Cisco DNA Software for Switching

Contents

Cisco Digital Network Architecture

Cisco® Digital Network Architecture (Cisco DNA) is your team's bridge to an intent-based network. It is an open, extensible, software-driven architecture that accelerates and simplifies your enterprise network operations while lowering costs and reducing risk. Only Cisco provides a single-network fabric that is powered by deep intelligence and integrated security to deliver automation and assurance across your entire network organization at scale. Cisco DNA gives IT time back from time-consuming, repetitive network configuration tasks so you can focus on the innovation your business needs.

Cisco DNA software subscriptions provide customers with four key benefits:

- Investment protection of software purchases through software services-enabled license portability
- Software suites that address typical customer use-case scenarios at an attractive price
- Flexible licensing models to smoothly distribute customer's software spending over time
- Access to new technology from Cisco

Table 1 outlines common IT management challenges and the ways that Cisco DNA software helps customers to address them.

Table 1.   IT management challenges and Cisco DNA software benefits

IT management challenges	Cisco DNA software benefits
Shrinking IT budgets Budgets are shrinking while IT demands continue to accelerate. As the costs of IT and downtime skyrocket, companies need to balance shrinking budgets with easy-to-deploy networks that enhance operation efficiency.	**Deliver more value for your money** Cisco DNA Software is designed for typical customer use scenarios and is offered at a better-together price, making it easier and less expensive for you to deploy complete solutions. **Increase investment protection** Software services-enabled license portability lets your software licenses stay current through hardware upgrades and replacements at no additional cost.
Infrastructure inflexibility IT organizations lack an automated way to keep pace with changing business needs and demands for more resources. It often takes months or weeks to procure and provision a new network service.	**Enhance business agility** Cisco DNA Software delivers critical business solutions and provides you with the tools you need to deploy, maintain, and manage your software.
Lack of buying options Organizations need more options for buying software to improve their flexibility, reduce risk, and cut costs.	**Supplies flexible licensing models** Evenly distribute your software spending over time with subscription-based and other flexible purchasing models.
Implementation obstacles Deploying software and implementing new use cases can often cause major disruptions in your current operations.	**Reduce risk** Cisco's technical and professional services provide the expertise, smart tools, and proven processes that reduce risk and downtime.
Excessive time and costs for maintenance The majority of your IT budget and most of your workloads are focused on routine maintenance, limiting your ability to innovate and grow your business.	**Accelerate ROI and time-to-value** Optimize the performance of your networks to get the most from your technology investments. Accelerate your business outcomes with expert guidance from Cisco technical and professional services.

Benefits of software subscriptions

Software subscriptions provide a number of benefits detailed here.

Product overview

Cisco DNA software delivers an unbound network on an open and extensible architecture to help you navigate the digital journey. Benefits include lower initial costs, access to ongoing innovation, agility to respond more quickly to business needs, and better budget predictability. These 3-, 5-, and 7-year subscriptions include full Cisco Digital Network Architecture (Cisco DNA) capabilities supported by Cisco Software-Defined Access (SD-Access) analytics, automation, and security. Cisco DNA subscription offers are categorized into Good, Better, and Best solutions: Cisco DNA Essentials, Cisco DNA Advantage, and Cisco DNA Premier, respectively. Cisco DNA Premier is the lead offer.

To see a comprehensive list of the features within each subscription tier, view the Cisco DNA Software for Switching feature matrix.

Components of Cisco DNA Premier offer

Cisco DNA Premier for Switching consists of policy-based automation with Cisco Software-Defined Access (SD-Access), Cisco DNA Assurance, and enhanced security. Cisco DNA Premier is offered as a 3-, 5-, or 7-year subscription and includes both software licenses and support services. The tiers are nested, meaning Cisco DNA Premier includes all features contained in Cisco DNA Essentials and Advantage.

- Cisco DNA Essentials delivers base automation, monitoring, and management.

- Cisco DNA Advantage delivers policy-based automation with SD-Access, monitoring, and a full Cisco DNA Assurance solution with ThousandEyes Network and Application Synthetics. Using ThousandEyes together with Cisco DNA Assurance gives you a truly holistic view of network traffic, along with AI/ML-driven insights to make problem resolution quick and easy.

