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 Bengaluru 17.6.1

Note: Last release for Wave 1 APs is 17.3.x

Supported Features

| | | Plat | tform |
|-----------|--|------------|---------------|
| Category | | AireOS | Catalyst 9800 |
| | Feature Name | | |
| Infrastru | CAPWAP Support | YES | 16.10.1 |
| cture | 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 |
| | 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 |
| | VLAN select per DHCP dirty | YES | 16.10.1 |
| | LAG | YES | 16.10.1 |
| | 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 |
| | 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 | YES | 16.10.1 |

| 2700 | | |
|--|-----|---------|
| CLI addition - config ap cert-expiry-ignore {mic | YES | 16.10.1 |
| ssc} enable | | |
| Support for management user session accounting | YES | 16.10.1 |
| records | | |
| 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 | YES | 16.10.1 |
| global | | |
| Maximum number of characters of mgmt user | YES | 16.10.1 |
| password length increased from 24 to 127 | | |
| Support for Secure Shell (SSH) standard login | YES | 16.10.1 |
| interface | | |
| 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 | YES | 16.10.1 |
| primary/secondary/tertiary WLC (Primed Join | | |
| timeout) | | |
| Ability to clear internal DHCP lease | YES | 16.10.1 |
| Ability to disable old crash files from WLC (clear | YES | 16.10.1 |
| crash-files) | | |
| DHCP opt 82 as American Standard Code for | YES | 16.10.1 |
| Information Interchange (ASCII) instead of binary | | |
| IPv6 - Block of Router Advertisement (RA) from | YES | 16.10.1 |
| controller and AP | VEC | 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 |
| RADIUS and TACACS+ DNS | YES | 16.12.1 |
| DHCP opt 82, sub-option 5 and sub-option | YES | 16.12.1 |
| 151/152 | | |
| Link Layer Discovery Protocol (LLDP) support | YES | 16.12.1 |
| Sending access points events through radius | YES | 17.1.1 |
| accounting | | |
| IPv6 - Neighbor Discovery Protocol (NDP) proxy | YES | 17.2.1 |
| and rate limit of IPv6 packets | \ | 1= |
| Viewing AP LLDP Neighbor Info from the eWLC | YES | 17.3.2 |
| eWLC DHCP option-82 remote-id | YES | 17.3.3 |
| C9800 DHCP Behaviour change feature | YES | 17.3.3 |

| | Intermediate CA support for AP authentication | YES | 17.5.1 |
|---|--|------|---------|
| | Support for both MIC and LSC APs to join the same C9800 | YES | 17.5.1 |
| | 9800 Special Character handling | YES | 17.5.1 |
| | Sourcing DHCP relay packets using SrcIP SVI but | YES | 17.5.1 |
| | vlan tag of wireless mgmt interface | | |
| | Additional PKI OPER information required for | YES | 17.5.1 |
| | Radsec-WLC integration project | | |
| | Control plane traffic out of SP port | YES | 17.6.1 |
| Security | 802.1x + web authentication support | YES | 16.10.1 |
| & ************************************ | Conditional Web Redirect with 802.1x | YES | 16.10.1 |
| Authenti cation | Authentication | \/FC | 46.40.4 |
| Cation | Identity Pre-Shared Key (PSK) | YES | 16.10.1 |
| | Multiple Pre-Shared Key (MPSK) | YES | 16.10.1 |
| | Local Authentication | YES | 16.10.1 |
| | Local Web Authentication / Central Web | YES | 16.10.1 |
| | Authentication Support (LWA/CWA) | \/FC | 46.40.4 |
| | Web Auth on MAC filter failure | YES | 16.10.1 |
| | Support for pre-auth ACL to block DNS for web | YES | 16.10.1 |
| | authenticated clients | YES | 16.10.1 |
| | Support for Captive portal bypass | YES | 16.10.1 |
| | CNAME - IPv6 Support (PreAuth ACLs with IPv6) | | |
| | 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 |
| | 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 Name | YES | 16.10.1 |
| | Wi-Fi Protected Access/TKIP only configurable | YES | 16.10.1 |
| | through CLI | | |
| | Configurable webauth required timeout | YES | 16.10.1 |
| | WLC 5520/8510/8540 - Support Local EAP | YES | 16.10.1 |
| | TKIP Support for APs 1810/1830/1850/2800/3800 | YES | 16.10.1 |
| | ISE Simplification - Day0 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 |
| | 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) |
| | WPA3 support | YES | 16.12.1 |
| | Support Wired Guest access | YES | 16.12.1 |
| | Wired client Single Sign On (SSO) | YES | 16.12.1 |
| | Enhanced Open support | YES | 17.1.1 |
| | Identity PSK peer2peer blocking | YES | 17.1.1 |
| | Wave 2 APs - Support for Wired 802.1x Extensible Authentication Protocol-Transport Layer Security (EAP-TLS) and Protected EAP (PEAP) | YES | 17.2.1 |
| | Web Auth needs a separate HTTPS Server from MGMT GUI and Web-Auth | YES | 17.3.1 |
| | Tracking of client with locally administered MAC address | YES | 17.3.1 |
| | WPA/WPA2-PSK-WebAuth on MAC filter fail | YES | 17.5.1 |
| | Knob to disable Random MAC Clients | YES | 17.5.1 |
| | LDAP authentication using sAMAccountName on WLC-9800 | YES | 17.6.1 |
| RF & | Band Select | YES | 16.10.1 |
| Radio | 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 |
| | 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 |
|--|-----|---------|
| Ability to set up upper and lower limits on TX | YES | 16.10.1 |
| power for RRM | | |
| CleanAir | YES | 16.10.1 |
| CleanAir - Event-Driven Radio Resource | YES | 16.10.1 |
| Management (EDRRM) | | |
| CleanAir - Unclassified Interference | YES | 16.10.1 |
| Threshold/Trap | | |
| 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 |
| Transmit Power Control (TPC) min/max values with | YES | 16.10.1 |
| bands enabled | | |
| Radio monitor for 80MHz | YES | 16.10.1 |
| Support for -B domain APs | YES | 16.10.1 |
| Regulatory Domain -S change | YES | 16.10.1 |
| 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}) | | |
| DCA algorithm redesigned to prevent pinning and | YES | 16.10.1 |
| cascading | | |
| Event Driven-Radio Resource Management (ED- | YES | 16.10.1 |
| RRM) triggered by Wi-Fi interference too | | |
| Increased Channel and Transmit (Tx) Power | YES | 16.10.1 |
| Support for some countries | | |
| 2800/3800 - Support for Client-Awre Flexible Radio | YES | 16.10.1 |
| Assignment (FRA) | | |
| Support for HE PHY layer (and new MCS rates) | YES | 16.11.1 |
| 20/40/80MHz off-channel scan on serving channel | YES | 16.12.1 |
| Support for -P domain | YES | 16.12.1 |
| 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 -F domain (Indonesia) | YES | 16.12.1 |
| 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 |
| China -H domain migration (allow indoor use of | YES | 16.12.1 |
| 5150 MHz to 5350 MHz) | | |
| Added -R regulatory domain | YES | 16.12.1 |
| Regulatory approval for Chile and Russia | YES | 16.12.1 |
| Beamforming (also called ClientLink) | YES | 16.12.1 |

