

# Ruckus ZoneDirector 10.1.2 Refresh 4 Release Notes

Supporting ZoneDirector 10.1.2 Refresh 4

# Copyright, Trademark and Proprietary Rights Information

© 2019 CommScope, Inc. All rights reserved.

No part of this content may be reproduced in any form or by any means or used to make any derivative work (such as translation, transformation, or adaptation) without written permission from CommScope, Inc. and/or its affiliates ("CommScope"). CommScope reserves the right to revise or change this content from time to time without obligation on the part of CommScope to provide notification of such revision or change.

## Export Restrictions

These products and associated technical data (in print or electronic form) may be subject to export control laws of the United States of America. It is your responsibility to determine the applicable regulations and to comply with them. The following notice is applicable for all products or technology subject to export control:

*These items are controlled by the U.S. Government and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. government or as otherwise authorized by U.S. law and regulations.*

## Disclaimer

THIS CONTENT AND ASSOCIATED PRODUCTS OR SERVICES ("MATERIALS"), ARE PROVIDED "AS IS" AND WITHOUT WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. TO THE FULLEST EXTENT PERMISSIBLE PURSUANT TO APPLICABLE LAW, COMMScope DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT, FREEDOM FROM COMPUTER VIRUS, AND WARRANTIES ARISING FROM COURSE OF DEALING OR COURSE OF PERFORMANCE. CommScope does not represent or warrant that the functions described or contained in the Materials will be uninterrupted or error-free, that defects will be corrected, or are free of viruses or other harmful components. CommScope does not make any warranties or representations regarding the use of the Materials in terms of their completeness, correctness, accuracy, adequacy, usefulness, timeliness, reliability or otherwise. As a condition of your use of the Materials, you warrant to CommScope that you will not make use thereof for any purpose that is unlawful or prohibited by their associated terms of use.

## Limitation of Liability

IN NO EVENT SHALL COMMScope, COMMScope AFFILIATES, OR THEIR OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, SUPPLIERS, LICENSORS AND THIRD PARTY PARTNERS, BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER, EVEN IF COMMScope HAS BEEN PREVIOUSLY ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN AN ACTION UNDER CONTRACT, TORT, OR ANY OTHER THEORY ARISING FROM YOUR ACCESS TO, OR USE OF, THE MATERIALS. Because some jurisdictions do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of liability for consequential or incidental damages, some of the above limitations may not apply to you.

## Trademarks

ARRIS, the ARRIS logo, CommScope, Ruckus, Ruckus Wireless, Ruckus Networks, Ruckus logo, the Big Dog design, BeamFlex, ChannelFly, Edgelron, FastIron, HyperEdge, ICX, IronPoint, OPENG, SmartCell, Unleashed, Xclaim, and ZoneFlex are trademarks of CommScope, Inc. and/or its affiliates. Wi-Fi Alliance, Wi-Fi, the Wi-Fi logo, Wi-Fi Certified, the Wi-Fi CERTIFIED logo, Wi-Fi Protected Access, the Wi-Fi Protected Setup logo, Wi-Fi Protected Setup, Wi-Fi Multimedia and WPA2 and WMM are trademarks or registered trademarks of Wi-Fi Alliance. All other trademarks are the property of their respective owners.

# Contents

---

<b>About This Release.....</b>	<b>4</b>
<b>Supported Platforms and Upgrade Information.....</b>	<b>4</b>
Supported Platforms.....	4
Access Points.....	4
Upgrading to This Version.....	5
<b>Enhancements and Resolved Issues.....</b>	<b>6</b>
Enhancements and New Features.....	6
Resolved Issues in Build 275.....	6
Resolved Issues in Build 270.....	7
Resolved Issues in Build 251.....	7
<b>Caveats, Limitations and Known Issues.....</b>	<b>7</b>
General.....	7
R730 Feature Limitations.....	8
R730 Power Modes.....	8

# About This Release

This document provides release information on ZoneDirector release 10.1.2, including new features, enhancements, known issues, caveats, workarounds, upgrade details and interoperability information for version 10.1.2.

## NOTE

By downloading this software and subsequently upgrading the ZoneDirector and/or the AP to version 10.1.2, 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.

# Supported Platforms and Upgrade Information

## Supported Platforms

ZoneDirector version **10.1.2.0.275** supports the following ZoneDirector models:

- ZoneDirector 1200
- ZoneDirector 3000

## NOTE

ZoneDirector 5000 is discontinued as of release 10.1, and cannot be upgraded to version 10.1 or later.

