



# 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 data center environments 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) 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, and consistent operations.

Cisco Nexus Dashboard Fabric Controller (NDFC) provides granular, scalable visibility across all clusters for deep-dive troubleshooting, functionality, and maintenance operations that benefit data-center operation teams. It makes fabric management simple and reliable for LAN (VXLAN EVPN, classic Ethernet, routed, etc.), SAN, and Cisco IP Fabric for Media solutions.



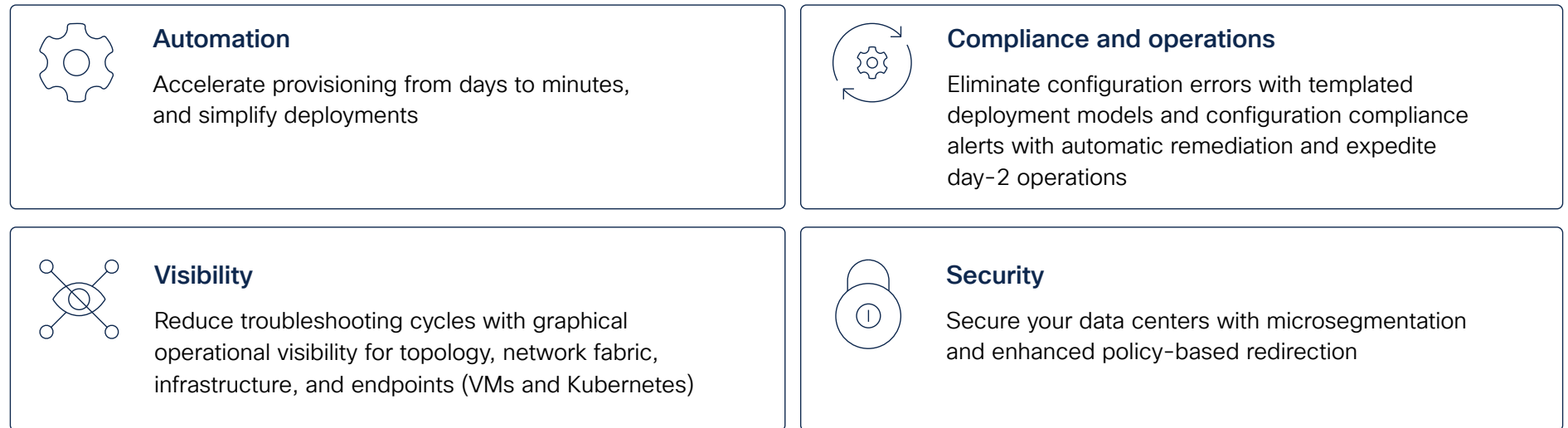


Figure 1. Nexus Dashboard Fabric Controller Key Benefits

## Business outcomes

Nexus Dashboard Fabric Controller provides automated network connectivity, consistent network management, and simplified operations for your various network environments. With Cisco Nexus Dashboard Fabric Controller you can:

- **Identify your ideal data-center use case:** NDFC provides end-to-end automation, extensive visibility, fabric reliability, and consistent operations for your LAN, SAN, and IPFM deployments.
- **Effortlessly provision and deploy your networks:** Reduce your fabric deployment time from days to minutes and decrease operational errors by leveraging NDFC's predefined best practice templates and fully automated workflows.
- **Streamline network management and control:** Simplify configuration changes by aggregating dev ices and fabrics across sites and clusters into a single pane of glass with NDFC's All Cluster View.
- Easily access critical high level fabric information while being able to drill down to each of your fabrics and switches to make configuration changes to your networks, VRFs and interfaces across all clusters.
- Experience NDFC's guided-change control management with new user roles such as stager, approver, and deployer.
- Track configuration changes and rollback at the granularity of a task to quickly resolve any inaccurate or unwanted changes, reducing potential downtime.

- Experience comprehensive image management policies to specify a version and patch level for specific switches, automatically be notified if the image policy on a switch is non-compliant, and run pre/post-upgrade configuration reports.
- Leverage SAN Insights capability to provide network latency and visibility at scale.
- **Prioritize network security:** Leverage NDFC’s simplified approach to understanding and controlling network traffic and risk mitigation with microsegmentation using VXLAN GPO and L4-L7 Service Insertion.
  - With micro-segmentation using group policy, you now have greater flexibility in choosing attributes, such as IP, VLAN, and VM Attributes to craft policies that segment your network according to your architecture’s logic. Minimize vulnerabilities by creating a smaller attack surface and improve the overall security posture of your network.
- NDFC effortlessly manages the switches and interfaces attached to a service cluster. L4-L7 service insertion can be easily enabled by editing a fabric and in the advanced settings, enabling L4-L7 Services Redirection. Furthermore, support is available for enhanced Policy-Based Redirection (ePBR) used for L4-L7 service load balancing and single-site traffic steering and redirection.
- 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.
- **Utilize DevOps tools for success:** Leverage tools such as Git Repo integration to import and export your non-default NDFC templates, validate your templates, and easily leverage them in multi-cluster NDFC deployments.
- **Simple automation for AI/ML deployments:** NDFC offers advanced configuration and automation features that enable rapid AI/ML fabric setup, including QoS configuration for PFC and ECN, completed within minutes.

“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](#).