



## **Release Notes for Cisco Cloud Native Broadband Router Version 21.1**

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## CHAPTER 1

# What's New in Cisco cnBR 21.1

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- Note** Explore the [Content Hub](#), the all new portal that offers an enhanced product documentation experience.
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Cisco is continuously enhancing the product with every release and this section covers a brief description of key features and enhancements that were added. It also includes links to detailed documentation, where available.

- [New Software Features in Cisco cnBR 21.1, on page 1](#)

## New Software Features in Cisco cnBR 21.1

Cisco cnBR 21.1 supports a range of improved menu options, flexible licensing capabilities, virtualized network management microservices, intuitive diagnostic utilities, maintenance tools, and operational improvements as well. The new changes are:

- **Smart Licensing:** Introduced from Cisco cnBR 21.1 onwards, Smart Licensing is a new, flexible way of licensing to buy, deploy, track, and renew Cisco software. With Smart Licensing, you can configure, activate, and register your device. Smart Licensing establishes a pool of software licenses or entitlements that are used across your entire enterprise in a flexible and automated manner.
- **Video QAM configuration:** From Cisco cnBR 21.1 release, you can configure RPD video QAM and OOB sources without using a cBR-8 or other core. The Cisco cnBR communicates with RPDs using GCP to configure video Downstream SC QAM channels and associated multicast forward static pseudowires.
- **Log Aggregation and Management:** From Cisco cnBR 21.1 onwards, the Cisco Operations Hub provides the Audit Dashboard, Debug Dashboard and a host of other utilities for log aggregation and management

activities. You can search, visualize, and create dashboards to have macro and micro views using the various visualization techniques and customizations.

- **View and Manage SG to cnBR node assignment:** From Cisco cnBR 21.1, you have better visibility and management on the Service Groups (SG) and the worker-node that they are running on. You can also migrate SGs to other worker nodes.

**Support user configurable OFDM guard bands:** From Cisco cnBR 21.1, you can override the default guard band configuration and configure the guard band of an OFDM channel. By default, Cisco cnBR uses the default guard band, which is based on the roll-off and spacing in the OFDM channel profile.

- **Support for configuring OFDM subcarriers using Frequency Offset:** You can now also configure the OFDM subcarrier ranges using the frequency offset (freqOffset) attribute in ofdmModProfs.
- **Support SG Modification use case without deleting and readding RPD:** Starting from Cisco cnBR 21.1, Cisco cnBR Manager allows you to edit RPDs serviced by a Cisco cnBR using the Configurator interface.
- **Multiserver - STATIC scale to 5 servers at a limited performance level:** From Cisco cnBR 21.1, node failure recovery is also supported with the deployment of expansion servers.
- **IPv6 WAN Protocols:** Cisco cnBR 21.1 supports WAN protocols over IPv6. The WAN protocols consist of IPv6 BGP Agent, IPv6 DHCP Relay Agent and Proxy, and IPv6 DMIC.



## CHAPTER 2

### Caveats

- [Open Caveats for Cisco cnBR 21.1](#), on page 3
- [Resolved Caveats for Cisco cnBR 21.1](#), on page 4
- [Cisco Bug Search](#), on page 4

