### Release Notes

Published 2023-07-31

**Contrail Networking Release 2003.1** 



### **Table of Contents**

Introduction   1
New and Changed Features in Contrail Networking Release 2003.1   1
New and Changed Features in Contrail Networking Release 2003   1
Supported Platforms in Contrail Networking Release 2003   7
Known Behavior   11
Resolved Issues   19
Deprecated Items   19
Documentation Update   19

#### Introduction

Juniper Networks Contrail Networking is an open, standards-based software solution that delivers network virtualization and service automation for federated cloud networks. It provides self-service provisioning, improves network troubleshooting and diagnostics, and enables service chaining for dynamic application environments across enterprise virtual private cloud (VPC), managed Infrastructure as a Service (laaS), and Networks Functions Virtualization (NFV) use cases.

These release notes accompany Release 2003 of Contrail Networking. They describe new features, limitations, and known problems.

These release notes are displayed on the Contrail Networking Documentation Web page at https://www.juniper.net/documentation/en\_US/contrail20/information-products /topic-collections/release-notes/index.html.

### New and Changed Features in Contrail Networking Release 2003.1

There are no new features in Contrail Networking Release 2003.1.

### New and Changed Features in Contrail Networking Release 2003

#### IN THIS SECTION

- Contrail Command UI Navigation Updates | 2
- Get Started with Contrail Enterprise Multicloud Panel | 2
- Configuring CRB-Gateway, ERB-UCAST-Gateway, and CRB-MCAST-Gateway Roles on MX Series
   Routers | 3
- Canonical Openstack Support in Contrail Command | 3
- Cloning a Configuration Profile | 3

- Enhanced DPDK vRouter Performance Through Full CPU Partitioning and Isolation | 4
- Greenfield Fabric Onboarding for MX Series Routers | 4
- Host-based Firewalls for Intra-Virtual Network Traffic Beta | 4
- Logging in to a Domain in Contrail Command | 5
- Separate Credentials for Multicloud Networks | 5
- Support for Connecting to Third-Party Devices not Managed by Contrail Networking | 6
- Support for Creating a Routed Virtual Network and Routed Virtual Port Group | 6
- Support for Reconfiguring Physical Router | 6
- Support for Viewing Configuration of Devices Deployed in Contrail Fabric | 7
- Top N View in Contrail Command | 7

#### **Contrail Command UI Navigation Updates**

Contrail Networking Release 2003 introduces a redesigned Contrail Command UI. The biggest change in the new UI is that the drop-down menu in the top banner has been replaced by a side panel on the left. All categories and their respective options are accessible through the side panel. The new UI also introduces features including the ability to search for pages and the ability to pin frequently accessed pages to a favorites category. However, pinned favorite pages are stored in the Web browser cache in local storage. The existing favorite-page list disappears if you switch between Web browsers, or log in under the incognito mode, or clear Web browser cache and cookies.

For more information on the updated Contrail Command UI, see Navigating the Contrail Command UI.

### Get Started with Contrail Enterprise Multicloud Panel

Starting with Contrail Networking Release 2003, you can use the *Get Started with Contrail Enterprise Multicloud* panel in Contrail Command. This *Get Started* panel provides a user-friendly walkthrough of initial Contrail Command configuration tasks with an initial focus on fabric management workflows. The panel includes **Begin** buttons that allow for quick task initiation and a dynamic tracking mechanism that tracks task progress. The *Get Started* panel appears automatically when Contrail Command is initially accessed and can always be opened by selecting the **Get Started with Contrail** option in the ? help

menu. If you choose to close the panel, it remains closed within Contrail Command—including across Contrail Command sessions—unless you choose to reopen it by selecting the **Get Started with Contrail** option.

You can login to Contrail Command to use the *Get Started* panel. For additional information on the panel, see Using the Get Started with Contrail Enterprise Multicloud Panel in Navigating the Contrail Command UI.

