AireOS to Catalyst 9800 Wireless Controller Feature Comparison Matrix

This document lists support information for various AireOS features mapped to Cisco Catalyst 9800 Wireless Controller in Cisco IOS XE releases.

This document is updated for Cisco IOS XE Amsterdam 17.3.1.

Supported Features

		PI	atform
Category	Feature Name	AireOS	Catalyst 9800
Infrastructure	Link Layer Discovery Protocol (LLDP) support	YES	16.12.1
	CAPWAP Support	YES	16.10.1
	CAPWAP data keep-alive support	YES	16.10.1
	VLAN tagging support for CAPWAP packets	YES	16.10.1
	TACACS+ support	YES	16.10.1
	LSC	YES	16.10.1
	AP image pre-download	YES	16.10.1
	Support for interface groups	YES	16.10.1
	SSH File Transfer Protocol (SFTP)	YES	16.10.1
	Encryption of Neighbor Discovery Packet (NDP) packets	YES	16.10.1
	IPv6 - Neighbor Discovery Protocol (NDP) proxy and rate limit of IPv6 packets	YES	17.2.1
	Support for APs behind NAT	YES	16.10.1
	DHCP Proxy	YES	16.10.1
	DHCP opt 60 + vendor name	YES	16.10.1
	DHCP opt 82 (AP_Eth_MAC)	YES	16.10.1
	DHCP opt 82, sub-option 5 and sub-option 151/152	YES	16.12.1
	VLAN select per DHCP dirty	YES	16.10.1
	LAG	YES	16.10.1
	RADIUS and TACACS+ DNS	YES	16.12.1
	RADIUS server overwrite interface	YES	16.10.1
	RADIUS selection by realm	YES	16.10.1
	Support for NTP Authentication	YES	16.10.1
	Load balancing per ethernet port utilization	YES	16.10.1
	Support for WLC webadmin SHA256 self-signed certificate	YES (8.10)	16.10.1
	Ability to upload the output of the show run- config to a FTP server by CLI	YES	16.10.1
	Can use Ethernet VLAN tag on AP	YES	16.10.1
	New TACACS+ command sets	YES	16.10.1

	Ability to choose if local management users are Telnet capable or not	YES	16.10.1
	Ping from dynamic interface (extended ping)	YES	16.10.1
	Out of the box config persistent option	YES	16.10.1
	Ability to enable/disable AUX ethernet port on AP 2700	YES	16.10.1
	CLI addition - config ap cert-expiry-ignore {mic ssc} enable	YES	16.10.1
	Support for management user session accounting records	YES	16.10.1
	Graphical User Interface (GUI) Service Port SSO	YES	16.10.1
	WLC Service Port support with SSO enabled	YES	16.10.1
	IPv6 support on 802.11ac Wave 2 APs	YES	16.10.1
	Ability to disable syslog server per AP and/or global	YES	16.10.1
	Maximum number of characters of password increased from 24 to 127	YES	16.10.1
	Support for Secure Shell (SSH) standard login interface	YES	16.10.1
	Sending access points events through radius accounting	YES	17.1.1
	per AP group NTP server	YES	16.10.1
	Login Banner File	YES	16.10.1
	Telnet disabled by default	YES	16.10.1
	Configurable timer when AP tries to join primary/secondary/tertiary WLC (Primed Join timeout)	YES	16.10.1
	Ability to clear internal DHCP lease	YES	16.10.1
	Ability to disable old crash files from WLC (clear crash-files)	YES	16.10.1
	DHCP opt 82 as American Standard Code for Information Interchange (ASCII) instead of binary	YES	16.10.1
	IPv6 - Block of Router Advertisement (RA) from controller and AP	YES	16.10.1
	IPv6 address visibility per client	YES	16.10.1
	Extra DHCP opt 82 attributes	YES	16.10.1
	Ability to backup 3rd party certificates from WLC	YES	16.10.1
	Ping with source interface	YES	16.10.1
	Ability to enable Telnet/SSH for all APs	YES	16.10.1
	Link Aggregation (LAG) in Transition support	YES	16.10.1
	Network Time Protocol (NTP) version 4 support	YES	16.10.1
Security &	802.1x + web authentication support	YES	16.10.1
Authentication	Conditional Web Redirect with 802.1x Authentication	YES	16.10.1
	Identity Pre-Shared Key (PSK)	YES	16.10.1

Identity PSK peer2peer blocking	YES	17.1.1
WPA3 support	YES	16.12.1
Local Authentication	YES	16.10.1
Local Web Authentication / Central Web Authentication Support (LWA/CWA)	YES	16.10.1
Web Auth on MAC filter failure	YES	16.10.1
		16.10.1
Support for pre-auth ACL to block DNS for web authenticated clients	YES	16.10.1
Support for Captive portal bypass	YES	16.10.1
CNAME - IPv6 Support (PreAuth ACLs with IPv6)	YES	16.10.1
User idle timeout per WLAN	YES	16.10.1
User idle threshold per WLAN	YES	16.10.1
802.11w - MFP	YES	16.10.1
802.11k	YES	16.10.1
Sleeping client support on web passthrough wLAN	YES	16.10.1
Support for TLSv1.2 for web authentication and WebAdmin	YES	16.10.1
Wired client Single Sign On (SSO)	YES	16.12.1
Support to enable Network Admission Control- RADIUS (NAC-RADIUS) on Pre-Shared Key (PSK) wireless network with CWA	YES	16.10.1
Flexibility for Cisco Centralized Key Management (CCKM) max timestamp validation	YES	16.10.1
Apple Captive Bypass for IOS 7	YES	16.10.1
Ability to change the SSID/Profile Name	YES	16.10.1
Wi-Fi Protected Access/TKIP only configurable through CLI	YES	16.10.1
Configurable webauth required timeout	YES	16.10.1
WLC 5520/8510/8540 - Support Local EAP	YES	16.10.1
WLC 5520/8510/8540 - Support Wired Guest access	YES	16.12.1
TKIP Support for APs 1810/1830/1850/2800/3800	YES	16.10.1
ISE Simplification - DayO RADIUS ISE default configuration	YES	16.10.1
ISE Simplication - Default RADIUS configuration for ISE server	YES	16.10.1
Option to disable webauth sucess page	YES	16.10.1
Splash page configuration per AP group (So same SSID can have multiple splash pages)	YES	16.10.1
Enhanced Open support	YES	17.1.1
Temporal Key Integrity Protocol (TKIP) support for APs 2800/3800	YES	16.10.1
Captive portal bypass per Service Set Identifier (SSID)	YES	16.10.1
AP Authorization	YES	16.10.1

