

# Chef for Junos OS 11.10 Release Notes

Release 11.10  
16 June 2018  
Revision 7

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## Introduction

These release notes accompany Release 11.10 of Chef for Junos OS. They describe supported platforms, new features, and known issues with the software.

Chef software automates the provisioning and management of compute, networking, and storage resources. Chef for Junos OS provides support for Chef on selected Juniper Networks devices running Junos OS, allowing you to automate common switching network configurations, such as physical and logical Ethernet link properties and VLANs. You can also configure any Junos OS hierarchy level.

## Supported Devices and Junos OS Releases

Chef for Junos OS Release 11.10 must be used only with the devices running the Junos OS release specified in [Table 1 on page 2](#). [Table 1 on page 2](#) also shows which installation package that we recommend you use to install the Chef client. You can download the package or bundle at [Chef for Junos Software Download](#). On switches running Junos OS with Junos Automation Enhancements, you do not need to install the Chef client because it is installed with the Junos OS software. For more information, see [Overview of Junos Automation Enhancements](#).

The template for the Chef Bundles package format for devices running Junos OS with Junos Automation Enhancements is as follows:

- Release 15.1 Junos OS—  
`chef-bundle-<client-version>_<sdk-indicator>.<juniper-iteration>.junos.<platform>.tgz`
- Release 16.1R1 Junos OS—  
`chef-<client-version>_<sdk-indicator>.<juniper-iteration>_x86-32.tgz`
- Release 18.2R1 and later releases of Junos OS—  
`chef-<platform>-<chef version>_<SDK indicator>.<Release count>.tgz`

where:

- **platform** is the platform microprocessor architecture, **powerpc**, **i386**, or **x86-32**.
- **chef version or client-version** is the version of the Chef client (for example, 11.10.4).
- **SDK indicator** indicates the Junos OS SDK infrastructure used to create the package. A 1 indicates the Junos SDK; a 2 indicates the Junos Extension Toolkit (JET).
- **Release count or juniper-iteration** indicate the version of Juniper Networks version of the package.

*Table 1: Supported Devices and Junos OS Versions*

Device	Junos OS Version	Chef Client Installation Package Example
EX4300	Release 15.1X53-D10 or later	chef-powerpc-11.10.4_1.0.tgz

Table 1: Supported Devices and Junos OS Versions (continued)

Device	Junos OS Version	Chef Client Installation Package Example
MX80 MX104	Release 14.2R2 or later	chef-powerpc-11.10.4_1.1.tgz
MX240 MX480 MX960	Release 14.2R2 or later 14.2 release	chef-i386-11.10.4_1.1.tgz
	Release 15.1R1 or later 15.1 release	Chef not supported
	Release 16.1R1 or later	chef-x86-32-11.10.4_2.0.tgz
	Release 18.1R1	chef-x86-32-11.10.4_2.1.tgz
	Release 18.2R1 or later	chef-x86-32-11.10.4_3.0.tgz
OCX1100	Release 14.1X53-D20 or later	Not Applicable
QFX5100	Release 13.2X51-D15 or later	Not Applicable
	Release 15.1X53-D70 or later (Non-TVP based images using JET based packages)	chef-x86-32-11.10.4_2.0.tgz
	Release 18.1R1	chef-x86-32-11.10.4_2.1.tgz
	Release 18.2R1 or later	chef-x86-32-11.10.4_3.0.tgz
QFX10002	Release 15.1X53-D20 or later	Not Applicable
	Release 15.1X53-D70 or later (TVP Unix SDK based packages across all the branches)	chef-x86-32-11.10.4_2.0.tgz
	Release 18.1R1	chef-x86-32-11.10.4_2.1.tgz
	Release 18.2R1 or later	chef-x86-32-11.10.4_3.0.tgz
QFX10008	Release 17.1R1 or later	Not Applicable
QFX10016	Release 17.1R1 or later	Not Applicable

## New and Changed Features

Chef for Junos OS Release 11.10 introduces support for the following features:

- Starting from Junos OS Release 17.1 R1, Chef supports QFX10008 and QFX10016 switches.
- Support for MX Series routers.

