

# Stratus and VMware Bring Continuous Availability to VMware® Virtualization



For the growing numbers of organizations adopting VMware® virtualization, here's welcome news: Bringing industry-leading uptime to your virtualized environment is simpler than ever. Stratus Technologies, the company that sets the pace in continuous computing, and virtualization leader VMware are delivering business-critical solutions that enable 99.999% or better uptime for both the server hardware and virtualization layer.

When you pair VMware virtualization with our fault-tolerant Stratus® ftServer® systems, you benefit from a strategic relationship focused on enabling critical applications. So you can deploy virtualization in uptime-demanding environments with even more confidence.

*"Customers deploying VMware Infrastructure 3 are achieving higher levels of availability by leveraging the combined benefits of VMotion, DRS, and VMware HA to reduce both planned and unplanned down time. VMware Infrastructure 3 on Stratus ftServer takes these benefits to the next level by combining the benefits of mission-critical platform availability with the flexibility and consolidation enabled by virtualization. Going forward, VMware looks forward to expanding collaborations with Stratus' rich heritage in continuous availability technologies to further complement VMware's market leading innovations in virtual infrastructure products."*

**Brian Byun**

Vice President, Global Partners and Solutions  
VMware, Inc.

Ensuring uptime for critical IT applications and services is at the center of everything Stratus does. We're dedicated to making Stratus hardware and software platforms the most available in the industry. Our fault-tolerant servers are designed from the ground up to maximize application uptime, including the VMware ESX Server environment. And benefiting from our Continuous Processing technology is as easy as loading your software.

## STRATUS PROFILE

Stratus Technologies is a global provider of fault-tolerant computer servers, technologies and solutions services, with more than 25 years of experience in Continuous Processing® technology. Stratus ftServer systems provide the highest levels of reliability in the server market, delivering greater than 99.999% uptime across the entire product line.

## BUSINESS SITUATION

Companies running business-critical applications depend on fault-tolerant Stratus systems and support services to prevent downtime and the costly losses that result: revenue, productivity, valuable business data and customer loyalty.

## SOLUTION

Stratus industry-standard ftServer family running VMware ESX Server

## BENEFITS

- Industry-leading uptime of 99.999% or greater ensures comprehensive availability protection
- Affordable open-systems family offers a range of configurations and performance options
- Built-in fault-detection, isolation and call-home features "prevent" outages unlike other availability alternatives that are simply designed to "recover" from failure
- Online manageability and serviceability protects "lights out" and remote locations
- Worldwide ActiveService™ network delivers 24/7 online service and support
- The combination of Stratus servers and VMware® Infrastructure 3 suite, addresses the full spectrum of availability challenges including, hardware and software failures as well as planned downtime.



# Proven 99.999% Availability for VMware Environments

## The Smarter Approach to Uptime™

Every aspect of the ftServer system design — from lockstep hardware technology to failsafe software to our ActiveService™ architecture — works together to prevent unplanned downtime. These systems don't miss a beat during component failures and system software faults that cause other servers to crash.

*"We feel confident doing this [virtualization] for Kansas City Terminal Railway because of the extremely high levels of reliability provided by the Stratus ftServer hardware and the virtualization software from VMware."*

**Ross Pirtle**  
President  
Railware, Inc.

You get comprehensive component and functional redundancy within the footprint of a single ftServer system. If one component fails, its partner keeps the server processing without disrupting your business operations. You avoid the processing blackout that happens while a high availability cluster transfers workload from a failed server to a healthy one. No transactions or data are lost; system performance does not degrade.

Stratus ftServer systems run VMware ESX Server and are fully ABI-compatible with applications supported by VMware ESX Server. Software features and functionality added outside the kernel enhance the fault-tolerant capabilities we bring to your virtualized environment.

## Ongoing financial advantages

Our ftServer systems combine continuous availability with financial advantages that last for the life of your server. In addition to cutting costs associated with downtime, the ftServer family keeps ownership costs low. They are maintained like ordinary servers —but with self-monitoring capabilities, remote troubleshooting and true hot-swap components built in.

A combination of remote-access serviceability and automatic (call-home) problem reporting allows service engineers to resolve issues online in more than 95% of cases. When needed, ftServer systems can automatically order their own hot-swappable replacement parts that usually arrive within 24 hours.

## Trusted by customers worldwide

For more than 27 years, Stratus systems have been trusted to run the world's most demanding mission- and business-critical applications. Today customers in manufacturing, life sciences, telecommunications, financial services, public safety, transportation & logistics and other industries depend on Stratus solutions, including:

- 8 of the world's top 10 banks
- 12 of the top 15 pharmaceutical companies
- More than 225 public safety agencies
- 14 of the 20 largest telecommunications service providers

Learn which organizations are already getting the highest reliability and the simplest operation, at an affordable cost. View our client success stories at: [www.stratus.com](http://www.stratus.com)

## The Industry's Highest Measured Uptime

Our uncompromising commitment to uptime is visible every day. Stratus is the first and only server vendor to report the dependability of our installed base of systems worldwide.

Displayed at [www.stratus.com](http://www.stratus.com), the Stratus Uptime Meter is refreshed daily from data that includes hardware, software, and operating system incidents.

