If you’re looking for a hosting provider, it’s impossible to bypass Rackspace. A true leader in managed hosting and cloud services, Rackspace has been innovating since its start in 2000. Regularly found on lists of best companies to work for, the company’s hardworking staff (who call themselves “Rackers”) are proud of their culture, and of the Fanatical Support® they feel so strongly about that they trademarked it. It should come as no surprise, then, that they seek the same from their vendors – especially when it comes to the infrastructure that supports their services.

**Resilience, Availability & Reliability**

The company’s commitment to its customers is backed by 100% availability.

**Infinite Scalability**

Rackspace required a solution that scales without limits, simply and without interruptions, because storage growth is continuous.

**Low TCO**

Lowering TCO was a key goal of the infrastructure refresh. In a competitive business, infrastructure costs—CAPEX and OPEX both—are key to optimizing profitability.
In a business where price often leads the decision-making process, managing costs is critical to competitiveness. When Rackspace decided to pursue broader segments of the market for email hosting, they looked for ways to cut costs without compromising the other critical requirement: availability.

It was a given, however, that those reductions had to come without any negative impact on the customer experience. Because there’s no room for compromise in a business where constant improvement is critical, they decided, in fact, to seek ways to improve availability—of data and of service—at the same time they were reducing costs.

Complete Customer Satisfaction

With their clients’ complete satisfaction at the heart of their decision-making Rackspace doesn’t take infrastructure decisions lightly. As the storage demands of more than 4 million accounts continued to increase, Rackspace decided to review their email back-end infrastructure. Why not take an opportunity to try to increase reliability and scalability—and lower costs—if they had to make a change?

They started with an ambitious list of key requirements:
- Reduce storage costs significantly
- Maintain geo-redundant copies of email data for 100% durability and always-on availability
- Eliminate hardware failover issues
- Survive environment-level network outages
- Reduce the management burden: eliminate user moves and server capacity management
- Enable fast onboarding of large customers

Business Benefits

Achieved 45% Overall TCO Reduction

Between the savings on personnel, floor space, HVAC, power and the hardware itself, Rackspace is truly reaping the benefits of their efficient storage choice.

Resiliency – 100% Availability

Their Scality RING infrastructure brings the resiliency and availability that backs their 100% guarantee to customers, ensuring that data is never lost, and always available. This was, and remains, their #1 priority. The fact that the Scality RING can tolerate the loss of an entire data center and can be upgraded and expanded with no downtime are critical to maintaining Rackspace’s 100% availability promise.

Efficiency in a Software-Defined Solution

The significant reduction in footprint saved Rackspace millions in lease fees, but the efficiency crosses in to lower personnel overhead—even just the time saved not replacing the 12 disk drives each day that they had been replacing—represents a significant positive impact.

Software-Defined Storage as an Economic Advantage

Dan Shain, Director, R&D, Rackspace Cloud Office, and his team took their ambitious set of requirements, and got to work vetting solutions to replace their storage, “We set really aggressive cost reduction goals, but we knew that we could achieve them with the right software-defined storage solution.”

The team initially identified 23 software-defined storage (SDS) vendors, then quickly eliminated 18 of them before they started their hands-on testing against the key considerations of performance, operability, survivability and management.

Evaluation Criteria

Performance
- Availability
- Data integrity
- Scalability – scale beyond petabytes
- User experience – responsive on read & write

Operability
- Automated operations
  - Failures should not require immediate intervention
  - Self-healing
- Manageability
  - Expand without downtime or other impact
  - Upgrade with minimal effort and no downtime
- Vendor support/reputation

---

We consider software-defined storage to be critical to our strategy for its growth potential, data center efficiency and efficient – and flexible – use of assets” — Dan Shain, Director R&D, Rackspace Cloud Office
Survivability
- Geographically distributed
- Resilient – failure of a single datacenter should have minimal impact
- Rack aware
  - Auto-distribution handles most likely impact
- Self-healing

Cost
- Meet business objectives – lower cost per PB stored
  - Capex
  - Opex

“A couple of the products started having difficulty when we moved into heavy mixed workloads of writing data, reading data and deleting data,” said Shain. “In our industry, 80% of data written is deleted within 10 days, and that has a big impact on storage.”

Lowering TCO was one driver in determining which software-defined storage solutions to test. Scality was the only tested solution to shine on all measures—taking them from a less than optimal DR-configuration with long RPO/RTO to a highly-resilient, active/active, multi-site object storage system with near zero RTO/RPO.

Fanatical Support – We’ve got your Back!
Rackspace is a 100% guarantee company – it doesn’t matter whose “fault” something is, Rackspace has a promise of service that they intend to keep. They need to be able to weather the loss of a datacenter—data must be available 24/7/365. “There are penalties – if we have an outage, we pay a penalty to the customer,” said Shain.

In fact, one of their datacenters went down during testing, and Shain offered that “Scality performed extremely well.” Resilience is a non-negotiable requirement.

The Clear Choice
Ultimately, the testing proved that Scality RING was the only solution that met Rackspace’s operational and survivability standards, so the choice was clear by the end of the testing. And now, they’re reaping the benefits. Not only has Rackspace already seen a 45% reduction in TCO due to substantial Capex and Opex savings, but they’re seeing significant secondary benefits of their move to Scality RING software-defined storage. One of the top “secondaries” was thanks to the small footprint: Rackspace was able to vacate an entire datacenter in Texas. “We’ve decommissioned 1800 assets – that’s huge,” said Shain. “And by vacating that datacenter, we’re saving millions in lease fees,” added Shain.

And the benefits keep coming. Rackspace was able to use that vacated datacenter to onboard a substantial new customer much more quickly and economically than they had anticipated, avoiding buildout spend and bringing faster revenue. General benefits are netting big payoff as well: faster onboarding of customers because expansion is easy and painless; reallocation of personnel to new priorities, because the administrative work is significantly reduced; and a clear path for growth.
**About Scality** Scality is a pioneering innovator of software-defined, multi-cloud data storage at petabyte scale. Recognized as a leader in distributed file and object storage by Gartner and IDC, Scality assures data control and freedom to manage data across clouds. Our products scale on-demand, non-disruptively, and drive lower cost for today’s leading enterprise companies.