# Configuring CRB-Gateway, ERB-UCAST-Gateway, and CRB-MCAST-Gateway Roles on MX Series Routers

Starting with Contrail Networking Release 2003, you can configure CRB-Gateway, ERB-UCAST-Gateway, CRB-MCAST-Gateway, routing-bridging roles on MX240, MX480, MX960, MX204, MX104, MX10003, MX2008, MX2010, and MX2020 devices. However, you can configure CRB-Gateway, ERB-UCAST-Gateway, and CRB-MCAST-Gateway routing-bridging roles on MX240, MX480, MX960 routers only with MPC2E or MPC3E line card support.

For more information, see Supported Hardware Platforms and Associated Roles and Supported Hardware Platforms and Associated Node Profiles and Roles.

#### **Canonical Openstack Support in Contrail Command**

Starting in Contrail Release 2003, Contrail Command can be used to manage environments that include Canonical Openstack as the environment's orchestration platform.

For information on importing an environment using Canonical Openstack into Contrail Command, see Importing a Canonical Openstack Deployment Into Contrail Command.

### **Cloning a Configuration Profile**

Starting from Contrail Networking Release 2003, you can create a new port profile, storm control profile, sFlow profile, or a telemetry profile by cloning an existing one. You can modify the parameters in the

cloned profile and save it. Cloning helps you quickly create a profile, without going through the process of defining each and every parameter. You can choose to modify those parameters that need to be modified.

For more information, see Creating Port Profiles, Storm Control Profiles, sFlow Profiles, or Telemetry Profiles by Cloning

# Enhanced DPDK vRouter Performance Through Full CPU Partitioning and Isolation

Contrail Networking Release 2003 supports full CPU partitioning. CPU isolation is an RHEL method to partition and isolate the CPU cores on a compute node from the symmetric multiprocessing (SMP) balancing and scheduler algorithms. The full CPU isolation feature optimizes the performance of DPDK vRouter when deployed with the DPDK settings recommended for RHOSP. To enable full CPU partitioning and isolation, you need to configure tuned and isolapus.

For more information, see Optimizing DPDK vRouter Performance Through Full CPU Partitioning and Isolation

### **Greenfield Fabric Onboarding for MX Series Routers**

Contrail Networking Release 2003 supports greenfield onboarding of MX240, MX480, and MX960 routers using ZTP. The *minimum* required version of Junos OS for these MX routers is 18.4R2-S3. Prior to release 2003, this functionality was available only for QFX Series devices.

For more information on ZTP, see Provision Fabric Devices Using End-to-End ZTP.

### Host-based Firewalls for Intra-Virtual Network Traffic - Beta

The host-based firewall feature, in Contrail Networking Release 2003, enables the creation of next generation firewalls using cSRX devices. Host-based firewalls can be configured for traffic originating

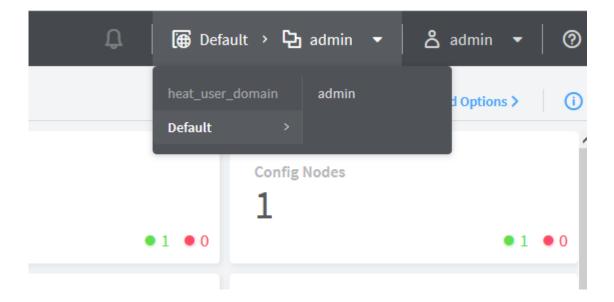
and ending in the same virtual network as well as in different networks. For more information on the host-based firewall feature, see Host-based Firewalls.

#### Logging in to a Domain in Contrail Command

Starting from Contrail Networking Release 2003, you can log in to a Canonical OpenStack domain by selecting a domain in the **Domain** field in the Contrail Command login page. If you do not select a domain, the default-domain is used.

Similar to earlier releases, once logged in, you can change your domain using the domain-switcher option in the banner in Contrail Command. The domain-switcher displays all domains and projects to which you have access to in your current login. These domains are also listed under **IAM > Domains**. However, you cannot create new domains or delete the default domain and project or disable them.

