

Release Notes

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Contrail Networking Release 2008

Table of Contents

Introduction | 1

New and Changed Features | 1

Supported Platforms in Contrail Networking Release 2008 | 7

Known Behavior | 10

Resolved Issues | 16

Deprecated Issues | 16

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 (IaaS), and Networks Functions Virtualization (NFV) use cases.

These release notes accompany Release 2008 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 THIS SECTION

- [New and Changed Features in Contrail Networking Release 2008 | 1](#)

The features listed in this section are new or changed as of Contrail Networking Release 2008. A brief description of each new feature is included.

New and Changed Features in Contrail Networking Release 2008

Support for Fast Routing Convergence

Starting with Release 2008, Contrail Networking supports fast convergence of the network in case of failures in the overlay tunnel endpoints. With the fast convergence feature, Contrail Networking can

detect and respond to failures in the gateway or vRouter and take corrective action faster, thereby reducing the convergence time. Convergence time is the time taken by the control plane to detect a failure and take corrective action. Faster convergence reduces the risk of silent packet drop in case of a failure in the network.

For more information, see [Fast Routing Convergence with Contrail Networking](#)

Configurable XMPP Timeout

Starting with Contrail Networking Release 2008, you can configure the XMPP timer value in the range 1 through 90 seconds. Reducing the timer to a lower value facilitates faster convergence in the network. Though you can configure a value as low as one (1), the recommended value is nine (9). A lower value for the timer is recommended only for smaller clusters.

For more information, see [Fast Routing Convergence with Contrail Networking](#)

Support for Red Hat OpenShift 4.4

Starting with Contrail Networking Release 2008, you install Contrail Networking with Red Hat OpenShift 4.4.

For more information, see [How to Install Contrail Networking and Red Hat OpenShift 4.4](#).

Support for Red Hat OpenStack Platform Director 16.1

Contrail Networking Release 2008 supports integration with Red Hat OpenStack Platform Director (RHOSPd or OSPd) 16.1. [Table 1 on page 2](#) lists the OpenStack releases and the corresponding operating system and deployer versions supported by Contrail Networking Release 2008.

Table 1: Supported Release Versions

Contrail Release	Operating System	OpenStack	Deployer
Contrail Networking 2008	RHEL 8.2	OSP16	OSPd16

For details, see [Using Contrail with Red Hat OpenStack 16.1](#).

Contrail Insights and Contrail Insights Flows on Same Server

Starting with Contrail Networking Release 2008, you can provision Contrail Insights and Contrail Insights Flows onto the same server node. Contrail Insights and Contrail Insights Flows had to be provisioned on separate servers in earlier releases.

For more information on provisioning Contrail Insights and Contrail Insights Flows onto the same server, see [How to Install Contrail Command and Provision Your Contrail Cluster](#).

Enhanced Job Status Monitoring Ability

Starting with Contrail Networking Release 2008, you can view a detailed summary of all Contrail Command initiated jobs and transactions for the past three days in the **Monitoring > Operations** page in Contrail Command. You can view job progress, completion status, error messages for failed jobs, and supplemental device configurations resulting from active and completed jobs as well. You can also abort an ongoing job. The **Operations** page replaces the **Jobs** page in the UI.

For more information, see [Monitoring Fabric Jobs](#).

Support for Hitless Software Upgrade on MX Series Devices

Starting with Contrail Networking Release 2008, you can perform Contrail Controller-assisted maintenance activities such as a hitless software image upgrade on MX Series devices in a data center fabric. Prior to release 2008, hitless software upgrade was supported only on QFX series devices.

For more information, see [Hitless Software Upgrade of Data Center Devices Overview](#).

Using MX Series Devices to Connect to Third-Party Network Devices

Starting in Contrail Networking Release 2008, you can use MX240, MX480, MX960, or MX10003 device as a border leaf and spine device, to connect to third-party network devices. You can assign CRB-Gateway, CRB-MCAST-Gateway, DCI-Gateway, or DC-Gateway roles to these border gateway devices. However, when you use an MX Series device as a border gateway device, you can only configure eBGP or Static routing protocols on the border gateway device.

For more information, see [Using Static, eBGP, PIM, and OSPF Protocols to Connect to Third-Party Network Devices](#).

