ZoneDirector™ 3000

Enterprise-Class Smart Wireless LAN Controller

The First Simple and Powerful Enterprise Smart Wireless LAN Controller

The Ruckus Wireless ZoneDirector 3000 is the first enterprise-class Smart Wireless LAN system 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 80211n Smart Wi-Fi access points from a central point, the Ruckus ZoneDirector 3000 is designed for simplicity and ease of use.

Unlike conventional wireless LAN systems that are costly, complex and cumbersome to deploy, the ZoneDirector 3000 is ideal for any enterprise that requires a high-performance wireless LAN that can be easily deployed and managed. The ZoneDirector 3000 integrates advanced features such as intelligent beam steering, smart wireless meshing and dynamic Wi-Fi security not found in any other WLAN system.

The Ruckus ZoneDirector 3000 can be deployed and operated by non-wireless experts and installed quickly and easily. Any organization with limited IT staff and budget can create a robust and secure multimedia WLAN in a matter of minutes.

The Ruckus ZoneDirector easily integrates with network, security and authentication infrastructure already in place and is easily configured through a point-and-click web wizard. Ruckus ZoneFlex access points (APs) automatically discover and are configured by the ZoneDirector.

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.

Simple to Deploy

The Ruckus ZoneDirector integrates seamlessly with existing switches, firewalls, authentication servers and other network infrastructure. The ZoneDirector can be placed within any Layer 2/3 network. All Ruckus ZoneFlex APs (wired or meshed) then automatically discover the Ruckus ZoneDirector, self configure and become instantly manageable.

BENEFITS

Unmatched scalability
Supporting up to 250 APs, the ZoneDirector 3000 can easily serve the largest campus deployments

Ruckus Smart Mesh Networking streamlines costly and complex deployment
Integrated Ruckus Smart Mesh Networking technology automates deployment, eliminates the need to run Ethernet cable to every Smart Wi-Fi access point

Simple to use, simple to manage
Centralized management, quick setup, IT-Lite and automatic, real-time optimization of entire WLAN

IT lite deployment in 5 minutes or less
Web-based configuration wizard lets any computer user configure an entire WLAN in minutes. Ruckus ZoneFlex APs auto-discover the ZoneDirector

Flexible deployment options
The ZoneDirector interacts with existing network and security infrastructure and provides dynamic RF management across APs to eliminate AP placement issues

Easy monitoring and troubleshooting
Customizable dashboard provides comprehensive at-a-glance network snapshot and allows drill down to troubleshoot wireless problems

Automatic user security
Eliminates the requirement to configure and update individual PC client devices with unique encryption keys

Complete integration
Combines network management, dynamic RF management, location management and AP control within a low-cost solution
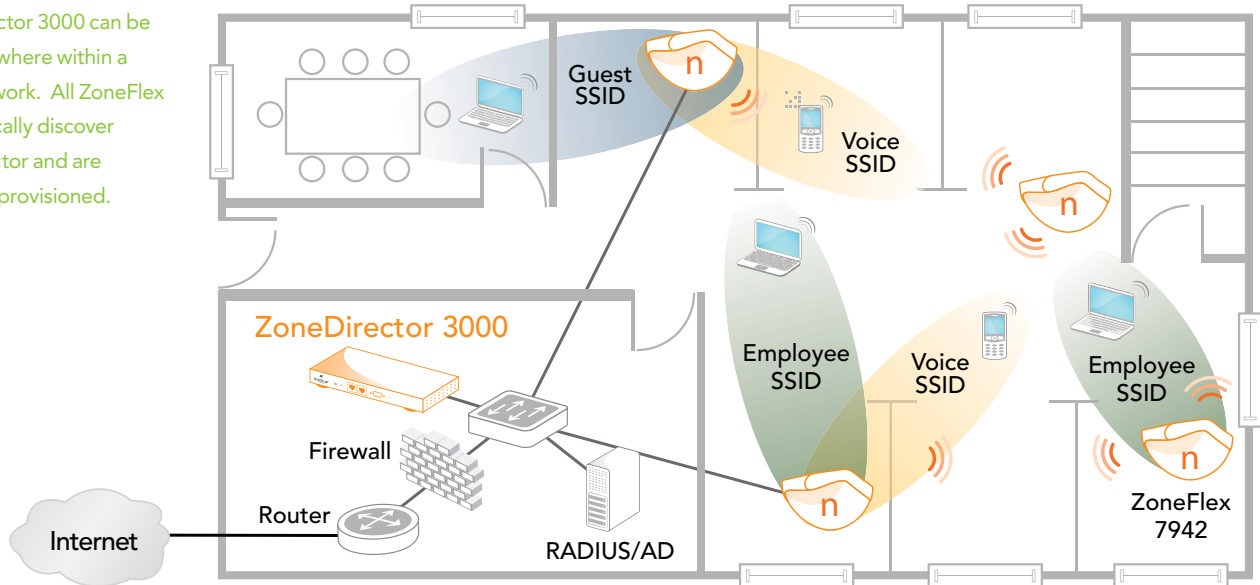
Advanced WLAN features and functions
Role-based user policies, internal authentication database, rogue AP detection and client thresholds per AP

