

# BROCADE AND RACKSPACE PRIVATE CLOUD SOLUTION



## DATA CENTER

## Enabling the Rapid Deployment of Private Cloud Environments

### HIGHLIGHTS

- Enables enterprises to quickly and easily build scalable and deployable private cloud infrastructures
- Provides a scalable private cloud solution to meet the growing needs of organizations deploying virtual machines
- Delivers an extensible foundation to achieve the benefits of cloud computing
- Leverages battle-tested software based on Rackspace's experience in designing, deploying, and operating the world's largest OpenStack cloud
- Provides OpenStack-optimized networking infrastructure built on Brocade networking solutions

Organizations that want the benefits of a scalable cloud environment built specifically for their needs are looking beyond the public cloud to a private cloud environment. In addition to offering the agility and efficiency of a public cloud, a private cloud can meet the needs of organizations with large compute and storage requirements while providing for strict control, security, and compliance requirements.

While the benefits of a private cloud are many, deploying, managing, and running a large-scale enterprise cloud can be daunting. In addition to the deep operational expertise required to build a private cloud environment, organizations are challenged to identify the right hardware and software to meet evolving needs while managing support costs and ensuring the ability to expand on-demand without the limitations of proprietary solutions.

### THE RACKSPACE PRIVATE CLOUD AND BROCADE NETWORKING SOLUTION

Together, Brocade® networking solutions and Rackspace® Private Cloud combine the power of OpenStack—the leading open-source cloud operating system—with a streamlined process that allows the rapid deployment of private cloud environments. As a truly enterprise-ready private cloud environment—complete with management, orchestration, and support—the joint solution leverages Rackspace's private cloud expertise and the power of Brocade VDX® switches with Brocade VCS® Fabric technology. Brocade has embraced this open-source cloud platform as part of its Software-Defined Networking (SDN) strategy, and is optimizing its networking solutions for OpenStack.

Brocade has been a member of the OpenStack alliance since May 2011, and is one of the first major network infrastructure providers to achieve the much-anticipated quality assurance and certification for Rackspace Private Cloud. This certification requires a rigorous validation process for compatibility and interoperability so that customers using Rackspace Private Cloud Software with OpenStack can more easily implement a reliable and flexible private cloud solution.

By facilitating networking within the OpenStack architecture, Brocade delivers cloud-optimized integration while leveraging Brocade VCS Fabric technology, which provides advanced Ethernet fabric capabilities that enable the graceful transition to elastic, highly automated private cloud networks. Brocade VCS Fabric technology, delivered on Brocade VDX switches, is designed to enable next-generation virtual data center and

private cloud computing initiatives with the highest levels of automation and efficiency. Brocade VCS Fabric technology provides OpenStack with a single logical interface to a cluster of physical switches by presenting efficient, service-level abstractions provided by distributed fabric intelligence. This frees the orchestration platform from having to manage individual network elements, simplifying operations of large-scale, complex infrastructures.

