

# *Ruckus Wireless ZoneFlex 8.0.2 (ZoneDirector and ZoneFlex Access Point) Release Notes*

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# 1 Introduction

Ruckus Wireless ZoneDirector is a WLAN access point controller that is capable of operating at both Layer 2 and Layer 3. ZoneDirector 1000 supports up to 50 ZoneFlex access points (APs) and is developed specifically for small-to-medium enterprises (SMEs) and hotzone operators. ZoneDirector 3000, on the other hand, supports up to 250 ZoneFlex APs and is intended for deployment in larger enterprise environments.

This document provides release information on ZoneDirector, supported ZoneFlex platforms, known issues, caveats, workarounds, upgrades, and interoperability information for version 8.0.2.

# 2 Supported Platforms

Version 8 supports the following platforms:

- ZoneDirector 1000 – Build 8.0.2.0.7
- ZoneDirector 3000 – Build 8.0.2.0.7
- ZoneFlex 2741 (main and backup images) – Build 8.0.2.0.7
- ZoneFlex 2925 (main image) – Build 8.0. 2.0.7
- ZoneFlex 2942 (main and backup images) – Build 8.0. 2.0.7
- ZoneFlex 7942 (main and backup images) – Build 8.0. 2.0.7
- ZoneFlex 7962 (main and backup images) – Build 8.0. 2.0.7

## 3 Resolved Issues in This Maintenance Release

This section lists the issues from previous releases that have been resolved in this maintenance release.

*Note: For a complete list of features that have been added in the 8.0 release, please visit <http://support.ruckuswireless.com/documents>.*

### 3.1 ZoneDirector

- 3.1.1 Resolve the problem that guest pass printout does not show Guest WLAN SSID (ID 9381).
- 3.1.2 Add event reporting in case the AAA server cannot be reached (ID 8975).
- 3.1.3 Increase number of allowed SSH sessions from 2 to 8.
- 3.1.4 Disable spanning tree algorithm by default and preserve its enable/disable configuration across reboots (ID 10176).
- 3.1.5 Resolve the problem that some WISPr clients are displayed with their IP addresses (instead of user names) on the ZoneDirector Web interface (ID 10175).
- 3.1.6 Resolve the problem that on Firefox v3.5.x, Dashboard widgets do not support drag-and-drop operations (ID 10325)
- 3.1.7 Max clients per WLAN configuration is supported.  
Administrator now can limit the amount of clients not only per AP basis but per WLAN created.

### 3.2 ZoneFlex Access Point

- 3.2.1 AP stops sending IGMP query packets if it detects query packets from other devices.  
With the existence of a multicast router, AP will stop sending query packets to avoid any potential confusion to devices on the network..

## 4 Known Issues and Caveats

This section lists the known issues and caveats for ZoneDirector and ZoneFlex Access Point in this version.

## 4.1 ZoneDirector

### 4.1.1 ZoneDirector and ZoneFlex AP connectivity

ZoneDirector and ZoneFlex access points can communicate with each other via Layer 2 or Layer 3. If Layer 2 connectivity is desired, ZoneDirector and the APs must be on the same broadcast domain (VLAN) and the same IP subnet. The management VLAN must be untagged (that is, no 802.1Q).

### 4.1.2 Guest captive portal does not work when accessed via HTTPS (ID 3816)

If the guest captive portal is accessed via HTTPS before authentication, the guest user is not redirected to the authentication server.

Workaround: Try browsing to an HTTP page.

### 4.1.3 Configuration changes after reboot (ID 5507)

In some cases, if ZoneDirector is rebooted after configuration changes are made, the changes do not take effect after the reboot.

Workaround: Use the **Shutdown** or **Reboot** option on the ZoneDirector Web interface to reboot ZoneDirector gracefully. This will help ensure that the configuration changes are saved even after the reboot.

### 4.1.4 WDS clients do not work on a ZoneDirector WLAN in tunnel mode (ID 6127)

Wireless distribution system (WDS) clients (using 4-address mode), for example, ZoneFlex 2925 LMG (Lite Mesh Gateway) or MediaFlex 2111, do not work when the ZoneDirector WLAN is in tunnel mode (ID 6127).

### 4.1.5 Rate Limiting is not supported in tunnel mode

When tunnel mode is enabled on a WLAN, enabling, configuring, or disabling Rate Limiting does not have any effect on that WLAN.

### 4.1.6 Multicast video packets on tunneled WLAN

When tunnel mode is enabled on a WLAN, multicast *video* packets are blocked on that WLAN. Multicast *voice* packets, however, are allowed.