Redesigned VLAN-Assignment Ability During Virtual Port Group Creation

In Contrail Networking Release 2008, you can create a VPG without assigning VLANs. VLAN assignment is a dedicated but optional step in the VPG-creation wizard. You can choose to assign VLANs in the wizard or you can assign them separately by clicking the **+Add** button in the **Overlay > Virtual Port Group** page.

In scaled setups, there can be a large number of VLANs, making them hard to manage inside the create or edit Virtual Port Group pages of earlier releases. Release 2008 simplifies the assignment of VLANs by introducing a dedicated page for management.

For more information, see [Configuring Virtual Port Groups](#).

Viewing Packet Paths in Topology View

Starting with Contrail Networking Release 2008, you can view the path a packet takes in a network. To view the packet path, both Contrail Insights and Contrail Insights Flows must be installed.

Port Profile Attributes and Parameters

Starting with Contrail Networking Release 2008, additional port attributes are available for port profile objects including MTU, admin state, LACP, flow control, BPDU loop protection, and QoS (CoS) untrust interface. Additionally, you can apply MTU, admin state, flow control, LACP force up, interface type attributes to physical interfaces; and MTU to logical interfaces. For details, see [Configuring Storm Control on Interfaces](#).

VLAN Forwarding Disabled for DPDK vRouters Deployed on VLAN Interfaces

Starting from Contrail Networking Release 2008, VLAN forwarding interface is disabled by default on DPDK enabled vRouters that are deployed in a fabric. This optimizes the performance of DPDK enabled vRouters.

In releases prior to release 2008, VLAN forwarding interface is enabled by default, enabling packet forwarding between the host and the fabric. This resulted in increased load on vRouters affecting their performance.

To enable VLAN forwarding interface on vRouter, set the value for `DPDK_ENABLE_VLAN_FWRD` to `True` in `contrail-settings.yaml`. If VLAN forwarding interface is enabled, the following message is logged in the `contrail-vrouter-dpdk` container logs:

```
VLAN forwarding is enabled and causing performance impact on the system
```

Analyzing Traffic Between vRouter and vRouter Agents Using Wireshark Plugin

Contrail Networking Release 2008 provides support for the `agent_header.lua` Wireshark plugin that enables you analyze the packets exchanged between vRouter data plane and vRouter agent on the `pkt0` interface.

For more information, see [Using the Wireshark Plugin to Analyze Packets Between vRouter and vRouter Agent on pkt0 Interface](#).

Support for Viewing Details of a DPDK Enabled vRouter

Starting with Contrail Networking Release 2008, the `dpdkinfo` command enables you to see the details of the internal data structures of a DPDK enabled vRouter. The `dpdkinfo` command enables you to view

information related to bond interfaces, Link Aggregation Control Protocol (LACP), memory pool (mempool), Logical core (lcore), network interface card (NIC) and application. The `dpdkinfo` command reads the internal data structures and unstructured data from a DPDK enabled vRouter, and displays the data on the console.

For more information, see [vRouter Command Line Utilities](#).

Packet Latency Improvements in the vRouter

Contrail Networking Release 2008 has significant vRouter packet latency improvements in DPDK deployments. The latency for 64B packets is measured to be around 120 microseconds (μ s) in release 2008 as against 300-400 μ s prior to release 2008. In historic DPDK deployments, the vRouter functions in a hybrid mode where it uses part pipelining mode and part run-to-completion mode for packet processing thereby ensuring good load balancing and also reasonable latency. However, from release 2008, you can switch the vRouter from hybrid to run-to-completion mode where the packets are processed in a single session with no load balancing thereby reducing latency overheads. To switch DPDK modes, you must set the `DPDK_COMMAND_ADDITIONAL_ARGS+= "--vr_no_load_balance"` parameter in the `ifcfg-vhost0` file on the vRouter.

This feature has the following caveats:

- The run-to-completion mode has inherent disadvantages such as if the virtual machine is unable to load balance, you might see bottlenecks using this mode.
- The VNF must be enabled with multiqueue virtio. This is to ensure that the VNF performs load balancing in place of the vRouter.
- Only MPLSoUDP and VXLAN encapsulation protocols are supported.

