

# Cisco DNA for Access Wireless and Switching Subscription

## Cisco Digital Network Architecture overview



### What is the Cisco Digital Network Architecture (Cisco DNA)?



Cisco® Digital Network Architecture (Cisco DNA) is an open, programmable architecture that turns business intent into business results. It provides virtualization, automation, analytics, and cloud, integrated in one architecture. It provides the roadmap to a digital-ready network, which is the foundation of your business's digital future. With Cisco DNA you can innovate more quickly, reduce costs, and lower risk with services that are easy to consume.

Introducing an entirely new era in networking. Constantly learning. Constantly adapting. Constantly protecting. The Network. Intuitive.



### What are some of the components and innovations of Cisco DNA?



The Cisco Digital Network Architecture includes:

- Built-in automation to reduce the complexity, cost, time, and effort required to deploy, manage, and maintain networks and services.
- Pervasive analytics to provide insights into network operations, IT infrastructure, and the business.
- Virtualization to run services anywhere, independent of the underlying platform: physical, virtual, on the premises, or in the cloud.
- Open, extensible, and programmable at every layer, integrating Cisco and third-party technology, open APIs, and a developer platform.
- Security innovations to use your network as a powerful security sensor and enforcer.

For an overview of the Cisco Digital Network Architecture, including components and innovations, visit <https://www.cisco.com/c/en/us/solutions/collateral/enterprise-networks/cisco-digital-network-architecture/solution-overview-c22-736580.pdf>.

**Q How do customers consume this architecture?**

**A** Cisco Digital Network Architecture services will be delivered through Cisco DNA software, a simple, straightforward approach to consuming high-value solutions with license portability and purchase flexibility. Customers can start their Cisco Digital Network Architecture journey today on our current portfolio with the confidence of knowing that they can adopt network innovations in the future, when it suits their business needs. That's the power of software.

**Q Why is Cisco moving more and more network features and functionality to software?**

**A** Organizations are digitally transforming to improve customer experience, empower workforce innovation, accelerate innovation, and sharpen creative differentiation. To succeed, organizations must become agile, able to respond quickly and flexibly to market changes and customer demands. Software-based, programmable capability enables this degree of agility. Just as Cisco's customers are themselves becoming more software-centric, they are seeking technology partners to help them. Cisco recognizes this trend and is shifting Cisco's portfolio toward software, offering our customers simpler ways to purchase, deploy, adopt, and upgrade technology innovations. Cisco's software-centric innovation fuels our customers' digital transformations.

**Q What are the details of the Cisco DNA software?**

**A** Cisco is delivering the new network via Cisco Digital Network Architecture (Cisco DNA) for enterprise networking. You can consume all of these innovations, such as Cisco® Software-Defined Access (SD-Access), Encrypted Traffic Analytics and Cisco DNA Analytics and Assurance, with the Cisco DNA software. The Cisco DNA software is available as a subscription in three tiers: Cisco DNA Essentials, Cisco DNA Advantage, and Cisco DNA Premier. These are available for wireless and switching.

**Q What additional benefits do customers experience from subscription-based Cisco DNA Software licensing?**

**A** Customers experience these benefits:

- “Better together” pricing can provide lower initial costs and reduce Total Cost of Ownership (TCO) over the software lifecycle.
- Access to ongoing innovation gives the customer software upgrades and new features at no cost.
- Software license agility means licenses are portable between generations of hardware, eliminating the need to repurchase software when upgrading to new hardware.
- Software suites with 3-, 5-, or 7-year subscription license agreements provide simplicity.
- Software Support Service (SWSS) included.

## Cisco DNA Software for access wireless subscription

**Q What are some of the wireless innovations that were announced recently?**

**A** Built with an agile OS, the Cisco Catalyst® 9800 Series Wireless Controllers (now also including the 9800-L) are the most secure controllers that are always-on and can be deployed anywhere.

Cisco Catalyst 9100 Access Point: Supporting the Wi-Fi 6 standard, also known as 802.11ax, the Catalyst 9100 addresses current and future network needs. Benefits of the Cisco Catalyst 9100 Access points are higher performance with increased capacity, better user experience with reduced latency, investment protection with multigigabit, and better power efficiency for mobile and IoT.

Cisco Aironet® 4800 access point: With an abundance of features that offer greater contextual insights into your wireless network, top-notch security, and industry-leading Wi-Fi, the Aironet

