



Architecting a network for today's world.

In today's connected world, the network plays an increasingly critical role. No longer simply a series of point-to-point connections, the network is expected to deliver insight and protection as well as data.

Cisco has developed an open, extensible, software-driven architecture that simplifies enterprise network operations while expanding critical capabilities across the network. By shifting the network paradigm from hardware-centric to software-driven, Cisco Digital Network Architecture (DNA) is enabling organizations to manage the unprecedented scale of connected devices while capturing valuable business insight and mitigating advanced security threats.



The network is under increasing pressure.

Technology trends such as IoT, cloud, and cyber security trends are fueling digital transformation and delivering significant benefits to companies and their customers. But these technologies – along with a growing number of services, devices, and device types – are also increasing IT complexity and demands on the network.

At the same time, we see rising expectations from business leaders to mine the expanding volume of data for better business insights and greater customer engagement. The increasing volume of data combined with more connected devices and a proliferation of security threats multiplies risk to the network and the organization.

The market needs a solution that integrates the critical innovations in networking software – virtualization, automation, analytics, cloud service management, and open and extensible programmability – into an architecture that can achieve these promises in an integrated and easy-to-consume manner.

While these innovations show promise for improving operational efficiency and enabling digital applications, adoption has been slow due to the difficulty in consuming these many new technologies.

The network must fundamentally change if it is to support the demands of business.

A modern approach to network architecture.

Meeting the challenges of increasing IT complexity, massive volumes of data traffic, and emerging security threats requires a new approach to networking – one that moves away from hardware centricity and toward a software-driven model that can learn, adapt, and intuit for greater agility, productivity, security, and performance.

By reimagining the network, Cisco has developed an open, extensible, software-driven architecture that accelerates and simplifies enterprise network operations to deliver the flexibility required to centrally manage the enterprise network, quickly provision new devices and activate network functions with a few clicks, while lowering costs and reducing risk. This new architecture simplifies management while expanding critical capabilities across the network:

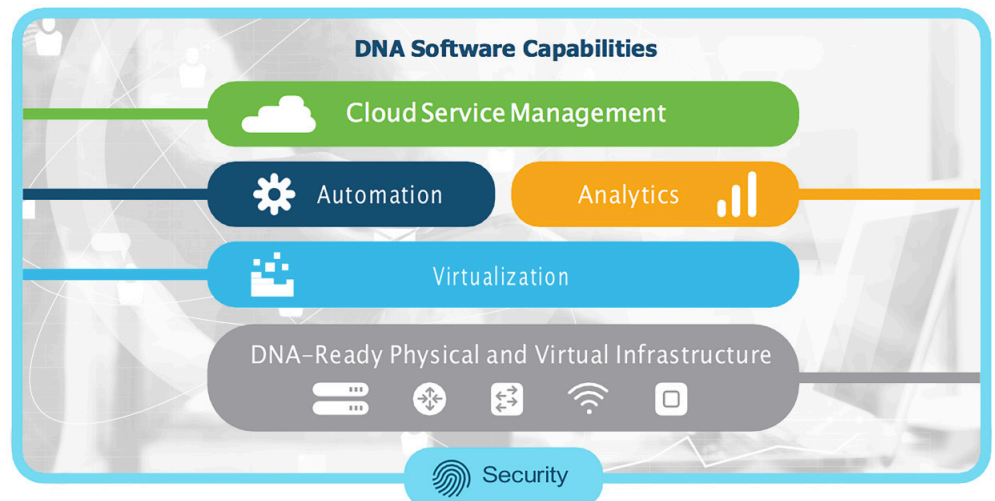
- **Cloud service management:** Design, provision, enable policy, and assure network services through centralized management. Enable visibility of end-to-end network services for campus and branch environments, on-premises or in the cloud.
- **Automation:** Fully automate the network infrastructure based on one policy across the entire access network, acting as a single fabric. Simplify and scale operations by automating day-to-day configuration, provisioning, and troubleshooting.

- **Analytics:** Proactively predict performance through machine learning to correlate user, device, and application data for business and operational insights. Identify issues and provide actionable insight to deliver better, more personalized experiences.
- **Security:** Detect and mitigate threats with end-to-end network segmentation and enforce security policies across the network. Identify and mitigate threats and vulnerabilities in encrypted traffic with network analytics.
- **Virtualization:** Deploy network services in minutes on any platform – branch, colocation, or public cloud – and connect users to applications with one seamless network.

