DELL EMC

redhat.

SOLUTION BRIEF

MINIMIZE TIME TO PRODUCTION FOR CONTAINERIZED APPLICATIONS

Accelerate container platform deployment with a proven reference architecture using Intel-based Dell EMC infrastructure and Red Hat OpenShift Container Platform.

CONTAINERS SUPPORT BUSINESS NEEDS

45% of surveyed IT professionals say that they use container technologies today.[1]

Red Hat OpenShift Container Platform provides an enterprise-grade application development environment for building, deploying, and improving applications quickly and efficiently.

Organizations using Red Hat OpenShift for application development experience:[2]

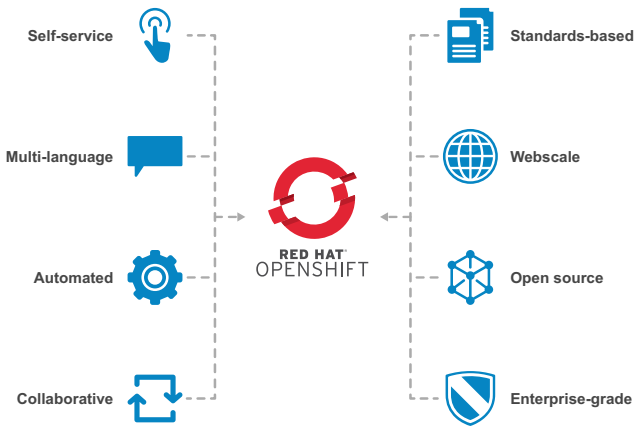
- **66%** faster development life cycles.
- **35%** less staff time per application developed.
- **38%** lower infrastructure and platform costs.

Container adoption is growing

Applications are at the core of modern, digital businesses. To support faster application development and deployment, many IT organizations are turning to new cloud- and container-based technologies. Container platforms simplify, speed up, and orchestrate application development and deployment. As a result, 45% of surveyed IT professionals say that they use container technologies today.[1]

Dell EMC, Red Hat, and Intel offer a proven reference architecture that delivers:

- A complete, integrated container environment, including hardware and software.
- High availability operations, persistent storage, automated processes, and horizontal scalability.
- Bare-metal, on-premise infrastructure for production and dev/test use.
- Accelerated delivery of stateless, cloud-based applications.
- Enterprise-grade Kubernetes container orchestration.



Red Hat OpenShift Container Platform provides an enterprise-grade foundation for provisioning, managing, and scaling container-based applications.

1 *"2017 Container and Cloud Orchestration Report". SDxCentral. 2017.* sdxcentral.com/reports/container-cloud-orchestration-devops-download-2017.

2 *"The Business Value of Red Hat OpenShift." IDC. October 2017.* redhat.com/en/resources/The-Business-Value-of-Red-Hat-OpenShift.

intel

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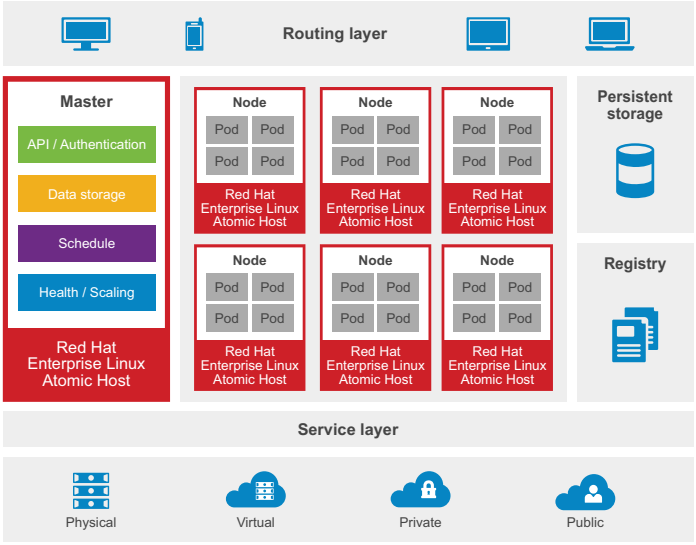
Support modern business requirements with containers

Not every IT organization has the time or resources to research, integrate, and test all of the components required to deploy a customized container infrastructure. Together, Dell EMC, Red Hat and Intel take the guesswork and risk out of container platform deployment with a complete, integrated reference architecture. This enterprise-grade container environment streamlines application development, deployment, and management, allowing you to release new applications and services quickly, efficiently, and at scale.

Streamline deployment with a proven architecture

The Dell EMC, Red Hat, and Intel reference architecture provides guidance for building a highly available, on-premise, container-based application development environment using integrated Dell EMC infrastructure, Red Hat software, and Intel processors, storage, and networking.

Running in a cluster of 15 servers, each component in the predefined bill of materials provides key functionality.



The Dell EMC, Red Hat, and Intel reference architecture helps you deploy an on-premise container-based application environment faster.

- Dell EMC PowerEdge R640 servers—distributed among three master nodes, two infrastructure nodes, six application nodes, and one bastion node using a leaf-spine network topology—scale easily and deliver optimized performance.
- Dell EMC PowerEdge R740xd servers serve as high-performance storage nodes.
- Intel Xeon Gold 5115 and 6140 processors supply up to 18 cores and 36 threads—and memory speeds up to 2666 MHz—to support demanding application workloads.
- Intel SSDs deliver high-performance, highly available storage.
- Intel Ethernet Converged Network Adapters supply high-speed, low-latency networking.
- Red Hat OpenShift Container Platform 3.9 provides an enterprise-grade, Kubernetes-based container environment with native architecture, process, platform, and service integration.
- Red Hat container-native storage, based on Red Hat Gluster Storage, provides high-performance, persistent storage for container environments.
- Red Hat Ansible Automation streamlines installation and bare-metal provisioning for fast, predictable set up of both predefined and customized architectures.

Learn more

Container technologies can help your organization support modern digital business requirements. Dell EMC, Red Hat, and Intel offer a validated reference architecture that speeds implementation of an enterprise-grade container environment, letting you focus on developing innovative applications to deliver business value.

The Dell EMC, Red Hat, and Intel reference architecture is expected to be released in June 2018. Find more information at dell.com/learn/us/en/05/campaigns/dell-and-redhat-ga-partners and redhat.com/openshift.

Learn more about Dell EMC partnerships

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