Datacenter Product Family Guide

Your fast lane to PRIMERGY/PRIMEQUEST Servers, ETERNUS Storage and Integrated Systems
PRIMEFLEX

Windows Server 2022: Be cloud-ready with hybrid.
Servers for the data-driven world

Fujitsu x86 servers
Fujitsu x86 Server
The right computing solution for every purpose

Fujitsu server systems provide the most powerful and flexible data center solutions for companies of all sizes, across all industries and for any type of workload. This includes expandable tower servers, versatile rack-mount servers and density-optimized multi-node servers as well as GPU servers. They offer compelling business-proven quality with a wide range of innovations, top efficiency that cuts operational costs and complexity, and they provide more agility in daily operations in order to turn IT into a business advantage more quickly.

Customer-inspired and innovative technology is integrated into every Fujitsu PRIMERGY server, offering exceptional performance, efficiency and reliability, from small business offices to enterprise data centers and hyper-scale.
The PRIMERGY Tower servers delivers rock-solid, efficient business value and are the ideal choice for small and medium businesses, and for branch operations. They are also super-simple to run, so you won’t need a team of techies to keep your IT working the way it should. In addition, the right-sized tower portfolio also silent enough to run in the office, even on your desk. And should you change your setup later, it’s good to know that nearly all PRIMERGY TX servers can also be rack-mounted.

<table>
<thead>
<tr>
<th>Type</th>
<th>Specifications</th>
<th>Products</th>
<th>Processor</th>
<th>Memory</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential</td>
<td>Compact</td>
<td>TX1310 M5</td>
<td>Intel® Xeon® E-2300, Pentium®</td>
<td>8 - 128 GB</td>
<td>4 x 3.5&quot; SATA</td>
</tr>
<tr>
<td>Compact</td>
<td>Compact</td>
<td>TX1320 M5</td>
<td>Intel® Xeon® E-2300, Pentium®</td>
<td>8 - 128 GB</td>
<td>2 x 3.5&quot; SATA or 8 x 2.5&quot; SATA/SAS</td>
</tr>
<tr>
<td>Standard</td>
<td>Ultra-Compact</td>
<td>TX1330 M5</td>
<td>Intel® Xeon® E-2300, Pentium®</td>
<td>8 - 128 GB</td>
<td>8 x 3.5&quot; SATA/SAS or 24 x 2.5&quot; SATA/SAS</td>
</tr>
<tr>
<td>Expandable</td>
<td>Compact</td>
<td>TX1330 M5</td>
<td>1 - 2 Intel® Xeon® Bronze 34xx/ Intel® Xeon® Silver 44xx/ Intel® Xeon® Gold 54xx/ Intel® Xeon® Gold 64xx processor</td>
<td>16 GB - 4 TB</td>
<td>12 x 3.5&quot; SATA/SAS or 32 x 2.5&quot; SATA/SAS</td>
</tr>
<tr>
<td>High workload</td>
<td>Performance + expandable</td>
<td>TX2550 M7</td>
<td>16 GB - 4 TB</td>
<td>12 DIMM DDR5</td>
<td>32 x 2.5&quot; SATA/SAS</td>
</tr>
</tbody>
</table>
PRIMERGY RX Rack Server

PRIMERGY Rack servers are versatile, rack-optimized servers providing best-in-class performance and energy efficiency. You can rely on these servers as the backbone of your IT operation, and easily scale them as you grow. Moreover, the PRIMERGY rack server portfolio is performance optimized for multi-application workloads to significantly increase the efficiency of IT operations and enable IT to respond to business needs of any size more quickly.
PRIMERGY Multi-Node and Workload-Optimized

PRIMERGY CX Multi-Node Servers
The PRIMERGY CX multi-node systems are the ideal basis for cloud, hyper-converged and high-performance computing solutions. They provide data centers as well as branch offices with massive computing power while at the same time delivering best economics for server density, energy consumption, heat optimization and lower overall operating costs.

