



Cisco DNA Center

Cisco DNA Center: A complete network management and control system that enables your network to drive business growth and innovation.

Your network is more strategic to your business than ever before. You need a network management system that can automate the deployment, connectivity, and lifecycle of your infrastructure and proactively maintain the quality and security of your applications so that your IT staff can focus on networking projects that enhance your core business.

With Cisco DNA Center, the days of time-consuming network provisioning and tedious troubleshooting tasks are over. Zero-touch device connectivity and Software Image Management (SWIM) features reduce device installation and upgrade times from hours to minutes and bring new remote offices online with plug-and-play ease from an off-the-shelf Cisco® device. Cisco DNA Assurance enables every point on the network to become a sensor, sending continuous, streaming telemetry on application performance and user connectivity in real time. This capability, coupled with automatic path trace visibility and guided remediation, means network issues are resolved in minutes—before they become problems. Integration with Cisco Stealthwatch® security provides detection and mitigation of threats, even when they are hidden in encrypted traffic. Cisco DNA Center also provides an open, extensible platform with broad support for external applications and systems to exchange data and intelligence, building upon its native functions. And it is the only centralized network management system to bring all of this functionality into a single pane of glass.

Benefits

- **Simplify network management.** Manage your enterprise network over a centralized dashboard.
- **Deploy networks in minutes, not days.** Using intuitive workflows, Cisco DNA Center makes it easy to design, provision, and apply policy across your network.
- **Lower costs.** Policy-driven provisioning and guided remediation increase network uptime and reduce time spent managing simple network operations.
- **Transform your network.** Deploy cloud services and applications that benefit from the intelligent network optimization delivered by Cisco DNA Center.



“Cisco DNA Center is the only way we can keep up with the explosion of devices on our network.”

Marty Miller

Technology strategist
Children’s Hospital Los Angeles

What makes Cisco DNA Center different?

Cisco DNA Center is a complete management and control platform for your network, designed, created, and implemented by Cisco. This single, extensible software platform includes integrated tools for network management, automation, virtualization, analytics and assurance, security, and Internet of Things (IoT) connectivity and can also interface with your business-critical tools. Until now, functionality this complete could be achieved only through the purchase and operation of multiple third-party software tools. The advantages of having all your core network tools integrated into a single software platform are compelling:

- Multiple tools with multiple interfaces add complexity, which increases the possibility of errors in configuration and management. This can be especially damaging when errors in security settings lead to open vulnerabilities.
- Changing between program interfaces during network operations is time consuming and can make even simple changes or troubleshooting tasks take much longer to complete.
- Third-party platforms will never support the same levels of device management and control as those that are integrated and designed to work together.
- Automatic troubleshooting with guided remediation is extremely complex in today’s virtualized networks. Third-party tools can often tell you if a problem is due to the network or caused by an application, but they can’t offer guided remediation without true integration between the tools that control virtualization, analytics, and automation.

- Real intent-based networking requires extensive real-time data flow between the operational tools that are core to the network. The management of network configuration, security, analytics, and automation comes together to deliver the true business intent of the operation. Core management tools supplied by multiple third-party vendors cannot efficiently share, and react to, the amounts of data and critical information required to deliver a genuine intent-based network experience.
- Cisco DNA Center is an open and extensible platform that allows third-party applications and processes to exchange data and intelligence with your network. This improves IT operations by automating workflow processes based on network intelligence coming from Cisco DNA Center.

Cisco DNA Center offers a single dashboard for every core function in your network. With this platform, IT can become far more nimble and respond to changes and challenges faster and more intelligently.

Cisco DNA Center is the network management system, foundational controller, and analytics platform at the heart of Cisco’s intent-based network. Beyond device management and configuration, Cisco DNA Center is a set of software solutions that provide:

- A management platform for all of your network.
- A software-defined networking controller for automation of your virtual devices and services.
- An assurance engine to guarantee the best network experience for all your users.

