Release Notes

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Juniper BNG CUPS 22.4R1

Introduction

Juniper BNG CUPS separates the Broadband Network Gateway (BNG) stack running in the native Junos OS into a cloud native application, where the BNG control plane functionality runs on the cloud application and the BNG user plane functionality runs in Junos OS. The cloud environment enables a single control plane to connect with multiple user planes.

In Juniper BNG CUPS, the BNG functions are split into the BNG CUPS Controller (control plane) functions and the BNG User Plane (user plane) functions. The management, state and control packet interfaces operate between the BNG CUPS Controller and the BNG User Planes.

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The benefits of Juniper BNG CUPS are the following:

- A centralized BNG CUPS Controller provides for more efficient use of network resources. Following are some examples:
  - Address allocation
  - Load balancing
  - Management and control
- Increased scale—The cloud environment that Juniper BNG CUPS utilizes, enables you to increase the number of subscribers supported.
- Locational independence and separate life-cycle management and maintenance.
- Throughput and latency optimization—Because the BNG User Planes are closer to the subscribers, throughput and latency is optimized.

These release notes accompany Juniper BNG CUPS Release 22.4R1. They describe new features, limitations, and known problems.

Installation

Juniper BNG CUPS 22.4R1 installation requires the following minimum system requirements:

NOTE: These system requirements are for Juniper BNG CUPS Controller (BNG CUPS Controller).

Primary Node

- CPU cores—4 (hyperthreading preferred)
- RAM—30 GB
- Disk space—100 GB of free disk storage in the root partition

Worker Nodes—BNG CUPS Controller requires a minimum of three worker nodes. Each worker node must meet the following requirements:

- CPU cores—7 (hyperthreading preferred)
- RAM—62 GB
- Disk space—64 GB of free disk storage in the root partition

Software

Juniper BNG CUPS was verified with Kubernetes nodes running Ubuntu 18.04 LTS and Kubernetes 1.19.

For information on how to install Juniper BNG CUPS, see Juniper BNG CUPS Installation Guide.

New and Changed Features

IN THIS SECTION

Learn about new features or enhancements to existing features in Juniper BNG CUPS 22.4R1. For more information about a feature, click the link in the description. See the Juniper BNG CUPS Installation Guide and Juniper BNG CUPS User Guide for more details about new and changed features.

New Features

We've introduced the following features in Juniper BNG CUPS 22.4R1:

- **Multicast**—Support for the broadband network gateway (BNG) multicast service. (See Use Juniper BNG CUPS Multicast.)
- `statistics-reporting-interval` **configuration**—Configure the interval at which statistics are reported from a BNG User Plane to the BNG CUPS Controller.

New Device Support

Juniper BNG CUPS 22.4R1 adds support for the following platforms:

- MX100004
- MX100008

Open Issues

This section lists the known issues in Juniper BNG CUPS 22.4R1.

- BNG CUPS Controller L2TP LAC functionality is not working. PR1642991
- PPPoE clients fail to login if the Source MAC is changed on the User Plane interface. PR1641495
- BNG CUPS: User plane IFL-SET weight based load balancing on MX10008 systems does not show the correct number of DHCPv4 subscribers on L2 broadcast domains. PR1699864

Requesting Technical Support

IN THIS SECTION

Technical product support is available through the Juniper Networks Technical Assistance Center (JTAC). If you are a customer with an active Juniper Care or Partner Support Services 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 https://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://supportportal.juniper.net/s/knowledge
- 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://supportportal.juniper.net/s/knowledge
- Join and participate in the Juniper Networks Community Forum: https://www.juniper.net/company/communities/
- Create a service request online: https://supportportal.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://support.juniper.net/support/requesting-support/
- 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/.