## Access Points

ZoneDirector version **10.1.2.0.275** supports the following Access Point models:

Indoor AP	Outdoor AP
C110	E510
H320	T300
H500	T300e
H510	T301n
R300	T301s
R310	T310c
R500	T310d
R510	T310n
R600	T310s
R610	T610

Indoor AP	Outdoor AP
R700	T610s
R710	T710
R720	T710s
R730*	ZF7781CM
ZF7055	ZF7782
ZF7352	ZF7782-E
ZF7372	ZF7782-N
ZF7372-E	ZF7782-S
ZF7982	

**NOTE**

This release adds support for new AP: R730.

## Upgrading to This Version

This section lists important notes on upgrading ZoneDirector to this version.

### *Officially Supported Upgrade Paths*

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

- 9.13.0.0.232 (9.13 GA)
- 9.13.1.0.11 (9.13 MR1)
- 9.13.1.0.26 (9.13 MR1 Refresh)
- 9.13.2.0.33 (9.13 MR2)
- 9.13.3.0.22 (9.13 MR3)
- 9.13.3.0.41 (9.13 MR3 Refresh)
- 9.13.3.0.106 (9.13 MR3 Refresh 2)
- 9.13.3.0.121 (9.13 MR3 Refresh 3)
- 9.13.3.0.133 (9.13 MR3 Refresh 4)
- 9.13.3.0.145 (9.13 MR3 Refresh 5)
- 9.13.3.0.157 (9.13 MR3 Refresh 6)
- 9.13.3.0.164 (9.13 MR3 Refresh 7)
- 10.0.0.0.1424 (10.0 GA)
- 10.0.1.0.17 (10.0 MR1)
- 10.0.1.0.35 (10.0 MR1 Refresh)
- 10.0.1.0.44 (10.0 MR1 Refresh 2)
- 10.0.1.0.61 (10.0 MR1 Refresh 3)
- 10.0.1.0.83 (10.0 MR1 Refresh 4)
- 10.0.1.0.88 (10.0 MR1 Refresh 5)
- 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)
- 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)

If you are running an earlier version, you must upgrade 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.

# Enhancements and Resolved Issues

This section lists new features and enhancements that have been added in this release, and any customer-reported issues from previous releases that have been resolved in this release.

## Enhancements and New Features

This section lists the new features and enhancements in this release.

### *New Access Points*

- New Ruckus Access Point: R730

This release adds native support for the R730 dual-band 802.11ax indoor access point.

The R730 is the first Ruckus access point based on the 802.11ax standard, the next generation Wi-Fi standard supporting peak PHY rates up to 10 Gbps. The R730 features one 5 Gbps PoE+ (802.3at/at+) Ethernet port, one 1 Gbps non-PoE port, and a USB port for IoT applications.

## Resolved Issues in Build 275

- Resolved an issue where ZoneDirector would not report session data by default when *management by SmartCell Insight* was enabled. [ER-7762]
- Resolved an issue that could cause failure to configure an NTP server when the server name contains dashes. [ER-7843]
- Resolved an issue that could cause failure to configure an AP via the web interface. [ER-7834]
- Enhanced the DNS Spoofing on Access Point to resolve the domain name of ZoneDirector for clients associated with WISPr, Guest and Web Authentication WLANs. [ER-7915]
- Resolved an issue where Force DHCP feature did not work properly after client roaming or reconnect. [ER-7579]
- Resolved an ARP drop issue on Access Point. [ER-6748]

## Resolved Issues in Build 270

- Resolved an issue that could cause APs to unexpectedly reboot with reason "reset button". [ER-7419]
- Resolved an issue related to TCP SACK Panic - Kernel Vulnerability CVE-2019-11477, CVE-2019-11478 and CVE-2019-11479. [AP-11589]  
For information on security incidents and responses, please visit <https://www.ruckuswireless.com/security>.
- Resolved an issue where the Aeroscout tag feature would not work properly on H510/R510/R710 APs. [ER-5191]
- Resolved an issue with R730 APs where the AP would unexpectedly reboot due to kernel panic. [ER-7674]

