

# RED HAT ENTERPRISE LINUX OPENSTACK PLATFORM

DATASHEET

Red Hat Enterprise Linux OpenStack Platform lets you create, deploy, and scale a secure and reliable public or private OpenStack cloud.

## READY FOR OPENSTACK?

As a community project, OpenStack is being developed and changing quickly. Red Hat removes risk by providing long-term stability through an enterprise software life cycle and provides world-class, production-level support from a trusted technology partner.

## LOOKING FOR AN ON-RAMP TO OPENSTACK THAT WILL ALLOW YOU TO USE YOUR EXISTING VIRTUALIZATION INVESTMENTS WHILE MOVING TO THE CLOUD?

Consider Red Hat Cloud Infrastructure.

Learn more:  
[www.redhat.com/rhci](http://www.redhat.com/rhci)

More information OpenStack:  
[www.openstack.org](http://www.openstack.org)

Red Hat cloud solutions:  
[redhat.com/products/cloud-computing](http://redhat.com/products/cloud-computing)



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## PRODUCT OVERVIEW

Red Hat® Enterprise Linux® OpenStack® Platform is an integrated and open foundation for creating, deploying, and scaling a secure OpenStack private or public cloud. This enterprise-class cloud platform combines the power of Red Hat Enterprise Linux with Red Hat OpenStack technology, giving you the competitive advantage to quickly meet customer demands without compromising on availability, security, or performance.

OpenStack services depend on the underlying Linux it is deployed on, to provide:

- Access to server hardware
- A hypervisor for virtual machines
- Access to storage systems
- Driver compatibility
- System performance, scalability, and security

Your OpenStack cloud deployment may only be as capable as the Linux you deploy it on. If your organization is considering an OpenStack cloud deployment, then you should not only consider which OpenStack distribution you choose, but also which Linux platform you deploy on.

Red Hat Enterprise Linux OpenStack Platform delivers a co-engineered and integrated foundation for building OpenStack clouds, bringing together trusted Red Hat Enterprise Linux and Red Hat OpenStack technology.

## FEATURES AND BENEFITS

By choosing Red Hat Enterprise Linux OpenStack Platform, you can take advantage of the fast pace of innovation of the OpenStack project, while maintaining a stable platform for production deployment. With Red Hat Enterprise Linux OpenStack Platform, you can concentrate on customizing and developing code on top of OpenStack, while Red Hat maintains the core OpenStack code and the underlying Linux platform on which it depends.

## DEPLOY OPENSTACK WITH CONFIDENCE

Release compatibility

Each release of Red Hat Enterprise Linux OpenStack Platform aligns with a community release (e.g., Icehouse), including all the core and incubating projects that are associated with that community release. Red Hat maintains strict API compatibility, so any code developed against a particular OpenStack release will run on its corresponding Red Hat Enterprise Linux OpenStack Platform release.

## OPENSTACK TECHNOLOGY LEADERSHIP FROM RED HAT

As the top corporate contributor to the OpenStack project for the last three releases<sup>1</sup>, Red Hat gives you a competitive advantage by representing your needs in the greater community.

## BUILD YOUR OPENSTACK CLOUD ON THE INDUSTRY-LEADING HYPERVISOR FROM RED HAT

The Red Hat Enterprise Virtualization hypervisor, based on KVM technology, holds top scores in the industry-standard SPECvirt hypervisor benchmark for performance, density, and scalability.

Learn more: [spec.org/virt\\_sc2013/results/](http://spec.org/virt_sc2013/results/)

Enterprise-hardened software	Red Hat tests and certifies each OpenStack release running on Red Hat Enterprise Linux OpenStack Platform for broad hardware and software compatibility and performance.
Enterprise software life cycle	Red Hat Enterprise Linux OpenStack Platform provides a stable branch release of OpenStack and Linux that can be supported by Red Hat beyond the six-month release cycle of community OpenStack. Red Hat delivers security fixes, bug fixes, performance enhancements, and even some features from future releases without disrupting production environments.
Expansive ecosystem	Red Hat built the world's largest certified OpenStack partner ecosystem for Red Hat Enterprise Linux OpenStack Platform. It starts with the inherited certified ecosystem of Red Hat Enterprise Linux – which includes thousands of certified servers and third-party software. A new OpenStack-specific certification program introduces partners that provide compute, storage, networking, ISV software, and services to ensure the same level of broad support and compatibility that customers enjoy today in the Red Hat Enterprise Linux ecosystem.
Enterprise management	A robust set of APIs offers customers management extensibility through the Red Hat OpenStack Cloud Infrastructure Partner Network and certified third-party management tools. Additionally, Red Hat CloudForms provides enterprise management over Red Hat Enterprise Linux OpenStack Platform and provides configuration management, service catalog, life cycle management, monitoring and reporting, and more over Red Hat's OpenStack infrastructure resources.
Technology leadership	Red Hat is a leader in both the OpenStack community and the broader Linux community, participating in thousands of critical open source projects that come together in Red Hat Enterprise Linux OpenStack Platform. Red Hat can support you better in your OpenStack deployment than any other vendor in the business.
Security	You can rely on military-grade <sup>1</sup> security from technologies that are part of Red Hat Enterprise Linux, like SELinux. These advancements can help prevent intrusions and protect your data when running in public or private clouds.