	Can specify delimiter for MAC address in auth/acct access-request	YES	16.10.1
	MAC addresses in called-station-id and calling- station-id now as lower case	YES	16.10.1
	Attributes for Called Station ID	YES	16.10.1
	ISE - Support for Guest Originating URL	YES	16.10.1
	Custom Network access server identifier (NAS-ID) for Remote Authentication Dial-In User Service (RADIUS) accounting	YES	16.10.1
	Configurable EAPOL-key timeout for FlexConnect Groups - local authentication	YES	16.10.1 (Global level knob)
	Wave 2 APs - Support for Wired 802.1x Extensible Authentication Protocol-Transport Layer Security (EAP-TLS) and Protected EAP (PEAP)	YES	17.2.1
RF & Radio	Band Select	YES	16.10.1
	Band Select mid-RSSI support	YES	16.10.1
	DFS	YES	16.10.1
	RFID tags support	YES	16.10.1
	Coverage Hole Detection per WLAN	YES	16.10.1
	Beamforming (also called ClientLink)	YES	16.12.1
	Manage of Bluetooth Low Energy (BLE) Beacons	YES	16.11.1
	Dynamic Bandwidth Selection (DBS)	YES	16.10.1
	Flexible DFS (Dynamic frequency selection)	YES	16.10.1
	FRA	YES	16.10.1
	Load Balancing	YES	16.10.1
	Off-Channel scan defer	YES	16.10.1
	TPCv1 Channel Aware Mode	YES	16.12.1
	TPC max/min limit	YES	16.10.1
	Ability to set up upper and lower limits on TX power for RRM	YES	16.10.1
	CleanAir	YES	16.10.1
	CleanAir - Event-Driven Radio Resource Management (EDRRM)	YES	16.10.1
	CleanAir - Unclassified Interference Threshold/Trap	YES	16.10.1
	CleanAir - Persistent Device Avoidance	YES	17.1.1
	RF static group leader	YES	16.10.1
	RF Profiles	YES	16.10.1
	Default RF Profiles for High Density	YES	16.10.1
	Dynamic Channel Assignment (DCA) in RF profiles	YES	16.10.1
	Support for HE PHY layer (and new MCS rates)	YES	16.11.1
	Added -R regulatory domain	YES	16.12.1
	Regulatory approval for Chile and Russia	YES	16.12.1
	Dropped channels 120, 124, 116 and 132	YES	17.3.1
	Configuration of ClientLink only through CLI	YES	16.12.1

	Support for -B domain APs	YES	16.12.1
	Introduced -Z domain (Australia and New Zealand)	YES	16.12.1
	Transmit Power Control (TPC) min/max values	YES	16.10.1
	with bands enabled		
	China -H domain migration (allow indoor use of	YES	16.12.1
	5150 MHz to 5350 MHz)		
	Support for -F domain (Indonesia)	YES	16.12.1
	Radio monitor for 80MHz	YES	16.10.1
	Added regulatory domain -S for Hong Kong	YES	16.12.1
	Country code KR is changed to KE (for Korea)	YES	16.12.1
	Country code JP (for Japan) is removed	YES	16.12.1
	Support for -B domain APs	YES	16.10.1
	Regulatory Domain -S change	YES	16.10.1
	AP 3700 - Flexible Antenna port support	YES	17.1.1s
	Support for AP -B domain	YES	16.10.1
	Support of regulatory domain -K for Malaysia	YES	16.10.1
	Command to Configure Smart Dynamic Frequency	YES	16.10.1
	Selection (DFS) (config 802.11h smart-dfs {enable		
	disable})		
	Support for -M regulatory domain in AP Industrial	YES	17.1.1s
	Wireless Local Area Network (IWLAN) 3700		
	Support for -P domain	YES	16.12.1
	Support for -P domain	YES	16.12.1
	DCA algorithm redesigned to prevent pinning and cascading	YES	16.10.1
	Event Driven-Radio Resource Management (ED-	YES	16.10.1
	RRM) triggered by Wi-Fi interference too	125	10.10.1
	Increased Channel and Transmit (Tx) Power	YES	16.10.1
	Support for some countries		
	20/40/80MHz off-channel scan on serving channel	YES	16.12.1
	2800/3800 - Support for Client-Awre Flexible	YES	16.10.1
	Radio Assignment (FRA)		
Mobility	Mobiity - Foreign/Anchor	YES	16.10.1
	Mobility - Symetric tunneling	YES	16.10.1
	Opportunistic Key Caching (OKC) for H-REAP	YES	16.10.1
	groups		
	Roam between WLC for static-IP clients (static-ip	YES	16.10.1
	tunneling)		
	802.11r for AP in local mode (Fast Roaming)	YES	16.10.1
	Optimized roaming	YES	16.10.1
	Optimized roaming + 802.11v	YES	16.10.1
	Seamless roaming with Inter-release controller	YES	16.10.1
	mobility (IRCM)	200	
	Aeroscout removal from MSE	YES	16.12.1
	Rest Application Programming Interface (API)	YES	16.12.1

	support on MSE		
	MSE exposes the RSSI for RFID tags	YES	16.12.1
	Ability to enable/disable Network Mobility	YES	16.10.1
	Services Protocol (NMSP) port (config nmsp		
	service enable/disable)		
Mesh	Mesh Ethernet bridging	YES	16.10.1
	Mesh ethernet VLAN tagging	YES	16.10.1
	Mesh multicast mode for ethernet bridged clients (in/in-out)	YES	16.10.1
	Mesh multicast support for roaming L2/L3	YES	16.10.1
	Mesh limited voice support (indoor)	YES	16.11.1
	Mesh - bridge data rate auto	YES	16.10.1
	Mesh - preferred parent selection	YES	16.10.1
	Mesh - 2.4 GHz as mesh backhaul	YES	16.10.1
	Mesh - Universal client access	YES	16.10.1
	Mesh - Native VLAN not sent to Mesh Access Point (MAP) Ethernet port when VLAN transparent mode enabled	YES	16.10.1
	Mesh LSC authentication (MAC bypass)	YES	16.10.1
	Mesh Daisy Chain	YES	16.10.1
	Mesh - Fast Convergence	YES	16.10.1
	Mesh - Multi-country WLC support for mesh APs	YES	16.10.1
	Mesh - RRM on 5GHz RAP	YES	16.10.1
	Multi Regulatory Domain (Country code) WLC support for Mesh APs	YES	16.10.1
	Mesh Convergence	YES	16.10.1
	Mesh - PSK provision support for Mesh Networks	YES	16.10.1
	Mesh Off Channel background Scanning	YES	16.10.1
	Air Time Fairness (ATF) on mesh	YES	16.10.1
	Dynamic Host Configuration Protocol (DHCP) internal server on Root AP (RAP) (Flex+Bridge AP mode)	YES	16.11.1
	Network Address Translation / Port Address Translation (NAT/PAT) on RAP (Flex+Bridge AP mode)	YES	16.11.1
	AP 3700 - Daisy chain is supported	YES	17.1.1s
	Mesh - Can disable intrusion detection system (IDS) on outdoor Mesh	YES	16.10.1
	Mesh APs can be pinged before they join a controller	YES	16.10.1
	Mesh preferred parent per GUI	YES	16.10.1
	Mesh - 2.4 GHz mesh backhaul for Israel	YES	16.10.1
	Mesh mode and Mesh ethernet bridging support on AP 1560	YES	16.10.1
	Mesh mode on wave 2 APs	YES	17.1.1

