Recommended AireOS Wireless LAN Controller Releases

Contents

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

)
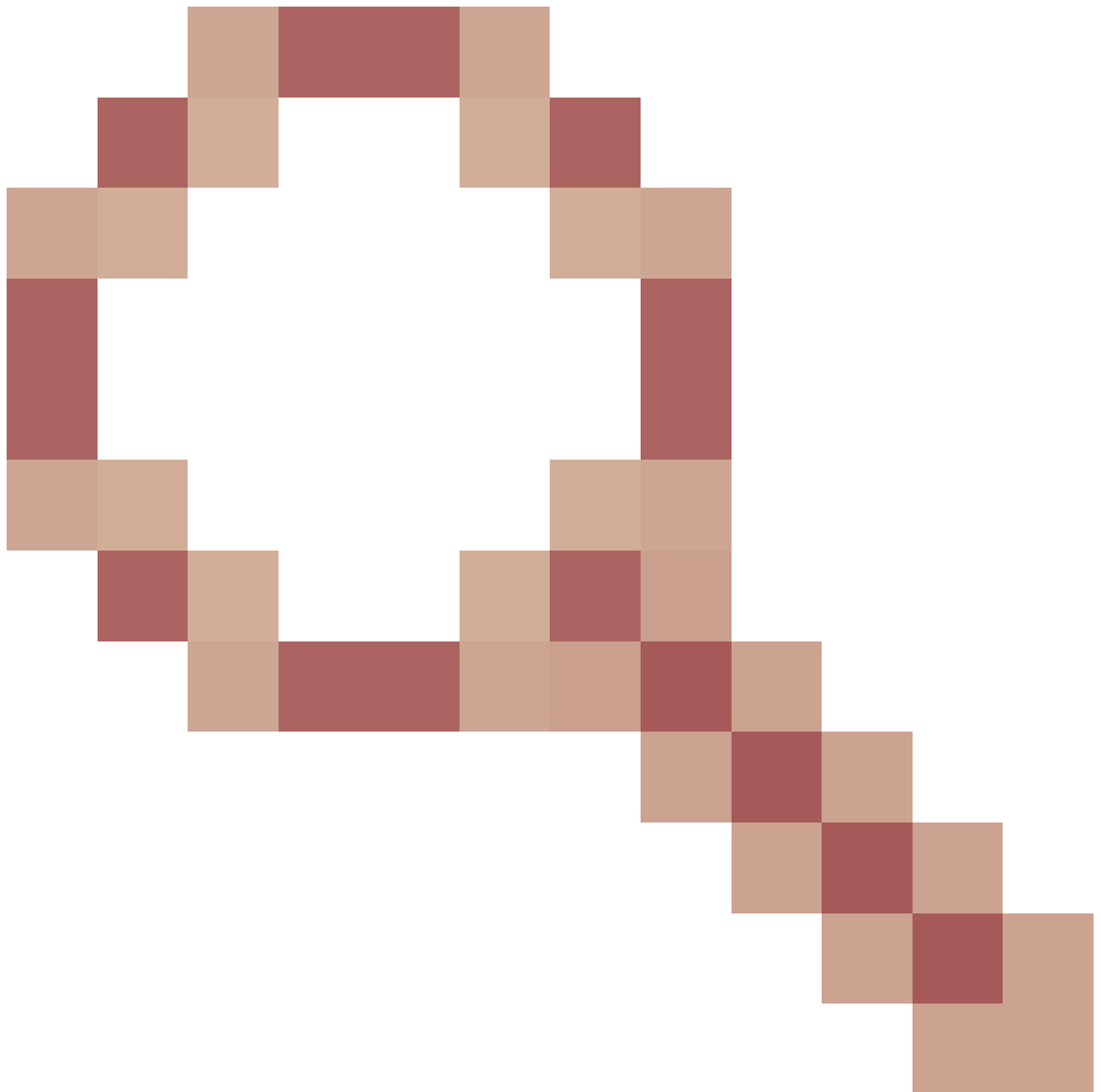
before upgrading/downgrading.

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. These

recommendations may be updated on a weekly basis.

