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Catalyst Wireless Ordering Guide

Contents

Cisco wireless access point product family

Ordering information

Tables 1 through 4 provide ordering information for the Cisco wireless access points. To place an order, visit the Cisco Ordering homepage. To download software, visit the Cisco Software Center.

Note:

- Customers are responsible for verifying approval for use in their individual countries. To verify approval that corresponds to a particular country or the regulatory domain used in a specific country, visit https://www.cisco.com/go/compliance.

- Regulatory domain approval occurs in phases. As they are approved, the part numbers will be available on the Cisco Global Price List (GPL).

- Regulatory domains: (x=regulatory domain).

- When ordering the Cisco Catalyst 9166, 9164 and 9162 Access Points, a choice must be made on AP deployment/management. For on-premises management -x part number should be ordered, for cloud use -MR.

Table 1.　Indoor access points

Product name	Part number	Description
Cisco Catalyst 9166 Series	CW9166I-x	Cisco Catalyst 9166I Access Point, Wi-Fi 6E, Internal Antennas, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig with Reg-X.
	CW9166I-MR	Cisco Catalyst 9166I Access Point, Wi-Fi 6E, Internal Antennas, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig with Meraki.
	CW9166D1-x	Cisco Catalyst 9166 Series Access Point, Integrated Directional Antennas, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig with Reg-X
	CW9166D1-MR	Cisco Catalyst 9166 Series Access Point, Integrated Directional Antennas, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig with Meraki
	Note: Customers ordering 9160 Access Points shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.	
Cisco Catalyst 9164 Series	CW9164I-x	Cisco Catalyst 9164I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+4x4+4x4 MIMO, 2.5G mGig with Reg-X.
	CW9164I-MR	Cisco Catalyst 9164I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+4x4+4x4 MIMO, 2.5G mGig with Meraki.
	Note: Customers ordering 9160 Access Point shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.	

Product name	Part number	Description
Cisco Catalyst 9162 Series	CW9162I-x	Cisco Catalyst 9162I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+2x2+2x2 MIMO, 2.5G mGig with Reg-X.
	CW9162I-MR	Cisco Catalyst 9162I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+2x2+2x2 MIMO, 2.5G mGig with Meraki.
	Note: Customers ordering 9160 Access Points shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.	
Cisco Catalyst 9136 Series	C9136I-x	Cisco Catalyst 9136I Access Point, Wi-Fi 6E, Internal Antennas, 4x4+8x8+4x4 MIMO
Cisco Catalyst 9130AX Series	C9130AXI-x	Cisco Catalyst 9130AXI Access Point, internal antennas; 802.11ax; 8x8:8 MIMO
	C9130AXE-x	Cisco Catalyst 9130AXE Access Point, external antennas; 802.11ax; 8x8:8 MIMO
	C9130AXE-STA-x	Cisco Catalyst 9130AXE Stadium Antenna Access Point, external antennas (C-ANT9104); 802.11ax; dual 5GHz MIMO
Cisco Catalyst 9120AX Series	C9120AXI-x	Cisco Catalyst 9120AXI Access Point, internal antennas; Wi-Fi 6; 4x4:4 MIMO
	C9120AXE-x	Cisco Catalyst 9120AXE Access Point, external antennas; Wi-Fi 6; 4x4:4 MIMO
	C9120AXP-x	Cisco Catalyst 9120AXP Access Point, external antennas; professional install; Wi-Fi 6; 4x4:4 MIMO
Cisco Catalyst 9115AX Series	C9115AXI-x	Cisco Catalyst 9115AXI Access Point, internal antenna; Wi-Fi 6; 4x4:4 MIMO
	C9115AXE-x	Cisco Catalyst 9115AXE Access Point, external antenna; Wi-Fi 6; 4x4:4 MIMO
Cisco Catalyst 9105AX Series	C9105AXI-x	Cisco Catalyst 9105AX Access Point, internal antenna; ceiling mount, Wi-Fi 6; 2x2:2 MIMO
	C9105AXW-x	Cisco Catalyst 9105AX Access Point, internal antenna; wall mount, Wi-Fi 6; 2x2:2 MIMO

Table 2.   Outdoor access points

Product name	Part number	Description
Cisco Catalyst 9163E Series	CW9163E-x	Cisco Catalyst 9163E Outdoor Access Point, N-type antenna connectors; Wi-Fi 6E; 2x2:2SS with Reg X
	CW9163E-MR	Cisco Catalyst 9163E Outdoor Access Point, N-type antenna connectors; Wi-Fi 6; 2x2:2SS with Meraki
Cisco Catalyst 9124AX Series	C9124AXI-x	Cisco Catalyst 9124AX Outdoor Access Point, internal omnidirectional antenna; Wi-Fi 6; 4x4:4 MIMO
	C9124AXD-x	Cisco Catalyst 9124AX Outdoor Access Point, internal directional antenna; Wi-Fi 6; 4x4:4 MIMO
	C9124AXE-x	Cisco Catalyst 9124AX Outdoor Access Point, external omnidirectional antenna; Wi-Fi 6; 4x4:4 MIMO

Note: Embedded Wireless Controller part numbers can be found under Table 7 of Catalyst 9800 wireless platform part numbers.

Note: "x" is a placeholder for the regulatory domain designator. Visit https://www.cisco.com/go/aironet/compliance to determine which regulatory domain is used in your country. The regulatory domain used in your country may differ depending on access point model, and some models are not available for all countries.

Cisco Catalyst 9100 Indoor Access Points ordering steps

1. Select the access point model based on requirements and as per the correct country's regulatory domain.

Table 3.   Access Points

AP part number	Description
CW9166I-X	Cisco Catalyst 9166I Access Point, Wi-Fi 6E, Internal Antennas, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig with Reg-X.
CW9166I-MR	Cisco Catalyst 9166I Access Point, Wi-Fi 6E, Internal Antennas, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig with Meraki. **Note**: Customers ordering 9160 Access Points shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.
CW9166D1-X	Cisco Catalyst 9166DI Access Point, Wi-Fi 6E, Integrated Directional Antenna, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig, with Reg-X.
CW9166D1-MR	Cisco Catalyst 9166DI Access Point, Wi-Fi 6E, Integrated Directional Antenna, 4x4+4x4+4x4 MIMO with XOR Radio, 5G mGig, with Meraki. **Note:** Customers ordering 9160 Access Points shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.
CW9164I-X	Cisco Catalyst 9164I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+4x4+4x4 MIMO, 2.5G mGig with Reg-X.

AP part number	Description
CW9164I-MR	Cisco Catalyst 9164I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+4x4+4x4 MIMO, 2.5G mGig with Meraki. **Note**: Customers ordering 9160 Access Points shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.
CW9162I-x	Cisco Catalyst 9162I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+2x2+2x2 MIMO, 2.5G mGig with Reg-X.
CW9162I-MR	Cisco Catalyst 9162I Access Point, Wi-Fi 6E, Internal Antennas, 2x2+2x2+2x2 MIMO, 2.5G mGig with Meraki. **Note:** Customers ordering 9160 Access Points shipping with Meraki Management Mode (-MR) must have a Meraki license to operate with the Meraki dashboard or to migrate to Cisco DNA Management Mode.
C9136I-x	Cisco Catalyst 9136I Access Point, Wi-Fi 6E, Internal Antennas, 4x4+8x8+4x4 MIMO
C9130AXI-x	Cisco Catalyst 9130AXI Access Point, internal antennas; 802.11ax; 8x8:8 MIMO
C9130AXE-x	Cisco Catalyst 9130AXE Access Point, external antennas; 802.11ax; 8x8:8 MIMO
C9130AXE-STA-x	Cisco Catalyst 9130AXE Access Point, C-9104 Stadium Antenna; 802.11ax; Dual 5GHz MIMO
C9120AXI-x	Cisco Catalyst 9120AXI Access Point, internal antennas; Wi-Fi 6; 4x4:4 MIMO
C9120AXE-x	Cisco Catalyst 9120AXE Access Point, external antennas; Wi-Fi 6; 4x4:4 MIMO
C9120AXP-x	Cisco Catalyst 9120AXP Access Point, external antennas; professional install; Wi-Fi 6; 4x4:4 MIMO
C9115AXI-x	Cisco Catalyst 9115AXI Access Point, internal antenna; Wi-Fi 6; 4x4:4 MIMO
C9115AXE-x	Cisco Catalyst 9115AXE Access Point, external antenna; Wi-Fi 6; 4x4:4 MIMO
C9105AXI-x	Cisco Catalyst 9105AX Access Point, internal antenna; ceiling mount, Wi-Fi 6; 2x2:2 MIMO
C9105AXW-x	Cisco Catalyst 9105AX Access Point, internal antenna; wall mount, Wi-Fi 6; 2x2:2 MIMO

Note: When ordering the Cisco Catalyst 9166, 9166D1, 9164, or 9162 Access Point, a choice must be made on AP deployment/management. For on-premises management -x part number should be ordered, for cloud use -MR.

Note: When customers order the Cisco Catalyst 9130AXE Access Point, the following instructions need to be adhered to:

2. Customer either has to order new cables and bracket (see below) and use current antennas:

Table 4.   Antenna Connector and Brackets

AP part number	Description
AIR-CAB002-D8-R=	8-Port Smart antenna connector to RP-TNC connectors, 2ft
AIR-CAB003-D8-N=	8-Port Smart antenna connector to N-Type connectors, 3ft

3. Or purchase one of the newly released 8x8 antennas, which has the DART cables attached, and bracket:

Table 5.   8-Port Antenna and Brackets

AP part number	Description
C-ANT9101=	2.4/5/6 GHz Ceiling mount omni antenna, 8-port, DART, Self ID
C-ANT9102=	2.4/5/6 GHz Multi mount omni antenna, 8-port, DART, Self ID
C-ANT9103=	2.4/5/6 GHz Directional antenna, 8-port, DART, Self ID
AIR-AP-BRACKET-9=	C9130AXE antenna bracket

4. The Cisco Embedded Wireless Controller is available for the Cisco Catalyst access points. See section "X"

    1. Select appropriate software.

Table 6.   Software

Software part number	Description
SWxxxx-CAPWAP-K9	CAPWAP software

5. Cisco DNA Licenses are required when using APs with the Catalyst 9800 Series Controllers and Cisco Catalyst Center. Select your required Cisco DNA license and subscription duration from the following licensing tier options:

- Essentials (-E) - AIR-DNA-E
- Advantage (-A) - AIR-DNA-A

When ordering the Catalyst 9100 series access points, one of the following Cisco DNA options must be selected in 3-year, 5-year, or 7-year subscription terms:

Table 7.   Cisco DNA Subscription

Cisco DNA part number	Subscription option	Description
AIR-DNA-E	**AIR-DNA-E-3Y**	Cisco DNA Essentials license with 3-year subscription
	AIR-DNA-E-5Y	Cisco DNA Essentials license with 5-year subscription
	AIR-DNA-E-7Y	Cisco DNA Essentials license with 7-year subscription

Cisco DNA part number	Subscription option	Description
AIR-DNA-A	AIR-DNA-A-3Y	Cisco DNA Advantage license with 3-year subscription
	AIR-DNA-A-5Y*	Cisco DNA Advantage license with 5-year subscription **(default option)**
	AIR-DNA-A-7Y	Cisco DNA Advantage license with 7-year subscription

*Note: AIR-DNA Advantage with a 5-year subscription option is selected by default.

