

Cisco DNA Checklist

Determine exactly what you
need to take advantage of
intent-based networking



You know that a smarter, more intuitive network helps both you and your organization. The next step is figuring out exactly what Cisco DNA solutions meet your needs in order to take advantage of intent-based networking. Explore the IT priorities below and see what hardware, software, and services we recommend for each solution.

Your Cisco DNA Checklist



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Automate your network to simplify everything

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Assure network performance with quick issue resolution

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Automate one policy across the entire access network

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Integrate security to gain visibility and reduce risk

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Securely connect locations with the power of the cloud



Automate your network to simplify everything

Ensuring that each device is configured correctly and has the approved software image is one of the challenges that Cisco DNA Center automation helps you tackle. Cisco DNA Center interprets organizational and business intent policies and translates these policies into configurations for individual network devices. Automation helps eliminate errors and make the network more agile because changes can be made rapidly.

The solution: Cisco DNA Center automation

The basic building blocks needed:

- Cisco DNA Center appliance: one centralized pane of glass to manage and control your network.
- Cisco® Catalyst® 9000 access points and wireless controllers: Wi-Fi 6–ready devices.
- Cisco Catalyst 9000 switches: built-in security, Internet of Things (IoT), mobility, and cloud capabilities.
- Cisco 4000 and 1000 Series Integrated Services Routers (ISRs): Cisco DNA–ready routers, built-in security, and cloud capabilities.

The software needed to take full advantage of Cisco DNA Center automation:

- Cisco DNA Essentials: Enable basic automation such as plug-and-play application and LAN automation.
- Cisco DNA Advantage/Premier: Enable advanced automation such as application policy and Cisco Software-Defined Access (SD-Access).

Cisco Customer Experience services help you speed time to value:

- Cisco DNA Advisory Service: Create a strategic plan to achieve your business and IT objectives.
- Expert guidance: Explore the full portfolio of services for Cisco DNA.

02

Assure network performance with quick issue resolution

Your network operators are called upon to optimize network performance and meet user expectations. In a large network, this verification can be difficult. For intermittent problems, troubleshooting might be impossible. Cisco DNA Assurance collects telemetry data from clients and network devices, correlates and analyzes the data, pinpoints problem areas, and suggests corrective actions. It also features advanced artificial intelligence and machine learning to accurately identify issues that have the greatest impact on your network.

The solution: Cisco DNA Assurance

The basic building blocks needed:

- Cisco DNA Center appliance: visibility and insights in a single dashboard, troubleshooting that goes back in history to spot transient problems, and recommended fixes based on Cisco's 35 years of learnings.
- Cisco Catalyst 9000 access points and controllers: Wi-Fi 6-ready devices.
- Aironet® 4800 access points with Intelligent Capture: high-speed connectivity with enhanced troubleshooting.
- Cisco Catalyst 9000 switches: built-in security, IoT, mobility, and cloud capabilities.
- Cisco 4000 and 1000 Series ISRs: Cisco DNA-ready routers, built-in security, and cloud capabilities.

The software needed to take full advantage of Cisco DNA Assurance:

- Cisco DNA Advantage/Premier: Collect device telemetry and analyze it to spot potential issues and suggest remediation through Cisco AI Network Analytics.

Cisco Customer Experience services help you speed time to value:

- Cisco DNA Center Advise and Implement: Reduce migration risk with validated designs, proven processes, and innovative tools.
- Expert guidance: Explore the full portfolio of services for Cisco DNA.

03

Automate one policy across the entire access network

The number of users and devices that you need to keep connected—and secured—just keeps growing. And to make it more complicated, each user has different needs and different access requirements. Cisco SD-Access segments the network into groups of users with similar needs and roles, and enforces separation between the groups.

The solution: Cisco SD-Access

The basic building blocks needed:

- Cisco DNA Center appliance: Define the groupings based on user directives, and create an overlay network to separate group traffic.
- Cisco Identity Services Engine (ISE) appliance: Recognize, authenticate, and authorize users and things; onboard users; and apply access policies.
- Cisco Stealthwatch® appliance: Detect threats and perform encrypted traffic analytics.
- Cisco Catalyst 9000 access points and controllers: Wi-Fi 6–ready devices.
- Cisco Catalyst 9000 switches: Built-in security, IoT, mobility, and cloud capabilities.
- Cisco 4000 and 1000 Series ISRs: Cisco DNA–ready routers, built-in security, and cloud capabilities.