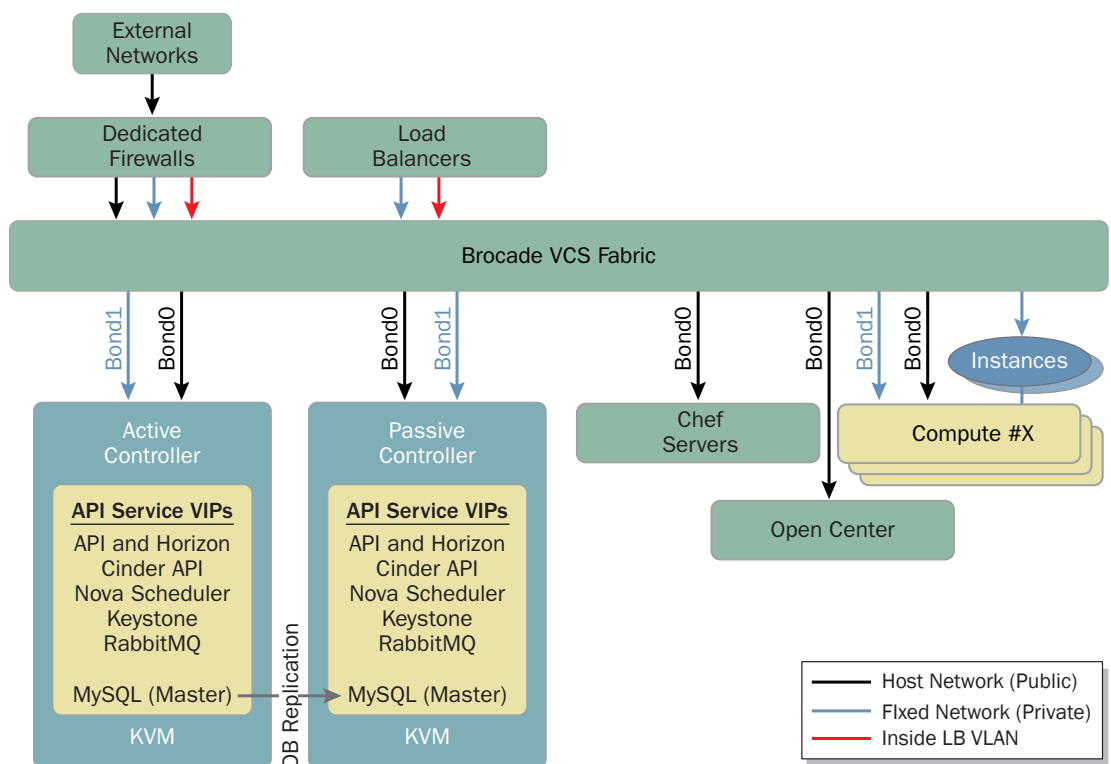
Rackspace's expertise stems from successfully running the world's largest open cloud in addition to deploying and managing several private clouds. This expertise enables Rackspace to configure and optimize its Private Cloud Software and quickly resolve any issues that might arise. Rackspace Private Cloud Software is based on open-source technologies that eliminate the risk of being locked into a proprietary platform. Founded by Rackspace and NASA, OpenStack is the

key foundation to this open-source offering and is a standard and massively scalable open-source cloud operating system designed to run on standard hardware.

Whether the infrastructure is deployed on-premise, hosted in the Rackspace data center, or deployed utilizing a colocation facility, Rackspace works closely with organizations to design, deploy, and operate the private cloud environment, all supported by its Fanatical Support® promise. Dedicated Rackspace Private Cloud teams bring significant DevOps expertise and skills to run private clouds at scale.

The Brocade and Rackspace partnership currently offers three private cloud open reference architectures built for enterprise-class, highly scalable clouds: mass-compute with external storage, mass-compute, and distributed object storage.

**Figure 1.**  
Rackspace Private Cloud for mass-compute.



Together, Brocade and Rackspace deliver the benefits of open and interoperable cloud architectures built on a solid OpenStack foundation. Brocade endorses an open framework for management, provisioning, and integration designed to promote multivendor and system-to-system interoperability specifically for cloud environments.

With an infrastructure dedicated exclusively to a single organization, a private cloud solution leveraging Rackspace Private Cloud and Brocade provides the agility and efficiency of a public cloud while meeting the availability, service performance, and security requirements many organizations demand. The close collaboration between Rackspace and Brocade has resulted in a flexible, resilient, and scalable solution that helps address the growing demands of private cloud infrastructures.

### **LEARN MORE**

Brocade partners with companies of all sizes to deliver innovative solutions that help organizations maximize the value of their most critical information. To learn more, visit [www.brocade.com/alliance](http://www.brocade.com/alliance).

### **ABOUT BROCADE**

Brocade networking solutions help organizations achieve their critical business initiatives as they transition to a world where applications and information reside anywhere. Today, Brocade is extending its proven data center expertise across the entire network with open, virtual, and efficient solutions built for consolidation, virtualization, and cloud computing. To learn more, visit [www.brocade.com](http://www.brocade.com).

### **ABOUT RACKSPACE**

Rackspace Hosting is the open cloud company, delivering open technologies and powering more than 205,000 customers worldwide. Rackspace provides its renowned Fanatical Support across a broad portfolio of IT products, including Public Cloud, Private Cloud, Hybrid Hosting, and Dedicated Hosting. Rackspace has been recognized by *Bloomberg BusinessWeek* as a Top 100 Performing Technology Company, is featured on *Fortune's* list of 100 Best Companies to Work For and is included on the Dow Jones Sustainability Index. Rackspace was positioned in the Leaders Quadrant by Gartner, Inc., in the "2011 Magic Quadrant for Managed Hosting." Rackspace is headquartered in San Antonio with offices and data centers around the world. Learn more at [www.rackspace.com](http://www.rackspace.com).

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