6. Select 2.4/5 GHz dual-band external antennas (applicable if the external antenna version of the access point is selected).

Table 8.   External Antennas

Antenna part number	Description
AIR-ANT2524DW-RS	Cisco Aironet dual-band dipole antenna; white; peak gain 2dBi at 2.4 GHz and 5 dBi at 5 GHz
AIR-ANT2535SDW-RS	Cisco Aironet short dual-band omni antenna, Peak Gain 3 dBi at 2.4. GHz and 5 dBi at 5 GHz
AIR-ANT2524V4C-RS=	Cisco Aironet omni antenna, ceiling mount, Peak Gain 2 dBi at 2.4. GHz and 4 dBi at 5 GHz
AIR-ANT2544V4M-RS=	Cisco Aironet omni antenna, wall/pole mount, Peak Gain 2 dBi at 2.4 GHz and 4 dBi at 5 GHz
AIR-ANT2566P4W-RS=	Cisco Aironet patch antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz
AIR-ANT2566D4M-RS=	Cisco Aironet directional antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz
AIR-ANT2513P4M-NS=	Cisco Aironet directional antenna, wall/pole mount, Peak Gain 13 dBi at 2.4 GHz and 13 dBi at 5 GHz
AIR-ANT2566P4W-DS=	Cisco Aironet patch antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz, 4-port DART connector
AIR-ANT2566D4M-DS=	Cisco Aironet directional antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz, 4-port DART connector

7. Select access point mounting brackets.

Table 9.   Mounting Brackets

Part number	Description
AIR-AP-NO BRACKET	Select this option if no bracket is required
AIR-AP-BRACKET-1	Low-profile access point mounting bracket, default option
AIR-AP-BRACKET-2	Universal bracket for access point mounting

Part number	Description
AIR-AP-BRACKET-W4	Bracket for Cisco Catalyst 9105w access point mounting
AIR-AP-BRACKET-8	Bracket for Cisco Catalyst 9105i access point mounting
CW-MNT-ART2-00	Articulating arm for bracket 2

8. Select ceiling grid clips.

Table 10.   Ceiling grid clips

Part number	Description
AIR-AP-T-RAIL-R	Ceiling grid clip (recessed mounting); this is the default option
AIR-AP-T-RAIL-F	Ceiling grid clip (flush mounting)
AIR-CHNL-ADAPTER	Optional adapter for channel-rail ceiling grid profile

9. Select the access point powering options (to be ordered separately, as per the requirement).

Table 11.   Powering options

Source	Description
AIR-PWRINJ7=	802.3bt Cisco Power Injector, 5Gbps Ethernet
AIR-PWRINJ6=	802.3at Cisco Power Injector
AIR-PWRINJ5=	802.3af Cisco Power Injector
PoE+ via switch port	Any 802.3at (30.0 W) compliant switch port

Note: Please check access point data sheets for power requirements. In some applications, if AIR-PWRINJ5 is used the access point will work with reduced features. For more details, refer to the respective access point data sheet.

Cisco Catalyst 9100 Outdoor Access Points ordering steps

1. Select the access point model based on requirements and as per the correct country's regulatory domain.

Table 12.   Access points

AP part number	Description
CW9163E-x	Cisco Catalyst 9163E Outdoor Access Point, N-type antenna connectors; Wi-Fi 6E; 2x2:2SS with Reg -x
CW9163E-MR	Cisco Catalyst 9163E Outdoor Access Point, N-type antenna connectors; Wi-Fi 6E; 2x2:2SS with Reg -MR

AP part number	Description
C9124AXI-x	Cisco Catalyst 9124AX Outdoor Access Point, internal omnidirectional antenna; Wi-Fi 6; 4x4:4 MIMO
C9124AXD-x	Cisco Catalyst 9124AX Outdoor Access Point, internal directional antenna; Wi-Fi 6; 4x4:4 MIMO
C9124AXE-x	Cisco Catalyst 9124AX Outdoor Access Point, external antenna; Wi-Fi 6; 4x4:4 MIMO

Note: When customers order a Cisco Catalyst 9124AX Series Access Point, the following instructions need to be adhered to.

Note: Some components are available as a "configurable" option or as a "spare."

- A "configurable" option ships in the same main box as the access point. For example, AIR-MNT-VERT1 is a "configurable" option and, if ordered, is shipped with the access point in the same box.

- A "spare" option is denoted with an equal (=) sign at the end of the part number. For example, AIR-MNT-ART1 = is a "spare" and, if ordered, is shipped in separate packaging.

2. Select appropriate software.

Table 13. Software

Software part number	Description
SW9124AX-CAPWAP-K9	CAPWAP software

3. Cisco DNA software licenses are required when using APs with the Catalyst 9800 Series wireless controllers and Cisco Catalyst Center (previously Cisco DNA Center). Select your required Cisco DNA license and subscription duration from the following licensing tier options:

- Essentials (-E) - AIR-DNA-E

- Advantage (-A) - AIR-DNA-A

When ordering the Catalyst 9100, one of the following Cisco DNA options must be selected in 3-year, 5-year, or 7-year subscription terms:

Table 14. Cisco DNA Subscription

Cisco part number	Subscription option	Description
AIR-DNA-E	**AIR-DNA-E-3Y**	Cisco DNA Essentials license with 3-year subscription
	AIR-DNA-E-5Y	Cisco DNA Essentials license with 5-year subscription
	AIR-DNA-E-7Y	Cisco DNA Essentials license with 7-year subscription

Cisco part number	Subscription option	Description
AIR-DNA-A	AIR-DNA-A-3Y	Cisco DNA Advantage license with 3-year subscription
	AIR-DNA-A-5Y[*]	Cisco DNA Advantage license with 5-year subscription **(default option)**
	AIR-DNA-A-7Y	Cisco DNA Advantage license with 7-year subscription

[*] Note: AIR-DNA Advantage with a 5-year subscription option is selected by default.

4. Select 2.4- and 5-GHz dual-band external antennas (applicable if the external antenna version of the access point is selected).

Table 15. External configurable antennas

Part number	Generation	Qty	Description
AIR-ANT2568VG-NS	SIA	4	2.4GHz 6dBi / 5GHz 8dBi Omnidirectional Antenna, Connectors N-Male
AIR-ANT2547VG-NS	SIA	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male

Table 16. External spare antennas

Part number	Generation	Qty	Description
CW-ANT-O1-NS-00	SIA	1	External omni-directional antenna for CW9163E; Wi-Fi 6E; 2x2:2SS, Four (4) antennas required to fully populate antenna ports on CW9163E
CW-ANT-GPS2-S-00	SIA	1	External GPS Antenna for CW9163E; Wi-Fi 6E; 2x2:2SS
CW-ANT-D1-NS-00	SIA	1	External 4-Port Directional Patch Self-Identifying Antenna (SIA) with N-Type Connectors, includes CW-MNT-ART2-00, articulating arm bracket
AIR-ANT2568VG-NS=	SIA	4	2.4GHz 6dBi / 5GHz 8dBi Omnidirectional Antenna, Connectors N-Male
AIR-ANT2547VG-NS=	SIA	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2588P4M-NS=	SIA	1	2.4GHz 8dBi / 5GHz 8dBi 4-Element Dual-Polarized Patch Antenna, Connectors N-Female Bulkhead (4x RF Coaxial Cable needed)
AIR-ANT2513P4M-NS=	SIA	1	2.4GHz 13dBi / 5GHz 13dBi Dual-Band Polarization Diverse Patch Array Antenna, Connectors N-Female Bulkhead (4x RF Coaxial Cable needed)
AIR-ANT2547V-N=	Legacy	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2547VG-N=	Legacy	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male (Grey Color)
AIR-ANT2588P3M-N=	Legacy	1	2.4GHz 8dBi / 5GHz 8dBi 3-Element Dual-Polarized Patch Antenna, Connectors N-Female Bulkhead (3x RF Cable Coaxial needed)
AIR-ANT2450V-N=	Legacy	4	2.4GHz 5dBi Omnidirectional Colinear Array Antenna, Connectors N-Male

Part number	Generation	Qty	Description
AIR-ANT2480V-N=	Legacy	4	2.4GHz 8dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT5180V-N=	Legacy	4	5GHz 8dBi 2-Element Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2513P4M-N=	Legacy	1	2.4GHz 13dBi / 5GHz 13dBi Dual-Band Polarization Diverse Patch Array Antenna, Connectors N-Female Bulkhead (4x RF Coaxial Cable needed)

Note:

- The Catalyst 9124AXI access point has four internal dual-band (2.4- and 5-GHz) antennas that reside under a sealed radome and cannot be accessed.

- The Catalyst 9124AXD access point has four internal directional dual-band (2.4- and 5-GHz) antennas that reside under a sealed radome and cannot be accessed.

5. Select the access point RF Cables and Lightning Arrestor (to be ordered separately when remote antennas are connected, as per the requirement).