- **Providers for the netdev cookbook**—The netdev cookbook contains resource types that support configuration of the following Junos OS elements:
  - Physical interfaces—Physical Ethernet interfaces attributes, such as administrative state, description, speed, duplex mode, and MTU with the **netdev\_interface** resource
  - Layer 2 Ethernet switching services—Logical Ethernet switching interface attributes, such as description, VLAN membership, and port mode (access or trunk) with the **netdev\_l2\_interface** resource
  - Link aggregation groups (LAGs)—LAG interface attributes, such as name, member links, LACP mode, and minimum up links required with the **netdev\_lag** resource
  - VLANs—VLAN attributes, such as name, ID, and description with the **netdev\_vlan** resource
  - Configuration at any hierarchy level—Custom configuration with the **netdev\_group** resource



**NOTE:** The Juniper Networks OCX1100 switches support only the **netdev\_interface** physical interface resource.

Chef for Junos OS includes the providers for these resources that are specific to Junos OS. The Chef client uses the providers to implement the configuration described by the resources on the Juniper Networks device the Chef client is running on.

The netdev cookbook is maintained by Chef and is available at the Chef supermarket website at <https://supermarket.getchef.com/cookbooks/netdev>.

[See [Chef for Junos OS Overview](#)].

- **Native Chef client and Ohai**—The Chef client and Ohai run natively on the supported device. They are included in the Chef package you install. For packages built with the Junos SDK, the following three packages are installed:
  - Chef client 11.10—Includes both the Chef client and Ohai
  - junos-ez-stdlib—Libraries used by the netdev cookbook providers and by Ohai
  - Ruby—Ruby Interpreter version compatible with the Chef client

For packages built with the Juniper Extension Toolkit (JET), only one package is installed, JET app chef, that includes junos-ez-stdlib and the Ruby Interpreter.

## Installation and Configuration Notes

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- For devices running Junos Automation Enhancements, the Chef bundle package is included in the Junos OS software and installed when you install the Junos OS software. For instructions on how to install the Junos OS software with Junos Automation Enhancements, see [Installing Junos OS Software with Junos Automation Enhancements](#).
- For devices that are not running Junos Automation Enhancements, you must install the Chef bundle package on the device. For more information, see the *Chef for Junos OS Getting Started Guide* at the [Chef for Junos OS, Release 11.10](#) website.
- Regardless of how the Chef client is installed on the device, you must configure the Chef client on the Juniper Networks device that is running Junos OS before you can use it to manage the device. For more information, see the *Chef for Junos OS Getting Started Guide* at the [Chef for Junos OS, Release 11.10](#) website.
- If the Chef client running on your platform has a Juniper Networks version 1.1 or greater (for example, `chef-bundle-11.10.4_1.1.junos.i386.tgz`), the Junos OS configuration that is generated by the Chef client from the `netdev_lag` resource definition includes the normally hidden `apply-macro` statement. For example:

```
ae0 {          apply-macro "netdev_lag[:links]" {          ge-0/0/0;
          ge-0/0/1;          }          unit 0;          }
```

This is not a configuration error; you can ignore it.

## Known Issues

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This section lists known issues with this release.

- Chef for Junos OS supports `netdev-resources` to enable easier configuration of networking devices. `Netdev-interface`, which is a `netdev-resource` developed for interface configuration, enables you to configure speed only on a GE interface. Because of this, you cannot use the `netdev-interface` resource to configure an XE interface. This limitation is applicable to packages `chef-11.10.4_1.1.*tgz` and `chef-11.10.4_2.0.*tgz` in all supported platforms. [PR1181475](#)
- If you perform a unified ISSU to reinstall Junos OS Release 13.2X51-D15 on a QFX5100 switch on which Junos OS Release 13.2X51-D15 is already installed, the Chef for Junos OS package is deleted from the device. You must reinstall Chef for Junos OS. Contact Juniper Networks Technical Assistance Center (JTAC) for assistance. This issue does not exist for reinstalling other supported Junos OS releases. [PR966947](#)

## Finding More Information

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

<https://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:

<https://www.juniper.net/documentation/content-applications/content-explorer/> .

## 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 of the Juniper Networks TechLibrary site at <https://www.juniper.net/documentation/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 <https://www.juniper.net/documentation/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).

## 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 Partner Support Service 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 <https://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: <https://www.juniper.net/customers/support/>
- Search for known bugs: <https://prsearch.juniper.net/>
- Find product documentation: <https://www.juniper.net/documentation/>
- Find solutions and answer questions using our Knowledge Base: <https://kb.juniper.net/>

- Download the latest versions of software and review release notes:  
<https://www.juniper.net/customers/csc/software/>
- Search technical bulletins for relevant hardware and software notifications:  
<https://kb.juniper.net/InfoCenter/>
- Join and participate in the Juniper Networks Community Forum:  
<https://www.juniper.net/company/communities/>
- Open a case online in the CSC Case Management tool: <https://www.juniper.net/cm/>

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

## 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 <https://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 <https://www.juniper.net/support/requesting-support.html>.

## Revision History

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15 December 2017—Revision 6, Chef for Junos OS Release 11.10

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