

RUCKUS ZoneDirector 10.5.1 GA Refresh 2 Release Notes

Supporting ZoneDirector 10.5.1

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Document History

Revision Number	Summary of Changes	Publication Date
A	Initial release notes	August 2022

Introduction

This document provides release information on ZoneDirector release 10.5.1, including new features, enhancements, known issues, caveats, workarounds, upgrade details, and interoperability information for version 10.5.1.

NOTE

By downloading this software and subsequently upgrading the ZoneDirector and/or the AP to version 10.5.1, please be advised that:

- The ZoneDirector will periodically connect to RUCKUS and RUCKUS will collect the ZoneDirector serial number, software version, and build number. RUCKUS will transmit a file back to the ZoneDirector and this will be used to display the current status of the ZoneDirector Support Contract.
- The AP may send a query to RUCKUS containing the AP's serial number. The purpose is to enable your AP to autonomously connect with a wireless LAN controller operated by your choice of cloud service provider. RUCKUS may transmit back to the AP, the Fully Qualified Domain Name (FQDN) or IP address of the controller that the AP will subsequently attempt to join.

Please be advised that this information may be transferred and stored outside of your country of residence where data protection standards may be different.

New in This Release

This section lists the new features and changed behavior in this release.

New Access Point in 10.5.1.0.124

- H350

This release adds ZoneDirector support for the new H350 indoor 802.11ax AP.

H350 is an 802.11ax Dual-Band Concurrent 2x2:2 .11ax (5GHz) and 2x2:2 .11ax (2.4GHz) for indoor applications that comes with a three port Ethernet (10/100/1000) with PoE input. It doesn't have USB port.

- T350se

T350se is an 802.11ax Dual-Band Concurrent 2x2:2 .11ax (5GHz) and 2x2:2 .11ax (2.4GHz) for outdoor applications that comes with a single port Ethernet (1000/100/10M). It also has an integrated USB port.

New Features

- ZD upgrade support multiple version migration

Beginning from ZoneDirector 10.5.1, the upgrade limitation of N-2 version is removed. Following versions can be directly upgraded to 10.5.1 with configuration migration.

- 10.1.0.0, 10.1.1.0, 10.1.2.0, 10.2.0.0, 10.2.1.0, 10.3.0.0, 10.3.1.0, 10.4.0.0, 10.4.1.0, 10.5.0

- Wi-Fi 6 disable

From the UI, the user can enable or disable Wi-Fi 6 in WLAN for 11ax APs.

- Replace FTP with HTTPS

As a security enhancement, File Transfer Protocol (FTP) is replaced with Hypertext Transfer Protocol Secure (HTTPS).

- Channel 144 support

Channel 144 is supported for country codes "US" and "JP" when DFS is enabled.

- Configuration change recoding

Records all the configuration change commands from the web UI, CLI, mobile app, and UMM to track the configuration changes.

- DNSmasq upgrade for security issue

DNSmasq is upgraded to address a security issue.

Changed Behavior

- Remove AP USB page from ZD web UI because uploading AP USB command has not been supported on the platform. [ZF-21993]
- Beginning with Zone Director 10.5.1, the AP image upgrade uses HTTPS. If there is an upgrade failure using HTTPS, you can enable the legacy AP image upgrade option to FTP under **Administrator > Upgrade** tab. Zone Director supports either HTTPS or FTP as the AP image upgrade option.

Hardware and Software Support

Supported Platforms

ZoneDirector firmware version **10.5.1.0.193** supports the following ZoneDirector models:

- ZoneDirector 1200

Supported Access Points

ZoneDirector version **10.5.1.0.193** supports the following RUCKUS Access Point models:

Indoor AP	Outdoor AP
C110	E510
H320	T300
H510	T300e
R310	T301n
R320	T301s
R500	T310c
R510	T310d
R550	T310n
R600	T310s
R610	T610
R650	T610s
R710	T710

Upgrade Information

Indoor AP	Outdoor AP
R720	T710s
R730	T750
R750	T750se
R850	T350c
R350	T350d
H550	T350se*
H350*	

NOTE

H350 and T350se were introduced in the GA release.

