

# Cisco DNA Automation Capabilities

Network Operations (NetOps) that align the network with business goals

## Simplifying network deployment and management

Cisco DNA is Cisco's intent-based digital network architecture. Delivered through the Cisco DNA Center management dashboard, this innovative approach to networking enables organizations to more effectively manage network operations while supporting the agility necessary to adapt in today's digitally driven world.

Working with Cisco DNA-ready network devices, Cisco DNA Center powers a robust set of automation capabilities that address many of the challenges facing the modern IT organization. These capabilities enable IT teams to more easily and effectively deploy complex networks across multiple domains. No more box-by-box configuration and deployment. Using intent-based policy, the capabilities automate previously manual network device onboarding, configuration, provisioning, and maintenance processes to simplify and scale network operations and drastically reduce configuration errors.

During deployment, devices can be automatically discovered and provisioned with the right configuration. Cisco DNA Center then continually monitors the OS versions on devices to help ensure that they remain in compliance. As a result, you get end-to-end consistency, for optimal performance and security.

## Benefits

- Automate manual processes to save time and reduce human errors
- Create repeatable and consistent configurations to help ensure optimal performance and security
- Discover, inventory, and view network devices from a single pane of glass
- Codify business intent through easy-to-define configuration and access policies
- Simplify new device deployment through the plug-and-play function
- Automatically monitor and manage software updates and patches to help ensure end-to-end consistency across the network
- Extend automation policies to assurance, security, and third-party applications, including Cisco DNA Center assurance capabilities

## Call to action

Network automation powered by Cisco DNA Center can help you streamline repetitive tasks and focus on adding greater value to your network.

- Explore network programming at [developer.cisco.com/network-automation](https://developer.cisco.com/network-automation).
- Request a personal Cisco DNA Center demo today <https://engage2demand.cisco.com/LP=14467?oid=otren015026>.

## The keys to effective automation

Cisco DNA Center assurance is built to support five key pillars necessary for an effective network—visibility, intent, deployment, management, and extensibility.

- **Visibility:** Cisco DNA automatically discovers new network devices and provides end-to-end visibility into your entire network—all through a single pane of glass.
- **Intent:** Our automation capabilities let you define policies and configurations using business intent, so it's easier to tame network complexity.
- **Deployment:** New network devices are automatically discovered and, using your predefined policies, can be automatically onboarded and configured.
- **Management:** Cisco DNA Software image management monitors your device operating systems, alerts you to necessary updates and patches, and helps ensure consistency across your entire network.
- **Extensibility:** Using open APIs, our automation processes and configurations can be shared with Cisco DNA Assurance capabilities as well as other Cisco® applications and security solutions.