Table 17. RF Cables and Lightning Arrestor

Part number	Description
AIR-CAB005LL-N=	RF Cable, 5 ft Low-loss, N Connectors
AIR-CAB010LL-N=	RF Cable, 10 ft Low-loss, N Connectors
AIR-ACC245LA-N	Lightening Arrestor (If C9124AXE is connected to remote antenna through cable)

6. Select the access point powering options (to be ordered separately, as per the requirement). The Catalyst 9124AX Series Access Points can be powered by multiple sources: AC, DC, or Power over Ethernet (PoE). For AC powering, an external AC-to-DC power adapter is required. For DC powering, a 2-pin DC connector is included with every access point. The access point can also be powered by Cisco Universal Power over Ethernet (Cisco UPOE) or PoE+ (802.3at) directly from a switch or power injector.

Table 18. Powering options

Part number	Description	Use case
AIR-PWRINJ-60RGD1=	Power injector, 60W, outdoor, North America plug	Outdoor-rated 60W power injector with North American AC plug
AIR-PWRINJ-60RGD2=	Power injector, 60W, outdoor, un-connectorized	Outdoor-rated 60W power injector, unterminated AC cable for international use
AIR-PWRINJ-60-PMK=	Pole mount kit for AIR-PWRINJ-60	Required for pole mounting for AIR-PWRINJ-60RGD1= or AIR-PWRINJ-60RGD2=

Part number	Description	Use case
AIR-PWRINJ6=	Power injector, 802.3at, indoor	Indoor-rated, 802.3at-compliant power injector

Note: Please check access point data sheets for power requirements. If AIR-PWRINJ6 is used, the access point will work with reduced features. For more details, refer to the respective access point data sheet.

7. Select the access point SFP options (to be ordered separately, as per the requirement).

8. Catalyst 9124AX Series outdoor access points support fiber backhaul. The SFP port is built into the access point, but the mechanical interface is external to the access point. A special SFP adapter/gland kit is needed to interface the fiber cable to the access point.

Table 19. SFP options

Adaptor Part number	Description	Use case
GLC-LX-SM-RGD	1000BASE-LX single-mode rugged SFP	Long-distance fiber backhaul on single-mode fiber
GLC-SX-MM-RGD	1000BASE-SX multi-mode rugged SFP	Shorter-distance fiber backhaul on multimode fiber
GLC-T-RGD	1000BASE-T SFP, industrial temp	GE electrical interface for bridging wired clients such as video cameras or switches

9. Select access point mounting brackets.

Table 20. Mounting backets

Part number	Description
AIR-AP-NO-BRACKET	Select this option if no bracket is required
AIR-MNT-VERT1	Vertical mounting bracket for Cisco Catalyst 9124AXD access point, will be option in CCW
AIR-MNT-VERT1=	Vertical mounting bracket for Cisco Catalyst 9124AXD access point
AIR-MNT-ART1=	Articulating mounting bracket for Cisco Catalyst 9124AXD access point
AIR-MNT-HORZ1=	Horizontal mounting bracket for Cisco Catalyst 9124AXI/AXD access point
AIR-MNT-VERT2=	Vertical mounting bracket for Cisco Catalyst 9124AXD access point with AC/DC PSU
AIR-MNT-STRAND1=	Strand mounting bracket for Cisco Catalyst 9124AXI/AXD access point

10. Select the access point powering options (to be ordered separately, as per the requirement).

Table 21.   Accessories

Accessories Part number	Description
CW-ACC-KIT1-00	Accessory Kit for CW9163E
C9124-CVR1=	Paintable cover for Catalyst 9124AX
AIR-SFP-KIT1=	SFP installation kit for Catalyst 9124AX (QTY 5)
AIR-ACC-PS-MNT1=	AC/DC adapter mount bracket for AIR-MNT-HORZ1=
AIR-ACC-KIT1=	5x ethernet, 2 dust cap, ground lug, DC plug kit
AIR-ACC-CAT6=	CAT 6/6A Ethernet Cable Gland Assembly kit[*]

[*] Note: AIR-ACC-CAT6= is mandatory if C9124 is to be installed with Cat6/6a ethernet cable

Cisco Capital financing

Flexible payment solutions to help you achieve your objectives

The significant benefits offered by Cisco wireless access points make them the natural choice for providing best-in-class wireless connectivity. As with any technology investment, the question is the affordability of the new system. The answer is financing from Cisco Capital. Whether through flexible repayments to match expenditures to benefit and help mitigate cash flow issues, or an operating lease to help negate capital expenditure, we can give customers the financing solution that works best for them.

Cisco Capital can help remove or reduce the barriers preventing organizations from obtaining the technology they need. Total solution financing programs help customers and partners:

- Achieve business objectives

- Accelerate growth

- Acquire technology to match current strategies and future needs

- Remain competitive

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.

Cisco DNA software subscriptions for wireless

Cisco wireless provides open, extensible, software-driven portfolio that helps accelerate and simplify your enterprise network operations while lowering costs and reducing your 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 at scale. Cisco enables you to avoid time-consuming, repetitive network configuration tasks so you can focus on the innovations 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 software spending over time.
- Access to new technology from Cisco.

Table 22 outlines common IT management challenges and the ways that Cisco DNA software helps customers to address them.

Table 22.   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 enables you to choose the solution that best fits your critical business requirements 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.

Product overview

Cisco DNA software subscriptions deliver an unbound network on an open and extensible architecture to help you navigate the digital journey. Benefits include lower initial costs, investment protection, agility to respond more quickly to business needs, and better budget predictability. These 3-, 5-, and 7-year subscriptions include full Cisco capabilities supported by Cisco Software-Defined Access (SD-Access), AI / ML, analytics, automation, and security. For a full list of Cisco DNA software features, please visit the Wireless Feature Matrix.

All Cisco DNA subscription offers include embedded support with the Cisco Technical Assistance Center (TAC), knowledge base access, and software downloads. Additional services, such as Cisco Solution Support with Smart Net Total Care and Cisco Solution Support with Software Support Services, are available for purchase separately.

More details about the available features in each tier can be found at https://www.cisco.com/go/dnawireless.

Cisco platforms supported by Cisco DNA wireless subscriptions

The following access point platforms are supported:

- All Cisco Catalyst 9100 Access Points are fully supported.

The following Wireless LAN Controller (WLC) platforms are supported:

- Cisco Catalyst 9800 Series Wireless Controllers.

How to order a Cisco DNA wireless subscription

Cisco DNA software subscriptions for wireless can be ordered through the following methods:

- Cisco DNA software subscription, along with an access point order
- Standalone Cisco DNA software subscription

1. Ordering Cisco DNA subscriptions along with an access point order:

- Cisco DNA software subscriptions are available to order along with all Cisco access points.
- For convenience, Cisco DNA Advantage 5-year is preselected as the default option with Cisco Catalyst 9100 Access Points.

To order a Cisco DNA subscription with access points in Cisco Commerce Workspace, follow these steps:

1. Enter the access point SKU. For example, AIR-AP4800-X-K9.
2. Select the appropriate AIR-DNA (AIR-DNA-A or AIR-DNA-E) license type.
3. Choose the Cisco DNA license term (3, 5, or 7 years).

Figure 1.
Ordering the access points

Figure 2.
Selecting a Cisco DNA subscription

Cisco DNA standalone SKUs for ordering

Table 23.   Cisco DNA License options

SKU	Description
AIR-DNA	CISCO DNA licenses for wireless
AIR-DNA-A	CISCO DNA Advantage term licenses
AIR-DNA-E	CISCO DNA Essentials term licenses

To order in Cisco Commerce Workspace, follow these steps:

4. Enter AIR-DNA.

5. Select the appropriate AIR-DNA license type.

6. Choose the Cisco DNA term license (3, 5, or 7 years).

	1.0	AIR-DNA	3 days	0.00	1	0.00	0.00	0.00

more ▸

CISCO DNA for Wireless - CHOOSE ONLY QTY 1 HERE

Success Track: CAMPUS NETWORK

⚠ Invalid as of 07-Jul-2023 08:54:51 PDT

Edit Options | Edit Service/Subscription | Validate | Recommended Content | Add Note | More Actions ⌄   Add Subtotal

Figure 3.
Specifying AIR-DNA

Figure 4.
Choosing a license type

Figure 5.
Choosing a license term

Cisco Catalyst 9800 Series highlights

Built from the ground up for intent-based networking and Cisco DNA, the Cisco Catalyst 9800 Series Wireless Controllers bring together the magic of Cisco IOS XE and Cisco RF excellence, to create a best-in-class wireless experience for your evolving and growing organization. The 9800 Series wireless controllers are built on an open and programmable architecture with built-in security, streaming telemetry, and rich analytics.

The Cisco Catalyst 9800 Series Wireless Controllers are feature rich and enterprise ready to power your business-critical operations and transform end-customer experiences:

- High availability and seamless software updates, enabled by hot patching, keep your clients and services always on during planned and unplanned events.

- Secure the air, devices, and users with the 9800 Series controllers. Wireless infrastructure becomes the strongest first line of defense with Cisco Encrypted Traffic Analytics (ETA) and SD-Access. The controllers come with built-in security features such as secure boot, runtime defenses, image signing, integrity verification, and hardware authenticity.

- Deploy anywhere to enable wireless connectivity everywhere. Whether on-premises, in a public or private cloud, or embedded on a switch or access point, the Cisco Catalyst 9800 Series has multiple deployment and scale options to best meet your organization's needs.

- Built on a modular operating system, the 9800 Series' open and programmable APIs enable automation of your day-0 to day-N network operations. Model-driven streaming telemetry provides deep insights into the health of your network and clients.

Cisco Catalyst 9800 Series Wireless Controllers are available in multiple form factors to best suit your deployment preference:

- Cisco Catalyst 9800 Series Wireless Controller appliances (CW9800M, CW9800H1, CW9800H2, C9800-L, C9800-40, and C9800-80).

- Cisco Catalyst 9800 Wireless Controllers for Cloud.

- Cisco Catalyst 9800 Embedded Wireless for Switch.

- Cisco Embedded Wireless Controller on Catalyst 9100 Access Point.

https://www.cisco.com/c/dam/en/us/products/collateral/wireless/catalyst-9800-series-wireless-controllers/nb-06-cat9800-ser-aag-ctp-en.pdf.