Upgrade Information

Supported Upgrade Paths

The following ZoneDirector release builds can be directly upgraded to this release:

- 10.1.0.0.1515 (10.1 GA)
- 10.1.1.0.26 (10.1 MR1)
- 10.1.1.0.35 (10.1 MR1 Refresh 1)
- 10.1.1.0.42 (10.1 MR1 Refresh 2)
- 10.1.1.0.55 (10.1 MR1 Refresh 3)
- 10.1.1.0.62 (10.1 MR1 Refresh 4)
- 10.1.1.0.79 (10.1 MR1 Refresh 5)
- 10.1.2.0.120 (10.1 MR2)
- 10.1.2.0.210 (10.1 MR2 Refresh 1)
- 10.1.2.0.251 (10.1 MR2 Refresh 2)
- 10.1.2.0.270 (10.1 MR2 Refresh 3)
- 10.1.2.0.275 (10.1 MR2 Refresh 4)
- 10.1.2.0.277 (10.1 MR2 Refresh 5)
- 10.1.2.0.306 (10.1 MR2 Refresh 6)
- 10.1.2.0.318 (10.1 MR2 Refresh 7)
- 10.2.0.0.189 (10.2 GA)
- 10.2.1.0.58 (10.2 Patch Release - R720 LACP)
- 10.2.1.0.75 (10.2 MR1)
- 10.2.1.0.129 (10.2 MR1 Refresh 1)
- 10.2.1.0.135 (10.2 MR1 Refresh 2)
- 10.2.1.0.147 (10.2 MR1 Refresh 3)
- 10.2.1.0.159 (10.2 MR1 Refresh 4)
- 10.2.1.0.183 (10.2 MR1 Refresh 5)

- 10.2.1.0.192 (10.2 MR1 Refresh 6)
- 10.2.1.0.200 (10.2 MR1 Refresh 7)
- 10.2.1.0.212 (10.2 MR1 Refresh 8)
- 10.3.0.0.362 (10.3 GA)
- 10.3.0.0.389 (10.3 GA for R750)
- 10.3.0.0.398 (10.3 GA Refresh 1)
- 10.3.1.0.21 (10.3 MR1)
- 10.3.1.0.24 (10.3 MR1 Refresh 1)
- 10.3.1.0.30 (10.3 Patch for ER-7600)
- 10.3.1.0.42 (10.3 MR Refresh 2)
- 10.3.1.0.45 (10.3 MR1 Refresh 3)
- 10.3.1.0.46 (10.3 MR Patch for ER-8328)
- 10.3.1.0.52 (10.3 MR Patch for AP-13802)
- 10.4.0.0.69 (10.4 GA)
- 10.4.0.0.70 (10.4 GA Refresh 1)
- 10.4.0.0.98 (10.4 GA Refresh 2)
- 10.4.0.0.109 (10.4 Patch for ER-8683)
- 10.4.1.0.214 (10.4.1 GA)
- 10.4.1.0.226 (10.4.1 GA Refresh 1 for T750se)
- 10.4.1.0.236 (10.4.1 Patch for ER-9106)
- 10.4.1.0.238 (10.4.1 GA Refresh 2)
- 10.4.1.0.248 (10.4.1 Patch for ER-9807)
- 10.4.1.0.254 (10.4.1 GA Refresh 3)
- 10.4.1.0.257 (10.4.1 GA Refresh 4)
- 10.4.1.0.272 (10.4.1 GA Refresh 5)
- 10.5.0.0.150 (10.5 GA Release)
- 10.5.0.0.190 (10.5 GA Refresh 1)
- 10.5.0.0.212 (10.5 GA Refresh 2)
- 10.5.1.0.124 (10.5.1 GA)
- 10.5.1.0.167 (10.5.1 Patch 1)
- 10.5.1.0.176 (10.5.1 GA Refresh 1)

If you are running an earlier version, you must upgrade ZoneDirector to one of the above builds before upgrading to this release.

If you do not have a valid Support Entitlement contract, you will be unable to upgrade ZoneDirector to this release. See the *Administer > Support* page for information on Support Entitlement activation.

NOTE

For information and detailed instructions (including video tutorials) on upgrading ZoneDirector, visit the RUCKUS Support How-To Hub at <https://support.ruckuswireless.com/how-to-hub>.

Known Issues

This sections lists the caveats, limitations, and known issues in this release.

Issue	ZF-22071
Description	In ZoneDirector GUI, device model MAC OS 12.0.1 is shown as MAC OS X 10.15.7.

TABLE 1 Channel 144 Support

Issue	ZF-22013
Description	Channel 144 is not available on 11ac APs in Japan.

Resolved Issues

This section lists the customer-reported issues that have been resolved in this release.