Figure 1: Domain Switcher



### Separate Credentials for Multicloud Networks

In Contrail Networking Release 2003, you can create, update, or remove cloud networks from a Multicloud environment in Contrail Command by providing the authentication credentials for the impacted cloud network only.

Multicloud environments are managed using the **Infrastructure > Multicloud** page in Contrail Command. For more information on multicloud deployments using Contrail Command, see Deploying Contrail Multicloud with Contrail Command.

# Support for Connecting to Third-Party Devices not Managed by Contrail Networking

Starting in Contrail Networking Release 2003, you can use the Contrail Command user interface (UI) to connect the border gateway devices to third-party devices that are not managed by Contrail Networking. In earlier releases, Contrail Networking did not support connecting to an unmanaged third-party device. With this release, you can use the Contrail Command UI to configure border leaf devices or spine devices, to connect to third-party devices. Load balancers, firewalls, and WAN routers are examples of these third-party devices.

For more information, see Connecting to Third-Party Devices.

# Support for Creating a Routed Virtual Network and Routed Virtual Port Group

Starting in Contrail Networking Release 2003, you can create a routed virtual network and routed virtual port group by using the Contrail Command user interface (UI). A routed virtual port group can only contain routed virtual networks.

#### **Support for Reconfiguring Physical Router**

Starting in Contrail Networking Release 2003, you can reconfigure any physical router that you want to extend a routed virtual network to, while creating the logical router. You can then configure the Integrated Routed and Bridging (IRB) interface by manually configuring the IP address of the IRB interface of the logical router.

# Support for Viewing Configuration of Devices Deployed in Contrail Fabric

Contrail Networking Release 2003 introduces a new feature, which enables you to view the configuration information of each devices deployed in a fabric. The device configuration information is related to interface, encryption, physical role or routing-bridging roles assigned to the device, and so on. To view the configuration information of a fabric device in the Contrail Command user interface (UI), you have to navigate to the **View Configuration** button in the **Infrastructure>Fabrics>** Fabric Name> Device Name page.

For more information, see Viewing Configuration of Devices Deployed in Contrail Fabric.

#### **Top N View in Contrail Command**

Contrail Networking Release 2003 introduces top N view in the Contrail Command UI. The feature offers a new top N or "top talkers" query engine with tabular and charted views. These Contrail Insights diagnostics enable engineers to proactively mitigate issues like network congestion and resource contention. For details, see Top N View in Contrail Command.

## Supported Platforms in Contrail Networking Release 2003

Table 1 on page 8 lists the orchestrator releases and the corresponding operating systems and kernel versions supported by Contrail Networking Release 2003.

**Table 1: Supported Platforms** 

Contrail Networking Release	Orchestrator Release	Deployment Tool	Operating System, Kernel, and Key Components Version
Contrail Networking Release 2003.1	Kubernetes 1.12.9	Ansible	CentOS 7.7—Linux Kernel Version     3.10.0-1062.12.1  Docker version: 18.03.1-ce
	OpenShift 3.11	Ansible	• RHEL 7.7—Linux Kernel Version 3.10.0-1062.12.1
	OpenStack Rocky	Ansible	CentOS 7.7—Linux Kernel Version     3.10.0-1062.12.1  Ansible version: 2.5.2  Docker version: 18.03.1-ce
	OpenStack Queens	Ansible	CentOS 7.7—Linux Kernel Version     3.10.0-1062.12.1  Ansible version: 2.5.2  Docker version: 18.03.1-ce
		Juju Charms	Ubuntu 18.04.4—Linux Kernel Version     4.15.0-91-generic  MaaS Version: 2.4.2
	Red Hat OpenStack Platform 13.0.10	RHOSP 13 director	RHEL7.7—Linux Kernel Version     3.10.0-1062.12.1  (Director Image: rhosp-director-images-all- 13.0-20200303.1.el7ost.noarch)  Red Hat Content Sync Date: 2020-02-25