<table>
<thead>
<tr>
<th>Use cases</th>
<th>Specifications</th>
<th>Products</th>
<th>Processor</th>
<th>Memory</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>VDI</td>
<td>2U / up to 24 x 2.5” storage drives</td>
<td>CX400 M7</td>
<td>1 - 2 x Intel® Xeon® processor</td>
<td>8 GB - 4 TB</td>
<td>up to 2x 2.5” HDD/SSD and 2x M.2 device per node</td>
</tr>
<tr>
<td>VDI</td>
<td>Redundant, hot-plug components</td>
<td></td>
<td></td>
<td>16 DIMM DDR5</td>
<td></td>
</tr>
<tr>
<td>Cloud/HPC-optimized server node</td>
<td>Cloud/HPC-optimized server node</td>
<td>CX2550 M7</td>
<td>1 - 2 x Intel® Xeon® processor</td>
<td>8 GB - 6 TB</td>
<td>6 x 2.5” storage drives</td>
</tr>
<tr>
<td>Technical computing</td>
<td>2U / up to 24 x 2.5” storage drives</td>
<td>CX2560 M7</td>
<td></td>
<td>24 DIMM DDR5</td>
<td>DynamicLoM + 2x PCIe, dedicated RAID + optional TPM</td>
</tr>
<tr>
<td>AI</td>
<td>All-around server node</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deep learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PRIMERGY GX Workload-Optimized Servers
PRIMERGY GX servers are optimized for GPU performance and offer the reliability and cost-effectiveness of our PRIMERGY line to best fit your individual requirements. There is no need for compromise as GX servers are designed to excel at single/multi-GPU accelerated data-driven use cases such as artificial intelligence — especially machine (deep) learning, data science and analytics, VDI and graphics plus futuristic high-performance computing workloads.

<table>
<thead>
<tr>
<th>Type</th>
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<th>Products</th>
<th>Processor</th>
<th>Memory</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>DUAL</td>
<td>8 x NVIDIA® A100 Tensor Core GPUs</td>
<td>GX2570 M6</td>
<td>2 x Intel® Xeon® processor</td>
<td>512 GB - 2TB memory with 32 x DDR4 RDIMM (16 per CPU)</td>
<td>10 x 2.5” NVMe/ SATA drives</td>
</tr>
</tbody>
</table>
Fujitsu PRIMEQUEST Server Systems

Fujitsu PRIMEQUEST systems offers unprecedented x86 performance and memory expandability for resource-intensive applications. By uniting the x86 industry standards with mission-critical features, PRIMEQUEST systems delivers availability levels similar to those of UNIX systems - but with the cost advantages of an x86-based architecture.

**Superior performance and reliability for business-critical workloads with optimized economics**

Featuring the Intel® Xeon® processor scalable family with up to 28 cores per processor and fastest available DDR4 memory modules with memory capacity of up to 24 TB (DDR4 only) or 36 TB with Intel® Optane™ DC persistent memory, the PRIMEQUEST 3800B2 significantly improves performance for in-memory databases such as SAP HANA® and real-time data analytics, thereby making it the right choice for the most complex business-critical workloads in big-data processing environments.

Redefining mission-critical server architecture

Featuring the Intel® Xeon® Platinum processors with up to 28 cores per processor and fastest available DDR4 memory modules with memory capacity of up to 24 TB (DDR4 only) or 36 TB with Intel® Optane™ DC persistent memory, the PRIMEQUEST 3800E2 improves performance for in-memory databases such as SAP HANA® and Microsoft SQL Server 2017, thereby making it the right choice for the most complex mission-critical workloads in big-data processing environments.
Fast track to a data-driven enterprise

Fujitsu Integrated System PRIMEFLEX

Simple, fast, minimized risk and reduced costs
Fujitsu Integrated System PRIMEFLEX

Fast track to a data-driven enterprise

Building a data-driven enterprise is a complex process and rides on having a data-architecture foundation that enables companies to scale and adapt on the go. Fujitsu Integrated System PRIMEFLEX is a portfolio of holistic, modern infrastructure offerings that are predefined, preintegrated and pretested for easy and risk-free deployment and increased operational efficiency. The portfolio consists of a series of converged, hyper-converged and hybrid IT-enabled infrastructure solutions, which are easy to adapt to customer-specific requirements, simplifying operation and maintenance with end-to-end solution support from a single point of contact. The deployment and integration services also ensure a smooth integration into existing operation.