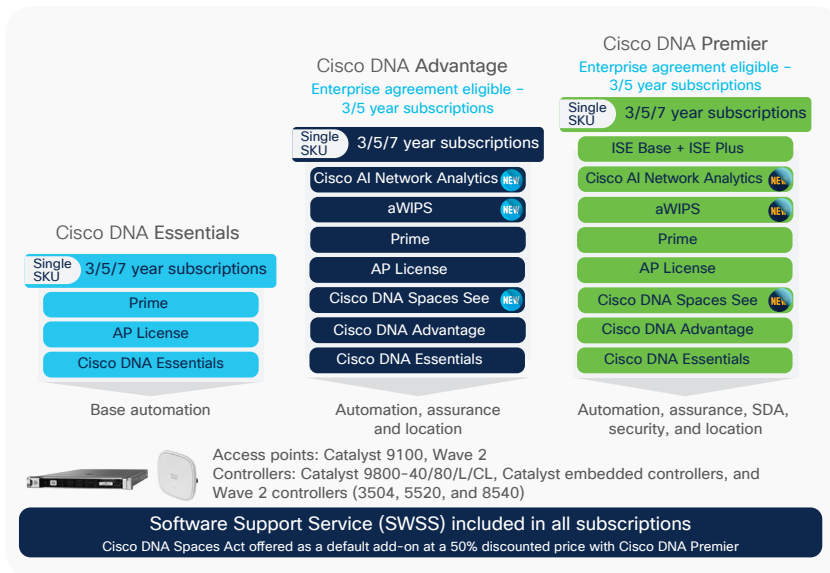
4800 access point revolutionizes how wireless is done. The functionalities are spread out over four internal radios, so all features simultaneously run over your network.

Cisco Aironet 1800s Active Sensor: The wireless Aironet Active Sensor is a part of the Cisco Wireless Service Assurance solution. The Cisco Aironet Active Sensor is an 802.11 a/b/g/n/ac (Wave 2) sensor, with internal antennas and an Ethernet backhaul. The sensor can be used to monitor, measure, and troubleshoot overall wireless network performance.

**Q Does anything change with the existing software subscription tiers?**

**A** Yes. The software subscription tiers have been updated, as shown in the figure below.

Cisco DNA Advantage and Cisco DNA Premier will now include Cisco AI Network Analytics, Cisco DNA Spaces See as well as Advanced Wireless Intrusion Protection (aWIPS) at no additional cost.



**Q Is a software subscription license mandatory for wireless? What options are available to customers?**

**A** Software subscription is mandatory for Cisco Catalyst 9100, Aironet 4800 access points, and Aironet Active Sensors. Any access point connecting to Catalyst 9800 WLC requires the subscription software. To enable all Cisco DNA capabilities, customers will require Cisco DNA Premier or Cisco DNA Advantage that is packed with powerful features such as SD-Access, Assurance and Encrypted Traffic Analytics.

Customers can continue to purchase access point licenses, and Cisco Prime, as perpetual licenses just as they purchased them in the past.

**Q What is the licensing strategy for Cisco Catalyst 9100 and Aironet 4800 access points?**

**A** The Cisco Catalyst 9100 and Aironet 4800 access points require a Cisco DNA attach. Customers must purchase either a Cisco DNA Essentials, Cisco DNA Advantage, or Cisco DNA Premier 3-, 5-, or 7-year subscription license when purchasing Cisco Catalyst 9100 or 4800 access point.

**Q What is the licensing strategy for the Aironet Active Sensor?**

**A** The Aironet Active Sensor requires a Cisco DNA attach. Customers must purchase a 3-, 5-, or 7-year Cisco DNA subscription endpoint license when purchasing an Aironet Active Sensor.

**Q How are the Aironet Active Sensor Cisco DNA licenses different?**

**A** These are endpoint licenses and entitle the sensors to Cisco DNA access and sensor functionality. They are identified with the SKU AIR-Cisco DNA-EP and have 3-, 5-, and 7-year terms available. These licenses are different from the traditional Cisco DNA licenses and do not have Essentials and Advantage tiers.

**Q** **What is the licensing strategy for the Catalyst 9800 Wireless LAN Controller?**

**A** Any access point connecting to Catalyst 9800 WLC needs Cisco DNA software. Customers can get Cisco DNA Essentials, Advantage or Premier.

**Q** **How do customers buy Assurance and the other Cisco DNA innovations?**

**A** Customers can buy Assurance and other Cisco DNA innovations by purchasing the following:

**Hardware:**

Wireless controllers: Catalyst 9800 Series (9800-40/80/L/CL), Cisco 3504, 5520, and 8540 with AireOS 8.5+ software.

- Catalyst 9100 Access Points.
- Wave 2 access points: Aironet 1800, 2800, and 3800 Series, and the 4800 model.
- Wave 1 access points: Aironet 1700, 2700, and 3700 Series.
- Sensors: Aironet Active Sensor.

**Software:**

Cisco DNA Advantage: Complete policy-based automation, assurance, and location-based services.

Cisco DNA Premier: Advanced automation, assurance, SD-Access, security and location based services.

**Q** **How do customers buy SD-Access?**

**A** Customers need to purchase Cisco DNA Premier Software to get SD-Access. Cisco DNA Premier includes Cisco DNA Advantage, Cisco Prime, ISE Base, ISE Plus, Cisco DNA Spaces See and Software Support.

Alternately, customers can buy Cisco DNA Advantage but will also need to purchase ISE separately.

