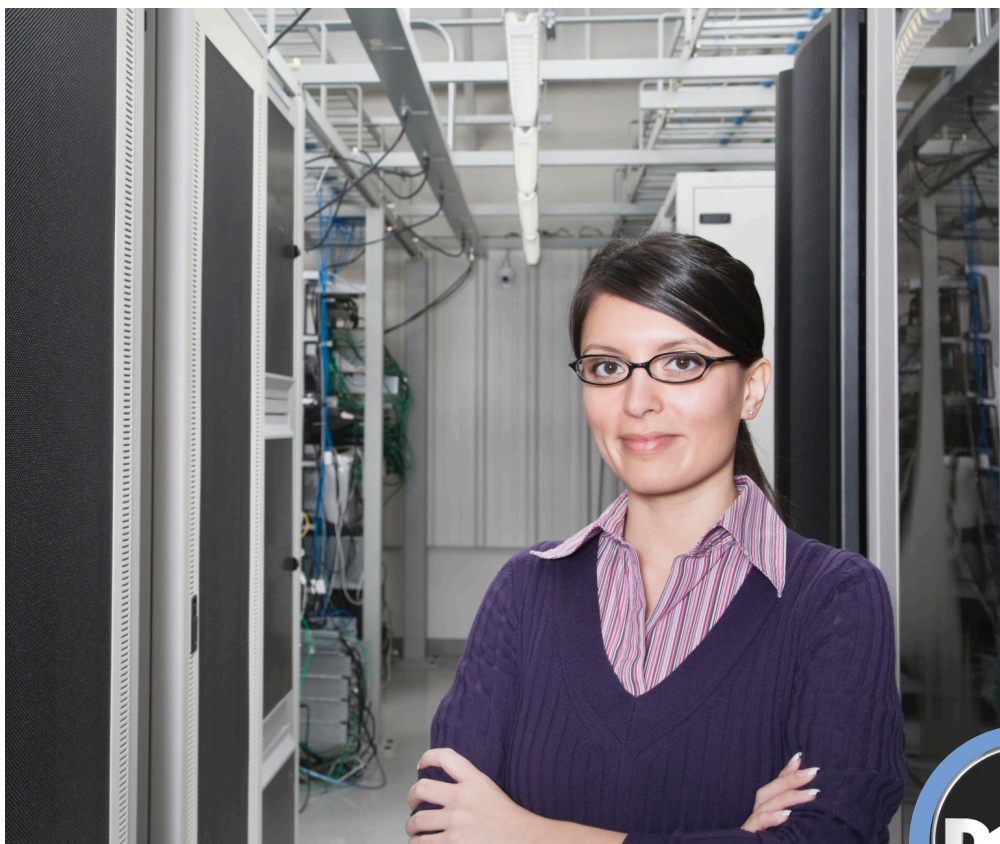


# ENABLING FANATICAL SUPPORT®

By simplifying its operations, the Rackspace Hosting IT team can grow with no additional manpower



- SOLUTIONS
- CONSOLIDATION
- MESSAGING
- POWER & COOLING
- VIRTUALIZATION



## CUSTOMER PROFILE

**COUNTRY:** Global (U.S., Hong Kong and U.K.)

**INDUSTRY:** Hosted IT Services

**FOUNDED:** 1998

**NUMBER OF EMPLOYEES:** 2,400+

**WEB ADDRESS:** [www.rackspace.com](http://www.rackspace.com)

## CHALLENGE

To stay competitive, Rackspace must offer fast, powerful, reliable server and storage deployment that can support processing-intensive Web 2.0 or ERP applications, plus flawless service. It needed to minimize the cost of operating hardware and support, as well as delays in getting parts or technical advice.

## SOLUTION

Rackspace turned to Dell for a virtualization platform including Dell™ PowerEdge™ servers, Dell PowerVault™ direct-attached storage and Dell/EMC SAN storage arrays.

## BENEFITS

### GET IT FASTER

- Faster server deployment due to cable-free, rack-friendly design
- Quick storage installation via wizard guided tools

### RUN IT BETTER

- High availability for customer applications
- Ability to offer cost-effective direct-attached storage solution to customers

### GROW IT SMARTER

- Revenue growth supported without an increase in IT staff
- Reduction in operational and training costs due to standardized environment
- Reduction in data center footprint through virtualization and consolidation
- Reduction in data center power and cooling costs
- Savings of 15 minutes per day per device managed
- Reduction in total cost of ownership (TCO)



Many companies want the benefit of cutting-edge information technology to support CPU-intensive financial calculations, predict market demand or offer online customers a rich multimedia experience—yet they don't want the administrative burden of supporting this technology in-house. Enter IT hosting providers such as Rackspace.

# “OVER THE YEARS, AS WE’VE LOOKED FOR WAYS TO IMPROVE THE QUALITY OF SERVICE, WE’VE WORKED VERY CLOSELY WITH DELL TO ADOPT THE LATEST TECHNOLOGY.”