Virtualization and cloud

**PRIMEFLEX for VMware vSphere**
Converged infrastructure for deploying VMware vSphere-based infrastructure with external all-flash or hybrid storage from Fujitsu. It includes multiple configurations varying in size, scales from 2 up to 64 servers and can support 4,000+ VMs.

- **Compute**: PRIMERGY RX
- **Storage**: ETERNUS DX / AF
- **Network**: Extreme networks
- **Optional**: Broadcom FC switches
- **Software**: VMware vSphere
- **Optional**: VMware Horizon
- **Management**: Fujitsu ISM

**PRIMEFLEX for Nutanix Enterprise Cloud**
A multi-hypervisor infrastructure, PRIMEFLEX for Nutanix Enterprise Cloud helps customers to eliminate complexity and risk in deploying a hyper-converged infrastructure based on the Nutanix Enterprise Cloud software stack.

- **Computing**: PRIMERGY RX
- **Hypervisor**: Choice of AHV or ESXi
- **Operating system**: Acropolis
- **Management**: Prism

**PRIMEFLEX for VMware vSAN**
Hyper-converged system based on VMware software-defined server and storage technology delivered by the VMware HCI software stack. The system is available in various flexible vSAN ReadyNodes configurations with pre-installed software scaling from 2 to 64 server nodes.

- **Compute/storage**: PRIMERGY RX / CX
- **Software**: VMware vSphere, vSAN
- **Optional**: VMware Horizon
- **Management**: Fujitsu ISM

**PRIMEFLEX for Microsoft Storage Space Direct**
Hyper-converged system based on Microsoft software-defined server and storage technology integrated in Windows Server Datacenter. The system is available in various validated and certified configurations scaling from 2 to 16 server nodes.

- **Compute/storage**: PRIMERGY RX
- **Operating System**: Windows Server Datacenter (Hyper-V and Storage Spaces Direct)
- **Management**: Windows Admin Center

**PRIMEFLEX for Microsoft Azure Stack HCI**
Hyper-converged system based on Azure software-defined server and storage technology integrated in Microsoft’s Azure Stack HCI operating system. The system is available in various validated and certified configurations scaling from 2 to 16 server nodes.

- **Computing**: PRIMERGY RX
- **Operating System**: Azure Stack HCI
- **Management**: Windows Admin Center, Azure Cloud
As an SAP Global Partner for technology and services, Fujitsu provides enterprises with end-to-end support at the application and IT infrastructure levels, to implement and run SAP systems, including strategic consulting and developing business processes further.

**Fujitsu inspection service for SAP solutions:**
With this hardware-agnostic solution, Fujitsu helps customers holistically in their data-driven intelligent enterprise journeys.

**SAP process automation:**
This solution helps optimize and automate SAP operations across organizations and ensures operational efficiency.

### PRIMEFLEX for SAP HANA

SAP-validated infrastructure solution for the SAP HANA® software. It is based on Fujitsu PRIMERGY and PRIMEQUEST servers optimized for in-memory technology. The complementary on-site services ensure fast and non-disruptive implementation and operation at the customer site.

- **Computing:** PRIMERGY and PRIMEQUEST
- **Storage:** ETERNUS / NetApp / TDI support (opt. for single node)
- **Network:** Broadcom, Cisco (multi-node only)
- **Software:** SUSE or Red Hat Linux, optional: VMware vSphere

### PRIMEFLEX for SAP Landscapes

Powered by FlexFrame Orchestrator management software, the setup of infrastructures optimized for SAP applications and databases is simplified and a more effective operation enabled. The predefined, preintegrated and pretested combination of servers, storage, network connectivity and software ensure the highest quality and fast time to value.

