

# Cloud CPE Selfcare Application for MX Series Routers, Release 1.0 Release Notes

Release 1.0  
6 November 2015

The cloud CPE (cCPE) Selfcare Application for MX Series Routers enables service providers to provision cloud CPE services on MX Series 3D Universal Edge Routers.

## Contents

Cloud CPE Selfcare Application for MX Series Routers Release Notes, Release 1.0	2
Introduction	2
Overview	2
Downloading and Installing the Cloud CPE Selfcare Application for MX Series Routers	3
Known Issues with Junos OS Release 13.2 R1 when Running MX Series Router	
Cloud CPE Services	3
General Routing	3
Upgrades	4
Interfaces and Chassis	4
DHCP Services	4
Ethernet OAM Connectivity Fault Management (CFM) Services	5
VRRP Services	5
Known Issues with cCPE Selfcare Application for MX Series Routers, Release 1.0	5
General	5
DHCP Services	5
Device Management	5
Finding More Information	6
Junos Space Documentation and Release Notes	6
Documentation Feedback	6
Requesting Technical Support	7
Self-Help Online Tools and Resources	7
Opening a Case with JTAC	7
Revision History	8

## Cloud CPE Selfcare Application for MX Series Routers Release Notes, Release 1.0

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- [Introduction](#)
- [Overview](#)
- [Downloading and Installing the Cloud CPE Selfcare Application for MX Series Routers](#)

### Introduction

These release notes describe known issues related to:

- Junos<sup>®</sup>, Release 13.2R1 running on MX Series routers deploying cCPE services
- cCPE Selfcare Application Release 1.0, running on the Junos Space Network Management Platform

For general information on Junos OS and the Junos Space Network Management Platform, see the product documentation page on the Juniper Networks website at <http://www.juniper.net/techpubs/>.

### Overview

The cloud CPE (cCPE) application enables service providers to offer their business enterprise customers virtual customer premises equipment (CPE) services. When you transition your customers to cCPE services, you can replace their complex and expensive Layer 3 CPEs with simple, low-cost Layer 2 CPE devices. Layer 3 CPE functions are provided by the MX Series 3D Universal Edge Router in the service provider cloud. cCPE uses existing Junos OS Release 13.2 features to provide cloud CPE services.

You can run cCPE services on MX Series routers running Junos OS Release 13.2 or later. For information about cCPE services, see [http://www.juniper.net/techpubs/en\\_US/junos13.2/information-products/pathway-pages/subscribe-access/cpe/cloud-cpe.html](http://www.juniper.net/techpubs/en_US/junos13.2/information-products/pathway-pages/subscribe-access/cpe/cloud-cpe.html).

You can manage cCPE services in several ways:

- CLI — Service providers can use the Junos OS CLI to provision, manage, and monitor cCPE services.
- cCPE Selfcare application — Service providers can use the cCPE Selfcare application, which runs on the Junos Space Network Management Platform to provision, manage, and monitor cCPE services. APIs are also available for integrating your operations support systems (OSS) and using it to provision and manage cCPE services.
- cCPE Selfcare Web portal — Enterprise business customers can use the cCPE Selfcare Web portal to monitor their cCPE services and perform certain configuration changes.

As an option to the cCPE Selfcare application, you can use Junos Space Services Activation Director to provision the network, create subscriber sites, and associate Layer 3 VPN services with subscribers. If you use Junos Space Services Activation Director, the cCPE Selfcare application can import customers and their associated network inventory (interfaces on the router connecting to subscriber sites) from Junos Space Services

Activation Director. Otherwise, the cCPE Selfcare application provides its own API and Web GUI to enable importing this information from your OSS.

In addition to inventory management functions, the cCPE Selfcare application implements monitoring and service change APIs that enable service providers to integrate their OSS.