Wireless platform support summary and part numbers

Table 24. Wireless platform support summary

Product family	Product name	Description
Cisco Catalyst 9800 Series Wireless Controller appliances	Cisco Catalyst CW9800M	Powerful and efficient 1RU design for medium sized deployments. Supports up to 3000 APs and 32000 clients with up to 50 Gbps.
	Cisco Catalyst CW9800H1	Powerful and efficient 1RU design for large sized deployments with 4 x 25 Gbps and 8 x 1/10 Gbps uplinks. Supports up to 6000 APs and 64000 clients with up to 100 Gbps.
	Cisco Catalyst CW9800H2	Powerful and efficient 1RU design with 2 x 40 Gbps and 8 x 1/10 Gbps uplinks uplinks. Supports up to 6000 APs and 64000 clients with up to 100 Gbps.
	Cisco Catalyst 9800-L Wireless Controller	9800-L: Perfect for small organizations, this controller offers seamless software updates
	Cisco Catalyst 9800-40 Wireless Controller	9800-40: Fixed wireless controller with seamless software updates
	Cisco Catalyst 9800-80 Wireless Controller	9800-80: Modular wireless controller with 100G modular uplink and seamless software updates
Cisco Catalyst 9800 Wireless Controllers for Cloud	Cisco Catalyst 9800-CL Wireless Controller for Cloud (Private cloud: VMware ESXI, KVM, Cisco NFVIS on ENCS) (Public cloud: AWS Marketplace)	Wireless controller that can be deployed in a private cloud or in a public cloud as Infrastructure as a Service (IaaS)
Cisco Catalyst 9800 SD-Access Embedded Wireless	Cisco Catalyst 9800 Embedded Wireless for Switch	Cisco Catalyst 9800 software sub-package for Cisco Catalyst 9000 switching platform
Cisco Embedded Wireless Controller on Catalyst Access Point	Cisco Embedded Wireless Controller on Catalyst 9100 Access Point	Cisco Embedded Wireless Controller on Catalyst Access Point

Table 25. Wireless platform part numbers

Product family	Part numbers	Description
Cisco Catalyst CW9800M Wireless Controller	PWR-CH1-750WACR	Cisco 750W AC Power Supply
	A1K-1RU-REAR=	Rear rack mount kit for CW9800
Cisco Catalyst CW9800H1 Wireless Controller	PWR-CH1-750WACR	Cisco 750W AC Power Supply
	PWR-CH1-950WDCR	Cisco 950W DC Power Supply
	A1K-1RU-REAR=	Rear rack mount kit for CW9800
Cisco Catalyst CW9800H2 Wireless Controller	PWR-CH1-750WACR	Cisco 750W AC Power Supply
	PWR-CH1-950WDCR	Cisco 950W DC Power Supply
	A1K-1RU-REAR=	Rear rack mount kit for CW9800
Cisco Catalyst 9800-L Wireless Controller	C9800-L-C-K9	Cisco Catalyst 9800-L-C Wireless Controller_Copper Uplink
	C9800-L-F-K9	Cisco Catalyst 9800-L-F Wireless Controller_Fiber Uplink
	C9800-AC-110W	Cisco Catalyst 9800-L Wireless Controller Power Adapter
	C9800-AC-110W=	Cisco Catalyst Wireless Controller 110W AC Power Adapter Spare
	LIC-C9800-DTLS-K9	Cisco Catalyst 9800 Wireless Controller DTLS license
	C9800L-RMNT	C9800 Wireless Controller Rack Mount Tray
	C9800L-RMNT=	Spare C9800 Wireless Controller Rack Mount Tray
	C4948E-BKT-KIT=	C49xxE front and rear mount brackets
Cisco Catalyst 9800-40 Wireless Controller	C9800-40-K9	Cisco Catalyst 9800-40 Wireless Controller
	C9800-AC-750W-R	Cisco Catalyst 9800-40 750W AC Power Adapter Reverse Air (part of the system configuration)
	C9800-AC-750W-R=	Cisco Catalyst 9800-40 750W AC Power Adapter Reverse Air (spare)
	LIC-C9800-DTLS-K9	Cisco 9800 Wireless Controller DTLS license

Product family	Part numbers	Description
Cisco Catalyst 9800-80 Wireless Controller	C9800-80-K9	Cisco Catalyst 9800-80 Wireless Controller
	C9800-AC-1100W	Cisco Catalyst Wireless Controller 1100W AC Power Adapter (part of the system configuration)
	C9800-AC-1100W=	Cisco Catalyst Wireless Controller 1100W AC Power Adapter (spare)
	C9800-DC-950W	Cisco Catalyst Wireless Controller 950W DC Power Adapter (part of the system configuration)
	C9800-DC-950W=	Cisco Catalyst Wireless Controller 950W DC Power Adapter (spare)
	LIC-C9800-DTLS-K9	Cisco Catalyst 9800 Wireless Controller DTLS license
Cisco Catalyst 9800-CL Wireless Controller for Cloud	L-C9800-CL-K9	Cisco Catalyst 9800-CL Wireless Controller
Cisco Embedded Wireless Controller on Catalyst 9100 Access Point	C9115AXI-EWC-X	Cisco 9115 with embedded Catalyst 9800 Wireless Controller
	C9115AXE-EWC-X	Cisco 9115 with embedded Catalyst 9800 Wireless Controller
	C9120AXI-EWC-X	Cisco 9120 with embedded Catalyst 9800 Wireless Controller
	C9120AXE-EWC-X	Cisco 9120 with embedded Catalyst 9800 Wireless Controller
	C9120AXP-EWC-X	Cisco 9120 with embedded Catalyst 9800 Wireless Controller
	9130AXI-EWC-X	Cisco 9130 with embedded Catalyst 9800 Wireless Controller
	9130AXE-EWC-X	Cisco 9130 with embedded Catalyst 9800 Wireless Controller
Cisco Catalyst 9800 Embedded Wireless	Cisco Catalyst 9300 Series Switch	Cisco Catalyst 9800 software sub-package for Catalyst 9000 switching platform
	Cisco Catalyst 9400 Series Switch	Cisco Catalyst 9800 software sub-package for Catalyst 9000 switching platform
	Cisco Catalyst 9500 Series Switch	Cisco Catalyst 9800 software sub-package for Catalyst 9000 switching platform

Product family	Part numbers	Description
Modules for 9800-80	C9800-18X1GE (=)	Cisco Catalyst 9800-80 GE module
	C9800-10X10GE (=)	Cisco Catalyst 9800-80 10 GE module
	C9800-1X40GE (=)	Cisco Catalyst 9800-80 1-port 40 GE module
	C9800-2X40GE (=)	Cisco Catalyst 9800-80 2-port 40 GE module
	C9800-1X100GE (=)	Cisco Catalyst 9800-80 1-port 100 GE module

Cisco Catalyst 9800 Series Wireless Controller ordering steps

Cisco Catalyst 9800 Series Wireless Controllers can be ordered from [Cisco Commerce Workspace](#).

CW9800M ordering steps

Table 26. Ordering steps for Cisco Catalyst CW9800M

1. Type "CW9800M," then add "CW9800M"and select "Edit Options."	
Part number	**Description**
CW9800M	Cisco Catalyst CW9800M Wireless Controller (ships with one AC power adapter)

Table 27. Software Image

3. The software image is auto selected.	
Part number	**Description**
SW-9800M-1714	Software image (current version of software installed at factory)

Table 28. Power adaptor selection

4. The power adapter is auto selected.	
Part number	**Description**
PWR-CH1-750WACR	Cisco 750W AC power adapter

Table 29. Country specific power cable

5. Choose the country-specific power cable (presented after selecting the power adapter).			
Part number	**Description**	**Part number**	**Description**
CAB-ACC	China AC Type A Power Cable	CAB-IND	India AC Type A Power Cable
CAB-ACR	Argentina AC Type A Power Cable	CAB-L620P-C13-JPN	Japan AC Type A Power Cable
CAB-ACU	UK AC Type A Power Cable	CAB-AC	North America AC Type A Power Cable
CAB-C13-C14-2M	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-ACA	Australia AC Type A Power Cable
CAB-C13-C14-AC	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-L620P-C13-US	US Standard Power Cable
CAB-C13-C14-JMPRCAB-ACS	Cisco Power Cable	CAB-JPN	Japan AC Type A Power Cable
CAB-ACI	Italy AC Type A Power Cable	CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors
CAB-C15-ACB	Brazil AC Type A Power Cable	CAB-ACE	Continental Europe AC Type A Power Cable
CAB-ACS	Switzerland AC Type A Power Cable		

CW9800H1/CW9800H2 ordering steps

Table 30. Ordering steps for Cisco Catalyst CW9800H1/H2

1. Type "CW9800H1 or CW9800H2," then add "CW9800H1 or CW9800H2"and select "Edit Options."	
Part number	**Description**
CW9800H1 or CW9800H2	Cisco Catalyst CW9800H1 or CW9800H2 Wireless Controller

Table 31. Software image

3. Click "Software," and SC980040K9-1610 is auto selected.	
Part number	**Description**
SW9800H-1714	Software image (current version of software installed at factory)

Table 32.   Power adaptor selection

4. Click "Power" and choose from the options below.	
Part number	**Description**
PWR-CH1-750WACR	Cisco 750W AC power adapter
PWR-CH1-950WDCR	Cisco 950W DC power adapter

Table 33.   Country specific power cable

5. Select the presented power cable type from the list below after clicking the AC power adapter.			
Part number	**Description**	**Part number**	**Description**
CAB-ACC	China AC Type A Power Cable	CAB-IND	India AC Type A Power Cable
CAB-ACR	Argentina AC Type A Power Cable	CAB-L620P-C13-JPN	Japan AC Type A Power Cable
CAB-ACU	UK AC Type A Power Cable	CAB-AC	North America AC Type A Power Cable
CAB-C13-C14-2M	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-ACA	Australia AC Type A Power Cable
CAB-C13-C14-AC	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-L620P-C13-US	US Standard Power Cable
CAB-C13-C14-JMPR	Cisco Power Cable	CAB-JPN	Japan AC Type A Power Cable
CAB-ACI	Italy AC Type A Power Cable	CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors
CAB-C15-ACB	Brazil AC Type A Power Cable	CAB-ACE	Continental Europe AC Type A Power Cable
CAB-ACS	Switzerland AC Type A Power Cable		

Note: No cable option is presented when the DC power adapter is selected.