Support to Ignore Manual CLI Configuration Changes

Contrail Networking supports the detection of manual CLI configuration changes. You can either accept these manual changes as part of the configuration, or you can reject the CLI changes and the changes are removed from the configuration. With Contrail Networking Release 2008, you can also ignore these manual CLI configuration changes by using the Contrail Command UI. For more information, see [Detecting and Managing Manual CLI Configuration Changes](#).

Support for Clearing vif Statistics Counters

Contrail Networking Release 2008 supports clearing of vif statistics counters for all interfaces by using the `--clear` command.

For more information, see [vRouter Command Line Utilities](#).

Contrail Tools Container

Contrail-tools container provides centralized location for all the available tools and CLI commands in one place. Starting with Contrail Networking Release 2008, contrail-tools command will be installed by default. contrail-tools command enables you to log in to the container and execute the tool. Additionally, the command will kill the container on exit. For details, see [Using Contrail Tools](#).

Support for DPDK Release 19.11

Starting with Contrail Networking Release 2008, Contrail vRouter supports DPDK Release 19.11. To view the DPDK version, use the following commands:

```
[root@user ~]# contrail-tools
(contrail-tools)[root@user /]$ dpdkinfo -v
DPDK Version: DPDK 19.11.0
vRouter version: {"build-info": [{"build-time": "2020-09-17 00:44:40.135183", "build-hostname":
"contrail-build-r2008-centos-121-generic-20200916063600.novalocal", "build-user": "contrail-
builder", "build-version": "2008"}]}
```

Sandump Tool

Starting with Contrail Networking Release 2008, Sandump tool is available in contrail-tools container. Sandump tool captures the Sandesh messages from netlink connection between the Agent and the vRouter (only DPDK mode) and, provides detailed interpretation of all the captured bytes. For details, see [Using Sandump Tool](#).

Deploying Contrail Command and Importing a Contrail Cluster Using Juju in a Kubernetes Environment

Starting in Contrail Networking Release 2008, you can deploy Contrail Command and import an existing Contrail cluster into Contrail Command with a single procedure using Juju in environments where Kubernetes is deployed as the orchestration platform. For details, see [How to Deploy Contrail Command and Import a Cluster Using Juju](#).

Enablement Changes to Optional Contrail Analytics Modules

Starting with Contrail Networking Release 2008, the optional Contrail Analytics modules—analytics alarm, analytics SNMP, and analytics database—must be enabled in the OOO (TripleO) Heat templates. For more information, see TripleO Provisioning in the Contrail Networking Monitoring and Troubleshooting Guide.

Support for Modular Layer 2 Plug-in Connections for Fabric Management—Beta

Starting in Contrail Networking Release 2008, you can configure Contrail Fabric Management to communicate with Openstack deployments that are using the Modular Layer 2 (ML2) neutron plug-in. The ML2 plugin translates events that happen in the Neutron service in Openstack into configuration that can be pushed onto the fabric devices managed using Contrail Command.

This feature is managed using the **Infrastructure > External Systems** workflow in Contrail Command.

It is currently a beta feature.

OVA Package for Contrail Networking and Contrail Insights

The OVA installation packages available for Contrail Networking and Contrail Insights are for provided for customer early evaluation purposes only. For production installations, we still recommend following the [Contrail Networking Installation and Upgrade Guide](#).

Supported Platforms in Contrail Networking Release 2008

[Table 2 on page 7](#) lists the orchestrator releases and the corresponding operating systems and kernel versions supported by Contrail Networking Release 2008.

Table 2: Supported Platforms

Contrail Networking Release	Orchestrator Release	Deployment Tool	Operating System, Kernel, and Key Components Version
Contrail Networking Release 2008	Kubernetes 1.18	Juju Charms	<ul style="list-style-type: none"> Ubuntu 18.04.4—Linux Kernel Version 4.15.0-45-generic <p>MaaS Version: 2.4.2</p>