The cCPE Selfcare application also provides a Web portal that enables enterprise customers to manage and monitor their cCPE services. Authorized administrators can change certain configuration parameters and view states and statistics for their cCPE resources. For security purposes, the cCPE Selfcare portal exposes only configuration capabilities that are safely changed by the end subscriber; changing the configuration does not affect other cCPE subscribers.

## Downloading and Installing the Cloud CPE Selfcare Application for MX Series Routers

You install the cCPE Selfcare application like any other application using the Junos Space application management functions. For overall information on installing Junos Space applications, see

[http://www.juniper.net/techpubs/en\\_US/junos-space31/platform/topics/concept/junos-space-app-management-overview.html](http://www.juniper.net/techpubs/en_US/junos-space31/platform/topics/concept/junos-space-app-management-overview.html).

For information about installing Junos Space applications, see

[http://www.juniper.net/techpubs/en\\_US/junos-space31/platform/topics/task/installation/junos-space-application-install.html](http://www.juniper.net/techpubs/en_US/junos-space31/platform/topics/task/installation/junos-space-application-install.html).

You can download the cCPE Selfcare application from the Juniper Networks software download page, see [Cloud CPE Selfcare Application for MX Series Routers- Download Software](#).

## Known Issues with Junos OS Release 13.2 R1 when Running MX Series Router Cloud CPE Services

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This section lists the known issues in hardware and software in Junos OS Release 13.2R1 for MX Series routers running cCPE services.

For the most complete and latest information about known Junos OS defects, use the Juniper Networks online [Junos Problem Report Search](#) application.

See

[http://www.juniper.net/techpubs/en\\_US/junos132/information-products/topic-collections/release-notes/132/index.html](http://www.juniper.net/techpubs/en_US/junos132/information-products/topic-collections/release-notes/132/index.html) for the complete list of known issues in Junos Release 13.2.

- [General Routing](#)
- [Upgrades](#)
- [Interfaces and Chassis](#)
- [DHCP Services](#)
- [Ethernet OAM Connectivity Fault Management \(CFM\) Services](#)
- [VRRP Services](#)

### General Routing

- When running cCPE services with more than 1000 integrated routing and bridging interfaces (IRBs) configured, the following processes may fail to restart properly.

- Routing process [PR911083](#)
- Chassisid process [PR911009](#)
- L2-learning process [PR911096](#)
- Interface control process [PR911006](#)
- When running cCPE services with more than 1800 IRBs configured, service flows and traffic may stop processing during a Routing Engine switchover. [PR909833](#)

## Upgrades

- When running cCPE services with more than 1800 IRBs configured, the ISSU process can fail to complete. [PR909852](#)

## Interfaces and Chassis

- When running cCPE services with more than 1800 IRBs configured, the FPC may go into a ready state and fail to restart properly. [PR901354](#)
- When running cCPE services with more than 1800 IRBs configured, the MS DPC may crash during a routing engine switchover. [PR909329](#)
- When running cCPE services with more than 1800 IRBs configured, the MS DPC may crash. [PR911362](#)

## DHCP Services

- When running cCPE services with more than 1000 IRBs configured, the DHCP process crashes after a restart. [PR911104](#)
- When you configure a DHCP server in a VRF, if you want the server to handle DHCP requests sent by DHCP relay agents located at remote sites of the same VPN, you need to add tunnel interfaces to the DHCP server. Specifically, you need to add the following configuration to the DHCP server:

```
user@host set routing-instances routing-instance-name system services
dhcp-local-server group group-name interface lsi.0 upto lsi.16385
```

If you are using the cCPE Selfcare Application to configure DHCP services on the MX Series router, the cCPE Selfcare Application resolves the need for adding this tunnel. However, if you are configuring DHCP cCPE services using the router CLI, you must manually add the tunnel interface. [PR922935](#)

## Ethernet OAM Connectivity Fault Management (CFM) Services

- When running cCPE services, pings to a directly connected interface may fail if you have more than 1000 CFM sessions in process. [PR910312](#)

## VRRP Services

- When running cCPE services with more than 1800 IRBs configured, the VRRP process crashes after flapping the interface on the access side. [PR911039](#)

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## Known Issues with cCPE Selfcare Application for MX Series Routers, Release 1.0

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This section describes the known issues in cCPE Selfcare Application Release 1.0 running Junos Space Release 12.3P2.8 on the Junos Space Network Management Platform.