Table 1: Supported Platforms (Continued)

Contrail Networking Release	Orchestrator Release	Deployment Tool	Operating System, Kernel, and Key Components Version
	VMware vCenter 6.7	Ansible	ESX version 6.5  CentOS VM version running vRouter: CentOS 7.7—Linux Kernel Version 3.10.0-1062.1.1
Contrail Networking Release 2003	Kubernetes 1.12.9	Ansible	CentOS 7.7—Linux Kernel Version     3.10.0-1062.12.1  Docker version: 18.03.1-ce
	OpenShift 3.11	Ansible	• RHEL 7.7—Linux Kernel Version 3.10.0-1062.12.1
	OpenStack Rocky	Ansible	CentOS 7.7—Linux Kernel Version     3.10.0-1062.12.1  Ansible version: 2.5.2  Docker version: 18.03.1-ce
	OpenStack Queens	Ansible	CentOS 7.7—Linux Kernel Version     3.10.0-1062.12.1  Ansible version: 2.5.2  Docker version: 18.03.1-ce
		Juju Charms	Ubuntu 18.04.4—Linux Kernel Version 4.15.0-91-generic  MaaS Version: 2.4.2

Table 1: Supported Platforms (Continued)

Contrail Networking Release	Orchestrator Release	Deployment Tool	Operating System, Kernel, and Key Components Version
	Red Hat OpenStack Platform 13.0.10	RHOSP 13 director	<ul> <li>RHEL7.7—Linux Kernel Version         <ul> <li>3.10.0-1062.12.1</li> </ul> </li> <li>(Director Image: rhosp-director-images-all-13.0-20200303.1.el7ost.noarch)</li> <li>Red Hat Content Sync Date: 2020-02-25</li> </ul>
	VMware vCenter 6.7	Ansible	ESX version 6.5  CentOS VM version running vRouter: CentOS 7.7—Linux Kernel Version 3.10.0-1062.1.1

Table 2 on page 10 lists the AppFormix release to use with Contrail Networking Release 2003.

**Table 2: AppFormix Release** 

Contrail Networking Release	AppFormix Release	Operating System
Contrail Networking Release 2003.1	3.1.15 - AppFormix 1.0.7 - AppFormix Flows	CentOS 7.7
Contrail Networking Release 2003	3.1.15 - AppFormix 1.0.7 - AppFormix Flows	CentOS 7.7

#### **Known Behavior**

#### IN THIS SECTION

- Known Behavior in Contrail Networking Release 2003.1 | 11
- Known Behavior in Contrail Networking Release 2003 | 15

This section lists known limitations with this release.

### Known Behavior in Contrail Networking Release 2003.1

- CEM-14751 After release 2003 deployment with OpenStack Rocky you cannot view the dashboard in the Horizon UI. This behavior is attributed to the OpenStack bug, https://bugs.launchpad.net/ horizon/+bug/1788631.
- CEM-11497 Polling Interval should default to 0 while creating an sFlow profile.
- CEM-14264 In release 2003, the Virtual Port Group create workflow no longer pre-populates the VLAN-ID with the existing value that was defined with the first VPG for a given virtual network. The field is editable unlike in previous releases. This issue occurs in a fabric that was provisioned with the Fabric-wide VLAN-ID significance checkbox enabled.
- CEM-14542 vRouter to vRouter datapath encryption does not work as per design. When datapath encryption is enabled between computes, traffic is encrypted in one direction only.
- CEM-14090 In release 2003, the OpenStack Rocky installation using Kolla OpenStack containers
  fails. This is due to the upstream breakage in centos-binary-kolla-toolbox container as noted in
  https://bugs.launchpad.net/kolla/+bug/1869613.
- CEM-14045 In Contrail fabric deployments ERB+DC GW doesn't work with LR.
- CEM-14003, CEM-13976 vRouter offload with Mellanox NIC cards does not work. However the DPDK on Mellanox NICs without offload is supported.