| S V A C | CleanAir - Persistent Device Avoidance Support for -M regulatory domain in AP Industrial Wireless Local Area Network (IWLAN) 3700 AP 3700 - Flexible Antenna port support Oropped channels 120, 124, 116 and 132 BLE Management/Scanning/Telemetry Configurable -Q indoor & outdoor domain support or IW3702 Support for -F regulatory domain for Indonesia on | YES YES YES YES YES YES YES | 17.1.1s 17.1.1s 17.1.1s 17.3.1 17.3.1 |
|------------------|--|-----------------------------|---|
| V A C | Wireless Local Area Network (IWLAN) 3700 AP 3700 - Flexible Antenna port support Dropped channels 120, 124, 116 and 132 BLE Management/Scanning/Telemetry Configurable -Q indoor & outdoor domain support or IW3702 | YES YES YES | 17.1.1s 17.3.1 |
| A C B | AP 3700 - Flexible Antenna port support Oropped channels 120, 124, 116 and 132 BLE Management/Scanning/Telemetry Configurable -Q indoor & outdoor domain support or IW3702 | YES YES | 17.3.1 |
| C B | Oropped channels 120, 124, 116 and 132 BLE Management/Scanning/Telemetry Configurable -Q indoor & outdoor domain support or IW3702 | YES YES | 17.3.1 |
| В | BLE Management/Scanning/Telemetry Configurable -Q indoor & outdoor domain support or IW3702 | YES | |
| | Configurable -Q indoor & outdoor domain support or IW3702 | | 17.3.1 |
| C | or IW3702 | YES | |
| f | Support for -E regulatory domain for Indonesia on | | 17.3.1 |
| | W3702 | YES | 17.3.1 |
| | Support for -M regulatory domain for Saudi Arabia, Suwait, Qatar, Iraq on IW3702 | YES | 17.3.1 |
| F | lexible Antenna Port configuration for IW3702 | YES | 17.3.1 |
| 3 | Brd Radio in Monitor Mode | YES | 17.3.1 |
| S | pectrum intelligence for AX9115 | YES | 17.3.1 |
| Т | ri-radio Support(dynamic) for AX9130 | YES | 17.3.1 |
| C | DL OFDMA (37 users) Support for AX9130 | YES | 17.3.1 |
| Т | WT Feature Support for BRCM Aps | YES | 17.4.1 |
| | Capability to enable/disable 11ax features per VLAN | YES | 17.5.1 |
| lı | ncreased 11ax OFDMA users on 9105/9115/9120 | YES | 17.5.1 |
| | Downlink MU-MIMO support Catalyst | YES | 17.5.1 |
| | 9105/9115/9120 series Aps | | |
| | vIPs scanning with Third Radio in AP 4800 | YES | 17.5.1 |
| | Provide granular reasons for power and channel change in Cisco DNA Assurance | YES | 17.5.1 |
| а | Performance improvements in Catalyst 9105/9115 and 9120 APs with enhancement in advanced cheduler. | YES | 17.5.1 |
| | Regulatory: Add support for TDWR channels (120, .24, 128) for "-E" regulatory domain | YES | 17.6.1 |
| | Regulatory domain reduction | YES | 17.6.1 |
| · - | Mobiity - Foreign/Anchor | YES | 16.10.1 |
| | Mobility - Symetric tunneling | YES | 16.10.1 |
| C | Opportunistic Key Caching (OKC) for Flex groups | YES | 16.10.1 |
| | Roam between WLC for static-IP clients (static-ip | YES | 16.10.1 |
| | unneling) | | |
| — | 302.11r for AP in local mode (Fast Roaming) | YES | 16.10.1 |
| | Optimized roaming | YES | 16.10.1 |
| <u> </u> | Optimized roaming + 802.11v | YES | 16.10.1 |
| | seamless roaming with Inter-release controller nobility (IRCM) | YES | 16.10.1 |
| | Ability to enable/disable Network Mobility Services Protocol (NMSP) port (config nmsp service | YES | 16.10.1 |

