

JunosV App Engine Release Notes

Release 13.2
August 2013
Revision 1

These release notes accompany Release 13.2R1 of the JunosV App Engine. They describe the features and the documentation of the JunosV App Engine and known problems.

JunosV App Engine provides a simpler, faster, and less expensive way to integrate the management, control, and data layers of third-party applications with Junos. JunosV App Engine enables these applications to run in their native environments without requiring porting to Junos. The applications are installed on a Juniper Networks M Series, MX Series, or T Series router and from there deployed to a VSE device tethered to the router. The applications run on the VSE device, each in its own virtualized guest OS environment.

Contents

New Features	2
Dynamic Host Configuration Protocol (DHCP)	2
User Interface and Configuration	2
General Feature Descriptions	2
Platforms Applications Can Run On	2
Version Compatibility	2
Outstanding Issues	3
User Interface and Configuration	3
Recently Resolved Issues	3
Dynamic Host Configuration Protocol (DHCP)	3
JunosV App Engine Documentation and Release Notes	4
Documentation Feedback	5
Requesting Technical Support	5
Self-Help Online Tools and Resources	5
Opening a Case with JTAC	6
Revision History	6

New Features

The following are new features for the JunosV App Engine as of Release 13.2R1:

Dynamic Host Configuration Protocol (DHCP)

- **Dynamic IP addresses**—A new **dhcp** option allows the IPv4 addresses of the management and data ports of a VSE device to be assigned by DHCP; users are not limited to static IP addresses. This configuration is for the JunosV App Engine platform. For more information, see [family \(Compute Cluster\)](#).

User Interface and Configuration

- **Multiple IP addresses for virtual machines**—The IP alias feature allows you to assign multiple addresses to the VM interfaces. The addition of this feature brings with it increased flexibility.

```
[edit services app-engine virtual-machines instance instance-name interface
interface-name]
family inet {
  [ address ip-address ];
}
```

This configuration is relevant for the JunosV App Engine platform.

General Feature Descriptions

JunosV App Engine Host Base OS package—This software contains the bootloader, kernel, and necessary root file system. This software is first installed on the router and from there deployed on the VSE device tethered to the router according to configuration present on the router.

Do You Need a DHCP License?—Based on which Juniper Networks router platform used (M Series, MX Series, or T Series), DHCP functionality might require a separate software license. If you encounter a message to this effect, contact the JunosV App Engine Technical Marketing team (jvae-tme@juniper.net). For more information, see [Configuring the DHCP Server and TFTP Server for Compute Nodes](#).

Platforms Applications Can Run On

To run JunosV App Engine applications, you need an M Series, an MX Series, or a T Series router with a VSE device tethered to the router. The JunosV App Engine OS software, CLI configuration, and the applications are installed on the router and from there deployed to the VSE device.

Version Compatibility

As of Junos OS Release 12.3, JunosV App Engine deployed applications install on Junos OS only if the Junos OS release matches the release of the backing sandbox used to package the application. For example, an application packaged with Release 12.3R2 will

only install on Junos OS Release 12.3R2 and will not install on Junos OS Release 12.3R1 or Junos OS Release 12.3R3 or Junos OS Release 13.1R1.

Outstanding Issues

This section lists outstanding issues with this release of the JunosV App Engine platform. If there is an identifier following the description, it is the tracking number in our bug database.

User Interface and Configuration

- **Clarification on use of the name for sdk-vmmd:** The name of the app-engine-virtual-machine management service is sdk-vmmd. In all CLI commands, refer to this service using "app-engine-virtual-machine-management." For example, to set traceoptions for sdk-vmmd, you need to use the following CLI command:

```
set system processes app-engine-virtual-machine-management-service traceoptions ...
```

However, tracelog messages of this service can be viewed using the daemon's actual name at `/var/log/sdk-vmmd`. [PRs 804375 and 804376]

- **Configure app-engine before TFTP:** If TFTP is configured before the **app-engine** statement, an error message is displayed when it should not be displayed. If you follow the procedures for starting JunosV App Engine given in [Deploying an Application](#), you will configure the **[edit services app-engine]** hierarchy level before configuring the TFTP server and so avoid this error message. [PR 808652]
- **Message for the request system software add command:** When installing the JunosV App Engine software with the **request system software add** command, a message is displayed:

WARNING: The software that is being installed has limited support.

Ignore this message. It is not the case that the software has limited support.
[PR 830525]

Recently Resolved Issues

This section lists the issues that have recently been resolved.

Dynamic Host Configuration Protocol (DHCP)

- **Change in text:** Where the *Configuring the DHCP Server and TFTP Server for Compute Nodes* topic says "Whichever device you use as the DHCP server, you need to do the following," the following is the revised text:

Add the following two fields in the DHCP response:

- **tftp boot server**—This is the tftp boot server field. Set it to the IP address of the network interface connected to the network boot interface of the compute node.