- CEM-13977 In Contrail fabric deployments, managed and unmanaged PNF cannot be used simultaneously on the leaf nodes.
- CEM-13940 Image upgrade through Contrail fabric manager on QFX10002-60C devices fails due
  to Junos PR 1498337. Customers using this device are advised to contact Juniper Technical
  Assistance Center (JTAC) for the Junos image with the fix for this PR.
- CEM-13767 Though Contrail fabric manager has the ability for the user to use custom image names
  for the fabric devices, for platforms like QFX10002-60C which runs on vmhost-based platforms,
  while uploading the image to CFM, the image name should be chosen in junos-vmhost-install-x.tgz
  format.
- CEM-13685 CX5: DPDK vRouter with MLNX CX5 takes about 10 minutes and also lcore crash is seen. This happens once during initial installation.
- CEM-13628 In Contrail Fabric deployments CRB-MCAST-Gateway role works only for QFX10k devices.
- CEM-13533 VPG update in Contrail Command fails when one of the Contrail Controllers is down (Contrail HA setup).
- CEM-13380 AppFormix Flows does not show up for multi homed devices on the fabric
- CEM-13379 StormControl profile config push to device fails if the name has " " <space>.
- CEM-13360 Uncaught exception observed when selecting a device before the GDO operation completes.
- CEM-12752 Data center interconnect between ERB and CRB fabrics or between 2 ERB fabrics doesn't work.
- CEM-12861 Flow to VN mapping using AppFormix sFlow does not work for any traffic involving BMS traffic end points.
- CEM-12507 Configuring DC-GW on spine without the RR role (border leaf) does not work.
- CEM-11229 PNF with DC-GW does not advertise static routes to PNF instance and hence traffic from private VN to internet does not go through. As a workaround, apply "set groups \_contrail\_overlay\_service\_chain\_ policy-options policy-statement pnf-si\_right-export term DIRECT from protocol static" on the DC-GW device handling PNF.
- CEM-10929 When AppFormix is querying LLDP table from a device through SNMP, if SNMP calls time out, AppFormix marks the device as invalidConfiguration and notifies the user to take a look. When the user verifies that snmpwalk is working and there are no network issues, click Edit and reconfigure that device from Settings > Network Devices to make AppFormix try to run LLDP discovery and add this device again.

- CEM-11141 Contrail fabric manager cannot configure PNF service chain on devices acting as ERB unicast gateway.
- CEM-8701, CEM-8149 Onboarding of multiple BMS in parallel on SP-style fabric does not work.
- CEM-7424, CEM-6570 MX acting as DC-GW cannot serve FIP for both Contrail VMs and Datacenter BMSes simultaneously.
- CEM-5788 Installation fails if FQDN is used to deploy Contrail Cluster through Contrail Command with OpenStack orchestration.
- CEM-5577 Contrail fabric manager does not configure PIM RP on spine devices.
- CEM-4370 Additional links cannot be appended to service templates used to create PNF service chaining. If there is a need to add additional links, the service template needs to be deleted and readded again.
- CEM-4358 In Contrail fabric deployments configuring QFX5110 as spine (CRB-Gateway) does not work.
- CEM-11163 In Fortville X710 NIC: With TX and RX buffers performance degrade is observed as mbufs gets exhausted.
- CEM-9979 During upgrade of DPDK computes deployed with OOO Heat Templates in RHOSP environment, vRouter coredumps are observed. This is due to the sequence in which the services are started during upgrade and does not have impact on cluster operation.
- CEM-8701 While bringing up a BMS using the Life Cycle Management workflow, sometimes on
  faster servers the re-image does not go through and instance not moved from ironic vn to tenant vn.
  This is because if the PXE boot request from the BMS is sent before the routes are converged
  between the BMS port and the TFTP service running in Contrail nodes. As a workaround, the servers
  can be rebooted or the BIOS in the servers can be configured to have a delayed boot.
- CEM-8149 BMS LCM with fabric set with enterprise\_style=True is not supported. By default, enterprise\_style is set to False. User should avoid using enterprise\_style=True if the fabric object will onboard BMS LCM instance.
- CEM-7874 User defined alarms may not be generated, when third stunnel/Redis service instance is down after the first two instances were restarted.

