

# Simplify telco cloud deployment

Build a cloud-native foundation  
with Red Hat and Dell Technologies



## Rapidly deploy a reliable, efficient telco cloud

Optimized for 5G core telecommunications cloud and distributed and centralized radio access network (RAN) architectures, Dell Telecom Infrastructure Blocks for Red Hat:

- ▶ Streamline design, testing, and deployment processes.
- ▶ Reduce risk through continuous integration testing.
- ▶ Simplify operations with integrated, engineered systems.

## Infrastructure transformation offers new business opportunities

Rapidly changing technologies create new opportunities for service providers. 5G networking, edge computing, and artificial intelligence and machine learning (AI/ML) shape how service providers build and deliver products, operate their networks, and run their businesses. Even so, adopting new network solutions to support these innovations can be difficult. In fact, 60% of network operators report that cost and complexity of infrastructure are the most limiting factors in their 5G and edge cloud deployments.<sup>1</sup>

Red Hat and Dell Technologies help you build and expand cloud-native telecommunications networks—from 5G cores to virtualized radio access networks (vRANs)—more efficiently and in less time.

## Deploy a telco cloud foundation with Dell Telecom Infrastructure Blocks for Red Hat

**Dell Telecom Infrastructure Blocks for Red Hat** are integrated, validated systems that provide a consistent, reliable cloud platform for your telecommunications workloads. Co-designed by Red Hat and Dell Technologies, these engineered systems contain the hardware, software, and automation capabilities you need to build and scale your telecommunications network. Dell PowerEdge servers—based on 4th generation Intel® Xeon® Scalable Processors—deliver compute capabilities and a range of configuration options that meet the needs of the most demanding cloud workloads. Integration of **Red Hat® OpenShift®**, **Red Hat Advanced Cluster Management for Kubernetes**, and **Red Hat OpenShift Data Foundation** with the Dell Telecom Infrastructure Automation Suite streamlines deployment and management of telecommunications infrastructure running in Red Hat OpenShift clusters. Available directly from Dell Technologies, these prepackaged solutions simplify procurement. You can rapidly and efficiently deploy a foundation optimized for telecommunications, including 5G core, operations and business support system (OSS/BSS), and centralized and distributed edge and vRAN workloads.

## Ensure reliability and availability with unified support

Dell Telecom Infrastructure Blocks for Red Hat include a unified support experience—with options to meet stringent service-level agreements (SLAs)—that covers both hardware and software issues. With Dell Technologies' carrier-grade support, you receive guaranteed response times of less than 15 minutes and service restoration times of less than 4 hours. One-call support for the solution helps minimize downtime, optimize performance, and enhance customer satisfaction.

<sup>1</sup> Heavy Reading. "5G network strategies operator survey 2023," March 2023.



Innovate on a proven foundation

Red Hat and Dell Technologies work together to provide flexible, high-performance, security-focused solutions that support cloud-native service provider network deployments.

Gain confidence with continuous validation

Red Hat and Dell Technologies perform extensive continuous integration testing of new hardware, software, and configurations to ensure that Dell Telecom Infrastructure Blocks for Red Hat meet performance, availability, and security requirements for defined service provider use cases. This also gives Red Hat and Dell Technologies valuable configuration guidance to further enhance system performance for different workloads. These joint validation activities help reduce integration costs, speed deployment of new technology investments, and consistently meet SLAs to improve your customers’ experiences.

Simplify network management

With Dell Telecom Infrastructure Blocks for Red Hat, you can automate infrastructure configuration to simplify management tasks and ensure consistency across cloud-native networks. Prebuilt automation workflows help you rapidly upgrade and scale Red Hat OpenShift clusters in response to evolving capacity demands—reducing the time and expertise needed to perform these manual tasks. The solution also supports a declarative automation approach that simplifies operations across your network. Define desired infrastructure configurations using built-in templates and let automation technology bring your infrastructure to a workload-ready state quickly and efficiently.

Increase operational efficiency

As the foundation of your cloud-native network, Red Hat OpenShift deployed on Dell Telecom Infrastructure Blocks for Red Hat increases network efficiency to reduce both cost and energy consumption. In fact, Dell Telecom Infrastructure Blocks for Red Hat can result in an 18% operational expense (OpEx) savings, 6% capital expense (CapEx) savings, and a 12% total cost of ownership (TCO) improvement over 5 years.<sup>2</sup> Plus, for a typical Tier-1 European service provider or a large North American region, Dell Telecom Infrastructure Blocks for Red Hat can reduce energy consumption by more than 138 million kilowatt-hours and carbon dioxide emissions by 98,000 metric tons.<sup>2</sup>

Learn more about our [long-standing, collaborative partnership](#).

2 ACG Research. “Examining the impact on total cost of ownership when deploying Telecom Infrastructure Blocks for Red Hat from core to RAN,” Feb. 2024.



About Red Hat

Red Hat is the world’s leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. A trusted adviser to the Fortune 500, Red Hat provides award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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