

BEHIND THE CASE STUDY SERIES



RackForce – Taming the Virtual Jungle



RackForce Networks was the first hosting service provider to bring Microsoft® Virtual Server 2005 R2 technology to market. However, with hundreds of customers and an array of server nodes, managing the company's growing virtual environment was a challenge. Enterprise-ready and easy to administer, Microsoft System Center Virtual Machine Manager lets RackForce centralize and vastly improve virtual machine management. The company can streamline server management and maintain an average of four customers to each physical server, rather than the one-to-one ratio previously supported. System Center Virtual Machine Manager enables RackForce to easily identify which servers have capacity for additional workload, and it significantly simplifies physical to virtual machine migrations. RackForce expects to be able to cut maintenance and provisioning time in half with System Center Virtual Machine Manager.

Quick Facts

Customer Name: RackForce Networks

Industry: Hosting and Application Service Providers

Size: Small, 23 employees

Country: United States

Website: www.rackforce.com

RackForce Case Study:

[Read](#) Fast-Growing Hosting Service Provider Centralizes and Simplifies Server Management

Software and Services

- Microsoft System Center Configuration Manager 2007
- Microsoft System Center Virtual Machine Manager 2007
- Microsoft Virtual Server 2005 R2

Why go behind the case study? Case studies are beneficial for technical decision makers because they can see a real example of a business problem being solved through the application of Microsoft technology. The story behind the scenes, however, provides detail into the decision making processes and IT best practices that ultimately led to the resolution of the business problem through the application of technology. Join us as we go Behind the Case Study at RackForce Networks.



RackForce is one of North America's fastest growing privately held Hosting Service Providers. RackForce provides wholesale server rentals to e-businesses, application providers, and hosting resellers. The company has more than 2,500 customers and is located in the heart of "Silicon Vineyard" in Okanagan, Canada.

In 2003, while a number of companies were offering dedicated physical server rental, RackForce pioneered virtual server rental through its Dynamic Dedicated Servers (DDS) program. RackForce saw that virtualization would allow its customers a higher degree of scalability and flexibility at a lower cost. Originally offered as a Linux-only solution, RackForce began offering Windows virtual server hosting in 2005. RackForce continues to look to the future as it anticipates the release of Hyper-V as part of Windows Server® 2008.

We talked to Randall Robinson, RackForce General Manager; Brian Fry, VP of Sales and a Co-Founder of RackForce; and James Bothe, RackForce System Administrator, to learn what led them to branch out into Windows hosting and how their company has fared as a result of that decision.

The Need for Windows

In 2005, RackForce started to experience a high volume of customer requests for Windows hosting. Randall explains, "We had customers coming to us and saying, 'Do you have Windows?' We had to say 'No'. So obviously it made sense to add Windows to our offerings and drive that forward." Brian also shared that, "In terms of requests from customers for new service offerings, Windows was outpacing other requests 10 to 1."

RackForce spent time analyzing the business opportunity that Windows presented. As Randall states, "We had done a joint

"Sales of Microsoft hosting were better than 50% of hosting sales. We have almost doubled our business, and we have done it without adding any staff."

Randall Robinson, General Manager, RackForce

survey, and part of the information that came back was that, overwhelmingly, Windows customers were willing to spend money. They were very honest and bold in stating that. They weren't looking for the cheapest solution; they were looking for the right solution."

After determining the business opportunity was real, RackForce got started with the implementation. Randall explains, "Sales of Microsoft hosting were better than 50% of hosting sales. We have almost doubled our business and we have done it without adding any staff."

Partnering

One of the biggest benefit areas for RackForce was that Microsoft stepped up as a partner it could go to market with. By contrast, RackForce struggled to find strong Linux partnerships that could enhance its business. As Brian puts it, "In the Linux world, there isn't an easy way to partner with anyone." Going on, Brian says, "Whose door do you knock on when you are doing a bunch of open source efforts? Most of the companies are quite small."

While RackForce used Red Hat's products extensively, it didn't get value from Red Hat as a partner. As Randall laments, "Red Hat is obviously big, but I do not know that Red Hat ever called on us, even though we spent a heck of a lot of money with that company."

By contrast, Microsoft was seen as a strong partner that would help RackForce grow its business. Randall feels that Microsoft concentrated on RackForce's success from the start, saying, "Microsoft is a very focused organization. It looks at what your goal is, works with partners, and understands the value of a partner chain."

