Ruckus Wireless ZoneFlex™ Version 9.8 Release Notes

(FlexMaster™, ZoneDirector™ and ZoneFlex Access Points)

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1. Introduction

This document provides release information on FlexMaster, ZoneDirector and supported ZoneFlex Access Point platforms, along with known issues, caveats, workarounds, upgrade details, and interoperability information for version 9.8.

2. What's New in This Release

For a list of features that have been added in this release, see the "What's New in ZoneFlex 9.8" 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/

3. Supported Platforms

Release 9.8 supports the following platforms:

- FlexMaster version 9.8.0.0.26 supports the ZoneDirector and ZoneFlex AP models listed below. FlexMaster also supports the MediaFlex product line (not included in Release 9.8).
- ZoneDirector 1100 version 9.8.0.0.203
- ZoneDirector 3000 version 9.8.0.0.203
- ZoneDirector 5000 version 9.8.0.0.203
- ZoneFlex 2741 802.11g Outdoor Access Point build 9.8.0.0.203
- ZoneFlex 2942 802.11g Access Point build 9.8.0.0.203
- ZoneFlex 7025 802.11n Wired/Wireless Wall Switch build 9.8.0.0.203
- ZoneFlex 7055 Dual Band 802.11n Wired/Wireless Wall Switch build 9.8.0.0.203
- ZoneFlex 7321 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7321-U 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7341 2.4GHz 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7343 2.4GHz 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7363 Dual Band 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7351 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7352 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203
- ZoneFlex 7372 Dual Band 802.11n Smart Wi-Fi Access Point build 9.8.0.0.203

- ZoneFlex 7372-E Dual Band 802.11n Smart Wi-Fi Access Point with External Antenna build 9.8.0.0.203
- ZoneFlex 7761-CM Dual Band 802.11n Outdoor Access Point with integrated Cable Modem build 9.8.0.0.203
- ZoneFlex 7762 Dual-band 802.11n Outdoor Access Point build 9.8.0.0.203
- ZoneFlex 7762-S Dual-band 802.11n Outdoor Access Point with Sector Antenna build 9.8.0.0.203
- ZoneFlex 7762-T Dual-band 802.11n Outdoor Access Point with Omni Antenna build 9.8.0.0.203
- ZoneFlex 7762-AC Dual-band 802.11n Outdoor Access Point build 9.8.0.0.203
- ZoneFlex 7762-S-AC Dual-band 802.11n Outdoor Access Point with Sector Antenna build 9.8.0.0.203
- ZoneFlex 7781CM 802.11n Dual-band Outdoor Access Point with Cable Modem build 9.8.0.0.203
- ZoneFlex 7782 Dual Band 802.11n Outdoor Access Point for Service Provider WiFi; Omni-directional BeamFlex adaptive antenna build 9.8.0.0.203
- ZoneFlex 7782-S Dual Band 802.11n Outdoor Access Point for Service Provider WiFi; 120 degree sector BeamFlex adaptive antenna build 9.8.0.0.203
- ZoneFlex 7782-N Dual Band 802.11n Outdoor Access Point for Service Provider WiFi; 30 degree narrow sector BeamFlex adaptive antenna build 9.8.0.0.203
- ZoneFlex 7782-E Dual Band 802.11n Outdoor Access Point for Service Provider WiFi; external antenna build 9.8.0.0.203
- ZoneFlex 7962 Dual-band 802.11n Access Point build 9.8.0.0.203
- ZoneFlex 7982 Dual-band 802.11n Access Point build 9.8.0.0.203
- SmartCell 8800-S Dual Band 802.11n Outdoor Access Point with Sector Antenna build 9.8.0.0.203
- ZoneFlex 7441 802.11n Distributed Antenna System Access Point build 9.8.0.0.203
- ZoneFlex R300 Dual Band 802.11n Access Point build 9.8.0.0.203
- ZoneFlex R700 Dual Band 802.11ac Access Point build 9.8.0.0.203

4. Upgrading to This Version

This section lists important notes on upgrading FlexMaster, ZoneDirector and ZoneFlex Access Points to this version.

