

What's New in ZoneFlex Software Release 7.0

This application note describes the new features available in Version 7.0 of the Ruckus Wireless ZoneFlex family. This document assumes familiarity with the Ruckus ZoneFlex product line and the features of earlier releases including version 6.0.

Highlights of this Release

ZoneFlex software release 7.0 provides Enterprises, HotZone Operators and Managed Service Providers a higher performing, more reliable, and easier to deploy and use way of providing wireless access to diverse groups of users across multiple locations:

- ZoneDirector 3000
- FlexMaster managing ZoneDirectors
- ZoneDirector Layer-3 support
- Voice mobility (WLAN tunneling for VoIP layer-3 roaming)
- 802.1x Roaming (PMK Caching and Opportunistic PMK Caching)
- SpeedFlex™
- RADIUS and ActiveDirectory authentication for Admins (including Read-only and read-write privileges)
- Built-in DHCP Server on ZoneDirector
- Static IP provisioning for APs from ZoneDirector
- Client HTTP proxy support
- DynamicPSK™ for Windows Mobile & CE
- FlexMaster support for ZoneFlex 7942
- FlexMaster Auto-configuration
- Enhanced FlexMaster reports layouts
- FlexMaster certificate import
- Device inventory status in FlexMaster

Supported Platforms

- FlexMaster version 7.0
 - ZoneDirector version 7.0
 - ZoneFlex 2925 802.11g Access Point version 7.0
 - ZoneFlex 2942 802.11g Access Point version 7.0
 - ZoneFlex 7942 802.11n Access Point version 7.0
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1. Introduction to Ruckus Wireless ZoneDirector 3000 controller

The Ruckus Wireless ZoneDirector 3000 is the first enterprise-class Smart Wireless LAN Controller that delivers a secure, robust and easily expandable WLAN solution at an unmatched total cost of ownership. Capable of managing up to 250 ZoneFlex 802.11g and 802.11n Smart Wi-Fi access points from a central point, the Ruckus ZoneDirector 3000 is designed for simplicity and ease of use. (Different model numbers offered for 25, 50, 100, and 250 APs) Redundant and secure, the Ruckus ZoneDirector provides WLAN-wide network, security, RF and location management within a single, easy-to-use and affordable WLAN system. ZoneDirector 3000 and 1000 support the same feature set and differ in scale and capacity.

Customer Benefits

- Scalable solution for large deployments
- Automated deployment keeps things simple even for large Enterprise deployments
- Distributed forwarding architecture eliminates controller bottlenecks even with 802.11n access points

Availability

ZoneDirector 3000 with software release 7.0

2. FlexMaster managing ZoneDirectors

With this release, FlexMaster can manage multiple ZoneDirectors in addition to standalone ZoneFlex Access Points. From a central location, administrators can log in through FlexMaster to any of the ZoneDirectors and perform all ZoneDirector administrative tasks. FlexMaster allows the grouping of multiple ZoneDirectors based on any administrator selected attribute (e.g. geography) and consolidates system-wide views on the dashboard. FlexMaster can also replicate the configuration from one ZoneDirector to multiple ZoneDirectors. Through simple configuration templates, FlexMaster copies the configuration of one ZoneDirector, and pushes out to selected ZoneDirectors at the pre-scheduled time.

Customer Benefits

- Ease of management for the Distributed Enterprise, managed service provider, HotZone chain, hotel chain, school district and any deployment requiring multiple ZoneDirectors
- Increased deployment speed
- Elimination of human errors during system-wide configuration
- Single point of control for compliance with corporate policies

Availability

FlexMaster and ZoneDirector with software release 7.0

3. ZoneDirector layer-3 support

In this release, ZoneDirector can manage ZoneFlex APs over a Layer-3 network. Auto-discovery is achieved via DHCP option 43 or DNS for a plug-n-play deployment. All ZoneDirector features are available for the ZoneFlex APs regardless whether they are managed via layer-2 or layer-3.

Customer Benefits

- Scalable deployment
- Seamless integration with existing networking infrastructure and topology

Availability

ZoneDirector with software release 7.0

4. Voice mobility (WLAN tunneling for VoIP layer-3 roaming)

With this release, a WLAN can be configured to tunnel all traffic back to the ZoneDirector as opposed to forwarding it directly to the wired network. This option is available for each WLAN and is recommended for layer-3 deployments where VoIP clients may roam across subnets. A typical solution will be to separate the VoIP clients to a dedicated WLAN that is tunneled back to the ZoneDirector, while other clients use different WLANs where data forwarding is distributed (forwarded from the AP directly to the wired network). By default, this option is disabled for each WLAN.

Customer Benefits

- Undisrupted voice calls via seamless roaming for VoIP clients in a layer-3 environment.

Availability

ZoneDirector with software release 7.0 and Mobility License

5. 802.1x Roaming (PMK Caching and Opportunistic PMK Caching)

When using 802.1x authentication with a remote RADIUS server, roaming across APs may result in an undesired delay in user experience (especially for latency-sensitive applications). In this release, ZoneDirector supports PMK Caching and Opportunistic PMK caching thereby eliminating the need to reach all the way back to the remote RADIUS server when roaming across managed APs. This feature requires client support for PMK Caching and Opportunistic PMK caching.

