

Cisco Cloud Native Broadband Router

Transform converged cable access platform services

In order to address the growing needs of customers, cable operators are adding capacity and deploying new and improved services at a faster rate. To keep pace, transformations began by replacing analog systems with digital devices such as Remote PHY and Converged Interconnect Network (CIN) devices. Now a new approach is required for the cable headend.

The Cisco® Cloud Native Broadband Router (cnBR) is a containerized, virtual Converged Cable Access Platform (CCAP) designed to replicate the service capabilities of the physical platform and virtualize them into a customizable, scalable, and resilient set of microservices. The cnBR, built from the ground up for CCAP-enabled services, enables a composable set of microservices that utilize standard tools such as Kubernetes for container orchestration and Docker for creating, deploying, and running containerized applications.

The cnBR supports CMTS Core features such as DOCSIS 3.0 and 3.1, VOIP, PTP, DHCP relay, downstream and upstream resiliency, and L2VPN to deliver data and voice services.

Benefits

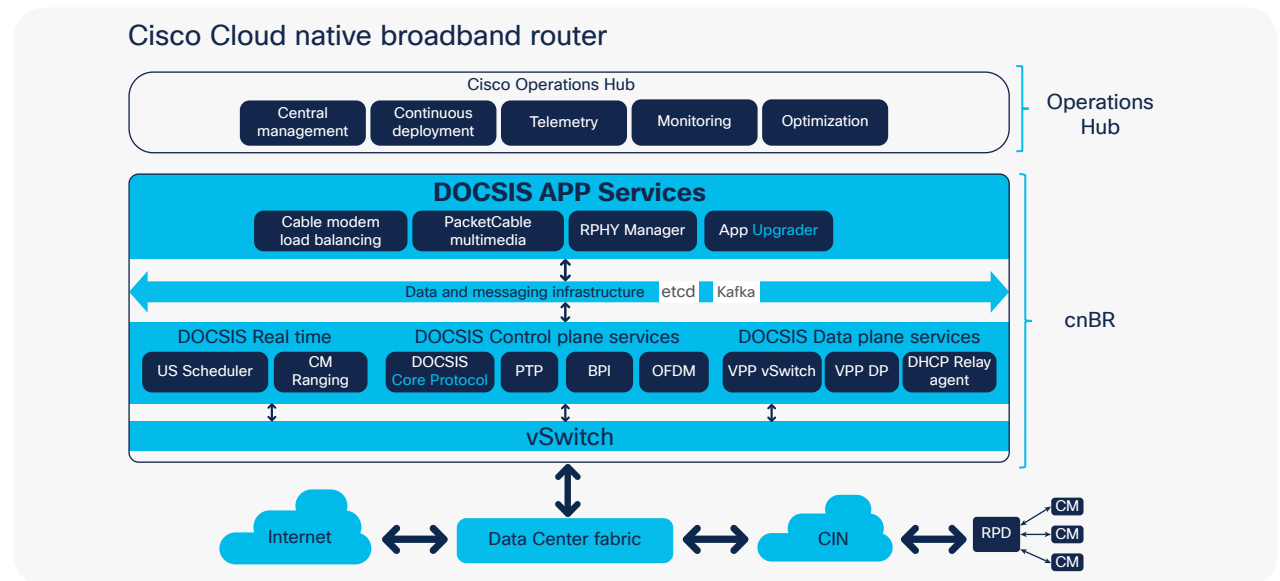
- Increase the velocity and resiliency of services by using microservices-based cloud-native design
- Scale dynamically by adding additional cnBR service containers to either new or existing clusters
- Support DevOps with open and modular software to automate and manage rapid deployments into your CI/CD process
- Automate with real-time monitoring, analysis, and remediation enabled with the Operations Hub
- Design and deploy with greater flexibility and agility using hardware-agnostic infrastructure

Virtualize your converged cabled access platform today!

Transform and virtualize your Converged Cable Access Platform today using the Cisco Cloud Native Broadband Router (cnBR) to build a highly resilient, scalable, and elastic network.

Get additional information by visiting <https://www.cisco.com/c/en/us/products/routers/cloud-native-broadband-router/index.html>.

Figure 1. Cisco Cloud Native Broadband Router Solution



What it does

Cisco Cloud Native Broadband Router is a virtualized CCAP solution built with composable, elastic, and resilient network microservices that optimize resource utilization and increase service velocity from ideation to revenue-generating deployments. Cisco cnBR supports DOCSIS 2.0, DOCSIS 3.0, and DOCSIS 3.1.

With Cisco cnBR, you can:

- Lower operational cost by transitioning your CCAP to use off-the-shelf hardware and enable elastic scaling
- Utilize the power of automation to provision deployments with increased agility and shift resources on demand
- Leverage the composable microservices to embrace a DevOps model for continuous integration and continuous development
- Reduce downtime with the available containerized framework that dynamically redeploys and schedules services in case of a failure
- Reduce total cost of ownership and capital expenditures by leveraging the Kubernetes platform for easier automation
- Simplify all aspects of the CCAP lifecycle, starting from initial deployment to real-time monitoring, software upgrades, and feature updates