Clear Roadmaps

Microsoft has provided RackForce with a clear roadmap of upcoming products and features. By contrast, RackForce has, at times, been blind-sided by unexpected changes or even abandonment of open-source projects. These changes can

"In the Linux world, there isn't an easy way to partner with anyone. Whose door do you knock on when you are doing a bunch of open source efforts? Most of the companies are quite small."

*Brian Fry, VP of Sales,
RackForce*

happen with limited or no warning. This is more than an inconvenience for RackForce, and these changes can directly impact RackForce's customers. On this point Randall states, "Right now, as a person who specifically deals with customer issues and customers who are upset, I would say that there is no single issue that this company has seen that's made people more upset than the end of life of Fedora."

Linux distributions present security challenges as well, as Randall says, "There are customers who are still on early releases of Fedora Core. They never had to patch it. The system never forced the idea, never told them they had to apply patches. This thing has got more holes than Swiss cheese, and it is compromised left, right, and center. It cost us a fortune to support them and to protect our network against those compromises."

Ultimately, customers hold RackForce responsible for Linux changes that the company doesn't control. As Randall puts it, "I have emails and tickets from customers saying, 'RackForce is forcing me to go away from Fedora, and it is costing me a huge amount of money.' They literally hold us responsible for that. We can't do anything about it, but we're the throat with their fingers around it."

With Microsoft, Randall says things are different, "With a partner like Microsoft, you see the path, and you know what is coming. You have much better insight into the roadmap ahead." He went on to say, "There is a clear upgrade path for each new operating system and a commitment to support the old operating system for a period of time. Microsoft has repeatedly provided us a clear roadmap, and we have told customers that if they are on Microsoft platforms, they have a clear upgrade path."

Patching Servers

RackForce has noticed differences between keeping Windows and Linux patched and secure. The process of applying patches in a Windows environment is clear and obvious, according to Randall: "On the Windows side, you of course get a nice little exclamation mark in the bottom right corner, which tells you it's time to patch. That makes life quite easy. On the Linux side, unless you specifically configure your updater to check for updates, you may or may not know there are updates waiting for you."

"Microsoft is a very focused organization. They look at what you're goal is, they work with partners, and they understand the value of a partner chain. I think groups like Red Hat and others in the open source community do not have that focus. They do not have the commitment to look forward."

Randall Robinson, General Manager, RackForce

In the words of James, Linux distributions can lack a consistent mechanism for discovering and applying patches. “There are different ways of installing packages, which everybody has to be aware of, for the different distributions. If you're not, it can be like using an operating system for the first time. This can be really confusing from a technical perspective,” he explains.

Support and Community

RackForce has also found differences in the communities and support models for Linux and Windows. As Randall puts it, “Our fear factor is higher on the Linux side than it used to be.”

In comparing getting support from the community, James describes it as, “Typically when you have a Linux problem, you head on over to Google, you try to search and search and search, and you will find an answer after a half of day of searching, and you call it a day.”

By contrast, James describes Microsoft support, saying, “There are some very good forum communities, and if I have a bigger problem, there is a phone number I can call. On the other end of the line is someone who is willing to come into my systems and actually fix the problem.”

RackForce has also noticed some more subjective differences between the support communities. In James' words, “Occasionally on the Linux side of things, you will post a question and get a 'read the manual' type of response, or something equally terse. On the Microsoft side, if you go to the TechNet forums there are people there who will help you, and give directions like 'Click here, go here, press this button, etc.’”

“There is a clear upgrade path for each new operating system and a commitment to support the old operating system for a period of time. Microsoft has repeatedly provided us a clear roadmap, and we have told customers that if they are on Microsoft platforms, they have a clear upgrade path.”

Randall Robinson, General Manager, RackForce

Looking Ahead

RackForce is also looking ahead to Windows Server 2008 and the impact it will have on business as a whole. RackForce is looking forward to adopting Windows Server 2008 Hyper-V technology, which will give the company new capacities for providing dynamic

resource capabilities to customers. In the words of Randall, “I think we are going to have tremendous advantages available to us when we get to Hyper-V. It will let us get around some of the limitations that exist for enterprise customers running Virtual Server, such as the 4GB memory limit.”

