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Ruckus Virtual SmartZone-Data Plane (vSZ-D) Quick Setup Guide

This *Quick Setup Guide* provides basic instructions for setting up the Ruckus Virtual SmartZone Data Plane (vSZ-D) on the network. For information on advanced configuration and management options, see the *vSZ-D Command Line Interface (CLI) Reference Guide*, which is available for download from the Ruckus Support website:

https://support.ruckuswireless.com/documents

Before You Begin

Before deploying Ruckus Wireless products, please check for the latest software and the release documentation.

- Release Notes and other user documentation are available at https://support.ruckuswireless.com/documents.
- Software upgrades are available at https://support.ruckuswireless.com/software.
- Software license and limited warranty information are available at https://support.ruckuswireless.com/warranty.
- Refer to the vSZ-D Configuration Guide for the upgrade process.

Important Notes

- If you are upgrading both Virtual SmartZone (vSZ) and vSZ DataPlane (vSZ-D), Ruckus Wireless recommends upgrading the vSZ software first, before upgrading the vSZ-D software.
- The minimum memory and CPU requirements of vSZ may have changed in this release. To ensure that the virtual machine on which you are installing vSZ has sufficient resources to handle the number of APs and wireless clients that you plan to manage, refer to the "Virtual SmartZone Required Resources" section of the vSZ Getting Started Guide.
- For information on how to upgrade the vSZ-D software to this release, see the vSZ-D Configuration Guide.
- Promiscuous mode must be enabled in the VMWare vSwitch. For more information, refer vSZ-D Configuration Guide.

NOTE: vSZ reserves subnets 10.255.0.0/16 and 10.254.1.0/24 for inter-process communications between the controllers/data planes. These subnets should not be used. Subnets are configurable using the CLI command.

What You Will Need

- A hypervisor on which to install vSZ-D (see Table 1)
- The vSZ-D distribution package (.OVA file), which is available for download from the Ruckus Wireless Support website
- The IP address, netmask, gateway and DNS server addresses assigned to the vSZ controller - if it has a static network address (recommended).
- A virtual machine that meets the recommended system resources for the number of APs and wireless clients that you plan to manage.

TABLE 1 Hypervisors that vSZ-D supports

Vendor	Hypervisor	Version
VMWare	ESXi	5.5 and later (6.7 or later recommended)
KVM	Linux	CentOS 7.4 (64 bit)

Step 1: Install and Start vSZ-D on the Hypervisor

Using the OVA file that you downloaded from the Ruckus Wireless Support site, install an instance of the vSZ-D on the hypervisor.

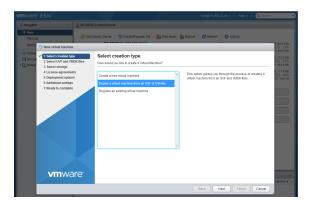
1. Login VMware ESXi.

FIGURE 1 VMware EXSi Screen



From VMware EXSi, click Host > Create/Register VM.
 The New Virtual Machine window appear as shown in the following image.

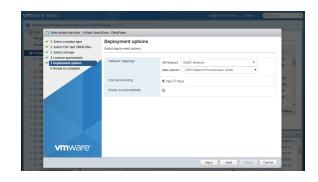
FIGURE 2 Creating Virtual Machine



- 3. Select the VM creation type from the list and click **Next**.
- From the Select OVF and VMDK files tab, enter a name for the virtual machine.
- 5. Select the vSZ-D OVA file that you downloaded from the Ruckus Wireless Support website, and click **Next**.
- From the Select storage tab, select the database for the virtual machine and click Next.
- Read and accept the end user license agreement, and click Next.

The Deployment Options tab page appear as shown in the following image.

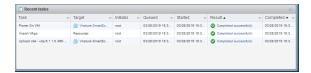
FIGURE 3 Deployment Options



- Select the **Network mappings** that you want this vSZ-D instance to use.
- 9. Select the Disk provisioning option.
- 10. Select the **Power on automatically** check box and click **Next**.

