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Cisco Nexus Dashboard

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Overview and definitions

Q: What is Cisco Nexus® Dashboard?

A: Cisco Nexus Dashboard is the simplest way to provision, manage, and operate data center networks. A unified automation and operations platform that provides unprecedented simplicity by integrating services to configure, operate, and analyze customers' data-center networks through a single pane of glass. Using the Cisco Nexus Dashboard, IT operations teams can navigate seamlessly all aspects of infrastructure lifecycle tasks from initial configuration and capacity planning to running and troubleshooting their Data Center networks by leveraging Cisco Nexus Dashboard Fabric Controller, Cisco Nexus Dashboard Insights, and Cisco Nexus Dashboard Orchestrator.

Cisco Nexus Dashboard unification integrated these common data center services into its platform, streamlining installation and upgrades. Users no longer select individual services, simplifying their experience. Third-party integrations for your mission-critical data center environment are supported on the platform.

Q: What is Cisco Nexus Dashboard Fabric Controller?

A: Cisco Nexus Dashboard Fabric Controller (NDFC) is the network management platform for all NX-OS and MDS enabled deployments. It spans LAN fabric architectures storage network deployments, and IP Fabric for Media. NDFC accelerates time to provisioning by providing automated and consistent configuration across multiple NX-OS Nexus switches in your network as well as other Cisco and third-party devices. It also helps in basic monitoring of the status of each device and can integrate with other Nexus Dashboard services, such as Insights for advanced analytics capabilities.

Q: What is Cisco Nexus Dashboard Orchestrator?

A: Cisco Nexus Dashboard Orchestrator provides the visibility and connectivity to different fabric controllers and unifies them into one single orchestrator, automatically interconnecting multiple fabrics and sites with just a few clicks and ensuring that consistent intent-based policies are provisioned properly. You can now achieve visibility, inter-site connectivity and site-wide configuration of multiple fabrics through one pane of glass while leveraging the distributed scale-out model of Cisco Application Policy Infrastructure Controllers (APIC) for data center network environments.

Q: What is Cisco Nexus Dashboard Insights?

A: Cisco Nexus Dashboard Insights provides customers with the ability to monitor, analyze, troubleshoot, and assure their networks in real time. It helps identify anomalies, provide root-cause analysis, plan capacity, manage change, understand energy consumption, and accelerate troubleshooting. By tracking historical context, collecting and processing hardware and software telemetry data, and correlating customer designs with Cisco best practices, customers can get excellent visibility and awareness of issues affecting their environments and take corrective actions. It also includes network assurance capabilities to enable customers to continuously analyze and verify that their network state is consistent with intent. Customers can ensure that network policies are compliant with business rules, validate network changes before deploying them, and determine network impact due to changes between any two points in time. You can perform natural language queries to gain in-depth connectivity knowledge of their network, of what policies enable which network elements, and of the relationships between communication and virtual resources in real time.

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Q: What is the role of the Cisco Nexus Dashboard platform?

A: The new Cisco Nexus Dashboard unleashes a unified management experience and automation workflows by standardizing on the Cisco Nexus Dashboard platform (physical/virtual/cloud). Customers can now standardize operations' processes on a single platform, and teams can use advanced visibility, analytics, monitoring, orchestration, and deployment services from a unified pane of glass. The Cisco Nexus Dashboard platform can be deployed across data center network infrastructure in the form factor of your choosing (physical/virtual or cloud). The Nexus Dashboard platform is extensible, integrates with third-party services such as Panduit and Splunk, and provides the central point for cross-domain integrations.

Q: What are the operational services currently supported on the Cisco Nexus Dashboard?

A: Cisco Nexus Dashboard Orchestrator, Cisco Nexus Dashboard Insights, and Cisco Nexus Dashboard Fabric Controller. Refer to the compatibility matrix. For more details, refer to the Nexus Dashboard data sheet.

Q: What is the relationship between Cisco Nexus Dashboard Insights and Cisco Nexus Dashboard?

A: Cisco Nexus Dashboard is a unified automation and operations platform that hosts best-in-class capabilities to empower modern operations teams. Cisco Nexus Dashboard Insights is a service within that platform that provides visibility and real-time insights into the operating state of the infrastructure.

Q: What is the relationship between Cisco Nexus Dashboard and Cisco Nexus Dashboard Fabric Controller (NDFC)?

A: Cisco Nexus Dashboard Fabric Controller (NDFC) is available as a service on the Cisco Nexus Dashboard. NDFC offers streamlined data center network automation, control, and management for Cisco NX-OS, IP Fabric for Media (IPFM), and storage (SAN) networking deployments as well as other Cisco (Catalyst, IOS-XR) and third-party devices.