4.1. ZoneDirector

4.1.1. Official 9.8 upgrade paths supported:

- 9.6.0.0.267 (9.6 GA)
- 9.6.1.0.15 (9.6 MR1)
- 9.6.2.0.13 (9.6 MR2)
- 9.7.0.0.220 (9.7 GA)
- 9.8.0.0.112 (9.8 Beta)

If you are running an earlier version, you must first upgrade to version 9.6 or 9.7 before upgrading to 9.8.

4.1.2. Upgrading ZoneDirector 1100 with Internet Explorer 11

There is a known issue with upgrading/downgrading ZoneDirector 1100 using IE 11. If you encounter this issue, you can enable compatibility mode in IE 11 (or use another browser). (ID ZF-7769)

To change your Compatibility View settings for IE11:

- Open Internet Explorer for the desktop, click Tools, and then click Compatibility View settings.
- In the Compatibility View Settings box, add the problematic website URL, and then click Add.
- Compatibility View is turned on for this single website, for this specific computer.

Decide if you want your intranet sites displayed using Compatibility View, decide whether to use Microsoft compatibility lists, and then click Close.

4.2. ZoneFlex Access Points

4.2.1. The following new ZoneFlex Access Points are introduced in this release:

- ZoneFlex R700 Dual Band 802.11ac Access Point

4.3. FlexMaster

4.3.1. Official 9.8 upgrade paths supported:

- 9.7.0.0.21

4.3.2. If upgrading ZoneDirector(s) along with FlexMaster, you should first perform the upgrade on FlexMaster before upgrading ZoneDirector. For multi-release upgrades, you should first ensure the ZD version is the same as the FM version before continuing with the FM upgrade. For example:

FM/ZD 9.6 to 9.8 upgrade:

Step 1, upgrade FM 9.6 → 9.7

Step 2, upgrade ZD 9.6 → 9.7

Step 3, upgrade FM 9.7 → 9.8

Step 4, upgrade ZD 9.7 → 9.8

4.3.3. FlexMaster must be installed on one of the following server platforms:

- Red Hat Enterprise Linux 5.x (64-bit) or above
- CentOS release 6.3 (64-bit)
- Minimum hardware requirements: Core 2 Duo CPU, 8GB RAM.

Managed Population	Min RAM	Min CPU
ZoneDirector-Controlled APs		
Up to 1,000 ZD managed APs	8G	2.0G Quad core Intel (Xeon E5606 equivalent or above)
Up to 5,000 ZD managed APs	16G	2.5G Six core (Intel Xeon X5670 equivalent or above)
Up to 10,000 ZD managed APs	32G	2* 2.5G Six core (Intel Xeon X5670 equivalent or above)
Standalone APs: (http/https)		
Less than 1,000 standalone APs	8G	2.5G Six core (Intel Xeon X5670 equivalent or above)
Up to 2,000 standalone APs	32G	2* 2.5G Six core (Intel Xeon X5670 equivalent or above)

5. Enhancements and Resolved Issues

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

5.1. ZoneDirector

5.1.1. Enhancements

5.1.2. New Access Point Support: ZoneFlex R700

The ZoneFlex R700 is the first Ruckus ZoneFlex AP to support the new 802.11ac standard. The R700 is a dual radio, 3 spatial stream Access Point capable of physical layer rates of up to 1300 Mbps on the 5 GHz 802.11a/n/ac radio, and 450 Mbps physical layer throughput on the 2.4 GHz 802.11b/g/n radio.

The R700 is compliant with 802.3af PoE under all modes of operation, allowing customers to upgrade their networks to support 802.11ac without having to upgrade their PoE infrastructure to PoE+ (802.3at).

5.1.3. Application Recognition and Control

The Application Recognition feature allows ZoneDirector to collect and display application usage statistics in dashboard charts and tables, and allows administrators to create application deny policies based on HTTP Host name or Port. Access restrictions can be deployed on a per-WLAN basis.

Supported APs: R700, 7982, 7372/52, 7055, 7782/81, SC-8800 series.

5.1.4. Guest Access Improvements

The Guest Access feature set has been improved to provide more control over deployments and offers enhanced guest pass generation options. ZoneDirector users can now create multiple guest access templates and deploy them to any WLAN, reducing the limitation of one Guest Access network configuration per ZoneDirector. To support the need for guests to connect multiple wireless devices, one guest pass can now support multiple devices. In addition to customizable printed guest passes, e-mail and SMS Guest Pass delivery options simplify guest networks operation and guest information logging.