## Resolved Issues in Build 251

- Resolved an AP issue with Vietnam country code where DFS channels were not listed in the supported channel list. [ER-7268]
- Resolved an issue where multicast traffic unexpectedly dropped for wireless clients associated with Open/None WLANs with tunnel enabled. [ER-7291]
- Resolved a kernel panic issue on APs located in high density environments when associated wireless clients were frequently roaming in and out of range. [ER-6689]
- Resolved an issue that rogue device reporting did not work properly when the SSID name was configured as a non-English name. [ER-6248]
- Resolved an AP issue with Singapore country code where DFS channels were not listed in the supported channel list for certain AP models. [ER-7247]
- Resolved an issue where the "Remarks" column did not display correctly on the "Generated Guest Pass" web page. [ER-7257]
- Resolved an issue on 11ac Wave 1 APs where unsupported data rates were used to send the first data packet to a wireless client over the 5 GHz radio. [ER-7018]
- Resolved an issue where the incorrect redirection URL was sent for guest authentication by ZoneDirector if the "domain" field was not set in the uploaded certificate. [ER-7156]
- Resolved an issue where AeroScout and Ekahau features would not work with R730 Access Points. [ER-7088]
- Resolved an issue where 11ax capable clients with Draft 3.0 standard would experience low throughput with R730 Access Points. [ER-7143]
- Resolved an AP issue related to DFS for CAC waiting and radar detection reporting. [ER-6437]
- Resolved an issue on R310 APs where the 5G radio would not function properly in 20 MHz channelization mode. [ER-6969]

# Caveats, Limitations and Known Issues

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

## General

- Apple iOS and Mac clients fail to authenticate to an 802.1X WLAN when 802.11w MFP is enabled and set to Required. [ZF-19239]

- Windows laptops with Intel wireless cards do not show SSIDs of APs advertising 11ax capability in their scan report, and users therefore cannot connect to an 11ax capable AP.

Workaround: The latest Intel drivers address this issue, a driver upgrade is recommended.

**NOTE**

See the following URLs for Intel PROSet wireless drivers:

- Windows 7: <https://downloadcenter.intel.com/download/27748/Wireless-Intel-PROSet-Wireless-Software-and-Drivers-for-Windows-7-?product=59485>
- Windows 8.1: <https://downloadcenter.intel.com/download/27749/Wireless-Intel-PROSet-Wireless-Software-and-Drivers-for-Windows-8-1-?product=59485>
- Windows 10: <https://downloadcenter.intel.com/download/27750/Wireless-Intel-PROSet-Wireless-Software-and-Drivers-for-Windows-10?product=59485>

- Apple iOS devices are unable to get an IP address with DPSK key if 802.11w is optional. [ZF-19822]

## R730 Feature Limitations

The following R730 AP features are unsupported in this release:

- MU-MIMO
- ATF/BSSP
- OFDMA
- 160 Mhz change to 160/80+80 MHz BW on 5G radio
- MESH
- Auto Cell Size
- Transient Client Management
- Airtime Decongestion
- LACP
- Onboard BLE/Zigbee is not supported
- TxBF
- Spectrum Analysis

## R730 Power Modes

The R730 can be powered by 48V DC power, or 802.3at or 802.3at+ PoE (Power over Ethernet) switch or PoE injector. 802.3af PoE is *NOT* supported. Refer to the following table for power modes supported, and AP limitations when powered with sub-maximum power supply.

**NOTE**

The 5 Gbps PoE In port supports auto-negotiation with support for the following speeds: 100/1000/2500/5000 Mbps.



**NOTE**

The PoE switch port must run link layer discovery protocol (LLDP) power over Ethernet/MDI (PoE+) in order for the R730 to operate in full-power mode. This may require enabling both LLDP and Power via MDI (dot3) on the switch, if available.

Power Mode	2.4 GHz Radio		5 GHz Radio		5 Gbps Eth Port	1 Gbps Eth Port	USB Port	Comments
	Tx/Rx chains	Tx/Rx streams	Tx/Rx chains	Tx/Rx streams				
DC	4/4	4/4	8/8	8/8	Enabled	Enabled	Enabled (3W limit)	Requires 35W power
802.3af PoE <b>(not supported)</b>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<b>Not Supported</b>
802.3at PoE switch	4/4	4/4	4/8	4/4	Enabled	Disabled	Enabled (0.5W limit)	
802.3at+ PoE switch	4/4	4/4	8/8	8/8	Enabled	Enabled	Enabled (3W limit)	Requires 35W power
PoE injector Model GRT-480125A (In GUI select POE operation mode = AT+)	4/4	4/4	8/8	8/8	Enabled (1 Gbps speed)	Enabled	Enabled (3W limit)	Injector model GRT-480125A is rated only for 1Gbps speed. If POE operating mode = Auto, POE injector will power AP in AT mode only.



© 2019 CommScope, Inc. All rights reserved.  
Ruckus Wireless, Inc., a wholly owned subsidiary of CommScope, Inc.  
350 West Java Dr., Sunnyvale, CA 94089 USA  
[www.ruckuswireless.com](http://www.ruckuswireless.com)