7 traffic, some of leaf switches and spine switches might not exporting flow information. Flow path will not include those nodes in the path information.	6.1.1 and 6.1.2
CSCwb57504	*NDO Endpoints Out of Sync Between Sites* anomaly is generated for a subset of endpoints even though spine switch does not have the endpoint entry in the coop table.	6.1.1 and 6.1.2
CSCwb76417	Flow Rate Statistics feature under System Status Page can sometimes have empty Node Flow Rate tables.	6.1.1 and 6.1.2
CSCwb92508	When you click on Pre-Change Analysis rows in the table, if you navigate through them a bit faster without waiting for the sidebar to completely load, you may sometimes notice duplicated changes added in the form.	6.1.1 and 6.1.2
CSCwb69431	In the NetFlow mode, after you disable and re-enable Nexus Dashboard Insights, VRF and EPG information are not available sometimes in the flow	6.1.1 and 6.1.2

Bug ID	Description	Exists In
	analytics page.	
CSCwb87579	Since Explore is designed to support max fabric wide rules of 150k, nae-policy-explorer pod would go OOM when Explore "Connectivity analysis" is run for completed epoch having a large policy scale.	6.1.1 and 6.1.2
CSCwb74134	Estimated Impact for BGP Prefix Received Count Fluctuation anomaly is missing	6.1.1 and 6.1.2

Resolved Issues

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

Bug ID	Description	Fixed In
CSCvz46540	A duplicate or redundant switch entry may be seen on Nodes page after upgrade of a switch whose hostname contains a period (.) in it (eg. switch1.abc).	6.1.1
CSCvz15603	Site becomes "Disabled" or "Add_Fail" and policies will not be pushed to the fabric when Nexus Dashboard Insights gets disabled and re-enabled or upgraded if the site goes down.	6.1.1
CSCvz22022	Assurance job is aborted if there is not enough CPU and memory resources available and if there are multiple jobs running at the same time.	6.1.1
CSCwa42622	Flow statistics summary data is cleaned up after Nexus Dashboard Insights upgrade.	6.1.1
CSCvz64136	Selecting a time range of Last Week on the Interfaces Dashboard causes the browser to show a blank screen.	6.1.1
CSCvv92188	In the Flow analytics details page, path information might not display spine node in the traffic path.	6.1.1
CSCwa30074	In Configuration export import feature, the following configurations are not supported only during the IMPORT. • Template based Compliance Configuration and • Compliance configuration by importing JSON/Xml file	6.1.2
CSCwa70097	Export Import feature does not show the Kafka configuration settings.	6.1.2
CSCvy95956	After ACI site is on-boarded on Nexus Dashboard Insights, the certificates on APIC to connect to the Kafka broker are missing.	6.1.2
CSCwb66633	Auto suggest is not supported for Subnet (fvSubnet and l3extSubnet) object types for Manual Configuration in Pre-Change Analysis.	6.1.2

Known Issues

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

Bug ID	Description	Exists In
CSCvv77014	Cisco NIA allows onboarding of third-party sites without any devices being discovered.	6.1.1 and 6.1.2
CSCvv31284	External EPG name is not reported in Cisco Nexus Insights app even though the subnet is specified.	6.1.1 and 6.1.2
CSCvw11059	The EX tier-1 leaf switch is not stitched in the flow path.	6.1.1 and 6.1.2
CSCwb59463	In ACI platforms, with fast-link-fail over feature enabled, path summary will not have north bound or spine facing information in the flow path summary for FX2 based platforms.	6.1.1 and 6.1.2

Compatibility Information

For Nexus Dashboard Insights compatibility information see the Services Compatibility Matrix.

Software	Release/PID
Cisco Device supported for Software Telemetry	Cisco Nexus 9000 Series switches
Cisco Nexus Dashboard cluster	SE-CL-L3
Minimum Intersight Device Connector version on Cisco Nexus Dashboard	1.0.9-828
Cisco Device supported for Flow Telemetry	Cisco Nexus 9300-EX, -FX, -FX2, -GX, and 9500 platform switches with EX, FX line cards Cisco Nexus 9000 FX3 and 9336C-FX2-E platform switches
Minimum Cisco APIC version required for FTE and Micro-Burst	5.1(1h)
AppDynamics APM	4.5