Note: As of May 1, 2023, AireOS is End of Software Maintenance. Only security/vulnerability fixes will be provided until January 30, 2025. 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 and 3504 Wireless LAN Controllers until those platforms' Last Date of Support (January 31, 2027).

# Recommended AireOS Builds

AireOS 8.10

Cisco recommends AireOS 8.10.185.0 or 8.10.190.0 for deployments with 802.11ac/802.11ax access points (APs) and 8540/5520/3504/vWLC controllers.
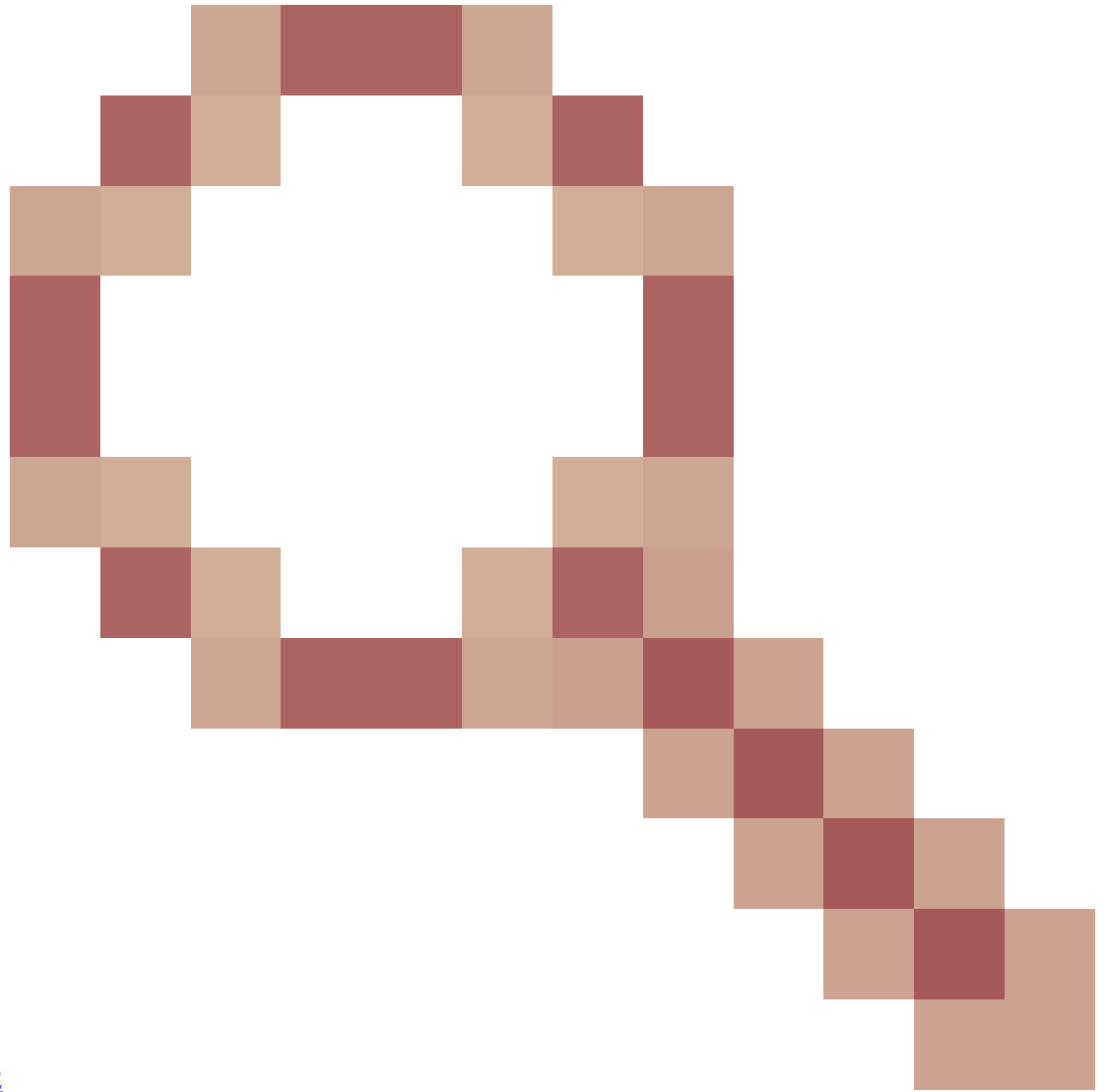
- **Note:** If you are operating 2800, 3800, 4800, 1560 or 6300 series APs in DFS channels, see the Radar Detection Fixes note below.
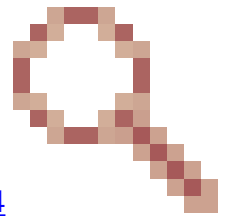
