

Release Notes ZoneDirector Release 6.0

October 31, 2008



1. Introduction

The Ruckus ZoneDirector 1000 is the first centrally managed multimedia Wireless LAN (WLAN) solution developed specifically for small-to-medium enterprises (SMEs) and hot zone operators. This document provides information on supported ZoneFlex platforms, known issues and caveats, upgrades, and interoperability information for the ZoneDirector 6.0 release.

2. Supported ZoneFlex Platforms

Release 6.0 supports the following platforms:

- ZoneDirector 1000 – build 6.0.3.0.19
- ZoneFlex 7942 – build 6.0.3.0.23
- ZoneFlex 2942 – build 6.0.3.0.21
- ZoneFlex 2925 – build 6.0.3.0.21

3. Known Issues and Caveats

The following are the known issues and caveats in this release:

3.1. Administrators should not login to the Admin UI of a ZoneDirector-controlled AP

If an access point is managed by ZoneDirector, administrators should NOT login to individual access point Admin UI or CLI. The AP UI is in read-only mode when managed by a ZoneDirector.

Making configuration changes on the CLI might result in unexpected and inconsistent behavior.

3.2. External antenna support on the ZoneFlex 2942 AP

One exception to the guidance above is the configuration of the external antenna on the ZoneFlex 2942 AP. Enabling an external antenna on the ZoneFlex 2942 AP can be done only via CLI on the AP:

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

3.3. New LED behavior for ZoneFlex APs

Starting in release 6.0, ZoneFlex access points have a new LED behavior reflecting the support for SmartMesh™. For details refer to the User Guide.

- Director LED (applies to ZoneFlex 2942 and ZoneFlex 7942 only)
 - For AP that has never been managed by a ZD (or right after a factory reset), the LED is off. The LED starts to blink once the AP enters CONFIG or IMAGE state.
 - When (a non-standalone) AP is looking for ZD, LED blinks slowly
 - The LED blinks quickly when the AP is downloading images or is configuring
 - The LED is solid on when it is running
- WLAN LED

- Solid Green: WLAN service is up and there is a client associated. If mesh is enabled, there is no downlink mesh AP associated to this AP.
- Fast blinking Green: Mesh is enabled, and there is a downlink mesh AP associated to this AP; WLAN service is up and there are clients associated to WLAN's
- Slow blinking Green: Mesh is enabled, there is a downlink mesh AP associated to this AP, WLAN service is up and there are no client associated to any WLAN's
- Solid Orange: WLAN service is up, and there is no client associated; and if mesh is enabled, there is no downlink mesh AP associated.
- Off: there is no WLAN service
- AIR Quality LED
 - Solid green: mesh is enabled and this is a MAP with good signal to its uplink mesh AP (> 24 dbm)
 - Fast blinking Green: mesh is enabled, and this is a MAP with no so good signal to its uplink mesh AP (<= 24 dbm)
 - Slow blinking Green: mesh is enabled, there is no mesh uplink, the AP is searching for a mesh uplink
 - Off: mesh is disabled, or if mesh is enabled, this is a Root AP.

3.4. ZoneFlex AP connectivity to ZoneDirector

ZoneDirector and the ZoneFlex access points have to be on the same broadcast domain (VLAN) and the same IP subnet. The management VLAN must be untagged (i.e. no 802.1Q).

3.5. Physical ports configuration on a ZoneDirector-controlled AP

If VLAN tagging is configured for one or more WLANs on ZoneDirector that information will propagate to all physical ports on the access points.

3.6. Guest captive portal does not work when the requested page is HTTPS (ID 3816)

When trying to access the guest network before authentication the automatic captive portal will not work if the requested page was https (SSL).

Workaround: try browsing to a http page

3.7. Wrong number of clients on Usage Summary widget (ID 3341)

The usage summary widget on the dashboard shows the number of associations in the past 24 hours and not the number of unique clients associated in the past 24 hours.

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

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

Workaround: if 1Gbps is needed use a different switch.

3.9. Safari browser is not supported for ZoneDirector Web UI (ID 3858)

Safari web browser is not supported in this release for the ZoneDirector Web UI.

Workaround: use Firefox or Internet Explorer

3.10. Maximum Layer-2 Access Control supported (ID 2994)

In this release the maximum supported Access Controls is 90.

Configuring more ACLs might result in browser errors on some Web Browsers (e.g. Internet Explorer 6 in Traditional Chinese).

3.11. Zero-IT Configuration for 802.1x EAP is supported on a single WLAN only (ID 4390)

Zero-IT Configuration for auto-provisioning certificates to clients for 802.1x EAP is supported on no more than a single WLAN.

Using 802.1x on more than one WLAN (with no Zero-IT enabled) as well as Zero-IT for Dynamic PSK provisioning are supported on more than one WLAN.

3.12. Local database WPA/2 Enterprise authentication with Windows Vista

In this release, WPA/2 Enterprise authentication using the ZoneDirector Local Database as the authentication server is not supported for Windows Vista.

3.13. Configuration changes before reboot (ID 5507)

In some cases, when making configuration changes and immediately rebooting the ZoneDirector, the changes will not take effect after the reboot.

Workaround: Use the Shutdown or Reboot options on the ZoneDirector WebUI to gracefully reboot the system.

