

Release Notes for Cisco Mobility Express, Cisco Wireless Release 8.6.101.0

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Introduction



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These release notes describe what is new or changed in the release, instructions to upgrade to this release, and open and resolved caveats for this release. These release notes are updated as needed to provide information about new features, caveats, potential software deferrals, and related documents.

The Cisco Mobility Express network solution inherits all features that were released prior to the introduction of the Cisco Wireless Release with a few exceptions. For information about inherited features that were introduced prior to this release, see the *Existing Features* section of the .



Note The Cisco Mobility Express wireless network solution is available starting from Cisco Wireless Release 8.1.122.0.

We recommend that you view the field notices for this release to check whether your software or hardware platforms are affected. If you have an account on Cisco.com, you can find the field notices at: http://www.cisco.com/en/US/customer/support/tsd_products_field_notice_summary.html.

However, if you do not have a Cisco.com account, you can find the field notices at: http://www.cisco.com/en/US/support/tsd_products_field_notice_summary.html.

Overview of Cisco Mobility Express

The Cisco Mobility Express wireless network solution comprises of at least one 802.11ac Wave 2 Cisco Aironet Series access point (AP) with an in-built software-based wireless controller (WLC) managing other APs in the network.

The AP acting as the WLC is referred to as the primary AP while the other APs in the Cisco Mobility Express network, which are managed by this primary AP, are referred to as subordinate APs.

In addition to acting as a WLC, the primary AP also operates as an AP to serve clients along with the subordinate APs.

Cisco Mobility Express provides most features of a Cisco WLC and has the capability to interface with the following:

- Cisco Prime Infrastructure—For simplified network management, including managing AP groups
- Cisco Identity Services Engine—For advanced policy enforcement
- Connected Mobile Experiences (CMX)—For providing presence analytics and guest access using Connect & Engage

Supported Cisco Access Points

The following Cisco Aironet Series APs are supported in the Cisco Mobility Express network:



Note

- APs listed under primary APs can also function as subordinate APs.
- The software on the APs listed under primary APs can be converted from Cisco Mobility Express to CAPWAP Lightweight AP software and vice versa. For ordering information, visit the [Cisco Aironet Access Points Ordering Guide](#)

Table 1: Cisco APs Supported in Cisco Mobility Express

Primary APs	Subordinate APs
Cisco Aironet 1830 Series	Cisco Aironet 1700 Series
Cisco Aironet 1850 Series	Cisco Aironet 1800i
	Cisco Aironet 1810w
	Cisco Aironet 2700 Series
	Cisco Aironet 3700 Series
	Cisco Aironet 700i
	Cisco Aironet 700w

Maximum APs and Clients Supported

Depending on the primary AP in the Cisco Mobility Express network, the maximum number of APs and clients supported varies.

Table 2: Scale Supported in Cisco Mobility Express Network

Primary AP Model	Maximum APs Supported	Maximum Clients Supported
Cisco Aironet 1540 Series	50	1000
Cisco Aironet 1560 Series	100	2000
Cisco Aironet 1815i	50	1000
Cisco Aironet 1815m	50	1000
Cisco Aironet 1815w	50	1000
Cisco Aironet 1830 Series	50	1000
Cisco Aironet 1850 Series	50	1000
Cisco Aironet 2800 Series	100	2000
Cisco Aironet 3800 Series	100	2000



Note If there are more than 25 Access Points in a Mobility Express network, the primary AP (running the Wireless LAN controller function) can service a maximum of 20 clients. This limit only applies to primary AP and not any other Access Point in the Mobility Express network.

New and Changed Features

- Support for TLS secure tunnel with the following provisions:
 - Zero touch configuration through the APIC EM PNP server
 - Support for TLS gateway FQDN
 - Support for cloud-based DNS server
 - PSK-based authentication
 - Implicit and explicit configuration for tunneling traffic
 - Support for Dead Peer Detection (DPD) that enables a keepalive check of the server and client
 - Rekey procedure that provides SSL connection security
- GUI enhancements with the following provisions:

- Support for multiple **Access Points Groups**
- Options in the **Access Points Administration** window to:
 - Manually set a preferred primary AP via the **Make Me Controller** button
 - Ability to configure 802.1x supplicant through the **Global Access Point Configuration** page
- Ability to configure SSH credentials
- Support for creating RF profiles
- Best practices for improved RF management to enable and disable low data rates on 2.4 GHz and 5 GHz.
- Complete management of **Syslog server** configuration
- Improved **WLAN Users** screen
- Improved **Edit WLAN** screen in **Expert** view with an option to enable or disable CCKM

Compatibility of Cisco Mobility Express with Other Cisco Wireless Solutions

For Cisco Mobility Express solution software compatibility information, see the [Cisco Wireless Solutions Software Compatibility Matrix](#).