Q: What scale and size of data center fabrics can Cisco Nexus Dashboard support?

A: Cisco Nexus Dashboard can configure, manage, and analyze small sites to very large enterprise-grade implementations of Cisco Nexus series switches. With its flexible hosting model, from physical, virtual, and cloud-hosted, customers can choose the right model that is applicable to their environment. Refer to Nexus Dashboard Capacity Planning for more details.

How to buy?

Q: Where can I find more information about how to run Cisco Nexus Dashboard?

A: Please refer to the Nexus Dashboard ordering guide.

Q: What type of licensing does the Cisco Nexus Dashboard require?

A: Cisco Nexus Dashboard and its services do not require an additional license. Based on the license level purchased for your Nexus 9000 switches, you will be entitled to use Cisco Nexus Dashboard Insights, Fabric Controller, and Orchestrator with different feature sets. For example, Cisco Nexus Dashboard Fabric Controller and a select number of Insights features are included from the Cisco Data Center Networking **Essentials** tier. Visibility into basic Inventory (Switches, Controllers, Interfaces, Endpoints), Capacity, Topology, SW/HW Conformance, Sev-1 PSIRTs, and Basic Anomalies are included in the Essentials tier.

Orchestrator and additional Insights features require a Cisco Data Center Networking (DCN) **Advantage** license, and the full Cisco Nexus Dashboard Insights feature set requires a Cisco DCN Premier device license or a DCN Essentials or Advantage device license with the Day 2 Operations (Day2OPS) device license bundle. Visibility into Data and Inventory (L3 neighbors, VPC domains, Routing Tables),

CAM Analyzer, Scale Conformance, Advisories, Sustainability, and Delta Analysis (Basic) are included in the Advantage tier.

A full feature set of Cisco Nexus Dashboard Insights are delivered as part of Cisco DCN **Premier** device license or Day2OPS device license bundle.

For a full list of features please see the Cisco Data Center Network Subscriptions page.

Q: Is there a new way of ordering the Cisco Nexus Dashboard platform?

A: The new PID ND-CLUSTER-L4 is based on the Cisco UCS® M6 server. Additional nodes can be purchased through the PID ND-NODE-L4= (Cisco Nexus Dashboard platform node based on the Cisco UCS M6 server). The new generation of the platforms and Product IDs (PIDs) are backward compatible. And virtual form factors of Cisco Nexus Dashboard (Open Virtualization Archive [OVA], KVM) may be purchased through ND-VIRTUAL. Please refer to the ordering guide.

Q: Do I need to purchase a service/support PID for virtual Nexus Dashboard?

A: The virtual Nexus Dashboard PID "ND-VIRTUAL=" is cost free ($0). This PID provides the entire cluster. Reference the release notes for scale information. A support contract specific to Virtual Nexus Dashboard is not required. It is covered by the switch support.

Q: Do I need to purchase a service/support PID for Nexus Dashboard?

A: Please refer to the Data Center Networking (DCN) subscription document.

Q: Are there any new data-center networking promotional offers?

A: Please refer to the promotions page on the latest offers. The latest one is the Cisco Nexus Dashboard Day2Ops Add-On bundle.

Deployment guidelines

Q: Where can the data-center networking applications version compatibility information be found? Are there any constraints to fabric versions?

A: Refer to the Cisco Data Center Networking Applications Compatibility Matrix.

Q: What is the scale (that is, how many sites and switches) Cisco Nexus Dashboard platform can support?

A: Cisco Nexus Dashboard platform is built on scale-out architecture, which means you can add more nodes if you require additional resources. Please refer to the Nexus Dashboard sizing calculator to determine the cluster size.

Q: Does the Cisco Nexus Dashboard require connectivity to the internet? Can it be used on an air-gapped system?

A: When hosting Cisco Nexus Dashboard Insights on Cisco Nexus Dashboard, Cisco Nexus Dashboard needs to be connected to Cisco Intersight® periodically for Nexus Dashboard Insights to access the latest Cisco database of known defects, field notices, Cisco Product Security Incident Response Teams (PSIRTs), and sustainability information. Cisco Nexus Dashboard Insights can then run bug scans against the latest database. Offline customers can utilize Insight's "Advisory" features to better identify risks to their infrastructure (PSIRTS, defects, EoX notices, and field notices).

Q: Can you share best practices for design and deployment of the Nexus Dashboard platform cluster?

A: Refer to the design and deployment guide for recommendations.