

Solution Brief

Ericsson Integrated Core on Dell Telecom Infrastructure Blocks for Red Hat

Simplifying Core Networks Transformation: How Dell Technologies and Ericsson Empower Modern Infrastructure for Advanced Core Networks

Solution Highlights



D&LLTechnologies

When it comes to deploying a 5G cloud-based infrastructure, Dell Technologies, in collaboration with Ericsson, Red Hat and Cisco, has streamlined the process. By integrating Ericsson's dual-mode 5G Core solution with Dell Telecom Infrastructure Blocks for Red Hat, we simplify the deployment, operations, and management of cloud-native environments.

- Accelerated 5G Deployment: With preintegrated systems including Ericsson Dual-mode 5G Core solution, Cisco's Nexus-based data center networking solution and Dell Infrastructure Blocks for Red Hat - reduced deployment timelines, enabling faster time-to-market.
- Enhanced Operational Efficiency: Pre validated and tested solution with automation resources simplify network operations.
- Future-Ready Flexibility: Cloud-native, modular design supports scalable and adaptable network architectures.
- Collaborative Support Model: Ensures seamless vendor management, and faster issue resolution.

Revolutionizing 5G Deployment: Simplified, Scalable, and Future-Ready Solution.

Dell Technologies and Ericsson are redefining network modernization through a strategic partnership that empowers Communication Service Providers (CSPs) to accelerate 5G deployment. By combining Dell's modern infrastructure expertise with Ericsson's leadership in mobile networks, we deliver solutions that address today's connectivity demands and set CSPs up for tomorrow's opportunities.

A key result of this collaboration is the integration of Ericsson's 5G Core along with Cisco ACI Data Center fabric with Dell Telecom Infrastructure Blocks for Red Hat offering operators a validated 5G core, without the usual associated complexities. This end-to-end solution streamlines deployment drives innovation and accelerates time to market.

Horizontal platform to host different workloads: Container-based architecture eliminates the rigid boundaries between network functions, creating a unified platform. This enables telecom operators to deploy, scale, and update services more efficiently, while reducing operational complexity and improving resource utilization across diverse workloads.

Accelerating Innovation: By providing a stable, flexible, and scalable cloud-native foundation, the joint solution empowers CSPs to develop and deploy a wide range of advanced 5G services.

Reducing Risk and Driving Cost Efficiency: co-engineered and validated with Red Hat and Ericsson - reducing risk and speeding time to value. Continuous integration validation reduces operational complexity and enables economies of scale.

Enabling Cloud-Native Operations: Horizontal networks leverage cloud-native principles, bringing the same agility and scalability that transformed enterprise IT to telecommunications networks.

This strategic transformation positions CSPs to respond quickly to market demands, deliver personalized services, and create new revenue opportunities in the 5G era.

Ericsson 5G Core and Dell Telecom Infrastructure Blocks for Red Hat: A Seamless Integration

At the heart of our collaboration is the integration of Ericsson's industry-leading dual-mode 5G Core solution, integrated with Dell Telecom Infrastructure Blocks. This pre-validated solution represents a breakthrough in simplifying 5G deployment while maintaining the performance and reliability that CSPs demand.

Agility and Automation at Scale

The solution dramatically reduces deployment timelines from months to weeks¹ through comprehensive blue-print driven orchestration and automation. Infrastructure-wide automation eliminates manual interventions, reducing human error and freeing technical teams to focus on innovation rather than routine tasks.

Seamless System Integration

Every component—from our best of breed telecom optimized Dell PowerEdge servers to Red Hat OpenShift Container Platform and Ericsson's dual-mode 5G Core along with Cisco ACI Data Center fabric - is validated as a unified solution. Continuous end to end system verification and updates mitigate risk and ensure consistent performance.

Future-Ready Flexibility

Built on open-source principles and cloud-native architectures, the solution scales with emerging network needs. Modular design enables CSPs to adapt quickly to shifting market demands without major infrastructure overhauls.

How the Solution Works in Practice

Ericsson's dual-mode 5G Core solution workloads run on the Dell Telecom Infrastructure Blocks for Red Hat - a fully integrated horizontal telco cloud stack executed on Dell Power Edge telecom-optimized servers. The built-in automation capabilities enabled by Dell Telecom Automation Suit (DTIAS) in coordination with Ericsson End to End automation, simplify the deployment, operations, and life cycle management of the network. This cloud-native foundation enables CSPs to leverage pre-built blueprints specifically designed and engineered for Ericsson dual-mode 5G Core solution, enabling faster and more reliable deployment and operations.

Ericsson Integrated Core on Dell Infrastructure Blocks for Red Hat

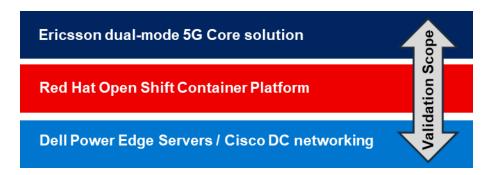


Figure 1: Ericsson Integrated Core on Dell Telecom Infrastructure Blocks for Red Hat

Dell Telecom Infrastructure Blocks provide an automated, validated, and continuously integrated foundation for deploying and managing disaggregated, cloud-native networks. It allows CSPs to obtain the benefits of an open ecosystem with the ease of working with a single end-to-end integrated solution.