ISE Plus enables bring-your-own-device functionality, profiling, endpoint protection, and Cisco TrustSec®.

Cisco DNA Spaces See allow you to unlock insights into customer, employee, and asset behavior.

Access point license provides centralized configuration, policy, optimization of the wireless network, and innovations such as Identity PSK, Apple Fast Lane support, Cisco CleanAir® technology, and flexible radio assignment for Wave 2 access points. It serves as the foundation for other mobility services.

**Q** **What if customers are only looking for basic automation and monitoring?**

**A** We recognize that not all customers are ready to deploy the SD-Access and Assurance solution. Customers can start with base automation, monitoring, and management by purchasing:

**Hardware:**

Wireless controllers: Catalyst 9800 Series (9800-40/80/L/CL), Cisco 3504, 5520, and 8540 with AireOS 8.5+ software.

- Catalyst 9100 Access Points.
- Wave 2 access points: Aironet 1800, 2800, and 3800 Series and the 4800 model.
- Wave 1 access points: Aironet 1700, 2700, and 3700 Series.
- Sensors: Aironet Active Sensor.

**Software:**

Customers need to purchase Cisco DNA Essentials software to get basic automation and monitoring.

- Cisco DNA Essentials: This includes access point licenses, Cisco Prime Lifecycle and Assurance licenses, and Cisco DNA Essentials, which offer basic automation such as Plug-and-Play (PnP), EasyQoS configuration and management, and embedded Cisco Software Support.

**Q** **If a customer wants to purchase Cisco DNA Premier/Cisco DNA Advantage, do they have to buy Cisco DNA Essentials also?**

**A** No. Cisco DNA Premier and Cisco DNA Advantage include the features and functions of Cisco DNA Essentials.

**Q** **If a customer purchases Cisco DNA Essentials, Advantage or Premier, do they still need to purchase an access point license?**

**A** No. All three tiers of Cisco DNA solution include access point licenses in the packages.

**Q** **If a customer has Cisco DNA Essentials, how can they upgrade to Cisco DNA Advantage or Cisco DNA Premier?**

**A** If customers want to upgrade before their original term is over, they will receive a 50% residual value credit for remaining term when upgrading from Cisco DNA Essentials to Cisco DNA Advantage or Premier. If they are upgrading from Cisco DNA Advantage to Premier, they will receive 100% residual value credit for remaining term.

**Q** **Do customers get access point license portability with the new subscription-based licenses?**

**A** Yes, they get full access point license portability, depending on the SKU they purchase as long as they maintain their Cisco DNA Essentials, Advantage, or Premier subscription license, they can use any Aironet access point on any WLAN controllers. The WLAN controllers supported for access point licenses are RTU-based 3504, 5520, and 8540 controllers only. After license term expires, customers can port Network Essentials/Network Advantage licenses across AP's and WLC's as long as the license entitlements show up on the smart account. They can get software upgrades updates by purchasing Smartnet on access points.

**Q** **Is Cisco Prime included in any of the Cisco DNA licenses for wireless?**

**A** Yes. Cisco DNA Essentials, Advantage and Premier include subscription-based Cisco Prime licenses.

**Q** **If a customer wants to use cloud-based, Cisco AI Network Analytics features (AI-based baseline issues, network insights and trends), what license tier is needed?**

**A** Cisco DNA Advantage or Cisco DNA Premier subscriptions will provide cloud-based, Cisco AI Network Analytics features. There is no separate license required for cloud-based Cisco AI Network analytics solution.

**Q** **Is Stealthwatch included in any of the Cisco DNA licenses for wireless?**

**A** No. Cisco DNA Essentials, Advantage and Premier do not include Stealthwatch licenses. However, customers can purchase Stealthwatch licenses as add-on licenses for a separate price.

**Q** **What does Cisco DNA Spaces Act offer and how can customers buy it?**

**A** Cisco DNA Spaces Act leverages digitization toolkits to act on insights into user and asset behavior in the network. It translates the network view of people and assets into business view. Cisco DNA Spaces Act triggers contextual notifications and workflows based on the behavior of people and assets.

Customers can purchase Cisco DNA Spaces Act as an add-on license for a separate price with Cisco DNA Premier.

**Q** **Can Cisco DNA Center licenses be ordered without subscription-based licenses?**

**A** No, Cisco DNA Center licenses are only available through subscription-based offers.

**Q** **Is there a process to set a starting date later than the actual buying date? What is the maximum delay that can be allowed (both Cisco ONE and à la carte)?**

**A** Customers can delay the start by up to 60 days from the time the order leaves the demand fulfillment center (usually within a day of placing the order).

**Q** **If a customer stops paying for their subscription-based software licenses, does the network stop working?**

**A** No, the WLAN controllers and access points will continue to function. Customers must renew their subscription-based licenses to continue to get access to innovation and software support.

**Q** **What happens to Cisco DNA software when the WLAN reaches end of support?**

**A** The WLAN hardware will continue to function. You may continue to use the last version of Cisco DNA that supports the WLAN to control/manage it. Cisco DNA and the WLAN have a different lifecycle that is independent of each other.

