

## RACKSPACE SERVICE OVERVIEW

# RACKSPACE PRIVATE CLOUD POWERED BY OPENSTACK

*Upstream OpenStack delivered "as a service" and backed with a 99.99% uptime SLA.*

Rackspace Private Cloud powered by OpenStack® provides public cloud benefits with the performance, security and control of an enterprise environment. Rackspace Private Cloud includes:

- **A superior model:** Rackspace eliminates complexity by delivering OpenStack "as a service" (24x7x365 monitoring, maintenance and upgrades).
- **World's most reliable OpenStack:** 99.99% uptime SLA.
- **OpenStack everywhere:** Rackspace can deploy in a Rackspace data center, customer data center or third-party location.
- **The most operational OpenStack experience in the world by a factor of 100:** Rackspace has successfully scaled OpenStack to hundreds of thousands of nodes and OpenStack clouds for some of the largest companies in the world.
- **A single platform:** For managing containerized, virtualized and bare-metal applications across private, public and hybrid clouds.

## TRUE OPEN-SOURCE SOLUTION

Rackspace Private Cloud powered by OpenStack uses only open-source software and offers open-source designed infrastructure components.

- Infrastructure design based on Open Compute Project (OCP) specifications, purpose-built for running an OpenStack cloud.
- Proactively updated with the latest available distributions of Ubuntu Linux and KVM for the operating system and virtualization layers.
- Management layer using upstream OpenStack, deployed according to our prescribed and tested configurations using the OpenStack Ansible Deployment playbooks – without any proprietary code or wrappers.

## REDUCED IT EXPENSES

By providing a private cloud solution designed using open standards, built on an open-source software stack and managed by Rackspace OpenStack experts, Rackspace can help you to reduce acquisition and ongoing operational costs.

- Minimize software licensing costs by using freely available distributions of Ubuntu Linux, KVM and upstream OpenStack.
- Reduce hardware acquisition and operational costs by choosing from the broad set of Rackspace infrastructure options, including infrastructure designed based on the OCP specifications.
- Save time and eliminate the operational expenses of finding, training and retaining hard-to-find OpenStack experts by relying on the experienced Rackspace team of OpenStack specialists to manage your private cloud.

## KEY FEATURES

### BUILT-IN AUTOMATION

- Deployment and configuration management automated with Ansible
- Heat-based solution templates
- Deploy production-ready stacks in minutes

### ENTERPRISE-GRADE ARCHITECTURE

- Industry-leading 99.99% OpenStack uptime guarantee
- Linux containers for independent scaling and seamless upgrades
- Designed to scale to thousands of nodes
- High availability using a professional grade, four-server control plane
- Includes a clustered database and messaging service

### SECURITY AND LOGGING

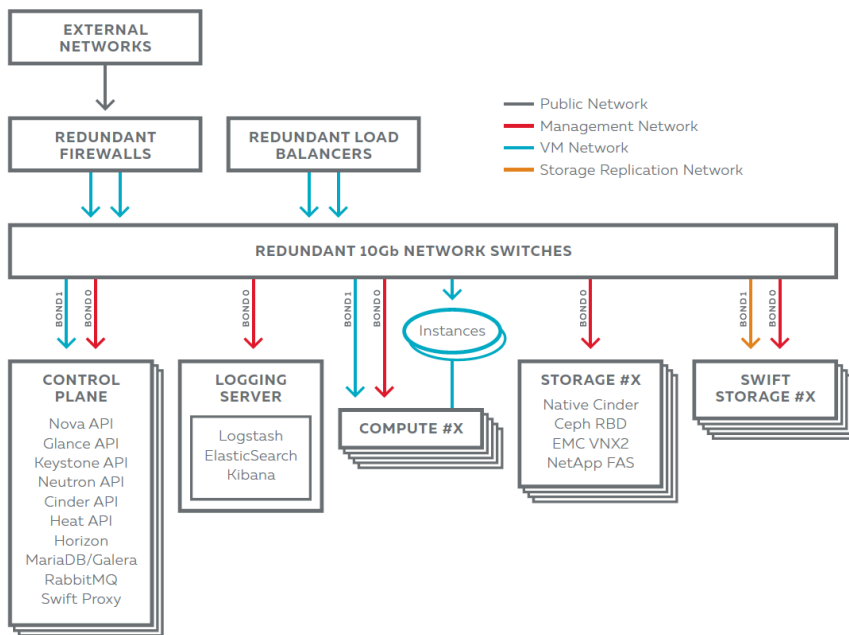
- Secure, dedicated environment
- Includes two physical firewalls and audit logs
- Allows use of existing Open LDAP service to authenticate users

## FASTER TIME TO VALUE

Get up and running faster by leveraging integrated infrastructure, prescriptive deployment, application-level automation and Rackspace OpenStack expertise.

- Faster setup and deployment by leveraging the Rackspace open standards design – a pre-integrated system of network, storage and compute designed to the OCP specifications and purpose-built for OpenStack-powered clouds.
- Prescriptive deployment that leverages OpenStack Ansible playbooks to reduce deployment times and is designed and tested to provide the stability, scalability and high availability you need to support your cloud-ready enterprise production workloads.
- Deploy production-ready application stacks in minutes, with templates for several widely used open-source applications including Magento, Drupal and MongoDB.

## RACKSPACE PRIVATE CLOUD POWERED BY OPENSTACK ARCHITECTURE



## PUTTING IT ALL TOGETHER

Rackspace Private Cloud powered by OpenStack delivers private cloud as a service, making it faster, easier and more cost-efficient to deploy dedicated cloud resources built on truly open technologies, while eliminating the complexity and operational challenges associated with OpenStack.

## COMPUTE

All Ubuntu 14.04-compatible compute, including Cisco, Dell, IBM, HP and Open Compute-based systems.

## NETWORKING

OpenStack Networking (Neutron) with the ML2 plug-in and Linux Bridge agents supports the following:

- Flat and VLAN provider networks
- Flat, VLAN and VXLAN overlay (tenant) networks
- L3 agents for routing, NAT and floating IP addresses

## STORAGE

- OpenStack Object Storage (Swift)
- OpenStack Block Storage (Cinder) driver support for Ceph RBD, Cinder/LVM, EMC VNX2 and NetApp FAS