



## KEY FEATURES/BENEFITS

### Scalability for Enterprises

The vSZ is a virtualized WLAN Controller that runs in the cloud and can start with smaller deployments and easily ramp-up to support networks with thousands of APs and tens of thousands of users

### Cost Effective Centralized Licencing Framework

As part of Ruckus Smart Licensing, customers only purchase licenses for the number of APs that need to be supported and additional licenses can be added for a pay-as-you-grow model. License purchases under Smart Licensing can also be easily transferred to other SmartZone devices using a cloud licensing portal

### Smart Meshing Support

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

### Call Admission Control

This new feature helps to ensure existing Wi-Fi users' quality of experience is maintained when the maximum load of the access point is reached

### SmartWay Bonjour Gateway Support

The SmartWay Bonjour Gateway allows customers to discover Bonjour services (such as AirPlay, Apple TV and other Apple network services) and other mDNS based products like ChromeCast across VLANs and subnets

### Device Policy Enforcement

Administrators can now apply rules to allow, deny, rate limit, or assign devices to specific VLANs based on the device operating system

### Guest Access Enhancements

Guest access on the vSZ has been enhanced to provide added functionality and ease of use. Guest credentials can be delivered via SMS using Twilio or email

# Virtual SmartZone (vSZ-E)

## ENTERPRISE CLASS WLAN CONTROLLER DESIGNED TO RUN IN THE CLOUD

The virtual SmartZone (vSZ) is a scalable and versatile WLAN Controller designed to run in the cloud. It eliminates the difficulties enterprises experience with building, managing, and scaling up to very large-scale WLAN networks. The vSZ implements a whole host of new features that optimize the Wi-Fi deployment for the enterprise.

By moving the SmartZone functionality into the cloud, it becomes possible to offer a platform with enormous scalability. This includes support for over a thousand Ruckus access points and tens of thousands of subscribers per virtual instance. The vSZ provides all control plane and management functions, with data plane traffic being routed directly from the APs to a separate WLAN gateway. This approach is consistent with the industry trend toward Software Defined Networks (SDN) that split out the control plane from the data plane.

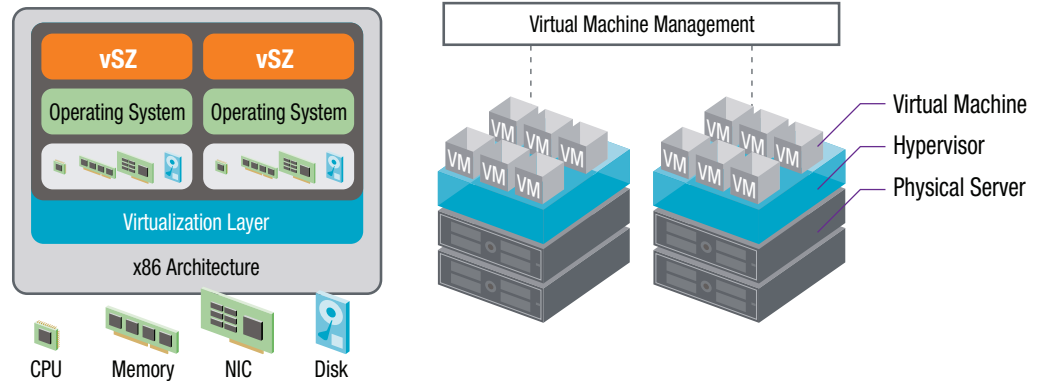
The vSZ can be deployed as a private cloud to support one specific network deployment, or in a public cloud that can support hundreds or even thousands of managed WLAN networks. The vSZ can run on either VMware Esxi 5.5 and later or Hyper-V/Azure or KVM (CentOS 7.0 64 bit).

The hypervisor function creates the virtual machines (VMs) that the vSZ application can run on. As traffic and load increases, the hypervisor can obtain additional resources from the underlying hardware layer to meet the demand. These resources can later be released as circumstances dictate.

# Virtual SmartZone

ENTERPRISE CLASS WLAN CONTROLLER  
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Figure 1: The vSZ runs on a virtual machine established by the hypervisor. It in-turn runs atop the physical x86 blade servers. When deploying the vSZ in a data center, the existing cloud service management and orchestration function can interface with the vSZ through an API.



## Virtualizing the SmartZone

Virtualizing the SmartZone involves running the vSZ application and its OS on top of either VMware Esxi 5.5 and later or Hyper-V/ Azure or KVM (CentOS 7.0 64bit) (see Figure 1). Virtualization enables a whole host of new capabilities including:

- Ability to dynamically add hardware resources as required to support the needs of a rapidly growing enterprise, enabling a much more efficient use of data center resources
- High availability by enabling the hypervisor to shift applications to different server modules to address failures. The vSZ application can also run in Active/Active mode for extremely high availability.

## Key vSZ features

<b>Monitoring</b>	<ul style="list-style-type: none"> <li>• Enables quick views of the health of the network, APs, connected devices, and alerts</li> <li>• Provides detailed views of the AP status and client data</li> </ul>
<b>Remote troubleshooting</b>	<ul style="list-style-type: none"> <li>• Speeds problem resolution across multiple sites with easy drill-down menus</li> <li>• Enables IT to perform troubleshooting commands from the cloud</li> </ul>
<b>Simplified deployment</b>	<ul style="list-style-type: none"> <li>• Simplifies configuration by applying consistent configurations and firmware to a group of APs</li> <li>• Smart Meshing streamlines costly and complex deployment</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>• Creates scheduled or on-demand network and security reports</li> <li>• Delivers PCI-compliance reports for compliance</li> </ul>
<b>One-click provisioning</b>	<ul style="list-style-type: none"> <li>• Downloads AP configurations from the cloud automatically</li> </ul>



## Specifications

SUPPORTED CONFIGURATIONS	
SUPPORTED CONFIGURATIONS MANAGED APs	<ul style="list-style-type: none"> <li>Up to 1,024 per vSZ</li> <li>Supports 3+1 cluster</li> </ul>
CONCURRENT MOBILES (UEs) / STATIONS	<ul style="list-style-type: none"> <li>Up to 25,000 users per vSZ instance</li> </ul>
WLANS	<ul style="list-style-type: none"> <li>Up to 65,534 per vSZ</li> </ul>

CAPACITY	
WLANS (BSSIDs)	<ul style="list-style-type: none"> <li>2,000</li> <li>With cluster: 6,000</li> </ul>

## Sizing Table

# OF APs	# OF CLIENTS	vCPU (Core)	RAM (GB)	DISK VOL SIZE (GB)
100	2,000	2	15	100
1,024	25,000	8	23	250

## Product Ordering Information

MODEL	DESCRIPTION
<b>Virtual Smart Cell Gateway (vSZ)</b>	
L09-0001-SG00	SZ/(v)SCG AP license for 1 AP
S01-0001-1LSG	WD Premium Per AP Support, 1 YR
S01-0001-3LSG	WD Premium Per AP Support, 3 YR
S01-0001-5LSG	WD Premium Per AP Support, 5 YR
L09-VSCG-WW00	Virtual SmartCell Gateway, 1 Instance
S01-VSCG-1L00	WD Premium Support - VSCG-RTU, 1 YR
S01-VSCG-3L00	WD Premium Support - VSCG-RTU, 3 YR
S01-VSCG-5L00	WD Premium Support - VSCG-RTU, 5 YR