Cisco Mobility Express Software Release Information

The following table lists the Cisco Wireless Release 8.6.101.0 software for Cisco Aironet APs that are Cisco Mobility Express capable (primary APs).



Note Choose the appropriate AP software based on the following:

- Cisco Mobility Express software to be used for converting the AP from the unified wireless network CAPWAP lightweight AP to a Cisco Mobility Express-capable AP (primary AP)
- AP software image bundle to be used either for upgrading the Cisco Mobility Express software on the primary AP or for updating the software on the subordinate APs or both

Prior to ordering these Cisco Aironet APs, visit the [Cisco Aironet Access Points Ordering Guide](#).

Table 3: Cisco Mobility Express Software for Cisco Aironet APs

Primary AP	AP Software for Conversion from CAPWAP to Cisco Mobility Express	AP Software Image Bundle for Upgrade	AP Software in the Bundle
Cisco Aironet 1540 series	AIR-AP1540-K9-8-6-100-0.tar	AIR-AP1540-K9-ME-86-1000.zip	ap1g5
Cisco Aironet 1560 series	AIR-AP1560-K9-8-6-100-0.tar	AIR-AP1560-K9-ME-86-1000.zip	ap3g3
Cisco Aironet 1815 series	AIR-AP1815-K9-8-6-100-0.tar	AIR-AP1815-K9-ME-86-1000.zip	ap1g5

Primary AP	AP Software for Conversion from CAPWAP to Cisco Mobility Express	AP Software Image Bundle for Upgrade	AP Software in the Bundle
Cisco Aironet 1830 series	AIR-AP1830-K9-8-6-100-0.tar	AIR-AP1830-K9-ME-8-6-100-0.zip	ap1g4
Cisco Aironet 1850 series	AIR-AP1850-K9-8-6-100-0.tar	AIR-AP1850-K9-ME-8-6-100-0.zip	ap1g4
Cisco Aironet 2800 series	AIR-AP2800-K9-8-6-100-0.tar	AIR-AP2800-K9-ME-8-6-100-0.zip	ap3g3
Cisco Aironet 3800 series	AIR-AP3800-K9-8-6-100-0.tar	AIR-AP3800-K9-ME-8-6-100-0.zip	ap3g3

Installing Cisco Mobility Express Software

For software installation instructions, see the “Getting Started” section in the .

Limitations and Caveats

Known Limitations

- Internet Group Management Protocol (IGMP)v3 is not supported on Cisco Aironet Wave 2 APs.
- If the Cisco AP has a Cisco Mobility Express software image, it will not support link aggregation groups (LAG) even if it is 802.3ad (LACP)-compliant.
- Over-the-DS fast BSS transition and fast transition PSK authentication are not supported.

Caveats

Caveats describe unexpected behavior in the Cisco Mobility Express network solution. Severity 1 caveats are the most serious while Severity 2 caveats are less serious. Severity 3 caveats are moderately serious and only select severity 3 caveats are listed here.

The and sections list the caveats in the Cisco Mobility Express network solution for Cisco Wireless Release . The following information is provided for each caveat:

- Identifier—Each caveat is assigned a unique identifier (ID) with a pattern of CSCxxNNNNN, where x is any letter (a-z) and N is any number (0-9). These IDs are frequently referenced in Cisco documentation, such as Security Advisories, Field Notices and other Cisco support documents. Technical Assistance Center (TAC) engineers or other Cisco staff can also provide you with the ID for a specific caveat.
- Description—A description of what is observed when the caveat occurs.

Cisco Bug Search Tool

The [Cisco Bug Search Tool](#) (BST), which is the online successor to the Bug Toolkit, is designed to improve the effectiveness in network risk management and device troubleshooting. The BST allows partners and customers to search for software bugs based on product, release, and keyword, and aggregates key data, such as bug details, product, and version. The tool has a provision to filter bugs based on credentials to provide external and internal bug views for the search input.