For the most complete and latest information about known Junos OS defects, use the Juniper Networks online [Junos Problem Report Search](#) application.

- [General](#)
- [DHCP Services](#)
- [Device Management](#)

### General

- Customers with duplicate names are not permitted. [PR915192](#)

### DHCP Services

- When there are no DHCP server pools configured, you are incorrectly allowed to enter data in the DHCP server configuration fields. Any data you enter is discarded. [PR916706](#)
- There is a display issue after updating one of the DHCP server configuration lists on Site A, if you then switch to Site B before submitting the updates for the DHCP server configuration list at Site A, *and* Site B displays empty fields where the new DHCP item was configured, then you will see newly added entries within the context of Site B. However, on a subsequent update, only Site A is updated with the new data for the DHCP server configuration list. [PR902078](#)

### Device Management

- Monitoring data can become unavailable if the managed device is rediscovered by Junos Space. If the managed device is deleted from Junos Space and later rediscovered and managed again, the cCPE Selfcare application portal does not properly display monitoring statistics or historical data graphs for the customer associated with the access link to the managed device. [PR923713](#)
- Adding a duplicate name causes an invalid error message to display. [PR912651](#)

## Finding More Information

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For the latest, most complete information about known and resolved issues with Junos OS, see the Juniper Networks Problem Report Search application at:

<http://prsearch.juniper.net> .

Juniper Networks Feature Explorer is a Web-based application that helps you to explore and compare Junos OS feature information to find the correct software release and hardware platform for your network. Find Feature Explorer at:

<http://pathfinder.juniper.net/feature-explorer/>.

Juniper Networks Content Explorer is a Web-based application that helps you explore Juniper Networks technical documentation by product, task, and software release, and download documentation in PDF format. Find Content Explorer at:

<http://www.juniper.net/techpubs/content-applications/content-explorer/>.

## Junos Space Documentation and Release Notes

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For a list of related Junos Space documentation, see <http://www.juniper.net/techpubs/>.

If the information in the latest release notes differs from the information in the documentation, follow the *Junos Space Release Notes*.

To obtain the most current version of all Juniper Networks<sup>®</sup> 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

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We encourage you to provide feedback, comments, and suggestions so that we can improve the documentation. You can provide feedback by using either of the following methods:

- Online feedback rating system—On any page at the Juniper Networks Technical Documentation site at <http://www.juniper.net/techpubs/index.html>, simply click the stars to rate the content, and use the pop-up form to provide us with information about your experience. Alternately, you can use the online feedback form at <http://www.juniper.net/techpubs/feedback/>.

- E-mail—Send your comments to [techpubs-comments@juniper.net](mailto:techpubs-comments@juniper.net). Include the document or topic name, URL or page number, and software version (if applicable).

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## Requesting Technical Support

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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 postsales 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: <http://kb.juniper.net/InfoCenter/>
- 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 located at <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, visit us at <http://www.juniper.net/support/requesting-support.html>.

If you are reporting a hardware or software problem, issue the following command from the CLI before contacting support:

```
user@host> request support information | save filename
```

To provide a core file to Juniper Networks for analysis, compress the file with the **gzip** utility, rename the file to include your company name, and copy it to **ftp.juniper.net/pub/incoming**. Then send the filename, along with software version information (the output of the **show version** command) and the configuration, to **support@juniper.net**. For documentation issues, fill out the bug report form located at <https://www.juniper.net/cgi-bin/docbugreport/>.

## Revision History

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6 November 2015—Revision 1, Cloud CPE Selfcare Application for MX Series Routers, Release 1.0

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