<sup>1</sup> [http://activity.openstack.org/dash/releases/index.html?data\\_dir=data/whole\\_project](http://activity.openstack.org/dash/releases/index.html?data_dir=data/whole_project)

## TRAINING AND CERTIFICATION

Red Hat OpenStack Administration with Expertise Exam (CL211)  
[redhat.com/training/courses/cl211/](https://redhat.com/training/courses/cl211/)

Red Hat OpenStack Administration course outline:  
[redhat.com/training/courses/cl210/course-exam-outline](https://redhat.com/training/courses/cl210/course-exam-outline)

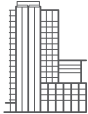
## PROFESSIONAL SERVICES

Red Hat offers a full range of consulting engagements for Red Hat Enterprise Linux OpenStack Platform and other cloud initiatives.

Learn more:  
[redhat.com/consulting/product-enablement/product-accelerators/](https://redhat.com/consulting/product-enablement/product-accelerators/)

Performance	Red Hat Enterprise Linux OpenStack Platform uses the Red Hat Enterprise Virtualization hypervisor to provide superior performance for your OpenStack workloads. Red Hat Enterprise Virtualization hypervisor, based on KVM, holds record-breaking performance scores on industry-standard SPECvirt_sc2010 and SPECvirt_sc2013 benchmarks, including the top two-socket and four-socket server scores and the only published eight- and sixteen-socket scores in the industry.
Integrated solutions	Red Hat Enterprise Linux OpenStack Platform helps relieve deployment and management burdens through its software integration with Red Hat's portfolio of cloud infrastructure products. You can: <ul style="list-style-type: none"><li>• Deploy Red Hat Enterprise Linux virtual machines to gain performance, security, and operational advantages that no other vendor can deliver.</li><li>• Deploy Red Hat Enterprise Virtualization and share the image storage and networking services to ensure consistency and compliance across virtual machines, while eliminating security concerns.</li><li>• Deploy Red Hat CloudForms to provide unified operations management for Red Hat Enterprise Linux OpenStack Platform, Red Hat Enterprise Virtualization, and other non-Red Hat cloud solutions.</li><li>• Deploy Red Hat Storage Server as an add-on to manage your block, object, and image storage.</li><li>• Deploy OpenShift by Red Hat using OpenStack's new Heat orchestration tool to build your own Platform-as-a-Service (PaaS) on top of OpenStack.</li></ul>

With Red Hat Enterprise Linux OpenStack Platform, your organization can use the most widely deployed enterprise Linux operating system jointly engineered for and integrated with an OpenStack distribution that delivers high performance, is well-supported, and offers a stable enterprise life cycle for your production environments.



### ABOUT RED HAT

Red Hat is the world's leading provider of open source solutions, using a community-powered approach to provide reliable and high-performing cloud, virtualization, storage, Linux, and middleware technologies. Red Hat also offers award-winning support, training, and consulting services.

Red Hat is an S&P company with more than 75 offices spanning the globe, empowering its customers' businesses.

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### TECHNICAL SPECIFICATIONS

Red Hat Enterprise Linux OpenStack Platform will run on any server platform certified for Red Hat Enterprise Linux. The following minimums are required for specific server roles.

#### Compute nodes

- 64-bit x86 processor with support for the Intel 64 or AMD64 CPU extensions, and the AMD-V or Intel VT hardware virtualization extensions enabled
- A minimum of 2 GB of RAM is recommended.
- A minimum of 50 GB of available disk space is recommended.
- 2 x 1 Gbps network interface cards

#### Controller nodes

- 64-bit x86 processor with support for the Intel 64 or AMD64 CPU extensions
- A minimum of 2 GB of RAM is recommended.
- A minimum of 10 GB of available disk space is recommended, and more for nodes providing block storage services. See documentation for more details.
- 2 x 1 Gbps network interface cards

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