



Ruckus Wireless™ ZoneDirector™ Version 9.10

Release Notes

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Introduction

This document provides release information on ZoneDirector release 9.10, including new features, enhancements, known issues, caveats, workarounds, upgrade details and interoperability information for version 9.10.

NOTE: Beginning with this release, the *ZoneFlex Release Notes* (which previously included ZoneDirector, FlexMaster and ZoneFlex Access Points) are now divided into three separate Release Notes documents. This document covers ZoneDirector only. For FlexMaster and Access Point release information, please refer to their respective separate *Release Notes* documents.

NOTE: By downloading this software and subsequently upgrading the ZoneDirector and/or the AP to version 9.10, 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 Country Codes

Refer to the Ruckus Wireless Price List for available country certifications.

What's New in This Release

For a additional information on the new features that have been added in this release, see the *What's New in ZoneFlex 9.10* document, available from the Ruckus Wireless support website. Please refer to Release Notes for prior releases for information on previously documented caveats, limitations, enhancements and resolved issues. These documents can be found at: <https://support.ruckuswireless.com/>.

Supported Platforms and Upgrade Information

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Supported Platforms

ZoneDirector version **9.10.0.0.218** supports the following ZoneDirector models:

- ZoneDirector 1100
- ZoneDirector 1200
- ZoneDirector 3000
- ZoneDirector 5000

Access Points

ZoneDirector version **9.10.0.0.218** supports the following Access Point models:

- H500 *** (ZoneDirector 1200, 3000, 5000 only. Not supported on ZD 1100)*
- R300
- R500
- R600
- R700
- SC8800-S
- SC8800-S-AC
- T300
- T300e
- T301n
- T301s
- ZF7055
- ZF7321
- ZF7321-u
- ZF7341
- ZF7343
- ZF7352

- ZF7363
- ZF7372
- ZF7372-E
- ZF7441
- ZF7761-CM
- ZF7762
- ZF7762-AC
- ZF7762-S
- ZF7762-S-AC
- ZF7762-T
- ZF7781CM
- ZF7782
- ZF7782-E
- ZF7782-N
- ZF7782-S
- ZF7982

NOTE: ZoneFlex 7025 APs are no longer supported as of this release, and cannot be upgraded to ZoneFlex version 9.10.

NOTE: H500 is not supported on ZoneDirector 1100.

Upgrading to This Version

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

Officially Supported 9.10 Upgrade Paths

The following ZoneDirector builds can be directly upgraded to ZoneDirector build 9.10.0.0.218:

- 9.9.0.0.205 (9.9 GA)
- 9.9.0.0.212 (9.9 GA refresh 1)
- 9.9.0.0.216 (9.9 GA refresh 2)

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

Due to the enforcement of the Support Entitlement feature in ZoneDirector 9.10, Ruckus recommends upgrading to 9.10 from one of the above 9.9 builds only.

You can also upgrade directly to 9.10 from one of the following 9.8 builds. However, you will be prompted to reset to factory defaults before the upgrade can continue. (This is not required when upgrading from 9.9 to 9.10.)

9.8 builds that can be directly upgraded to 9.10 (requires factory default):

- 9.8.0.0.379 (9.8 GA)
- 9.8.1.0.101 (9.8 Maintenance Release 1)
- 9.8.2.0.15 (9.8 Maintenance Release 2)

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

Enhancements and Resolved Issues

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

Enhancements

11ac Packet Capture

This release adds support for Packet Capture for 802.11ac Access Points.

11ac SPoT Support

This release adds support for SPoT location service for 802.11ac Access Points.

11ac Mesh

This release adds support for Smart Mesh for 802.11ac Access Points.

Guest Pass Self-Service

The Guest Pass Self-Service feature allows guests to connect to a guest SSID and submit basic information (name, email address and mobile phone number) to receive a guest pass code. The guest then enters this code to gain access to the internet.

New Access Point Support: H500

This release adds support for the new H500 Dual Band 802.11ac Multimedia Wi-Fi Access Point Wall Switch. The H500 provides four 10/100 Mbps Ethernet ports (LAN1 to LAN4) as a row of RJ45 jacks on the bottom of the unit, and one GbE port on the rear which supports 802.3af/at PoE. The H500 is designed for hospitality applications where it can be installed one per room to provide connectivity for multiple wired Ethernet services such as IPTV, VoIP, guest laptops, etc., along with WiFi connectivity, in a typical hotel room.

