

# RUCKUS ZoneDirector 10.4.1 GA Refresh 2 Release Notes

Supporting ZoneDirector 10.4.1 GA Refresh 2

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# Document History

Revision Number	Summary of changes	Publication date
A	Initial release notes	December 2020

## Introduction

This document provides release information on ZoneDirector release 10.4.1, including new features, enhancements, known issues, caveats, workarounds, upgrade details and interoperability information for version 10.4.1.

### NOTE

By downloading this software and subsequently upgrading the ZoneDirector and/or the AP to version 10.4.1, 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 10.4.1.0.226

- T750se

This release adds ZoneDirector support for the new T750se outdoor 802.11ax (Wi-Fi 6) AP.

The T750SE is a 4x4:4 outdoor access point capable of delivering an aggregate throughput of 2.4 Gbps in the 5GHz band and 1.148 Gbps in the 2.4GHz band with an internal 120-Degree Sector antenna and option to attach external antennae. In addition, the T750SE has on-board BLE and Zigbee radios to enable IoT use-cases, and a 2.5Gbps Ethernet back-haul to support high throughput in ultra-high density deployments.

### New Access Points in 10.4.1.0.214

- R550

This release adds ZoneDirector support for the new R550 indoor 802.11ax (Wi-Fi 6) Access Point.

The R550 is a 2x2:2 802.11ax access point with integrated 2-port Ethernet interfaces designed for medium-density, small to mid-sized indoor enterprise WLAN applications. The R550 provides one 2.5 Gbps Ethernet port that supports 802.3af/at PoE and one 1 Gbps Ethernet port, a USB port and onboard Zigbee/BLE radio support for IoT applications.

- R850

This release adds ZoneDirector support for the new R850 indoor 802.11ax (Wi-Fi 6) Access Point.

The R850 is a dual-band Wi-Fi 6 Indoor access point with 12 radio chains, operating in 8x8:8 mode on the 5GHz band and in 4x4:4 mode on the 2.4GHz band, supporting peak PHY rates of 4.8Gbps (5GHz) and 1.148Gbps (2.4GHz). The R850 has one 5 Gbps PoE Ethernet port and one 1 Gbps port, onboard BLE and Zigbee radios for IOT applications, and a USB port for additional connectivity. The R850 will operate with PoH, uPOE and 802.3at power.

## New Features

- Mesh support for 11ax APs  
This release adds mesh support for Wi-Fi 6 (802.11ax) APs.
- 160 MHz support  
This release adds 160 MHz channelization support for R850, R750, R650, T750, and T750se Wi-Fi 6 APs. (R550 and R730 are not included.)
- User-defined time zones  
Allows user to define custom time zones and Daylight Savings Time start and end times.
- Display client's AKM and cipher method  
Provides additional client encryption method information.
- Background Scanning channel management enhancement  
This release introduces a new automatic channel assignment algorithm using Background Scanning that optimizes for the number of APs and clients and provides user control over when channel changes should occur.
- Concurrent 11r and 11w support  
802.11r and 802.11w can now be enabled concurrently on the same WLAN.
- SpeedFlex security enhancement  
Adds the ability to disable SpeedFlex access from any remote device.

## Changed Behavior

- None.

# Hardware and Software Support

## Supported Platforms

ZoneDirector firmware version **10.4.1.0.238** supports the following ZoneDirector models:

- ZoneDirector 1200

## Supported Access Points

ZoneDirector version **10.4.1.0.238** supports the following Ruckus Access Point models:

Indoor AP	Outdoor AP
C110	E510
H320	T300

## Upgrade Information

Indoor AP	Outdoor AP
H510	T300e
R310	T301n
R320	T301s
R500	T310c
R510	T310d
R550*	T310n
R600	T310s
R610	T610
R650	T610s
R710	T710
R720	T710s
R730	T750
R750	T750se*
R850*	

### NOTE

R550 and R850 were new in the GA release; T750se was new in the Refresh 1 release.

# Upgrade Information

## Supported Upgrade Paths

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

- 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)
- 10.3.0.0.362 (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)
- 10.4.0.0.69 (10.4 GA)

- 10.4.0.0.70 (10.4 GA Refresh 1)
- 10.4.0.0.98 (10.4 GA Refresh 2)
- 10.4.1.0.214 (10.4.1 GA)
- 10.4.1.0.226 (10.4.1 GA Refresh 1)
- 10.4.1.0.236 (10.4.1 Patch 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.

<b>Issue</b>	ZF-21553
<b>Description</b>	Apple Mac devices fail to connect on channels 100,104,112 and 136 when country code is set to India.