**Q** **How are the existing Cisco ONE Foundation and Cisco ONE Advanced products different from Cisco DNA Essentials, Advantage, Premier?**

**A** Cisco ONE Foundation and Cisco ONE Advanced are a perpetual license solution suite offered on WLAN controllers and Aironet access points. Cisco DNA Essentials, Advantage, and Premier are a subscription-based license solution suite offered on WLAN controllers and Aironet access points with embedded software support.

Customers can consume Cisco DNA Center capabilities only through new subscription-based licenses.

**Q** **Can the customer still buy the Cisco ONE Foundation and Cisco ONE Advanced perpetual software offer on WLAN controllers and Aironet access points?**

**A** Yes. Cisco ONE Software for the WLAN controllers and Aironet access points will continue to be offered.

**Q** **A customer has the Cisco ONE Foundation suite now. If they are looking to migrate from perpetual to subscription, what should they buy?**

**A** Cisco DNA Premier offers customers the full benefits of Cisco DNA and ISE as well as all the features that customers are used to getting: access point licenses and Cisco Prime. Hence, our recommendation is to migrate with Cisco DNA Premier, which provides them with additional ISE Plus and Cisco DNA Advantage capabilities. If they just need Cisco DNA Advantage capability, then they can migrate with a Cisco DNA Advantage license.

**Q** **What does an existing Cisco ONE perpetual customer get as part of the ongoing Cisco DNA innovation?**

**A** Cisco ONE customers with active SWSS will automatically receive the Cisco DNA innovation at SWSS renewal. Customers with Cisco ONE Foundation will receive Cisco DNA Essentials. Customers with Cisco ONE Advanced will receive Cisco DNA Advantage. Customers have a choice to upgrade to get Cisco DNA Premier.

**Q** **What if customers want to enable all Cisco DNA use cases with SD-Access and Assurance and they already have ISE Plus?**

**A** They could buy individual Cisco DNA Advantage with Catalyst 9100 and Wave 2 access points and 9800/8540/5520/3505 controllers.

**Q** **Can customers still order a Cisco ONE Advantage subscription?**

**A** No, Cisco ONE Advantage has been renamed Cisco DNA Premier, with no underlying change to the offer or the price.

The offer-name change aligns with our overall Cisco DNA structure.

**Q Can Cisco Catalyst 9100 Access Points connect to AireOS 3504/5520/8540 controllers and Catalyst 9800 controllers? If so, what are the licensing options?**

**A** Cisco Catalyst 9100 Access Points can connect to both AireOS 3504/5520/8540 controllers and Catalyst 9800 controllers. These access points require a mandatory Cisco 9100 DNA License to connect to either AireOS controllers or Catalyst controllers.

**Q Are Cisco Catalyst 9100 Access Point licenses portable?**

**A** Cisco C9100 DNA Licenses of Catalyst 9100 Access Points are portable across the Cisco Catalyst 9100 product family, AireOS controllers and Catalyst wireless controllers.

**Q Can I use AIR-DNA licenses with Cisco Catalyst 9100 Access Points?**

**A** No, Cisco AIR-DNA can be used only with Aironet access points. Cisco DNA term-based licenses (Cisco C9100 DNA Licenses) are mandatory for the Cisco Catalyst 9100 product family.

**Q Customers currently have perpetual license on legacy access point (wave 2 or wave 1). Can they migrate the perpetual license to Cisco Catalyst 9100 access point?**

**A** Cisco Catalyst 9100 access point requires mandatory Cisco DNA subscription. However, customers can receive credit for the existing perpetual license.

**Q What are the options for migration from AIR DNA licenses for deploying the Cisco Catalyst 9100 Access Points?**

**A** Customers who have purchased AIR-DNA licenses for Wave2 access points may receive credits for the unused term on the AIR-DNA license. These credits can be used to purchase a Cisco C9100 DNA license. Also, the credits may be applicable while moving to the same license tier or above.

**Q Are Cisco Catalyst 9100 DNA licenses Enterprise Agreement (EA) eligible?**

**A** Yes. Catalyst C9100 DNA SKUs will be added as part of Enterprise Agreement. In case of migration from AIR-DNA to C9100 DNA in an EA, customers may receive credits for the unused term remaining on the AIR-DNA license.

## New customer promotions for migration:

**Q What are some of the promotions at high level?**

**A** To help customers begin their journey toward Cisco DNA use cases such as SD-Access, Assurance, or Basic automation, we have created some compelling promotions:

- Migration credits for perpetual to subscription.
- Free portability of existing access point license.
- Discounts on access point hardware.
- Details on these promotions can be found here: [www.cisco.com/go/promotions](http://www.cisco.com/go/promotions).

