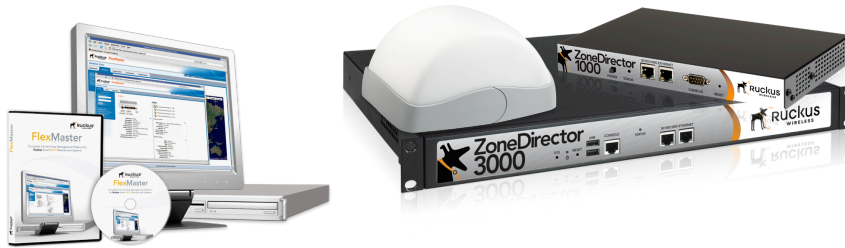


Ruckus Wireless ZoneFlex 7.1.0.0.54 (ZoneDirector, and ZoneFlex Access Point) Release Notes

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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. FlexMaster is a centralized management system that can manage ZoneDirector devices, as well as standalone ZoneFlex APs, on a global scale.

This document provides release information on ZoneDirector, supported ZoneFlex platforms, known issues, caveats, workarounds, upgrades, and interoperability information for version 7.1.0.0.54.

2 Supported Platforms

Version 7.1 supports the following platforms:

ZoneDirector 1000 – build 7.1.0.0.54

ZoneDirector 3000 – build 7.1.0.0.54

ZoneFlex 7942 Access Point – build 7.1.0.0.45

ZoneFlex 2942 Access Point – build 7.1.0.0.56

ZoneFlex 2925 Access Point – build 7.1.0.0.56

ZoneFlex 2741 Access Point – build 7.1.0.0.56

3 Known Issues and Caveats

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

3.1 ZoneDirector

3.1.1 *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).

3.1.2 *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.

3.1.3 *Windows Vista clients should be upgraded to Vista Service Pack 1 (ID 5847)*

Windows Vista Service Pack 1 includes important fixes for 802.1x EAP-WPA-TKIP encryption, and PEAP authentication that will significantly improve client behavior.

3.1.4 *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.

3.1.5 *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).

3.1.6 *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.

3.1.7 *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.

3.1.8 *Wireless clients are unable to use SpeedFlex when wireless client isolation or guest access is enabled (ID 6753)*

When either wireless client isolation or guest access is enabled, wireless clients cannot ping ZoneDirector and, therefore, cannot connect to ZoneDirector and access SpeedFlex, a wireless performance testing application from Ruckus Wireless.

ZoneDirector Web Interface

3.1.9 *The Safari Web browser is not supported by the ZoneDirector Web interface (ID 3858)*

The ZoneDirector Web interface does not support the Safari Web browser.

Workaround: Use Mozilla Firefox or Microsoft Internet Explorer to access the ZoneDirector Web interface.

3.1.10 *Incorrect number of clients appear in the Usage Summary widget (ID 3341)*

The Usage Summary widget on the Dashboard shows the *number of associations* in the past 24 hours (instead of the *number of unique clients* that associated with ZoneDirector in the past 24 hours).

3.1.11 APs reboot if administrator enters an SSID that is 32 characters long (ID 7304)

The ZoneDirector Web interface allows the administrator to enter an SSID consisting of up to 32 characters. However, if the administrator sets an SSID that is exactly 32 characters long, the AP will automatically reboot after it receives the SSID configuration change from ZoneDirector.

Workaround: Use an SSID that is less than 32 characters long.

3.1.12 Map View does not show coverage after changing AP's Tx power to minimum (ID 7265)

If an AP is configured with minimum Tx power, the Map View does not show its RF coverage.

3.1.13 Guest pass expiration date appears as invalid if the administrator sets the expiration date to more than 700 days (or 100 weeks) (ID 7245)

To avoid this issue, set the guest pass expiration date to less than 700 days (or 100 weeks).

3.1.14 The AP's radio channel cannot be changed unless WLAN is configured (ID6718)

Unless WLAN is configured, changing the AP's radio channel will not take effect.

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

Smart Mesh Networking

3.1.15 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 on a live system as it would leave Mesh APs unreachable.

Workaround: Restore ZoneDirector to factory default state.

3.1.16 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.

3.1.17 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. In other words, APs in the same Mesh Tree must be on the same IP subnet.

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.

3.1.18 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.

3.1.19 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.

3.1.20 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.

3.1.21 ZoneFlex 2925 Lite Mesh Gateway support

ZoneFlex 2925 Lite Mesh Gateway (LMG) can be upgraded to smart mesh networking. However, ZoneFlex 2925 LMG needs to be upgraded to AP version 6.0 before it could be upgraded to AP version 7.1. Refer to 2925 LMG Upgrade Instruction at <http://support.ruckuswireless.com/documents/73>.