| | enable/disable) | | |
|------|--|-----|---------|
| | 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 |
| | CSDL CT1674:SEC-CRY-PRIM-4: Mobility Cipher | YES | 17.5.1 |
| | Configuration | | |
| Mesh | Mesh Ethernet bridging | YES | 16.10.1 |
| | Mesh ethernet VLAN tagging | YES | 16.10.1 |
| | Mesh multicast mode for ethernet bridged clients | YES | 16.10.1 |
| | (in/in-out) | | |
| | Mesh multicast support for roaming L2/L3 | YES | 16.10.1 |
| | 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 | YES | 16.10.1 |
| | (MAP) Ethernet port when VLAN transparent | | |
| | mode enabled | | |
| | 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 | YES | 16.10.1 |
| | support for Mesh APs | | |
| | Mesh Convergence | YES | 16.10.1 |
| | Mesh - PSK provision support for Mesh Networks | YES | 16.10.1 |
| | Mesh Off Channel background Scanning (IOS AP) | YES | 16.10.1 |
| | Air Time Fairness (ATF) on mesh | YES | 16.10.1 |
| | Mesh - Can disable intrusion detection system | YES | 16.10.1 |
| | (IDS) on outdoor Mesh | | |
| | Mesh APs can be pinged before they join a | YES | 16.10.1 |
| | controller | | |
| | 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 | YES | 16.10.1 |
| | on AP 1560 | | |
| | Network Address Translation / Port Address | YES | 16.11.1 |
| | Translation (NAT/PAT) on RAP (Flex+Bridge AP | | |
| | mode) | | |
| | Dynamic Host Configuration Protocol (DHCP) | YES | 16.11.1 |
| | internal server on Root AP (RAP) (Flex+Bridge AP | | |
| | mode) Mesh limited voice support (indoor) | YES | 16.11.1 |
| | iviesii iiiiitea voice support (iiiaoor) | 163 | 10.11.1 |

| | Mesh mode on wave 2 APs | YES | 17.1.1 |
|----------|---|-----|---------|
| | AP 3700 - Daisy chain is supported | YES | 17.1.1s |
| | Mesh - 2.4 GHz mesh backhaul for Israel | YES | 17.3.1 |
| | Mesh Off Channel background Scanning (IOS AP) | YES | 17.3.1 |
| | Enhanced mesh convergence | YES | 17.3.1 |
| | RAP Ethernet Daisy Chain on IW3702 | YES | 17.3.1 |
| 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 | YES | 16.10.1 |
| | Switch Port Trace (SPT) | | |
| | WIPS - auto SPT | YES | 16.10.1 |
| | wIPS Attack containment | YES | 16.10.1 |
| | Password policies (Product Security Baseline [PSB]) | YES | 16.10.1 |
| | Data rate selection for rogue containment | YES | 16.10.1 |
| | Validate rogue clients against Mobility Service | YES | 16.10.1 |
| | Engine (MSE) Wildcard SSID per rogue policy | YES | 16.10.1 |
| | Set rogue policy to delete a rogue from WLC | YES | 16.10.1 |
| | database | ILJ | 10.10.1 |
| | 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 |
| | Enhanced rogue containment | YES | 16.10.1 |
| | Rogue enhancement | YES | 16.12.1 |
| | Automatically assign number of APs to contain a | YES | 16.12.1 |
| | rogue | | |
| | Online Certificate Status Protocol (OCSP) | YES | 16.12.1 |
| | Wireless Intrusion Prevention System (wIPS) | YES | 17.1.1s |
| | support for 40/80 (MegaHertz) MHz and transmit capability | | |
| | Enhanced wIPS Support for Hyperlocation Module | YES | 17.1.1s |
| | with Advanced Security | 123 | 17.1.13 |
| | WIPS: Advanced Security Enhancements on 9800 | YES | 17.3.1 |
| | WLC (RTS/CTS) | | |
| | Rogue enhancement on 9800 WLC | YES | 17.3.1 |
| | Hotspot 2.0 - Passpoint R3 WFA Certification | YES | 17.3.1 |
| | Support to provision SuiteB 192bit AVPs | YES | 17.5.1 |