Resolved Issues in Build 10.5.1.0.193

- Resolved an issue where packet loss issue during background scanning on some particular APs. [ER-10181]
- Resolved an Air Time Fairness (ATF) issue on T350/H550 and R550 APs. [ER-11360]
- Resolved an issue where certain clients could not be authenticated with 8021.X for AD. [ER-11482]
- Resolved an issue where an AP rpm key "wlan-band-bal-enable" had an invalid value. [ER-10115]
- Enhanced DNS spoofing on Access Point to resolve the domain name of ZoneDirector for clients associated with WISPr and web authentication WLANs. [ER-11376]
- Resolved an issue where ZD failed to get certain data from AP when there was a special symbol '\$' in the password. [ER-11615]

Resolved Issues in Build 10.5.1.0.176

- Resolved an issue where the STAMGR daemon on ZoneDirector crashed due to corrupted data received. [ER-10850]
- Resolved an issue where the STAMGR daemon on ZoneDirector crashed due to unexpected overwrite in memory data. [ER-10906]
- Resolved an issue where duplicate MAC entries in different letter cases were allowed in the L2 ACL list. [ER-11056]
- Resolved an issue where the FTP setting changed to disable after upgrading to 10.5.1. [ER-10990]
- Resolved an issue where the DPSK client was no longer able to authenticate successfully after ZoneDirector failover. [ER-10967]
- Resolved an issue where certain allowed service was unexpectly blocked when the application policy denial rule was configured as block all tunneling. [ER-11140]
- Resolved an intermittent client disconnect issue. [ER-10674/ER-10760]
- Enhanced the SMS notification feature to support JSON format in POST data. [ER-11148]
- Resolved an issue where the redirector time is longer than expected for Facebook WLAN authentication. [ER-10917]
- Resolved an issue that caused AP with clients roaming reboot frequently due to kernel panic. [ER-11242]
- Resolved an issue that caused R750 AP to reboot due to kernel panic. [ER-10795]
- Resolved an issue where connected clients lost network connection randomly. [ER-10797]
- Resolved an issue where client entries did not clear properly after inactivity timeout. [ER-10844]
- Resolved an issue that caused AP kernel panic due to buffer overflow. [ER-10918]

- Resolved an issue that caused R850 AP to reboot due to kernel panic under certain conditions. [ER-10944]
- Resolved an issue that caused R710 AP and R610 AP to reboot due to kernel panic under certain conditions. [ER-10607]
- Resolved an airtime fairness-related issue for 11ac APs. [ER-10530]
- Resolved an issue where certain kind of clients were unable to obtain IP addresses when proxy ARP is enabled on the WLAN. [ER-10593]
- Resolved a performance issue on AP with 3X3 MIMO devices. [ER-10474]

Resolved Issues in Build 10.5.1.0.124

- Resolved an issue where "Block client" option in Wireless LANs was not working. [ER-10820]
- Resolved an issue where Channel 144 is supported in Wi-Fi 6 AP with "Japan" country code. [ER-10189]
- Resolved an issue where Zero-IT prov.apk file failed to download using Chrome Browser. [ZF-22091]

Client Interoperability

ZoneDirector and RUCKUS APs use standard protocols to interoperate with third-party Wi-Fi devices. RUCKUS qualifies its functionality on the most common clients.

The following client operating systems and browsers have been tested for compatibility with this release (for specific OS and browser limitations, including compatibility with Zero-IT, see subsequent sections below).

PC OS

- Windows 7
- Windows 8
- Windows 8.1
- Windows 10
- Windows 11
- Windows 12
- Mac OS 10.9.5
- Mac OS 10.10
- Mac OS 10.11
- Mac OS 10.12
- Mac OS 10.13
- Mac OS 10.14
- Mac OS 10.15
- Mac OS 11

Smartphone/Tablet OS

- iOS (6.1, 7.0, 7.1, 8.1, 8.4, 9.2, 9.3, 10.0, 10.2, 10.3, 11.1/2/3/4, 12.0, 12.1, 12.2, 12.4, 13.0, 13.1, 13.2, 13.4, 13.5, 13.6, 13.7, 14.0, 14.1, 14.5, 14.6, 14.7)
- Android (4.1.2, 4.2.2, 4.3, 4.4.2, 4.4.4, 5.0.1, 5.0.2, 5.1, 6.0, 7.0, 7.1.1, 8, 9, 10, 11)
- Windows Phone (7, 8, 8.1, 10)

Client Interoperability

Officially Supported Browsers

- BlackBerry OS (10, 10.3.2) not supported with Zero-IT
- Chrome OS (47.0, 49.0) not Supported with Zero-IT

Officially Supported Browsers

- Internet Explorer 10, 11
- Firefox 34 and later
- Chrome 39 and later

Not Officially Supported Browsers

Safari, Dolphin, Opera Mini, Android Default, BlackBerry Default, etc.

