# **DC**



READY SOLUTIONS FOR SERVICE PROVIDERS - SOLUTION BRIEF

# DELL EMC NFV READY BUNDLE FOR RED HAT

THE CHANGING COMMUNICATIONS MARKET

Data from mobile devices will reach:

## 49 exabytes monthly

By 2021, data emanating from mobile devices will reach 49 exabytes monthly<sup>1</sup>. Communications Service Providers (CSP) need to rapidly scale up their capability and meet this growing demand. However, the current network architecture comprises of expensive hardware-based appliances with software tightly embedded into them. This not only makes the network rigid and fragmented, but also expensive with limited scalability.

Network functions virtualization (NFV) can help you overcome these issues by increasing infrastructure flexibility, efficiency, and scalability — while also reducing costs and lowering innovation risks. Dell EMC and Red Hat provide a proven, adaptable infrastructure for NFV environments. Based on open standards and engineering collaboration, the Dell EMC NFV Ready Bundle for Red Hat delivers exceptional scalability and agility in an integrated, optimized, and cost-effective package.

#### Dell EMC NFV Ready Bundle for Red Hat Overview

The Dell EMC NFV Ready Bundle for Red Hat is a turnkey solution optimized to simplify and accelerate production deployments. With this solution, Dell EMC has built a fully integrated and validated solution that enables service providers to immediately launch their own services on top of this NFV platform, minimizing, if not eliminating, the need to apply engineering resources to develop their own infrastructure.

The Dell EMC NFV Ready Bundle for Red Hat combines hardware, software, and Dell EMC engineering and is designed to create a more flexible, scalable, and agile platform for CSPs. It includes open standards-based Dell EMC cloud infrastructure hardware (compute, networking) and Red Hat OpenStack Platform.

The solution is pre-validated with Red Hat OpenStack Platform software, and it encompasses both hardware and software. This specific software is optimized for Dell EMC cloud infrastructure. The pre-validated solution minimizes adoption time and significantly reduces time to service from weeks to days/hours. In addition, the solution provides carrier-grade reliability to meet SLA requirements.

JetPack Automation Tool Kit is included that manages the hardware configuration of the Solution Admin Host (SAH) node as well as managing the automated hardware discovery, configuration, and software deployment for the rest of the cluster. This tool kit enables the deployment of the Red Hat OpenStack cluster in hours, rather than days.

At its core, Red Hat OpenStack Platform includes the Kernel-based Virtual Machine (KVM) hypervisor, Open vSwitch (OVS) and Neutron plugins as well as Cinder, Glance, and Swift OpenStack storage modules. Deploying Red Hat Enterprise Linux (RHEL) as host nodes and virtual machines will allow the gaining performance, security, and operational advantages.

#### A Proven, Optimized NFV Infrastructure

To promote cost-effectiveness, agility, innovation and interoperability, the European Telecommunications Standards Institute (ETSI) has proposed a modern NFV Infrastructure based on open technologies and architectures.

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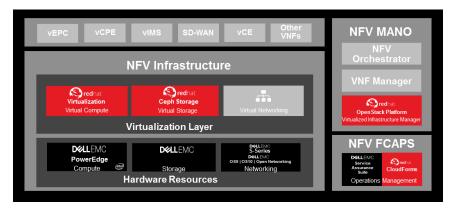


Figure 1: Dell EMC NFV Ready Bundle for Red Hat

In Figure 1, the Dell EMC NFV Ready Bundle for Red Hat integrates all of these components into a flexible, customizable building block. Dell EMC and Red Hat co-engineered this infrastructure for optimized performance, security, and stability. Plus, the companies continue to work together to incorporate the newest technology and business innovations into the solution so you can confidently keep pace with your evolving requirements.

### Why Choose Dell EMC NFV Ready Bundle for Red Hat?

The Dell EMC NFV Ready Bundle for Red Hat offers several customer benefits to help CPSs rapidly implement Dell EMC cloud infrastructure hardware and Red Hat OpenStack Platform software jointly:

- **Ready-to-use solution**: The solution has been fully engineered, validated, tested and documented by Dell EMC. This decreases your investment and deployment risk, and it enables faster deployment time.
- **Ease of ordering**: The full bundle is orderable from Dell EMC. No need to purchase Red Hat OpenStack Platform software separately.
- Long lifecycle deployment: The solution includes long-life Intel® Xeon® processors which reduces your investment risk and protects your investment in the solution for the long-term.
- **Collaborative support**: Dell EMC provides a single point of contact for any issues related to Red Hat and will work closely with Red Hat on behalf of the customer for resolution.
- World-class professional services: The solution includes Dell EMC and Red Hat professional services that spans consulting, deployment, and design support to guide your deployment needs.
- **Customizable solution**: The solution is prescriptive, but it can be customized to address each customer's unique virtual network function (VNF) workload requirements.

#### Conclusion

The Dell EMC NFV Ready Bundle for Red Hat is a ready-to-operate solution for CSPs. Pre-validated with Dell EMC cloud infrastructure hardware and Red Hat OpenStack Platform, it reduces the time it takes to procure, validate, and integrate components. With the bundle, CSPs can accelerate infrastructure virtualization and NFV adoption.

#### **Dell EMC Ready Solutions for Service Providers**

The Dell EMC Ready Solutions for Service Providers offer a simple and reliable path to identify and acquire tested and validated solutions aligned to CSP workloads so that you can accelerate innovation, reduce risk and lower the total cost of ownership. The Dell EMC Ready Solutions for Service Providers delivers hassle-free, confidence-inducing, packaging of best-of-breed disaggregated components to help CSPs get up and running quickly.

From fully systems delivered with full lifecycle support, to reference architectures and bundles with pre-constructed templates, tools and documentation that serve as starting points for your own custom built solutions, you can count on Dell EMC to help you deliver better outcomes. Services and support from Dell EMC and channel partners complement



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