C9800-L-F-K9 and C9800-L-C-K9 ordering steps

Table 34. Ordering steps for Cisco Catalyst 9800-L Wireless Controllers

1. Type "C9800-L-C-K9/ C9800-L-F-K9," then add "C9800-L-C-K9/ C9800-L-F-K9"and select "Edit Options."	
Part number	**Description**
C9800-L-C-K9	Cisco Catalyst 9800-L-C Wireless Controller_Copper Uplink (ships with one AC power adapter)
C9800-L-F-K9	Cisco Catalyst 9800-L-F Wireless Controller_Fiber Uplink (ships with one AC power adapter)

Table 35. Optional Data Encryption License

2. Click "Data Encryption" and select DTLS license if encryption of client data is required (optional).	
Part number	**Description**
LIC-C9800-DTLS-K9	Cisco Catalyst 9800 Wireless Controller DTLS license

Table 36. Software image

3. The software image is auto selected.	
Part number	**Description**
SC9800LK9-xxxx	Software image (xxxx = current version of software installed at factory)

Table 37. Power adaptor selection

4. The power adapter is auto selected.	
Part number	**Description**
C9800-AC-110W	Cisco Catalyst 9800-L 110W AC power adapter

Table 38. Country specific power cable

5. Choose the country-specific power cable (presented after selecting the power adapter).			
Part number	**Description**	**Part number**	**Description**
CAB-AC-C5	AC Power Cord, Type C5, US, Canada	CAB-AC-C5-ITA	AC Power Cord, Type C5, Italy
CAB-AC-C5-ARG	AC Power Cord, Type C5, Argentina	CAB-AC-C5-JAP	AC Power Cord, Type C5, Japan
CAB-AC-C5-AUS	AC Power Cord, Type C5, Australia	CAB-AC-C5-KOR	AC Power Cord, Type C5, Korea
CAB-AC-C5-BR	AC Power Cord, Type C5, Brazil	CAB-AC-C5-SAF	AC Power Cord, Type C5, South Africa
CAB-AC-C5-BRA	AC Power Cord, Type C5, Brazil	CAB-AC-C5-SWI	AC Power Cord, Type C5, Switzerland
CAB-AC-C5-CHI	AC Power Cord, Type C5, China	CAB-AC-C5-TWN	AC Power Cord, Type C5, Taiwan

5. Choose the country-specific power cable (presented after selecting the power adapter).			
Part number	**Description**	**Part number**	**Description**
CAB-AC-C5-EUR	AC Power Cord, Type C5, Europe	CAB-AC-C5-UK	AC Power Cord, Type C5, UK
CAB-AC-C5-IND	AC Power Cord, Type C5, India	CAB-AC-C5-ITA	AC Power Cord, Type C5, Italy
CAB-AC-C5	AC Power Cord, Type C5, US, Canada		

C9800-40-K9 ordering steps

Table 39.   Ordering steps for Cisco Catalyst 9800-40

1. Type "C9800-40-K9," then add "C9800-40-K9"and select "Edit Options."	
Part number	**Description**
C9800-40-K9	Cisco Catalyst 9800-40 Wireless Controller (ships with one AC power adapter)

Table 40.   Optional Data Encryption License

2. Click "Data Encryption" and select DTLS license if encryption of client data is required (optional).	
Part number	**Description**
LIC-C9800-DTLS-K9	Cisco Catalyst 9800 Wireless Controller DTLS license

Table 41.   Software Image

3. The software image is auto selected.	
Part number	**Description**
SC980040K9-xxxx	Software image (xxxx = current version of software installed at factory)

Table 42.   Power adaptor selection

4. The power adapter is auto selected.	
Part number	**Description**
C9800-AC-750W-R	Cisco Catalyst 9800-40 750W AC power adapter

Table 43. Country specific power cable

5. Choose the country-specific power cable (presented after selecting the power adapter).			
Part number	**Description**	**Part number**	**Description**
CAB-ACC	China AC Type A Power Cable	CAB-IND	India AC Type A Power Cable
CAB-ACR	Argentina AC Type A Power Cable	CAB-L620P-C13-JPN	Japan AC Type A Power Cable
CAB-ACU	UK AC Type A Power Cable	CAB-AC	North America AC Type A Power Cable
CAB-C13-C14-2M	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-ACA	Australia AC Type A Power Cable
CAB-C13-C14-AC	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-L620P-C13-US	US Standard Power Cable
CAB-C13-C14-JMPRCAB-ACS	Cisco Power Cable	CAB-JPN	Japan AC Type A Power Cable
CAB-ACI	Italy AC Type A Power Cable	CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors
CAB-C15-ACB	Brazil AC Type A Power Cable	CAB-ACE	Continental Europe AC Type A Power Cable
CAB-ACS	Switzerland AC Type A Power Cable		

C9800-80-K9 ordering steps

Table 44. Ordering steps for Cisco Catalyst 9800-80

1. Type "C9800-80-K9," then add "C9800-80-K9"and select "Edit Options."	
Part number	**Description**
C9800-80-K9	Cisco Catalyst 9800-80 Wireless Controller

Table 45. Optional Data Encryption License

2. Click "Data Encryption" and select DTLS license if encryption of client data is required (optional).	
Part number	**Description**
LIC-C9800-DTLS-K9	Cisco Catalyst 9800 Wireless Controller DTLS license

Table 46. Software image

3. Click "Software," and SC980040K9-1610 is auto selected.	
Part number	**Description**
SC980080K9-xxxx	Software image (xxxx = current version of software installed at factory)

Table 47. Power adaptor selection

4. Click "Power" and choose from the options below.	
Part number	**Description**
C9800-AC-1100W	Cisco Catalyst Wireless Controller 1100W AC power adapter
C9800-DC-950W	Cisco Catalyst Wireless Controller 950W DC power adapter

Table 48. Country specific power cable

5. Select the presented power cable type from the list below after clicking the AC power adapter.			
Part number	**Description**	**Part number**	**Description**
CAB-ACC	China AC Type A Power Cable	CAB-IND	India AC Type A Power Cable
CAB-ACR	Argentina AC Type A Power Cable	CAB-L620P-C13-JPN	Japan AC Type A Power Cable
CAB-ACU	UK AC Type A Power Cable	CAB-AC	North America AC Type A Power Cable
CAB-C13-C14-2M	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-ACA	Australia AC Type A Power Cable
CAB-C13-C14-AC	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors	CAB-L620P-C13-US	US Standard Power Cable
CAB-C13-C14-JMPR	Cisco Power Cable	CAB-JPN	Japan AC Type A Power Cable
CAB-ACI	Italy AC Type A Power Cable	CAB-C13-CBN	Cabinet Jumper Power Cord, 250 VAC 10 A, C13-C14 Connectors
CAB-C15-ACB	Brazil AC Type A Power Cable	CAB-ACE	Continental Europe AC Type A Power Cable
CAB-ACS	Switzerland AC Type A Power Cable		

Note: No cable option is presented when the DC power adapter is selected.

Table 49. Uplink module selection

6. Click "Modules" and select one of the following uplink modules.	
Part number	**Description**
C9800-18X1GE	Cisco Catalyst 9800-80 GE Module
C9800-10X10GE	Cisco Catalyst 9800-80 10 GE Module
C9800-1X40GE	Cisco Catalyst 9800-80 1 Port 40 GE Module
C9800-2X40GE	Cisco Catalyst 9800-80 2 Port 40 GE Module
C9800-1X100GE	Cisco Catalyst 9800-80 1 Port 100 GE Module

Note: If none of the uplink modules is chosen, C9800-BLANK module will automatically be added to the configuration.

Cisco Catalyst 9800-CL Wireless Controller for Cloud ordering steps

Table 50. Ordering steps for Cisco Catalyst 9800-CL

1. Type "C9800-CL-K9," then add "C9800-CL-K9"and select "Edit Options."	
Part number	**Description**
C9800-CL-K9	Cisco Catalyst 9800 Wireless Controller for Cloud

Table 51. Optional Data Encryption License

2. Click "Data Encryption" and select DTLS license if encryption of client data is required (optional).	
Part number	**Description**
LIC-C9800-DTLS-K9	Cisco Catalyst 9800-CL Wireless Controller DTLS license

Table 52. Software image

3. Click "Software" and choose one of the following software images.	
Part number	**Description**
SC9800CLTARK9-xxxx	Cisco Catalyst 9800-CL Wireless Controller – ENFV
SC9800CLOVAK9-xxxx	Cisco Catalyst 9800-CL Wireless Controller – VMware ESXi
SC9800CLQCOK9-xxxx	Cisco Catalyst 9800-CL Wireless Controller – KVM
SC9800CLAMIK9-xxxx	Cisco Catalyst 9800-CL Wireless Controller – AWS

(xxxx = current version of software installed at factory)

After submission you will get an eDelivery Order Notification email.

7. After placing your order on CCW, do one of the following, based on your software selection in step 3.

- Private cloud

  ◦ Go to software.cisco.com.

  ◦ Download the appropriate image as selected in CCW.

- Public cloud

  ◦ Go to AWS Marketplace, and search for "C9800-CL."

  ◦ Continue to subscribe and instantiate the C9800 wireless controller for AWS.

Catalyst 9800 SD-Access embedded wireless ordering steps

8. Prerequisite: Customer has or will buy a Cisco Catalyst 9300, 9400 or 9500 Series Switch and the required Cisco DNA Advantage or Cisco DNA Essentials licenses.

9. Prerequisite: Customer has or will buy Cisco access points with a Cisco DNA Advantage or Cisco DNA licenses for each access point.

   1. Navigate to the Cisco Catalyst 9300, 9400 or 9500 downloads section on software.cisco.com.

   2. Download the "C9800-SW" sub-package.

   3. Install the sub-package on the Cisco Catalyst 9300, 9400 or 9500 Series Switch.

Cisco Embedded Wireless Controller (EWC) on Catalyst 9100 Access Points ordering steps

1. Select the access point model based on requirements and as per the correct country's regulatory domain.

EWC is only available for Cisco Catalyst 9130, 9124, 9120, 9115, and 9105.