Getting started with Cisco DNA Center

Cisco offers a number of ways to get started with Cisco DNA Center, depending on your networking goals. Cisco DNA capabilities are delivered through three software subscription tiers: Cisco DNA Premier, which permits advanced automation, assurance, SD-Access, security, and location-based services; Cisco DNA Advantage, which enables complete policy-based automation, assurance and analytics; and Cisco DNA Essentials, which offers basic automation such as Plug and Play (PnP), EasyQoS configuration and management, and embedded Cisco Software Support. The most value-rich offer, Cisco DNA Premier, delivers policy-based automation with SD-Access, Cisco DNA Assurance, and enhanced security with Cisco Stealthwatch. Customers can enable all Cisco DNA use cases with Cisco DNA Premier. [Get software details.](#)

Customer success stories

Cisco customers in every industry are changing the way they manage their networks with Cisco DNA Center. Take a look at the latest customer case studies to learn how customers are deploying Cisco DNA Center and how it is aligning their network operations with their business goals. [Read stories.](#)

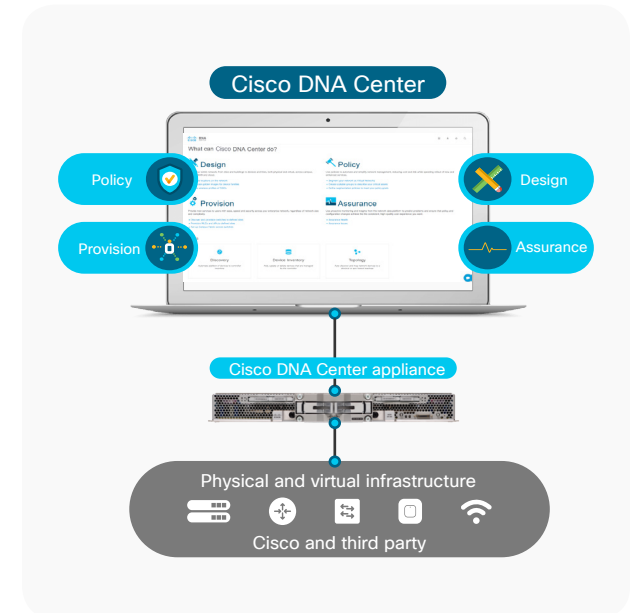
Cisco DNA Center software resides on the Cisco DNA Center appliance and controls all of your Cisco devices—both physical and virtual (fabric and nonfabric). From the main menu, Cisco DNA Center has four general sections:

Design: Design your network using physical maps and logical topologies for quick visual reference. The direct import feature brings in existing maps, images, and topologies directly from Cisco Prime® Infrastructure and the Cisco Application Policy Infrastructure Controller Enterprise Module (APIC-EM), making upgrades easy and quick. Device discovery is automatic and can be done either through Cisco Discovery Protocol or simply by entering an IP address range.

Policy: Define user and device profiles that facilitate highly secure access and network segmentation based on business needs. Cisco DNA Center takes the information collected in a policy and translates it into network-specific and device-specific configurations required by the different types, makes, models, operating systems, roles, and resource constraints of your network devices. Using Cisco DNA Center, you can create virtual networks, access control policies, traffic copy policies, and application policies.

Provision: Once you have created policies in Cisco DNA Center, provisioning is a simple drag-and-drop task. Categories of identities (users, devices, applications, etc.) in the Cisco DNA Center inventory list are assigned a policy, and this policy will always follow the identity. The process is completely automated and zero touch. New devices added to the network are assigned a policy based on identity—greatly facilitating remote office setups.

Assurance: Cisco DNA Assurance provides a comprehensive solution to help assure better and consistent service levels to meet growing business demands. It addresses not just reactive network monitoring and troubleshooting, but also the proactive and predictive aspects of running the network, and improving client, application, and service performance. The outcome is a consistent experience and proactive optimization of your network, with less time spent on troubleshooting tasks.



Cisco Services

Accelerate your intent-based networking journey with [Cisco Services](#). With proven experience, best practices, and innovative tools, our experts help you achieve extraordinary business outcomes and anticipate change so you can pivot quickly, securely, and confidently. Our comprehensive lifecycle of advisory, implementation, optimization, managed, technical, and IT training services helps you move to an open, secure, and automated intent-based network with ease and confidence. We'll help build your in-house expertise with training for your staff, and will provide centralized Cisco Solution Support with a single point of contact from first call to resolution. Our experts will also help you improve performance, efficiency, and operational excellence while extracting maximum value from your resources.

Cisco DNA Center Advise and Implement Service extends the capabilities of the Cisco DNA Center platform to help ensure rapid and secure deployment of Cisco DNA Center for simplified control of wired and wireless environments across campus, branch, and WAN. Our experts help you extend the value of Cisco DNA Center with cross-domain and third-party software integration and customized feature enhancements. Using an architectural approach to policy automation and assurance, this service enables you to manage, scale, and securely integrate Cisco DNA Center with IT and business systems for greater IT efficiency.