### 4.1.7 WDS is not supported on tunnel mode WLANs via MediaFlex 7111/2111 Adapter (ID 6127)

If Wireless Distribution System (WDS) is used on a tunneled WLAN via MediaFlex 7111/2111 Adapter, the WDS frames sent through the Adapter are not parsed.

### 4.1.8 10/100Mbps half-duplex mode with no auto-negotiation is not supported on the ZoneDirector 1000 (ID 8495)

The ZoneDirector 1000 cannot be connected to a 10/100Mbps half-duplex switch when auto-negotiation is disabled.

4.1.9 Administrative privileges are not supported with local database (ID 7719)

If no external authentication server is configured, user accounts assigned with Administrator role (on the **Configure > Roles** page) will be not have administrative privileges.

Administrative privileges must be configured on an external authentication server. If the administrator creates an Administrator role and assigns it to a user but no external authentication server has been configured, the user will not have any administrative privileges.

4.1.10 Stations subscribed to the same multicast group may stop receiving video (ID 7832)

If two or more stations are subscribed to the same multicast video group, some of these stations might stop receiving video traffic after some time.

Workaround: Disable IGMP query on the AP by using the following AP CLI command: "set qos QueryInterval 0"

## **Web Interface**

4.1.11 The AP's radio channel cannot be changed if there is no WLAN configured (ID6718)

If there is no WLAN configured, changing the AP's radio channel will not take effect.

Workaround: Configure at least one WLAN before changing the AP's radio channel.

4.1.12 ZoneDirector Web interface shows ZoneFlex 7962 as using radio channel 0 (ID 8611)

On rare occasions, the **Monitor > Access Point** page shows ZoneFlex 7962 as using radio channel 0 (zero).

Workaround: Delete the AP, and then allow it to rejoin. After it rejoins, the correct channel information will appear.

4.1.13 Arabic and Japanese languages are not supported in this release

The ZoneDirector Web interface does not support the Arabic and Japanese languages in this release.

4.1.14 Map View requires latest Java version (ID 7410)

The ZoneDirector Map View does not appear on the Web interface if the Java software version is 6 Update 5 or earlier.

Workaround: Update the Web browser's Java software to the latest version.

## **Smart Mesh Networking**

### 4.1.15 ZoneFlex 7962 AP does not support Smart Mesh Networking

In this release, Smart Mesh Networking is not supported on ZoneFlex 7962 APs. This will be fixed in the next release.

### 4.1.16 Smart Mesh Networking cannot be disabled

Once Smart Mesh Networking is enabled, either via the Setup Wizard or via the Web interface, it cannot be disabled. To prevent Mesh APs from becoming orphaned, Ruckus Wireless has removed the ability to change Smart Mesh Networking on the fly.

Workaround: Restore ZoneDirector to factory default state.

### 4.1.17 Smart Mesh Networking is only supported for APs with the same radio type

Smart Mesh Networking is only supported for ZoneFlex APs with the same radio type (802.11g or 802.11n). For example, a ZoneFlex 7942 802.11n AP cannot form a mesh with a ZoneFlex 2925/2942 802.11g AP.

### 4.1.18 Smart Mesh Networking is only supported for APs on the same subnet (ID 5559, 5930, 6279)

Smart Mesh Networking cannot be formed by APs that belong to different network subnets. For example, a ZoneFlex 7942 Mesh AP with the IP address 192.168.10.1/24 will be unable to form a mesh with a ZoneFlex 7942 Root AP with the IP address 192.168.20.1/24. When connecting a MAP on a different subnet, the result may be unpredictable.

### 4.1.19 Dynamic channel management with Smart Mesh Networking

All ZoneFlex APs that belong to the same mesh tree (that is, Mesh APs that share the same root/wired AP) are assigned the same channel. When Smart Mesh Networking is enabled, dynamic channel assignment will not take effect after the mesh tree is formed (that is, after the root AP has one or more downlink mesh APs). However, manual channel assignments to root APs will be enforced.

### 4.1.20 Smart Mesh Networking hops

While the maximum number of mesh hops is eight, it is strongly recommended that administrators design the mesh network in a way that minimizes the hop count. Each additional hop reduces overall network performance.

### 4.1.21 Smart Mesh Networking configuration process

Configuring Smart Mesh Networking requires all APs to be connected via Ethernet until Smart Mesh Networking is fully provisioned. After provisioning is complete, they will appear as Root APs on the **Monitor > Access Points** page. At that point, they will automatically reboot. Refer to the Quick Start Guide for details.