Table 53. Ordering steps for Embedded Wireless Controller on Cisco Catalyst Wi-Fi 6 access points

AP part number	Description
C9130AXI-EWC-x	Cisco Catalyst 9130AXI Access Point, internal antennas; 802.11ax; 8x8:8 MIMO
C9130AXE-EWC-x	Cisco Catalyst 9130AXE Access Point, external antennas; 802.11ax; 8x8:8 MIMO
C9120AXI-EWC-x	Cisco Catalyst 9120AXI Access Point, internal antennas; Wi-Fi 6; 4x4:4 MIMO
C9120AXE-EWC-x	Cisco Catalyst 9120AXE Access Point, external antennas; Wi-Fi 6; 4x4:4 MIMO
C9120AXP-EWC-x	Cisco Catalyst 9120AXP Access Point, external antennas; professional install; Wi-Fi 6; 4x4:4 MIMO
C9115AXI-EWC-x	Cisco Catalyst 9115AXI Access Point, internal antenna; Wi-Fi 6; 4x4:4 MIMO
C9115AXE-EWC-x	Cisco Catalyst 9115AXE Access Point, external antenna; Wi-Fi 6; 4x4:4 MIMO
C9105AXI-EWC-X	Cisco Catalyst 9105AX Access Point, internal antenna; ceiling mount, Wi-Fi 6; 2x2:2 MIMO
C9124AXI-EWC-X	Cisco Catalyst 9124AX Outdoor Access Point, internal omnidirectional antenna; Wi-Fi 6; 4x4:4 MIMO

AP part number	Description
C9124AXD-EWC-X	Cisco Catalyst 9124AX Outdoor Access Point, internal directional antenna; Wi-Fi 6; 4x4:4 MIMO
C9124AXE-EWC-X	Cisco Catalyst 9124AX Outdoor Access Point, external antenna; Wi-Fi 6; 4x4:4 MIMO

2. License-free for single-site management up to 100 APs when using Dashboard/Mobile App. For this option, use Cisco DNA Opt-Out when ordering EWC APs

   For multi-site management a Cisco DNA license is required. Select your Cisco DNA license and subscription duration from the following options.

   Cisco DNA licenses come in two licensing tier options:

   - Essentials (-E) - AIR-DNA-E.

   - Advantage (-A) - AIR-DNA-A.

When ordering the EWC on Catalyst 9100, one of the following Cisco DNA options must be selected in 3-year, 5-year, or 7-year subscription terms:

Table 54.   EWC licensing options

Cisco DNA part number	Subscription option	Description
AIR-DNA-E	**AIR-DNA-E-3Y**	Cisco DNA Essentials license with 3-year subscription
	AIR-DNA-E-5Y	Cisco DNA Essentials license with 5-year subscription
	AIR-DNA-E-7Y	Cisco DNA Essentials license with 7-year subscription
AIR-DNA-A	**AIR-DNA-A-3Y**	Cisco DNA Advantage license with 3-year subscription
	AIR-DNA-A-5Y[*]	Cisco DNA Advantage license with 5-year subscription (**default option**)
	AIR-DNA-A-7Y	Cisco DNA Advantage license with 7-year subscription

[*] Note: AIR-DNA Advantage with a 5-year subscription option is selected by default.

Note: Some components are available as a "configurable" option or as a "spare."

- A "configurable" option ships in the same main box as the access point. For example, AIR-MNT-VERT1 is a "configurable" option and, if ordered, is shipped with the access point in the same box.

- A "spare" option is denoted with an equal (=) sign at the end of the part number. For example, AIR-MNT-ART1 = is a "spare" and, if ordered, is shipped in separate packaging.

3. Select 2.4/5 GHz dual-band external antennas (applicable if the C9130 or C9120 or C9115 external antenna version of the access point is selected).

Table 55. Antenna ordering steps

Antenna part number	Description
C-ANT9101=	2.4/5/6 GHz Ceiling mount omni antenna, 8-port, DART, Self ID
C-ANT9102=	2.4/5/6 GHz Multi mount omni antenna, 8-port, DART, Self ID
C-ANT9103=	2.4/5/6 GHz Directional antenna, 8-port, DART, Self ID
AIR-AP-BRACKET-9=	C9130AXE antenna bracket
AIR-ANT2524DW-R	Cisco Aironet dual-band dipole antenna; White; Peak Gain 2 dBi at 2.4. GHz and 4 dBi at 5 GHz
AIR-ANT2535SDW-R	Cisco Aironet short dual-band omni antenna, Peak Gain 3 dBi at 2.4. GHz and 5 dBi at 5 GHz
AIR-ANT2524DG-R	Cisco Aironet dual-band dipole antenna; Grey; Peak Gain 2 dBi at 2.4. GHz and 4 dBi at 5 GHz
AIR-ANT2524DB-R	Cisco Aironet dual-band dipole antenna; Black; Peak Gain 2 dBi at 2.4. GHz and 4 dBi at 5 GHz
AIR-ANT2524DW-RS	Cisco Aironet dual-band dipole antenna; White; Peak Gain 2 dBi at 2.4. GHz and 4 dBi at 5 GHz
AIR-ANT2535SDW-RS	Cisco Aironet short dual-band omni antenna, Peak Gain 3 dBi at 2.4. GHz and 5 dBi at 5 GHz
AIR-ANT2524V4C-RS=	Cisco Aironet omni antenna, ceiling mount, Peak Gain 2 dBi at 2.4. GHz and 4 dBi at 5 GHz
AIR-ANT2544V4M-RS=	Cisco Aironet omni antenna, wall/pole mount, Peak Gain 2 dBi at 2.4 GHz and 4 dBi at 5 GHz
AIR-ANT2566P4W-RS=	Cisco Aironet patch antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz
AIR-ANT2566D4M-RS=	Cisco Aironet directional antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz
AIR-ANT2513P4M-NS=	Cisco Aironet directional antenna, wall/pole mount, Peak Gain 13 dBi at 2.4 GHz and 13 dBi at 5 GHz
AIR-ANT2566P4W-DS=	Cisco Aironet patch antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz, 4-port DART connector
AIR-ANT2566D4M-DS=	Cisco Aironet directional antenna, wall/pole mount, Peak Gain 6 dBi at 2.4 GHz and 6 dBi at 5 GHz, 4-port DART connector

4. Select 2.4- and 5-GHz dual-band external configurable or spare antennas (applicable if C9124AXE access point is selected).

Table 56. Antenna type selection

Part number	Generation	Qty	Description
AIR-ANT2568VG-NS	SIA	4	2.4GHz 6dBi / 5GHz 8dBi Omnidirectional Antenna, Connectors N-Male
AIR-ANT2547VG-NS	SIA	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2568VG-NS=	SIA	4	2.4GHz 6dBi / 5GHz 8dBi Omnidirectional Antenna, Connectors N-Male

Part number	Generation	Qty	Description
AIR-ANT2547VG-NS=	SIA	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2588P4M-NS=	SIA	1	2.4GHz 8dBi / 5GHz 8dBi 4-Element Dual-Polarized Patch Antenna, Connectors N-Female Bulkhead(4x RF Coaxial Cable needed)
AIR-ANT2513P4M-NS=	SIA	1	2.4GHz 13dBi / 5GHz 13dBi Dual-Band Polarization Diverse Patch Array Antenna, Connectors N-Female Bulkhead(4x RF Coaxial Cable needed)
AIR-ANT2547V-N=	Legacy	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2547VG-N=	Legacy	4	2.4GHz 4dBi / 5GHz 7dBi Omnidirectional Colinear Array Antenna, Connectors N-Male (Grey Color)
AIR-ANT2588P3M-N=	Legacy	1	2.4GHz 8dBi / 5GHz 8dBi 3-Element Dual-Polarized Patch Antenna, Connectors N-Female Bulkhead(3x RF Cable Coaxial needed)
AIR-ANT2450V-N=	Legacy	4	2.4GHz 5dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2480V-N=	Legacy	4	2.4GHz 8dBi Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT5180V-N=	Legacy	4	5GHz 8dBi 2-Element Omnidirectional Colinear Array Antenna, Connectors N-Male
AIR-ANT2513P4M-N=	Legacy	1	2.4GHz 13dBi / 5GHz 13dBi Dual-Band Polarization Diverse Patch Array Antenna, Connectors N-Female Bulkhead(4x RF Coaxial Cable needed)

5. RF Cables and Lightning Arrestor (applicable if the C9124 access point is selected, to be ordered separately, as per the requirement)

Table 57. RF Cable and Lightning Arrestor options

Part number	Description
AIR-CAB005LL-N=	RF Cable, 5 ft Low-loss, N Connectors
AIR-CAB010LL-N=	RF Cable, 10 ft Low-loss, N Connectors
AIR-ACC245LA-N	Lightening Arrestor (If C9124AXE is connected to remote antenna through cable)

6. Select access point mounting brackets (applicable if the C9130 or C9120 or C9115 or C9105 access point is selected).

Table 58. Bracket options

Part number	Description
AIR-AP-NO-BRACKET	Select this option if no bracket is required
AIR-AP-BRACKET-1	Low-profile access point mounting bracket, default option

Part number	Description
AIR-AP-BRACKET-2	Universal bracket for access point mounting
AIR-AP-BRACKET-W4	Bracket for 9105w access point wall mounting
AIR-AP-BRACKET-8	Bracket for 9105i access point mounting

7. Select access point mounting brackets. (applicable if the C9124 access point is selected).

Table 59. Bracket options

Part number	Description
AIR-AP-NO-BRACKET	Select this option if no bracket is required
AIR-MNT-VERT1	Vertical mounting bracket for Cisco Catalyst 9124AXD/AXE access point, will be option in CCW
AIR-MNT-VERT1=	Vertical mounting bracket for Cisco Catalyst 9124AXD/AXE access point
AIR-MNT-ART1=	Articulating mounting bracket for Cisco Catalyst 9124AXD access point
AIR-MNT-HORZ1=	Horizontal mounting bracket for Cisco Catalyst 9124AXI/AXD access point
AIR-MNT-VERT2=	Vertical mounting bracket for Cisco Catalyst 9124AXD/AXE access point with AC/DC PSU
AIR-MNT-STRAND1=	Strand mounting bracket for Cisco Catalyst 9124AXI/AXD access point

8. Select ceiling grid clips (applicable if the C9130 or C9120 or C9115 or C9105 access point is selected).

Table 60. Ceiling clip options

Part number	Description
AIR-AP-T-RAIL-R	Ceiling grid clip (recessed mounting); this is the default option
AIR-AP-T-RAIL-F	Ceiling grid clip (flush mounting)
AIR-CHNL-ADAPTER	Optional adapter for channel-rail ceiling grid profile

9. Select the access point powering options (applicable if the C9130 or C9120 or C9115 or C9105 access point is selected, to be ordered separately, as per the requirement).