ruckus WIRELESS

ZoneDirector 3000

The ZoneDirector 3000 can be deployed anywhere within a Layer 2/3 network. All ZoneFlex APs automatically discover the ZoneDirector and are automatically provisioned.

Simple to Manage

Once up and running the ZoneDirector automatically manages the ZoneFlex network of APs – automatically adjusting transmit power levels and RF channel assignments as needed, to prevent adjacent APs from interfering and enable redundant coverage in the event of an AP failure. Configuration changes can easily be applied to multiple APs, or the entire system, simultaneously. A customizable dashboard provides instant access to a variety of client and network information and events, and a real-time heat map displays AP locations and signal coverage, as well as your Smart Mesh Networking topology.

ZoneDirector Smart WLAN systems integrate a unique performance utility from Ruckus called SpeedFlex™. Ruckus SpeedFlex allows administrators to locally or remotely determine client Wi-Fi performance over the wireless LAN. With SpeedFlex, administrators can now better plan, troubleshoot, monitor and measure WLAN performance, eliminating the need to use Internet-based speed tools that often provide inaccurate results of the local Wi-Fi environment.

Simple to Secure

The ZoneDirector 3000 provides innovative new techniques that simplify and automated Wi-Fi security. In addition to enterprise-class 802.1x support, the ZoneDirector 3000 supports a patent-pending Dynamic Pre-Shared Key (PSK) capability that streamlines WLAN security.

First-time users plug their computers into the LAN and specify a URL that directs them to a captive web portal for a one-time authentication. After successful authentication, the ZoneDirector automatically configures the client system with the designated SSID and a dynamically-generated encryption key. The key is bound to the client, and can be removed upon expiration when the user or the user's device is no longer trusted.

FEATURES

- Centralized configuration of up to 250 Ruckus ZoneFlex APs
- Centralized software upgrade
- Smart Mesh Networking control and monitoring
- Real-time client admission control
- Easy discovery from PC using UPnP
- Easy-to-use setup wizard
- Customizable dashboard
- Dynamic RF channel and power management
- Integrated captive portal
- ActiveDirectory and RADIUS support
- Local authentication database
- Guest accounts and Terms of Use
- Dynamic PSK and IT-Lite configuration
- Rogue AP detection and graphical map view
- Event management
- Performance monitoring and statistics
- N+1 redundancy
- Manage multiple locations and ZoneDirectors with FlexMaster
- Two 1000 Mbps ports for full redundancy
- Limited lifetime warranty coverage