3.14. 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, when configured with WPA-PSK-TKIP or WEP encryption, the ZoneFlex 7942 will operate at 802.11g rates (up to 54Mbps).

3.15. ZoneFlex 7942 AP supports only 802.11ng mode (ID 3294)

The ZoneFlex 7942 AP operates in 802.11ng-mode only. In this mode 802.11n, 802.11g, and 802.11b clients can all associate simultaneously. 802.11g-only or 802.11b-only modes are not supported.

3.16. In some cases, changing the mesh SSID (or passphrase) while the mesh network is operational can result in an isolated AP (ID 6479)

Changing the mesh SSID or passphrase while the mesh is operational can result in a mesh AP losing connection and becoming an isolated AP.

Workaround: the mesh SSID should be configured only when the ZoneDirector is being provisioned and before Mesh APs are being deployed.

3.17. **Connecting APs via a separate wired network segment to a mesh AP is not supported**

Connecting an AP via a separate wired network segment (e.g. in a separate building) to a mesh AP will result in that AP advertising itself as a Root AP (it discovers the ZoneDirector via the Ethernet port). This might result in the Mesh AP (through which the segment is connected to the ZoneDirector) trying to connect to the new Root AP and therefore losing its connection to the ZoneDirector and creating an isolated network.

Workaround: connect APs in the isolated network segment via mesh

3.18. **SmartMesh cannot be disabled**

If the SmartMesh is enabled (either via the Setup Wizard or via the WebUI) it cannot be disabled.

Workaround: restore the ZoneDirector to factory default state.

3.19. **SmartMesh is supported for APs from the same radio type only**

SmartMesh is supported for ZoneFlex APs from the same radio type (802.11g or 802.11n). Therefore, a ZoneFlex 7942 802.11n APs cannot form a mesh with a ZoneFlex 2925/2942 802.11g AP.

3.20. **Dynamic channel management with SmartMesh**

All ZoneFlex APs belonging to the same mesh tree (i.e. share the same root/wired AP) are assigned the same channel. When SmartMesh is enabled dynamic channel assignment will not take effect after the mesh tree was formed (i.e. after the root AP has one or more downlink mesh APs).

However, manual channel assignments to root APs will be enforced.

3.21. **SmartMesh hops**

While the maximum number of mesh hops is eight, it is strongly recommended to architect the network to minimize the hops count. Each additional hop reduces the overall network performance.

3.22. **SmartMesh configuration process**

Configuring SmartMesh requires all APs to be connected via Ethernet until the SmartMesh is fully provisioned. After the 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* document for details.

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

3.23. ZoneFlex 2925 Lite Mesh Gateway support

The ZoneFlex 2925 Lite Mesh Gateway can be upgraded to the SmartMesh. A detailed procedure is described in the “LMG Upgrade to SmartMesh” document. This document is available from Ruckus SEs and partners.

Do NOT make any changes in your configuration until the upgrade process is completed. Specifically: do not add, update, or delete any WLANs. (At least one of them is used to access the LMGs.)

While performing the upgrade for the LMG, do NOT connect it to the Ethernet network. Connecting the LMG to an Ethernet network during the upgrade might create a network loop.

If the upgrade process described in this document fails, you will need to access the LMG via Ethernet and complete the upgrade manually. Start by setting the LMG to factory default by using the pin-hole at the back of the unit.

Downgrading from a 6.0 ZoneFlex 2925 AP to a 4.3 Lite Mesh Gateway is not supported.

4. Upgrade

4.1. Supported upgrades

Upgrade to the software is supported from the following releases:

- ZoneDirector 3.0.4.0.143 and above (earlier releases must be upgraded to 3.0.4 or above first)
- ZoneDirector 6.0.0.0.143
- ZoneDirector 6.0.1.0.154
- ZoneDirector 6.0.2.0.3
- ZoneFlex 2925/2942 5.0.0.0.189 and above
- ZoneFlex 7942 5.0.0.0.102 and above
- ZoneFlex 2925 Lite Mesh Gateway – refer to LMG Upgrade to SmartMesh document for a detailed procedure.

Upgrading from any other release might result in losing all configuration (factory default).

4.2. ZoneDirector upgrade issue (ID 7137)

In rare cases, the ZoneDirector image upgrade might fail. In this case, after the reboot, the software version will stay the same as before the upgrade.

Upgrading the ZoneDirector again (to the same build) should resolve the issue.

4.3. AP upgrade failure issues (ID 4744, 5757)

In some cases, ZoneFlex APs might fail to upgrade to the latest software via ZoneDirector. The AP will automatically try to upgrade itself again. This might take up to 10 additional minutes.

Workaround: make sure your ZoneDirector and ZoneFlex APs are on the same IP subnet.

4.4. Downgrading from release 6.0 might require Factory Default (ID 4906)

In some cases, downgrading from the 6.0 release to the 3.0 release might require a factory default for ZoneDirector and all ZoneFlex APs. Specifically:

- Downgrading to release 3.0.4 or 3.0.5 will require a factory default if the original upgrade to release 6.0 was NOT from release 3.0.4 or 3.0.5
- Downgrading to release 3.0.3 or below is not supported

5. Appendix A: Interoperability Information

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

A list describing the specific platforms that were tested for interoperability by Ruckus Wireless is available at http://support.ruckuswireless.com/documents/for_product/zd1000.