**Q How does the credit process work for customers migrating from a perpetual to an Advantage subscription?**

- A**
- Customers and partners can request credit on nonstandard deals by contacting a Cisco account manager.
  - The Cisco account manager will review the request and raise a Customer Service Central (CSC) case with Customer and Partner Services (CPS) for estimating and updating the portability credits on the nonstandard deal.
  - CPS is alerted of the CSC case and will perform an eligibility check.
  - CPS calculates the credit amount, re-opens the deal, adds the estimated credit amount as a purchase adjustment on the deal, and resubmits it.

**Q What are the details of the portability of the existing access point license?**

**A** For customers who have an access point license tied to legacy wireless LAN controllers, and if they are interested in Assurance and SD-Access, they can buy Cisco DNA Advantage/Cisco DNA Premier with credits based on existing perpetual licenses and get free AP-license portability while retaining the perpetuity of that access point license.

**Q How will these promotions benefit customers?**

**A** We have existing customers who have legacy controllers and want to deploy Assurance and SD-Access. We also have new customers who want to enable Assurance and SD-Access in their deployments. In order to achieve these outcomes, they need an Advantage license, newer controllers, and/or a Cisco DNA Center appliance. They would also have to port their existing licenses from legacy controllers to these new controllers.

We understand the Total Cost of Ownership (TCO) implications involved in each of these aspects and have designed various promotions, such as the offer of free appliances, free controllers, free portability, and investment protection for perpetual licenses to reduce the TCO burden for customers.

**Q What software support do customers get as part of the Cisco DNA SKUs?**

**A**

Type	Cisco support offers	RMA	TAC	OS Upgrades and updates
Wireless LAN Controller	SNTC	✓	✓	✓
Wave2 AP Hardware	SNTC	✓	-	-
Cisco DNA License (for an AP)	Embedded SWSS	-	✓	✓

Cisco DNA SKUs provide embedded Cisco Software Support (SWSS) coverage for all those licenses that are part of the Cisco DNA license that includes access points. To be entitled to Return Materials Authorization (RMA) for access point hardware, customers will need Cisco Smart Net Total Care® Service. To get RMA, Technical Assistance Center (TAC) support, and OS upgrades and updates on WAN controllers, they will need to purchase Smart Net Total Care for controllers. Cisco Solution Support is the default service for controllers and access points. Solution support is not mandatory, but if customers cover their wireless network components under Solution Support, this will also provide Solution Support coverage on their Cisco DNA licenses.

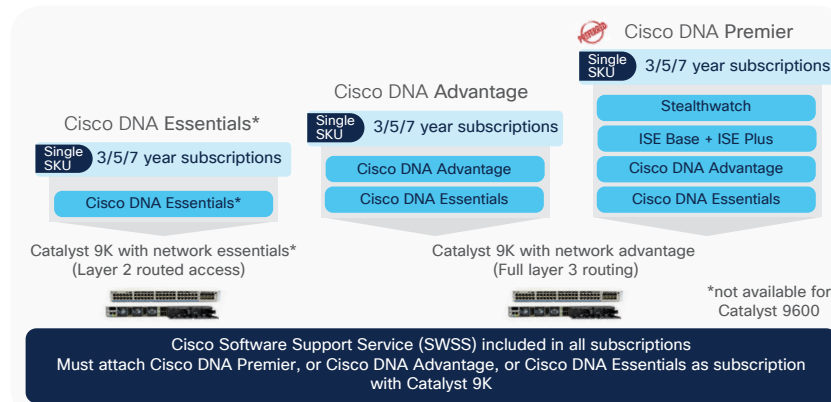


## Cisco DNA Software for access switching subscription

### Q What offers are part of Cisco DNA Software for access switching subscription?

A The software product include the following:

Figure 2. Cisco DNA for Switching: Subscription Offer Structure



- Cisco DNA Premier delivers policy-based automation with SD- Access, Cisco DNA Assurance, and enhanced security. This solution includes Cisco DNA Advantage, Cisco DNA Essentials, ISE Base, ISE Plus, and Stealthwatch, along with embedded Cisco Software Support. Customers can enable all Cisco DNA use cases with Cisco DNA Premier. Offered as a single SKU.
- Cisco DNA Advantage delivers policy-based automation with SD-Access, monitoring, and Cisco DNA Assurance. This solution includes Cisco DNA Advantage and Cisco DNA Essentials, with embedded Cisco Software Support. Customers need to buy ISE Base, ISE Plus, and Stealthwatch to enable all Cisco DNA use cases.
- Cisco DNA Essentials delivers base automation, monitoring, and management. This solution includes Cisco DNA Essentials and embedded Cisco Software Support. With this solution, customers can enable basic automation and monitoring. Cisco DNA Essentials is not available with the Catalyst 9600 Switch.

### Q Is a software subscription mandatory with the new Cisco Catalyst® 9000 switching family? What options are available to customers?

A Yes, customers must buy software as a subscription along with the Cisco Catalyst 9000. To enable all Cisco DNA capabilities, customers will require Cisco DNA Premier, which is packed with powerful solutions such as SD-Access, Assurance, and Encrypted Traffic Analytics. Alternately, customers can buy Cisco DNA Advantage, but will need to buy additional licenses to enable the comprehensive Cisco DNA capabilities.