Verified Scalability Limits

Software/Hardware	Scale Limits
Number of ACI sites	8 for physical Nexus Dashboard 4 for virtual Nexus Dashboard
Number of ACI nodes (includes ACI switches)	500 for physical Nexus Dashboard 50 for virtual Nexus Dashboard
Maximum support for a 3-node Cisco Nexus Dashboard cluster	Site with 50 nodes, 60000 Endpoints per Site Group

Software/Hardware	Scale Limits
	and 100000 per cluster, and 10000 Flows
Maximum support for a 4-node Cisco Nexus Dashboard cluster	Site with 100 nodes, 60000 Endpoints per Site Group and 140000 per cluster, and 10000 Flows, and 300000 logical rules
Maximum support for a 6-node Cisco Nexus Dashboard cluster	Site with 500 nodes, 60000 Endpoints per Site Group and 200000 per cluster, 20000 Flows, and 300000 logical rules
Maximum support for a 6-node Cisco Virtual Nexus Dashboard (vND) cluster	Site with 50 nodes, 5000 Endpoints per Site Group and 20000 per cluster, 2500 Flows, and 100000 logical rules
Maximum support for a 9-node Cisco Virtual Nexus Dashboard (vND) cluster (3 data nodes and 6 app nodes)	Site with 200 nodes, 5000 Endpoints per Site Group and 20000 per cluster, 5000 Flows, and 100000 logical rules
Maximum number of leaf switches in a POD running PTP	128 288 for APIC release 5.2(5) and later

Rollup and Retention Numbers for Nexus Dashboard Insights Telemetry

Nexus Dashboard Insights implements a multi-level roll-up strategy for the telemetry streamed that enables better management of the data. The following table provides information about roll-up and retention policy in Nexus Dashboard Insights.

Statistics Name	Granularity (Time difference between sample points)	Retention proposed for Nexus Dashboard Insights
Interfaces and Protocols Statistics and Error Counters	1 minute	3 days
	5 minutes	7 days
	3 hours	30 days
Resources and Environmental Statistics	5 minutes	7 days
	3 hours	30 days
Integrations Statistics (AppDynamics)	5 minutes	7 days
	3 hours	30 days
Anomalies and Advisories	On-event*	30 days
Microburst	On-event*	7 days
Endpoints History**	On-event*	7 days
Events	On-event*	15 days

Statistics Name	Granularity (Time difference between sample points)	Retention proposed for Nexus Dashboard Insights
Flows and Flow Telemetry Events	-	7 days
Delta Analysis	-	30 days

*On-event: The data is sent from the switch or stored in the database only if the state of the object has changed.

** Endpoint History tracks the moves and modifications of an endpoint for last 7 days.

Usage Guidelines and Limitations

This section lists the usage guidelines and limitations for Cisco Nexus Dashboard Insights:

- Nexus Dashboard Insights downgrade is not supported.

- When the Device Connector is unclaimed from the on-premise GUI application, the Device Connector must be unclaimed from Intersight for TAC Assist's connected TAC functionality to work.

- After modifying a bridge domain or VRF instance for an EPG, the flows show errors and flow analytics does not work as expected.

- For virtual Nexus Dashboard (vND), you must provision the underlying HOST with Distributed Virtual Switch and not with a Standard Virtual Switch.

- In Multi-cluster setup, remote cluster system anomalies are not displayed in the local cluster. You must log in to the remote cluster to view the system anomalies.

- Nexus Dashboard Insights creates a user in APIC called *cisco_SN_NI*. This user is used when Nexus Dashboard Insights needs to make any changes or query any information from APIC. In APIC navigate to **System** > **History** > **Audit Logs tab**. *Cisco_SN_NI* user is displayed in the user column.

Related Content

The Cisco Nexus Dashboard Insights documentation can be accessed from the following website:

https://www.cisco.com/c/en/us/support/data-center-analytics/nexus-insights/series.html

The documentation includes installation, upgrade, configuration, programming, and troubleshooting guides, technical references, and release notes, as well as other documentation.

Document	Description
Cisco Nexus Dashboard Insights Release Notes for Cisco ACI	This document.
Cisco Nexus Dashboard Insights Deployment Guide	Describes how to install and upgrade Nexus Dashboard Insights.
Cisco Nexus Dashboard Insights User Guide for Cisco ACI	Describes how to use Nexus Dashboard Insights.

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