CEM-5141 For deleting compute nodes, the UI workflow will not work. Instead, update the
instances.yaml with "ENABLE\_DESTROY: True" and "roles:" (leave it empty) and run the following
playbooks.

```
ansible-playbook -i inventory/ -e orchestrator=openstack --tags nova playbooks/
install_openstack.yml
ansible-playbook -i inventory/ -e orchestrator=openstack playbooks/install_contrail.yml
```

For example:

```
global_configuration:
    ENABLE_DESTROY: True
...
instances:
...
srvr5:
    provider: bms
    ip: 19x.xxx.x.55
    roles:
...
...
```

- CEM-5043 VNI update on a LR doesnt update the RouteTable. As a workaround, delete the LogicalRouter and create a new LogicalRouter with the new VNI.
- CEM-4370 After creating a PNF Service Instance, the fields like PNF eBGP ASN\*, RP IP Address, PNF Left BGP Peer ASN\*, Left Service VLAN\*, PNF Right BGP Peer ASN\*, Right Service VLAN\* cannot be modified. If there is a need to modify these values, delete and re-create the Service Instance with intended values.
- CEM-3959 BMS movement across TORs is not supported. To move BMS across TORs the whole VPG need to be moved. That means if there are more than one BMS associated to one VPG, and one of the BMS need to be moved, the whole VPG need to be deleted and re-configured as per the new association.
- JCB-187287 High Availability provisioning of Kubernetes master is not supported.
- JCB-184776 When the vRouter receives the head fragment of an ICMPv6 packet, the head fragment is immediately enqueued to the assembler. The flow is created as hold flow and then trapped to the agent. If fragments corresponding to this head fragment are already in the assembler or if new

fragments arrive immediately after the head fragment, the assembler releases them to flow module. Fragments get enqueued in the hold queue if agent does not write flow action by the time the assembler releases fragments to the flow module. A maximum of three fragments are enqueued in the hold queue at a time. The remaining fragments are dropped from the assembler to the flow module.

As a workaround, the head fragment is enqueued to assembler only after flow action is written by agent. If the flow is already present in non-hold state, it is immediately enqueued to assembler.

- JCB-177787 In DPDK vRouter use cases such as SNAT and LBaaS that require netns, jumbo MTU cannot be set. Maximum MTU allowed: <=1500.</li>
- JCB-177541 When you receive an error message during Kolla provisioning, rerunning the code will not work. In order for the provisioning to work, restart provisioning from scratch.

### Known Behavior in Contrail Networking Release 2003

- CEM-14751 After release 2003 deployment with OpenStack Rocky you cannot view the dashboard in the Horizon UI. This behavior is attributed to the OpenStack bug, https://bugs.launchpad.net/ horizon/+bug/1788631.
- CEM-14542 vRouter to vRouter datapath encryption does not work as per design. When datapath encryption is enabled between computes, traffic is encrypted in one direction only.
- CEM-11497 Polling Interval should default to 0 while creating an sFlow profile.
- CEM-14264 In release 2003, the Virtual Port Group create workflow no longer pre-populates the VLAN-ID with the existing value that was defined with the first VPG for a given virtual network. The field is editable unlike in previous releases. This issue occurs in a fabric that was provisioned with the Fabric-wide VLAN-ID significance checkbox enabled.
- CEM-14090 In release 2003, the OpenStack Rocky installation using Kolla OpenStack containers fails. This is due to the upstream breakage in centos-binary-kolla-toolbox container as noted in https://bugs.launchpad.net/kolla/+bug/1869613.
- CEM-14045 In Contrail fabric deployments ERB+DC GW doesn't work with LR.
- CEM-14003, CEM-13976 vRouter offload with Mellanox NIC cards does not work. However the DPDK on Mellanox NICs without offload is supported.

