



Stratus ftServer®



A continuously available advanced computing platform uniquely engineered to run mission-critical applications without downtime or data loss—for the enterprise data center, control room, or edge location.

Overview

Enterprises today need failure prevention, not failure recovery. Penguin Solutions® Stratus ftServer® provides organizations with the unmatched reliability, computing power, performance, and serviceability needed they need to rapidly modernize IT architectures, run mission-critical applications with no downtime, and turn data into actionable insights.

Ensuring data integrity and the continuous availability of critical applications is essential to business operations. In distributed locations with scarce information technology (IT) resources—such as at remote plant facilities or at the network edge—organizations also need computing infrastructure that non-IT staff can maintain. Platforms running these critical applications must be easy to deploy, manage, and service.

Stratus ftServer is a fault-tolerant advanced computing platform designed to run mission-critical applications with no downtime or data loss, whether in the data center, in the control room, or at edge locations. It's hardware-based, fully redundant architecture delivers better than five nines reliability and provides proactive health monitoring and self-healing capabilities. In addition, it is designed to be easily serviced by IT and operational technology (OT) teams alike.

Key Features

- Eliminate application downtime:

 Built-in fault tolerance delivers greater
 than five nines availability to run
 critical applications.
- Avoid data loss and ensure data integrity: Redundant computing architecture protects in-flight data in the event of component failure.
- Simplify management and support:

 Proactive health monitoring and self-healing capabilities save time and are easily managed by OT or IT staff.
- Rapidly modernize computing infrastructure: Run advanced software and deploy virtualization to consolidate multiple software workloads onto a single platform.
- Reduce total cost of ownership (TCO): Platform delivers a lifespan of seven to 10 years (twice that of traditional servers), reduces organizational IT footprint, and requires fewer software licenses.

With Stratus ftServer, organizations can rapidly modernize their IT infrastructure to maximize reliability, simplify manageability, and increase operational efficiency with minimal risk. In addition, application virtualization enables the consolidation of multiple software workloads onto a single Stratus ftServer platform to run an entire data center, digital factory, or remote asset. This unmatched combination of performance, computing power, reliability, and serviceability allows organizations the ability to build the future-proof, edge-to-enterprise architectures necessary to connect edge operations with cloud investments and realize edge-core-cloud data strategies that turn data into actionable insight.

Stratus ftServer features

Several key features make Stratus ftServer easy to deploy, manage, and service, whether in the enterprise data center, in the control room, or edge:

Automated Uptime Layer



Stratus Automated Uptime Layer (AUL) software coordinates processor synchronization, data replication, and logic to ensure continuous availability, even in the event of a hardware component failure. The Stratus AUL monitors nearly 500 alarm points to alert users of potential issues.

Industry-standard components



Stratus ftServer uses the same chipsets, DIMMs, and drives found in other industry–standard x86 systems. It also uses standard shrink–wrapped operating system and virtualization software for ease of management and faster time–to–value.

Serviceable by OT and IT teams



Stratus ftServer is designed for serviceability. The customer replaceable units (CRUs) are hot swappable and do not require platform shutdown or use of special tools. When a CRU is replaced, the system automatically re-synchronizes data, making Stratus ftServer ideal for deployment in remote manufacturing locations or locations with limited IT resources.

Redundant hardware CRUs



Each Stratus ftServer platform consists of two identical CRUs—each with its own processors, memory, storage, and power. All redundant components and subsystems are packaged as a single system. This approach is completely transparent to applications, which means simplified management and no development costs for deployment. The platform can be serviced and maintained while in operation, without disruption or downtime.

Workload consolidation



Stratus ftServer offers organizations the flexibility to run critical applications on bare metal—with the choice of industry–standard operating systems from Microsoft or RedHat—or to consolidate workloads with the hypervisor of your choice—whether VMware vSphere, Microsoft Windows Server with Hyper-V, or Red Hat Enterprise Linux with KVM.

Proactive health monitoring



Stratus ftServer delivers automated self-monitoring, alerting, self-diagnosing, and remediation capabilities. Platform health information sent via the Stratus ActiveService™ Network (ASN) or through an organization's existing monitoring methods alerts users of potential issues before they occur.

Stratus ftServer models

Stratus ftServer is easy to deploy, manage, and service. With four different models to choose from, Stratus ftServer can meet most every enterprise's workload, environment, and budget.



Stratus ftServer 2920

Affordability for stable, fixed, standalone applications in remote locations, branch offices, or on shopfloors.



Stratus ftServer 4920

Versatility for rapidly growing or evolving applications in regional offices, remote plants, or regional data centers.



Stratus ftServer 6910

High performance for dataor transaction-intensive applications in large remote plants or corporate data centers.



Stratus ftServer 6920

The ultimate in performance for compute-, data- or transaction-intensive applications in corporate data centers or large plants.

