



Hosting Company Taps Growth Market by Offering Latest Virtualization Technology

Overview

Country or Region: United States

Industry: Hosting

Customer Profile

Layered Tech, based in Plano, Texas, provides dedicated hosting and on-demand IT infrastructure solutions to customers in more than 120 countries.

Business Situation

Layered Tech sought to provide a broader range of hosting options to its customers. It wanted to be one of the first hosting providers to offer virtualization technology.

Solution

Through participation in the Microsoft[®] Go-Live program for the Windows Server[®] 2008 operating system with Hyper-V[™] virtualization technology, Layered Tech became one of the first hosting companies to offer Hyper-V.

Benefits

- Highly-flexible, cost-effective hosting
- Simplified management environment
- Competitive advantage
- Superior support

“Our investment in Hyper-V is based on the fact that Layered Tech sees a huge growth market in virtualization and we want to be a part of it.”

John Pozadzides, Vice President and Chief Marketing Officer, Layered Tech

Layered Tech provides IT infrastructure, including dedicated servers, managed hosting, and grid computing, to businesses of all sizes. To offer its customers maximum choice, the company added virtualization technology to its offerings. Layered Tech participated in the Microsoft[®] Go-Live program for the Windows Server[®] 2008 operating system with Hyper-V[™] virtualization technology, which permitted the company to deliver services based on Hyper-V to customers even before the product's official release. With Hyper-V in its portfolio of server products, Layered Tech can provide robust hosting at a fraction of the cost of maintaining dedicated servers, giving the company an important edge in this competitive industry. Layered Tech is also simplifying management of customers' servers with Microsoft System Center Virtual Machine Manager 2008.

“Virtualization offers a level of automation and control over server resources that you just can’t get using standard servers.”

Jeremy Suo-Anttila, Chief Technology Officer,
Layered Tech

Situation

Founded in 2004, Layered Tech is a young hosting company that has seen tremendous growth in its early years. Based in Plano, Texas, the company provides dedicated hosting, both managed and unmanaged, as well as utility computing services, to customers in more than 120 countries. Those customers range from small businesses to Web 2.0 companies, such as WordPress and Woopra, to enterprises such as Accenture and Unisys.

Layered Tech was formed out of a desire to provide hosting customers with more variety and flexibility in hardware and operating system hosting options. “Our goal is to provide customers with a range of flexible hosting options,” says John Pozadzides, Vice President and Chief Marketing Officer at Layered Tech. “With our self-managed hosting options, which enable customers to do most of their own management of the applications and services they are hosting on our servers—with Layered Tech providing day-to-day technical management—we can offer hosting solutions at a lower price.”

In 2006, to further its goal of providing flexible, affordable hosting options to customers of all sizes, Layered Tech entered the arena of grid computing—a form of distributed computing that relies on the pooling of computational resources. In this model, the processing power of physical servers is shared across a network, enabling all machines to function as one large supercomputer. “Grid computing gave us the ability to provide computing resources on demand to our customers,” says Pozadzides. “The next logical step for Layered Tech was to take advantage of virtualization technology to better serve our customers.”

Jeremy Suo-Anttila, Chief Technology Officer at Layered Tech, explains, “With the advances in server hardware technology,

each dedicated server is providing a great deal more resources than is generally needed. I log into many servers a day, and I often see that as much as 80 percent of a server’s resources is not being used, which means that customers are paying for processing power, memory, disk space, and bandwidth that they aren’t taking advantage of. We wanted to adopt virtualization because it can enable our customers to consolidate their hosted servers, which saves them money.”

Finally, virtualization also offered the potential for simplified server management, both for Layered Tech and for its customers. “Virtualization offers a level of automation and control over server resources that you just can’t get using standard servers,” says Suo-Anttila.

Solution

The first virtualization technology that Layered Tech offered was Virtuozzo Containers from Parallels. “With Virtuozzo, we are able to emulate isolated containers on a single physical machine, but customers are restricted to a single operating system per server,” says Suo-Anttila. To expand its virtualization product lineup, Layered Tech also began to offer technology from VMware. “It’s all about customer choice,” says Pozadzides. “We don’t take a one-solution-fits-all approach.”

As Layered Tech grew, it attracted more and more enterprise customers. To meet the demands of these customers, the company adopted a variety of Microsoft® solutions, including the Windows Server® operating system and Microsoft SQL Server® data management software. “All of our system integrator customers wanted Microsoft products,” says Suo-Anttila. “We adapted our offerings to fit their needs; we don’t like to say no.”