| | Rejection on wrong WLAN ID on SSID | YES | 17.5.1 |
|-----------|--|-----|---------|
| | Disable clients with Random MAC Address | YES | 17.5.1 |
| | WIPS Additional Signatures | YES | 17.6.1 |
| | AWIPS Enhancement: Logging of the Rogue and | YES | 17.6.1 |
| | AWIPS alarms from Controller | | |
| | Fallback for AAA Overridden VLAN | YES | 17.6.1 |
| | AP PnP Onboarding with Dot1x Authentication | YES | 17.6.1 |
| Resilienc | HA AP SSO | YES | 16.10.1 |
| У | HA Client SSO and Redundancy Port (RP) trough L2 | YES | 16.10.1 |
| | switch | | |
| | HA-SSO Configurable keep-alive timers/retries | YES | 16.10.1 |
| | Fast AP failover | YES | 16.10.1 |
| | HA-SSO bulk sync status | YES | 16.10.1 |
| | 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 } | | 10.10.1 |
| | 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 |
| | HA-SSO new debugs/shows | YES | 16.12.1 |
| | Internet Protocol security (IPSec) encryption for High Availability (HA) | YES | 16.12.1 |
| | HA-SSO replace peer Redundancy Management Interface (RMI) Internet Control Message Protocol (ICMP) ping with UDP message | YES | 17.1.1 |
| | HA SSO - Automatic recover from maintenance mode after network converges | YES | 17.1.1 |
| | HA-SSO default gateway reachability check enhancement | YES | 17.1.1 |
| | SSO enhancements on the GW check | YES | 17.2.1 |
| | Out of band access to standby WLC in a SSO pair | YES | 17.3.1 |
| | Gateway IP Check with Native IPv6(RMI IPv6) | YES | 17.3.2 |
| | Configuration of Gateway Failure Detection Interval | YES | 17.3.2 |
| | HA Parity | YES | 17.3.3 |
| | Gateway IP Check - HA parity with AirOS | YES | 17.3.5 |
| | (Network error handling) | | |
| | RMI over IPv6 | YES | 17.4.1 |
| | RMI/Default GW Enhancements | YES | 17.4.1 |
| | Standby Monitoring Enhancements | YES | 17.5.1 |
| | Default Gateway IP Reachability Check (AireOS Parity) | YES | 17.5.1 |
| | HA Management - Interface Status of the | YES | 17.6.1 |