Security	Rogue detection per AP	YES	16.10.1
-	Rogue auto-containment level	YES	16.10.1
	Rogue - Minimum RSSI for rogue	YES	16.10.1
	detection/classification		
	Rogue - Rogue detection report interval	YES	16.10.1
	Rogue - Transient Rogue Interval	YES	16.10.1
	Rogue - Rogue AP Ignore List	YES	16.10.1
	Rogue Policy per security level	YES	16.10.1
	Rogue AP validation against AAA server	YES	16.10.1
	Rogue Client Information Detection for Auto Switch Port Trace (SPT)	YES	16.10.1
	WIPS - auto SPT	YES	16.10.1
	wIPS Attack containment	YES	16.10.1
	Wireless Intrusion Prevention System (wIPS)	YES	17.1.1s
	support for 40/80 (MegaHertz) MHz and transmit capability		
	Enhanced wIPS Support for Hyperlocation Module with Advanced Security	YES	17.1.1s
	Password policies (Product Security Baseline [PSB])	YES	16.10.1
	Online Certificate Status Protocol (OCSP)	YES	16.12.1
	Data rate selection for rogue containment	YES	16.10.1
	Validate rogue clients against Mobility Service Engine (MSE)	YES	16.10.1
	Wildcard SSID per rogue policy	YES	16.10.1
	Set rogue policy to delete a rogue from WLC database	YES	16.10.1
	Maximum RSSI for friendly rogue Aps	YES	16.10.1
	TrustSec enhancements	YES	16.10.1
	Support for certificates generated using OpenSSL v1.0	YES	16.10.1
	Rogue enhancement	YES	16.12.1
	Automatically assign number of APs to contain a rogue	YES	16.12.1
	Enhanced rogue containment	YES	16.10.1
Resiliency	HA AP SSO	YES	16.10.1
	HA Client SSO and Redundancy Port (RP) trough L2 switch	YES	16.10.1
	HA SSO - Automatic recover from maintenance mode after network converges	YES	17.1.1
	HA-SSO Configurable keep-alive timers/retries	YES	16.10.1
	HA-SSO default gateway reachability check enhancement	YES	17.1.1
	Internet Protocol security (IPSec) encryption for High Availability (HA)	YES	16.12.1

	Fast AP failover	YES	16.10.1
	HA-SSO bulk sync status	YES	16.10.1
	HA-SSO new debugs/shows	YES	16.12.1
	HA-SSO replace peer Redundancy Management	YES	17.1.1
	Interface (RMI) Internet Control Message Protocol		
	(ICMP) ping with UDP message		
	HA-SSO support for 802.11ac	YES	16.10.1
	HA SSO (HA-SSO) - Traps for events (when WLC	YES	16.10.1
	turns hot standby, bulk synk complete)		
	HA - show redundancy peer-system { statistics	YES	16.10.1
	cpu memory }		
	Ability to disable AP HA Fallback	YES	16.10.1
	HA-SSO Support for internal DHCP server	YES	16.10.1
	HA-SSO Support for sleeping client feature	YES	16.10.1
Flex	H-REAP Local Authentication	YES	16.10.1
	H-REAP groups and local radius server	YES	16.10.1
	H-REAP fault tolerance	YES	16.10.1
	Flexconnect - P2P Blocking	YES	16.10.1
	Flexconnect - FlexConnect efficient AP Upgrade	YES	16.10.1
	Flexconnect - FlexConnect ACLs	YES	16.10.1
	Flexconnect - AAA Override to Assign Dynamic	YES	16.10.1
	VLANs	TL5	10.10.1
	Flexconnect - Fast Roam for Voice Clients	YES	16.10.1
	External Web-Auth for Local Switching	YES	16.10.1
	FlexConnect		
	FlexConnect - Split tunneling	YES	16.10.1
	FlexConnect - 802.11r (Fast Transition) support in	YES	16.10.1
	Central/Local switching		
	FlexConnect - Network Address Translation (NAT)	YES	16.10.1
	and Port Address Translation (PAT) on locally		
	switched WLAN		
	FlexConnect - WGB/Universal WGB support in	YES	16.10.1
	FlexConnect Locally Switched mode		
	FlexConnect - Support for 802.11u (HotSpot 2.0)	YES	16.12.1
	FlexConnect - VLAN-based local and central	YES	16.10.1
	switching		
	Protected Extensible Authentication Protocol	YES	16.10.1
	(PEAP) and Extensible Authentication Protocol-		
	Transport Layer Security (EAP-TLS) for		
	FlexConnect (Local Auth)		
	WLAN to VLAN maps for FlexConnect Groups and	YES	16.10.1
	APs	VEC	16 10 1
	Per client ACL on FlexConnect APs	YES	16.10.1
	QoS AAA Override for FlexConnect Local Switching	YES	16.10.1
	FlexConnect - Client load balancing support	YES	16.10.1

	11w on Flex and Mesh APs	YES	16.12.1
	FlexConnect VideoStream in local switching	YES	16.10.1
	FlexConnect AP joins WLC's multicast group	YES	16.10.1
	FlexConnect proxy ARP	YES	16.10.1
	FlexConnect + Mesh (bridge)	YES	16.10.1
	AVC for FlexConnect	YES	16.10.1
	FlexConnect Group VLAN support	YES	16.10.1
	FlexConnect AAA Override of VLAN name	YES	16.10.1
	Dynamic Bandwidth Selection (DBS) with Flex DFS	YES	16.10.1
	FlexConnect - Support TrustSec	YES	16.10.1
	Flexconnect IPv6 EoGRE Tunnel support	YES	16.12.1
	FlexConnect IPv4 pre-auth DNS ACLs	YES	16.10.1
	VLAN transparent feature bridges all non-defined	YES	16.10.1
	VLANs on flexconnect-mesh	123	10.10.1
	Support for FlexConnect AVC on vWLC	YES	16.10.1
	FlexConnect - Default FlexConnect group	YES	16.10.1
	FlexConnect - AP will only join CAPWAP multicast	YES	16.10.1
	group if it has a centrally switched WLAN		
	Wave 2 APs - Support for FlexConnect Proxy	YES	16.10.1
	Address Resolution Protocol (ARP)		
	Wave 2 APs - Support for FlexConnect limit clients	YES	16.10.1
	per radio / WLAN		
	Wave 2 APs - Support for FlexConnect VLAN name	YES	16.10.1
	Authentication, Authorization, and Accounting		
	(AAA) override		
	Wave 2 APs - Support for Management Frame	YES	16.12.1
	Protection (MFP) (Not supported on 1800 series APs)		
	Support for RADIUS creation within FlexConnect	YES	16.10.1
	groups (CLI changed)	TLS	10.10.1
	FlexConnect on stand-alone can keep performing	YES	16.10.1
	rogue containment	•	
	FlexConnect - Convert AP mode from Local to	YES	16.10.1
	FlexConnect without reboot		
	Proxy ARP support on FlexConnect Local Switching	YES	16.10.1
	802.11ac Wave 2 APs.		
	FlexConnect NAT/PAT support for central DHCP	YES	16.10.1
	on 802.11ac Wave 2 APs		
	Flexconnect AAA Quality of Service (QoS) override	YES	16.10.1
	per client support on 802.11ac Wave 2 APs		
	Wave 2 APs - Support for FlexConnect IPv6 ACL for	YES	16.11.1
Comilar	or web authentication	VEC	10.10.1
Services	Multiple WLANs with the same SSID	YES	16.10.1
	MFP	YES	16.12.1
	Transmission Control Protocol - Maximum	YES	16.10.1