“We experimented with Hyper-V and saw many of the same benefits that VMware delivered, but the cost was much lower.”

Jeremy Suo-Anttila, Chief Technology Officer,
Layered Tech

Pozadzides adds, “We also shifted our entire internal support infrastructure to Microsoft Dynamics® AX. All of our own systems are built on Microsoft products and technologies, and it was only natural that we offer our customers the widest range of Microsoft products possible.”

When the Windows Server 2008 operating system with Hyper-V™ virtualization technology was announced, Layered Tech was anxious to experiment with it. The company was chosen to participate in the Microsoft Go-Live program for the Windows Server 2008 operating system with Hyper-V, in which select hosters are permitted to deploy systems and deliver services on prerelease, beta versions of Hyper-V in production environments. The program also offers technical support from Microsoft Services. “We experimented with Hyper-V and saw many of the same benefits that VMware delivered, but the cost was much lower,” says Suo-Anttila. “In addition to the price point, we wanted to maintain our reputation as a pioneer in the field by offering the latest technologies. For all of these reasons, it was an easy decision to adopt Hyper-V.”

Layered Tech now offers customers a Hyper-V virtualization option on dedicated servers from HP and Dell, which run the Windows Server 2008 Datacenter operating system. The Hyper-V offering means that Layered Tech can reduce its data center footprint because customers using Hyper-V require fewer servers overall. This is because virtualization allows a customer to run many virtual machines, responsible for a variety of workloads, from a single dedicated server. And for the customer, leasing fewer dedicated servers means lower hosting costs.

With the self-managed Hyper-V virtualization package, customers receive administrator access for full system control. They can also choose to take advantage of DEFCON

management services from Layered Tech, which range from completely self-managed to a full turnkey package, including monitoring, updates, and live support 24 hours a day.

In addition to its Hyper-V-enabled dedicated servers, Layered Tech is offering customers the option to lease individual partitions of a physical server—that is, individual Hyper-V-enabled virtual machines, rather than an entire dedicated server, at a much lower price entry point. “This allows customers to lease a single virtual machine—a ‘slice’ of a server—running the operating system of their choice,” says Suo-Anttila.

Layered Tech plans to use Microsoft System Center Virtual Machine Manager 2008 to manage its customers’ Hyper-V environment, and will also license System Center Virtual Machine Manager 2008 to customers who choose to self-manage their own virtual environments.

Benefits

With its new virtualization offering, Layered Tech can create a more efficient, easy-to-manage hosting environment. Cost-savings as a result of virtualization are passed on to the company’s customers, giving Layered Tech a competitive advantage in the marketplace. Through its participation in the Microsoft Go-Live program, Layered Tech became one of the first hosting companies to offer Hyper-V technology.

Highly Flexible, Cost-Effective Hosting
Layered Tech is using Hyper-V virtualization technology to expand its hosting options and, consequently, its ability to provide customers with a wider range of services. “A larger company may want to consolidate its dedicated, hosted servers to reduce costs, but it still needs to be able to provision server resources for each of the company’s departments, such as billing or human resources,” says Suo-Anttila. “The IT

“With Hyper-V and System Center Virtual Machine Manager 2008, we not only get more customers per cubic inch in the data center, we reduce or eliminate certain management tasks.”

Jeremy Suo-Anttila, Chief Technology Officer, Layered Tech

department doesn't want to put all of the departments' workloads on a shared server because the risk of conflicts among software can be high. With Hyper-V, we can provide the company with one high-power server, and on it, provision a number of virtual machines, one for each department, with power for each virtual machine equivalent to the dedicated server the department would have otherwise had.”

On the other side of the spectrum, Layered Tech can provide a startup company that needs, for instance, a Microsoft database server and a Linux application server, with two virtual machines—one running Linux and one running the Windows Server operating system. Instead of purchasing two dedicated physical servers from Layered Tech, the company can purchase two virtual machines for a third of the cost.

Pozadzides says, “Hyper-V gives us the ability to deliver individual virtual machines for each application the customer needs to host, at much less than the cost of a dedicated server.”

Simplified Management Environment
Cost savings from Hyper-V also result from simplified management. “In our own environment,” says Pozadzides, “Hyper-V will result in administrative cost savings because it will take less time to manage virtual machines than it does to manage our thousands of dedicated physical servers.”