- CEM-13977 In Contrail fabric deployments, managed and unmanaged PNF cannot be used simultaneously on the leaf nodes.
- CEM-13940 Image upgrade through Contrail fabric manager on QFX10002-60C devices fails due
  to Junos PR 1498337. Customers using this device are advised to contact Juniper Technical
  Assistance Center (JTAC) for the Junos image with the fix for this PR.
- CEM-13767 Though Contrail fabric manager has the ability for the user to use custom image names
  for the fabric devices, for platforms like QFX10002-60C which runs on vmhost-based platforms,
  while uploading the image to CFM, the image name should be chosen in junos-vmhost-install-x.tgz
  format.
- CEM-13685 CX5: DPDK vRouter with MLNX CX5 takes about 10 minutes and also lcore crash is seen. This happens once during initial installation.
- CEM-13628 In Contrail Fabric deployments CRB-MCAST-Gateway role works only for QFX10k devices.
- CEM-13533 VPG update in Contrail Command fails when one of the Contrail Controllers is down (Contrail HA setup).
- CEM-13380 AppFormix Flows does not show up for multi homed devices on the fabric
- CEM-13379 StormControl profile config push to device fails if the name has " " <space>.
- CEM-13360 Uncaught exception observed when selecting a device before the GDO operation completes.
- CEM-12752 Data center interconnect between ERB and CRB fabrics or between 2 ERB fabrics doesn't work.
- CEM-12861 Flow to VN mapping using AppFormix sFlow does not work for any traffic involving BMS traffic end points.
- CEM-12507 Configuring DC-GW on spine without the RR role (border leaf) does not work.
- CEM-11229 PNF with DC-GW does not advertise static routes to PNF instance and hence traffic from private VN to internet does not go through. As a workaround, apply "set groups \_contrail\_overlay\_service\_chain\_ policy-options policy-statement pnf-si\_right-export term DIRECT from protocol static" on the DC-GW device handling PNF.
- CEM-10929 When AppFormix is querying LLDP table from a device through SNMP, if SNMP calls time out, AppFormix marks the device as invalidConfiguration and notifies the user to take a look. When the user verifies that snmpwalk is working and there are no network issues, click Edit and reconfigure that device from Settings > Network Devices to make AppFormix try to run LLDP discovery and add this device again.

- CEM-11141 Contrail fabric manager cannot configure PNF service chain on devices acting as ERB unicast gateway.
- CEM-8701, CEM-8149 Onboarding of multiple BMS in parallel on SP-style fabric does not work.
- CEM-7424, CEM-6570 MX acting as DC-GW cannot serve FIP for both Contrail VMs and Datacenter BMSes simultaneously.
- CEM-5577 Contrail fabric manager does not configure PIM RP on spine devices.
- CEM-4370 Additional links cannot be appended to service templates used to create PNF service
  chaining. If there is a need to add additional links, the service template needs to be deleted and readded again.
- CEM-4358 In Contrail fabric deployments configuring QFX5110 as spine (CRB-Gateway) does not work.
- CEM-11163 In Fortville X710 NIC: With TX and RX buffers performance degrade is observed as mbufs gets exhausted.
- CEM-9979 During upgrade of DPDK computes deployed with OOO Heat Templates in RHOSP environment, vRouter coredumps are observed. This is due to the sequence in which the services are started during upgrade and does not have impact on cluster operation.
- CEM-8701 While bringing up a BMS using the Life Cycle Management workflow, sometimes on
  faster servers the re-image does not go through and instance not moved from ironic vn to tenant vn.
  This is because if the PXE boot request from the BMS is sent before the routes are converged
  between the BMS port and the TFTP service running in Contrail nodes. As a workaround, the servers
  can be rebooted or the BIOS in the servers can be configured to have a delayed boot.
- CEM-8149 BMS LCM with fabric set with enterprise\_style=True is not supported. By default, enterprise\_style is set to False. User should avoid using enterprise\_style=True if the fabric object will onboard BMS LCM instance.
- CEM-7874 User defined alarms may not be generated, when third stunnel/Redis service instance is down after the first two instances were restarted.
- CEM-5788 Installation fails if FQDN is used to deploy Contrail Cluster through Contrail Command with OpenStack orchestration.