Table 61. Power options

Source	Description
AIR-PWRINJ6=	802.3at Cisco Power Injector 802.3af
AIR-PWRINJ5=	Cisco Power Injector
PoE+ via switch port	Any 802.3at (30.0 W) compliant switch port

10. Select the access point powering options (applicable if the C9124 access point is selected, to be ordered separately, as per the requirement).

The Catalyst 9124AX Series Access Points can be powered by multiple sources: AC, DC, or Power over Ethernet (PoE). For AC powering, an external AC-to-DC power adapter is required. For DC powering, a 2-pin DC connector is included with every access point. The access point can also be powered by Cisco Universal Power over Ethernet (Cisco UPOE) or PoE+ (802.3at) directly from a switch or power injector.

Table 62. Power source

Part number	Description	Use case
AIR-PWRINJ-60RGD1=	Power injector, 60W, outdoor, North America plug	Outdoor-rated 60W power injector with North American AC plug
AIR-PWRINJ-60RGD2=	Power injector, 60W, outdoor, un-connectorized	Outdoor-rated 60W power injector, unterminated AC cable for international use
AIR-PWRINJ-60-PMK=	Pole mount kit for AIR-PWRINJ-60	Required for pole mounting for AIR-PWRINJ-60RGD1= or AIR-PWRINJ-60RGD2=
AIR-PWRINJ6=	Power injector, 802.3at, indoor	Indoor-rated, 802.3at-compliant power injector

Note: Please check access point data sheets for power requirements. If AIR-PWRINJ5 is used, the access point will work with reduced features. For more details, refer to the respective access point data sheet.

11. Catalyst 9124AX Series outdoor access points support fiber backhaul.

The SFP port is built into the access point, but the mechanical interface is external to the access point.

A special SFP adapter/gland kit is needed to interface the fiber cable to the access point.

Table 63. Adaptor options

Adaptor Part number	Description	Use case
AIR-ACC-KIT1=	Accessory kit for Catalyst 9124AX	Contains 5x SFP glands
GLC-LX-SM-RGD	1000BASE-LX single-mode rugged SFP	Long-distance fiber backhaul on single-mode fiber
GLC-SX-MM-RGD	1000BASE-SX multi-mode rugged SFP	Shorter-distance fiber backhaul on multimode fiber
GLC-T-RGD	1000BASE-T SFP, industrial temp	GE electrical interface for bridging wired clients such as video cameras or switches

12. Accessories (applicable if the C9124 access point is selected, to be ordered separately, as per the requirement).

Table 64. Accessory options

Accessories Part number	Description
AIR-ACC-KIT1=	Accessory kit for Catalyst 9124AX (5x ethernet, 2 dust cap, ground lug, DC plug kit)
C9124-CVR1=	Paintable cover for Catalyst 9124AX
AIR-SFP-KIT1=	SFP installation kit for Catalyst 9124AX
AIR-ACC-PS-MNT1=	AC/DC adapter mount bracket for AIR-MNT-HORZ1=

Default accessories shipped with the box

C9800-L accessories kit

74-1151990-XX	TPASY WIRELESS MECHANICAL ACCESSORY KIT
78-101471-XX	CDOC; PNTR CARD C9800-L

Figure 6.
Components shipped with the controllers

C9800-40 accessories kit

69-1937-01_C0	MECHKIT, MOUNTING BRACKETS,1RU
47-20184-01_A0	LBL, EPUP, 10YR, China RoHS
72-4334-02_B0	CABLE, ROUND, RJ45 TO D9 FEMALE,3000mm,FTP,SERIAL
79-0087-01_A0	STRAP, DISPOSABLE ESD WRIST, CLIP TERMINATION
69-2016-01_A0	MECHKIT, CABLE RETAINER, 1RU, JACKPOT, MCP
78-21649-xx	CDOC; PNTR_CARD
502-00275-01_A0	PKG, BAG,10"X15",2MIL, PE, NC

C9800-80 accessories kit

32-0629-01 (Qty:2pcs)	LUG TWO HOLE#6AWG#10 STUD BLUE
48-0700-01 (Qty:4pcs)	SCR, M, THS, PH10-32X038" L, ZNwPCH
72-4334-02_B0	CABLE, ROUND, RJ45 TO D9 FEMALE,3000mm,FTP,SERIAL
78-21649-xx	CDOC; PNTR_CARD
79-0087-01_A0	STRAP, DISPOSABLE ESD WRIST, CLIP TERMINATION
502-00275-01_A0	PKG, BAG,10"X15",2MIL, PE, NC

Licensing

The Cisco Catalyst 9800 Series Wireless Controllers require mandatory Smart Licensing. This provides ease of use for Cisco DNA license management, consumption, and tracking.

No licenses are required to boot up a **Cisco Catalyst 9800 Series Wireless Controller**. However, in order to connect any access points to the controller, Cisco DNA licenses are required. Each access point that connects to the wireless controller requires a Cisco DNA license to be entitled to connect. See Figure 9.
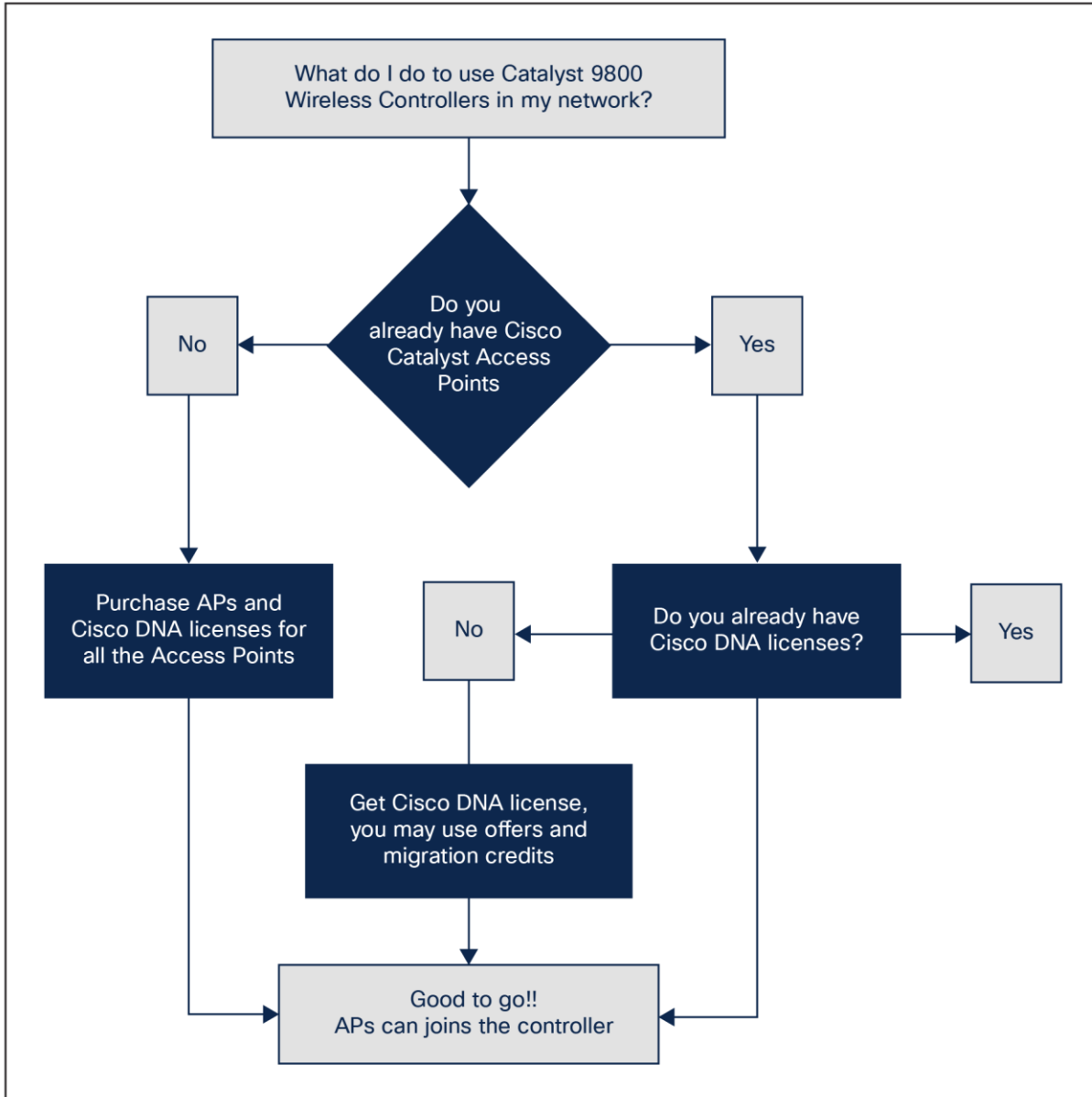
Figure 7.
Cisco DNA license entitlement steps

Two modes of licensing are available:

- Cisco Smart Licensing is a flexible licensing model that provides you with an easier, faster, and more convenient way to purchase and manage software across the Cisco portfolio and across your organization. And it's secure, you control what users can access. With Smart Licensing you get:

  ◦ Easy Activation: Smart licensing establishes a pool of software licenses that can be used across the entire organization-no more PAKs (Product Activation Keys).

  ◦ Unified Management: My Cisco Entitlements (MCE) provides a complete view into all of your Cisco Products and services in an easy-to-use portal, so you always know what you have and what you are using.

  ◦ License Flexibility: Your software is not node-locked to your hardware, so you can easily use and transfer licenses as needed.

- To use Smart Licensing, you must first set up a Smart Account on Cisco Software Central (software.cisco.com).

For more detailed overview on Cisco Licensing, go to cisco.com/go/licensingguide.

- SLR mode.

  ◦ Specific License Reservation (SLR) is a feature used in highly secure networks. It provides a method for customers to deploy a software license on a device (product instance) without communicating usage information to Cisco. There will be no communication with Cisco or a satellite. A license is reserved for every controller. It is node-based licensing.

Four levels of license are supported on the **Cisco Catalyst 9800 Series Wireless Controllers**. The controllers can be configured to function at any one of the four levels.

- Cisco DNA Essentials: At this level the Cisco DNA Essentials feature set will be supported.

- Cisco DNA Advantage: At this level the Cisco DNA Advantage feature set will be supported.

- NE: At this level the Network Essentials feature set will be supported.

- NA: At this level the Network Advantage feature set will be supported.