Voice over IP (VoIP) Snooping (SIP voice calls)	YES	17.1.1
Rate shifting	YES	16.10.1
Video/media stream	YES	16.10.1
VLAN select per foreign WLC maps (foreign maps)	YES	16.10.1
IGMP snooping support	YES	16.10.1
Wi-Fi Direct & Peer-to-Peer (P2P) Blocking	YES	16.10.1
Bi-directional rate limit per WLAN/User (bandwidth contract)	YES	16.12.1
Ability to specify name and SSID of AP on RADIUS CallStationID	YES	16.10.1
NAS-ID per interface, WLAN or AP group	YES	16.10.1
Global Positioning System (GPS) support for outdoor	YES	16.10.1
Called Station ID for Accounting	YES	16.10.1
Ethernet Fallback shutdown	YES	16.10.1
HTTPS redirect	YES	16.10.1
Guest-Anchor redundancy	YES	16.10.1
ATF	YES	16.10.1
Support for hyperlocation module	YES	16.10.1
Dynamic Management User Login via AAA Server	YES	16.10.1
Smart Licensing	YES	16.10.1
Layer 3 (L3) Interfaces for tunneling protocols (GRE tunnels)	YES	16.11.1
AP Provisioning PnP	YES	16.10.1
Passpoint 2.0 R2 Certification	YES	16.12.1
URL domain filtering	YES	16.10.1
Fastlane support	YES	16.10.1
Radio Frequency IDentification (RFID) and Wi-Fi tag support	YES	16.10.1
Wi-Fi Alliance Agile Multiband (MBO) support	YES	17.1.1
Password encryption	YES	16.10.1
802.11u (Hotspot 2.0)	YES	17.2.1
Limit connections to 11n clients only	YES	16.12.1
11v support (Directed Multicast Service [DMS] and BSS Max Idle Period)	YES	16.10.1
11r mixed mode support	YES	16.10.1
11v - Basic Service Set (BSS) Transition Management	YES	16.10.1
Adaptive 802.11r	YES	17.1.1
Access Control List (ACLs)	YES	16.10.1
Domain Based Filter ACL	YES	16.10.1
Passive clients	YES	16.10.1
WLAN AAA override - client interface override	YES	16.10.1

Limit number of clients per WLAN	YES	16.10.1
WMM non-compliant U-APSD client support	YES	16.10.1
Sleeping client support	YES	16.10.1
Guest User Management - Client Whitelisting	YES	17.2.1
Client exclusion due to 802.1x timeout	YES	16.10.1
DHCP opt 82 - Can specify the name and SSID of the AP	YES	16.10.1
LDAP support	YES	16.10.1
Secure Lightweight Directory Access Protocol (LDAP)	YES	16.12.1
Multicast - multicast	YES	16.10.1
L3 multicast roaming	YES	16.10.1
VLAN select & L2/L3 multicast optimization	YES	16.10.1
CAPWAPv6 AP multicast mode support	YES	16.10.1
Support for NetFlow protocol	YES	16.10.1
Netflow support on 3rd party NMS	YES	16.10.1
Native Sensor DHCP Support in Local and FlexConnect mode (Device Profiling)	YES	16.10.1
Support for RADIUS Client Profiling	YES	16.10.1
HTTP profiling for local and flex mode (RADIUS profiling)	YES	16.10.1
Ability to update Organizational Unique Identifier (OUI)/Device Profile list	YES	16.10.1
SNMP trap support for client association/disassociation	YES	16.10.1
Flash AP light-emitting diodes (LEDs) via SNMP and GUI	YES	17.3.1
Simple Network Management Protocol (SNMP) over IPSec supported over IPv6 interfaces	YES	17.1.1s
SNMP traps over IPSec supported over IPv6 interfaces	YES	17.1.1s
SNMP traps via SNMPv3	YES	16.10.1
WGB with multiple VLANs	YES	16.10.1
Dynamic Link Exchange Protocol Client Support (DLEP) on WGB	YES	16.10.1
EoGRE on WLC	YES	16.11.1
EoGRE on AP	YES	16.11.1
EoGRE - IPv6 support	YES	16.12.1
EoGRE tunnel failover	YES	16.12.2
EoGRE deployment with multiple Tunnel Gateways (TGWs) enhancements	YES	16.12.1
Call Admission Control (CAC) and U-APSD	YES	16.10.1
Load-based CAC	YES	16.10.1
Initiation Protocol - CAC (SIP CAC)	YES	16.10.1
802.11n voice Call Admission Control (CAC)	YES	16.10.1

Bonjour gateway (mDNS support - Phase I)	YES	16.11.1
mDNS Phase II (Location Specific Services [LSS],	YES	17.1.1s
mDNS-AP, priority mac, origin of service)		
mDNS phase 3 (ISE policies, profile	YES	16.12.1
enhancements, PI instant services)		
mDNS bonjour message update with PTR RR	YES	16.11.1
Broadcast enabling/disabling independent of multicast	YES	16.10.1
Can specify a DNS server and AP domain on APs with static ip address	YES	16.10.1
CLI to disable Aggregated Mac Service Data Unit (A-MSDU) per priority	YES	16.10.1
11u new features (hotspot)	YES	16.12.1
DTLS support on vWLC	YES	16.10.1
Data DTLS on vWLC support	YES	16.10.1
	YES	16.10.1
11h channel switch (easier CLI configuration)		
11ac configuration on HA environment	YES	16.10.1
Can add Licenses to WLC HA SKU	YES	16.10.1
WLC 2500 - Wired guest access support	YES	16.12.1
Windows 8 profile support	YES	16.10.1
Support for Universal Stock Keeping Unit SKU	YES	16.10.1
1st client is kicked off after IP address duplication is detected	YES	16.10.1
DNS radius feature changes	YES	17.1.1s
Chromecast service on Multicast Domain Name System (mDNS) default database	YES	17.1.1
WLC 2505 - Bonjour gateway support for up to 200 instance services	YES	16.11.1
Application Policy Infrastructure Controller Enterprise Module (APIC-EM) PnP for 802.11ac Wave 2 APs	YES	16.10.1
APIC-EM PnP for FlexConnect AP PnP	YES	16.10.1
802.11k and 802.11v enabled by default	YES	16.10.1
Parallel Redundancy Protocol Enhancement on AP and WGB	YES	16.10.1
Wave 2 APs - Support for IPv6 PnP (Plug-n-Play)	YES	16.10.1
Transmission Control Protocol - Maximum Segment Size (TCP MSS) enabled by default with value of 1250	YES	16.10.1
DHCP Option 82 for EoGRE Tunnel in Cisco Wave 2 APs	YES	16.12.1
Upgrade of Access Points (APs) and Wireless LAN Controller (WLC) software with rolling AP upgrade with Prime Infrastructure 3.3	YES	16.10.1
Wave 2 APs - Support for DHCP Opt 60	YES	16.10.1

