Recommended AireOS Wireless LAN Controller Releases

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Important Notices

IOS AP Download Loop

As of Dec. 5, 2022, lightweight IOS access points are subject to being stuck in a downloading loop when upgrading or downgrading software. See:

- Field Notice: FN - 72524 - During Software Upgrade/Downgrade, Cisco IOS APs Might Remain in Downloading State
- IOS AP Image Download Fails Due to Expired Image Signing Certificate Post December 4th, 2022 (CSCwd80290) before upgrading/downgrading.

Wave 2 APs May Not Detect Radar

The following Wave 2 AP series (2800, 3800, 4800, 1560, 6300) may fail to detect radar on 5GHz DFS channels, and hence may operate in violation of regulatory requirements. See: Field Notice: FN74035 - Cisco Access Points May Not Detect Radar on the Required Levels After Channel Availability Check Time - Software Upgrade Recommended. For more details, see the Radar Detection Fixes note below.

Introduction

This document helps customers to find the most reliable AireOS Wireless LAN Controller (WLC) software available. Cisco recommends AireOS builds from each train of released WLC software.

Note: As of May 1, 2023, AireOS is End of Software Maintenance. Only security/vulnerability fixes will be provided until January 30, 2025; after then, Cisco will provide no new AireOS releases. This includes the software support for Cisco Mobility Express (ME) Software for Aironet Access Points. See: Cisco announces the end-of-life for the Cisco Wireless Software Version 8.10. Cisco TAC will continue to provide support for AireOS running on 8540, 5520, 3504 and vWLC Wireless LAN Controllers until those platforms' Last Date of Support (January 31, 2027).

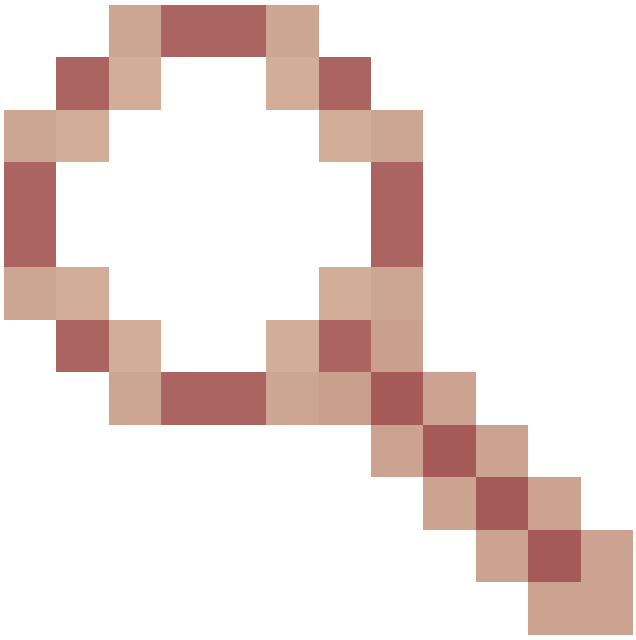
Recommended AireOS Builds

AireOS 8.10

Cisco recommends AireOS 8.10.196.0 for deployments with 802.11ac/802.11ax access points (APs) and 8540/5520/3504/vWLC controllers. 8.10.196.0 includes fixes for the following important issues:

- IOS APs stuck in a downloading loop - see Field Notice: FN - 72524 - During Software Upgrade/Downgrade, Cisco IOS APs Might Remain in Downloading (fixed in 8.10.183.0 and above)
- Certain C9105/9120/9130 units manufactured starting September 2022 require 8.10.181.0 or above - see https://www.cisco.com/c/en/us/support/docs/wireless/catalyst-9120axi-access-point/218081-c9105-c9120-c9130-access-points-manufact.html.
- 2800, 3800, 4800, 1560 or 6300 series APs, if operating in DFS channels, must run software released after June 2023. See Field Notice: FN74035 - Cisco Access Points May Not Detect Radar on the Required Levels After Channel Availability Check Time - Software Upgrade Recommended. (CSCwf67316, fixed in 8.10.190.0.)
    - Note: after upgrading to software with the CSCwf67316 fix, 2800, 3800, 4800, 1560 or 6300 series AP radios may get stuck in a state where they are unable to transmit data frames to clients. This is addressed via CSCwh74663, which is fixed in 8.10.196.0.

Special Note for 8.10 Deployments with 1815/1830/1850 Series APs



Due to a regression caused by the commit of CSCwb51757
, 1800 series APs running 8.10.185.0 through 8.10.196.0 may report spuriously high channel utilization in 5GHz, causing performance problems.

- For 1815 series APs, this is CSCwi92439; the fix is in 8.10.190.9 / 8.10.196.7, available from TAC.
- For 1830/1850 series APs, this is CSCwh75431, fixed in 9800/EWC releases 17.6.7 / 17.9.5 / 17.12.3 / 17.14.1. As this fix is unavailable in the 8.10 code train, to avoid this problem, AireOS deployments

encountering this issue will need to downgrade to code prior to the CSCwb51757 commit, i.e. 8.10.183.0 or earlier.