Table 1. Cisco DNA Center features

Feature	Description	Benefits
Automation: Software Image Management (SWIM)	Manages software upgrades and controls the consistency of image versions and configurations across your network.	Speeds and simplifies the deployment of new software images and patches. Pre- and post-checks help prevent adverse effects from an upgrade.
Automation: Plug and Play (PnP)	Zero-touch provisioning for new device installation. Allows off-the-shelf Cisco devices to be provisioned simply by connecting to the network.	Enables deployment of new devices in minutes, and without onsite support visits. Eliminates repetitive tasks and staging.
Enterprise Network Functions Virtualization (ENFV)	Automation support for ENFV facilitates branch virtualization on any hardware device—Cisco or third party.	Saves time in setting up network virtual services. Supports existing branch migration without hardware upgrade.
EasyQoS	Automation feature that creates an optimal end-to-end Quality-of-Service (QoS) chain for each link in the network.	Provides consistent QoS across the WAN and enterprisewide. Achieve toll-quality voice from any device, whether enterprise owned or user provided (BYOD).
Encrypted Traffic Analytics (ETA)	Allows the system to look for trends that could indicate a security threat in encrypted data traffic.	Detects malware, attacks, and other threats.
Network Health dashboard and client health dashboard	Assurance feature that gives a quick overview of the health of every network device and client on the network, wired or wireless.	Offers a general overview of the operational status of every network device provisioned from Cisco DNA Center. Any poorly connected devices will be highlighted with suggested remediation.
Device 360 Client 360	Assurance feature that displays device or client connectivity from any angle or context. Includes information on topology, throughput, and latency from different times and applications.	Provides a detailed view of the performance of any device or client over time and from any application context. Provides very granular troubleshooting in seconds.

Cisco Capital

Flexible payment solutions to help you achieve your objectives

Cisco Capital makes it easier to get the right technology to achieve your objectives, enable business transformation and help you stay competitive. We can help you reduce the total cost of ownership, conserve capital, and accelerate growth. In more than 100 countries, our flexible payment solutions can help you acquire hardware, software, services and complementary third-party equipment in easy, predictable payments. [Learn more.](#)

Cisco DNA promotions

Going digital has never been easier. Check out the latest promotions to help you get started on your journey to a digital-ready network. [Find deals.](#)

Feature	Description	Benefits
Network time travel	Assurance feature that allows an operator to see device or client performance in a timeline view to understand the network state when an issue occurred.	Enables an operator to go back in time and see the cause of a network issue, instead of trying to re-create the issue in a lab.
Path trace	Assurance feature that allows the operator to visualize the path of an application or service from the client through all devices, and to the server.	Instantly performs a common, and critical, troubleshooting task that normally requires 6 to 10 minutes. The operator simply clicks on a client or application.
Aironet® Active Sensor	A compact network sensor designed to monitor your wired or wireless network.	Simulates real-world client experiences in order to validate wireless performance for critical venues and high-value locations such as conference halls and meeting rooms.
Machine learning algorithms	As network conditions change, context-aware baselining captures the relationship between metrics and constantly updates an optimal curve (regression) for performance. Precise issues can be identified when they deviate from this ever-changing baseline.	Updates the preferred performance curve in real time, as network conditions change. Issues raised are based on current and real network conditions, rather than a static model. The result is 75% fewer issues to troubleshoot.
Cisco DNA Center platform	A broad set of APIs, SDKs, and adapters that extend the capabilities of Cisco DNA Center to external applications, cross-architectural domains, systems and processes, and third-party devices.	Allows Cisco DNA Center to share network data and insights that can provide important intelligence related to business and IT operations. It also allows real-time control of the network in lockstep with business needs.

Cisco DNA Center allows you to run the network with maximum performance, reliability, security, and open interfaces. Unlock the power of data by starting your journey with Cisco DNA Center today.

Next steps

For more information, visit the Cisco DNA Center website at www.cisco.com/go/ciscodnacentr.

Get started with programming to take full advantage of the Cisco DNA Center platform capabilities. Learn more at [Cisco DevNet](#).

Why Cisco?

You need a network that is constantly learning, constantly adapting, and constantly protecting. This is the future of networking.

With our deep understanding of technology and relationships with IT, Cisco can help bring the boardroom and your IT together to work effectively toward better outcomes for IT and the business. With Cisco DNA, we can help you create revenue opportunities, lower costs, reduce risks, and ensure regulatory compliance. And we can help you simplify your network operations and accelerate their response to changing IT and business needs.

Together with our partners, we help you innovate, manage market transitions, and turn technology into business advantage.