WLC only forward probing client Received Signal Strength Indication (RSSI) data if CMX is opted	YES	16.10.1
Client statistics forwad based on CMX AP group subscription	YES	16.11.1
Custom Support configuration of Receiver Start of	YES	16.10.1
Packet (RX-SOP) values configurable through RF	123	10.10.1
profiles		
Wave 2 APs - VxLAN AP Infra for eCA on 4800	YES	16.10.1
Wave 2 APs - Ability to disable AP fallback to	YES	16.10.1
DHCP when configured for static IP address		
Wave 2 APs - AP able to get time from network	YES	16.10.1
Wave 2 APs - Improved sniffer mode for Layer 1	YES	16.10.1
information		
Ethernet over Generic Routing Encapsulation	YES	16.11.1
(EoGRE) Virtual Local Area Network (VLAN)		
overriden withing the WLAN		
Ability to Disable Accounting Servers per WLAN	YES	16.10.1
ACL counters	YES	16.10.1
WGB VLAN client feature	YES	16.10.1
RADIUS servers per WLAN from 3 to 6	YES	16.10.1
Support for more DHCP opt 82 attributes	YES	16.10.1
Internal Policy Classification Engine	YES	16.10.1
IPv6 support (Phase III)	YES	16.10.1
IPv6 - Terminal Access Controller Access Control	YES	16.10.1
System (TACACS+) IPv6 support		
ATF Phase 2	YES	16.10.1
FlexConnect mode support on APs 1800/2800/3800	YES	16.10.1
OfficeExtended AP (OEAP) mode on Wave 2 802.11ac APs	YES	17.2.1
Support for Cisco Hyperlocation in HA Environment	YES	16.10.1
Monitor support for APs 1540, 1560, 1810OEAP, 1810W, 1815, 1850 and 1830.	YES	16.10.1
Minimum interval time for volume metering	YES	16.10.1
Wave 2 APs - Support for wired 802.1x	YES	16.10.1
Wave 2 APs - Spectrum Intelligence	YES	16.10.1
Wave 2 APs - CMX FastLocate	YES	17.1.1s
Wave 2 APs - Support for Bluetooth Low Energy	YES	16.10.1
(BLE) management		
Wave 2 APs - Support for Remote LAN (RLAN) on	YES	16.10.1
Aux port		
Daisy Chain support for AP 1560 and 1542I/D	YES	17.1.1
Wave 2 APs - Flex+Bridge support	YES	17.1.1s
Wave 2 APs - Support for RLAN local switcing on	YES	16.10.1

	AP 1815W		
	Wave 2 APs - NTP support	YES	16.10.1
	Wave 2 Fabric - IPv6 Domain Name System (DNS) Access Control Lists (ACLs)	YES	16.12.1
	Wave 2 Fabric - Post-auth IPv6 ACL support	YES	16.12.1
	Mobility Express : Mdns policy	YES	17.3.1 (Supported on EWC)
	Airtime fairness support on wave 2 APs	YES	16.10.1
	Intelligent capture support added to more APs - 1800s, 9115, 9117, 9120, IW3700, Cisco 6300 Embedded AP	YES	16.12.1
	Support for IOS WGB association to LWAPP AP	YES	16.10.1
	AP in sniffer mode	YES	16.10.1
	Non-Cisco WGB support	YES	16.10.1
	Introduction of config network ap-discovery nat- ip-only	YES	16.11.1
	Clients doing passive scan can join a WLAN wit load balancing enable at first try	YES	16.10.1
	ISE NAC Device profiler for WLC	YES	16.10.1
	WLAN for voice auto-config	YES	16.10.1
	OEAP - split tunneling	YES	16.10.1
	OEAP - Higher priority for voice packets support (Voice QoS)	YES	16.10.1
	RX SOP	YES	16.10.1
	AP groups	YES	16.10.1 (Same behavior using New Config Model)
	No support for fragmented pings	YES	16.10.1
	IPSec (for Radius)	NO	16.10.1
	Multicast improvement	YES	16.10.1
	WLC Netflow Enhancement	YES	16.12.1
	Wave 2 APs - Local switching of rlan traffic supported even when AP is in Local Mode	YES	17.2.1
	High Speed roaming for WGB	YES	16.10.1
QoS	QoS DSCP	YES	16.10.1
	AVC with NBAR2	YES	16.10.1
	Protocol Pack update capability for AVC/NBAR2	YES	16.12.1
	AAA Override QoS support	YES	16.10.1
	AVC AAA override	YES	16.10.1
	AVC directional QoS	YES	16.10.1
	AVC integration with local profile	YES	16.10.1
	AVC per application, per client rate limit on WLAN	YES	16.10.1
	QoS Map (DSCP based)	YES	16.10.1

	QoS Mapping (DSCP)	YES	16.10.1
	DSCP/User Priority (UP) settings based on	YES	16.10.1
	application traffic		
	QoS FastLane	YES	16.10.1
	Default Differentiated Services Code Point (DSCP)	YES	16.10.1
	marking per Application Visibility and Control		
	(AVC) profile		
	EDCA for spectralink phones	YES	16.10.1
	Trust DSCP between AP and controller	YES	16.10.1
	Last support for NBAR 3.7 (AVC v13)	YES	16.10.1
	NBAR and Netflow Updates (Pack 14.0)	YES	16.10.1
	NBAR Engine Upgrade on AP (NBAR2 Protocol Pack 19.1.0)	YES	16.10.1
	Support for NBAR2 Protocol Pack 19.1.0 (Optionally can upgrade to 24.0.0)	YES	16.10.1
	Fine QoS configuration	YES	16.12.1
	Ability to add AVC profile with fastlane enabled	YES	16.10.1
	Network Based Application Recognition (NBAR)	YES	17.1.1
	update to engine 31 and protocol pack 33.0	_	
GUI	GUI addition - AP join stats page	YES	16.10.1
	GUI addition - DHCP opt82	YES	16.10.1
	PoE column on WLC's GUI to check AP's PoE status	YES	16.10.1
	(WIRELESS > Access Points)		
	GUI support for AP Primed Joined timeout	YES	16.10.1
	Ability to make changes in SNMP community	YES	16.10.1
	through GUI		
	Ability to disable AVC stats per GUI button	YES	16.10.1
	802.11k configuration available through GUI	YES	16.10.1
	GUI option to retrieve support bundle	YES	16.10.1
	GUI addition - Tx Power Control threshold	YES	16.10.1
	GUI addition - Radios page (Wireless > Access Point > Radios)	YES	16.10.1
	GUI addition - Telnet-SSH configuration	YES	16.10.1
	GUI addition - LSC configuration	YES	16.10.1
Solution	TrustSec SXP for WLCs	YES	16.12.1
	Security Group Tag (SGT) Exchange Protocol (SXP)	YES	16.12.1
	Support on WLC 8540 and WLC 5520	_	
	Fabric Enabled Wireless	YES	16.10.1
	Cisco Umbrella WLAN - OpenDNS support	YES	16.10.1
	StadiumVision Multicast	YES	16.10.1
		YES YES	16.10.1 17.1.1
	StadiumVision Multicast wIPS	YES	17.1.1
	StadiumVision Multicast		