- **Computing:** PRIMERGY and PRIMEQUEST
- **Storage:** NetApp for shared image, ETERNUS / NetApp for database
- **Network:** Cisco
- **Software:** Fujitsu FlexFrame Orchestrator, SUSE Linux
- **Optional:** VMware vSphere, extension packs (e.g., from LNW Soft)

Helping organizations identify potential gaps across their heterogeneous database and SAP application environment using the following:
Data & Storage

Key value for our customer's

Rely on ETERNUS Primary Storage  
Transform with flash  
Embrace Disaster Preparedness  
How do you protect your business data?
Fujitsu Storage Products

In the storage area, you can rely on a well-synchronized portfolio: Data-centric storage at its best from a single provider with more than 50 years, experience in storage. Fujitsu provides online storage systems, tape libraries and data-protection solutions, which allow customers to flexibly manage their increasing data volumes with lower growth costs in order to benefit from a very reliable architecture as well from radically simplified operation.

Fujitsu Storage

All-flash and hybrid storage systems
Combining leading performance architecture with automated quality of service management, the online storage provide powerful features for digital growth, efficiency and continuity.

Software-defined Storage
Software-Defined Storage (SDS) solutions from Fujitsu are specifically designed to manage explosive data growth, better support modern workloads and provide greater compatibility for multi-cloud environments.

Data-protection appliances
Data-protection appliances from Fujitsu simplify your backup and archive infrastructure and transform your IT landscape into a genuine enabler for digital business growth, efficiency and continuity.

Tape storage systems
The affordable tape systems offer impressive scalability and reliability. They meet SMB requirements, thwart cyberattacks, and are certified for market-leading backup and archiving software.

Fujitsu Storage Solutions

Online Storage Solutions
Leading performance increases system utilization and consolidation resulting in a faster ROI.

SDS Solutions
Share and control data across a multitude of locations and between different applications for broader business usage.

Data Protection Solutions
ETERNUS CS data-protection appliances radically simplify backup and archive infrastructures by aligning storage resources with business priorities.

Tape Solutions
Highly automated, simple and remote operation without any demand for local expertise.
**Fujitsu ETERNUS Storage**

Online storage made easy

### Specifications

<table>
<thead>
<tr>
<th>Product</th>
<th>Host Functions</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF150</td>
<td>8 x FC 16G / 8 x iSCSI 10G</td>
<td>RAID protection and redundancy; ETERNUS SF management software offers local advanced copy, thin provisioning</td>
</tr>
<tr>
<td>AF250</td>
<td>8 x FC 32G / 16 x FC 16G / 8 x iSCSI 10G</td>
<td>RAID protection, encryption and redundancy; ETERNUS SF management software offering local advanced copy, transparent failover, automated storage tiering, automated quality-of-service, thin provisioning, deduplication and/or compression on volume base</td>
</tr>
<tr>
<td>AF650</td>
<td>32 x FC 32G / 32 x FC 16G / 16 x iSCSI 10G</td>
<td>RAID protection, redundancy, ETERNUS SF management software offering local advanced copy, thin provisioning</td>
</tr>
</tbody>
</table>

### ETHERNUS AF all-flash arrays

**NUMBER OF DRIVES**

<table>
<thead>
<tr>
<th>Product</th>
<th>Connectivity / scalability</th>
<th>Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF150</td>
<td>max. 24 92 TB raw 40.560 TB effective *</td>
<td>max. 4 host ports / 96 drives (31 TB SSD / 768 TB HDD)</td>
</tr>
<tr>
<td>AF250</td>
<td>max. 264 8110 TB raw 40,560 TB effective *</td>
<td>max. 16 host ports / 144 drives (4424 TB SSD / 2304 TB HDD)</td>
</tr>
<tr>
<td>AF650</td>
<td>max. 1024 32,440 TB raw 162,200 TB effective *</td>
<td>max. 32 host ports / 1056 drives (32440 TB SSD / 16570 TB HDD)</td>
</tr>
</tbody>
</table>

