

Juniper Extension Toolkit Release Notes, Release 19.3R1

Release 19.3
January 2020
Revision 2

These release notes accompany the Juniper Extension Toolkit (JET). They describe the new and changed features, limitations, and known and resolved problems.

Applications developed using the Juniper Extension Toolkit (JET) are supported on the following platforms: ACX Series, PTX Series, QFX Series, MX80, MX104, MX240, MX480, MX960, MX2010, MX2020, vMX, vSRX, and SRX Series.

JET provides a common API framework that exposes API functionality made available by the internal Junos OS daemons. Each internal daemon exposes its own APIs. All of the APIs are accessible using the gRPC framework for remote procedure calls (RPCs).

JET supports the following:

- Multiple languages for applications that run off-box
- Python for applications that run on a device running Junos OS
- Applications written in C to run on devices that do not use the JET APIs
- An event notification method that enables the applications to respond to selected system events

Contents	New and Changed Features 3
	Python Scripts 3
	Junos OS Evolved API 3
	Changes in Behavior and Syntax 3
	User Interface 4

Known Issues | 4

Known Issues in 19.1R1 | 4

Known Issues in 16.2R1 | 5

Certificates for JET | 5

Third-Party Components | 5

Finding More Information | 5

Documentation Feedback | 5

Requesting Technical Support | 6

Self-Help Online Tools and Resources | 6

Creating a Service Request with JTAC | 7

Revision History | 7

New and Changed Features

IN THIS SECTION

- [Python Scripts | 3](#)
- [Junos OS Evolved API | 3](#)

This section lists the new features and enhancements to existing features in Juniper Extension Toolkit as of the Junos OS Release 19.3R1.

Python Scripts

- **IPv6 support in Python scripts (MX Series, PTX Series, QFX Series)**—Devices running Junos OS with upgraded FreeBSD support using IPv6 in Python scripts. IPv6 support enables Python scripts to establish connections and perform operations using IPv6 addresses.

[See [IPv6 Support in Python Automation Scripts](#).]

Junos OS Evolved API

- **Configure firewall configurations programmatically (QFX5220)**—Server stubs generated by JAPI file are made available for third-party applications using firewall configurations.

[See [ENGNET](#).]

Changes in Behavior and Syntax

IN THIS SECTION

- [User Interface | 4](#)

This section lists the changes in behavior of Junos Extension Toolkit features and changes in the syntax of Junos OS statements and commands from Junos OS Release 19.3R1.

User Interface

- **LibGRPC trace options added to the extension service (MX Series)**—Starting in Junos OS Release 19.3R1, three libgrpc trace options are added to the `[edit system services extension-service]` hierarchy level. These trace options allow you to log libgrpc-related events at three different verbosity levels: **libgrpc-debug**, **libgrpc-info**, and **libgrpc-errors**.

[See [traceoptions \(Services\)](#).]

Known Issues

IN THIS SECTION

- [Known Issues in 19.1R1](#) | 4
- [Known Issues in 16.2R1](#) | 5

This section contains the known behavior, system maximums, and limitations in software in the Juniper Extension Toolkit.

Known Issues in 19.1R1

None.

Known Issues in 16.2R1

Certificates for JET

Junos OS does not support ECDSA or DSA SSL certificates for JET. For secure communications with the JET service process (jsd), use RSA certificates. PR 1120453

Third-Party Components

This product includes third-party components. To obtain a complete list of third-party components, see [Overview for Routing Devices](#).

For a list of open-source attributes for this Junos OS release, see [Open Source: Source Files and Attributions](#).

Finding More Information

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

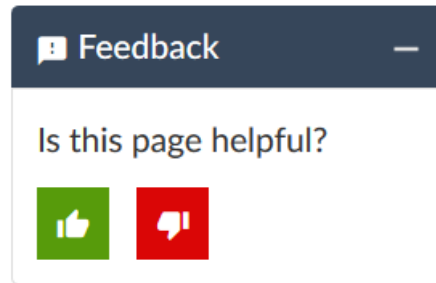
Juniper Networks Feature Explorer is a Web-based application that helps you to explore and compare Junos OS feature information to find the correct software release and hardware platform for your network. Find Feature Explorer at <https://pathfinder.juniper.net/feature-explorer/>.

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

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 system—Click TechLibrary Feedback, on the lower right of any page on the [Juniper Networks TechLibrary](#) site, and do one of the following:



- Click the thumbs-up icon if the information on the page was helpful to you.
- Click the thumbs-down icon if the information on the page was not helpful to you or if you have suggestions for improvement, and use the pop-up form to provide feedback.
- E-mail—Send your comments to techpubs-comments@juniper.net. Include the document or topic name, URL or page number, and software 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 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/>
- Create a service request online: <https://myjuniper.juniper.net>

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

Creating a Service Request with JTAC

You can create a service request with JTAC on the Web or by telephone.

- Visit <https://myjuniper.juniper.net>.
- 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://support.juniper.net/support/requesting-support/>.

Revision History

September 2019—Release 19.3R1 of the JET Release Notes.

January 2020—Second release of 19.3R1 JET Release Notes

Juniper Networks, the Juniper Networks logo, Juniper, and Junos are registered trademarks of Juniper Networks, Inc. in the United States and other countries. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners.

Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.