	Hyperlocation module support for multiple Connected Mobile Experience (CMX) connections	YES	16.10.1
	TrustSec support on WLC 5520, 7510 and 8500	YES	16.12.1 (On equivalent C9800 Platform)
Scale (Refer to C9800 Datasheet* for Scale Numbers)	WLC 8510 - Support for 6000 APs	YES	16.10.1 (Same/better scale on equivalent C9800 controller)
* <u>C9800-CL</u> <u>Datasheet</u> * <u>C9800-L</u> <u>Datasheet</u> * <u>C9800-40</u>	WLC 8510 - Support for 64000 clients	YES	16.10.1 (Same/better scale on equivalent C9800 controller)
Datasheet * <u>C9800-80</u> Datasheet	WLC 8510 - Support for 4096 VLANs	YES	16.10.1 (Same/better scale on equivalent C9800 controller)
	WLC 7500 - Support for 6000 APs, 6400 clients, 2000 flex groups	YES	16.10.1 (Same/better scale on equivalent C9800 controller)
	WLC 7500 - Support for 64000 clients	YES	16.10.1 (Same/better scale on equivalent C9800 controller)
	WLC 7500 - Support for 4096 VLANs	YES	16.10.1 (Same/better scale on equivalent C9800 controller)
	WiSM 2 - Support for 10,000 RFIDs	YES	16.12.1 (Same/better scale on equivalent C9800 controller)
	WLC 7500 - Support for 50,000 RFIDs	YES	16.12.1 (Same/better scale on equivalent C9800 controller)
	WLC 8500 - Support for 50,000 RFIDs	YES	16.12.1 (Same/better

		scale on equivalent C98
		controller)
vWLC - Support for 3000 RFIDs	YES	16.12.1
		(Same/better
		scale on
		equivalent C98
		controller)
WLC 2500 - Support for 1000 sleeping clients (500	YES	16.10.1
previously)		(Same/better
		scale on
		equivalent C98
		controller)
WLC 5508 - Support for 1000 sleeping clients	YES	16.10.1
(same as before)		(Same/better
		scale on
		equivalent C98
		controller)
WiSM 2 - Support for 1000 sleeping clients (same	YES	16.10.1
as before)		(Same/better
		scale on
		equivalent C98
		controller)
WLC 7500 - Support for 25000 sleeping clients	YES	16.10.1
(9000 previously)		(Same/bette
		scale on
		equivalent C98
		controller)
WLC 8500 - Support for 25000 sleeping clients	YES	16.10.1
(9000 previously)		(Same/better
		scale on
		equivalent C98
		controller)
vWLC - Support for 500 sleeping clients (same as	YES	16.10.1
before)		(Same/better
		scale on
		equivalent C98
		controller)
Up to 110 country codes per WLC (prior 8.2 WLC	YES	17.3.1 (200
supported 20)		country code
		supported)
Support for up to 32 RADIUS server (17 before)	YES	16.10.1
Support for up to 20 URLs per ACL (10 before)	YES	16.10.1
Support for learning up to 40 IP address per DNS	YES	16.10.1
ACL (20 before)	. 20	10.10.1
Support for up to 4 clients (mac address) on wired	YES	16.10.1
ports for APs 1810 and 1810W	. 20	

Support for 192 AP groups in 5500 WLC	YES	16.10.1
		(Same/bette
		scale on
		equivalent C98
		controller)
Support for 500 APs in 5508	YES	16.10.1
		(Same/bette
		scale on
		equivalent C9
		controller)
Support for 100 H-REAP groups	YES	16.10.1
		(Same/bette
		scale on
		equivalent C9
		controller)
WLC 7500 support for 3000 APs (2000 before)	YES	16.10.1
		(Same/bette
		scale on
		equivalent C9
N// C 7500		controller)
WLC 7500 support for 30,000 clients (20,000	YES	16.10.1
before)		(Same/bette
		scale on
		equivalent C98
WLC 7500 support for 1000 FlexConnect groups	YES	controller) 16.10.1
(500 before)	TES	(Same/bette
(500 before)		scale on
		equivalent C9
		controller)
WLC 7500 support for bandwidth central switch to	YES	16.10.1
1 Gb (250 Mb before)	125	(Same/bette
		scale on
		equivalent C9
		controller)
WLC 7500 support for 3000 OEAP (OEAP 600s)	YES	16.10.1
		(Same/bette
		scale on
		equivalent C9
		controller)
WLC 8510 - Support for 2000 FlexConnect groups	YES	16.10.1
		(Same/bette
		scale on
		equivalent C9
		controller)
WLC 8510 - Support for 6000 AP groups	YES	16.10.1
		(Same/bette

		scale on equivalent C98 controller)
WLC 8510 - Support for 100 APs per FlexConnect	YES	16.10.1
group		(Same/bette
		scale on
		equivalent C98
		controller)
WLC 8510 - Support for 24000 rogue APs and	YES	16.10.1
32,000 rogue clients		(Same/bette
		scale on
		equivalent C98
		controller)
WLC 7500 - Support for 2000 FlexConnect groups	YES	16.10.1
		(Same/bette
		scale on
		equivalent C98
WLC 7500 - Support for 6000 AP groups	YES	controller) 16.10.1
WEC 7500 - Support for 6000 AP groups	TES	(Same/bette
		scale on
		equivalent C98
		controller)
WLC 7500 - Support for 100 APs per FlexConnect	YES	16.10.1
group		(Same/bette
		scale on
		equivalent C98
		controller)
WLC 2500 - Support for 2500 rogue clients and	YES	16.10.1
2000 rogue APs		(Same/bette
		scale on
		equivalent C98
		controller)
WLC 5508 - Support for 2500 rogue clients and	YES	16.10.1
2000 rogue APs		(Same/bette
		scale on equivalent C98
		controller)
WLC WiSM2 - Support for 5000 rogue clients and	YES	16.10.1
4000 rogue APs	1LJ	(Same/bette
1000 10540 / 11 5		scale on
		equivalent C98
		controller)
WLC 7500 - Support for 32000 rogue clients and	YES	16.10.1
24000 rogue APs		(Same/bette
-		scale on
		equivalent C98