### Q How do customers buy SD-Access and the other Cisco DNA innovations?

A Customers can buy SD-Access and other innovations by purchasing the following:

- **Hardware:** Cisco Catalyst 9000 Series Switches (9200, 9300, 9400, 9500, and 9600). The hardware ships with Network Advantage, which includes full Layer 3 routing functionality (equivalent to IP Services), segmentation, and network resiliency. You could also get it on current-generation switches such as 3650, 3850, 4500X, 4500E, 6807, 6840, and 6880.
- **Software:** Cisco DNA Premier. This includes Cisco DNA Advantage, ISE Plus, Stealthwatch, and Software Support. Alternately, customers can buy Cisco DNA Advantage, but will also need to purchase ISE and Stealthwatch.

### Q Are the Cisco DNA capabilities available on the Cisco Catalyst 9200 Series switches the same as on Catalyst 9300, 9400, 9500, and 9600 Series switches?

A The Cisco Catalyst 9200 Series is an entry level enterprise-class access family of switches that extend the power of intent-based networking to a broader scale of deployments. The same Cisco DNA Software subscription offers (Cisco DNA Essentials, Cisco DNA Advantage, and Cisco DNA Premier) apply to the Catalyst 9200 Series to deliver capabilities such as SD-Access, Assurance, and extraordinary security. Cisco DNA Essentials is not available with the Catalyst 9600 Switch.

However in keeping with the Catalyst 9200 Series' ideal suitability for entry level deployments, the implementation specifics of some Cisco DNA capabilities vary from the Catalyst 9300, 9400, 9500, and 9600 Series. Examples:

- Assurance on the Catalyst 9200 Series for fabric, network, and client levels is extended to assurance at the application level on the Catalyst 9300 Series and above.
- Advanced security on the Catalyst 9200 Series employs MACsec 128-bit encryption whereas this is extended to MACsec 256-bit on the Catalyst 9300 Series and above.
- ERSPAN, Third-party application hosting, Cisco DNA Service for Bonjour and MPLS features are supported on the Catalyst 9300 Series and above.

For more information the Cisco DNA Software subscription offers, please see: <https://www.cisco.com/c/dam/en/us/products/collateral/software/one-subscription-switching/dna-licensing-switching-subscription-bdm.pdf>.

### **Q** What does Cisco DNA Premier offer?

**A** Cisco DNA Premier offers the following:

- Cisco DNA Premier enables all use cases of Cisco DNA. It includes Cisco DNA Advantage, ISE Plus, Stealthwatch, and Software Support.
- Cisco DNA Advantage offers complete policy-based automation and Assurance through SD-Access, Encrypted Traffic Analytics, and the Assurance solution.
- ISE Plus enables BYOD functionality, profiling, endpoint protection, and Cisco TrustSec.
- Stealthwatch provides visibility and security intelligence across the extended enterprise and the entire attack continuum before, during, and after an attack.
- Stealthwatch also continuously monitors the network interior, where sophisticated attackers often lurk undetected.

### **Q** What if customers are only looking for basic automation and monitoring?

**A** We recognize that not all customers are ready to deploy the SD-Access solution. Customers can start with base automation and management by purchasing:

- **Hardware:** Cisco Catalyst 9000 Series Switches. The hardware ships with Network Essentials, which include Layer 2 switch capability, routed access, and QoS visibility into traffic with sample Netflow. They can also buy current-generation switches.
- **Software:** You could buy Cisco DNA Essentials, which offers basic automation such as PnP, EasyQoS configuration and management, ISE Base, and Software Support. Alternately, customers can buy Cisco DNA Essentials individually. Cisco DNA Essentials is not available with the Catalyst 9600 Switch.

### **Q** I want to buy IP Base functions for my Cisco Catalyst 9000 switch. Which Cisco DNA package offers that?

**A** Lan Base, IP Base, and IP Services are being replaced with Network:

- Network Essentials = Lan Base.
- Network Advantage = IP Base and IP Services.

### **Q** What happens if the customer doesn't want to buy the subscription-based license?

**A** A software license for the Cisco Catalyst 9000 Series Switches is only available through the subscription model. On current-generation switches, subscriptions are not mandatory.

### **Q** If a customer stops paying for their software subscription, does their network stop working?

**A** No, the switch will continue to function with all Network Stack features intact. Cisco Catalyst 9000 series switches are covered with an extended limited lifetime warranty (<https://www.cisco.com/c/en/us/products/collateral/switches/catalyst-9000/bulletin-c25-740149.pdf>), and will receive software updates tied to the box, including minor and maintenance releases. However, customers must renew their Cisco DNA subscription to continue to get access to major releases for software updates, as well as access to all features, innovations and capabilities included in the Cisco DNA Stack.

