cisco

The bridge to possible

Nexus Dashboard Fabric Controller

Businesses are seeing enormous evolution in digitization, and to cope with this data driven environment, they have relied on IT and especially on their disparate data center network environments. Networks need to become simpler, more agile, more proactive, more intuitive, and more manageable across on-premises and public cloud environments. Long gone are the days when a network administrator manually configured every switch. Cisco Nexus® Dashboard Fabric Controller (NDFC), running on Cisco Nexus Dashboard, has helped address many of the challenges of managing Cisco NX-OS switches. It empowers IT to move at the increasing speed required of your business. With NDFC, you get complete automation, extensive visibility, consistent operations, and a network that is prepared for your hybrid-cloud environment.

Comprehensive management solution for LAN (VXLAN EVPN, classic Ethernet, routed, etc.), SAN, and Cisco IP Fabric for Media solutions across a hybrid-cloud environment.

Cisco Nexus Dashboard Fabric Controller (NDFC) provides granular, scalable visibility for deep-dive troubleshooting, functionality, and maintenance operations that benefit data-center operation teams. It makes fabric management simple and reliable. Also, Cisco NDFC meets ever-growing scalability needs with the integration of Cisco Nexus Dashboard Orchestrator (NDO).

Benefits

- Provide automated network connectivity, consistent network management, and simplified operations for hybrid-cloud environments.

- Provide complete lifecycle management and automation for Cisco Nexus and Cisco MDS platforms.

- Streamline data center automation and centralize common services with Cisco Nexus Dashboard.

- Empower administrators and operators with granular control over configuration changes, ensuring seamless transitions and minimizing disruptions.

- Reduce deployment time of VXLAN-EVPN fabrics or Layer-2/Layer-3 networks to minutes, leveraging our fully automated workflows.

- Provide lifecycle management and automated workflows for managing your Cisco® Catalyst® switches for campus VXLAN EVPN deployments.

- Improve fabric reliability with constant monitoring of compliance and health.

- Reduce operation errors with predefined deployment models.

- Monitor and alert operators to failure conditions.

- Visualize multiple fabrics with intuitive topology.

- Ensure that media networks are secure and authorized with IPFM's host policies, which provide end-point access control, and flow policies, which define link bandwidth reservation.

- Provides SAN Insights capability to provide network latency and visibility at scale.

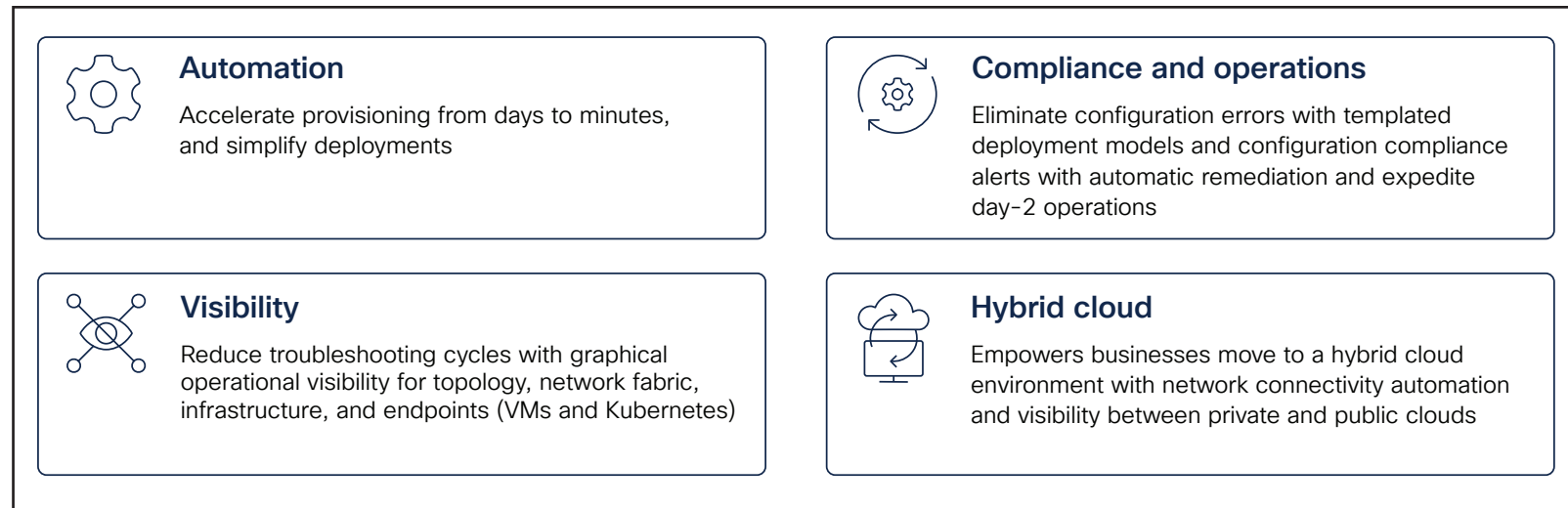- Monitor Host and Storage in dedicated pages to show all correlated information.

Automation
Accelerate provisioning from days to minutes, and simplify deployments

Compliance and operations
Eliminate configuration errors with templated deployment models and configuration compliance alerts with automatic remediation and expedite day-2 operations

Visibility
Reduce troubleshooting cycles with graphical operational visibility for topology, network fabric, infrastructure, and endpoints (VMs and Kubernetes)

Hybrid cloud
Empowers businesses move to a hybrid cloud environment with network connectivity automation and visibility between private and public clouds

Figure 1.   Cisco Nexus Dashboard Fabric Controller

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"Now, we can do maintenance and upgrade network software with minimal impact, and we can control all network updates programmatically rather than having to do them manually."

Gregory Shulov
Director of Global IT, Infinidat

For more information

- Visit the Cisco **Nexus Dashboard Fabric Controller webpage**.

- Learn more about Cisco **Nexus Dashboard**.

What's new

Cisco NDFC is the network management service on Cisco Nexus Dashboard for Cisco NX-OS-enabled deployments, spanning new fabric architectures, IP Fabric for Media, storage networking deployments and the hybrid cloud for the Cisco Nexus-powered data center.

Cisco NDFC Release 12 now supports:

- Modularized architecture based on Kubernetes microservices.

- New and revamped user interface and experience to align with Cisco Nexus Dashboard.

- Cisco Nexus Dashboard fabric discovery capability for inventory and discovery.

- New guided-change control management with new user roles such as stager, approver, and deployer.

- Ability to track the configuration changes and rollback at the granularity of a task.

- Increased capability for automating non-Nexus OS platforms including Cisco IOS® XE and Cisco IOS XR.

- Support software image management for Catalyst switches, along with fully automated workflows for Campus VXLAN EVPN automation.

- Cisco NDFC, running on Cisco Nexus Dashboard, allows cloud connectivity with AWS and Microsoft Azure by integrating with Cisco Nexus Dashboard Orchestrator (NDO) and Cisco Cloud Network Controller.

- Git Repository integration for easier synchronization of non-default templates from NDFC.

- One view for all LAN fabrics from across NDFC clusters.

- Implementation of Cisco Smart Licensing policy.

- SAN controller provides storage management for the Cisco MDS 9000 family.