If APs appear as *Connected* on the **Monitor > Access Points** page, they do not have Smart Mesh Networking activated yet. If the problem persists for more than 15 minutes, reboot the APs.

#### 4.1.22 Connecting APs via a separate wired network segment to a mesh AP is unsupported

Connecting an AP via a separate wired network segment (for example, in an adjacent building) to a mesh AP will result in that AP advertising itself as a Root AP. This is because the AP will discover ZoneDirector via its Ethernet port. This might cause the Mesh AP (that connects the segment to ZoneDirector) to try to connect to the new Root AP and lose its connection to ZoneDirector, resulting in an isolated mesh network.

Workaround: Connect APs in the isolated network segment via mesh.

#### 4.1.23 Smart Mesh Networking and maximum number of WLANs (ID 8571)

If mesh networking is enabled on ZoneDirector, the number of WLANs that is supported on all ZoneFlex APs is reduced from eight to six (per radio).

## WLAN and WLAN Groups

#### 4.1.24 If an AP has an SSL certificate loaded in the system, Zero-IT configuration can only support a maximum of 30 WLANs (ID 8087).

#### 4.1.25 The customized guest pass printout page supports standard ASCII characters only

Extended ASCII characters (see [http://www.webopedia.com/TERM/E/extended\\_ASCII.html](http://www.webopedia.com/TERM/E/extended_ASCII.html)) are unsupported on the guest-pass printout page.

#### 4.1.26 Maximum number of guest passes

ZoneDirector 3000/1000 supports a combined maximum number of users on the local database and guest passes (5000 for ZoneDirector 3000 and 1250 for ZoneDirector 1000).

Example: If the administrator has already created 1000 users on ZoneDirector 1000 (which supports 1250 users and guest passes), he can only create 250 guest passes

## WISPr (Hotspot Service)

#### 4.1.27 Cross-subnet clients connection issue with WISPr

In some cases, clients that associate with an AP that is on a different IP subnet than ZoneDirector may need to connect more than once before they can reach the WISPr captive portal. This is because ZoneDirector needs to learn the client addresses first before it can redirect them to the captive portal.

#### 4.1.28 WISPr Walled Garden and external links (ID 7999)

The walled garden feature is IP-based (not hostname-based). If a Web site on an allowed IP address contains links to sites on another IP address, users will be unable to access these other sites when they click on the links.

For example, if the administrator adds the IP address of domain.com to the Walled Garden, users will be able to access the main Web site at www.domain.com. But if a subdomain (for example, sub.domain.com) is hosted on a different IP address, users will be unable to access the page.

#### 4.1.29 WISPr Walled Garden and URLs with multiple IP addresses (ID 7999)

Configuring WISPr walled garden to URLs that could resolve to multiple IP addresses redirects users to a login page.

If a URL that can be translated to more than four IP addresses is used as the WISPr walled garden, users will be redirected to the ZoneDirector login page for authentication.

Workaround: Avoid using URLs like [www.yahoo.com](http://www.yahoo.com) as the walled garden URL.

## 4.2 ZoneFlex Access Point

### General

#### 4.2.1 If an AP is being managed by ZoneDirector, administrators should not log in to the AP's Web or command line interface

If an AP is being managed by ZoneDirector, administrators should NOT log in to the AP's Web interface or command line interface (CLI). When an AP is being managed by ZoneDirector, its Web interface is in *read-only* mode. On the other hand, making configuration changes via the CLI might result in unexpected and inconsistent behavior.

#### 4.2.2 Configuration of physical ports on a ZoneDirector-controlled AP

- If VLAN tagging is configured for one or more non-tunneled WLANs on ZoneDirector, the VLAN tag will propagate to all physical ports on the access point.
- If VLAN tagging is configured on one or more WLANs (either tunneled or non-tunneled) on ZoneDirector, the VLAN tag will propagate to the physical port on ZoneDirector.

### 802.11n Operation

#### 4.2.3 ZoneFlex 7942 and 7962 operate at 802.11g rates when using WPA-PSK-TKIP or WEP encryption (ID 3633)

In compliance with the 802.11n Draft 2.0 requirements, ZoneFlex 7942 and 7962 operate at 802.11g rates (up to 54Mbps) when using WPA-PSK-TKIP or WEP encryption.