<b>Issue</b>	ZF-21227
<b>Description</b>	Maps feature no longer automatically fills out GPS coordinates when an address is entered. This is due to a change in Google Maps API requiring billing to be enabled for a Google Maps key.  Workaround: Enable billing for Google Maps key. For information, see: <a href="https://support.google.com/googleapi/answer/6158867?hl=en">https://support.google.com/googleapi/answer/6158867?hl=en</a> .  Alternatively, enter address and GPS coordinates manually.

<b>Issue</b>	ZF-21469
<b>Description</b>	11ax APs may fail to change channels after radar signal detection when mesh is enabled and 160 MHz channelization is enabled.

## Resolved Issues

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

### Resolved Issues in Build 10.4.1.0.238

- Resolved an issue where syslog got truncated on AP. [ER-9189]
- Resolved an issue where WLAN may remain ON when it is provisioned as OFF with WLAN scheduler after AP is rebooted. [ER-9114]
- Resolved an issue where the new WLAN would be created, but failed on Access Point. [ER-9244]
- Resolved an issue where high latency was observed on 11ax APs. [ER-8747]
- Resolved an issue where static channelization settings would be lost on AP. [ER-9031]

## Resolved Issues

### Resolved Issues in Build 10.4.1.0.226

- Resolved an issue where AP was not able to handle client association properly under certain conditions. [ER-9215]
- Resolved an issue where repeated warning message "rks\_ioctl: module 27 cmd 3 not supported" appeared in support log. [ER-8985]
- Resolved an issue where the alarm notification for certain types of alarm was not sent properly. [ER-9193]
- Resolved an issue on 11ax Access Point where packet loss would happen intermittently. [ER-8946]
- Resolved an issue where the EMFD daemon on ZoneDirector would crash due to corrupted statistics data reported from Access Point. [ER-9021]
- Resolved an issue where clients sometimes encountered roaming failures between MAC-authorized WLANs. [ER-8945]
- Resolved an issue where Target Assert Failure would happen on Access Point when "Report Rogue Device" is enabled. [ER-8558]
- Removed "no ftp" CLI command and "force ftp enable" on ZoneDirector. [ZF-21701]
- Resolved an issue where SNMPv3 cannot be enabled with Read-Only. [ER-9106]

## Resolved Issues in Build 10.4.1.0.226

- Resolved an issue regarding target assert on 11ax APs. [ER-8674]
- Resolved an issue with multiple input, multiple output (MIMO) where constant throughput across MU clients was randomly causing starve-out. [ER-8417]
- Resolved an issue where single-client long throughput was experiencing some drops in its constant bit rate. [ER-8416]
- Resolved a traffic-flooding issue. [ER-8625]
- Resolved an issue where the GUI was not showing a pop-up error message when the number of configured MAC addresses exceeded 128. [ER-8781]
- Resolved an issue where an AP would unexpectedly reboot under some conditions. [ER-8862]
- Hide unnecessary information in syslog. [ER-8875]
- Improved ZoneDirector AP migration to RUCKUS Cloud when the AP internet connection is unstable. [ZF-21690]

## Resolved Issues in Build 10.4.1.0.214

- Resolved an issue where the R610 ethernet interface failed to pass traffic with the 2.5G port of ICX switches. [ER-8328]
- Resolved an issue in which Mesh AP (MAP) did not auto-negotiate to "PoE Injector" for its "Power Consumption Status" when using a 60W PoE adapter. [ER-8379].
- Resolved an issue with mesh APs establishing a connection to an uplink AP when the smart-uplink selection was enabled. [ER-7204]
- Resolved an issue where accessing the ZoneDirector GUI would intermittently fail. [ER-8267/ER-8217/ER-8056]
- Resolved an issue with an obfuscating private key appearing in the AP support log.[ER-8278]
- Resolved an issue where the "Directed-Multicast" setting would not persist on the WLAN and ethernet interfaces on APs. [ER-7600]
- Resolved an issue where an AP would randomly reboot due to soft lockup.[ER-7736]
- Resolved an issue that might cause AP reboots due to kernel panic caused by a memory leak. [ER-7896]
- Resolved an R730 AP watchdog timeout issue. [ER-7870]
- Resolved an issue where an AP would not return to static channel setting after a DFS-detection expired.[ER-7745]
- Resolved an issue where the AP CLI command "get scanresults" did not work properly. [ER-7630]
- Resolved an issue where multicast traffic unexpectedly dropped for wireless clients that were associated with Open/None WLANs with tunnel mode enabled. [ER-7291]



# 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
- 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

## 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)
- 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, 8.0, 9.0, 10.0)
- Windows Phone (7, 8, 8.1, 10)
- 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 1** 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)
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]

