





Business challenge

Companies in every industry are waking up to the value of data, wanting to store more and access it faster. How could cloud services provider Racksquared meet this demand without letting costs rocket?

Transformation

When you engage a cloud services provider, you want more than technology—you want a partner who understands your business needs. Seeing an even bigger appetite for fast, reliable access to data on the horizon, Racksquared teamed up with MAPSYS Inc. to deploy a storage platform that puts data at its clients' fingertips, whenever they need it.



Phil Smith Chief Operating Officer, Racksquared, LLC

Business benefits

<1ms

response times exceed client SLAs, increasing satisfaction levels

Boosts

profit margins by automating storage management

Enables

new billable services at competitive prices, growing the company's client base

Racksquared, LLC

Squaring up to the competition with high-performance, low-cost, and future-proof cloud services

Racksquared, LLC provides data center and cloud services to businesses of all sizes, from a variety of industries. Founded in 2012 and based in Columbus, Ohio, Racksquared is owned by the Wasserstrom Company.

"IBM solutions help to enable our clients' businesses, by supporting us in delivering cloud services that truly stand out from the masses."

—Phil Smith, Chief Operating Officer, Racksquared, LLC



Share this









Taking a long-term view

As an increasing number of companies recognize the benefits of outsourcing their IT, their expectations of providers are growing. Racksquared, LLC, a multi-faceted cloud services provider that offers Infrastructure as a Service, Platform as a Service, Data Recovery as a Service, Data Management as a Service, and hosting solutions based in Columbus, Ohio, was determined to cement its reputation as a technology leader.

Phil Smith, Chief Operating Officer for Racksquared, LLC, explains: "Clients often ask us to solve problems that they can't clearly articulate. It is our job to understand our clients' needs, and offer them the right set of technology solutions and services at the right time. And, increasingly, we also need to go beyond that to anticipate the challenges they might face in the future. Unless we stay proactive by helping clients overcome obstacles before they have an impact on their businesses, we risk losing them to better-prepared competitors."



Racksquared identified a growing appetite for data across all industries, and foresaw that this trend was unlikely to diminish any time soon.

"Companies are choosing to gather, analyze, and store more data than ever before, aware that it hides valuable insights that can be key to business success," notes Phil Smith. "As a result, more firms are looking to adopt high availability and disaster

recovery solutions to support everyday operations. Our clients want these sorts of capabilities, but at reasonable prices. It was up to us to build the infrastructure that would enable us to meet these emerging demands without letting our internal costs spiral, which would drive up our fees." "Combining FlashSystem and Power Systems with POWER8 architecture, we can offer clients average response times of less than a millisecond! As a result, they can access data at much greater speed, giving them rapid insights."

—Phil Smith, Chief Operating Officer, Racksquared, LLC

Making the right decision

To provide its clients with faster, more reliable access to data, Racksquared began looking for a powerful new storage platform. The solution would support its IBM® Power Systems™ servers, which are based on IBM POWER8® processers.

"Around half our clients rely on IBM i-based systems running on Power Systems, so an IBM storage solution was the natural choice for our transformation project," comments Phil Smith. "However, we still undertook a thorough review of offerings in the marketplace.

We scored options from multiple vendors against seven criteria, including average response times, IOPS [input/output operations per second], compression capabilities, and price—and the IBM solution emerged the victor."

Racksquared engaged its long-term partner MAPSYS to help with the solution design, configuration, and deployment. Phil Smith remarks: "MAPSYS keeps us clued up on new innovations, teaches us how to get the best out of our solutions and helps us to push the technology envelope. The MAPSYS team has proven itself repeatedly, so much so that we now consider it an extension of our staff. We set our strategy and then call them in to help us make it a reality."

Embracing smarter storage

Working closely with MAPSYS, Racksquared implemented a new tiered storage platform. For the top tier, the company selected an IBM FlashSystem® V9000 solution. For tiers one and two, Racksquared deployed an IBM Storwize® V7000 Gen 2 system and then subsequently implemented an IBM Storwize V5000 system to support disaster recovery.



