

Release Notes

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Juniper Cloud-Native Router 22.4.1 Release Notes

INTRODUCTION

Juniper Cloud-Native Router (cloud-native router) is a containerized implementation of Juniper control and forwarding planes. The cloud-native router runs on "white-box" Linux servers. It consists of modular components including a control plane (JCNR-Controller), forwarding plane (JCNR-vRouter), and JCNR-CNI. The control plane provides a Junos-based management framework; while the JCNR-vRouter, a DPDK-based forwarding plane, decouples forwarding from the Linux kernel, thus allowing faster forwarding and more scalability. JCNR-CNI provides the network interfaces in software that allow JCNR to network with other containers, VMs, and physical devices. Together, these elements provide flexibility, programmability, and scalability for the coming generations of 5G installations.

SUPPORTED ON

- RHEL 8.4, 8.5, or 8.6
- Rocky Linux 8.6

You can install the cloud-native router on VMs or BMS that run the operating systems shown above. Each server must have one or more Intel Columbiaville (E810) or Intel Fortville (XL710) NICs installed for proper operation.

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New and Updated Features

There are no new features that have been introduced in the Juniper Cloud-Native Router 22.4.1 release.

Resolved Issues

IN THIS SECTION

- [Resolved Issues in Juniper Cloud-Native Router Release 22.4.1 | 1](#)

This section provides information about issues that we resolved between releases 22.4 and 22.4.1.

Resolved Issues in Juniper Cloud-Native Router Release 22.4.1

- **JCNR-3416: CRPD logs are getting generated in /var/log/ and there is no option provided in the JCNR helm charts to change the default log path**—cRPD logs were being generated in the /var/log/ folder and there was no option provided in the Juniper Cloud-Native Router helm charts to change the default log path. This issue is now resolved. A new **log_path** key is provided in both **values.yaml** and **values_L3.yaml** files.
- **JCNR-3436: corefiles not saved on /var/crash on host**—The core files were not being saved in the /var/crash folder by default. This issue is now resolved. A new **coreFilePath** key is provided in both **values.yaml** and **values_L3.yaml** files.
- **JCNR-3162: Inconsistencies observed with pods using JCNR kernel interfaces after the node (server) was rebooted**—After the node (server) was rebooted, if the pods using JCNR kernel interfaces attempted to transition to the Running state while the cRPD container was initializing, those pods were found to land in an error state. This issue is now resolved.

- **JCNR-3269: JCNR Interface is created without Vlan-ID in vrouter-master POD**—While testing pod deletion, it was found that the JCNR interface was created without proper VLAN ID, resulting in packets being dropped at the interface level. This issue is now resolved.
- **JCNR-3373: JCNR is dropping multicast packets (DHCPv6 solicit request) coming from the radio unit**—During reboot testing, it was observed that Juniper Cloud-Native Router was dropping DHCPv6 solicit requests coming from the radio unit. This issue is now resolved.
- **JCNR-3420: post restarting docker services, DU pods are not able to reach the gateway**—After the docker restart it was noticed that all the pods restart and recover. However, after recovery, the **GW** was not reachable from inside the **odu** pods. This issue is now resolved.

Known Limitations

IN THIS SECTION

- [Known Issues and Limitations in Juniper Cloud-Native Router Release 22.4.1 | 2](#)

This section describes issues and limitations present in Juniper Cloud-Native Router release 22.4.1.

Known Issues and Limitations in Juniper Cloud-Native Router Release 22.4.1

- **JCNR-3173: After Refresh Deployment of JCNR in L3 Mode, the Pod Virtual Interface (VIF) Has an Invalid Virtual Routing and Forwarding (VRF) Reference**—As a workaround, you can restart the routing process in the cRPD pod (restart routing immediately) or you can restart the vRouter pod.
- **JCNR-3171: L2 Firewall Filter May Not Get Applied in Certain Scenarios**—We have found two scenarios in which firewall filters (ACL) may not get applied:
 - If you install cloud-native router with ACL configured in the template
 - If you run cloud-native router with configured ACL and the vRouter crashes

- **JCNR-3170: In L2 Mode, Cloud-Native Router Cannot Be Deployed if Kubernetes cpumanager is Installed**—This configuration is not supported.
- **JCNR-3060: cRPD Randomly Disables MPLS Family on Interfaces**—cRPD randomly disables the MPLS family hierarchy in interface configurations. The disabled configuration affects SR-MPLS LSPs. As a workaround, you can issue the `restart routing immediately` command.
- **JCNR-2917**—In certain circumstances, you might witness BGP flaps and cRPD pod restart if BGP routes are withdrawn while traffic passes through them. To avoid this issue, adjust the BFD liveness-detection as shown in the following two commands:

```
set protocols bgp group <group-name> bfd-liveness-detection minimum-receive-interval 320
```

```
set protocols bgp group <group-name> bfd-liveness-detection transmit-interval minimum-interval 300
```

Upgrade and Downgrade Options

IN THIS SECTION

- [Upgrade from a Previous Version | 3](#)
- [Downgrade to an Older Version | 4](#)

This section provides high-level information about the available upgrade and downgrade options.

Upgrade from a Previous Version

As of the 22.4.1 release of Juniper Cloud-Native Router, there is no procedure for upgrading from a previous version. To upgrade from your current version to a newer version, you must perform a new deployment of the new version.

Downgrade to an Older Version

As of the 22.4.1 release of Juniper Cloud-Native Router, there is no procedure for downgrading to an older version. To change from a current version to an older version, you must uninstall the current version and install an older version.

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