### ETHERNUS DX hybrid storage systems

**REMOTE**

<table>
<thead>
<tr>
<th>Product</th>
<th>Connectivity / scalability</th>
<th>Host</th>
</tr>
</thead>
<tbody>
<tr>
<td>DX60</td>
<td>max. 4 host ports / 96 drives (31 TB SSD / 768 TB HDD)</td>
<td>max. 4 host ports / 96 drives (31 TB SSD / 768 TB HDD)</td>
</tr>
<tr>
<td>DX100</td>
<td>max. 16 host ports / 144 drives (4424 TB SSD / 2304 TB HDD)</td>
<td>max. 16 host ports / 264 drives (4424 TB SSD / 2304 TB HDD)</td>
</tr>
<tr>
<td>DX200</td>
<td>max. 16 host ports / 576 drives (7836 TB SSD / 3897 TB HDD)</td>
<td>max. 32 host ports / 1056 drives (32440 TB SSD / 16570 TB HDD)</td>
</tr>
<tr>
<td>DX500</td>
<td>max. 64 host ports / 2304 drives (70779 TB SSD / 36271 TB HDD)</td>
<td>max. 64 host ports / 2304 drives (70779 TB SSD / 36271 TB HDD)</td>
</tr>
<tr>
<td>DX600</td>
<td>max. 384 host ports / 6924 drives (141558 TB SSD / 70779 TB HDD)</td>
<td>max. 384 host ports / 6924 drives (141558 TB SSD / 70779 TB HDD)</td>
</tr>
</tbody>
</table>

### ETHERNUS SF: Flexible data management

The ETERNUS SF storage management software is the uniform management solution for the entire ETERNUS AF and ETERNUS DX series. All essential operations for storage resource management, monitoring, reporting, tiered storage, performance management, disaster resilience and business continuity are integrated. The uniform management for the entire storage infrastructure covers all ETERNUS AF all-flash and ETERNUS DX hybrid storage systems, from entry-level through the enterprise as well as virtualized server infrastructures.

- Management of all infrastructure devices based on a unified view
- Visualization of the relations between storage, network and physical servers or virtual servers
- Early detection and elimination of performance issues through performance monitoring
- Reduced initial system infrastructure through thin provisioning
- Support for incident management
- Hardware investment optimization through automated storage tiering
- Reduced storage system power consumption
- Central management for local and remote replication
- Enhanced business continuity with transparent failover
- Automated quality-of-service management

* Calculation based on deduplication/compression factor of five

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* ETHERNUS SF Express

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* RAID protection and redundancy

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* RAID protection, encryption and redundancy

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* RAID protection, redundancy

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* RAID protection, encryption

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* RAID protection

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* RAID protection

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* RAID protection

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* RAID protection

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* RAID protection

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* RAID protection

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* RAID protection
# Fujitsu ETERNUS Storage

Online storage made easy

## Specifications

### ETERNUS AB

<table>
<thead>
<tr>
<th>NUMBER OF DRIVEs</th>
<th>NUMBER OF</th>
<th>Specifications</th>
<th>Product</th>
<th>Host interfaces</th>
<th>Functions</th>
</tr>
</thead>
</table>
| max. 24          | max 48    | 113TB SSD / 288TB HDD | AB1100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | Performance: - End-to-end NVMe  - Containers and microservices  - Secondary cache  
                       | max 16b   | 122TB SSD / 86TB HDD  | AB1200  | 4/8/16/32Gbps FC / 10Gbps iSCSI | Reliability: - Encrypted drives  - Authentication key management  - Data guarantee  - Data protection  - Snapshot, mirroring and copy  
                       | max 16b   | 1120TB SSD / 3072TB HDD | AB2100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | Flexibility: - Storage virtualization  - REST API  - Cloud backup  - Multiple drive sizes  
                       | max 16b   | 1408TB SSD / 2155TB HDD | AB2200  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 48    | 1332TB SSD / 3072TB HDD | AB3100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 24    | 1836TB SSD / 6,732TB HDD | AB4100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 96    | 14697TB, 300k IOPS   | AB5100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 24    | 4672TB, 670k IOPS    | AB6100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 24    | 367TB, 2M IOPS       | AB6100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |

