

BUILDING A PATH TO MODERN DATACENTER OPERATIONS

Virtualize faster with Red Hat Virtualization Suite



TABLE OF CONTENTS

Modernize your IT with virtualization..... Page 2

Red Hat Virtualization Suite overview Page 3

Common use cases Page 4

 Server consolidation..... Page 4

 Performance-sensitive workloads Page 5

 Development and test environments..... Page 6

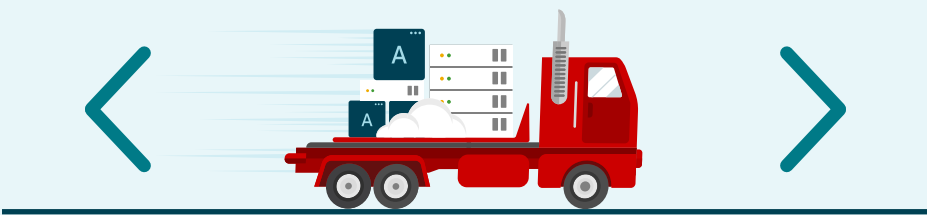
 Multi-hypervisor and hybrid environments..... Page 7

 Technical workstations..... Page 8

Learn more Page 9

NAVIGATING THIS E-BOOK

Select a topic from the table of contents to the left—or use the forward and back arrows in the bridge graphic at the bottom of the page.



MODERNIZE YOUR I.T. WITH VIRTUALIZATION

The core of modern datacenters is virtualized

Virtualization platforms play a key role in modern datacenters as the foundation for traditional, cloud-native, and container-based workloads. Within IT modernization initiatives, virtualization helps improve efficiency, free resources, boost performance, enhance security, and cut costs. Additionally, open platforms can deliver the same features as proprietary solutions with more choice, flexibility, and innovation—all at lower cost.

Red Hat® Virtualization Suite lets you deploy a high-performance, enterprise-grade, open virtual environment quickly and easily. This bundle combines the leading Kernel-based Virtual Machine (KVM) hypervisor and advanced virtual machine (VM) management tools.

>80%

of datacenter workloads are virtualized today.

IDC, "THE CRITICAL ROLE OF VIRTUALIZATION IN MODERN DATACENTERS, HYBRID CLOUDS, AND CONTAINERS," JULY 2017.

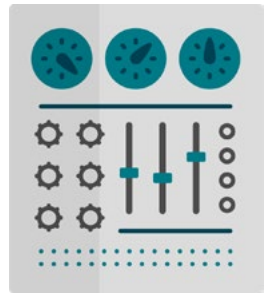
High-performance, enterprise-grade, easy-to-use virtualization platform

Unified orchestration and automation tools for hybrid infrastructure management



RED HAT VIRTUALIZATION SUITE

Virtualize faster and gain ongoing operational benefits



Centralize management across federated deployments.



Gain insight and intelligence into your virtualized infrastructure.



Build a workflow for software-defined networking (SDN).



Enforce compliance with corporate and regulatory policies.



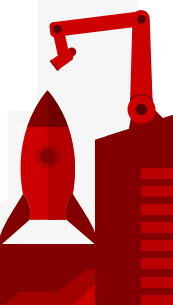
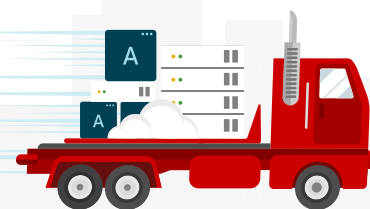
Create automated, self-service delivery processes.



Optimize capacity planning and resource sizing.



Automate processes across your environment.



SERVER CONSOLIDATION

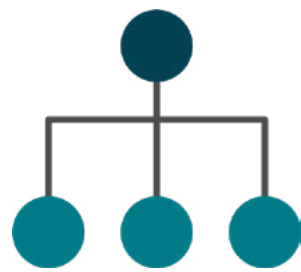
Overcome IT complexity with virtualization

» CHALLENGE

Complex and proprietary IT environments can suffer from server and VM sprawl, infrastructure inefficiency, and high licensing costs.

» SOLUTION

Consolidate physical servers and proprietary virtualization platforms onto Red Hat Virtualization Suite to unify management, reduce licensing costs, and improve technology choice.



CONSOLIDATE MORE WORKLOADS

Achieve consolidation ratios of 10:1 and reduce server rackspace by up to 75%.¹



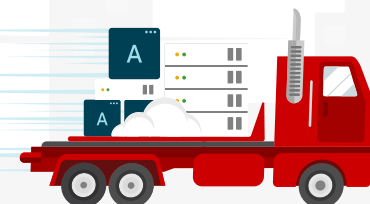
STREAMLINE MANAGEMENT

Unify management of physical, virtualized, cloud, and container-based resources.