John Engates, chief technology officer, Rackspace Hosting

Founded in 1998 in San Antonio, Texas, Rackspace quickly found its niche hosting Web, back-office and database applications for companies all over the world. Today, the company runs more than 42,000 servers in eight data centers in the U.S., Hong Kong and U.K. It holds more than 1.5 petabytes in managed storage.

The company hosts a wide variety of applications, including e-commerce, e-mail, supply-chain planning, data mining and social networking. “We’ve grown fast and furiously over the past 10 years,” says Rackspace CTO John Engates. “Hosted IT customers look for rapid deployment of remote infrastructure. They come to us because we are one of the best in the business, and the most responsive to their needs. We drive revenue by putting servers online, so the faster and more easily we can put them on and keep them on, the better.”

Although demand for hosted IT services keeps increasing, so does the number of providers. So to stay ahead, Rackspace is constantly looking for competitive advantages. “Over the years, we’ve looked for ways to cut deployment time, reduce costs and improve the quality of service,” Engates says. “We’ve worked very closely with Dell since 2002 to adopt the latest technology, and even plan strategies for future deployments. Our partnership with Dell has been very valuable to us over the years.”

## RACKED BY POPULAR DEMAND

Rackspace offers a choice of server brands in its remote data centers. Many of its customers opt for Dell. “The Dell PowerEdge servers are a very important part of our business because our customers want service they can trust, and they like seeing the Dell brand on their infrastructure,” Engates explains. “And many companies use Dell servers in their own facilities, so they want the same models in our data center.”

Moreover, Dell offers unique advantages in design, reliability and support. “Dell servers are very reliable. Since we’re often hosting our customers’ business-critical applications, it’s very important for us to maintain 100 percent uptime for them,” says Antony Messerli, product engineer for server and virtualization technologies at Rackspace Hosting. “Dell helps us do that.”

Another plus is the ergonomic design, Engates says. “Things as simple as how you mount a server in the rack can have a big influence on how quickly you can deploy it. With Dell, you just snap the rails into the rack and slide the servers in—no need for screwdrivers and pliers. Simpler cabling and the option to get operating systems and software installed at the factory help too.”

## REDUCING SERVER DEPLOYMENT TIME

Dell’s streamlined, reliable supply chain cuts deployment time even further, Engates says. “Prior to our current

## HOW IT WORKS

### HARDWARE

- Dell™ PowerEdge™ 2650, 2850, 2950 and 2970 servers with Intel and AMD processors
- Dell PowerEdge R900, R905 servers
- Dell PowerVault™ MD3000 direct attached disk arrays
- Dell/EMC CX500, CX700, CX3-40, CX3-80 SAN storage arrays

### SOFTWARE

- VMware® ESX Server™
- VMware Infrastructure 3
- Microsoft® Exchange Server

### SERVICES

- Dell ProSupport for IT
  - Enterprise-Wide Contract
  - Fast-Track Dispatch

relationship with Dell, we had to stock a lot of parts and machines in our data centers, waiting to be deployed, so that our customers would never have to wait for delivery. That wasn’t economical for us. But Dell has a very efficient, just-in-time model for building and shipping servers. They’re unique in being able to deliver a server right when they say they will, built to our specs.

“Plus, they save money and trees by shipping multiple machines in earth-friendly flat packs. Our company is really trying to be green, and anything

# “WE REALLY APPRECIATE THE SCALABILITY OF DELL/EMC STORAGE PRODUCTS, AND THAT’S ONE OF THE PRIMARY REASONS WE HAVE BEEN USING THEM FOR THE PAST FIVE YEARS.”

Chad Smykay, storage architect, Rackspace Hosting

that cuts down on server packaging is valuable. In fact, Dell is working with us on new packaging processes that should deliver big benefits before too long.”

## THE IDEAL SERVERS FOR VIRTUALIZATION

Dell is also helping Rackspace support virtualization, or give a single machine “multiple personalities” so it can support several complex applications at a time. Many of Rackspace’s customers find virtualization gives them unprecedented agility—say, to add a Web 2.0-rich promotional Web site within a few days—without driving up hardware costs. The company is rapidly acquiring Dell PowerEdge R905 four-socket servers for these power-intensive functions.

“The ideal server for virtualization is the Dell PowerEdge R905,” Messerli explains. “To reap the benefits of virtualization, you need to have the largest number of sockets, the largest number of cores and the largest amount of memory to be able to scale properly. The quad-socket R905 fits all those needs. It also includes SD cards for the embedded hypervisors from VMware and Citrix, so you’ve got an all-in-one setup right out of the box.”

“For large environments needing a lot of processing power, and to consolidate many virtual machines onto one server, the R905 is a good choice,” he adds.

“For our Web hosting customers that need a lot of memory and bandwidth for their applications, the PowerEdge 2970 is very popular. It’s also the greenest server we offer today, with the 2.5 inch drives and a highly efficient power supply.”