"The all-flash FlashSystem V9000 ensures staggering performance levels for our clients' most critical data," describes Phil Smith. "The key advantage of the IBM Storwize solutions is the exceptional compression we are able to achieve: we purchased 350 TBs, but now have about 1 PB of usable capacity available to use. On our IBM flash storage, we have attained a three to one compression ratio, turning the 17 TB we purchased into 50 TB."

Using IBM Spectrum Virtualize™ software, Racksquared has automated many aspects of storage management. For example, the company

relies on IBM Easy Tier® to optimize the movement of data between different storage systems and IBM Global Mirror to replicate data to its disaster recovery infrastructure.

Phil Smith sums up: "Our new IBM storage solutions are designed to deliver maximum performance, while making life easier for our staff to manage them. Easy Tier automatically moves the most frequently-accessed data to the fastest resources, so our storage platform is always optimizing itself without manual intervention. We now also have a reliable disaster recovery strategy that keeps our clients' data safer than ever before."

"The IBM solutions help us increase our profit margins while providing new capabilities to clients, which is a win-win situation for both parties."

Phil Smith, Chief Operating Officer, Racksquared, LLC

Racking up the pressure on competitors

By raising performance for clients, the solution is helping Racksquared consistently exceed service level agreements, boost satisfaction levels, and attract new clients.

"Combining FlashSystem and Power Systems with POWER8 architecture, we can routinely offer clients average response times of less than a millisecond, sometimes as little as 250 microseconds!" elaborates Phil Smith. "As a result, they can access data at much greater speed, giving them the rapid insights

they need to guide their businesses to success. And our tiered storage platform gives even our smallest clients a taste of what ultra-fast FlashSystem technology can do, without breaking the bank."

Crucially, Racksquared's new automated storage management capabilities ensure that it can provide these service improvements without increasing the administrative burden for its employees—enabling it to keep prices highly competitive.

"The IBM solutions help us increase our profit margins while providing new capabilities to clients, which is a win-win situation for both parties," says Phil Smith. "Using compression across our storage environment enables us to get more value from our infrastructure, while the integrated management tools allow us to shift our focus from everyday administra-

tion to activities that yield more benefits for the business—such as innovation. Already, we have started to provide new high-availability and disaster-recovery solutions, enabling us to meet emerging demands for our clients. These factors combined give us an edge over the competition."

Surpassing customer expectations

With more satisfied clients,
Racksquared increases loyalty
among its existing customers and
attracts new business. One of
the clients enjoying the benefits of
Racksquared's new storage platform
is MXD Group, which is a logistics
company that specializes in hightouch delivery services.

"Racksquared and IBM allows our staff to focus on delivery time, not downtime!"

—Shane Hart, Vice President of Information Technology, MXD Group

Shane Hart, Vice President of Information Technology at MXD Group, comments: "Using Racksquared for our IBM datacenter services allows us to fully focus on our core competencies. Racksquared and IBM allows our staff to focus on delivery time, not downtime! Since Racksquared moved us into a high-availability environment, where data from our business-critical ERP and Warehouse Management systems running on IBM i is replicated in real-time, we have seen significantly shorter response times and exceptional reliability, giving us the tools to succeed."

Solution components

- IBM® FlashSystem® V9000
- IBM Power® S822
- IBM Storwize® V5000
- IBM Storwize V7000
- IBM Spectrum Virtualize™

Connect with us







Take the next step

To learn more about IBM storage solutions, please contact your IBM representative or IBM Business Partner, or visit the following website: ibm.com/storage

Produced in the United States of America, March 2017. IBM, the IBM logo, ibm.com, Easy Tier, FlashSystem, IBM Spectrum Virtualize, Power, Power Systems, POWER8, and Storwize are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml. This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates. The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions. THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIS. OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided. Actual available storage capacity may be reported for both uncompressed and compressed data and will vary and may be less than stated.





[©] Copyright IBM Corporation 2017. IBM Corporation, IBM Systems, Route 100, Somers, NY 10589.