

## CITRIX SYSTEMS, INC.

A GLOBAL LEADER IN PROVIDING VIRTUAL COMPUTING SOLUTIONS USES THE THINKSERVER RD240 TO HELP COMPANIES DELIVER I.T. AS AN ON-DEMAND SERVICE.



### CUSTOMER PROFILE

Citrix Systems, Inc. is a global leader in providing virtual computing solutions that help companies deliver I.T. as an on-demand service. Founded in 1989, Citrix combines virtualization, networking, and cloud computing technologies into a full portfolio of products that enable virtual work styles for users and virtual datacenters for I.T. More than 230,000 organizations worldwide, including 100% of the Fortune 100, rely on Citrix to help them build simpler and more cost-effective I.T. environments.

### BUSINESS SITUATION

Twice each year, Citrix hosts a special event for its customers, partners, opinion leaders, media, and analysts to provide a conference framework for learning, networking and inspiration. This event which encompasses both US and European venues is aptly named Synergy.

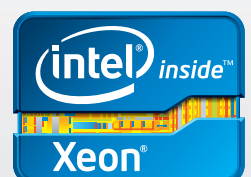
**BUILT FOR BUSINESS, THE LENOVO THINKSERVERS ENABLE CITRIX'S POWERFUL ENTERPRISE SOLUTIONS.**

"The ability to easily configure the ThinkServers to meet our requirements at Synergy allowed us to build and deliver a solid, high performance and reliable computing infrastructure with relative ease."

- **Fabian Wright**  
 Manager, Corporate Events,  
 Citrix Systems, Inc.



Lenovo® ThinkServer® RD240



## "150 plus Virtual Desktops Delivered!"

"Citrix delivered an unparalleled virtual desktop experience to our partners and customers powered by ThinkServer RD230 and RD240."

- **Fabian Wright**  
 Manager, Corporate Events



Fabian Wright  
 Citrix Systems, Inc



Lenovo ThinkServer® RD230

## INTRODUCTION

Citrix Synergy requires a robust and scalable computing infrastructure to support our virtual computing solutions. This case study highlights how the Lenovo RD230 and RD240 rack mount ThinkServer series provides solid performance, reliability, and scalability for this demanding environment.

## SITUATION

One of the many popular venues at Synergy is the Internet Access Center where attendees are able to enjoy an amazing virtual desktop experience while checking on event details and schedules, staying in touch with work and family, making dinner and theater reservations, and planning their return home at the end of the event.

In addition, the same computing infrastructure must support our Press Center where media are able to relax while reporting back with exciting event news and announcements, as well as our BYO (Mobility) Center where attendees can experience the power of Citrix virtualization technology on a wide variety of mobile devices and tablet PCs.

## CHALLENGES

- Ability to easily scale and expand the environment to maintain optimal performance
- Flexible server hardware configuration
- High capacity memory configuration
- Multi-socket and multi-core CPU options
- Redundancy for zero fault tolerance
- Space constraints to house server equipment
- High performance and redundant storage configuration
- Fast and expandable networking options
- Solid virtualization and hypervisor support

## CITRIX APPLICATIONS

Below are the Citrix applications loaded Per Sever:

- Windows 7 with XenDesktop 5 Virtual Desktop Agent = 50
- XenDesktop = 2
- XenApp = 2
- Citrix EdgeSight = 1t

## SOLUTION

The ThinkServer RD230 and RD240 servers meet these challenges head on. To meet our specific needs, we chose the following configuration:



"ThinkServer offers an enterprise class solution that allows the enterprise to shine when it matters most."

- **Fabian Wright**  
Citrix Systems, Inc.



