

# We're talking streamlined

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



Rapidly deploy a reliable, efficient telco cloud with ease

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 with scalable, interoperable systems.



## Infrastructure transformation offers new business opportunities

Rapidly changing technologies create new opportunities for telco 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 service providers report that cost and complexity of infrastructure are the most limiting factors in their 5G and edge cloud deployments.<sup>1</sup>

Red Hat, Dell Technologies, and Intel have teamed up to 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 pre-tested, validated, and -integrated systems that provide a consistent, flexible, reliable cloud platform for your telecommunications workloads. Created by Red Hat and Dell Technologies, and powered by best-in-class Intel solutions, these purpose-built systems contain the hardware, software, and automation capabilities you need to build and scale your telecommunications network. Dell PowerEdge servers—powered by 4th Gen 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.

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

## Full ease ahead with Red Hat, Dell Technologies, and ePlus

Dell Telecom Infrastructure Blocks for Red Hat is a set of optimized foundational building blocks designed specifically to enable telecom service providers to build and expand their cloud-native network—from the datacenter to the edge of the network. This pre-tested, -validated, and -integrated solution has been purpose-built to streamline the design, deployment, and lifecycle management of telco cloud network infrastructures. Add in expert guidance from ePlus, and you've smoothed your path to network reliability and performance.

With state-of-the-art technology, 24/7/365 carrier-grade support, and integrated and automated design, service providers can lower TCO and raise ROI, speed time to market, and free their teams to innovate.

It's a comprehensive, cloud-native telco network infrastructure solution brought to you by the experienced names you know and trust: Red Hat, Dell, and ePlus.

<sup>2</sup> ACG Research. ["Examining the impact on total cost of ownership when deploying Telecom Infrastructure Blocks for Red Hat from core to RAN,"](#) Feb. 2024.

## 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 four hours. One-call support for the entire Infrastructure Blocks for Red Hat cloud stack helps minimize downtime, optimize performance, and enhance customer satisfaction.

## Gain confidence with continuous validation

Red Hat, Dell Technologies, and Intel 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, Dell Technologies, and Intel valuable configuration guidance to further optimize system performance for different workloads. These joint validation activities help reduce integration costs and speed deployment of new technology investments, so you can consistently meet SLAs and improve your customers' experience.

## 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 five 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 while lowering carbon dioxide emissions by 98,000 metric tons.<sup>2</sup>

## Move forward with confidence

Questions? Ready to get started? Contact us today chart a custom course that makes sense for your business.

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