5.1.5. Smart Positioning Technology (SPoT) Support

This release introduces Ruckus' SmartPositioning Technology (SPoT) location-based service. Ruckus SPoT™ is the industry's first cloud-based positioning technology that enables carriers, service providers and enterprises to deliver a wide range of location-based services. The solution works with Ruckus ZoneDirector and ZoneFlex Access Points to track footfall usage and provides an API to accurately pinpoint user locations in real time.

5.1.6. Bonjour Gateway on AP

This release adds the ability to offload the Bonjour Gateway service from ZoneDirector to a specified AP. Offloading the Bonjour Gateway service to the AP supports flexible deployment options to support larger and more complex networks with Layer 3 isolation between ZoneDirector and the

access points.

Supported Access Points: R700, R300, 7982, 7372/52, 7055, 7782/81, SC-8800 series.

5.1.7. Role Based Access Control

Role Based Access Control allows multiple clients to be able to connect to the same SSID with different access privileges. Administrators can apply VLAN, rate limiting, permitted device type and service schedule policies to different users based on their roles within the organization without having to create separate SSIDs for different sets of users.

5.1.8. Zero-IT for Mobile Devices Enhancement

Improved the user experience for Zero-IT installations on Android, iOS and Windows Phone clients, and improved the way the Zero-IT package is installed and run on mobile devices.

5.1.9. Device Registration Enhancement

Enhanced BYOD Onboarding Portal options enable the user to customize the onboarding screen to include Guest only, Zero-IT activation only, or both options.

5.1.10. 802.11r and 802.11k Support

The addition of support for 802.11r and 802.11k adds two 802.11 amendments designed to provide faster and more reliable roaming for mobile devices.

5.1.11. Client Band Balancing “Intelligent Band Steering”

Band Balancing steers clients towards the less-utilized radio band on dual-radio APs. This option is configurable and allows optimal use of Wi-Fi spectrum by load balancing across the 2.4 and 5 GHz radios.

5.1.12. Walled Garden Enhancement for DNS Entries

Added the ability to permit unauthenticated clients to access domains serviced by many IP addresses. This enhancement improves the Hotspot Walled Garden functionality to allow multi-IP domains such as Facebook, Twitter and Google+, which can be used to provide authentication with social media accounts.

5.1.13. Support for Cisco LEAP Authentication

ZoneDirector provides authentication support for LEAP clients on Windows 7 and Juniper Odyssey Access clients on Windows 7 and XP, along with other tested mobile handsets.

5.1.14. Enhanced Syslog Messages for Firewall Integration

With this release, ZoneDirector will generate syslog messages upon acquisition, update or deletion of IP addresses by wireless stations, allowing station information to be delivered through log messages that can be retrieved by firewalls to implement client-specific security rules.

5.1.15. Flexible RADIUS MAC Formats

Support for up to six MAC address formats for MAC authentication to provide simplified interoperation with various RADIUS vendors.

5.1.16. DHCP Option 82 Sub-Option 151 and 152 Support

ZoneDirector has added support for Cisco specific DHCP option 82 sub-options. These are useful to provide integration into Cisco based network environments for DHCP Relay Agent configuration and allow the DHCP server to insert additional information to identify the client's connection environment.

5.1.17. Configurable LDAP Group Search

A new option is provided to disable look-up against 'user role' (user-group) while conducting web authentication against an LDAP server. This can help to improve the AAA request time for LDAP services with many groups or large amounts of users.

5.1.18. Graceful RADIUS Failover

Improved options for controlling failover to the backup RADIUS server. This enhancement allows administrators to configure the max number of consecutive dropped packets before failover, providing a more forgiving AAA environment for large-scale networks.

5.1.19. Support Entitlement Checking

A notification service has been implemented to verify if a support contract has been purchased for an individual ZoneDirector. The ZoneDirector will remotely connect to a Ruckus Entitlement Server and retrieve an "entitlement file" from Ruckus that contains the current active/expired status of the ZoneDirector Support Contract. The ZoneDirector must be connected to the Internet to automatically retrieve the file, or the user has the option to manually retrieve and import it. If the support entitlement is not found or expired, a warning message will be presented with instructions on how to resolve the issue.