			controller)
	vWLC - support for 1500 rogue clients and 800	YES	16.10.1
	rogue APs		(Same/better
			scale on
			equivalent C9800
			controller)
	WLC 2504 - Support for 75 Aps and 1000 clients	YES	16.10.1
			(Same/better
			scale on
			equivalent C9800
	Current for up to 512 local policies (C4 hofers)	VEC	controller)
AD C	Support for up to 512 local policies (64 before)	YES	16.10.1
AP Support	Support for AP 3700	YES	16.10.1
(Please refer	Support for AP 2700	YES	16.10.1
<u>compatibility</u> matrix for	Support for AP 1700	YES	16.10.1
complete list	Support for AP 1570	YES	16.10.1
of supported	Support for AP IW3702	YES	17.1.1s
APs)	Support for AP 1850	YES	16.10.1
, 0,	Support for AP 1830	YES	16.10.1
	Support for AP 2800	YES	16.10.1
	Support for AP 3800	YES	16.10.1
	Support for AP 1810(W)	YES	16.10.1
	Support for AP 1560 (Local mode only)	YES	16.10.1
	Support for AP 1815i	YES	16.10.1
	Support for AP 1815	YES	16.10.1
	Support for AP 1815M	YES	16.10.1
	Support for AP 1542I/D	YES	16.10.1
	Support for APs 1540, 1815m and 1815t	YES	16.10.1
	Support for Catalyst 9115 and 9117 access points	YES	16.12.1s
	Support for Catalyst 9120-AXI access point	YES	16.12.2s
	Support for 9130-AXI	YES	16.12.2s
	support for 9120AXE, 9120AXP	YES	16.12.2s
Serviceability	CLI command to display number of voice calls in	YES	16.10.1
Sciviccasiiity	WLC (show cac voice stats [802.11a 802.11b]	125	10.10.1
	<ap-name>)</ap-name>		
	Ability to clear queue-info-max stats (clear queue-	YES	16.10.1
	info [detail <queue-< td=""><td></td><td></td></queue-<>		
	id>/all/capwap/dot11/ipv6/mobility/redundancy])		
	Logs saved in flash prior WLC reboot (show	YES	16.10.1
	logging last-reset)		
	Test AAA RADIUS command	YES	16.10.1
	Log of a Radio reset event	YES	16.10.1
	Wave 2 APs - Addition of command show	YES	16.10.1
	controllers dot11radio 0/1 antenna		
	Wave 2 APs - Collection of support bundle (copy	YES	16.10.1

Wave 2 APs - Log history for radio reset (show	YES	16.10.1
history interface dot11radio { 0 1 } { reset		
radar })		
Wave 2 APs - Command available to clear	YES	16.12.1
counters on show controller (#clear counters [
dot11radio client])		
Selective client packet capture support for AP 2800/3800	YES	16.10.1
Wave 2 APs - Support for syslog facility	YES	16.10.1
Wave 2 APs - Support for ' include <string>' for all show commands</string>	YES	16.10.1
Wave 2 APs - Command to show client exclusion list on Flex APs (#show flexconnect client exclusion-list)	YES	16.10.1
Wave 2 APs - Abitlity to filter debug traffic based on source/destination IP (#debug traffic wired filter)	YES	16.10.1
Wave 2 APs - Ability to export capture as .pcap (#copy tmp APname_capture.pcap0 tftp)	YES	16.10.1
Name of AP included in show client detail output	YES	16.10.1
Introduction of show ap bundle	YES	16.12.1
Ability to debug multiple mac address	YES	16.10.1
AP packet-dump	YES	16.10.1
Usernames are displayed in client summaries	YES	16.11.1
AP's IP address in show ap summary	YES	16.10.1
IP address in show client summary	YES	16.12.1
Add CLI - Grep support	YES	16.10.1
Wildcard support in Change Filter in GUI	YES	16.12.1
CLI command show queue-info addition	YES	16.10.1
IP address included in the output of show ap summary	YES	16.10.1
AP search per IP address on GUI	YES	16.10.1
Add CLI show system to monitor WLC's performance	YES	16.10.1
Add CLI show run-config startup-commands	YES	16.10.1
AP CLI to choose AP mode #capwap ap mode local/bridge	YES	16.10.1
Add CLI show client detail displays profile/ssid name	YES	16.10.1
Add CLI show ap join stats shows current real name	YES	16.10.1
CLI show rogue ap summary - extended options	YES	16.12.1
debug client shows AP name	YES	16.10.1
AP name duing asso/reasso on debug client output	YES	16.10.1

	CLI command to verify all certificates installed in the WLC (show certificate all)	YES	16.10.1
	FlexConnect Client debugs on AP	YES	16.10.1
	Wave 2 APs - Addition of command show controllers dot11radio 0/1 client <mac></mac>	YES	16.10.1
	Wave 2 APs - Ability to clear ap trace logs (#config ap client-trace clear)	YES	16.10.1
	Wave 2 APs - Debug to check UP value for client downstream (#debug capwap client qos)	YES	16.10.1
	Wave 2 APs - Log number of deauths sent by AP (#show dot11 clients deauth)	YES	16.10.1
	Wave 2 APs - Log number of consecutive TX fails (#show controllers dot11radio 0/1 client aa:bb:cc:dd:ee:ff)	YES	16.10.1
	Wave 2 APs - Ability to see rate per client on client tracing (#debug dot11 client rate address aa:bb:cc:dd:ee:ff)	YES	16.10.1
	Wave 2 APs - Client count statistics (#show client summary)	YES	16.10.1
	Debug commands for bonjour/mDNS added (debug mdns client, shows mdns query stats, test mdsn)	YES	16.11.1
	Ability to see conifguration history (show logging config-history)	YES	16.10.1
	Wave 2 APs - Improved show dot11 interface dot11radio 0/1 statistics output	YES	16.12.1
	Ability to Small Form-Factor Pluggable (SF) transceiver information (show port sfp-info)	YES	16.10.1
Certification	FIPS	YES	16.12.1
	FIPS 140-2	YES	16.12.1
	FIPS 140-2	YES	16.10.1
	Federal Information Processing Standard (FIPS) - Support for Data Datagram Transport Layer Security (DTLS) 1.2 for AP-WLC Control and Provisioning of Wireless Access Points (CAPWAP)	YES	16.10.1
	FIPS - Support new GCM cipher suites for DTLS	YES	16.10.1
	FIPS - New 802.11 encryption modes	YES	16.10.1
	FIPS - Simple Certificate Enrollment Protocol (SCEP) over HyperText Transfer Protocol over HTTPS support for Locally Significant Certificate (LSC)	YES	16.10.1
	FIPS - IPsec configuration is profile-based	YES	16.10.1
	FIPS - Syslog over IPsec support	YES	16.10.1
	FIPS - IKEv1/IKEv2 supported	YES	16.10.1
	FIPS - Certificate Signing Request (CSR) generation by WLC	YES	16.10.1
L			

Deprecated Features

Below is the list of AireOS features which are deprecated in Cisco Catalyst 9800 Wireless Controller platform for various reasons like – features cater to legacy technology, implications of new architecture of IOS-XE and much better alternatives available in Cisco Catalyst 9800 wireless controllers.

