

Simplify and Accelerate Deployment of VNFs

Dell EMC Ready Architectures for Red Hat® OpenStack® Platform provide proven, high-confidence solutions for the telecommunications industry

In response to 5G, Internet of Things (IoT) and other emerging applications, communications service providers (CSPs) are moving away from vertically integrated platforms that are rigid and unforgiving, toward disaggregated components solutions that bring greater flexibility and infrastructure agility.

While this shift ushers in new challenges in terms of deployment and management complexity, Dell Technologies and Red Hat® have joined forces to simplify and accelerate deployment and lifecycle management, helping CSPs transform on their terms — and with a high degree of confidence.

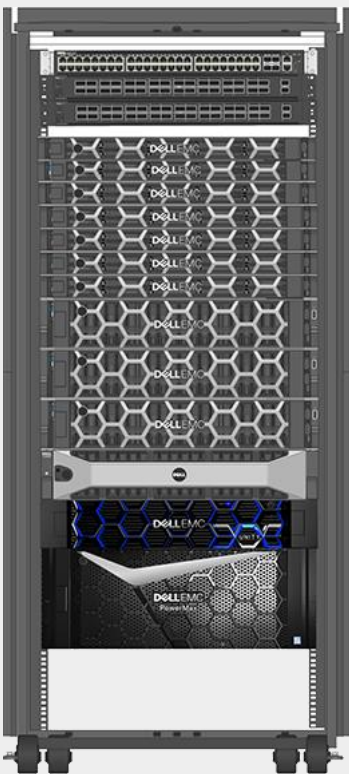
Ready Architectures designed for service providers

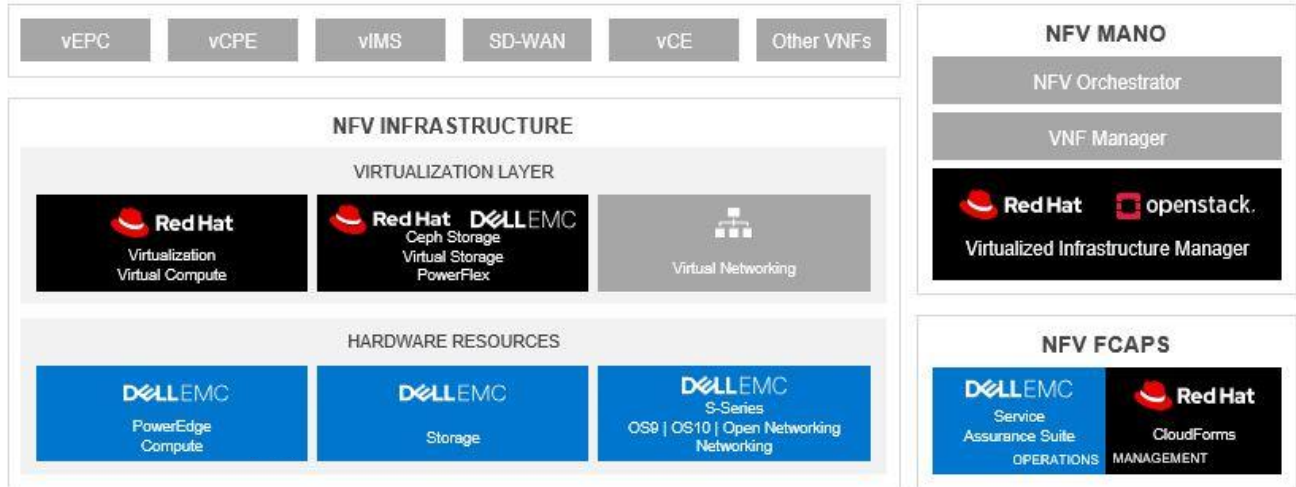
Together, Dell Technologies and Red Hat deliver ready-to-use solutions optimized for the telecommunications industry. These reference architectures reduce customer time to value, easing the effort to procure, setup and deploy OpenStack® solutions optimized for network function virtualization (NFV) workloads. They also provide CSPs the freedom to create an open platform for workloads.

The **Dell EMC Ready Architecture Guide** gives you freedom to select solution components suited for your virtual network function (VNF) or workload requirements. We offer a broad range of options — built on Dell EMC PowerEdge servers, Dell EMC PowerSwitch networking and Dell EMC storage hardware options — that are pre-engineered and validated with Red Hat OpenStack Platform. These reference architectures detail optimized configurations for hardware design, infrastructure nodes, compute nodes, storage nodes, network design and software layout.

On the software side, **Red Hat OpenStack Platform** relies on Red Hat Enterprise Linux® for performance, security, hardware enablement, networking, storage and other primary services. The Red Hat OpenStack Platform delivers an OpenStack distribution with fault tolerance, scalability and core-to-edge expansion.

This solution utilizes [OpenStack Ironic](#), also part of the Red Hat distribution, for bare-metal configuration/provisioning and lifecycle management.





Dell Technologies enhancements to Red Hat OpenStack Platform

- Additional software defined storage options with Dell EMC PowerFlex
- Single solution for core, edge and hyper-converged infrastructure deployments
- Purpose-built server for telecom and edge use-cases with the PowerEdge XE2420
- JetPack automation toolkit streamlines deployment of OpenStack

Key solution benefits

- **Freedom to pick and choose** infrastructure components for your specific VNF or workload requirements.
- **Peace of mind** with ready-to-use solutions that simplify deployment and minimize risk.
- **Proven interoperability** with solutions co-engineered and rigorously tested and validated for carrier-grade performance.
- **Investment protection** with long-life Intel® Xeon® processors and AMD EPYC™ processors in PowerEdge R-Series and XE-Series servers.
- **Optimized configurations** of hardware, Linux and OpenStack for NFV use cases.
- **No vendor lock-in** with open technologies that enable access to components from a wide variety of commercial third-party vendors.

Deploy in hours instead of days

Automate your OpenStack deployment with the JetPack automation toolkit for fast, repeatable results every time. Cut deployment times from days, when doing manual installations, to roughly 3 hours with JetPack automation for a full rack.¹

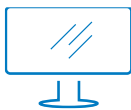
¹ Based on Dell EMC internal lab testing, along with Red Hat engineering, it has been determined that utilizing the co-engineered automation toolset JetPack, that the time to deploy a Dell EMC Ready Architecture environment goes from days to hours. Results are based on time spent in the lab performing both manual and automated deployments.

Why choose Dell EMC Ready Architectures for Red Hat OpenStack Platform?

We recognize that transformation is a huge undertaking for any organization, especially for service providers dealing with complex network requirements. That's why we're providing you with viable options that simplify the deployment of VNFs — options based on open-source standards and your choice of infrastructure components. More than that, though, we deliver peace of mind at a time when change can be unsettling. We do this through:

1. **Our longstanding partnership.** Dell Technologies and Red Hat have worked closely over the last 20 years to continually refine, improve, optimize and integrate all solution components.
2. **World-class and unified support.** With solutions that are jointly engineered and validated, you can turn to Dell Technologies or Red Hat — again, your choice — for consulting, deployment and design support.
3. **Customizable solutions.** While these Ready Architectures are prescriptive in nature, you can also customize solutions based on your unique VNF or workload requirements.
4. **Trusted and certified components.** Our solutions adhere to ETSI standards and governance initiatives shaping the NFVI ecosystem.

Our solution partner



[Learn more](#) about Dell EMC Ready Architectures for Red Hat OpenStack Platform.



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