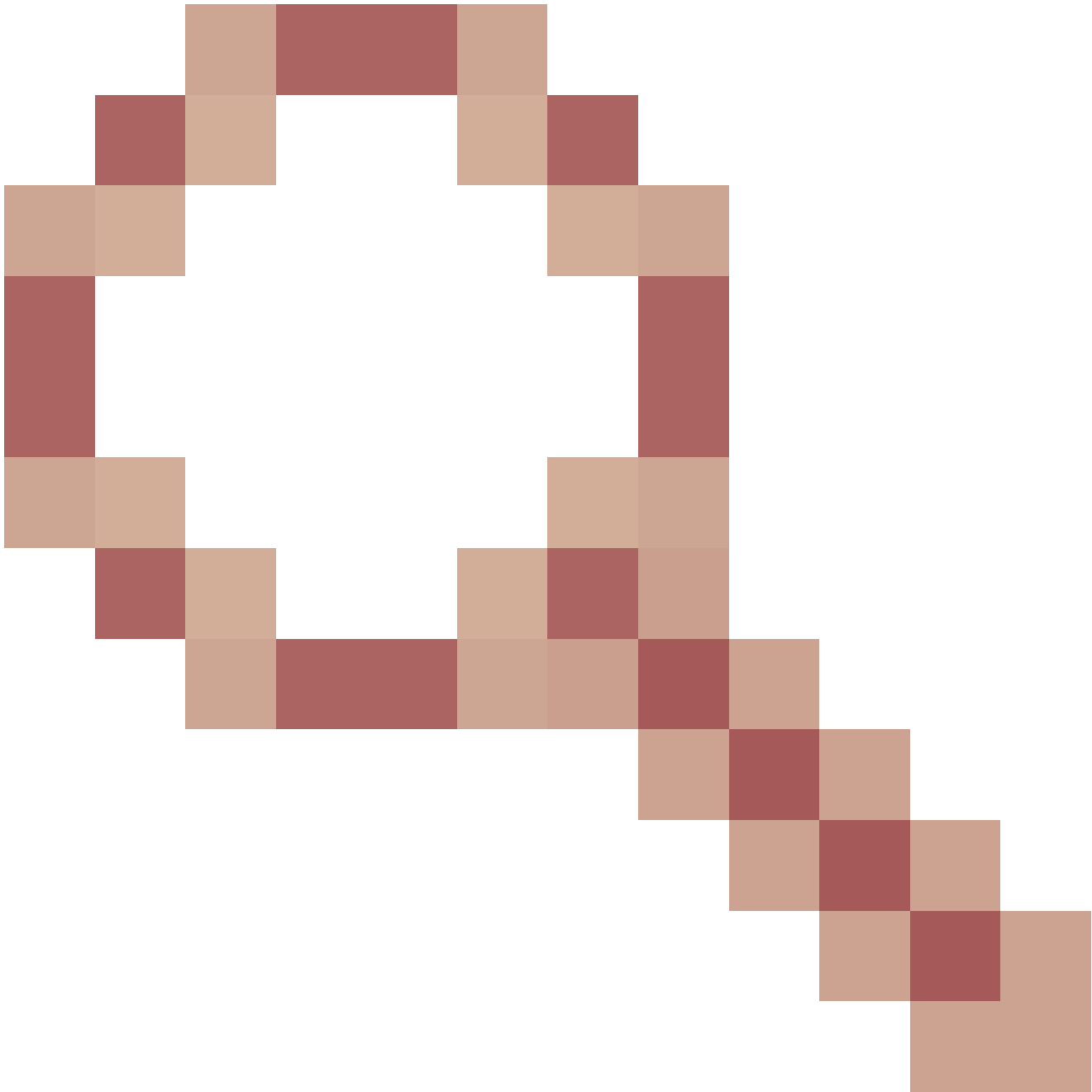- 8.10.185.0 introduces important AP fixes for client connectivity issues (CSCwb82694
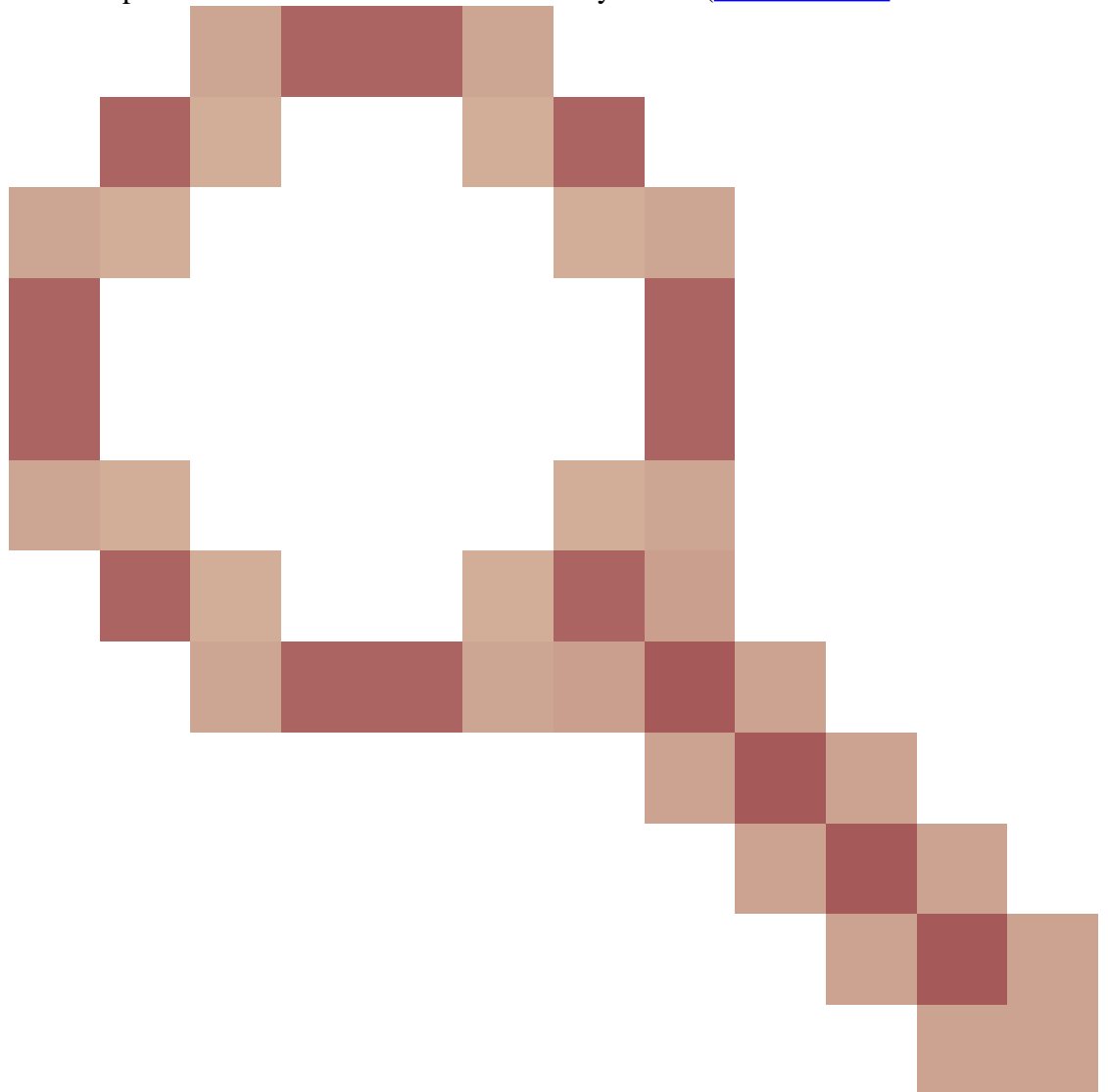
, CSCwd59921
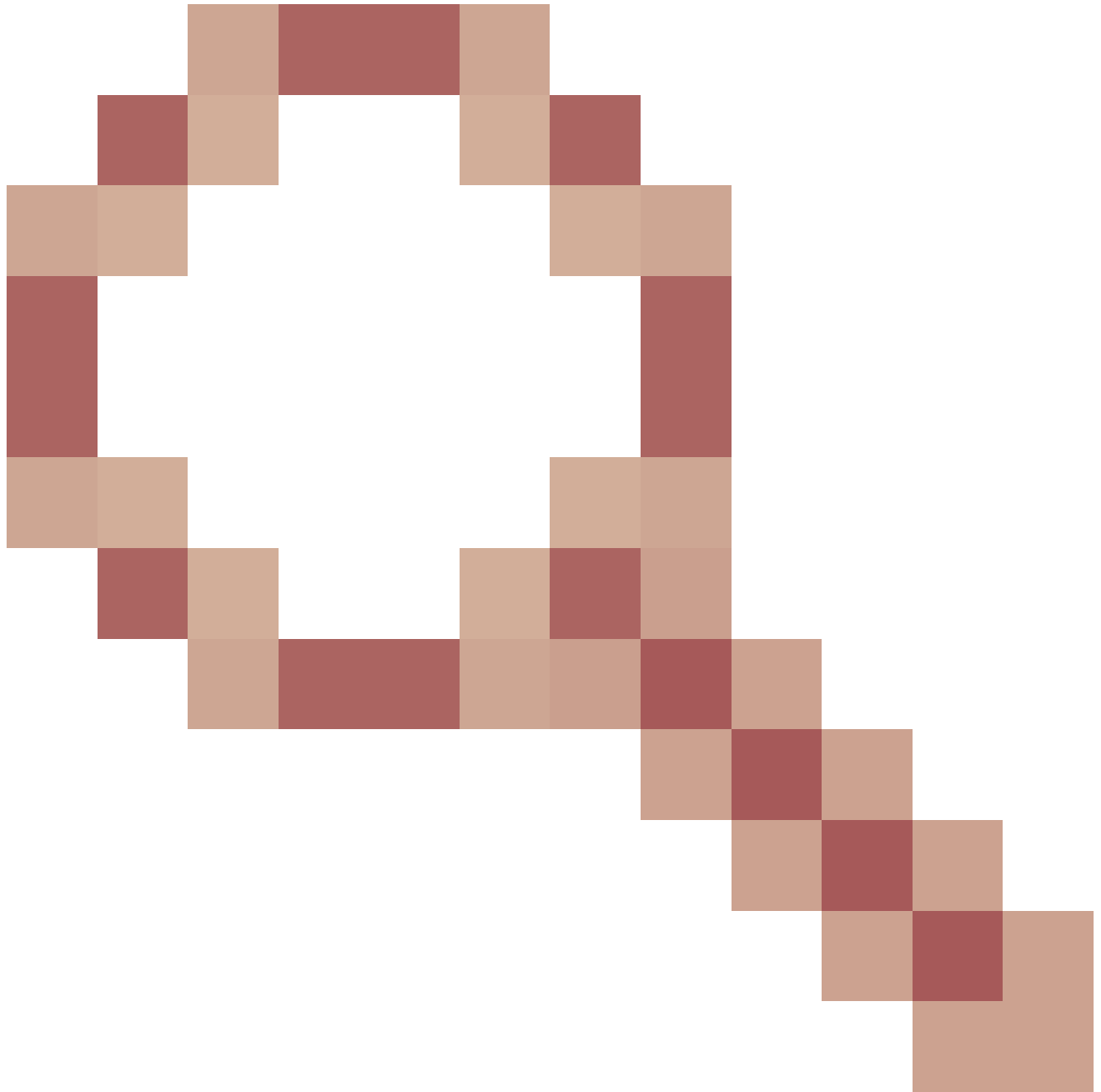
, [CSCwe04602](#)
, [CSCwe07802](#)