The results report that ftServer systems — from entry-level to enterprise class— surpass five nines of uptime, making them ideal for business applications and services that require "always-on" computing.

### Stratus® ftServer® Systems



# Stratus and VMware: A Productive Relationship

## VMware Global Hardware Alliance Partner

VMware teams with industry-leading hardware companies to optimize selected technology with VMware software and enable these partners to sell and support VMware products. Following extensive compatibility testing VMware Global Hardware Alliance Partners are eligible to have their systems recommended for use with VMware software. VMware Global Hardware Alliance Partners help customers configure VMware products to optimize performance and functionality and fully leverage their VMware software investment.

## VMware Community Source program

Stratus is a member of the VMware Community Source program. This program provides tools and resources that enable vendors to work collaboratively on ESX Server development and interface their differentiated products with VMware ESX Server.

## VMware Hardware Compatibility List

All Stratus ftServer systems pass the rigorous tests to qualify for the VMware Hardware Compatibility List (HCL). As a result, you know that VMware virtualization, guest operating systems and applications will run flawlessly on every ftServer model.

## Technology collaboration

Leveraging many years of availability expertise, engineering groups at VMware and Stratus worked closely together to extend the availability features of VMware ESX Server technology.

These joint efforts included:

- **Development** of automated device-failure testing to study the response of ESX Server.
- **Improved** surprise-removal support for PCI devices in storage, USB, PCI control, and plug-and-play.
- **Accelerated** identification and resolution of software issues affecting availability during various test phases.

“By opening the door to an expanded base of engineering creativity and technical resources, the VMware Community Source program is an innovative approach to quickly building added value for customers.”

### Allan Jennings

Senior Vice President  
Product and Solution Development  
Stratus Technologies



VMware Global  
Hardware Alliance Partner

## Stratus Fourth Generation ftServer family

	2500 Model	4400 Model	6200 Model
<b>Positioning</b>	Highly affordable, entry-level, fault-tolerant server	<ul style="list-style-type: none"> <li>• Scalable, versatile, expandable</li> <li>• Price/performance leader for applications that cannot fail</li> </ul>	Enterprise-class server delivering maximum performance and availability for mission-critical computing
<b>VMware® Infrastructure 3 Deployment model</b>	<ul style="list-style-type: none"> <li>• VMware® VirtualCenter Management Server</li> </ul>	Departmental or remote virtualization	Datacenter virtualization

# Stratus ftServer Systems and VMware ESX Server: A Unique Combination of Award-Winning Technologies



*Stratus and  
VMware captured  
"best in class"  
2007 technology  
awards from  
InfoWorld*

*"No one should think about virtualization without also thinking about availability at some level. Our collaboration with VMware provides the availability and virtualization support to satisfy a broad range of customer requirements."*

#### **Greg Enriquez**

Senior Vice President Worldwide Sales and Operations  
Stratus Technologies

#### **Stratus: Best Fault-Tolerant Server**

InfoWorld's 2007 Technology of the Year Awards honored Stratus' ftServer 4300 model as Best Fault-Tolerant Server. In fact, they tried every avenue to break the configuration and failed on all attempts. In the final analysis, the system received an excellent rating from InfoWorld reviewers based on six criteria: availability, performance, scalability, management, serviceability and value.

Their evaluation: "This is one tough dual-CPU server. Repeated attempts to break the running OS by failing hardware components didn't make the ftServer 4300 flinch ... if your company requires true redundancy, look no further."

#### **VMware: Best Server Virtualization**

The same year, InfoWorld designated the VMware Infrastructure 3 platform (ESX Server) as Best Server Virtualization, stating: "VMware Infrastructure 3 reinforces VMware's standing as the leading virtualization platform vendor." Criteria for this award category included ease of use, manageability, performance, set-up, configuration, and value.

The InfoWorld Test Center evaluation praised the software's improved performance, and new features set, concluding: "In the end, VI3 and the VMware team passed our test with flying colors, successfully migrating a number of Windows and Linux systems and impressing us with a wealth of useful tools and automated management capabilities."

#### **Peak uptime for virtualized environments**

VMware Infrastructure 3 is the industry-leading infrastructure virtualization software that virtualizes servers, storage and networking, allowing multiple unmodified operating systems and their applications to run independently in virtual machines while sharing physical resources. The suite delivers comprehensive virtualization, management, resource optimization, application availability and operational automation capabilities. The combination of VMware ESX Server and Stratus fault-tolerant servers provides the most comprehensive solution for infrastructure availability in the industry.

## **Requirements on the Rise**

### **Analyst report predicts growing demand for fault tolerance and virtualization**

According to Yankee Group, continuous availability needs will expand with trends such as virtualization and consolidation. A recent report notes: "These key trends are prompting a fresh look at fault-tolerant servers for data centers and server infrastructure."

The conclusion? "For vendors of fault-tolerant servers such as Stratus Technologies, the market conditions are favorable. The enterprise infrastructure consolidation wave is just building."

Visit [www.stratus.com](http://www.stratus.com) to read the full report: Server Virtualization Creates New Opportunities for Fault-Tolerant Servers  
Go to the Stratus library: analysts reports.

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