The H500 is supported on ZoneDirector 1200, 3000, and 5000. H500 is not supported on ZoneDirector 1100.

Chrome OS Recognition and Device Policy

Chrome OS devices are now recognized as the proper operating system in client charts and tables, and Device Policies can now be defined for Chrome OS devices.

USB Port Configuration

USB ports on ZoneFlex 7321 and R500 APs can now be configured (disabled) from the ZoneDirector AP and AP Group configuration UI pages.

Resolved Issues

No customer-found bugs.

Caveats, Limitations, and Known Issues

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

Ethernet Port Settings

ZoneDirector 1100 and ZoneFlex AP Ethernet ports can become disabled if half-duplex is forced on any port. (ID ER-1208, ER-1229)

This problem affects the following:

- ZoneDirector: ZD 1100
- APs: ZoneFlex 7341, 7343, 7363, 7761, and 7762

Workaround: Uplink switch ports must be set to 100Mbps auto-negotiation or 1000Mbps auto-negotiation.

Web Interface

- ZoneDirector release 9.10 supports the following Web browsers:
 - Firefox 31 and later
 - Internet Explorer 10, 11
 - Chrome 36 and later
- Chrome browser may fail to redirect to the authentication page for WISPr and Guest Access profiles when a user attempts to browse to a page that uses HTTP Strict Transport Security (HSTS).

Workaround: browse to a website that does not use HSTS, complete the authentication, then browse to any site. (ZF-10401)

General

- Under certain conditions, two APs may be assigned the same IPv6 address at the same time. (ZF-9540)
- Chrome displays a certificate invalid error when a station connects to a WLAN using open+none+web auth authentication. (ZF-11058)

- ZoneDirector web interface sometimes requires the user to log in twice. (ZF-11267)
- SSIDs with special characters fail to deploy with no indication. (ZF-11249)
- Some ZD web pages have minor display issues in IE compatibility mode. (ZF-11550)

11ac Mesh

- “mesh-uplink-selection” command is not supported in AP CLI. (ZF-11310)

H500

- Android 5.0 displays a certificate invalid error when a station joins a WLAN using open+wpa2+web auth authentication. (ZF-11033)

Self Service Guest Pass

- Guest pass print out shows validity in English instead of the language selected. (ZF-9802)
- Delivering multiple Self-Service Guest Passes in batch with Sponsor Approval enabled via SMS (Clickatell) may result in some guest passes failing to be delivered. (ZF-12202)

R500, R600, R700 and T300 Series APs

The following features are not included in this release:

- Airtime Fairness on 5 GHz radio
- Spectrum Analysis on 5 GHz radio
- WLAN prioritization on 5 GHz radio

ZoneDirector Controller and RuckOS Controller Interoperability

To ensure reliable network operations, it is recommended that ZoneDirector controllers and RuckOS controllers (SCG, vSCG, SZ, SAMs controllers) not be deployed on the same IP subnet or in such a way as the controllers share the same DHCP address scopes and domain name servers (DNS) as there may be limitations or restrictions in AP controller discovery capabilities. An effective network segmentation strategy should be developed when ZoneDirector and RuckOS controllers co-exist in the same network.

Redeploying ZoneFlex APs with RuckOS Controllers

Note that a supported ZoneFlex AP configured to operate with ZoneDirector will require an upgrade to a compatible RuckOS controller approved software release prior to interoperating with a SmartCell Gateway, vSCG, SmartZone or SAMs controller. Once the AP firmware is updated, the AP will no longer be able to communicate with its old ZoneDirector controller. The AP must be reset to factory-default setting before attempting to configure the AP from the RuckOS controller.

NOTE: There are established ZoneDirector to RuckOS controller migration tools and procedures. Contact support.ruckuswireless.com for the latest available procedures and utilities.

ZoneFlex Release 9.9 and AP Standalone Mode and FlexMaster Managed Mode Operation

Starting January 1, 2015 the default image that ships from the factory on Ruckus access points (APs) will change from ZoneFlex Release 9.8.x to ZoneFlex Base Image Release 100.0.x. Most customers will not notice any difference in AP operation. The APs will continue to support standalone mode and FlexMaster managed mode operations and will automatically discover and connect to ZoneDirector or RuckOS controllers.