Stratus ftServer System Specifications	2920	4920	6910	6920		
Processors						
Processor(s)	1 x Intel® Xeon® Silver 4210R processor 2.4 GHz	2 x Intel® Xeon® Silver 4210R processor 2.4 GHz	2 x Intel® Xeon® Gold 5220 processor 2.2 GHz	2 x Intel® Xeon® Gold 6241C processor 2.3 GHz		
Intel® Hyper-Threaded Cores	10 per processor (10 per CRU)	10 per processor (20 per CRU)	18 per processor (36 per CRU)	22 per processor (44 per CRU)		
Threads	20 per processor (20 per CRU)	20 per processor (40 per CRU)	36 per processor (72 per CRU)	44 per processor (88 per CRU)		
Intel UPI speed	9.6 GT/s	9.6 GT/s	10.4 GT/s	10.4 GT/s		
Maximum memory bandwidth	76.8 GB/s	192 GB/s	213.3 GB/s	213.3 GB/s		
Memory						
Min/max memory	32 GB / 256 GB DDR4	64 GB / 640 GB DDR4	64 GB / 1280 GB DDR4	64 GB / 1280 GB DDR4		
DIMM slots	16 (8 per CRU)	40 (20 per CRU)	40 (20 per CRU)	40 (20 per CRU)		
I/O Subsystem						
Integrated PCIe adapter slots	4 PCle 3 x8 (2 per CRU)	4 PCle 3 x8 (2 per CRU)	4 PCle 3 x8 (2 per CRU)	4 PCle 3 x8 (2 per CRU)		
Additional PCIe adapter slots	N/A	4 PCIe 3 x8 (optional) (2 per CRU)	4 PCle 3 x8 (included) (2 per CRU)	4 PCle 3 x8 (included) (2 per CRU)		
Storage Subsystem						
Internal system drive bays	12 Gb SAS (8 per CRU) OR 12 Gb SAS (2 per CRU), NVMe PCle Gen4 x 4 U.2 (4 per CRU)	12 Gb SAS (8 per CRU) OR 12 Gb SAS (2 per CRU), NVMe PCle Gen4 x 4 U.2 (4 per CRU)	12 Gb SAS (8 per CRU) OR 12 Gb SAS (2 per CRU), NVMe PCle Gen4 x 4 U.2 (4 per CRU)	12 Gb SAS (8 per CRU) OR 12 Gb SAS (2 per CRU), NVMe PCle Gen4 x 4 U.2 (4 per CRU		
Internal 2.5" drives	Please visit www.stratus.com/	ftserver/disks for a complete lis	st of supported disk drives			
Stratus ftScalable Storage Sub	osystem					
Expansion drive slots (RAID)	Up to 144	Up to 144	Up to 144	Up to 144		
RAID levels	1, 5, 6, 10	1, 5, 6, 10	1, 5, 6, 10	1, 5, 6, 10		
Drive types	Please visit www.stratus.com/ftserver/disks for a complete list of supported disk drives					
Embedded I/O						
10/100/1000 Ethernet ports	4 (2 per CRU)	4 (2 per CRU)	4 (2 per CRU)	4 (2 per CRU)		
10 Gb Ethernet ports	N/A	4 (2 per CRU)	4 (2 per CRU)	4 (2 per CRU)		
10/100 Management Ethernet ports	2 (1 per CRU)	2 (1 per CRU)	2 (1 per CRU)	2 (1 per CRU)		
Serial (com) ports	2 (9-pin) ports per system	2 (9-pin) ports per system	2 (9-pin) ports per system	2 (9-pin) ports per system		
USB ports	4 USB 2.0 (redundant), 4 USB 3.0 (non-redundant)	4 USB 2.0 (redundant), 4 USB 3.0 (non-redundant)	4 USB 2.0 (redundant), 4 USB 3.0 (non-redundant)	4 USB 2.0 (redundant), 4 USB 3.0 (non-redundant)		
Manageability						
Baseboard management controller	Standard	Standard	Standard	Standard		
	0	Standard	Standard	Standard		
Virtual Technician Module (VTM)	Standard	Standard	otandara			

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PCI Adapters				
1 Gb dual-port Ethernet	Up to 4 optional (2 per CRU)	Up to 8 optional (4 per CRU)	Up to 8 optional (4 per CRU)	Up to 8 optional (4 per CRU)
10 Gb dual-port Ethernet server adapter (fiber & copper)	Up to 4 optional (2 per CRU)			
32 Gb Fibre Channel for external storage	Up to 4 optional (2 per CRU)			
Serviceability				
Hot-swappable components	CPU / I/O module, disks			
Operating System*				
Microsoft	Windows Server with Hyper-V™ virtualization			
VMware	vSphere	vSphere	vSphere	vSphere
Red Hat	Enterprise Linux with KVM			
Power and Packaging				
Input voltage	100-127, 200-240 VAC; 50 Hz, 60 Hz			
System dimension (H x W x D)	7.0" (4U) x 17.5" x 30.1" with bezel			
Weight (fully loaded including rails)	54.43 kg (120 lbs)			

Penguin Solutions support and additional storage

Penguin Solutions offers a variety of certified options to easily extend your continuously available platform. From value-added managed support plans to modular storage, you can get the additional capabilities that you need to satisfy your unique enterprise and edge computing requirements.

Stratus ftServices

Get the help you need when you need it and ensure your systems are up-to-date and operating at peak efficiency. Total Assurance, System Assurance, Extended Platform Support, and Platform Support managed plans are available for different applications, environments, and use cases. More+

Stratus ftScalable™

Specifically designed to complement Stratus ftServer, this hybrid storage array helps you meet your growing storage needs while also ensuring continuous availability and data integrity. Manage both hot and cold storage with real-time data tiering and protect sensitive data at rest with encrypted disk technology. More+



Contact Us

For sales queries, please contact sales@penguinsolutions.com.

To learn more about Stratus ftServer and other Penguin Solutions products, please visit: www.penguinsolutions.com

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