| | Standby through the Active using SNMP | | |
|------|---|-----|---------|
| Flex | Flex Local Authentication | YES | 16.10.1 |
| | Flex groups and local radius server | YES | 16.10.1 |
| | Flex 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 VLANs | YES | 16.10.1 |
| | Flexconnect - Fast Roam for Voice Clients | YES | 16.10.1 |
| | External Web-Auth for Local Switching FlexConnect | YES | 16.10.1 |
| | FlexConnect - Split tunneling | YES | 16.10.1 |
| | FlexConnect - 802.11r (Fast Transition) support in Central/Local switching | YES | 16.10.1 |
| | FlexConnect - Network Address Translation (NAT) and Port Address Translation (PAT) on locally switched WLAN | YES | 16.10.1 |
| | FlexConnect - WGB/Universal WGB support in FlexConnect Locally Switched mode | YES | 16.10.1 |
| | FlexConnect - VLAN-based local and central switching | YES | 16.10.1 |
| | Protected Extensible Authentication Protocol (PEAP) and Extensible Authentication Protocol- Transport Layer Security (EAP-TLS) for FlexConnect (Local Auth) | YES | 16.10.1 |
| | WLAN to VLAN maps for FlexConnect Groups and APs | YES | 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 |
| | 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 IPv4 pre-auth DNS ACLs | YES | 16.10.1 |
| | VLAN transparent feature bridges all non-defined | YES | 16.10.1 |
| | VLANs on flexconnect-mesh | | |
| | 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 group if it has a centrally switched WLAN | YES | 16.10.1 |
|----------|---|-----|---------|
| | Wave 2 APs - Support for FlexConnect Proxy Address Resolution Protocol (ARP) | YES | 16.10.1 |
| | Wave 2 APs - Support for FlexConnect limit clients per radio / WLAN | YES | 16.10.1 |
| | Wave 2 APs - Support for FlexConnect VLAN name Authentication, Authorization, and Accounting (AAA) override | YES | 16.10.1 |
| | Support for RADIUS creation within FlexConnect groups (CLI changed) | YES | 16.10.1 |
| | FlexConnect on stand-alone can keep performing rogue containment | YES | 16.10.1 |
| | FlexConnect - Convert AP mode from Local to FlexConnect without reboot | YES | 16.10.1 |
| | Proxy ARP support on FlexConnect Local Switching 802.11ac Wave 2 APs. | YES | 16.10.1 |
| | FlexConnect NAT/PAT support for central DHCP on 802.11ac Wave 2 APs | YES | 16.10.1 |
| | Flexconnect AAA Quality of Service (QoS) override per client support on 802.11ac Wave 2 APs | YES | 16.10.1 |
| | Wave 2 APs - Support for FlexConnect IPv6 ACL for or web authentication | YES | 16.11.1 |
| | Wave 2 APs - Support for Management Frame Protection (MFP) (Not supported on 1800 series APs) | YES | 16.12.1 |
| | Flexconnect IPv6 EoGRE Tunnel support | YES | 16.12.1 |
| | FlexConnect - Support for 802.11u (HotSpot 2.0) | YES | 16.12.1 |
| | 11w on Flex and Mesh APs | YES | 16.12.1 |
| | Flex Connect Overlap IP Address | NO | 17.3.3 |
| Services | Multiple WLANs with the same SSID | YES | 16.10.1 |
| | Transmission Control Protocol - Maximum Segment Size (TCP MSS) Adjustment | YES | 16.10.1 |
| | 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 |
| | 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 |
| AP Provisioning PnP | YES | 16.10.1 |
| URL domain filtering | YES | 16.10.1 |
| Fastlane support | YES | 16.10.1 |
| Radio Frequency IDentification (RFID) and Wi-Fi | YES | 16.10.1 |
| tag support | 123 | 10.10.1 |
| Password encryption | YES | 16.10.1 |
| 11v support (Directed Multicast Service [DMS] and | YES | 16.10.1 |
| BSS Max Idle Period) | | |
| 11r mixed mode support | YES | 16.10.1 |
| 11v - Basic Service Set (BSS) Transition | YES | 16.10.1 |
| Management | | |
| 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 |
| Client exclusion due to 802.1x timeout | YES | 16.10.1 |
| DHCP opt 82 - Can specify the name and SSID of | YES | 16.10.1 |
| the AP | | |
| LDAP support | YES | 16.10.1 |
| 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 | YES | 16.10.1 |
| FlexConnect mode (Device Profiling) | 123 | 10.10.1 |
| Support for RADIUS Client Profiling | YES | 16.10.1 |
| HTTP profiling for local and flex mode (RADIUS | YES | 16.10.1 |
| profiling) | | |
| Ability to update Organizational Unique Identifier | YES | 16.10.1 |
| (OUI)/Device Profile list | | |
| SNMP trap support for client | YES | 16.10.1 |
| association/disassociation | | |
| 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 |
|---|-------|---------|
| 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 |
| Broadcast enabling/disabling independent of | YES | 16.10.1 |
| multicast | | |
| Can specify a DNS server and AP domain on APs | YES | 16.10.1 |
| with static IP address | | |
| CLI to disable Aggregated Mac Service Data Unit | YES | 16.10.1 |
| (A-MSDU) per priority | | |
| DTLS support on vWLC | YES | 16.10.1 |
| Data DTLS on vWLC support | YES | 16.10.1 |
| 11h channel switch (easier CLI configuration) | YES | 16.10.1 |
| 11ac configuration on HA environment | YES | 16.10.1 |
| Can add Licenses to WLC HA SKU | YES | 16.10.1 |
| 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 | YES | 16.10.1 |
| is detected | | |
| Cisco DNA Center PnP for 802.11ac Wave 2 APs | YES | 16.10.1 |
| Cisco DNA Center 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 | NO |
| 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 a value of 1250 | YES | 16.10.1 |
| 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 | YES | 16.10.1 |
| Strength Indication (RSSI) data if CMX is opted | | |
| Custom Support configuration of Receiver Start of | YES | 16.10.1 |
| Packet (RX-SOP) values configurable through RF | | |
| profiles | V.E.C | 46.40.1 |
| Wave 2 APs - VxLAN AP Infra for eCA on 4800 | YES | 16.10.1 |
| Wave 2 APs - Ability to disable AP fallback to DHCP | YES | 16.10.1 |
| when configured for static IP address | VEC | 10.40.4 |
| Wave 2 APs - AP able to get time from network | YES | 16.10.1 |
| Wave 2 APs - Improved sniffer mode for Layer 1 information | YES | 16.10.1 |