When the company begins using System Center Virtual Machine Manager 2008, the Layered Tech technicians will be able to take advantage of features such as the Quick Migration tool that allows for faster and easier physical-to-virtual and virtual-to-virtual migrations. “We won't be spending as much time going to the server racks and uninstalling and reinstalling software,” Suo-Anttila explains. “Our labor costs will

decrease with Hyper-V and System Center Virtual Machine Manager 2008.”

“Using System Center Virtual Machine Manager 2008 with Hyper-V provides a much higher level of automation than you can achieve with standard servers,” adds Suo-Anttila. “With Virtual Machine Manager 2008, I can delegate management of Hyper-V servers located at remote data centers to the customer, who, using the self-service portal, can provision its own virtual machines on these physical servers.” System Center Virtual Machine Manager 2008 can be used to provide a customer with management abilities, but on a reduced scope, such as only on a designated subset of physical servers. This allows Layered Technologies to maintain ultimate control of its resources, while granting customers the flexibility, and associated cost savings, of managing the portion of resources they are leasing.

“With Hyper-V and System Center Virtual Machine Manager 2008,” says Suo-Anttila, “We not only get more customers per cubic inch in the data center, we reduce or eliminate certain management tasks. For instance, with physical servers, when a customer cancels a server order, it can take a technician up to three hours to provision the server to another customer. With our virtualization offering, the server can be provisioned to a new customer in a matter of minutes.”

Competitive Advantage

As an early adopter of Hyper-V technology, Layered Tech is poised to capture customers seeking higher efficiency in their hosted environments. “Our investment in Hyper-V is based on the fact that Layered Tech sees a huge growth market in virtualization and we want to be a part of it. Shortly after we began to offer grid computing, because of the higher efficiency it offered by allowing customers to buy resources on demand, it became

“What we save from reduced labor costs, smaller data center footprint, lower power consumption from Hyper-V—all of that gets passed on to our customers.”

Jeremy Suo-Anttila, Chief Technology Officer,
Layered Tech

responsible for about 10 percent of our revenue. Virtualization holds similar benefits, and we believe that the rush to adopt virtualization in the marketplace is also going to drive high sales volumes for Hyper-V in a short amount of time,” says Pozadzides.

“What we save from reduced labor costs, smaller data center footprint, lower power consumption from Hyper-V—all of that gets passed on to our customers,” says Suo-Anttila.

Superior Support

Through participation in the Go-Live program, Layered Tech received support from Microsoft Services to get its Hyper-V offering ready for the marketplace. Pozadzides and Suo-Anttila say that the support they received was helpful in being first-to-market with this new technology.

“When we needed help, Microsoft was there for us,” says Suo-Anttila. “We would readily participate in another Go-Live program.”

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 Layered Tech products and services, call (866) 584-6784 or visit the Web site at: www.layeredtech.com

Hyper-V and Microsoft System Center Virtual Machine Manager 2008

Together, Hyper-V technology—a key feature of the Windows Server 2008 operating system and Microsoft System Center Virtual Machine Manager 2008 provide a reliable virtualization technology and comprehensive management solution that make it easier for customers to virtualize their IT infrastructure and reduce costs. With integrated administration, customers can use a single console to centralize management of a heterogeneous virtual machine infrastructure; increase physical server utilization; rapidly provision new virtual machines; and provide dynamic performance and resource optimization of hardware, operating systems, and applications. Both of these technologies easily plug into existing infrastructures, so companies can continue to use their current patching, provisioning, management, and support tools and processes. This combined virtualization technology and management solution also provides great value, because customers can make the most of their IT professionals' skill set, the breadth of solutions from Microsoft partners, and comprehensive support from Microsoft.

For more information, go to:
www.microsoft.com/hyper-V
www.microsoft.com/scvmm

Software and Services

- Microsoft Server Product Portfolio
 - Windows Server 2008 Datacenter
 - Windows Server 2008 Hyper V
 - Microsoft System Center Virtual Machine Manager 2008

Hardware

- HP ProLiant DL180 G5 and DL140 G3 servers with Dual Quad-Core Harperton 5405 processors
- Dell PowerEdge 2950 servers with two Quad-Core Intel Xeon processors
- Dell PowerEdge 1950 servers with two Dual-Core Intel Xeon processors

Partner

- Microsoft Services