



What's New in Cisco cnBR 21.2



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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.

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New Software Features in Cisco cnBR 21.2

Cisco cnBR 21.2 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:

Feature	Description
Cisco Cloud Native Broadband Router User's Guide, Release 21.2	
Bare Metal support	Cisco cnBR 21.2 provides for a simplified deployment and configuration, through the Bare Metal support. With the introduction of Bare Metal support, all the required software and applications for Cisco cnBR and Cisco Operations Hub installation are provided in a single release package. This eliminates any dependency on external software repositories.
Smart Licensing	From Cisco cnBR 21.2, the Smart Licensing workflows have been simplified. Device Registration, Permanent License Reservation, Specific License Reservation, and returning license reservations are now simple GUI driven workflows.

Feature	Description
Support for OOB Services	This release of Cisco cnBR supports passing OOB signals through an RPD using the SCTE 55-1 and SCTE 55-2 standards. It also supports NDF and NDR protocols for the same purpose.
Out-of-band Services Configuration	You can create and update OOB configuration templates, and save them to each RPD when you add or edit an RPD.
Profiles and Templates	From Cisco cnBR 21.2 onwards, you easily provision your detailed and repetitive tasks. The configuration needs and provisioning requirements for growing networks are complex, and Cisco cnBR offers a simplified data model, commonly known as Profiles and Templates, to enable ease of network operations. You can now easily automate a range of commonly performed tasks, such as configuring Remote PHY Device, establishing connections with cnBR clusters and other networking entities, and also bringing Cable Modems online.
Support for NDF and NDR	The NDF supports FM broadcast, DAB+ broadcast, and OOB signals. NDF digitizes the analog portion of the DS and sends it to the RPD, where it recreates the original analog portion. Whereas, NDR digitizes the analog portion of the US and sends it to the CMTS, where it recreates the original analog portion at the headend. It supports legacy OOB signals. In addition, Cisco cnBR provides SNMP support for NDF and NDR.
Support for DHCPv6 client link-layer address (RFC 6939)	This support provides the client's link-layer address in the DHCPv6 messages which are sent towards the server.
Support for 48 downstream channels per Service Group	From Cisco cnBR 21.2, DS scale has been increased to 48 SC-QAM DS channels per SG. You can configure a total of 48 SC-QAM channels and 2 OFDM channels per SG. This increase in scale of DS channels per SG allows for increased DS bandwidth as well as decreased load on each DS channel.
Support for 2 OFDM Blocks	This feature increases the support for OFDM Blocks to 2. This increase allows for up to 384 MHz of OFDM bandwidth per Service Group.
Downstream and upstream channel utilization live graphs	Downstream and upstream channel utilization live graphs are added in the traffic throughput section of the service group dashboard. You can view the utilization of the downstream and upstream channels under the service group in these live graphs.
Multiple NIC configuration on the Cisco Operations Hub for cable modem data	You can configure multiple NIC on the Cisco Operations Hub cluster that connects to CIN network, allowing the Cisco Operations Hub to poll cable modem data such as SNR and TX/RX power.
Login Banner Messages	You can create and display a message that appears as a banner on the Cisco Operations Hub login page.

Feature	Description
New dashboard home page and left navigation menu	Metrics & Dashboards page in the cnBR Manager has been renamed Dashboards and promoted to a top level Cisco Operations Hub main menu item. The Dashboards home page has been updated to include a list of Suggested and Recently viewed dashboards. Additionally, the left navigation menu on the Dashboards page has been streamlined to improve usability.
CM State History	Cisco cnBR 21.2 provides for improved access to information on online and offline Cable Modems. The Download CSV option allows you to download information on one Cisco cnBR cluster at a time. You can alternatively use the Cable Modem State History dashboard for historical information.
Customize Dashboards	You can customize Cisco cnBR and Cisco Operations Hub dashboards to analyze and visualize your data the way you want to. You can use the real-time data or the historical data for this purpose.
Kibana Queries and Data Visualization	You can create Kibana queries, retrieve data, and then customize how you want to present the queried data in Cisco cnBR.
Modem type column	Modem type column is added in the Cable Modem List table of the Cable Modem List dashboard. It shows the DOCSIS version of the cable modem.
RPD Reset	From Cisco cnBR 21.2 onwards, you can reboot the RPD operations using the RPD Reset button. Note that by using the RPD Reset option, existing services are affected.