| 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 | . 23 | 10.10.1 |
| ATF Phase 2 | YES | 16.10.1 |
| FlexConnect mode support on APs | YES | 16.10.1 |
| 1800/2800/3800 | | |
| Support for Cisco Hyperlocation in HA | YES | 16.10.1 |
| Environment | | |
| Monitor support for APs 1540, 1560, 1810OEAP, | YES | 16.10.1 |
| 1810W, 1815, 1850 and 1830. | | |
| 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 - Support for Remote LAN (RLAN) on | YES | 16.10.1 |
| Aux port | | |
| Wave 2 APs - Support for RLAN local switching on | YES | 16.10.1 |
| AP 1815W | | |
| Wave 2 APs - NTP support | YES | 16.10.1 |
| Airtime fairness support on wave 2 APs | YES | 16.10.1 |
| 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 |
| Clients doing passive scan can join a WLAN wit | YES | 16.10.1 |
| load balancing enable at first try | | |
| 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 | YES | 16.10.1 |
| (Voice QoS) | | |
| RX SOP | YES | 16.10.1 |
| AP groups | YES | 16.10.1 (Same |
| | | behavior using |
| | | New Config |
| No cupport for fragrenated viscs | VEC | Model) |
| No support for fragmented pings | YES | 16.10.1 |
| IPSec (for Radius) | YES | 16.10.1 |
| Multicast improvement | YES | 16.10.1 |
| Multicast Direct | YES | 16.12.1 |
| High Speed roaming for WGB | YES | 16.10.1 |

| Layer 3 (L3) Interfaces for tunneling protocols (GRE | YES | 16.11.1 |
|---|-----------|---------|
| tunnels) EoGRE on WLC | YES | 16.11.1 |
| EoGRE on AP | YES | 16.11.1 |
| | | |
| Bonjour gateway (mDNS support - Phase I) | YES | 16.11.1 |
| mDNS bonjour message update with PTR RR | YES | 16.11.1 |
| WLC 2505 - Bonjour gateway support for up to 200 | YES | 16.11.1 |
| instance services | \ <u></u> | 10.11.1 |
| Ethernet over Generic Routing Encapsulation | YES | 16.11.1 |
| (EoGRE) Virtual Local Area Network (VLAN) | | |
| overriden withing the WLAN | YES | 16.11.1 |
| Client statistics forwad based on CMX AP group subscription | 153 | 10.11.1 |
| Introduction of config network ap-discovery nat- | YES | 16.11.1 |
| ip-only | 113 | 10.11.1 |
| DHCP Option 82 for EoGRE Tunnel in Cisco Wave 2 | YES | 16.12.1 |
| APs | 123 | 10.12.1 |
| Wave 2 Fabric - IPv6 Domain Name System (DNS) | YES | 16.12.1 |
| Access Control Lists (ACLs) | | |
| Bi-directional rate limit per WLAN/User | YES | 16.12.1 |
| (bandwidth contract) | | |
| Wave 2 Fabric - Post-auth IPv6 ACL support | YES | 16.12.1 |
| Intelligent capture support added to more APs - | YES | 16.12.1 |
| 1800s, 9115, 9117, 9120, IW3700, Cisco 6300 | | |
| Embedded AP | | |
| WLC Netflow Enhancement | YES | 16.12.1 |
| 11u new features (hotspot) | YES | 16.12.1 |
| WLC 2500 - Wired guest access support | YES | 16.12.1 |
| mDNS phase 3 (ISE policies, profile enhancements, | YES | 16.12.1 |
| PI instant services) | | |
| EoGRE deployment with multiple Tunnel Gateways | YES | 16.12.1 |
| (TGWs) enhancements | | |
| EoGRE - IPv6 support | YES | 16.12.1 |
| Limit connections to 11n clients only | YES | 16.12.1 |
| MFP | YES | 16.12.1 |
| Passpoint 2.0 R2 Certification | YES | 16.12.1 |
| Secure Lightweight Directory Access Protocol | YES | 16.12.1 |
| (LDAP) | | |
| EoGRE tunnel failover | YES | 16.12.2 |
| Chromecast service on Multicast Domain Name | YES | 17.1.1 |
| System (mDNS) default database | | |
| Daisy Chain support for AP 1560 and 1542I/D | YES | 17.1.1 |
| Voice over IP (VoIP) Snooping (SIP voice calls) | YES | 17.1.1 |
| Adaptive 802.11r | YES | 17.1.1 |
| Wi-Fi Alliance Agile Multiband (MBO) support | YES | 17.1.1 |