In the case of a Linux DHCP server, this field's name is **next-server** in `/etc/dhcpd.conf`.

In the case of a Junos DHCP server, this field's name is **tftp-server** at the **[access address-assignment pool *poolname* family inet dhcp-attributes]** hierarchy level.

- boot filename—This is the filename of the boot file on the tftp boot server. Set boot filename to **pxelinux.0**.

In the case of a Linux DHCP server, this field's name is **filename** in **/etc/dhcpd.conf**.

In the case of a Junos DHCP server, this field's name is **boot-file** at the **[access address-assignment pool *poolname* family inet dhcp-attributes]** hierarchy level.

[PR 877697 - Resolved]

JunosV App Engine Documentation and Release Notes

The JunosV App Engine documentation is available online and downloadable. The technical publications home page for the JunosV App Engine is at the following URL:

http://www.juniper.net/techpubs/en_US/release-independent/junosv-app-engine/

Table 1: JunosV App Engine Documentation

Documentation Piece	Description
<i>JunosV App Engine Administration Guide</i>	<p>This documentation, available in PDF and HTML, includes:</p> <ul style="list-style-type: none"> • Topics on configuring the JunosV App Engine platform • Summaries of configuration statements used to configure the JunosV App Engine platform • Summaries of operational commands used to monitor the JunosV App Engine platform
<i>VSE1100 and VSE2100 Virtual Services Engine Hardware Installation Guide</i>	<p>This documentation, available in PDF and HTML, includes:</p> <ul style="list-style-type: none"> • Device features and specifications • Site preparation and compliance • Installation and maintenance • Safety and troubleshooting information

If the information in the latest release notes differs from the information in the documentation, follow the *JunosV App Engine Release Notes*.

To obtain the most current version of all Juniper Networks® technical documentation, see the product documentation page on the Juniper Networks website at <http://www.juniper.net/techpubs/>.

Juniper Networks supports a technical book program to publish books by Juniper Networks engineers and subject matter experts with book publishers around the world. These books go beyond the technical documentation to explore the nuances of network architecture, deployment, and administration using the Junos operating system (Junos OS) and Juniper Networks devices. In addition, the Juniper Networks Technical Library, published in conjunction with O'Reilly Media, explores improving network security, reliability, and availability using Junos OS configuration techniques. All the books are for

sale at technical bookstores and book outlets around the world. The current list can be viewed at <http://www.juniper.net/books>.

Documentation Feedback

We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can send your comments to techpubs-comments@juniper.net, or fill out the documentation feedback form at <https://www.juniper.net/cgi-bin/docbugreport/>.

If you are using e-mail, be sure to include the following information with your comments:

- Document or topic name
- URL or page number
- Software release version (if applicable)

Requesting Technical Support

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active J-Care or JNASC support contract, or are covered under warranty, and need post-sales technical support, you can access our tools and resources online or open a case with JTAC.

- JTAC policies—For a complete understanding of our JTAC procedures and policies, review the *JTAC User Guide* located at <http://www.juniper.net/us/en/local/pdf/resource-guides/7100059-en.pdf>.
- Product warranties—For product warranty information, visit <http://www.juniper.net/support/warranty/>.
- JTAC hours of operation—The JTAC centers have resources available 24 hours a day, 7 days a week, 365 days a year.

Self-Help Online Tools and Resources

For quick and easy problem resolution, Juniper Networks has designed an online self-service portal called the Customer Support Center (CSC) that provides you with the following features:

- Find CSC offerings: <http://www.juniper.net/customers/support/>
- Search for known bugs: <http://www2.juniper.net/kb/>
- Find product documentation: <http://www.juniper.net/techpubs/>
- Find solutions and answer questions using our Knowledge Base: <http://kb.juniper.net/>
- Download the latest versions of software and review release notes: <http://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications: <https://www.juniper.net/alerts/>

- Join and participate in the Juniper Networks Community Forum:
<http://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <http://www.juniper.net/cm/>

To verify service entitlement by product serial number, use our Serial Number Entitlement (SNE) Tool: <https://tools.juniper.net/SerialNumberEntitlementSearch/>

Opening a Case with JTAC

You can open a case with JTAC on the Web or by telephone.

- Use the Case Management tool in the CSC at <http://www.juniper.net/cm/>.
- Call 1-888-314-JTAC (1-888-314-5822 toll-free in the USA, Canada, and Mexico).

For international or direct-dial options in countries without toll-free numbers, see <http://www.juniper.net/support/requesting-support.html>.

Revision History

15 August 2013—Initial version of the JunosV App Engine Release Notes, 13.2R1.

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