5.1.20. ZoneDirector Remote 9.8 Spectrum Application Integration

ZD Remote 9.8 includes the following features:

- Spectrum Analysis
- Guest Pass Generation
- Android Tablet Support

5.1.21. SmartCell Insight integration to support SCI's ability to pull data directly from ZoneDirector.

5.1.22. AAA Statistics Monitoring

Added a UI page to display AAA server statistics such as access requests, accounting requests, etc. over a configurable time span.

5.1.23. Minor GUI updates including changes to the Restore screen and a button to export managed AP list to CSV file.

5.1.24. Resolved Issues

5.1.25. Added a warning to ensure the user disables all WLANs (including mesh) before modifying external antenna settings for outdoor ZF 77xx series APs (ID ER-1136).

5.1.26. Resolved an issue with Acer devices running Windows 8.1 failing to connect

to a WLAN profile. (ID ZF-6651)

5.2. ZoneFlex Access Points

5.2.1. Enhancements

5.2.2. ZoneFlex R700 Dual Band 802.11ac Access Point

5.3. FlexMaster

5.3.1. Enhancements

5.3.2. Column settings now can be customized in reports. Settings will be saved in cookies, and when cookies are deleted from the browser, the columns will revert to default settings. (ZF-4401)

5.3.3. Incorporated new stats introduced/corrected in ZD 9.5.1, improved reports and organization of reports (ID ZF-3491, ZF-3485)

The following reports have been replaced by new reports and information consolidated:

Old Report	New Report
AP Traffic -TX/RX	Network Capacity
# of Associated Clients	
AP Traffic -TX/RX	AP Traffic -TX/RX Histogram
# of Associated Clients	# of Associated Clients -Histogram

5.3.4. The Report SLA->AP_Uptime report has been renamed to AP_ConnectionTime. The SLA->AP_Downtime report has been removed.

5.3.5. Enhanced ZoneDirector monitoring configuration options. (ID ZF-6375)

5.3.6. Improved alarm email delivery options to enable the following capabilities: (ID ZF-4459)

- Assign a group of devices (APs & ZDs) to a user. If there's an event on that group of devices, send an email to that user's email address
- When the event is cleared, send the clear event to above
- Capability to send specific events (e.g. AP down, ZD down)
- Capability to send only events with a particular severity (Major, Critical)

5.3.7. Increased the number of simultaneous reports FlexMaster can send. (ID ZF-3492)

6. Caveats, Limitations and Known Issues

This section lists the caveats, limitations, and known issues for FlexMaster, ZoneDirector and ZoneFlex Access Points in this version. Please also refer to previous (e.g., 9.6, 9.7) Release Notes documents for previously documented caveats and limitations.

6.1. ZoneDirector

6.1.1. Ethernet Port Settings

6.1.2. 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, 7351, 7363, 7761, 7762, and 7962.

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

6.1.3. Web Interface

6.1.4. ZoneDirector release 9.8 supports the following Web browsers:

- Firefox 3.0 and later
- Internet Explorer 7, 8, 9, 10, 11
- Chrome 5.0 and later

6.1.5. General

6.1.6. Spectrum analysis does not work with IPv6 mode. (ID ZF-4182)

6.1.7. "Null function (No data)" packets do not appear in AP sniffer captures. (ID ZF-5131)

6.1.8. Two different guest pass printout preview pages cannot be opened in the same browser. (ID ZF-6878)

6.1.9. Clients may be unable to obtain an IP address from a DHCP server when APs are in dual IPv4/v6 mode, Client Isolation is enabled and both the client and DHCP server are on a Client Isolation whitelist. (ID ZF-6702)

6.1.10. Spectrum Analysis is unable to scan on the 2.4 GHz radio. (ID ZF-5049)

6.1.11. The client Monitor page displays the client’s authentication method incorrectly after reassociation. (ID ZF-6703)

6.1.12. The IPv6 management interface may become unreachable after Smart Redundancy failover when IPv6-only mode is enabled. (ID ZF-7638, ZF-7520)

6.1.13. AirPlay mirroring fails when Call Admission Control is enabled for a WLAN. (ID ZF-7622)

6.1.14. ZoneDirector may run out of memory when FlexMaster, SCI and Application Visibility are all enabled and 500 APs and 10,000 stations are connected. (ID ZF-7217)

6.1.15. The configuration restore process may halt at the "pending" state when downgrading two Smart Redundancy ZoneDirectors from 9.8 to build 9.7.0.0.220 and the option "maintain the previous backup file" is selected. (ID ZF-6741)