CEM-5141 For deleting compute nodes, the UI workflow will not work. Instead, update the
instances.yaml with "ENABLE\_DESTROY: True" and "roles:" (leave it empty) and run the following
playbooks.

```
ansible-playbook -i inventory/ -e orchestrator=openstack --tags nova playbooks/
install_openstack.yml
ansible-playbook -i inventory/ -e orchestrator=openstack playbooks/install_contrail.yml
```

For example:

```
global_configuration:
    ENABLE_DESTROY: True
...
instances:
...
srvr5:
    provider: bms
    ip: 19x.xxx.x.55
    roles:
...
...
```

- CEM-5043 VNI update on a LR doesnt update the RouteTable. As a workaround, delete the LogicalRouter and create a new LogicalRouter with the new VNI.
- CEM-4370 After creating a PNF Service Instance, the fields like PNF eBGP ASN\*, RP IP Address, PNF Left BGP Peer ASN\*, Left Service VLAN\*, PNF Right BGP Peer ASN\*, Right Service VLAN\* cannot be modified. If there is a need to modify these values, delete and re-create the Service Instance with intended values.
- CEM-3959 BMS movement across TORs is not supported. To move BMS across TORs the whole VPG need to be moved. That means if there are more than one BMS associated to one VPG, and one of the BMS need to be moved, the whole VPG need to be deleted and re-configured as per the new association.
- JCB-187287 High Availability provisioning of Kubernetes master is not supported.
- JCB-184776 When the vRouter receives the head fragment of an ICMPv6 packet, the head fragment is immediately enqueued to the assembler. The flow is created as hold flow and then trapped to the agent. If fragments corresponding to this head fragment are already in the assembler or if new

fragments arrive immediately after the head fragment, the assembler releases them to flow module. Fragments get enqueued in the hold queue if agent does not write flow action by the time the assembler releases fragments to the flow module. A maximum of three fragments are enqueued in the hold queue at a time. The remaining fragments are dropped from the assembler to the flow module.

As a workaround, the head fragment is enqueued to assembler only after flow action is written by agent. If the flow is already present in non-hold state, it is immediately enqueued to assembler.

- JCB-177787 In DPDK vRouter use cases such as SNAT and LBaaS that require netns, jumbo MTU cannot be set. Maximum MTU allowed: <=1500.
- JCB-177541 When you receive an error message during Kolla provisioning, rerunning the code will not work. In order for the provisioning to work, restart provisioning from scratch.

#### **Resolved Issues**

You can research limitations that are resolved with Contrail Networking releases 2003.1, and 2003 at:

Resolved Issues in Contrail Networking Release 2003

Use your Juniper Support login credentials to view the list. If you do not have a Juniper Support account, you can register for one at <a href="https://userregistration.juniper.net/">https://userregistration.juniper.net/</a>.

#### **Deprecated Items**

The following feature has been deprecated in Contrail Networking Release 2003.

• Installation and upgrade using Helm deployer.

### **Documentation Update**

Contrail Command Screenshots—If you are using Contrail Networking Release 2003, you will see a side-panel mismatch between screenshots presented in the Contrail Networking documentation and your Contrail Command UI. We added an enhanced side panel in the Contrail Command UI in release 2003.

Thus, screenshots in the documentation from releases before release 2003 do not display the side panel. However, the navigation path to all pages remains unchanged.

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. Copyright © 2023 Juniper Networks, Inc. All rights reserved.