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## Brocade Gen 5 Fibre Channel SAN Powers Rackspace Global Hybrid Cloud

### Achieves Greater Density, Flexibility and Scale at Each Data Center

SAN JOSE, CA -- (Marketwired) -- 03/04/14 -- Brocade (NASDAQ: BRCD) today announced that Rackspace (NYSE: RAX), the open cloud company, has completed the deployment of [Brocade Gen 5 Fibre Channel](#) SAN solutions across its global data center network to accommodate explosive customer growth. The new Gen 5 Storage Area Network (SAN) has helped the company achieve greater density, flexibility and scale in connecting to high-performance EMC storage arrays, resulting in increased efficiency and productivity at each data center.

Rackspace is a global leader in hybrid cloud computing and founder of OpenStack, the open-source operating system for the cloud. Hundreds of thousands of customers look to Rackspace to deliver the best-fit infrastructure for their IT needs, leveraging a product portfolio that allows workloads to run where they perform best -- whether on the public cloud, private cloud, dedicated servers, or a combination of platforms. Last year, Rackspace also [began offering](#) a portfolio of security and network offerings based on the [Brocade Vyatta vRouter software network appliance](#) that delivers increased security, as well as network address translation and routing.

To facilitate the company's move to a campus-style data center model, Brocade Gen 5 Fibre Channel director-class switches were deployed to allow Rackspace to simplify their SAN infrastructure and create a denser environment that enables more ports per square foot of data center space, which has improved efficiency and productivity at each location. Brocade Gen 5 Fibre Channel SAN switches are now deployed in eight of Rackspace's data centers across three continents as a foundation to connect EMC storage and Dell servers to their customer's remote IT environments.

"Rapid customer growth and their changing needs for supporting highly virtualized environments required an upgrade to our global SAN infrastructure," said Sean Wedige, CTO, Enterprise Solutions, at Rackspace. "We worked with Brocade and EMC Corporation to design a SAN fabric that was easy to grow and manage, while providing the flexibility to allow our data center technicians to connect any device to any switch in the fabric. In addition to improved reliability and availability, the new Brocade SAN fabric has allowed us to use less space and power, supporting our green initiatives, while allowing us better utilization of our physical facilities."

In Rackspace's previous SAN architecture, directors were used to connect to server hosts with smaller fixed-port switches connected to storage to save director ports. This architecture resulted in a stove pipe effect where servers and storage needed to be located within the same area of a data center, creating challenges when adding and connecting additional storage and new servers to meet unplanned customer growth. In addition, it fostered unbalanced data center growth and created islands of unused storage and SAN ports.

To fix these issues, Rackspace wanted to simplify the SAN designs for each data center and to establish a "plug anywhere in the data center" model without regard to physical location of the host or storage platform in order to maximize port utilization, ease deployment constraints and meet customer requirements for delivering the company's renowned Fanatical Support®.

With their new SAN design, Rackspace links multiple [Brocade 8510 directors](#) together using Brocade's unique UltraScale Inter-Chassis Links (ICLs), allowing all front-facing ports to be connected to high-performance EMC VMAX® enterprise storage arrays, dramatically increasing scalability and architectural flexibility. Four 16 Gbps optical Fibre Channel cables provide up to 64 Gbps connectivity between each Brocade 8510 director, which provides an exceptionally fast and reliable medium between each switch. Brocade UltraScale ICLs can connect up to ten Brocade DCX 8510 Backbones at distances of up to 100 meters, enabling flatter, faster and simpler fabrics that increase consolidation while reducing network complexity and costs.

To receive comprehensive visibility and insight into the health and performance of each SAN, Rackspace utilizes [Brocade Fabric Vision technology](#), which allows storage administrators to address problems before they impact operations. By using the "at-a-glance dashboard" feature of Fabric Vision, customized health and performance views are created that provide all critical information on one screen.

Rackspace is now working to deploy other Brocade Fabric Vision features, including Flow Vision and ClearLink diagnostics. Brocade Flow Vision is a suite of tools that allows administrators to easily identify specific application data flows, monitor and analyze potentially problematic devices before they impact fabric performance, and proactively validate fabrics to maximize application performance, avoid congestion and optimize resources.

"As a cloud service provider, Rackspace's strict service-level agreements with customers demanded the highest levels of availability, scalability and operational simplicity that only Brocade Gen 5 Fibre Channel can provide," said Jack Rondoni, vice president, Data Center Storage and Solutions, at Brocade. "In addition, our long-term partnership with EMC assured a seamless migration to the new SAN infrastructure in connecting to storage."

At each data center, the Brocade SAN is connected to EMC VMAX enterprise storage arrays. VMAX is the world's most trusted storage array for demanding virtual environments, delivering industry-leading performance, scale and efficiency that accelerates customers' transformation to the software-defined data center.

"The partnership between EMC and Brocade is essential to Rackspace," added Wedige. "Both teams are very responsive to our needs. We look forward to continuing to work together to develop solutions that benefit not only Rackspace and our customers, but other service providers and operators at scale."

#### **Video**

##### **[Rackspace Deploys Brocade Gen 5 Fibre Channel](#)**

Brocade next-generation SAN technology has allowed Rackspace to simplify their SAN infrastructure, while also creating a denser environment that allows more ports per square foot of data center space

#### **About Brocade**

Brocade (NASDAQ: BRCD) networking solutions help the world's leading organizations transition smoothly to a world where applications and information reside anywhere. ([www.brocade.com](http://www.brocade.com))

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