AireOS 8.9, 8.8, 8.7, 8.6

AireOS 8.9, 8.8, 8.7 and 8.6 are end of life, and are susceptible to Field Notice: FN - 72524; , which prevents IOS APs from downloading software that was released prior to December 2022. Customers should upgrade to latest 8.10.

AireOS 8.5

AireOS 8.5 is End of Life; Cisco will release no more fixes for it. See the Product Bulletin. It's the last train for the following platforms: AP1600, AP2600, AP3500, AP3600, AP1552 (128MB version), AP802, WLC2504, WLC5508, WLC7510, WLC8510, WiSM2. AireOS 8.5 has two branches:

8.5 Mainline

The 8.5 Mainline branch supports 5508/8510/5520/8540/3504/2504/7510/WiSM2/vWLC controllers. It supports intercontroller mobility (IRCM) between AireOS and old "New Mobility" ("Converged Access") controllers (5760/3850/3650.) It does **not** support IRCM with 9800 controllers. For 8.5 Mainline deployments, TAC recommends 8.5.182.12 (8.5.182.13 for 3504s), which have fixes for the following important issues:

- Access points with 17.6.1 or above loaded will be unable to join any controller running any AireOS released prior to July 2021. For 8.5 Mainline, this is fixed in 8.5.182.0 and above. See CSCvx98176 .
- CSCvz84912, which can cause frequent unexpected reloads, in any deployment where the WLC has mobility peers (fixed in 8.5.182.11 and above).
- Field Notice: FN - 72524 (CSCwd80290), which prevents IOS APs from downloading software (fixed in 8.5.182.11 and above).
- 2800, 3800, 4800, 1560 or 6300 series APs, if operating in DFS channels, must run software released after June 2023. See Field Notice: FN74035 - Cisco Access Points May Not Detect Radar on the Required Levels After Channel Availability Check Time - Software Upgrade Recommended. (CSCwf67316, fixed in 8.5.182.11 and above).
    - Note: after upgrading to software with the CSCwf67316 fix, 2800, 3800, 4800, 1560 or 6300 series AP radios may get stuck in a state where they are unable to transmit data frames to clients. This is addressed via CSCwh74663, which is fixed in 8.5.182.12.

8.5 IRCM

The 8.5 IRCM branch supports only 5508/8510/5520/8540/3504 controllers. It supports IRCM between AireOS and 9800 controllers; it does not support IRCM with old "New Mobility" ("Converged Acess") controllers. For 8.5 IRCM deployments, Cisco recommends 8.5.182.109 (8.5.182.111 for 3504s), which have fixes for the following important issues:

- Access points with 17.6.1 or above loaded will be unable to join any controller running any AireOS released prior to July 2021. For more details, see CSCvx98176.
- IOS APs may be be unable to download any software that was released prior to December 2022. See Field Notice: FN - 72524 (CSCwd80290).
- 2800, 3800, 4800, 1560 or 6300 series APs, if operating in DFS channels, must run software released after June 2023. See Field Notice: FN74035 - Cisco Access Points May Not Detect Radar on the Required Levels After Channel Availability Check Time - Software Upgrade Recommended. (CSCwf67316, fixed in 8.5.182.108 and above).
    - Note: after upgrading to software with the CSCwf67316 fix, 2800, 3800, 4800, 1560 or 6300 series AP radios may get stuck in a state where they are unable to transmit data frames to

clients. This is addressed via CSCwh74663, which is fixed in 8.5.182.109.

Mobility Express

For Mobility Express deployments, TAC recommends using the latest 8.10 release.

General AireOS Release Recommendations

For general AireOS Release Recommendations, see:

- Guidelines for Cisco Wireless Software Release Migration Bulletin
- Software Research

Note for CIMC Software on 5520s and 8540s

New: 5520 and 8540 controllers shoud have CIMC 4.1(2k) installed, in order to avoid FlexFlash problems that cause the WLCs to lose their certificates. See the Cisco UCX Rack Server Upgrade Matrix, for instructions on upgrading from your current CIMC version to 4.1(2k). (For 5520, enter "C220 M4" as the Platform; for 8540, enter "C240 M4".)

Note for Software Defined Access (SDA)

Always refer to the SDA Compatibility Matrix for code combination recommendations that work best for SDA. It lists specific combinations of code on Cisco DNA Center, the Identity Service Engine (ISE), switches, routers and Wireless LAN Controller codes that have been tested by the SDA Solution Test team at Cisco.

Related Information

- For wireless controller running IOS XE, see Recommended Cisco IOS XE Releases for Catalyst 9800 Wireless LAN Controllers
- Use the TAC Recommended AireOS discussion thread in Cisco Support Community
- Technical Support & Documentation - Cisco Systems
- Cisco Wireless Solutions Software Compatibility Matrix for information on which releases support which hardware platforms