Table 2: Supported Platforms *(Continued)*

Contrail Networking Release	Orchestrator Release	Deployment Tool	Operating System, Kernel, and Key Components Version
	Kubernetes 1.14.8	Ansible	<ul style="list-style-type: none"> CentOS 7.8—Linux Kernel Version 3.10.0-1127.13.1 <p>Ansible version : 2.7.11</p> <p>Docker version: 18.03.1-ce</p>
	OpenShift 3.11	Ansible	<ul style="list-style-type: none"> RHEL 7.8—Linux Kernel Version 3.10.0-1127.13.1
	OpenShift 4.4.11	Operator Framework	<ul style="list-style-type: none"> RHEL CoreOS 4.4—Linux Kernel Version 4.18.0-147.20.1
	OpenStack Rocky	Ansible	<ul style="list-style-type: none"> CentOS 7.8—Linux Kernel Version 3.10.0-1127.13.1 <p>Ansible version: 2.5.2</p> <p>Docker version: 18.03.1-ce</p>
	OpenStack Queens	Ansible	<ul style="list-style-type: none"> CentOS 7.8—Linux Kernel Version 3.10.0-1127.13.1 <p>Ansible version: 2.5.2</p> <p>Docker version: 18.03.1-ce</p>
		Canonical OpenStack Queens	<ul style="list-style-type: none"> Ubuntu 18.04.4—Linux Kernel Version 4.15.0-112-generic <p>MaaS Version: 2.4.2</p>

Table 2: Supported Platforms *(Continued)*

Contrail Networking Release	Orchestrator Release	Deployment Tool	Operating System, Kernel, and Key Components Version
	Canonical OpenStack Train	Juju Charms	<ul style="list-style-type: none"> Ubuntu 18.04.4—Linux Kernel Version 4.15.0-112-generic <p>MaaS Version: 2.4.2</p>
	Red Hat OpenStack Platform 13.0.12	RHOSP 13 director	<ul style="list-style-type: none"> RHEL 7.8—Linux Kernel Version 3.10.0-1127 <p>Overcloud Image: overcloud-full-13.0-20200610.2.el7ost.x86_64.tar</p> <p>Red Hat Content Sync Date : 2020-07-07</p>
	Red Hat OpenStack Platform 16.1.0	RHOSP 16 Director	<ul style="list-style-type: none"> RHEL 8.2—Linux Kernel Version 4.18.0-193.13.2 <p>Overcloud Image: overcloud-full-16.1-20200722.1.el8ost.x86_64.ta</p> <p>Red Hat Content Sync Date : 2020-08-12</p>
	VMware vCenter 6.7	Ansible	<ul style="list-style-type: none"> ESX version 6.5 <p>CentOS VM version running vRouter: CentOS 7.7—Linux Kernel Version 3.10.0-1062.1.1</p>

Known Behavior

IN THIS SECTION

- [Known Behavior in Contrail Networking Release 2008](#) | 10

This section lists known limitations with this release.

Known Behavior in Contrail Networking Release 2008

- CEM-19462 The **Infrastructure > External Systems** page in Contrail Command does not display the CVFM plugin despite successful installation. Contact Juniper Networks Technical Assistance Center (JTAC) for assistance in patching the CVFM plugin issue.
- CEM-19175 If the quality of internet connectivity is not good, then the ansible deployer times out while pulling packages from internet. As a workaround, rerun the playbook after fixing the internet connectivity.
- CEM-19151 During deployment we see race condition, due to which ipa-client installation on compute nodes fails. This is an issue with Red Hat. As a workaround, before deployment starts, modify the following file to add sleep of 400 seconds on undercloud.

```

name: DBG
    sudo vi /usr/share/ansible/roles/tripleo-kernel/tasks/kernelargs.yml -
name: DBG
    debug:
        msg: "sleep 400 sec if reboot_required == {{ reboot_required }}"
    - name: DBG sleep
      shell: sleep 400
    when:
        - reboot_required is defined and reboot_required# then
    sudo find / -name kernelargs.yml
    # to find all such files on undercloud and in containers because I am not sure
    which exactly is used (from host or from container)

```

```
# and overwriting such files in containers like
sudo cp /usr/share/ansible/roles/tripleo-kernel/tasks/
kernelargs.yml /var/lib/containers/storage/overlay/
6dc6b96b1392e5302b63156fa093525e17131bef1203cad005a911ad09241f5a/diff/usr/share/ansible/roles/
tripleo-kernel/tasks/kernelargs.yml
```