### ETERNUS HB

<table>
<thead>
<tr>
<th>NUMBER OF DRIVEs</th>
<th>NUMBER OF</th>
<th>Specifications</th>
<th>Product</th>
<th>Host interfaces</th>
<th>Functions</th>
</tr>
</thead>
</table>
| max. 24          | max 48    | 137TB SSD / 288TB HDD | HB1100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | Performance: - End-to-end NVMe  - Containers and microservices  - Secondary cache  
                       | max 16b   | 122TB SSD / 86TB HDD  | HB1200  | 4/8/16/32Gbps FC / 10Gbps iSCSI | Reliability: - Encrypted drives  - Authentication key management  - Data guarantee  - Data protection  - Snapshot, mirroring and copy  
                       | max 16b   | 1120TB SSD / 3072TB HDD | HB2100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | Flexibility: - Storage virtualization  - REST API  - Cloud backup  - Multiple drive sizes  
                       | max 16b   | 1408TB SSD / 2155TB HDD | HB2200  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 48    | 1332TB SSD / 3072TB HDD | HB3100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 48    | 1836TB SSD / 6,732TB HDD | HB4100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 96    | 14697TB, 300k IOPS   | HB5100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 24    | 4672TB, 670k IOPS    | HB6100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |
| max. 24          | max 24    | 367TB, 2M IOPS       | HB6100  | 4/8/16/32Gbps FC / 10Gbps iSCSI | |

* Calculation based on deduplication/compression factor of five
# High Performance Partnership

**Fujitsu and NetApp**

## NetApp All-Flash

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>50TiB</td>
<td>AFF C190</td>
<td>Unified, all flash, scale-out storage</td>
<td>Made for growing requirements</td>
</tr>
<tr>
<td>193.3 PB</td>
<td>AFF A220</td>
<td></td>
<td>Rich data management, Easy cloud connection</td>
</tr>
<tr>
<td>562.2 PB / 35 PB</td>
<td>AFF A300 / A320 A400 / A800 / A900</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## NetApp FAS hybrid storage

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,243 – 1,440 TB</td>
<td>FAS2550 / FAS2620</td>
<td>Unified, hybrid, scale-out storage</td>
<td>Scale-out all-flash storage and advanced data management</td>
</tr>
<tr>
<td>15PB – 17PB</td>
<td>FAS2750 / FAS2720</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8PB/ 17PB/ 18PB</td>
<td>FAS8700 / FAS8000 / FA9000</td>
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</tbody>
</table>
## Data Access Architecture

### SOFTWARE-DEFINED STORAGE

<table>
<thead>
<tr>
<th>Architecture</th>
<th>Data access</th>
<th>Product</th>
<th>Main use cases</th>
<th>Highlights</th>
</tr>
</thead>
</table>
| FILE STORAGE | QUMULO FILE DATA PLATFORM | • File share  
• Video surveillance  
• Analytics  
• Hybrid data centers  
• xSP  
• HPC | • All-NVMe cluster (option)  
• Automation/REST APIs  
• Real-time analytics  
• Tens of billions of files (of any file size)  
• Flash-first architecture | |
| OBJECT STORAGE | NETAPP STORAGEGRID | • Media streaming  
• Data analytics  
• Ceph and OpenStack environments | • Intelligent policy-driven data management  
• Massively scalable and easy-to-use global data repository for unstructured data  
• Support of standard object storage protocols like AWS S3 and OpenStack Swift  
• Support of file system storage protocols like NFS and SMB  
• Hybrid cloud enabled | |
# Fujitsu ETERNUS storage