REDUCE COSTS AND LOCK-IN

Save with subscription-based pricing and cross-platform interoperability.



¹ "CTOS improves agility for faster business expansion with Red Hat," Red Hat, 2017.
redhat.com/en/resources/ctos-case-study.

PERFORMANCE-SENSITIVE WORKLOADS

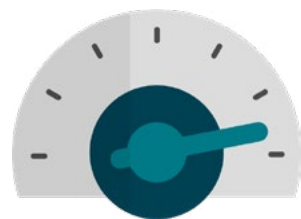
Deliver performance and availability to critical applications

» CHALLENGE

Workloads with elevated performance and availability requirements are often deployed on isolated infrastructure that is inefficient, difficult to scale, and costly.

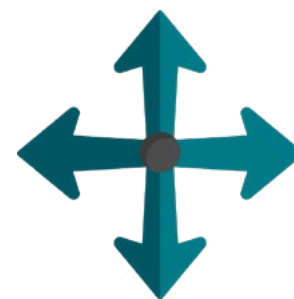
» SOLUTION

Virtualize performance-sensitive workloads on a shared infrastructure based on Red Hat Virtualization Suite to eliminate redundancies, increase resource use, and scale easily.



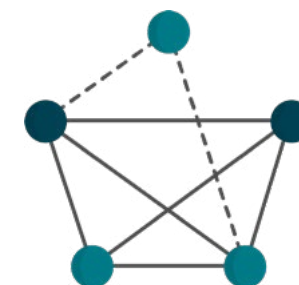
BOOST WORKLOAD PERFORMANCE

Achieve workload performance comparable with bare-metal systems.



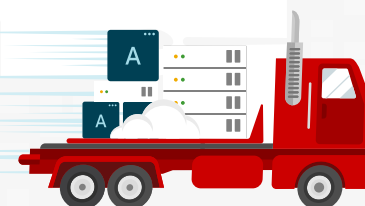
SCALE QUICKLY AND ECONOMICALLY

Expand to more than 500 virtual hosts and 5,000 VMs per environment.



OPTIMIZE WORKLOAD PLACEMENT

Strategically place and move VMs to maximize performance and availability.



DEVELOPMENT AND TEST ENVIRONMENTS

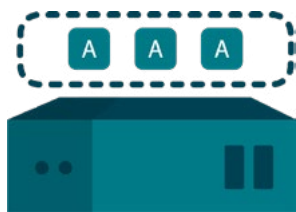
Give developers the resources they need, faster

» CHALLENGE

Inefficient infrastructure can slow delivery of resources to developers, delaying the entire development cycle and often resulting in the use of unapproved public cloud resources.

» SOLUTION

Optimize your infrastructure using Red Hat Virtualization Suite to increase efficiency, provide self-service portals, and track and control resource use and costs.



DELIVER RESOURCES FASTER

Provide automatically provisioned resources to developers through self-service catalogs.



TRIM COSTS

Enforce quotas automatically and track and allocate costs to user groups.



REDUCE SHADOW I.T. RISKS

Gain visibility and build a security-focused, non-disruptive environment.



MULTI-HYPERVISOR AND HYBRID ENVIRONMENTS

Lay the foundation for hybrid IT approaches

» CHALLENGE

Hybrid IT approaches can be challenging to adopt, requiring optimization of current infrastructure while building a way to move to cloud-based operations.

» SOLUTION

Use Red Hat Virtualization Suite as a foundation for seamless open hybrid and multi-hypervisor environments that integrate with cloud and container platforms, as well as other hypervisors.



ADOPT A MULTI-HYPERVISOR STRATEGY

Easily migrate workloads from other hypervisors and reduce dependency on a single hypervisor vendor.



BUILD A PATH TO PRIVATE CLOUD

Deliver cloud-like services on traditional infrastructure and add cloud and container technologies over time.

TECHNICAL WORKSTATIONS

Protect and contain data and core systems in your datacenter

» CHALLENGE

Technical and graphics-intensive workstations used for visualization applications in different locations introduce management and security challenges for IT operations teams.

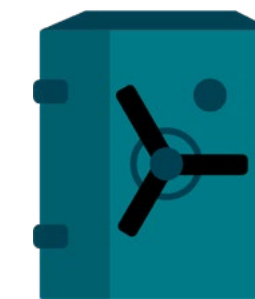
» SOLUTION

Virtualize workstation environments with Red Hat Virtualization Suite to simplify administration, improve access and data control, and reduce hardware costs.



DELIVER A HIGH-QUALITY USER EXPERIENCE

Provide a seamless experience with fast remote rendering, native USB redirection, and performance optimization.



IMPROVE SECURITY AND CONTROL

Unify environments and operations to centrally locate, control, and access data and enforce compliance.

LEARN MORE

redhat.com/virtualization
redhat.com/cloudforms