Client MFP
Packet capture files when controller's data plane crashes
128-bit WEP no longer available
40-MHz channels in 2.4GHz band
AP gives preference to WLC that has its same code version found on Discovery Response message
Spectrum Expert 4.0
Ability to enable/disable CDP per radio interface
Voice Diagnostic tools
CDP over the air
Support for SKC (sticky key caching)
Cisco Compatible Extensions version 6 (CCXv6)
Key Telephone System-based CAC (KTS-based CAC)
iWLAN AAA override - client interface/VLAN override
WLAN with 802.1X if MAC authentication with static Wired Equivalent Privacy (WEP) fails
New Mobility
L2 ACLS
New Mobility and Mobility Controller (MC) support
L2ACL FlexConnect
PMIPv6 (Proxy Mobile IPv6) - support for CWA/external web authentication
Layer 2 (L2) ACL GUI
Point-to-Point Protocol over Ethernet (PPPoE) client on FlexConnect AP
QinQ tag enhancement (802.1Q-in-Q VLAN tag)
Proxy Mobile IPv6 (PMIPv6) - FlexConnect as Mobile Access Gateway (MAG)
Ability to clear pmipv6 mag stats (clear pmipv6 mag stats)
Ability to disable MFP traps
Multiple User Datagram Protocol (UDP) source port support for RADIUS protocol
Microsoft (MS) Lync Software Defined Networking (SDN) Integration
Log source IP address on failed logins
Configurable dot1x exclusion attempts (1 to 10)
Multiple User Datagram Protocol (UDP) source port support for RADIUS protocol
FlexConnect group VLAN support override AP-specific
Mesh - Removal of Support for RX-SOP from Mesh Backhaul
PnP and Complex Programmable Logic Device (PLD) programmability
Link Layer Discovery Protocol (LLDP) on recovery image
WeChat authentication
FlexConnect - AP Easy Admin

Support for APeX
Wave 2 APs - Support for Mobile Concierge
Wave 2 APs - Ability to conver AP 2800/3800 into sensers
CPU ACLs
ARP padding
Context aware
Adder license without reboot
Alloy QoS
MSE - Virtual appliance
MSE - High availability
Faster reboot of WLC with restart instead of reset system
FIPS - Different CMX server Certificate authority (CA) certificate
FIPS - Support for CMX connectivity with TLSv1.2
ISE Simplification - Default Wireless Local Area Network (WLAN) configuration for ISE server
CleanAir with BLE Beacon disabled by default
Web authentication scaling improvements for Hypertext Transfer Protocol Secure (HTTPS) redirection
Improved radar detection
Dynamic Policy Enforcement / Usage Monitoring
Address Space Layout Rendomisation (ASLR) Support
Webhook
Debug arp added to debug client
Support to transfer upload of yang bundle through graphic interface

Not Applicable Features

Below is the list of AireOS features which are not applicable in Cisco Catalyst 9800 Wireless Controller platform for various reasons like – features are only relevant to AireOS platforms and/or incompatible legacy access points.

GUI Web Color Theme
Support for WLC 5508
Support for 1522, 1524, 1130 and 1240 in mesh mode
OEAP support for APs 1130 and 1140
Before delete an ap-group all the APs need to be moved to a new group
Channels 120,124 and 128 disable on -E regulatory domain APs 1131, 1243 and 1252
Support for AP 3502
Support for 500 AP join/image download simultaneously
Support for WLC 7510
Support for WLC 2504
Support for WiSM 2
Support with ISE v1.0
Because of CSCur27551 Bug-Preview for CSCur27551, SSLv3 disable by default
Support for AP 3600

WiSM2 support for 1000 APs (500 before)

WiSM2 support for 15000 clients (7500 before)

WiSM2 data plane of 20G (10G before)

Flexconnect - Hybrid Remote Edge Access Point (H-REAP) is called FlexConnect from this release and so on

Central switching mode support on WLC 7500

Unlicensed National Information Infrastructure 2 (UNII-2) and UNII-2 extended for 1552 APs

Mesh - Indoor mesh support for AP 3600

600 OEAP - can disable local SSID and local ports trough CLI

600 OEAP - can configure power, channel and channel width

600 OEAP - dual RLAN support

Support for AP 2600

AP 1520/1550 support for local and flexconnect mode

Can upgrade from a Licensed Data Payload Encryption (LDPE) controller to a non-LDPE

Support for vWLC

Support for WLC 8500

Support for AP 2600

Support for AP 1552CU/EU

Support for AP802H

Honor based license (Right to Use [RTU] licenses)

FlexConnect - PPP and PPPoE support

AP group out of the box

802.11n video CAC (Traffic Specification [TSPEC]-based video calls, Cius and facetime calls)

Local/flex/sniffer/rogue detector/monitor support for 1520 and 1550

Support for AP 1600

WLC 2504 - Support to be anchor WLC

WLC 2504 - Support for Link Aggregation (LAG)

WLC 7500 - Support for LAG

WLC 8510 - Support for LAG

Support for Wireless Security and Spectrum Intelligence (WSSI) monitor module

N+1 support with HA SKU controller

Support for all signatures on Enhanced Local Mode (ELM)

Support of 802.11ac module (Wave 1) on AP 3600

Support for AP 700

Support for WLC 8500 as anchor controller

Support of SFP-10G-LR on WLC 7500

VLAN tag on 1552 APs

Maximum number of APs allowed per WLC

AP Rate limit on vWLC

No more support of PPPoE on FlexConnect Aps

BBX (Billboard Exchange)

Cisco License Manager (CLM) is no longer supported

Default 802.1p tags changed (Platinum to 5 from 6, Gold to 4 from 5, Silver 2 from 3)

OEAP support for APs 1130,1240,1040,1140,1600,2600,3500,3600

Support for AP 1530

Support for Universal Small Cell 5310 on AP 3600

DFS channels on Aps 700 - A domain

WLC 8500 - Does not support new mobility

Support for AP 700W

WLC 2500 - WLAN Express Setup

CleanAir Express for 1600 and 1700 AP

OEAP AP602 GUI Enhancements

OEAP AP602 Split Tunneling

702W (Power over Ethernet) PoE management (ability to disable PoE port)

702W VLAN tag per Ethernet port

vWLC support for 6,000 clients

HA-SSO support for OEAP 600 APs

WLC 2500 - Express setup available through AP or client connection to any port

Because of CSCur27551 Bug-Preview for CSCur27551 SSLv3 is disabled by default

Support for WLC 5520

Support for WLC 8540

No more support for new mobility - Mobility Controller

Kernel-based Virtual Machine (KVM) support for vWLC

vWLC - by default, the WLAN is locally switched

Support for CSCur13394 (USC) 8x18

Large Scale Virtual WLC (vWLC)

WLC 5520/8510/8540 - Support to use service port on a daily basis

Upgrade with extra image and installation procedure (for APs 802, 1550 and 1570)

vWLC on Hyper-v support

Support for HA N+1 on Virtual WLC (vWLC)

Remote LAN support on wired ports of AP 702W

No more support for APs 600, 1550, 1040, 1140 and 1260

Show command for the redundant port (RP port)

Support for WLC 3504

Support for HA N+1 on Virtual Wireless LAN Controller (vWLC)