**Q What happens to Cisco DNA software when the switch reaches end of support?**

**A** The switch hardware will continue to function. You may continue to use the last version of Cisco DNA that supports the switch. Cisco DNA and the switch have different lifecycle that is independent of each other.

**Q How are the existing Cisco ONE Foundation and Cisco ONE Advanced products different from Cisco DNA Premier?**

**A** Cisco ONE Foundation and Cisco DNA Premier are a perpetual license solution suite offered on Cisco Catalyst 3000, 4000, and 6000 Series Switches. Cisco DNA Premier is a subscription license solution suite offered on Cisco Catalyst 9000, 3000, 4000, and 6000 Series Switches.

**Q Can the customer still buy the Cisco ONE Software perpetual offer on Cisco Catalyst 3000, 4000, and 6000 Series Switches?**

**A** Yes. Cisco ONE Software for the Cisco Catalyst 3000, 4000, and 6000 Series will continue to be offered.

**Q Is there an option for customers to buy a Cisco Catalyst 9000 only with base OS, then add a Cisco DNA subscription later?**

**A** No. You need to attach a software subscription, either Cisco DNA Premier, Cisco DNA Advantage, or Cisco DNA Essentials. To get the full SD-Access capability, Cisco DNA Premier is the way to go.

**Q Can you get a perpetual software license for a Cisco Catalyst 9000?**

**A** The software license for the Cisco Catalyst 9000 Series Switches is only available through the subscription model.

**Q Do customers have a choice of one-year subscription?**

**A** At this point Cisco is offering only 3-, 5-, and 7-year subscriptions.

**Q How can a customer get SD-Access support on Cisco Catalyst 3000, 4000, and 6000?**

**A** SD-Access support on the Cisco Catalyst 3000, 4000, and 6000 requires the following:

- Minimum IP Base package for the switch. This enables customers to 3 user virtual networks for SD-Access. With the IP Services package, the restriction of 3 user virtual networks is removed, and all VRFs supported on the platform are available for SD-Access.
- Cisco DNA Premier subscription.

## Switching migration and license portability

**Q What does an existing Cisco ONE perpetual customer get as part of the ongoing Cisco DNA innovation?**

**A** Cisco ONE customers with active SWSS will automatically receive the Cisco DNA innovation at SWSS renewal. Customers with Cisco ONE Foundation will receive Cisco DNA Essentials. Customers with Cisco ONE Advanced will receive Cisco DNA Advantage. Customers have a choice to upgrade to get Cisco DNA Premier.

**Q What are Cisco ONE customers on existing Cisco Catalyst purchases entitled to as part of portability when they refresh to Cisco Catalyst 9000?**

**A** Customers with active SWSS are entitled to a portability credit for their OS at the time of refresh. Credit value would be equal to the value of Network stack on Catalyst 9000 Switches. The credit is determined by the number of ports (or supervisors for modular switches like Cat 4500E) on the existing C1 switch that the customer purchased. Other C1 Foundation licenses such as Prime, Energy Management, ISE Base can be ported to Catalyst 9000 Switches and unused Software Support can be converted to credit in the new purchase.

**Q Can the “portability” credit be applied when customers migrate from a switch to a later switch in that series: for example, 35xx to 37xx?**

**A** No, the portability credit can only be applied for migrations to Cisco Catalyst 9000 switches from the 3000, 4000, 6000, and 7000 Series. Portability within current-gen platforms would follow the license portability rules as outlined in [www.cisco.com/c/en/us/products/collateral/software/one-software/tiering-guide-cisco-one.html](http://www.cisco.com/c/en/us/products/collateral/software/one-software/tiering-guide-cisco-one.html).

**Q What if a customer has 3000 or 4000 switches, but no Cisco ONE and wants to add Cisco DNA Essentials or Advantage for a subscription?**

**A** They can buy Cisco DNA Essentials or Advantage as a new purchase. They are not entitled to get it for free as they don't have Cisco ONE.

**Q Several customers believe that when their subscription expires, a Catalyst 9000 switch will not work. Can you confirm if L2/L3 services will work if the license has expired?**

**A** Yes, the switch will continue to function, however the customers will not be entitled to receive updates/upgrades for the functionality in the Cisco DNA stack. Customers must renew their subscription to continue to get access to the Cisco DNA innovation. L2/L3 services will continue working, and customers are entitled to receive updates/upgrades for this functionality, as they are tied with the perpetual network OS: Network Advantage or Network Essentials.

## General Cisco ONE Software

**Q What is Cisco ONE Software?**

**A** Cisco ONE Software is a family of software suites that span the technology of data center and cloud, WAN, access, and security. Cisco ONE Software simplifies the way you purchase software licenses within these technology platforms.

**Q Is Cisco ONE only available as perpetual offering?**

**A** As part of delivering Cisco DNA capabilities to our customers, we initially launched three subscription tiers: Cisco DNA Essentials, Cisco DNA Advantage, and Cisco ONE Advantage. We are now evolving the Cisco ONE Advantage tier to Cisco DNA Premier to reflect our Cisco DNA capabilities. The underlying details and features remain the same in this case. From now on, Cisco ONE is only available as a perpetual offering. To consume the Cisco DNA capabilities, customers will need the Cisco DNA software.