6.1.16. Users with the role of “Operator admin” should no longer be able to make configuration changes via CLI. (ID ZF-6627)

6.1.17. ZoneDirector may sometimes fail to send a “del” syslog message for offline clients after a reboot. (ID ZF-6439)

6.1.18. Unauthorized clients may be able to bypass web auth login page by logging in using the ZD Remote app. (ID ZF-6304)

6.1.19. Application Visibility statistics data does not differentiate between clients connected to the same WLAN on the same AP. (ID ZF-5063)

6.1.20. When only “Device Registration” is enabled in the Onboarding Portal configuration section of a guest policy, the redirection options should be disabled in the UI. (ID ZF-7631)

6.1.21. AP incorrectly reports reboot reason as “application reboot” when a target crash occurs. (ID ZF-7467)

6.1.22. AP support info files do not include Tx-Power information for each radio, as in previous releases. (ID ZF-7463)

6.1.23. ZoneDirector 5000 may encounter a station manager process restart under certain complex scaling environments. (ID ZF-7454)

6.1.24. When executing the “set channel wifi0” CLI command multiple times, the CLI displays channel information incorrectly after the first time. (ID ZF-7263)

6.1.25. Support Entitlement page may display incorrect information for entitlement period and number of APs supported. (ID ZF-7128)

6.1.26. Support entitlement messages may display incorrect AP entitlement count. (ID ZF-6994)

6.1.27. Generated registration request file (.csv file) does not contain the peer ZoneDirector’s serial number in a Smart Redundancy setup. (ID ZF-6986)

6.1.28. ZoneDirector admin password change section displays obfuscated password in the New Password and Confirm New Password fields rather than the Current Password field. (ID ZF-6984)

6.1.29. In some specific scenarios, the AP may fail to send discovery messages to all IPs on its latest ZoneDirector list. (ID ZF-6954)

6.1.30. Performing an upgrade/downgrade using the CLI may fail if ZoneDirector has no active Support entitlement file. (ID ZF-6881)

6.1.31. Online Help Welcome page fails to display properly and some Help topics have not been updated for new features. (ID ZF-7198, ZF-6857, ZF-5595, ZF-5376, ZF-5333, ZF-5379)

6.1.32. If the user sets the bss-minrate via CLI command multiple times with Spectralink Compatibility enabled on a WLAN, the AP may fail to enforce the proper bss-minrate. (ID ZF-6138)

6.1.33. When upgrading two ZoneDirectors in Smart Redundancy configuration, the

standby ZoneDirector's web interface may hang on the "Upgrading… Pending" page until the web page is refreshed. (ID ZF-6024)

6.1.34. Multiple clients using the same user name cannot be disassociated at once using a single RADIUS disconnect message. (ID ZF-5631)

Map view icons of newer AP models (including R700, R300, SC-8800-S, 7441, 7782, 7782-x) are incorrect. (ID ZF-7499)

6.1.35. Removed two pre-11n IEs (htcap and htinfo) from 11n beacons as the tag IDs for them (51 and 52) are now used for 802.11k AP channel report and neighbor report. (ID ZF-3884)

6.1.36. In some situations, ZoneDirector may fail to establish a TR069 connection with FlexMaster when both FlexMaster and SmartCell Insight connections are established, Application Visibility, syslog and alarms are enabled. (ID ZF-7764)

6.1.37. When configuring DHCP option 82 suboptions via CLI, typing "end" improperly restores the default configuration. (ID ZF-7760)

6.1.38. Client monitoring tables does not allow sorting by Role. (ID ZF-7762)

6.1.39. The Bypass Apple CNA Feature changes may cause issues with iOS and OS X clients using the Onboarding Portal when upgrading from a previous release. (ID ZF-7747)

Workaround: Enable the "Guest Access" button under Configure > WLANs > Bypass Apple CNA Feature.