3.1.22 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.

3.2 ZoneFlex Access Point

3.2.1 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.

3.2.2 External antenna support on ZoneFlex 2942 AP

One exception to the guidance described in section 3.2.1 (above) is the configuration of the external antenna on the ZoneFlex 2942 AP. Enabling the external antenna on the ZoneFlex 2942 AP can be done only via the CLI. The required command is:

```
rkscli:set extant <wlan name> [enable|disable|both]
```

Important: Use only the `enable` and `disable` parameters. The `both` parameter is unsupported in this version.

3.2.3 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 both physical ports on ZoneDirector.

802.11n Operation

3.2.4 ZoneFlex 7942 operates 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 operates at 802.11g rates (up to 54Mbps) when using WPA-PSK-TKIP or WEP encryption.

3.2.5 ZoneDirector and ZoneFlex 7942 interoperability with NetGear GS-608 switch (ID 1934)

In some cases, when ZoneDirector or ZoneFlex 7942 is connected to a NetGear GS-608 switch, auto-negotiation might result in a 100Mbps link, instead of a 1Gbps link.

Workaround: If 1Gbps link is required, use a different switch.

4 Upgrading to This Version

4.1 ZoneDirector

- Only ZoneDirector 1000 and ZoneDirector 3000 with firmware versions 6.0, 7.0, and 7.1 can be upgraded to this release (7.1.0.0.54). 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 upgraded to 7.1.0.0.54.

If a downgrade is required, note that ZoneDirector 3000 with firmware version 7.1.0.0.54 can only be downgraded to version 7.0.0.0.57 or any prior 7.1 release.

- After upgrading to ZoneDirector 7.1, 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 7.1.

5 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 platforms.

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

6 Feature Enhancements and Resolved Issues

6.1 ZoneDirector

6.1.1 Installation wizard/Web interface

- Default encryption algorithm is now set to Advanced Encryption Standard (AES).
- “Min” Tx power level (9dB) for AP Tx power configuration has been added.
- Tx power adjustment is now allowed for all APs, including Root APs and Mesh APs.

6.1.2 Resolved issues

- Under rare circumstance, Ethernet port 2 of a ZoneDirector may not get enabled during ZoneDirector reboot (ID7493).
- There could be time difference on timestamps of log entries between ZoneDirector and AP syslog messages if the syslog server is at a different time zone to the ZoneDirector (ID 7531).
- SpeedFlex test may not be timed out even after wireless interface is disabled (ID 7532).
- ZoneDirector displays 0.0.0.0 as the IP address of a wireless client when the client is configured with a static IP address and roams from one AP to another (ID 7627).
- ZoneDirector displays zero as the Retry Counter value for all clients under Client Detailed View (ID 7833).
- When checking WLAN information under Monitor -> WLANs page on ZoneDirector, Web Server on ZoneDirector may freeze if there are more than 35 wireless clients connected to the WLAN (ID 8020).
- Some old 802.11b clients may not be able to associate to access points under ZoneDirector management (ID 8049).
- In rare condition, 802.11n wireless clients may not re-associate to ZF7942 when 802.1x authentication method is used (ID 8318).
- Enhanced 802.1x client initialization when the client re-associates with AP
- Enhanced 802.11n automatic transmit power adjustment.
- Enhanced 802.1x protocol exchanges to handle large certificate payload.

- NAS-ID field of RADIUS authentication packet is populated with ZoneDirector MAC address when Web Authentication using RADIUS server is configured on a WLAN.
- In rare occasions, ZF7942 may transmit beacon frames with corrupted IE field causing neighboring APs to detect empty SSID (ID 8554).
- Some wireless clients may not associate to ZF7942 on their very first association attempt. (ID 8556).

6.2 ZoneFlex Access Point

6.2.1 AP interaction with ZoneDirector

- An AP enters sole-run state if it loses communication with ZoneDirector (12 consecutive heartbeat loss).
 - In earlier versions, the AP reboots after it discovers a ZoneDirector device on the network, either the original ZoneDirector to which it was reporting or a new ZoneDirector.
 - In version 7.1, the AP joins ZoneDirector and receives new configuration without rebooting.
- A Root AP without Ethernet connection (unplugged) becomes a Mesh AP after it loses communication with ZoneDirector.
- A Root AP with Ethernet connection remains in sole-run state after it loses communication with ZoneDirector.
- Mesh AP with no Ethernet connection reboots after it loses heartbeats for 15 minutes without discovering ZoneDirector. This reboot enables the Mesh AP to attempt to find a new mesh uplink.