For more information about how to use the [Cisco Bug Search Tool](#) effectively, including how to set email alerts for bugs, filter bugs, and save bugs and searches, see the [Bug Search Tool Help & FAQ](#) page.

You can access the listed bugs through the BST. This web-based tool provides you with access to the Cisco bug tracking system, which maintains information about bugs and vulnerabilities in the Cisco Mobility Express network solution and other Cisco hardware and software products.

Click the Caveat Identifier number in the table. The corresponding BST page is displayed with details of the bug.



Note If you are not logged in, you will be redirected to a **Log In** page where you need to enter your registered Cisco.com username and password to log In. If you do not have a Cisco.com account, you can [register](#) for one.

If the defect that you have selected cannot be displayed, this may be due to one or more of the following reasons:

- The defect number does not exist
- The defect does not have a customer-visible description yet
- The defect has been marked Cisco Confidential

Open Caveats

In this Cisco Wireless Release 8.6.101.0, there are no open caveats.

Resolved Caveats

This section lists the caveats that have been resolved in Cisco Wireless Release 8.6.101.0.

Caveat ID Number	Description
CSCuz85056	Modifying IP mode from DHCP to static does not change for a scenario
CSCvd87518	In GUI via HTTP, the image transfer shows as failed, while user is uploading the file
CSCve07559	Cisco Mobility Express controller shows incorrect port speed
CSCve20508	AP3800: Applying management IP address after clear config on the Cisco Mobility Express.
CSCve39780	Cisco Mobility Express controller is dropping some static IP client associations due to DHCP policy timeout
CSCvf04412	Cisco AP2800 or AP3800 acting as Cisco Mobility Express stopped working due to watchdog reset (OOM) after 23 days of up time
CSCvf11920	Unexpected error on uploading RRM History logs
CSCvf11942	DHCP Scope Gateway is mismatching with Client Gateway
CSCvf19134	Clients are getting disconnect when user clicks on apply button of RF-optimization page
CSCvf22977	Not able to delete RADIUS Auth server with RFC3576 enabled from CLI

Caveat ID Number	Description
CSCvf24648	Error message not shown while providing decimal values for VLAN ID in Cisco Mobility Express GUI
CSCvf24746	Showing wrong AP model name in popup message
CSCvf30068	Cisco Mobility Express: Add support for AP Groups in GUI
CSCvf36113	Cisco Mobility Express controller throws warning message while downloading image from TFTP
CSCvf37061	Cisco Mobility Express GUI should show a warning message if user enables MAC filter on SSID when local MAC list is empty
CSCvf41597	Failed to configure ACLs required to connect to CMX Server should be enhanced
CSCvf42316	DHCP client/server configurations gets reflected as 0 while configuring in Japanese
CSCvf60295	Cisco Mobility Express GUI error message with TACACS+ authentication configuration
CSCvf65988	DHCP Scope default gateway address IP is not getting saved while editing the Central NAT scope
CSCvf76161	Cisco Mobility Express: primary AP running with 100% CPU utilization
CSCvf89334	OpenDNS information is lost when primary AP fails over to the new one
CSCvg06986	Cisco Mobility Express: SSH session for WLC showing as Telnet

Service and Support

For all support-related information, see <http://www.cisco.com/c/en/us/support/index.html>.

Related Documentation

Cisco Mobility Express

Additional References

- The quick start guide or installation guide for your specific Cisco AP
- [Cisco Wireless Solutions Software Compatibility Matrix](#)
- [Cisco Aironet Access Points Ordering Guide](#)
- [Cisco Aironet Universal AP Priming and Cisco AirProvision User Guide](#)
- [Cisco Wireless Products Comparison Tool](#)

For more information about Cisco Mobility Express, visit <http://www.cisco.com/go/mobilityexpress>.

Communications, Services, and Additional Information

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Cisco Bug Search Tool

[Cisco Bug Search Tool](#) (BST) is a web-based tool that acts as a gateway to the Cisco bug tracking system that maintains a comprehensive list of defects and vulnerabilities in Cisco products and software. BST provides you with detailed defect information about your products and software.

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