6.1.40. The Application Performance details view from the AP monitoring page does not display individual SSID application performance graph correctly. (ID ZF-7790)

6.1.41. Any AP or controller configuration settings which contain the characters "`" or "$(" will be rejected as invalid. (ID ZF-7768)

6.2. ZoneFlex APs

6.2.1. ZF 2741 upgrade may fail when the AP is a Mesh AP. (ID ZF-6829)

6.2.2. Stations are unable to connect to standalone AP WLANs with WPA-Auto authentication. (ID ZF-5614)

6.2.3. AP fails to get station statistics when 512 clients are connected. (ID ZF-7436)

6.2.1. In some situations, APs may cause clients in Power Save mode to wake up too frequently due to background traffic delays, leading to excessive battery drain on the client. (ID ZF-7725)

Workaround: If you encounter this issue, adjust the mediaqueue settings to increase BK AC hold time using the following CLI command: "rkscli: set mq wifiX qtime 2000 2000 4000 4000".

6.2.2. R700

6.2.3. Official upgrade paths:

- 9.8.0.0.112 (Beta)

6.2.4. Features not included in this release:

- Mesh
- Spectrum Analysis
- WMM-Admission Control
- WLAN Prioritization
- Packet Capture
- SmartRoam on 5 GHz
- Background Scanning is currently disabled on the 5 GHz Radio. This means that the following features do not work for the 5 GHz radio:
    - WIDS/WIPS (Rogue detection on channel other than service channel on 5G radio)
    - 11k
    - Channel Selection with background scanning
    - AP Neighbor List in WebUI is empty

6.2.5. Limitations:

- Max 8 WLANs on 5 GHz radio.
    - WLAN Group assigned to 5GHz radio should not have more than 8 WLANs.
- Heuristics UDP Traffic Classification on 5 GHz Radio
    - This feature can be enabled via CLI but will not persist through power cycle.

6.2.6. Airplay using Apple TV version 2 does not work on the 5 GHz radio. (ID ZF-7636)

6.2.7. R700 may sometimes fail to use multi-stream data rates when sending data to an Intel 7260 2x2 11ac card. (ID ZF-7357)

6.2.8. Setting a RADIUS per-station inactivity timeout does not work for clients on the 5 GHz radio. (ID ZF-7483)

6.2.9. Setting a fixed rate for the wifi1 radio via CLI does not work. (ID ZF-7476)

6.2.10. R700 5 GHz radio type is displayed as “11a/n” rather than 11ac when ZoneDirector is upgraded from 9.7 to 9.8. (ID ZF-6966)

Workaround: Do not connect R700 to ZoneDirector running any version prior to 9.8.

6.2.11. Changing the 5 GHz radio to channel 132 or 136 from a different active channel may cause downlink traffic to stop for 802.11ac clients. (ID ZF-7700)

Workarounds: Avoid manual channel changes from another channel to 132 or 136, or blacklist them for ChannelFly. Alternately, the channel can be manually set to 132 or 136 in initial configuration, or AP can be rebooted after manual channel change to use either of these channels.

6.3. FlexMaster

6.3.1. Web Interface

6.3.2. FlexMaster release 9.8 supports the following Web browsers:

- Firefox 3.0 and above
- Chrome 5.0 and above
- Safari 5.1.7 and above

6.3.3. Ruckus recommends using the latest version of Firefox, Chrome or Safari browser for FlexMaster administration.

6.3.4. Internet Explorer 7 is not supported due to critical compatibility issues (ID ZF-736/738/BUGZ-10434)

6.3.5. IE 8, 9 and 10 are supported but are not recommend due to several UI compatibility issues (ID ZF-293/691/3818/3798/3797)

6.3.6. If the Registration User Name or password is changed after creating a template, then an auto-configuration task is created for this template, the template will execute successfully but the changed parameters do not take effect. (ID ZF-7212)

6.3.7. The Test button on the Tacacs+ settings page is always successful, regardless of what is entered in the Service Name field. (ID ZF-7381)

6.3.8. Email Notification settings will be lost after upgrading from 9.7 to 9.8. (ID ZF-7443)

6.3.9. The following reports have been removed/renamed: 'AP Traffic -TX/RX', '# of Associated Clients', 'AP Downtime', 'AP Uptime'. When upgrading from 9.7 to 9.8, any widgets for these reports should be deleted. FlexMaster does not remove them but changes their report name only.(ID ZF-7455)

6.3.10. Client association stats for the last 24/12 hours may be displayed incorrectly in client trend reports. (ID ZF-7554)

6.3.11. FlexMaster may fail to generate reports under scalability testing with 10k APs and 100k clients. This issue does not occur when FM is installed on a server with 48GB memory and 5k APs and 50k clients. (ID ZF-6156, ZF-7680)