Lenovo powers the Internet Access Center at Synergy 2011



Lenovo ThinkServer® RD240

### Server + Desktop Virtualization (4 Infrastructure Servers + 150 Virtual Desktops)

#### ThinkServer RD230 (Quantity 3)

- 2 x Intel Xeon® E5620® 2.4 GHz, 12MB L3 Cache processors (16 cores total)
- 64 Gb DDR3-1333 Memory
- 2 x 3.5" 500GB SATA Hot Swap Enterprise class 7.2K RPM (RAID 1 configuration)
- 1 x ThinkServer PRO 1000 PT Dual Port by Intel (Redundancy and Load Balancing)

### Shared Storage

#### ThinkServer RD240 (Quantity 1)

- Single Intel® Xeon® E5620® 2.4 GHz, 12MB L3 Cache processors (8 cores total)
- 64 Gb DDR3-1333 Memory
- 8 x 3.5" 500GB SATA Hot Swap Enterprise class 7.2K RPM (~3TB with RAID 50 configuration)
- 2 x ThinkServer PRO 1000 PT Dual Port by Intel (Redundancy and Load Balancing)
- ThinkServer RAID 700 with Battery

The sleek design of these 1U and 2U servers allowed us to organize the equipment in a custom-designed display case without comprising space or aesthetics.

The RD240, loaded with high-capacity SATA drives, provide a shared storage solution for our XenServer and VDI solution. The integrated and additional PCIe dual-port Intel Gigabit network adapters allowed us to separate storage from our VM traffic providing an optimal balance of network performance.

The high performance Intel® Xeon® processors and memory, provided all the power we needed to support the three venues and provide attendees with an optimal virtual desktop experience.

### BUSINESS RESULTS

150+ Virtual Desktops Delivered! Providing our partners and customers an unparalleled virtual desktop experience powered by Citrix was paramount. Lenovo allowed us to deliver that experience with its ThinkServer RD230 and RD240 high performance rack servers.

Desktop virtualization has gained a lot of attention in the past few years, and customers are looking at and weighing their options carefully based on personal experience with this technology.



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Lenovo powers the Internet Access Center at Synergy 2011



Lenovo ThinkServer® RD240

With the right combination of hardware and virtualization solution, the customer is empowered to lead the way – Citrix along with partners like Lenovo are here to guide them.

Pulling together a big event such as Synergy is equally challenging and rewarding. The conference center doors open, the clock starts ticking, and the build-out begins. The ability to easily configure the ThinkServers to meet our requirements for this event allowed us to build and deliver a solid, high performance and reliable computing infrastructure with relative ease.

Event attendees who visited the Internet Access Center were able to see the ThinkServers in our display case and measure the performance and stability of the environment with our XenDesktop management components Desktop Studio and Desktop Director, along with our XenServer management component XenCenter. Providing a look into the hardware and software infrastructure turned out to be a smart choice for presenting solutions to our audience.

Would we look to Lenovo again for a future event? You bet! ThinkServer offers an enterprise class solution that allows the enterprise to shine when it matters most.

### ABOUT LENOVO

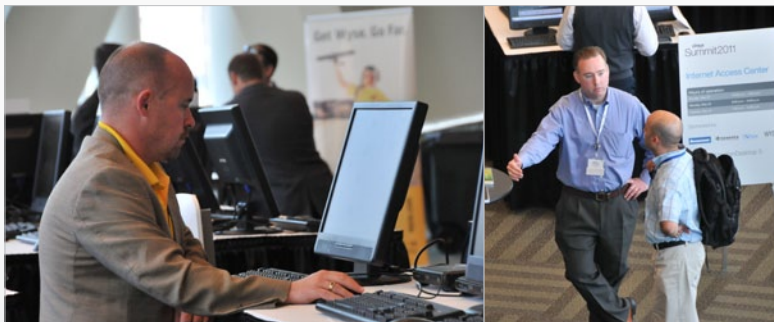
Lenovo (HKSE: 992) (ADR: LNVGY) is dedicated to building exceptionally engineered personal computers. Lenovo's business model is built on innovation, operational efficiency and customer satisfaction as well as a focus on investment in emerging markets. Formed by Lenovo Group's acquisition of the former IBM Personal Computing Division, the company develops, manufactures, and markets reliable, high-quality, secure and easy-to-use technology products and services worldwide. Lenovo has major research centers in Yamato, Japan; Beijing, Shanghai and Shenzhen, China; and Raleigh, North Carolina.

### VIDEO TESTIMONIALS

<http://www.youtube.com/user/LenovoVision>

### THINKSERVER PORTAL

[www.lenovo.com/thinkserver](http://www.lenovo.com/thinkserver)



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