Zero-IT Compatibility with Client Devices

TABLE 2 Zero-IT Compatibility

OS	WPA2 WLAN			802.1x EAP (external Radius Server)		
	Step 1	Step 2	Step 3	Step 1	Step 2	Step 3
iOS 6.x	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 7.x	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 8.0	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 8.0.2	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 8.1	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 9.0	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 10 .0	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 10 .2	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 10 .3	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
iOS 11.x	Y (ZF-19663)	Y (ZF-19663)	N (ZF-2888)	Y (ZF-19663)	Y (ZF-19663)	N (ZF-2888)
iOS 12.0	Y	Y	N (ZF-2888)	Y	Y	N (ZF-2888)
MAC OS 10.8.5	Y	Y	Y	Y	Y	N (ZF-4699)
Mac OS 10.9.3	Y	Y	Y	Y	Y	N (ZF-4699)
MAC OS 10.9.4	Y	Y	Y	Y	Y	N (ZF-4699)
Mac OS 10.9.5	Y	Y	Y	Y	Y	N (ZF-4699)
Mac OS 10.10	Y	Y	Y	Y	Y	N (ZF-4699)
Mac OS 10.11	Y	Y	Y	Y	Y	N (ZF-4699)
Mac OS 10.12	Y	Y	Y	Y	Y	N (ZF-4699)
Mac OS 10.13	Y	Y	Y	Y	Y	N (ZF-4699)
Windows 7	Y	Y	Y	Y	Y	Y
Windows 8	Y	Y	Y	Y	Y	Y
Windows 8.1	Y	Y	Y	Y	Y	Y
Windows 10	Y	Y	Y	Y	Y	Y
Windows Phone 8	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)

TABLE 2 Zero-IT Compatibility (continued)

Windows Phone 8.1	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)
BlackBerry OS 10.1	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)
BlackBerry OS 10.3	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)
Kindle 7.4.9	Y	Y	Y	Y	Y	Y
Android 4.0.4	Y	Y	Y	Y	Y	Y
Android 4.1.2	Y	Y	Y	Y	Y	Y
Android 4.4.4	Y	Y	Y	Y	Y	Y
Android 5.0	Y	Y	Y	Y	Y	Y
Android 6.0	Y (ZF-19664)	Y	Y	Y (ZF-19664)	Y	Y
Android 7.0	Y (ZF-19664)	Y	Y	Y (ZF-19664)	Y	Y
Android 7.1.1	Y (ZF-19664)	Y	Y	Y (ZF-19664)	Y	Y
Android 8.0	Y (ZF-19664)	Y	Y	Y (ZF-19664)	Y	Y
Chrome OS	N (ZF-8076)	N (ZF-8076)	N (ZF-8076)	N (ZF-8076)	N (ZF-8076)	N (ZF-8076)

- Step 1: Download Zero-IT file
- Step 2: Install Zero-IT script
- Step 3: Automatically connect to the appropriate SSID

Client Interoperability Known Issues

- Zero-IT is not supported on Windows Phone 7/8/8.1 devices. [ZF-3478]
- Zero-IT is not supported on Blackberry OS devices. [ZF-6402]
- Zero-IT is not supported on Chrome OS devices. [ZF-8076]
- iOS clients cannot connect to the Zero-IT WLAN automatically. Users must reconnect to the target WLAN after installing the Zero-IT configuration file. [ZF-2888]
- Mac OS 10.7 and 10.8 cannot automatically connect to an 802.1x EAP WLAN after installing Zero-IT script. [ZF-4699]
- In some situations, Chromebook clients can take up to 10-50 seconds to resume sending traffic after a channel change. [ZF-14883]
- iOS 11.x cannot download successfully Zero-IT profile by way of a mini browser. [ZF-19049]
- With OS version 10.0.19043, Microsoft Surface Pro 3 fails to connect when both 11r and 11w options are enabled in Open Auth WLAN. (Also failing with WPA2/WPA3-Mixed encryption). [ZF-22081]



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