The Ericsson Integrated Core on Dell Telecom Infrastructure Blocks for Had Hat includes the validation of the ACI network fabric solution from Cisco, providing a scalable, automated network fabric for seamless integration and simplified management.

In the telecom industry, cloud workloads are being deployed across far edge, edge, aggregation, regional, and central locations. Cisco Nexus Telco fabric offers a validated solution to seamlessly connect hyperdistributed telco stacks, supporting mobile, broadband, enterprise, and AI use cases.

Dell Infrastructure Blocks are engineered systems that have been designed and validated with our cloud software partners and are integrated at Dell's factory. They include automation that streamlines the deployment and lifecycle management of the telco cloud stack. And they are backed with collaborative support from Ericsson, Dell Technologies, Red Hat and Cisco.

Telecom Infrastructure Blocks for Red Hat are based on Red Hat OpenShift and Advanced Cluster Management for Kubernetes and include Dell Telecom Infrastructure Automation.

Ericsson dual-mode 5G Core solution:

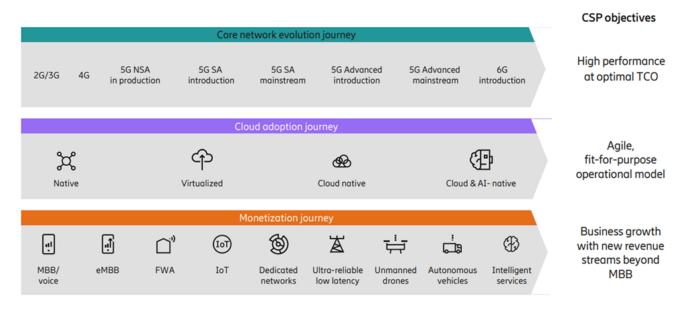


Figure 2: Ericsson core network portfolio, including dual-mode 5G Core, supporting CSP journey to new revenue streams. Source: Ericsson

The Ericsson dual-mode 5G Core solution (4G and 5G) is well aligned with the Communication Service Providers' objectives:

It enables CSPs to deploy and expand high performance Core networks with optimized Total Cost of Ownership (TCO), delivering an agile fit-to-purpose operational model.

With Ericsson Integrated Core on Dell Infrastructure Blocks, customers will be able to introduce innovative use cases, generating additional revenue streams without complexity and accelerating time to market.

A joint Support Model for Peace of Mind:

Supporting a multi-vendor stack can be challenging for CSPs, particularly when troubleshooting issues across various technology layers. The Dell and Ericsson solution is backed by a collaborative support model, providing telecom operators with a single, trusted point of contact for assistance across the full integrated solution.

Dell and Ericsson's coordinated support ensures faster issue resolution, eliminating the friction that can occur in siloed, multi-vendor environments. This collaborative approach enables CSPs to maintain the stability and performance of their vital infrastructure, while focusing on delivering superior services to their subscribers.

Transformative Benefits for CSPs

The integrated solution delivers measurable business outcomes that extend far beyond technical performance metrics.

Accelerate the adoption of new technology. We help CSPs by streamlining design, testing, deployment and management of 5G telco cloud architectures. This means CSPs will be able to fast-track innovation and competitive differentiation. This speed-to-market advantage is crucial in competitive markets where early 5G service availability drives customer acquisition and retention.

Minimize risks with our comprehensive approach: not only do we test and validate the Ericsson dual-mode 5G Core solution on Dell Infrastructure Blocks for the Red Hat stack, but we also conduct continuous integration and lifecycle verification to ensure long-term compatibility and support.

The Dell Telecom Infrastructure Automation Suite's advanced automation capabilities, combined with Ericsson's end-to-end automation, deliver a fully automated, orchestrated, cloud stack. This powerful synergy enables CSPs to simplify operations, reduce complexity, and accelerate cloud deployments.

Enhanced Operational Efficiency

The Ericsson Integrated Core on Dell Infrastructure Blocks has undergone comprehensive end-to-end validation, covering aspects such as interface compatibility, end-to-end automation, and lifecycle management. This ensures streamlined operations and minimizes the time required for proof of concept, configuration, and network testing and verification. These efficiencies lead to lower operational costs and enhanced service quality.

Cost-Effective Scaling

The solution minimizes downtime, reduces resource requirements, and supports efficient multivendor network expansions, enabling faster return on investment. CSPs can scale their infrastructure in response to demand without proportional increases in operational complexity.

Superior Customer Experiences

The combination of high-performance infrastructure, advanced automation, and unified support enables CSPs to deliver dynamic, responsive services. Network slicing, edge computing, and other advanced 5G use cases can be deployed quickly and reliably, creating new revenue opportunities and improving customer satisfaction.

Your Path Forward

The transformation to 5G-enabled horizontal networks doesn't have to be complex or risky. With the integrated Ericsson 5G Core and Dell Telecom Infrastructure Blocks for Red Hat, including Cisco networking capabilities, our customers have a proven path to network modernization.

Whether you're planning your first 5G deployment or expanding existing networks, our collaborative approach ensures you have the expertise, technology, and support needed to succeed. The future of telecommunications is built on partnerships that bring together the best of multiple worlds—and that future is available today.



Learn more about

<u>Dell Telecom Infrastructure Blocks</u>

for Red Hat



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