The ZoneDirector 3000 provides a detail map view that lets administrators quickly see the Wi-Fi network topology for all ZoneFlex Smart Wi-Fi access points.
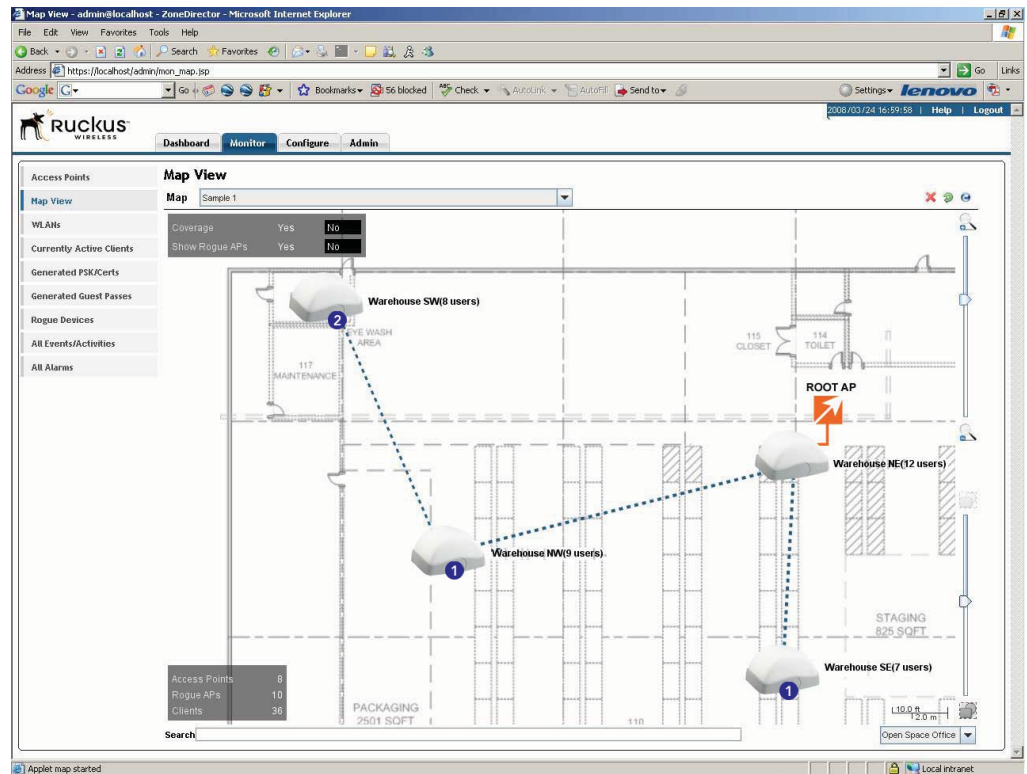
The Ruckus ZoneDirector centralizes authentication and authorization decisions for all APs, providing secure admission control across the WLAN. It works with any backend authentication database such as RADIUS and ActiveDirectory and also comes with an internal authentication database.

## Avoid Interference, Maximize Performance and Extend Reach with BeamFlex

Ruckus BeamFlex™, a patented Wi-Fi beam-steering technology, ensures predictable performance for multimedia traffic applications and extended range to eliminate Wi-Fi deadspots. With ZoneDirector, the value of BeamFlex is extended beyond a single access point to the system-wide WLAN and smart Wi-Fi meshing.

The ZoneDirector automatically controls the channel assignments and transmit power of all ZoneFlex Smart Wi-Fi APs. And with BeamFlex, the ZoneFlex system continuously picks the best path for every packet, to both clients outside the network and mesh APs inside the network, automatically avoiding interference, to guarantee the highest quality of service.

Smart Mesh Networking Increases Flexibility, Reduces Costs

Ruckus Smart Mesh Networking enables self-organizing and self-healing wireless meshing. Smart Mesh Networking eliminates the need to run Ethernet cabling to every Smart Wi-Fi AP, allowing administrators to simply plug in ZoneFlex APs to any power source, then walk away. All configuration and