The software needed to take full advantage of Cisco SD-Access:

- Cisco DNA Advantage: Enable SD-Access; a separate license is required for Cisco ISE.
- Cisco ISE Base or Plus: Enable segmented user authentication and onboarding.
- Cisco Stealthwatch: Enable Encrypted Traffic Analytics (ETA) on ETA-capable hardware.
- Cisco DNA Premier: Combine Cisco DNA Advantage, Cisco ISE Base and Plus, and Cisco Stealthwatch software into one convenient license for all use cases.

Cisco Customer Experience services help you speed time to value:

- Cisco SD-Access services: Scale innovation and accelerate results with expert automation and security guidance.
- Expert guidance: Explore the full portfolio of services for Cisco DNA.

04

Integrate security to gain visibility and reduce risk

Your users aren't just in the office anymore, so neither are your security threats. With workloads moving to the cloud and IoT devices becoming more ubiquitous, you need security everywhere. Recognizing that threats are not just from the outside, enterprise networks must step up to these challenges. Cisco DNA security provides full visibility, reduces the attack surface, accelerates incident response, and stops breaches before they can spread.

The solution: Cisco DNA security

The basic building blocks needed:

- Cisco DNA Center appliance: Gain visibility into all aspects of security in your network.
- Cisco ISE virtual or appliance: Identify and manage policies quickly and easily.
- Cisco Stealthwatch appliance: Continuously monitor all network traffic in real time.

The software needed to take full advantage of Cisco DNA Security:

- Cisco ISE Base or Plus: Enable segmented user authentication and onboarding.

- Cisco Stealthwatch: Enable ETA on ETA-capable hardware.

- Cisco DNA Premier: Combine Cisco DNA Advantage, Cisco ISE Base and Plus, and Cisco Stealthwatch software into one convenient license for all use cases.

Cisco Customer Experience services help you speed time to value:

- Cisco Business Critical Services: Get expert help to segment your network to keep confidential data safe.
- Expert guidance: Explore the full portfolio of services for Cisco DNA.

05

Securely connect locations with the power of the cloud

Your users need reliable applications. You need control and security. But the complexity of distributed workloads and private, public, and hybrid clouds make that difficult. Cisco SD-WAN provides a cloud-first architecture that connects your applications in data centers and multiple clouds to users in branches and campuses with simplified management and improved network speed, security, and efficiency.

The solution: Cisco SD-WAN

The basic building blocks needed:

- Cisco 4000 and 1000 Series ISRs: Cisco DNA-ready routers, built-in security, and cloud capabilities.
- Cisco ASR 1000 Series Aggregation Services Routers: routers that secure your branch sites and simplify IT management.
- Cisco Cloud Services Router 1000V Series (CSR 1000V): routers that seamlessly extend connections to public and virtual private clouds.
- Cisco vEdge: routers that establish a secure virtual overlay network for remote offices, branches, campuses, or data centers.
- Cisco Catalyst 8000 routers: The new family of agile multi-gigabit SD-WAN routers from Cisco, that range from virtualised appliances for multi-cloud connectivity, to Edge computing in the branch, secure access, built-in 5G WAN, and high-end large campus or data centre deployments.

- Cisco 5000 Series Enterprise Network Compute System (ENCS): compute appliance families that deliver a new standard of software-defined flexibility.

The software needed to take full advantage of Cisco SD-WAN:

- Cisco DNA Advantage: enables advanced SD-WAN with unlimited segmentation, advanced security, application-driven policy, network analytics, and full WAN optimization.
- Cisco DNA Premier: includes Cisco DNA Advantage and enables enterprise secure cloud edge functionality using Cisco Umbrella™ Insights and Cisco Threat Grid.

Cisco Customer Experience services help you speed time to value:

- Cisco SD-WAN services: Effectively migrate, adopt, deploy, and securely manage intent-based networking to any cloud.
- Expert guidance: Explore the full portfolio of services for Cisco DNA.

Interested in learning more
about Software Defined Networking?

[Head back to our toolkit →](#)

Or book a free consultation with
one of the team today

[Book now →](#)