## Purchasing

**Q Will customers be required to buy all their Cisco software in this new model instead of being able to purchase software features individually?**

**A** Cisco continues to offer multiple ways to buy Cisco software.

- Customers can still purchase Cisco software features the way they always have: by purchasing hardware and then buying selected software capabilities to build a custom package.
- Cisco ONE Software offers a perpetual consumption option that lets you buy a hardware platform and license the software separately.
- Customers looking to deploy the latest Cisco DNA innovations will need to buy the subscription based Cisco DNA software, as all of the Cisco DNA innovations such as Software-Defined Access, ETA, assurance is only available via subscription. As mentioned above, we are making it easier for our existing Cisco ONE customers to consume these Cisco DNA innovations.

**Q How do customers migrate equipment and software they already own to the new Cisco ONE Software licensing model?**

**A** For more information, refer to this document. [https://www.cisco.com/c/dam/en\\_us/about/doing\\_business/legal/service\\_descriptions/docs/cisco-one-access-foundation-for-brownfield-implementation.pdf](https://www.cisco.com/c/dam/en_us/about/doing_business/legal/service_descriptions/docs/cisco-one-access-foundation-for-brownfield-implementation.pdf).

**Q Are there any tax benefits associated with purchasing through the subscription-based Software licensing model?**

**A** Tax laws vary by jurisdiction and the individual circumstances of the transaction or offer. Some jurisdictions do not assess sales tax on intangible property such as software. However, the determination of whether software qualifies for an exemption depends on multiple factors. Cisco does not provide tax advice to customers, partners, or third parties. If you are unsure whether software (Cisco ONE Software or other) comes under a tax benefit in your jurisdiction, you should consult your tax advisor.

## Cisco Smart Accounts

**Q What is a Smart License and why should I care?**

**A** Smart Licensing is a new, flexible software–licensing model that simplifies the way customers activate and manage licenses across their organization. Instead of using Product Activation Keys (PAKs), Smart Licenses establish a pool of software licenses in a customer–defined Smart Account that can be used throughout the enterprise.

**Q What are Smart Accounts? Why should I care?**

**A** Smart Accounts are mandatory for any subscription. They help identify and connect the right customer account into which the subscription licenses purchased by the customer will be deposited before they may be used. The combination of Smart Licensing and Smart Accounts delivers visibility into your license ownership and consumption (through a cloud portal) to help you reduce operational costs. Smart License is used with Cisco DNA Center.

**Q What software products offer Smart Account and Smart License capabilities?**

**A** More and more switching and wireless products are offered only through Smart Account including Catalyst 9800 WLC and Catalyst 9000 switches.

**Q How do I view and use Smart License?**

**A** License availability and consumption through Smart License is visible through a portal called Cisco Smart Software License (CSSM). All licenses that are deposited and consumed are clearly visible through the user-id and password provided for the Smart or Virtual Account for each customer.

**Q What software products offer Smart Licenses?**

**A** For a complete list of Smart License–enabled products, go to: <https://community.cisco.com/t5/licensing-enterprise-agreements/smart-license-enabled-product-families/ta-p/3652497?attachment-id=147055>.

**Q Where can I learn more about Cisco Smart Software Licensing and Smart Accounts?**

**A** Smart License: <https://www.cisco.com/c/en/us/products/software/smart-accounts/software-licensing.html>.

Smart Account: <https://www.cisco.com/c/en/us/products/software/smart-accounts.html> for Smart Accounts.

## Cisco Enterprise Agreement (EA)

**Q Can the switching and/or wireless subscription offers be added to an existing Cisco ONE Foundation for switching/wireless EA?**

**A** Cisco DNA Premier or Cisco DNA Advantage (default) for switching or wireless may be added to an EA.

- There is a \$250K minimum Total Contract Value (TCV).
- Metering is license based.
- Newly added subscription offers will co-term with the existing EA.
- Cisco True Forward benefits apply.

**Q A customer is interested in consolidating all of their Cisco ONE Software Product Authorization Key (PAK)- based licenses. Is this possible?**

**A** Yes. Cisco is enhancing ease of doing business by offering an on-demand PAK consolidation service for your Cisco ONE Software purchase. To consolidate Cisco ONE Software PAKs and have them deposited into a Smart Account, email [licensing@cisco.com](mailto:licensing@cisco.com). Customers can also contact Cisco licensing support at 1800-553-2447 to speak directly with an agent.

**Q Is Software Support Service (SWSS) a mandatory purchase?**

**A** If a customer is buying a Cisco ONE perpetual offer, then Software Support Service (SWSS) is mandatory. Active Software Support gives customers access to ongoing innovation and license portability.

If a customer is buying a Cisco DNA subscription-based offer, then Software Support Service (SWSS) is already included.