 Verify the details and click Finish to start the vSZ-D deployment.

You can find the deployment status listed in the Recent tasks section as shown in the following image.

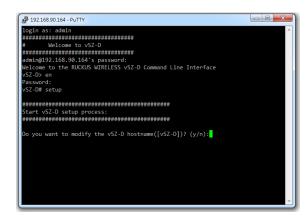


Step 2: Run and Complete the vSZ-D Setup

In this task, you will define the management and data interface settings that you want vSZ-D to use.

- Use an SSH client to connect to the IP address assigned to the vSZ-D instance. Alternatively, click the Console tab on the vSphere client to connect to the vSZ-D instance.
- In login as:, enter admin. The message "Welcome to vSZ-D" appears.
- 3. In password: enter admin. The vSZ-D> prompt appears.
- 4. Enter **en** to enter the privileged mode.
- 5. In password: enter admin. The vSZ-D# prompt appears.
- Enter setup. The message "Start vSZ-D setup process" appears.

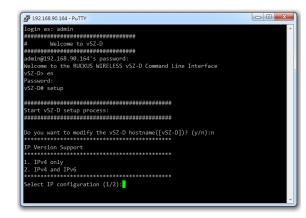
FIGURE 4 Modify the vSZ-D hostname



7. When the prompt "Do you want to modify the vSZ-D hostname ([vSZ-D])? (y/n) appears," enter n to keep the default host name or y to change it. If you entered y, the next prompt asks you to enter the new hostname.

The next prompt asks you to choose the IP version you want to support on the network.

FIGURE 5 IP configuration choice



Enter 1 to support IPv4 only, or enter 2 to support both IPv4 and IPv6.

The next prompt asks you to choose how you want to set up the management interface IP address.

 Enter 1 if you want to manually assign an IP address to the management interface, or enter 2 to automatically obtain an IP address from a DHCP server on the network.

If you entered 1 (Manual), the next prompt asks you to enter the IP address settings that you want to manually assign.

The next prompt asks you to confirm that you want to apply the IP address settings that you configured at the previous prompts.

10. Enter v to confirm and continue.

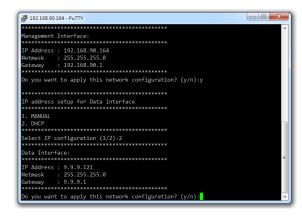
The next prompt asks you to choose how you want to set up the data interface IP address.

11. Enter 1 if you want to manually assign an IP address to the data interface, or enter 2 to automatically obtain an IP address from a DHCP server on the network.

If you entered 1 (Manual), enter the IP address settings that you want to manually assign.

The next prompt asks you to confirm that you want to apply the IP address settings that you configured in the previous prompts.

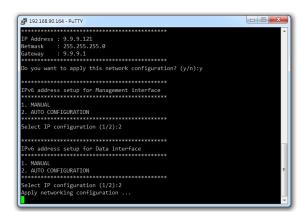
FIGURE 6 Apply IP settings



12. Enter y to confirm and continue.

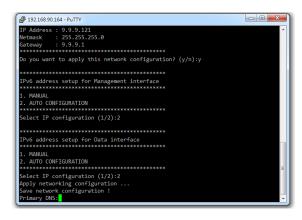
The message "Apply networking configuration..." appears.

FIGURE 7 Apply Network Configuration



13. At the Primary DNS prompt, enter the IP address or host name of the primary DNS server that you want vSZ-D to use.

FIGURE 8 Primary DNS server



14. At the Secondary DNS prompt, enter the IP address or host name of the secondary DNS server that you want vSZ-D to use.