With this new approach, Cisco has changed the fundamental blueprint for networking with reimagined hardware and advanced software. This shift from hardware-centric to software-driven networking will enable customers to experience a quantum leap in agility, productivity, and performance by leveraging an intelligent and highly secure platform powered by intent and informed by context:

- **Intent:** Intent-based networking allows IT to move from tedious traditional processes to automating intent, making it possible to manage millions of devices in minutes – a crucial development to help organizations navigate today’s expanding technology landscape.
- **Context:** Interpreting data in context is what enables the network to provide new insights. It’s not just the data that’s important, it’s the context that surrounds it – the who, what, when, where, and how. The intuitive network interprets all of this, resulting in better security, more customized experiences, and faster operations.
- **Intuition:** The new network provides machine learning at scale. Cisco is using the vast data that flows through its networks around the world, with machine learning built in, and unleashing that data to provide actionable, predictive insights.

Cisco calls its reimagined approach to the networking blueprint “Digital Network Architecture,” or Cisco DNA.



Cisco Digital Network Architecture.

Cisco Digital Network Architecture (DNA) is a portfolio of innovative hardware, software, and services designed to work together as a single system that empowers customers to innovate faster, reduce cost and complexity, and lower risk.

The Cisco DNA Portfolio.

Software-Defined Access

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:** 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.

Software-Defined WAN (SD-WAN)

- Deploy SD-WAN for branch offices with just 10 clicks.
- Deploy branch offices quickly with Cisco Enterprise Network Functions Virtualization (Enterprise NFV).
- Select any type of WAN connectivity to help lower costs without compromising security.

Cisco DNA Center

The Cisco DNA Center is a centralized management interface for Cisco DNA products and solutions. A single dashboard provides an intuitive interface to identify root causes, proactively pinpoint potential issues, and offer proven remediation options based on 30 years of Cisco domain expertise.

Automation

Cisco DNA allows you to easily automate the design, provisioning, and configuration management of your network. You can profile your topology, plan network services and feature configurations, and automatically provision and manage configuration compliance using Cisco's zero-touch Network Plug and Play app.

Assurance and Analytics

Cisco DNA proactively monitors the network, gathering and processing information from devices, applications, and users to identify service-impacting issues before users can.

Enterprise Network Security

Innovative technologies transform the network into a powerful security sensor and enforcer:

- 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) deliver software-defined segmentation to control network access, enforce security policies, and help meet compliance requirements.
- Cisco Umbrella® is the cloud security platform that provides the first line of defense against threats on the Internet, wherever users go.

DNA-Ready Products

DNA-ready infrastructure products include a portfolio of current and new products, including the Cisco Catalyst® 9000 family of switches that delivers unmatched security, programmability, and performance by innovating at the hardware (ASIC) and software (IOS XE) layers.

Software Subscription

When purchasing the new Catalyst 9000 family of switches, customers will access the DNA software capabilities by subscription, either via pre-bundled Cisco ONE software suites or a-la-carte components. Available across the entire enterprise networking portfolio, Cisco ONE software provides businesses with access to ongoing innovation, budget predictability, and a more agile way to consume the technology.

DNA Services

Cisco and Zones work together to deliver a comprehensive lifecycle of advisory, implementation, optimization, and technical services to help customers implement Cisco DNA successfully.

The robust Cisco portfolio allows you to optimize your network to provide business agility and scalability by automating one policy across the entire access network, gaining significant – and persistent – business benefits:

- Reduced network management cost and complexity.
- Less time spent managing and troubleshooting the network.
- Standardized configurations for repeatable processes and deployments.
- Accelerated rollout time for repetitive tasks – from months to minutes.

Summary.

Modern business demands an advanced network capable of delivering much more than reliable connections. Today's network must be secure, flexible, and smart as well. With Cisco DNA at the core of your network, you can make decisions faster, mitigate more security threats, and manage the unprecedented scale of connected devices more easily. That's because a network built on Cisco DNA constantly learns, adapts, and protects. It's a network informed by context and powered by intent. And intent-based networking is the difference between a network that needs continuous attention and one that simply understands what you need and makes it happen.

More Information

Visit our website [Zones.com](https://www.zones.com)

To speak with a solution specialist in the U.S. call toll-free **1-800-408-9663**.

About Zones, Inc.

Zones is a leading global IT solutions provider of advanced technology and services focusing on digital modernization, network optimization, and data center transformation. We deliver complex IT solutions simply across the IT infrastructure including Data Center, Mobility, Unified Communications, Cloud, Security, and Internet of Things. Zones operates in more than 80 countries around the world, with corporate offices, distribution facilities, IT partners, and service affiliates on six continents. As a certified Minority Business Enterprise (MBE), and holder of an elite Corporate Plus Certification, Zones supports many of the world's largest corporations.

Corporate Headquarters

Zones, Inc.
1102 15th Street SW, Suite 102
Auburn, WA 98001-6524

© 2018 Zones, Inc. All rights reserved. Zones and the Zones logo are trademarks or registered trademarks of Zones, Inc. Veritas and the Veritas Logo are trademarks or registered trademarks of Veritas Technologies or its affiliates in the U.S. and other countries. Other names may be trademarks of their respective owners.