management is delivered through the ZoneDirector Smart WLAN platform. Leveraging patented Ruckus Smart Wi-Fi technology that provides extended range and dynamic signal controls, Smart Mesh Networking minimizes inter-nodal hops that degrade performance, automatically adapts Wi-Fi connections between nodes to environmental changes and requires fewer APs to be deployed.
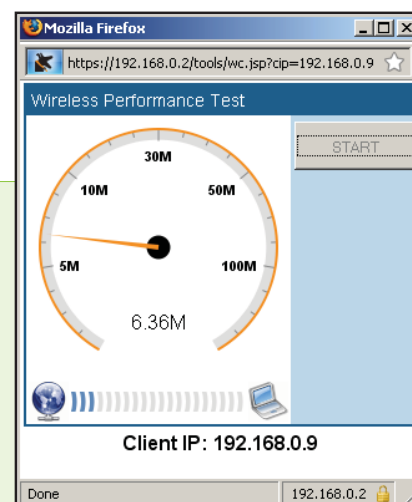
SpeedFlex™ is a unique wireless performance test tool integrated within the ZoneFlex™ family of centralized controllers that measures the Wi-Fi throughput of associated wireless LAN (WLAN) clients.

Specifications

PHYSICAL CHARACTERISTICS

POWER	• 220 watt internal power supply • 100–250V AC Universal, IEC 320 connector
PHYSICAL SIZE	• 35.52cm(L), 43.18cm(W), 4.39cm(H)
WEIGHT	• 14 lbs (6.37 kilograms)
ETHERNET PORTS	• 2 ports, auto MDX, auto-sensing 10/100/1000 Mbps, RJ-45
LED DISPLAY	• Power • Status
ENVIRONMENTAL CONDITIONS	• Operating Temperature: 41°F (5°C)–104°F (40°C) • Operating humidity: 15%–95% non-condensing

MANAGEMENT

CONFIGURATION	• Web user interface, FlexMaster
STATISTICS	• LAN, wireless and associated stations (available via UI)
AUTO AP SOFTWARE UPDATES	• Supported
CAPTIVE PORTAL	• Supported
GUEST ACCOUNTS	• Supported
VLAN SUPPORT	• 802.1Q (per BSSID)
DHCP SERVER	• Supported
AP DISCOVERY & CONTROL	• Layer-2 or Layer-3
WLANs (BSSIDs)	• Up to eight

SECURITY

WIRELESS SECURITY	• WEP, WPA-TKIP, WPA2-AES, 802.11i
AUTHENTICATION	• 802.1X, local database • External AAA servers: ActiveDirectory, RADIUS
LOCAL AUTHENTICATION	• 5000 user entries

MULTIMEDIA AND QUALITY OF SERVICE

VoIP TUNNELING	• Supported
802.11e	• Supported
SOFTWARE QUEUES	• Per traffic type, per client
AUTO-CLASSIFICATION	• Heuristics
RATE LIMITING	• Supported

CERTIFICATIONS

COUNTRIES	• U.S., Europe, Australia, Canada, Chile, Hong Kong, India, Philippines, Saudi Arabia, Thailand, UAE, New Zealand

PERFORMANCE AND SUPPORTED CONFIGURATIONS

NUMBER OF MANAGED APs	• Up to 250
CONCURRENT STATIONS	• Up to 5000

ZoneFlex 2925
802.11g
Smart Wi-Fi AP

ZoneFlex 2942
802.11g
Smart Wi-Fi AP

ZoneFlex 7942
802.11n
Smart Wi-Fi AP

Product Ordering Information

Model	Description
ZoneDirector 3000 Smart WLAN Controllers	
901-3025-XX00	ZoneDirector 3025 supporting up to 25 ZoneFlex APs
901-3050-XX00	ZoneDirector 3050 supporting up to 50 ZoneFlex APs
901-3100-XX00	ZoneDirector 3100 supporting up to 100 ZoneFlex APs
901-3250-XX00	ZoneDirector 3250 supporting up to 250 ZoneFlex APs
901-7942-XX01	Smart Wi-Fi 802.11n access point with Power over Ethernet, wall/ceiling mount
901-2942-XX01	2-port Smart Wi-Fi 802.11g access point with Power over Ethernet, wall/ceiling mount
901-2925-XX01	5-port Smart Wi-Fi 802.11g access point for user space deployment

PLEASE NOTE: When ordering you must specify the destination region by indicating -US, -EU, -UK, -UN, -AU, -UU or -IN instead of XX.

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