

Top Reasons: Dell Telecom Infrastructure Blocks for Red Hat

10

A fundamentally smarter, more flexible, and efficient way to deploy telco clouds, accelerate telecom transformation, and unlock AI innovation.

Dell Telecom Infrastructure Blocks for Red Hat provide a pre-engineered, factory-integrated foundation for deploying and managing Red Hat® OpenShift® clusters, tailored for 5G Core, OSS/BSS, edge and RAN workloads. Co-developed with Red Hat, these blocks streamline planning, design, and life cycle management, reducing deployment time and complexity. With flexible, pre-packaged solutions, they simplify procurement and ensure scalability to meet evolving telecom needs.

1 | Accelerate 5G transformation from core to edge to RAN

Dell Telecom Infrastructure Blocks for Red Hat provides a pre-engineered, horizontal cloud-native platform optimized for 5G core, edge and RAN workloads. With built-in automation and validated configurations, CSPs and NEPs can fast-track deployment timelines, enabling quicker rollouts of innovative services.

2 | Simplify operations with automation

Dell Telecom Infrastructure Automation Suite streamlines infrastructure deployment and life cycle management for Infrastructure Blocks, while Red Hat Advanced Cluster Management for Kubernetes centralizes control over Kubernetes clusters. Together, they automate complex tasks, reducing manual effort, minimizing downtime, and ensuring consistent performance.

3 | Reduce risk with continuous validation and flexible scaling

Factory integration and rigorous Release Compatibility Matrix (RCM) testing ensure seamless interoperability across hardware, software, and workloads, reducing deployment risks and simplifying multivendor integration. Additionally, Dell Telecom Infrastructure Blocks for Red Hat offer unmatched flexibility, allowing CSPs to scale from a single server to a full telco cloud. Configurations can be tailored to meet specific use cases across core, edge, and RAN environments, ensuring optimal resource utilization and a robust, reliable cloud foundation.

4 | Advanced Telemetry for Proactive Operations

Dell Telecom Infrastructure Blocks leverage advanced telemetry capabilities to power AI-driven operations (AIOps) with real-time data aggregation and filtering using the OpenTelemetry protocol. By collecting and standardizing server usage, performance metrics, and health status, CSPs gain actionable insights for day-to-day monitoring and long-term optimization. These capabilities enable advanced analytics, early issue detection, and seamless integration with AIOps tools and service assurance platforms, ensuring peak performance, reliability, and smarter operational decision-making.

5 | Unified support for the entire cloud stack

With single-call support covering Dell hardware, automation software, and Red Hat OpenShift, CSPs can resolve issues faster and eliminate finger-pointing between vendors. This unified approach simplifies troubleshooting and enhances operational efficiency.

6 | Optimize costs and boost efficiency

Dell Telecom Infrastructure Blocks for Red Hat help CSPs achieve significant cost savings by reducing CapEx and OpEx. Pre-engineered systems, automation, and efficient resource utilization lower total cost of ownership (TCO) while meeting sustainability goals with reduced power consumption.

7 | AI-ready infrastructure for innovation

With support for NVIDIA GPUs and Red Hat OpenShift AI, Dell Telecom Infrastructure Blocks for Red Hat enable CSPs to unlock AI-driven applications like predictive maintenance, network optimization, and virtual assistants. This AI-ready foundation empowers CSPs to innovate and differentiate in a competitive market.

8 | Integration with Open Ecosystems

Designed for open telecom ecosystems, Dell Telecom Infrastructure Blocks for Red Hat support multivendor environments with northbound APIs and plugins for tools like Ansible and Helm. This ensures smooth integration with existing systems and future-proofing for evolving technologies.

9 | Accelerate time-to-market

Pre-validated, factory-integrated systems eliminate the need for extensive on-site testing and configuration. CSPs can deploy telco clouds faster, enabling quicker service launches and a competitive edge in delivering 5G and edge solutions.

10 | Proven expertise and global support

Backed by Dell's decades of experience in cloud transformation, global services, and the Open Telecom Transformation Program, CSPs receive strategic guidance to confidently navigate their modernization journey. Additionally, Dell offers comprehensive services such as design, validation, and life cycle management for Infrastructure Blocks. CSPs also benefit from 24x7x365 carrier-grade support and access to Dell's Open Telecom Ecosystem Lab (OTEL) for custom testing and certification.

The time for telecom transformation is now.

The rapid evolution of 5G, AI, and rising consumer expectations are pushing CSPs to modernize their networks with open, cloud-native architectures. However, navigating this transformation can be complex and risky. Dell Telecom Infrastructure Blocks, paired with the Dell Open Telecom Transformation Program, provide CSPs with the tools and expertise to simplify and accelerate this journey. By offering pre-engineered solutions, strategic guidance, and ongoing support, Dell helps CSPs reduce complexity, mitigate risks, and achieve their modernization goals with confidence. This ensures CSPs are equipped to meet future demands while driving innovation and operational efficiency.



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