FIGURE 9 NAT server

```
Gateway : 9.9.1

Do you want to apply this network configuration? (y/n):y

IPVG address setup for Management interface

1. MANUAL

2. AUTO CONFIGURATION

Select IP configuration (1/2):2

IPVG address setup for Data interface

1. MANUAL

2. AUTO CONFIGURATION

Select IP configuration (1/2):2

Apply networking configuration ...

Save network configuration ...

Save network configuration !

Primary DNS:8.8.8.8

Secondary DNS:8.8.4.4

Data Interface external NAT IP:
```

15. At the Data Interface external NAT IP prompt, enter the public IP address of the NAT server (if you have one) on the network. If you do not have a NAT server on the network, leave the field blank and simply press <Enter>.
The next prompt asks you if you want verify certificate.

FIGURE 10 Certificate Verification

16. Enter **y** for FIPS support image or **n** for non-FIPS support image.

The next prompt asks you if you want vSZ-D to automatically discover a vSZ controller on the network using DHCP Option 43 (if you have configured this on your DHCP server).

NOTE: DHCP Option 43 can be configured only when DHCP is used to configure IP for management interface.

FIGURE 11 DHCP Option 43

```
№ 192.168.90.164 - PuTTY
                                                          _ D X
  you want to apply this network configuration? (y/n):y
  ***************
  ΜΔΝΙΙΔΙ
  . AUTO CONFIGURATION
  **************
  elect IP configuration (1/2):2
  Pv6 address setup for Data interface
  AUTO CONFIGURATION
   **************
  elect IP configuration (1/2):2
  ave network configuration !
  imary DNS:8.8.8.8
  condary DNS:8.8.4.4
 ata Interface external NAT IP:
  you want to apply vSZ IP through DHCP Option 43 (y/n):
```

17. Enter **y** to use DHCP Option 43 or enter **n** to manually enter the vSZ controller's IP address.

If you entered **n**, the next prompt asks you for the IP address of the vSZ controller with which you want this vSZ-D instance to join. For vSZ configured with three (3) IP interfaces, enter the vSZ control interface IP address.

18. At the new password prompt, enter the password that you want to assign to the vSZ-D management interface.

FIGURE 12 New password

```
## 19216890164-PUTTY

2. AUTO CONFIGURATION

Select IP configuration (1/2):2

**PV6 address setup for Data interface

1. MANUAL

2. AUTO CONFIGURATION

Select IP configuration (1/2):2

Apply networking configuration ...

Save network configuration !

Primary DNS:8.8.8.8

Secondary DNS:8.8.8.8

Secondary DNS:8.8.8.4.4

Data Interface external NAT IP:

Do you want to apply vSZ IP through DMCP Option 43 (y/n):n

Please input vSZ Control address:1.1.1.231

Do you want to connect vSZ (address:1.1.1.231)

Con you want to connect vSZ (address:1.1.1.231)

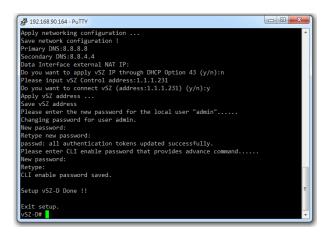
Expression of the local user "admin".....

Changing password for user admin.

New password:
```

The message $Setup \ vSZ-D \ Done \ !!$ appears. You have completed setting up vSZ-D on the network.

FIGURE 13 vSZ-D setup complete



Step 3: Approve vSZ-D to Register with the vSZ Controller

The last step is to approve vSZ-D to allow it to join the vSZ controller on the network.

- 1. Log on to the web interface of the vSZ controller with which you want vSZ-D to register.
- 2. Go to System > Cluster.
- Scroll down to the Data Planes section.
- 4. Select the vSZ-D instance that you deployed from the list, and click **Approve**.

You have completed approving vSZ-D to register with vSZ.

NOTE: Once the vSZ-D is registered and managed by the vSZ controller, the CLI login credentials will be the same as the vSZ superadmin. The CLI **enable password** remains the admin password set during vSZ-D configuration.

Related Documentation

You can configure the vSZ-D from the command line interface (CLI). For information on how to use the CLI to configure the vSZ-D, see the vSZ-D CLI Reference Guide.

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