- Cisco Identity Services Engine (ISE) Base enhances security policy management and control by simplifying access control and security compliance for wired and wireless devices including integration with third-party devices. It provides secure access (Authentication, Authorization, and Accounting [AAA] and IEEE 802.1x), guest management, and link encryption (MAC Security [MACsec]).

- Cisco Identity Services Engine (ISE) Plus provides Bring-Your-Own-Device (BYOD) support, profiling and feed services, Endpoint Protection Services (EPS), Cisco Platform Exchange Grid (pxGrid), and Cisco Mobility Services Engine (MSE) integration for location services.

Cisco Secure Network Analytics (Stealthwatch) is included to enable encrypted traffic analytics and uses existing networks through Cisco NetFlow as a sensor and enforcer to improve threat defense and to provide visibility, analytics, and protection across networks, data centers, branch offices, and clouds. Cisco DNA Premier includes a Cisco Stealthwatch Flow Rate license, Virtual Stealthwatch Management Console, and Virtual Flow Collectors. The Flow Rate license comes with Stealthwatch Management Console (SMC) and Flow Collector (FC) software licenses, which will enable the operation of any size SMC Virtual Edition (SMCVE), including SMCVE 2000 or FC Virtual Edition (FCVE), including FCVE 2000 and FCVE 4000. Total licensed capacity for flows per second is the cost driver.

Cisco platforms supported by the Cisco DNA Premier offer

Cisco DNA Premier is available on the following Cisco Catalyst switches:

- Cisco Catalyst 9000 Series Switches (Cisco Catalyst 9300, 9400, 9500, and 9600 Series): These are Cisco's leading stackable and modular enterprise switches. They are built for security, Internet of Things (IoT), and cloud environments and are the next generation of the Industry's most widely deployed switching platform.

- Cisco Catalyst 9200 Series Switches

- Cisco Catalyst 3000 Series Switches (Cisco Catalyst 3560-CX, 3650 and 3850 fiber and nonfiber switches)

- Cisco Catalyst 4500 Series Switches (Cisco Catalyst 4500E)

- Cisco Catalyst 6000 Series Switches (Cisco Catalyst 6880-X, 6840-X, 6807-XL, and 6500)

- Cisco Catalyst Digital Building Series Switches (CDB)

Table 2 lists feature sets for the Cisco DNA Premier subscription offer.

Table 2.   Feature sets for the Cisco DNA Premier offer

	Cisco Catalyst 9600 Series	Cisco Catalyst 9500 Series	Cisco Catalyst 9400 Series	Cisco Catalyst 9300 Series	Cisco Catalyst 9200 Series
Advanced security analytics (visibility and threat detection across the network with Stealthwatch*)[1] *Flow collector and management license included	✔[2] (400 flows of Stealthwatch)	✔[2] (100 flows of Stealthwatch)	✔ (400 flows of Stealthwatch)	✔ (100 flows of Stealthwatch)	✔ (100 flows of Stealthwatch)
Endpoint-based policy (fine-grained SD-Access policy with endpoint profiling from ISE)[1]	✔ (200 endpoint sessions for ISE Plus and ISE Base)	✔ (50 endpoint sessions for ISE Plus and ISE Base)	✔ (200 endpoint sessions for ISE Plus and ISE Base)	✔ (50 endpoint sessions for ISE Plus and ISE Base)	✔ (50 endpoint sessions for ISE Plus and ISE Base)
Optimized network deployments (multicast Domain Name System [mDNS] gateway)	✔	✔	✔	✔	✔
Advanced automation (containers, Python, Cisco IOS® Embedded Event Manager, and autonomic networking infrastructure)	✔	✔	✔	✔	✔
Advanced telemetry and visibility (Flexible NetFlow and Wireshark)	✔	✔	✔	✔	✔