- CEM-19093 When one of the HA master nodes go down, you might find contrail webUI broken and not accessible. As a workaround, restart the Contrail Web UI POD by using “oc delete <>” .
- CEM-18979 The vRouter to vRouter encryption feature is beta quality and should be used for future product capability demonstrations only.
- CEM-18999 In a heavily scaled datacenter with around 128 racks and 4000 VNs, 256k VMIs, if the Contrail Insights OpeStack adapter is restarted, it might take around 4 hrs for it to re-sync with the API server.
- CEM-18922 On DPDK compute, memory of the VMs are mapped to only one numa. VM creation fails after the hugepages in that numa are exhausted if it is launched with hw:mem_page_size='any' flavor. As a workaround, use the hw:mem_page_size='large' flavor instead to avoid the issue.
- CEM-18909 In case of RHOSP16 deployment with TLS, XMPP connection down is seen post deployment completion. While this is a cosmetic issue and does not impact functionality, as a workaround, restart the vRouter agent container on all compute nodes to update status.
- CEM-18864 After one of HA Master nodes failover (or) vrouter restart, you might observe further user PODs creation fails without getting IP address. As a workaround, find HA master nodes control-pods which are in sync with “new user-pod” and restart them. Perform the following steps:
 1. Log in to 3 HA masters and find the crictl pod with name “control”. Log in to view the command output of “curl --cert /etc/certificates/server-key-localhost --insecure https://localhost:8083/Snh_IFMapTableShowReq?table_name=virtual-machine” which shows the names of the latest user-pod that failed.
 2. Restart those control PODs which are not sync.
- CEM-18793 Canonical JuJu Contrail CNI (K8S) deployment using existing Keystone does not work with Version 2 Authorization policy definition.
- CEM-18667 In a scaled Contrail Enterprise Multicloud cluster with around 4000 VNs, the command UI can take up to 8 minutes to display the cluster details.
- CEM-18410 Some OpenShift System Pods may be seen “CrashLoopBackOff” due to “Invalid configuration: unable to load OpenShift configuration: unable to retrieve authentication information for tokens: Post https://172.30.0.1:443/apis/authentication.k8s.io/v1/tokenreviews: dial tcp 172.30.0.1:443: connect: no route to host” errors. This may be seen with Provisioning failure (or) may also be seen with Provisioning success. As a workaround, restart this pod using “oc delete pod <>” .

- CEM-18408 In DPDK1911 with X710 NIC performance degrades due to mbuf leak if txd and rxd are configured. Intel recommends configuring atleast 1K tx and rx descriptors on Fortville NICs for better and consistent performance, but they seem to have a degrading effect on X710 NIC.
- CEM-18398 Contrail WebUI doesn't work for System/Node status monitoring. As a workaround, check using CLI on the relevant nodes. This will not impact functionality.
- CEM-18381 QFX5120 cannot be used as border leaf role in SP style for CRB role.
- CEM-18349 Whenever there is an update received through rabbitmq for Physical Router, Physical Interface, nodes or ports objects, CVFM clears its local cache and reads all the VMIs, VNs, VPGs, Physical Routers, and so on objects again through Contrail API service. During this time, the API server can go unresponsive and recovers if the system has scaled objects.
- CEM-18313 If router-VN is connected to master LR in a Contrail Enterprise Multicloud cluster, it might make DCI, PNF features to break.
- CEM-18285 Image upgrade on a QFX-10008 device through Contrail Enterprise Multicloud does not work.
- CEM-18251 In a stable setup, pod “contrail-control” restarts with “status-monitor” container errors/ restarts. There is no functionality impact.
- CEM-18195 For installing OpenShift4.x clusters with Contrail, enterprise grade disks are recommended. Preferably SSDs for servers hosting databases.
- CEM-18193 In a scaled Contrail Enterprise Multicloud cluster, the job to delete devices might report failure, however the operation will be successful. Ignore the error and check if the devices are actually deleted.
- CEM-18163 On a DPDK compute, if contrail-vrouter-agent crashes or if contrail-vrouter-agent is restarted in a scaled setup with many sub-interfaces, all the sub-interfaces and their parent interface may become inactive. As a workaround, stop / start the instances whose interfaces are down.
- CEM-17991 In an OpenStack HA setup provisioned using Kolla and OpenStack Rocky, if you shut down all the servers at the same time and bring them up later, the Galera cluster fails. To recover the Galera cluster, follow these steps:
 1. Edit the `/etc/kolla/mariadb/galera.cnf` file to remove the `wsrep` address on one of the controllers as shown here.

```
wsrep_cluster_address = gcomm://
#wsrep_cluster_address = gcomm://10.x.x.8:4567,10.x.x.10:4567,10.x.x.11:4567
```

NOTE: If all the controllers are shut down in the managed scenario at the same time, you must select the controller that was shut down last.

