



# DEPLOY AN ADAPTABLE NFV INFRASTRUCTURE FROM DELL EMC, RED HAT, AND INTEL

SOLUTION BRIEF



Mobile data traffic will grow by

**10x**

and the number of global mobile broadband subscriptions will reach

**7.7 billion**

by the end of 2021.<sup>1</sup>

Network functions virtualization helps communications service providers take advantage of new market opportunities faster and more efficiently while cutting costs and preparing their infrastructure for the future.

Based on industry-leading components and open source standards, Dell EMC, Red Hat, and Intel deliver a proven, integrated foundation for your NFV environment. With this consistent, uniform building block and a large ecosystem of certified partner technologies, you can create a flexible NFV infrastructure that helps you keep pace with the evolving communications market.

## NETWORK FUNCTIONS VIRTUALIZATION TRANSFORMS COMMUNICATIONS

By 2021, mobile data traffic is expected to increase tenfold.<sup>1</sup> This presents a challenge for communications service providers, as the cost to support data traffic is increasing rapidly but the revenue from data services is growing much more slowly. Rigid, costly, and limited legacy communications infrastructures can't keep up with today's business demands and impede your ability to innovate and compete in a crowded market.

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, Red Hat, and Intel provide a proven, adaptable infrastructure for NFV environments. Based on open source standards and engineering collaboration, the Dell EMC + Red Hat® NFV Solution delivers exceptional scalability and agility in an integrated, optimized, and cost-effective package.

## BUILD YOUR NFV INFRASTRUCTURE WITH INDUSTRY LEADERS

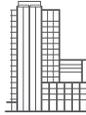
Dell EMC, Red Hat, and Intel provide proven, adaptable solutions to the communications industry. Through co-engineering and open community leadership, the companies are helping the communications industry move from proprietary infrastructures that are vertically oriented to flexible, scalable, and open source infrastructures that are horizontally oriented. Based on Dell EMC's world-class converged infrastructure offerings, Red Hat's open source software stack, and Intel's high-performance processors, this solution provides a consistent NFV environment that helps communications providers make a smooth and successful transition.

As a key contributor in the enterprise computing shift from mainframe to client-server, Dell EMC brings deep experience in datacenter transformation to the communications industry. Dell EMC's converged infrastructure offering for NFV includes Dell EMC PowerEdge servers, high-performance storage, open networking, and low-level software. Built on open industry standards, the Dell EMC + Red Hat NFV Solution gives you increased interoperability, flexibility, and choice.

Red Hat, the expert in making open source technologies safe, secure, and consumable for production use, delivers the entire core software stack needed for NFV. Red Hat's open source, integrated software stack delivers better interoperability, stability, and security than fragmented solutions. Outstanding scalability, performance, and security combine with simplified deployment and high availability to form an ideal software infrastructure for NFV.

In addition to providing high-performance, secure processors for the NFV solution, Intel collaborates with industry partners to simplify and speed NFV and software-defined networking (SDN) technologies using the Intel® Open Network Platform (Intel ONP) reference architecture. The Intel ONP defines a common infrastructure and test framework to evaluate and compare NFV infrastructure solutions to help the industry advance more quickly and easily.

<sup>1</sup> Ericsson, "Ericsson Mobility Report," June 2016.



## ABOUT RED HAT

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.

**NORTH AMERICA**  
1 888 REDHAT1

**EUROPE, MIDDLE EAST,  
AND AFRICA**  
00800 7334 2835  
europe@redhat.com

**ASIA PACIFIC**  
+65 6490 4200  
apac@redhat.com

**LATIN AMERICA**  
+54 11 4329 7300  
info-latam@redhat.com



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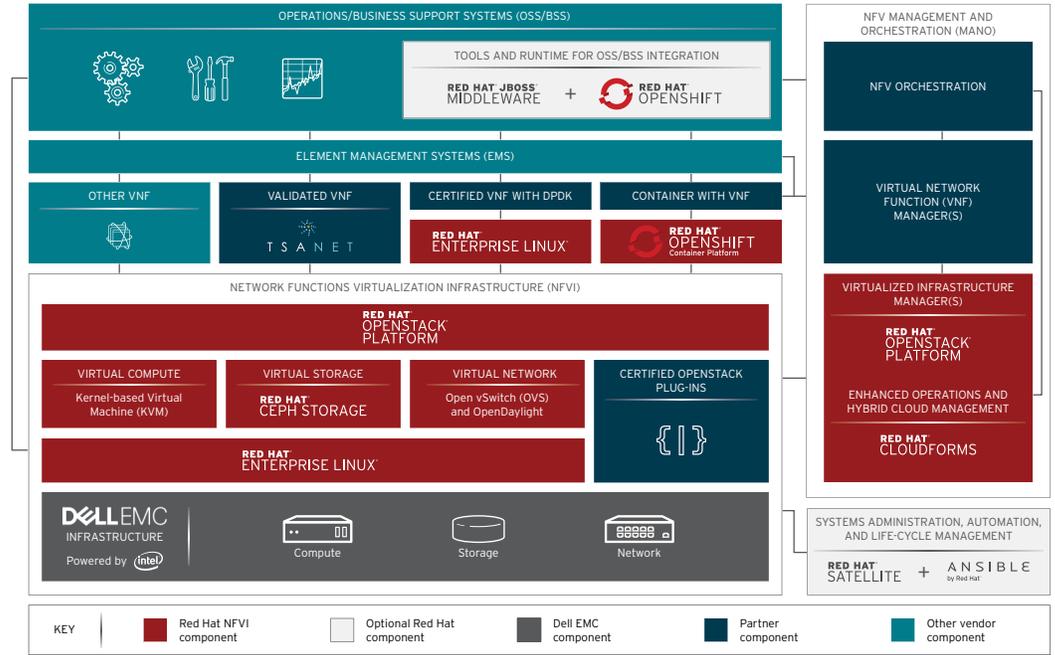


Figure 1. Dell EMC, Red Hat, and Intel deliver a proven, open, integrated solution for NFV environments. The companies foster large certified partner ecosystems that allow you to easily customize your NFV infrastructure.

Together, Dell EMC, Red Hat, and Intel foster broad certified partner ecosystems that help you customize your NFV environment with the top virtual network functions (VNFs) and orchestration and management tools available. Additionally, professional services based on industry best practices can help you build a stable, secure NFV environment faster and operate it more efficiently.

## A PROVEN, OPTIMIZED NFV INFRASTRUCTURE

To promote innovation and interoperability, the European Telecommunications Standards Institute (ETSI) has proposed a next-generation NFV infrastructure based on industry standards. In Figure 1, the Dell EMC + Red Hat NFV Solution 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 the evolving communications industry.

## CONCLUSION

In the face of growing demands and diminishing returns for data services, NFV allows you to operate flexibly, efficiently, and cost-effectively. Dell EMC and Red Hat deliver a proven, optimized, open source foundation for your NFV environment for today and tomorrow. Contact your Dell EMC or Red Hat representative to learn more about modernizing your communications infrastructure with a consistent, adaptable NFV foundation.

Learn more at [dell.com/nfv](http://dell.com/nfv) and [redhat.com/nfv](http://redhat.com/nfv).

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