	Cisco Catalyst 9600 Series	Cisco Catalyst 9500 Series	Cisco Catalyst 9400 Series	Cisco Catalyst 9300 Series	Cisco Catalyst 9200 Series
Optimized telemetry and visibility (Encapsulated Remote SPAN [ERSPAN], Cisco Application Visibility and Control, and NBAR2)	✔	✔	✔	✔	✔
High availability and resiliency (patching)	✔	✔	✔	✔	✔
Advanced security (encrypted traffic analytics)	✔	✔	✔	✔	
Day-0 network launch automation (Cisco network plug-and-play application, network settings, and device credentials)	✔	✔	✔	✔	✔
Element management (discovery, inventory, topology, software image, licensing, and configuration management)	✔	✔	✔	✔	✔
Element management (patching)	✔	✔	✔	✔	✔
Network monitoring (Cisco Product Security Incident Response Team [PSIRT] compliance; End-of-Life [EoL] and End-of-Support [EoS] reporting; telemetry quotient; client 360; device 360; and top talkers, NetFlow, and streaming telemetry collection and correlation)	✔	✔	✔	✔	✔
Static Quality-of-Service (QoS) configuration and monitoring (easy QoS applications)	✔	✔	✔	✔	✔
Policy-based automation (SD-Access; group-based policy for access, application prioritization, monitoring, and path selection; and SD-Access with integrated wireless)	✔	✔	✔	✔	✔
Network assurance and analytics (insights from analytics and machine learning for the network, clients, and applications that cover onboarding, connectivity, and performance)	✔	✔	✔	✔	✔

	Cisco Catalyst 9600 Series	Cisco Catalyst 9500 Series	Cisco Catalyst 9400 Series	Cisco Catalyst 9300 Series	Cisco Catalyst 9200 Series
Cisco ThousandEyes Network and Application Synthetics[*] (Network performance metrics, dashboarding, visibility into app and service experience, end-to-end visibility across cloud and DC applications)		✔	✔		

[1] Additional flows and endpoints are available as add-on purchases in increments of 25 or 50. Additional Identity Services Engine features such as profiling, posture, and TACACS+ need to be purchased individually. For more information, refer to the Identity Services Engine data sheet at https://www.cisco.com/c/en/us/products/collateral/security/identity-services-engine/data_sheet_c78-656174.html?cachemode=refresh.

[2] On roadmap

[*] Each Catalyst 9300 or 9400 Cisco DNA Advantage or Premier subscription entitles the customer to run the equivalent of one ThousandEyes network or web test every 5 mins from a ThousandEyes enterprise agent (22 units per month), up to a maximum of 110,000 units per month of ThousandEyes test capacity per customer. ThousandEyes Cloud Agent access is not included in the Cisco DNA license entitlement. Test capacity can be increased and Cloud Agents accessed with purchase of additional ThousandEyes Network and Application Synthetics.

Cisco and Partner Services

Our industry-leading methodology and tools, expertise, best practices, and established partner relationships help our customers deliver extraordinary outcomes. We take a holistic approach to planning implementing and managing your next-generation network. With our services, you quickly recognize the full value of your SD-Access investment. For more information about this and other Cisco Services, contact your local representative or visit https://www.cisco.com/go/enservices.

Cisco Technical Services

We recommend that Cisco DNA Premier subscription customers purchase Cisco Solution Support for both hardware and license support.

Cisco Embedded Support is included with the purchase of the software subscription. Cisco Embedded Support provides Cisco technical support access online or by phone.

Cisco Embedded Software Support includes:

- Access to support and troubleshooting through online tools and web case submission; case severity or escalation guidelines are not applicable.

- Cisco Technical Assistance Center (TAC) access 24 hours per day to assist by telephone, or web case submission and online tools with application software use and troubleshooting problems.

- Entitlement to maintenance releases, and software updates for software.

- Access to https://www.cisco.com; this system offers customers helpful technical and general information about Cisco products as well as access to the online Cisco Software Center library.

No additional products or fees are required to receive these services with a software subscription.

Cisco Solution Support

Cisco Solution Support is the recommended service on both the hardware and software licenses. Cisco Solution Support is an essential element of the Cisco DNA networking architecture because it helps customers maintain its performance, reliability, and return on investment. This service delivers centralized support across the Cisco and third-party solution partner products in your solution ecosystem. Cisco's team of solution experts is the primary point of contact and owns the case from first call to resolution, no matter where the problem resides in the customer's network.

Refer to the service description for more detailed information regarding Cisco Solution Support.

- Cisco Solution Support with Smart Net Total Care
- Cisco Solution Support with Software Support Services

You can learn more about Cisco Solution Support at https://www.cisco.com/go/solutionsupport.

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.

For more information

To learn more about how Cisco DNA Software can help your organization, please contact your account manager or authorized reseller.