| | Wave 2 APs - Flex+Bridge support | YES | 17.1.1s |
|-----|---|-----|---------------|
| | Wave 2 APs - CMX FastLocate | YES | 17.1.1s |
| | DNS radius feature changes | YES | 17.1.1s |
| | mDNS Phase II (Location Specific Services [LSS], | YES | 17.1.1s |
| | mDNS-AP, priority mac, origin of service) | | |
| | mDNS MAC based service policy | YES | NO |
| | Simple Network Management Protocol (SNMP) | YES | 17.1.1s |
| | over IPSec supported over IPv6 interfaces | | |
| | SNMP traps over IPSec supported over IPv6 interfaces | YES | 17.1.1s |
| | OfficeExtended AP (OEAP) mode on Wave 2 | YES | 17.2.1 |
| | 802.11ac APs | | |
| | Wave 2 APs - Local switching of rlan traffic | YES | 17.2.1 |
| | supported even when AP is in Local Mode | | |
| | Guest User Management - Client Whitelisting | YES | 17.2.1 |
| | 802.11u (Hotspot 2.0) | YES | 17.2.1 |
| | Mobility Express : Mdns policy | YES | 17.3.1 |
| | | | (Supported on |
| | | | EWC) |
| | Passpoint R3 | YES | 17.3.1 |
| | Spectrum intelligence for Salt Spring | YES | 17.3.1 |
| | Passpoint 2.0 - WFA Certification | YES | 17.3.1 |
| | Flash AP light-emitting diodes (LEDs) via SNMP and GUI | YES | 17.3.1 |
| | CAC running on AP | YES | 17.3.2 |
| | SNMP OID FOR Radius Access / Accept / Rejects | YES | 17.3.2 |
| | AP LLDP | YES | 17.3.2 |
| | AAA SNMP MIBs (RADIUS | YES | 17.5.1 |
| | accepts,rejects,timeouts) are not working | | |
| | Catalyst 9800 Special Character Handling | YES | 17.5.1 |
| | Link local bridging support | YES | 17.6.1 |
| | Block client association when AAA returns a VLAN | YES | 17.6.1 |
| | that is NOT present on the WLC | | |
| | eWLC needs to be able to handle AP's unable to reach NTP messages | YES | 17.6.1 |
| 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 application traffic | YES | 16.10.1 |
|----------------|--|-----|---|
| | QoS FastLane | YES | 16.10.1 |
| | Default Differentiated Services Code Point (DSCP) marking per Application Visibility and Control (AVC) profile | YES | 16.10.1 |
| | 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) update to engine 31 and protocol pack 33.0 | YES | 17.1.1 |
| Solution | TrustSec SXP for WLCs | YES | 16.12.1 |
| | Security Group Tag (SGT) Exchange Protocol (SXP) | YES | 16.12.1 |
| | Fabric Enabled Wireless | YES | 16.10.1 |
| | Cisco Umbrella WLAN - OpenDNS support | YES | 16.10.1 |
| | StadiumVision Multicast | YES | 16.10.1 |
| | wIPS (Architechture/Supported signatures are different between the two platforms) | YES | 17.1.1 |
| | Bring your own device (BYOD) (ISE auto- provisioning) | YES | 16.10.1 |
| | DNA Spaces connector | YES | 16.10.1 |
| | TrustSec support on WLC 5520, 7510 and 8500 | YES | 16.12.1 (On equivalent C9800 Platform) |
| | AAA and DHCP Dashboard Network Services Analytics | YES | YES |
| Scale | 9800 | YES | https://salesco nnect.cisco.co m |
| | 9100 | YES | https://salesco nnect.cisco.co m |
| AP | Support for AP 3700 | YES | 16.10.1 |
| Support | Support for AP 2700 | YES | 16.10.1 |
| (Please | Support for AP 1700 | YES | 16.10.1 |
| refer | Support for AP 1570 | YES | 16.10.1 |
| <u>compati</u> | Support for AP 1850 | YES | 16.10.1 |