2. Docker start mariadb on the controller on which you edited the file.
 3. Wait for a couple of minutes, ensure that the mariadb container is not restarting, and then Docker start mariadb on the remaining controllers.
 4. Restore the `/etc/kolla/mariadb/galera.cnf` file changes and restart the mariadb container on the previously selected controller.
- CEM-17883 VLAN tag does not work with Mellanox CX5 cards with DPDK 19.11.
 - CEM-17866 Monitoring/Operations page crashes with "Cannot read property 'className' of undefined". As a workaround, refresh the page to display the content properly.
 - CEM-17648 In case of BMS to BMS EVPN "Transparent" service chaining, Tunneled packet sent out of Transparent service instance to QFX have vlan-id and hence Traffic from left-bms to right-bms gets dropped since the inner header of the tunneled packet has vlan-id info which is internal to vRouter and QFX is not aware of the vlan-id so the packet gets dropped by the switch.
 - CEM-17562 Under Security Groups, the entry appearing with `__no_rule__` can be ignored.
 - CEM-15809 Updating VLAN-ID on a VPG in an enterprise style fabric is not supported. As a workaround, delete and recreate the fabric.
 - CEM-15764 In Octavia Load Balancer, traffic destined to the Floating IP of the load balancer VM does not get directed to the backend VMs. Traffic destined to the actual VM IP of the Load Balancer VM will work fine.
 - CEM-15561 vRouter offload with Mellanox NIC cards does not work. However the DPDK on Mellanox NICs without offload is supported.
 - CEM-14679 In fabric un-managed PNF use-case, some bogus static routes are pushed by DM under LR VRF on spines in case of CRB gateway.

As a workaround, change the value of the `dummy_ip` variable inside the `device_manager` docker. This line number below is based on the 2008 release code-base.

https://github.com/Juniper/contrail-controller/blob/R2008/src/config/fabric-ansible/ansible-playbooks/filter_plugins/fabric.py#L2594

After changing the value to the desired subnet and saving the file, restart the DM docker to reflect the change. Note that, this step should be performed at the beginning before fabric onboarding.

- CEM-14264 In release 2003, the Virtual Port Group create workflow will not pre-populate 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-13767 Though Contrail fabric manager has the ability for the user to use custom image names for the fabric devices, for platforms like QFX10000-60C 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 DPDK vRouter with MLNX CX5 takes about 10 minutes and also lcore crash is seen. This happens once during initial installation.
- CEM-13380 AppFormix Flows does not show up for multi homed devices on the fabric
- CEM-11163 In Fortville X710 NIC: With TX and RX buffers performance degrade is observed as mbufs gets exhausted.
- CEM-10929 When Contrail Insights is querying LLDP table from a device through SNMP, if SNMP calls time out, Contrail Insights 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 Contrail Insights try to run LLDP discovery and add this device again.
- 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 Onboarding of multiple BMS in parallel on SP-style fabric does not work. 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. Avoid using enterprise_style=True if the fabric object onboards the BMS LCM instance.

- 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 doesn't update the RouteTable. As a workaround, delete the LogicalRouter and create a new LogicalRouter with the new VNI.
- 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 re-added again.
- CEM-4358 In Contrail fabric deployments configuring QFX5110 as spine (CRB-Gateway) does not work.
- CEM-3959 BMS movement across TORs is not supported. To move BMS across TORs the whole VPG needs 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.
- CEM-3245 Multicast traffic originated from type-6 incapable QFX devices are duplicated by vRouters.
- 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 .

Resolved Issues

You can research limitations that are resolved with this release at:

[Resolved Issues in Contrail Networking Release 2008](#)

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 <https://userregistration.juniper.net/>.

Deprecated Issues

The following features are deprecated in Contrail Networking Release 2008.

- vRouter data plane encryption
- Public cloud vRouter as a multicloud gateway

The following feature is deprecated in Contrail Networking Release 2003.

- Installation and upgrade using Helm deployer

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