“Dell has done some really innovative things in server design to accommodate virtualization,” Engates says. “Their newer models like the R905 are packed with a lot more memory, which makes deployment of virtualization much more painless. We believe in the future of virtualization, and so does Dell. And that’s important because virtualization as a technology is still new enough that some companies aren’t willing to bet the business on it. So if you can put the Dell name behind it, along with VMware, which is a very solid product, and bring in Rackspace to support and service the infrastructure, that makes companies feel a lot more confident.”

## FEWER MACHINES USE LESS ENERGY

According to Engates, VMware allows Rackspace to consolidate multiple servers onto a few machines with considerable savings in terms of floor space, power and cooling costs—a particular advantage as energy costs continue to rise.

“Servers are one of the biggest components of a data center’s overall energy consumption,” he explains.

“The processors and memory and fans all generate heat like little ovens. So anything that lets us consolidate servers and push them closer to 100 percent utilization means big savings in power and cooling.”

## STAYING AHEAD OF STORAGE DEMANDS

Demand for data storage is growing just as fast as application hosting, and Dell is helping there too. “Our customers want to take advantage of all the benefits of virtualization and shared storage, like being able to do

live migrations without any downtime,” says Messerli.

Rackspace began using Dell/EMC storage products in 2003, and now has over 1.5 petabytes of information stored with over 3,000 SAN-attached hosts. It currently offers its customers SAN storage running on nearly 50 Dell/EMC CX3-80 storage arrays, and over 300 direct attached storage (DAS) devices via Dell PowerVault MD3000 disk arrays.

“Dell has been very innovative in helping us design solutions for our customers that take advantage of each model’s strong points,” says Chad Smykay, a storage architect at Rackspace Hosting. “The PowerVault MD3000 allows us to do out-of-band management so that we can manage direct attached storage for our customers without having to go through their dedicated servers. By consolidating our view of the MD3000 into a single pane of glass we save roughly 15 minutes per day of monitoring and troubleshooting time per device, as compared to managing an individual DAS attached device with no management services. Our DAS offering has been doing phenomenally well in its first year, and our SAN offering has grown 200 percent year over year for the past two years. We really appreciate the scalability of Dell/EMC storage products, and that’s one of the primary reasons we have been using them for the past five years.”

Chris Wetzel, who manages Rackspace’s product management team for platforms, agrees. “We chose the Dell PowerVault MD3000 to round out our external storage offerings

and offer our customers enterprise-level service and reliability at a small business price. It really combines the cost savings along with all the critical features we were looking for: speed, capacity, dual ports and dual storage controllers for redundancy.”

#### A SUPPORTIVE RELATIONSHIP

The third major component of Rackspace’s relationship with Dell is its ProSupport contract.<sup>1</sup> Dell Support for IT is a modular contract, and the company selected the highest level of coverage, Enterprise-Wide Contract. With this contract, the company gets access to expert technical support, from basic troubleshooting up to complex problem-solving, plus direct access to Dell Global Command Centers. Since Rackspace maintains data centers on both sides of the Atlantic and off the South China Sea, the ability to synchronize Dell Global Support Services between regional service delivery managers is particularly helpful. For instance, the regional service delivery managers have synchronized the Rackspace parts delivery and ticket process.

Rackspace also takes advantage of Dell ProSupport’s fast-track parts dispatch which gives the IT staff the flexibility to “skip the scripts” and dispatch parts and/or labor without having to go through scripted phone troubleshooting.

“Dell ProSupport definitely simplifies things,” Smykay says. “It gives us a single point of escalation for any issues with our gear, and frees us from having to worry about so many things, including routine reporting of the storage arrays’ performance.”

The reports from the Dell ProSupport Enterprise-Wide Contract alert Rackspace engineers to incidents such as when and how disks are failing, helping them analyze, predict and

even prevent many problems. Dell ProSupport also provides Web-based visibility into where parts are coming from and what labor is needed onsite. “Besides, our Dell Service Delivery Managers are awesome,” Smykay continues. “It’s really phenomenal the way they can anticipate our needs and help us handle them more efficiently. Dell ProSupport has been nothing but a positive experience for us. That kind of support is unusual to find in a vendor.”

Rackspace should know. The company has a goal of providing “Fanatical Support”<sup>®</sup> to its customers—a commitment to work at doing whatever it takes to fix their problem. “Receiving that same level of support ourselves makes it a lot easier to support our customers,” says Smykay.

#### DOING BUSINESS PERSON-TO-PERSON

This kind of close vendor relationship is important for Rackspace, Engates says. “Sometimes competing hardware vendors feel like big, impersonal companies when we deal with them. But Dell feels like a small company. They do business the way we do business—person-to-person. We like having quick access to Dell technical people. If we’re stuck on something, we can make a call any time and get an answer very quickly. Bottom line, our customers trust Dell and we do too.”

**To read additional case studies, go to: [DELL.COM/casestudies](http://DELL.COM/casestudies)**

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