7. Interoperability Information

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 sections 7.1 and 7.2 below):

- PC OS:
  - Windows XP
  - Windows 7
  - Windows 8
  - Windows 8.1
  - Mac OS 10.8.3
  - Mac OS 10.8.5
- Smart Phone/Tablet OS:
  - iOS (5.0, 6.0, 6.1.3, 7.0, 7.0.2, 7.0.3)
  - Android (4.0.4, 4.1.1, 4.1.2, 4.2.2, 4.3)
  - Windows Phone 8
  - BlackBerry OS 10.1
  - Kindle (7.4.2)
- Officially Supported Browsers:
  - Internet Explorer 7, 8, 9, 10, 11
  - Firefox 3.0 and later
- Not Officially Supported Browsers:
  - Safari, Chrome, Dolphin, Opera Mini, Android Default, BlackBerry Default, etc.

7.1. Zero-IT Compatibility with Client Devices

ZD software version: 9.8.0.0.203

Note: Y = Support ; N = Not Support

OS	Zero-IT						Comments
	WPA/WPA2 WLAN+DPSK			802.1x EAP (external Radius server)			
	step1	step2	step3	step1	step2	step3	
IOS 5	Y	Y	Y	Y	Y	Y	
IOS 6.1.3	Y	Y	Y	Y	Y	Y	
IOS7.0.2	Y	Y	Y	Y	Y	Y	
IOS7.0.3							
Mac OS (10.8.5)	Y	Y	Y	Y	Y	Y	
Mac OS (10.8.3)	Y	Y	Y	Y	Y	Y	
Android (4.0.4, 4.1.1, 4.1.2, 4.2.2, 4.3)	Y	Y	Y	Y	Y	Y	
Windows 8	Y	Y	Y	Y	Y	Y	
Windows 8.1	Y	Y	Y	Y	Y	Y	
Kindle	Y	Y	Y	Y	Y	Y	ZF-3478: No Zero-IT Support for Windows Phone 8
Windows Phone 8	Y	N (ZF-3478)	N (ZF-3478)	Y	N (ZF-3478)	N (ZF-3478)	
BlackBerry OS 10.1	Y	N (ZF-6402)	N (ZF-6402)	Y	N (ZF-6402)	N (ZF-6402)	ZF-6402: ZD 9.8.0.0.34: Zero-IT Configuration Wizard is not able to install in Blackberry Z10 device.

step1: Download Zero-IT file
step2: Install Zero-IT script
step3: Automatically connect to the appropriate SSID

7.2. Client Interoperability Issues

7.2.1. HTC Desire X DS phones may be unable to connect to a WPA-Mixed WLAN on the 2.4GHz band. (ID ZF-6592)

7.2.2. Opera mini browser on Android smartphones does not launch the Zero-IT activation page. (ID ZF-6464)

7.2.3. Some clients (including several Apple products) that do not support the 802.11r standard may be unable to join a WLAN with 802.11r enabled. (ID ZF-6866, ZF-6889, ZF-6455, ZF-6500)

Workaround: Only wireless clients that support the 802.11r Fast BSS Transition standard should be allowed to connect to WLANs with 802.11r FT Roaming enabled. For clients that do not support the standard, these settings are not optimal and the clients may refuse to connect. They should instead be forced to connect to a separate WLAN with this feature disabled.

7.2.4. Member APs are not displayed properly in AP Group membership list when running IE 8. (ID ZF-6756)

7.2.5. Win 7 and Win XP clients do not support unencrypted 802.1X, and are unable to access an 802.1X WLAN with no encryption and the client configured with LEAP authentication. (ID ZF-6366)

7.2.6. Kindle Fire devices may not be properly redirected to the user's intended page after successful Web authentication. (ID ZF-6941)

7.2.7. Nokia Lumia 820 devices fail to connect to Enterprise WPA EAP-PEAP WLANs using Freeradius server and IAS server. (ID ZF-6424)

7.2.8. Win 7 clients are unable to redirect to the Web authentication page when connecting to a Web Auth WLAN with IPv6 only mode enabled. (ID ZF-6839)

7.2.9. Windows Surface RT tablets running Windows RT cannot run the Zero-IT file. (ID ZF-6230)