| bility | Support for AP 1830 | YES | 16.10.1 |
|--------------------|---|-----|----------|
| matrix | Support for AP 2800 | YES | 16.10.1 |
| for | Support for AP 3800 | YES | 16.10.1 |
| complete | Support for AP 1810(W) | YES | 16.10.1 |
| list of | Support for AP 1560 (Local mode only) | YES | 16.10.1 |
| supporte | Support for AP 1815i | YES | 16.10.1 |
| d APs) | 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 1542/7 <i>b</i> 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 9113 and 9117 access points Support for Catalyst 9120-AXI access point | YES | 16.12.1s |
| | , , , , | | |
| | Support for 9130-AXI | YES | 16.12.2s |
| | support for 9120AXE, 9120AXP | YES | 16.12.2s |
| | Support for AP IW3702 | YES | 17.1.1s |
| | Tri-radio Support(dynamic) - Axel 9130 | YES | 17.3.1 |
| | UL OFDMA (37 users) Support for Axel 9130 | YES | 17.3.1 |
| | DL OFDMA (37 users) Support for Axel 9130 | YES | 17.3.1 |
| | .11ax UL MU-MIMO (160MHz) – | YES | 17.3.1 |
| | 9130/9120/9115/9105 | | |
| | .11ax DL MU-MIMO (160MHz) – Axel 9130 | YES | 17.3.1 |
| | CLI to enable/disable IW3702 heaters | YES | 17.3.1 |
| | eWLC CLIs for External Modules for 3800 | YES | 17.3.1 |
| | Teleworker | YES | 17.3.1 |
| | C9124 | YES | 17.5.1 |
| | C-ANT9104= Antenna support | YES | 17.6.1 |
| Servicea bility | CLI command to display number of voice calls in WLC (show cac voice stats [802.11a 802.11b] <ap-name>)</ap-name> | NO | 16.10.1 |
| | Ability to clear queue-info-max stats (clear queue-info [detail <queue-id>/all/capwap/dot11/ipv6/mobility/redundancy])</queue-id> | YES | 16.10.1 |
| | Logs saved in flash prior WLC reboot (show logging last-reset) | YES | 16.10.1 |
| | 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 |
| | support-bundle { scp: tftp: }) | | |
| | Wave 2 APs - Log history for radio reset (show history interface dot11radio { 0 1 } { reset radar }) | YES | 16.10.1 |
| | 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</string> | YES | 16.10.1 |
| show commands | | |
| Wave 2 APs - Command to show client exclusion | YES | 16.10.1 |
| list on Flex APs (#show flexconnect client | | |
| exclusion-list) | | |
| Wave 2 APs - Abitlity to filter debug traffic based | YES | 16.10.1 |
| 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) | 163 | 16.10.1 |
| Name of AP included in show client detail output | YES | 16.10.1 |
| | YES | 16.10.1 |
| Ability to debug multiple mac address AP packet-dump | YES | 16.10.1 |
| · · · · · · · · · · · · · · · · · · · | | |
| AP's IP address in show ap summary | YES | 16.10.1 |
| Add CLI - Grep support | YES | 16.10.1 |
| CLI command show queue-info addition | YES | 16.10.1 |
| IP address included in the output of show ap | YES | 16.10.1 |
| Summary AD search per ID address on CIII | YES | 16.10.1 |
| AP search per IP address on GUI | | |
| 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 | YES | 16.10.1 |
| local/bridge | TES | 10.10.1 |
| Add CLI show client detail displays profile/ssid | YES | 16.10.1 |
| name | 123 | 10.10.1 |
| Add CLI show ap join stats shows current real | YES | 16.10.1 |
| name | | |
| 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 | YES | 16.10.1 |
| the WLC (show certificate all) | | |
| FlexConnect Client debugs on AP | YES | 16.10.1 |
| Wave 2 APs - Addition of command show | YES | 16.10.1 |
| controllers dot11radio 0/1 client <mac></mac> | | |
| Wave 2 APs - Ability to clear ap trace logs (#config | YES | 16.10.1 |
| ap client-trace clear) | | |
| Wave 2 APs - Debug to check UP value for client | YES | 16.10.1 |
| downstream (#debug capwap client qos) | | 10:5: |
| Wave 2 APs - Log number of deauths sent by AP | YES | 16.10.1 |
| (#show dot11 clients deauth) | VEC | 10.40.4 |
| Wave 2 APs - Log number of consecutive TX fails | YES | 16.10.1 |
| (#show controllers dot11radio 0/1 client aa:bb:cc:dd:ee:ff) | | |
| Wave 2 APs - Ability to see rate per client on client | YES | 16.10.1 |
| vvave 2 At 3 Ability to see rate per client on chefft | ILJ | 10.10.1 |

| | tracing (#debug dot11 client rate address aa:bb:cc:dd:ee:ff) | | |
|------------|---|-----|---------|
| | Wave 2 APs - Client count statistics (#show client summary) | YES | 16.10.1 |
| | Ability to see conifguration history (show logging config-history) | YES | 16.10.1 |
| | Ability to Small Form-Factor Pluggable (SF) transceiver information (show port sfp-info) | YES | 16.10.1 |
| | Debug commands for bonjour/mDNS added (debug mdns client, shows mdns query stats, test mdsn) | YES | 16.11.1 |
| | Usernames are displayed in client summaries | YES | 16.11.1 |
| | CLI show rogue ap summary - extended options | YES | 16.12.1 |
| | Wildcard support in Change Filter in GUI | YES | 16.12.1 |
| | IP address in show client summary | YES | 16.12.1 |
| | Introduction of show ap bundle | YES | 16.12.1 |
| | Wave 2 APs - Command available to clear counters on show controller (#clear counters [dot11radio client]) | YES | 16.12.1 |
| | Wave 2 APs - Improved show dot11 interface dot11radio 0/1 statistics output | YES | 16.12.1 |
| | COS AP packet tracer phase 1 | YES | 17.3.1 |
| | Need a way to download AP support bundle from the WLC UI | YES | 17.3.1 |
| | Client assoc/disassoc/reassoc syslogs | YES | 17.3.1 |
| Certificat | FIPS | YES | 16.12.1 |
| ion | 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 |

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) |