RackForce looks forward to other enhancements in Windows Server 2008, such as IIS 7.0 and PowerShell. James describes IIS 7.0, saying, “It’s more modular; Microsoft has actually made it more like Apache in that way. Rather than loading up a ton of features in a single DLL, Microsoft has separated all of those features, so you can enable only what you need.”

With regard to PowerShell, James says, “The PowerShell scripting, along with using something like Virtual Machine Manager, well that’s golden. We can tie that into our proprietary systems and we’ll have customers come to our portal and click a button to start their virtual machine, create a checkpoint, etc.”

RackForce feels that not only has it found a great partner in Microsoft but it has found one that enables great business growth. As Brian puts it, “Microsoft has held its ground very well. For most of 2007, Microsoft was outselling Linux in the US, and that’s a good thing for us.”

“Occasionally on the open source side of things you will post a question and get a 'read the manual' type of response, or something equally terse. On the Microsoft side, if you go to the TechNet forums there are people there who will help you, and give directions like 'click here, go here, press this button, etc.’”

James Bothe, System Administrator, RackForce

About Randall Robinson

Randall Robinson is the General Manager of RackForce Networks Inc. and has been instrumental in systems and process development and management since joining the company in early 2003. In his current role, Randall interfaces directly with all teams and business groups within the company overseeing day-to-day operations and helping to guide and implement existing and future business objectives.

Randall has a diverse background encompassing sales and marketing, multimedia development, technical instruction, and music, film and television production. Randall's technical aptitude and business process astuteness are uniquely balanced by his artistic sensibilities, honed by his Diploma of Fine Art conferred upon him by the prestigious Emily Carr Institute of Art and Design. Randall's work has been honored with a Best Drama award for his short film For Old Times' Sake (Cascadia Festival of the Arts) as well as five independent music awards.

Outside of the office Randall is an active songwriter and musician whose award-winning band and music is receiving commercial radio airplay across Canada and as far away as London England and Tokyo Japan. Randall is also passionate about the environment. He has worked with Green Peace, both in his native Okanagan and in Vancouver, and currently sits as a director for the Canadian Earth Care Society as well as the Okanagan Wildlife Recovery Center.

About Brian Fry

Brian Fry is a sales driven entrepreneur with over 23 years of executive management experience in the Information, Software and Computer Technology Industry (ICT). Mr. Fry launched his first technology company in 1985, while attending BCIT; moved to California during the Internet boom years and held senior sales positions before returning to British Columbia in 1997. Mr. Fry then became Vice President and partner with PowerLink Internet services where he and his partners grew the company into one of the largest ISPs in British Columbia before it was sold to Internet Direct in 1999.



Mr. Fry then co-founded, with Tim Dufour, a very promising new fiber optic network communications company called IPWorld Networks. As funding for network start-ups became limited during the dot-com era, Mr. Fry and Mr. Dufour recognized the need for hosted web servers to keep up with Internet growth and in 2001 they founded RackForce, a very successful hosting service provider with, in Kelowna BC where Brian is Vice President.

Recently (early 2008) he co-founded gigaCENTER Services Corp. a company focused on delivering highly advanced data center infrastructure for next generation computing demands. This new company and RackForce are highly complementary and Brian is providing his sales and marketing expertise to ensure fast growth for both companies.

Outside of his entrepreneurial work Brian remains a passionate outdoor enthusiast. He skis and mountain bikes. In his younger years, during the Crazy Canuck era, he was a member of Canada's National Ski team. Today he is the President of Red Mountain Racers Ski Club one of North America's most successful ski racing clubs.

About James Bothe

James Bothe is the Project Lead for RackForce's On Demand Server Virtualization Strategy. Along with his team James plays an integral role in delivery and management of mission critical systems that seamlessly provision computing resources within seconds of being requested.



James was educated at Okanagan University College and in 2001 he joined the technical department at Shaw Communications where he quickly proved his technical prowess. With his passion for solving the most complicated technology challenges he joined RackForce in 2004. James is a sought after technical speaker on the topic of server virtualization.

Outside of work James is active in sports especially hockey. He is also a fast car enthusiast.

For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: www.microsoft.com.

For more information about RackForce Networks' products and services, call (800) 941-1921 or visit the Web site at: www.rackforce.com.