, CSCwd21996

, and others)
- Deployments with IOS APs should not upgrade or downgrade to any 8.10 release prior to 8.10.183.0 due to Field Notice: FN - 72524 - During Software Upgrade/Downgrade, Cisco IOS APs Might Remain in Downloading - see IOS AP Image Download Fails Due to Expired Image Signing Certificate Post December 4th, 2022 (CSCwd80290)
- 8.10.181.0 or above is required for support of certain C9105/9120/9130 units manufactured starting September 2022 - see https://www.cisco.com/c/en/us/support/docs/wireless/catalyst-9120axi-access-point/218081-c9105-c9120-c9130-access-points-manufact.html.

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 [8.5.182.7] or [8.5.182.11].

- **Note:** If you are operating 2800, 3800, 4800, 1560 or 6300 series APs in DFS channels, see the [Radar Detection Fixes]note below.
- **Note:** 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. For more details, see [CSCvx98176] .
- **Note**: However, TAC does **not** recommend running 8.5.182.0 in production, due to:
  - [CSCvz84912], which can cause frequent unexpected reloads, in any deployment where the WLC has mobility peers
  - Field Notice: FN - 72524 ([CSCwd80290]), which prevents IOS APs from downloading software
- The above issues are fixed in [8.5.182.7] and above.

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 8.5.182.108 or above, which fixes the following:

- 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]).
- **Note:** If you are operating 2800, 3800, 4800, 1560 or 6300 series APs in DFS channels, see the [Radar Detection Fixes] note below.

Mobility Express

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

Radar Detection Fixes

If you are operating 2800, 3800, 4800, 1560 or 6300 series APs, be aware that they may fail to detect radar in 5GHz DFS channels, and hence may operate in violation of regulatory requirements. This problem is
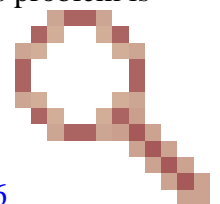
fixed in 8.10.190.0 or above, 8.5.182.11 or above, or 8.5.182.108 or above, via [CSCwf67316] . See: [Field Notice: FN74035 - Cisco Access Points May Not Detect Radar on the Required Levels After Channel Availability Check Time - Software Upgrade Recommended].
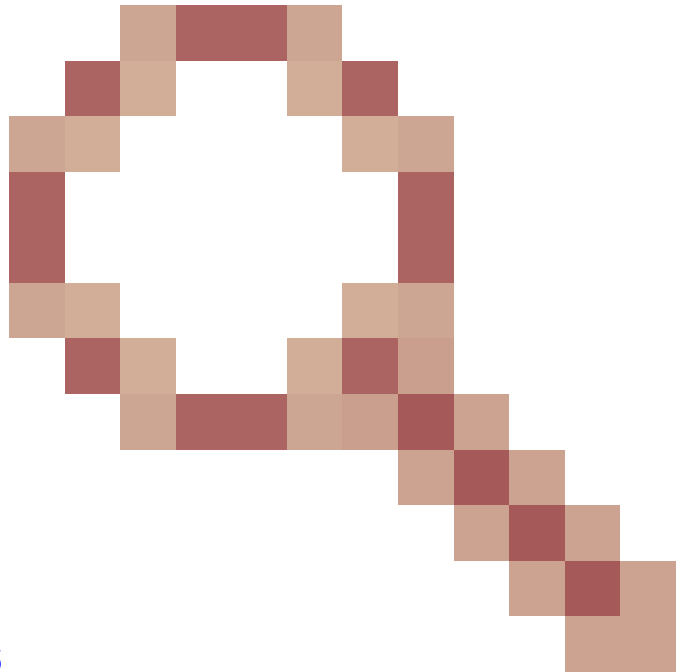
Note: after upgrading to software with the CSCwf67316
fix, 2800, 3800, 4800, 1560 or 6300 series AP radios may get stuck in a state where they are unable to

transmit data frames to clients. This is addressed via CSCwh74663
. Thus, TAC recommends that customers with these AP models upgrade to the following software
(available from TAC):

- 8.10: 8.10.190.7 or above
- 8.5 mainline: 8.5.182.12 or above
- 8.5 IRCM: 8.5.182.109 or above

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