  ◦ For customers who purchase Cisco DNA Essentials, Network Essentials will be supported and will continue to function even after term expiration. And for customers who purchase Cisco DNA Advantage, Network Advantage will be supported and will continue to function even after term expiration.

  ◦ Initial bootup of the controller will be at the Cisco DNA Advantage level.

Smart Accounts

A [Smart Account](#) is a central data repository that provides visibility and access control to all the Cisco software licenses and entitlements across an organization. Smart Accounts allow customers to store, manage, and move assets across locations and devices and begin to use them immediately. Smart Accounts are required for enabling Cisco Smart Software Licensing.

After a Smart Account has been set up, customers have the flexibility to create subaccounts (virtual accounts) to help manage licenses for departments, areas, or locations within their organization. Licenses can be pooled within virtual accounts as needed. Smart Accounts support role-based user access controls, which allow the delegation of authority to account administrators at the Smart Account level or at the virtual account level. In addition, customers can assign partner visibility and management rights to their virtual or enterprise-level accounts.

After purchasing a Cisco Catalyst controller up to day 1:

1) Create a Smart Account.

   a) Please use the following link to create a Smart Account:

      https://software.cisco.com/software/company/smartaccounts/home#accountcreation-account.

   b) Go to Cisco Software Central at software.cisco.com.

   c) An editable profile appears.

   d) An email is automatically sent to the customer Smart Account administrator.

2) Register the Cisco Catalyst controller using the Smart Account.

   Existing customers:

   a) Deposit existing Cisco DNA licenses, if any, into the Smart Account.

   b) Leverage offers to migrate existing perpetual licenses to Cisco DNA licenses.

   New customers:

   a) Purchase Cisco DNA licenses for access points connecting to the Cisco Catalyst controller.

3) Configure the license level on the box after bootup.

Additional information

site featuring Smart Account overviews and training sessions: Navigate to the Smart Account Resources panel on the page.

Smart Licensing

Smart Licensing is a cloud-based approach to licensing. The solution simplifies the purchase, deployment, and management of Cisco software assets. Entitlements are immediately deposited into the customer's virtual account for use. This eliminates the need to install license files on every device. Products that are smart enabled communicate with Cisco to report license consumption. The primary location for managing product registration and monitoring Smart License consumption is the Cisco Smart Software Manager. License ownership and consumption are readily available to help customers make better purchase decisions based on consumption or other business needs.

Smart Licensing for Cisco Catalyst 9800 Series Wireless Controllers is enabled starting with the 16.10.1 release.

Cisco enterprise wireless licenses

Tables 64 and 65 list the product IDs for ordering Cisco DNA licenses for access points.

Table 65. A la carte part numbers for Cisco DNA for access points

License type	Product ID	Description
A la carte part numbers		
Wireless Cisco DNA Essentials	AIR-DNA-E-3Y (greenfield) AIR-DNA-E-5Y (greenfield) AIR-DNA-E-7Y (greenfield)	**Wireless Cisco DNA Essentials Term License, per AP** Wireless Cisco DNA Essentials 3-year term license, per AP Wireless Cisco DNA Essentials 5-year term license, per AP Wireless Cisco DNA Essentials 7-year term license, per AP
Wireless Cisco DNA Advantage	AIR-DNA-A-3Y (greenfield) AIR-DNA-A-5Y (greenfield) AIR-DNA-A-7Y (greenfield)	**Wireless Cisco DNA Advantage Term License, per AP** Wireless Cisco DNA Advantage 3-year term license, per AP Wireless Cisco DNA Advantage 5-year term license, per AP Wireless Cisco DNA Advantage 7-year term license, per AP

Cisco Software-Defined Access (SD-Access)

SD-Access enables policy-based automation from edge to cloud with foundational capabilities using controller-based architecture, including design with validated templates, simplified device deployment, unified management of wired and wireless, network virtualization with segmentation, group-based policies, and context-based analytics.

SD Access can be enabled via Cisco DNA Advantage. The solution needs Cisco Identity Services Engine (ISE) licenses, which can be bought a-la-carte or through the Cisco DNA Expansion Pack. The Cisco DNA Expansion Pack is a flexible way to purchase Cisco ISE, Cisco Spaces, Cisco ThousandEyes, Cisco Secure Network Analytics (Stealthwatch) and other licenses, appliances, and services to enhance your Cisco Networking solutions.

Services and warranty

The Solution Support service option is strongly recommended; it delivers centralized support across the Cisco and solution partner products in your deployment and resolves complex issues an average of 43 percent faster than traditional support. Additional product-level hardware support options are available: Cisco Smart Net Total Care Service and Partner Support Service. Software support for Cisco DNA is included in your Cisco DNA subscription. A 1-year limited warranty is included for the hardware.

It is strongly recommended that the term of the hardware support contract match the software subscription license term to avoid any service support gaps for the duration of the term. Figures 12 and 13 describe the various service options for the Cisco Catalyst 9800 Series Wireless Controllers.

Cisco Technical Services Features comparison: Wireless					
1. Applicable to most Cisco Aironet Access Points and Controller hardware. Exceptions may apply. 2. Partner Support Service (PSS) available from partners with customized deliverables for the hardware only. The Partner must route all Cisco DNA subscription calls to Cisco. 3. Customer must purchase support on the Controller and AP HW to receive OS updates included with the Cisco DNA embedded software.					
Services Features	Warranty	Partner Support Service[2]	Embedded Support (software)	Cisco Smart Net Total Care	Cisco Solution Support with SNTC
Warranty: 1 year Hardware replacement; local business hours, 8x5 (next business day where available)[1]	●				
Partner first line of response; Cisco second for hardware issues		●			
Global 24x7 product-level technical support			●	●	●
Cisco DNA Essentials/Cisco DNA Advantage/Cisco DNA Premier Advantage software updates and upgrades			●	●	●
24-hour access to Cisco® online resources			●	●	●
AP and Controller operating system software updates and upgrades[3]				●	●
Hardware replacement (2-and 4-hour, next business day)				●	●
Proactive diagnostics/immediate alerts on devices through Cisco Smart Call Home				●	●
Web-based user community for self-service support of smart capabilities				●	●
Primary point of contact with solution-level expertise					●
Accountability for issue resolution, no matter where it resides					●
Coordination between Cisco TAC and solution partner product support teams					●
Case management from first call to resolution					●
SLO30+prioritized case handling					●
Proactive support to identify and mitigate potential issues or resolve					●

Figure 8.
Cisco Technical Services features comparison for 9800 Series controllers

Cisco Technical Services Features comparison: Wireless	1. Applicable to most Cisco Aironet Access Points and Controller hardware. Exceptions may apply. 2. Partner Support Service (PSS) available from partners with customized deliverables for the hardware only. The Partner must route all Cisco DNA subscription calls to Cisco. 3. Customer must purchase support on the Controller and AP HW to receive OS updates included with the Cisco DNA embedded software.		
Services Features	Warranty	Partner Support Service[2]	Embedded Support (software)
Warranty: Cisco warrants that the Software will substantially conform to the applicable Documentation for the longer of (i) nintey (90) days following the data the software is that https://www.cisco.com/go/warranty.	●		
Partner first line of response; Cisco second for hardware issues		●	
Global 24x7 product-level technical support – Cisco Support Service			●

Figure 9.
Cisco Technical Services feature comparison for Cisco Catalyst 9800-CL Wireless Controller for Cloud

Cisco 1-year limited hardware warranty terms

The following are terms applicable to the hardware warranty. The embedded software is subject to the Cisco End User License Agreement (EULA) (link available below) and/or any Supplemental End User License Agreement (SEULA) or specific software warranty terms for additional software products loaded on the device.

Duration of hardware warranty

One (1) year.

Replacement, repair, or refund procedure for hardware

Cisco or its service center will use commercially reasonable efforts to ship a replacement part within ten (10) working days after receipt of the RMA request. Actual delivery times may vary depending on customer location.

Cisco reserves the right to refund the purchase price as its exclusive warranty remedy.

Restrictions. This limited warranty does not apply if the hardware (a) has been altered, except by Cisco or its authorized representative; (b) has not been installed, operated, repaired, or maintained in accordance with instructions supplied by Cisco; (c) has been subjected to abnormal physical or electrical stress, abnormal environmental conditions, misuse, negligence, or accident; or (d) is licensed for beta, evaluation, testing, or demonstration purposes.

Return materials authorizations

To receive a Return Materials Authorization (RMA) number:

- Please contact the party from whom you purchased the product.
- If you purchased the product directly from Cisco, call Cisco TAC by phone to start a validation of your warranty claim.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL: https://www.cisco.com/go/DirTAC.

If you are instructed to return your product under the terms of your warranty and are issued an RMA number, follow these steps:

- Return the unit to Cisco or your network supplier as instructed.

- Your unit will be replaced per the applicable warranty guidelines.

- If you cannot locate your network supplier, you may return the unit to Cisco.

IMPORTANT NOTE: All material returned to Cisco must be accompanied by an RMA number. This number is necessary so that the factory can ensure proper tracking and handling of returned material.

If you do not have an RMA number, Cisco reserves the right to refuse receipt of returned units.

Service assistance

If you have a Cisco Smart Net Total Care Service program or other maintenance agreement, request service under your agreement. You can purchase maintenance contracts from your local network supplier or from Cisco directly.

Call the Cisco TAC line if you have contracted for this service. TAC support is not available as part of the warranty alone.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to https://www.cisco.com/go/DirTAC.

Online resources

- Cisco End User License Agreement (EULA)

  The Cisco EULA governing software use is available at:

  https://www.cisco.com/go/softwareterms.

- Warranty online

  Product warranty terms and other information applicable to Cisco products are available at:

  https://www.cisco.com/go/warranty.

Consult the above website or your Cisco sales and service representative for a complete listing of Cisco products and applicable warranties.

Important links

Smart Accounts: All you need to know

- [Operations Exchange: Partner and distributor software training:](#) A comprehensive list of external software training resources. Detailed training modules for ordering and license management.

- [Smart Account Leading Practices for Customers:](#) A leading practices guide that can help customers decide how to structure their Smart Accounts or if they need multiple Smart Accounts.

- [Smart Account Decision Tree:](#) A short branching survey that helps partners and customers understand what types of Smart Accounts to create.

- [Cisco Smart Accounts site:](#) The primary Cisco.com site for Smart Accounts.