### Open Caveats for Cisco cnBR 21.1

| Caveat ID Number           | Description  |
|----------------------------|--|
| <a href="#">CSCvx87009</a> | The ranging pod wrongly marks down the upstream during startup                                       |
| <a href="#">CSCvx86135</a> | Default entitlements blocked when cmts-cp-mgmt-service is not ready                                  |
| <a href="#">CSCvx85151</a> | RPD Add Operations with Video Services Fails when selected port is Downstream 1 (DS-1)               |
| <a href="#">CSCvx85079</a> | [voice] making new calls failed after UCS reloads due to BTS error                                   |
| <a href="#">CSCvx85128</a> | Getting home page of Operations Hub while going to the edit mode of Cable Modem Basic Info panel und |
| <a href="#">CSCvx81709</a> | Audit log shows username field empty   |
| <a href="#">CSCvx86438</a> | Failed to move SGs from Operations Hub for the first time after fresh deployment                     |
| <a href="#">CSCvx78544</a> | CM flapping due to T4 Timeout after UCS reboot   |
| <a href="#">CSCvx77870</a> | [voice] Arris 402p calls dropped after SG moves  |
| <a href="#">CSCvx80032</a> | UCS1 reload caused some modems Offline longer than 2 minutes   |
| <a href="#">CSCvx81685</a> | Cisco DPQ3212 failed to ping after UCS reloads   |
| <a href="#">CSCvw83313</a> | No UGS US throughput if EMTA has PHS enabled   |
| <a href="#">CSCvx85084</a> | [voice] voice dropped with vswitch crash, docsis node and UCS reloads                                |
| <a href="#">CSCvu83104</a> | After Power outage, the cnBR is having issues with PTP pods sync and RPDs with late maps or no maps  |

| Caveat ID Number           | Description   |
|----------------------------|---|
| <a href="#">CSCvx87423</a> | Video QAM: Opshub UI should support IPv6 format for the Source ID and Group ID fields |
| <a href="#">CSCvx87890</a> | RPD/CM flapping after reboot the expansion server that hosts two rphymgr or BGP pods  |

## Resolved Caveats for Cisco cnBR 21.1

| Caveat ID Number           | Description  |
|----------------------------|--|
| <a href="#">CSCvw75780</a> | SNMP traps sent from Operation Hub does not have Virtual IP as Source Address                        |
| <a href="#">CSCvw75718</a> | PTP announce Interval and sync interval graphs are not showing units                                 |
| <a href="#">CSCvw75675</a> | Pod cmts-rt-ranging cmts-rt-ranging crashed during restart and recovers by itself                    |
| <a href="#">CSCvw71036</a> | RPD state incorrect for RPDs requiring default password change.                                      |
| <a href="#">CSCvw75271</a> | No DHCP offer on modems after reboot UCS due to DP unable to ping dhcprelay                          |
| <a href="#">CSCvw75778</a> | BPI+ net_access_disable state is incorrect   |
| <a href="#">CSCvw67194</a> | D3.1 modems become offline due to ofdm unable to get DB table (after infra node shutdown and CM rese |
| <a href="#">CSCvw15185</a> | Timescaledb fails to start after UCS server shutdown/restart   |
| <a href="#">CSCvw71065</a> | Operations Hub Dashboard does not load when one UCS is down  |
| <a href="#">CSCvw27020</a> | DS Traffic graph displayed wrongly in Operations Hub after delete and add RPD via Rest API           |

## Cisco Bug Search

Use the [Cisco Bug Search Tool](#) to access open and resolved bugs for a release.

The tool allows you to search for a specific bug ID, or for all bugs specific to a product and a release.

You can filter the search results by last modified date, bug status (open, resolved), severity, rating, and support cases.

Save Search Load Saved Search Clear Search Email Current Search

Search For:  Examples: CSCtd10124, router crash, etc...

Product: Series/Model  Select from list

Releases: Affecting or Fixed in these Releat

Filter Modified Date: Status: Severity: Rating: Support Cases: Bug Type: Customer Visible

Viewing 1 - 25 of 132 results Sort by  Export Results to Excel

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# CHAPTER 3

## Supported Packages and System Requirements

- [Determining the Software Version for Cisco cnBR 21.1, on page 7](#)

### Determining the Software Version for Cisco cnBR 21.1

You can view the version of the Cisco cnBR components by using the following methods:

- To view the version of the Cisco cnBR cluster component, do the following:
  1. On the Cisco Operations Hub menu, click **cnBR Manager** > **Core Management** > **Core Overview**. The cnBR Clusters pane displays all the available cnBR clusters.
  2. On the Cisco cnBR clusters that are listed, click the **i** icon next to the cluster name. Information regarding the cnBR cluster component and the version are displayed.