## ZoneFlex 7962 Access Point

### 4.2.4 Channels 100-140 unsupported by some 802.11a and 802.11a/n clients (ID 3633)

Some 802.11a and 802.11a/n clients (such as US-based Atheros, Broadcom, and Centrino NICs) do not support radio channels 100-140.

### 4.2.5 DFS channels support

In this release, Dynamic Frequency Selection (DFS) channels are unavailable (restricted by ZoneDirector/AP) when the country code is set to US.

This will be fixed upon FCC approval in a later software release this year.

### 4.2.6 Video streaming and background scanning issue (ID 8571)

If there is a ZoneFlex 7962 AP on the network and it is being used to stream video traffic (UDP traffic), Ruckus Wireless recommends that background scanning be disabled (on the **Configure > Services** page) to improve video performance.

## Interoperability with PoE Switches

### 4.2.7 If a 10/100Mbps PoE injector is used to power ZoneFlex 7942/7962 AP, and the injector is connected to a switch port that supports 10/100/1000Mbps, the Ethernet connection of the AP may not work (ID 7634).

This incompatibility is caused by the link speed negotiation between the AP and the Gigabit-Ethernet port. The AP and the Gigabit-Ethernet port can support 1000Mbps connection, but the PoE injector cannot.

Workaround: Use a 10/100/1000Mbps PoE injector or a 10/100/1000Mbps PoE switch instead. Alternatively, connect the 10/100Mbps PoE injector to a 10/100Mbps switch port, or configure the Gigabit-Ethernet port of the switch to use full duplex at 100Mbps.

### 4.2.8 ZoneFlex APs support standard Power-over-Ethernet (802.3af). The following PoE switches were tested with ZoneFlex 2942, 2741, 7942, and 7962 APs:

- Linksys 2008MP
- Linksys SRW 224P
- NetGear FS726TP
- SMC | SMCGS8P-SMART 8P+1SFP
- HP ProCurve-24 2610
- BayStack 470
- DLink DES-1228P
- TrendNet TPE-S88

## **5 Upgrading to This Version**

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

### **5.1 ZoneDirector**

- Only ZoneDirector 1000 and ZoneDirector 3000 with firmware versions 7.1 and 8.0 can be upgraded to this release. Upgrading from any other firmware versions might result in loss of configuration settings. ZoneDirector 1000 devices that are using firmware version 3.0 must be upgraded to 6.0 before they could be upgrade to 7.1.

If a downgrade is required, note that ZoneDirector 3000 with firmware version 8.0.2 can only be downgraded to version 8.0.0. If downgrading the ZoneDirector 3000 to version 7.1 is desired, an intermediate downgrade to firmware version 8.0.0 is required.

- After upgrading to ZoneDirector version 8.0.2, administrators should clear the Web browser cache. This will ensure that the ZoneDirector Web interface shows all the changes and enhancements that were implemented in version 8.0.2
- When upgrading ZoneDirector 1000 to 8.0.2, the administrator may be prompted to reboot ZoneDirector manually to delete temporary files and clear the system memory. This happens when there is insufficient memory to perform the upgrade process.

### **5.2 ZoneFlex Access Point**

#### **5.2.1 Backwards compatibility between 8.0 and previous releases**

A new AP configuration storage scheme was introduced in version 8.0. When an AP is upgraded to 8.0, the configuration storage scheme will be ported automatically from the old scheme to the new scheme (a copy of the previous configuration file will be retained). This will be performed only once.

If the administrator downgrades from 8.0 to 7.1 or a previous version, ZoneDirector will read the old pre-8.0 configuration file (a copy of the 8.0 configuration file will be retained). Configuration porting will no longer be performed on subsequent upgrades to 8.0.

Example scenario:

1. AP is upgraded from 7.1 to 8.0. The 7.1 configuration is ported to the 8.0 scheme. A copy of the 7.1 configuration is also retained.
2. AP is downgraded to 7.1. AP reads and uses the old 7.1 configuration file. A copy of the 8.0 configuration is retained.
3. AP is upgraded to 8.0 again. AP reads and uses the old 8.0 configuration file. The 7.1 configuration will not be ported again.

## **6 Interoperability Information**

ZoneDirector 1000/3000 and ZoneFlex APs use standard protocols to interoperate with the third-party Wi-Fi devices. Ruckus Wireless qualifies its functionality on the most common clients.

A list describing the specific platforms that were tested by Ruckus Wireless for interoperability is available at:

[http://support.ruckuswireless.com/documents/for\\_product/zd1000](http://support.ruckuswireless.com/documents/for_product/zd1000)