Cisco Digital Network Architecture (Cisco DNA)

Unlock your network’s full potential. Drive IT and business innovation.


Increasingly, the agility of an organization’s network determines the agility of the business. All too often, a rigid network holds back the organization’s ability to flourish in an era of change. Cisco DNA provides a complete intent-based networking system that is constantly learning and adapting and using contextual insights to make sure the network continuously responds to dynamic IT and business needs. Cisco DNA is the open, software-driven platform that turns vision into reality.

With Cisco DNA Center at its core, Cisco DNA provides the policy, automation, and analytics required to adapt to change, simplify and scale operations, and protect against degradation and threats. It provides 360-degree open platform extensibility to vastly increase the network’s value by opening the way for new and innovative applications, processes, and solutions that are required today, and those that will be needed in the future.
Cisco DNA guiding principles

- **Security** everywhere, turning the network into a sensor and enforcement system that identifies and contains risk and threats, even in encrypted traffic.
- **Centralized**, cloud-enabled management to design, provision, enable policy, and assure network services.
- **Open** platform capabilities that allow the network to understand the needs of the business and integrate the network into IT and business processes.
- **Automation** to simplify operations and accelerate policy enforcement consistently and reliably across all devices in access, campus, and WAN networks.
- **Assurance** to proactively predict performance and remediate problems through machine learning and correlations for business insights and operational efficiencies.
- **Intent-ready** physical and virtual infrastructure to make sure all your switches, routers, and access points can support the software innovations today and into the future.

Cisco DNA solutions and products

**Cisco DNA Center**

An intuitive command and control center that acts as the core of an intent-based network, provides a centralized management dashboard for controller-based automation, networkwide assurance, and open platform extensibility.

- **Automation**: Simplify the design, provisioning, and configuration management of your entire network from a centralized policy-based dashboard.
- **Analytics**: Improve network assurance with rich contextual visibility and monitoring, networkwide. Make sure the network is performing at its optimal level and in accordance with business goals.
- **Open Platform**: Deliver 360-degree extensibility with an open, intent-based networking platform that enables easy data and intelligence exchange with external applications and systems. Benefit from the resulting streamlined operations and unlimited IT and business innovation.

**Cisco DNA Center Assurance Solution**

Get rich contextual visibility into the user-to-application experience with historical, real-time, and predictive insights across users, devices, applications, and the network. Analytics combined with automation reduces time spent on troubleshooting.

- **Simplified management**: A single user interface makes it easy to troubleshoot problems on your network.
- **Network visibility**: Collect data in real time from devices, users, and applications across the enterprise.
- **Guided remediation**: Use best practices based on 30 years of Cisco expertise to accurately pinpoint problems.

**Software-Defined Access (SD-Access) Solution**

Enable network access in minutes for any user or device to any application without compromising security.

- **End-to-end segmentation**: Secure users, devices, and applications with identity-based policy, regardless of location.
- **User policy workflows**: Use Cisco DNA Center to design, provision, and manage your wired and wireless networks.
- **Intelligent network fabric**: Enable a consistent user experience anywhere with insights and analytics into user and application behavior.
Cisco Services

We help organizations accelerate the journey to digitization by unlocking the network’s full potential. With proven experience, best practices, and innovative tools, we help you confidently move to a secure, automated, intent-based network. Manage, scale, and secure your Cisco DNA solutions with our comprehensive lifecycle of advisory, implementation, software integration, optimization, technical, and IT training services.


Next steps

For more information about Cisco DNA, visit https://www.cisco.com/go/dna.

Software-Defined WAN (SD-WAN) Solution

Accelerate digital and cloud transformation at your remote sites with a cloud-delivered overlay WAN architecture.

- **Better user experience:** Deploy applications in minutes on any platform. Deliver a consistent user experience and predictable performance.
- **Greater agility:** Get faster, easier deployment and operation of your WAN, and faster performance using less bandwidth.
- **Advanced threat protection:** Securely connect users to applications. Multilayer security encrypts all data for protection, from the WAN edge to the cloud.

Cisco DNA Security Solution

Turn your whole network into a powerful security sensor and enforcer, that integrates with security operations to detect and contain growing threats.

- **Encrypted Traffic Analytics (ETA):** Enables the network to serve as an even more advanced security sensor capable of detecting threats even in encrypted traffic.
- **Cisco Stealthwatch®:** Provides network visibility and security analytics to rapidly detect and contain threats.
- **Cisco TrustSec® and Cisco Identity Services Engine (ISE):** Enable fast and simple segmentation as part of the SD-Access solution to control networkwide access, enforce security policies, and help meet compliance requirements.

Cisco DNA-ready Infrastructure

Cisco DNA-ready infrastructure products include a portfolio of current and new routing, switching, and wireless products, including the Cisco Catalyst® 9000 family of switches:

Click here for the full list of Cisco DNA-ready products.

IT teams can take advantage of software subscriptions for Cisco DNA to increase business flexibility, reduce TCO, accelerate innovation, and simplify software management. And no matter where you are in your journey, Cisco and our partners offer services expertise to help you accelerate your network transformation.