| Status | Name       | Version  | Namespace | Host Name       | Username | Operation |
|--------|------------|--|-----------|-----------------|----------|-----------|
| ✓      | cnBR_226 ⓘ | Version: 21.1  |           | 2.64.226.nip.io | admin ✓  | 🗑️        |
| ✓      | cnBR_110 ⓘ | COMPONENT VERSION                                      |           | 5.29.110.nip.io | admin ✓  | 🗑️        |
| ✓      | cnBR_209 ⓘ | cloud-infra-app 0.1.0-master-0103-210309073301-a5cf30a |           | 2.64.209.nip.io | admin ✓  | 🗑️        |

Showing 1 to 3 of 3 entries

Previous 1 Next

- To view the version of the Cisco cnBR Cisco Operations Hub, do the following:
  1. Click the **Help Menu**. This is represented by the lifebuoy icon on the top-right of the Cisco Operations Hub.
  2. Click **About**. Information on the Cisco Operations Hub version is displayed.

cnBR Manager .Core Management

cnBR Clusters

Status ↑↓

Showing 0 to 0 of 0 e

### Cisco Operations Hub

Packages ▾

**Operations Hub 21.1**

| COMPONENT                    | VERSION                                |
|------------------------------|--|
| opshub-data-opshub-infra-app | 0.1.0-master-0081-210309173830-617eab5 |

**cnBR Manager 21.1**

| COMPONENT                        | VERSION                           |
|----------------------------------|-----------------------------------|
| cnbrmanager-data-cnbrmanager-app | 0.1.0-master-00130-20210310025043 |

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## CHAPTER 4

# Other Important Information

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- [Cisco cnBR and Cisco Remote PHY Devices Version Compatibility](#), on page 9
- [Browser Support](#), on page 9
- [Third-Party Tools Integration](#), on page 9
- [Cisco cnBR Router Documentation References](#), on page 10
- [Contact Cisco Support](#), on page 10

## Cisco cnBR and Cisco Remote PHY Devices Version Compatibility

The versions of Cisco cnBR and RPD must be compatible. The following list provides information on the compatible Cisco cnBR and Cisco RPD versions:

- For Cisco cnBR 21.1, the supported RPD version is 9.3. You can download it from this [page](#).

## Browser Support

For the Cisco cnBR, the Cisco Operations Hub functionality is supported for the following browser versions:

- Mozilla Firefox 78 and later
- Google Chrome 83 and later
- Microsoft Edge 44 and later

## Third-Party Tools Integration

Cisco cnBR provides integration with the following third-party tools:

- **Viavi XPERTrak**: For upstream spectrum capture.

Validated Versions:

- Viavi XPERTrak: 3.1, Build:91

- Viavi RCI: 1.5.13

Following steps are required in Viavi XPERTrak for successful modeling of cnBR in XPERTrak:

1. Locate `cmts_class_factory.csv` file in `/cfg` folder XPERTrak installation directory.
2. Add the following lines to the end of file `cmts_class_factory.csv`.

```
3.0,Cisco,Cloud +CMTS,true,Cisco_31_Cmts,CiscoCBR8,ciscoRciNodeInfo
3.1,Cisco,Cloud +CMTS,true,Cisco_31_Cmts,CiscoCBR8,ciscoRciNodeInfo
```

3. Restart XPERTrak.
4. Re-sync the CMTS.

- **Incognito MAP:** For channel and service (MAC Domain) utilization reports using the IPDR interface.

Validated Versions:

- MAP: 6.5.1

## Cisco cnBR Router Documentation References

For information on Cisco cnBR, go through the following:

- [Cisco Cloud Native Broadband Router User's Guide, Release 21.1](#)
- [Cisco Cloud Native Broadband Router Operations Hub REST API Guide, Release 21.1](#)

## Contact Cisco Support

You can choose to open a ticket for any Cisco cnBR that you might encounter.

Complete the following steps to contact Cisco Support:

1. On the Cisco cnBR Cisco Operations Hub, click the **Help Menu** icon > **Contact Support**.
2. Follow the Support Case Manager wizard to open a new case for your problem.