Beginning in ZoneFlex Release 9.9 and higher, the AP has a new behavior: once an AP connects to a controller the AP will no longer support standalone mode and FlexMaster managed mode operation after the controller completes the necessary AP firmware update during initialization.

An AP removed from a controller managed network may be restored to operate in standalone mode and FlexMaster managed mode operation by updating the AP firmware back to ZoneFlex Base Image Release 100.0.x or to a ZoneFlex-AP Release 9.8.x or lower.

These software images are available on the Ruckus support site, see support.ruckuswireless.com for more information.

AP Interoperability

APs with ordering number prefix 901- (example 901-T300-WW81), may now be supplied with an AP base image release 100.0. or higher.

The AP base image is optimized for controller-discovery compatibility to support all Ruckus Wireless controller products including ZoneDirector, SCG, vSCG, Smart-Zone and SAMS.

Once the AP discovers and joins a controller (for example ZoneDirector), the AP is updated to the compatible controller-specific AP firmware version. The updated AP firmware version becomes the factory-default image. The updated AP firmware version (for example ZoneFlex 9.9) will remain persistent on the AP after reset to factory defaults.

An AP configured with base image release 100.0 may be managed by the FlexMaster management tool or may be used in standalone controller-less operation if controller discovery is disabled on the AP web UI.

Client Interoperability

ZoneDirector and ZoneFlex APs use standard protocols to interoperate with third-party Wi-Fi devices. Ruckus Wireless 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
- Mac OS 10.8.3
- Mac OS 10.8.5
- Mac OS 10.9.3
- Mac OS 10.9.4
- Mac OS 10.10

Smart Phone/Tablet OS:

- iOS (6.x, 7.x, 8.0, 8.0.2, 8.1)
- Android (4.0.3, 4.1, 4.1.1, 4.1.2, 4.2.2, 4.3, 4.4, 4.4.2, 4.4.4)
- Windows Phone 7.5, 8, 8.1
- BlackBerry OS 10.1.0.4633
- Kindle (7.4.2)

Officially Supported Browsers:

- Internet Explorer 10, 11
- Firefox 33 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 7.0.3	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 8.0	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 6.1.3	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 8.1	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 7.1	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 7.0.4	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 7.1.2	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 7.0	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
IOS 6.1.3	Y	Y	N(ZF-2888)	Y	Y	N(ZF-2888)
Mac OS 10.9.5	Y	Y	Y	Y	Y	N(ZF-4699)
Mac OS 10.10.1	Y	Y	Y	Y	Y	N(ZF-4699)
MAC OS 10.8.5	Y	Y	Y	Y	Y	N(ZF-4699)
MAC OS 10.9.4	Y	Y	Y	Y	Y	N(ZF-4699)
Mac OS 10.9.3	Y	Y	Y	Y	Y	N(ZF-4699)
Windows 8.1	Y	Y	Y	Y	Y	Y
Windows 7	Y	Y	Y	Y	Y	Y
Windows 8	Y	Y	Y	Y	Y	Y
Windows Phone 7.5	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)
Windows Phone 8	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)	N (ZF-3478)
BlackBerry OS 10	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)	N (ZF-6402)
Kindle 7.4.2	Y	Y	Y	Y	Y	Y
Android 4.2.2	Y	Y	Y	Y	Y	Y
Android 4.4.2	Y	Y	Y	Y	Y	Y
Android 4.3	Y	Y	Y	Y	Y	Y
Android 4.0.3	Y	Y	Y	Y	Y	Y

Table 1. Zero-IT Compatibility

	WPA2 WLAN			802.1x EAP (external Radius Server)		
	Android 4.1.2	Y	Y	Y	Y	Y
Android 4.4	Y	Y	Y	Y	Y	Y
Android 4.4.4	Y	Y	Y	Y	Y	Y
Chrome	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 Issues

- Safari browser on iPhone 5, 5s, iPad2 (iOS 7, iOS 8) not redirecting to user's intended page after successful authentication (ZF-10177)
Workaround: Clear cookies (Safari > Reset Safari), or try another browser.
- Opera mini fails to redirect to any of the web authentication pages. (ZF-11841)



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