Customer Benefits

- Undisrupted user experience and seamless roaming in 802.1x environments with a remote RADIUS server

Availability

ZoneDirector with software release 7.0 and Mobility License

6. SpeedFlex™

With this release, ZoneDirector provides the ability to easily measure wireless performance to associated clients for troubleshooting, monitoring, and planning.

From the Currently Active Clients screen, administrators can invoke a speed test focusing on wireless layer-2 throughput measuring performance for a specific client. An intuitive speedometer provides immediate feedback on client throughput and helps administrators to isolate client issues quickly.

The same test can also be performed by the user from any location using nothing but a browser.

Customer Benefits

- Easy troubleshooting and monitoring of wireless client performance
- Increased IT administrator productivity by eliminating the need to physically be where the wireless client is
- Enhanced end user satisfaction
- Improved capacity planning capabilities allows better planning for coverage and performance

Availability

ZoneDirector with software release 7.0

7. RADIUS and ActiveDirectory authentication for Administrators (including Read-only and read-write privileges)

In this release, administrators can authenticate to the ZoneDirector via RADIUS or Microsoft ActiveDirectory. ZoneDirector can map administrators to different admin roles based on RADIUS or AD attributes. Admin roles can be assigned different access privileges (e.g. R/W vs. R/O). In the event an external authentication server is not reachable, ZoneDirector can also fallback to authenticate administrators via the local administrator account.

Customer Benefits

- Enhanced security by enforcing admin authentication via corporate AAA server
- Compliance with corporate security policies requiring centralized authentication, and separation of administrator privileges

Availability

ZoneDirector with software release 7.0

8. Built-in DHCP server in ZoneDirector

In release 7.0, administrators can use the ZoneDirector as a simple DHCP server for clients. When this functionality is enabled, the ZoneDirector will respond to DHCP requests coming from clients and assign them an IP address for the configured lease time. The built-in DHCP server was designed for small or overlay deployments and for lab environments where no other DHCP server is available.

Customer Benefits

- Easy deployment for lab trials and for small, simple, overlay wireless networks

Availability

ZoneDirector with software release 7.0

9. Static IP provisioning for APs from ZoneDirector

In this release, administrators can provision static IP address configurations (including IP subnet, default gateway, and DNS configuration) to managed ZoneFlex access points from the ZoneDirector's WebUI without the need to login to each AP individually.

Customer Benefits

- Ease of deployment and provisioning
- Ease of monitoring and management by allowing simple third-party monitoring of APs
- Enables compliance with corporate policy for IP address assignment

Availability

ZoneDirector with software release 7.0

10. Client HTTP proxy support (ports 8080 and 3128)

In this release, ZoneDirector can redirect browser requests on ports 8080 or 3128 (local proxy settings configured on clients) to the ZoneDirector web authentication or guest captive portal.

Customer Benefits

- Seamless integration with customer's existing environment for ease of deployment

Availability

ZoneDirector with software release 7.0

11. DynamicPSK™ for Windows Mobile & CE

Starting with software release 7.0, Ruckus Wireless extends its patent-pending DynamicPSK to support Windows Mobile and Windows CE. Customers can now automatically provision the wireless settings (SSID and unique pre-shared key) on Windows Mobile/CE machines. This is in addition to our current support of Windows XP and Vista.

Ruckus's Zero-IT capability for Windows Mobile/CE can also be used to provision other wireless authentication and security parameters (e.g. configuring SSIDs, 802.1x, ...)

Customer Benefits

- Highly secure and easy to deploy wireless for Windows Mobile and/or Windows CE devices

Availability

ZoneDirector with software release 7.0

12. FlexMaster support for ZoneFlex 7942

Starting with this release, FlexMaster can manage the ZoneFlex 7942 802.11n access points.

Customer Benefits

- Ease of deployment and management across multiple locations for 802.11n APs

Availability

FlexMaster and ZoneFlex 7942 with software release 7.0

13. FlexMaster Auto-configuration

In this release, ZoneFlex access points can be configured automatically at the instance of initial communication and registration with FlexMaster. Via the Auto-Configuration feature, administrators can set up a configuration template in advance. When a ZoneFlex AP is deployed, it first registers with the FlexMaster. FlexMaster searches its database for an updated configuration template and automatically sends the configuration to the Access Point.

Customer Benefits

- Zero-touch initial configuration
- Simplifies initial setup of ZoneFlex AP at locations where no IT staff is available

Availability

FlexMaster with software release 7.0

14. Enhanced FlexMaster reports selection

In this release, administrators can easily select, filter and display reports via FlexMaster.

Customer Benefits

- Ease of administration with intuitive generation of reports
- Improves reporting with display of comprehensive statistics
- Compliance with audit and standard requirements

Availability

FlexMaster with software version 7.0.

15. FlexMaster certificate import

In this release, administrators can import CA-signed certificates into FlexMaster.

Customer Benefits

- Enhanced security for FlexMaster SSL session
- Elimination of browser certificate warning for improved usability

Availability

FlexMaster with software version 7.0.

16. Device inventory status in FlexMaster

In this release, FlexMaster administrators can mark managed device status: Denied, RMA, or Unavailable, to eliminate unnecessary information (such as events) on devices that are not, or are no longer, managed. When a device is marked as Denied, RMA, or Unavailable, it will not show up on the managed device inventory page, will not be managed by FlexMaster, and will not count against your license limit.

Customer Benefits

- Increased ease of management

Availability

FlexMaster with software version 7.0.