Data protection made easy

## ETERNUS CS800

**backup appliance**

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Key feature</th>
<th>Data protection functions</th>
<th>Usability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable capacity after data reduction</td>
<td>CS800 Scale</td>
<td>Deduplication</td>
<td>Disk-based backup and recovery, replication, path-to-tape, multiprotocol support (NAS, VTL, OST), backup target in the cloud</td>
<td>Easy setup in just a few steps, automated operation, simple user interface for maintenance and analytics</td>
</tr>
<tr>
<td>11.315 TB</td>
<td>CS800 ENTERPRISE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2040 TB</td>
<td></td>
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</tbody>
</table>

## ETERNUS CS8000

Central storage for backup, archive, second-tier and object data

## ETERNUS CS8050 NAS

archive appliance

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
<th>Data protection functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable capacity</td>
<td>CS8050 NAS</td>
<td>Reliable, cost-efficient storage appliance for archiving and second-tier file storage</td>
<td>Archiving, integrated, snapshot-based backup, recovery, replication, SoftWORM</td>
</tr>
<tr>
<td>84 TB</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

## ETERNUS LT

tape storage systems

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Interface</th>
<th>Max. drives</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of slots / max. capacity</td>
<td>LT20 S2</td>
<td>SAS or FC</td>
<td>1</td>
<td>LTO 7 LTO 8 drive with 48 TB (LTO-7) or 96 TB (LTO-8) capacity native</td>
</tr>
<tr>
<td>8 slots / up to 96 TB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 280 slots / up to 3360 TB</td>
<td>LT140</td>
<td>SAS or FC</td>
<td>21</td>
<td>LTO 7 LTO 8 drive with 1680 TB (LTO-7) or 3360 TB (LTO-8) capacity native</td>
</tr>
<tr>
<td>80 - 560 slots / up to 6720 TB</td>
<td>LT260</td>
<td>SAS or FC</td>
<td>42</td>
<td>LTO 7 LTO 8 drive with 3360 TB (LTO-7) or 6720 TB (LTO-8) capacity native</td>
</tr>
</tbody>
</table>

## Architecture

- Branch-office backup
- Scale-up backup
- Scale-up archive
- Scale-out backup and/or archive

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Backup</th>
<th>Archive</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS8050</td>
<td>VTL, VTL with dedup</td>
<td>14 TB (up to one back-end tape library)</td>
<td>NAS protocol for CS8050 only with dedicated CS8050 NAS model (see archive appliance)</td>
</tr>
<tr>
<td>CS8200</td>
<td>VTL, VTL with dedup</td>
<td>19 TB-6 PB (up to 10 back-end tape libraries)</td>
<td>NAS (NFS / CIFS), object</td>
</tr>
<tr>
<td>CS8400 / CS8800</td>
<td>VTL, VTL with dedupNAS (NFS or CIFS), object</td>
<td>19 TB-96 PB (up to 10 back-end tape libraries)</td>
<td></td>
</tr>
</tbody>
</table>

## Specifications

ETERNUS CS8000

Central storage for backup, archive, second-tier and object data

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>CS8050 NAS</td>
<td>Reliable, cost-efficient storage appliance for archiving and second-tier file storage</td>
</tr>
<tr>
<td>CS8050 NAS</td>
<td></td>
<td>Archiving, integrated, snapshot-based backup, recovery, replication, SoftWORM</td>
</tr>
<tr>
<td>84 TB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Fujitsu ecosystem with partners**

**Data protection made easy**

### Fujitsu reference architecture

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
<th>Data-protection functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable capacity</td>
<td>50 - 678 TB per node</td>
<td>Reference architecture for Commvault HyperScale X Software</td>
<td>Fully-tested, easy-to-set-up solution based on Fujitsu Server PRIMERGY to protect data in physical, virtual or cloud-based data centers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Backup and recovery, deduplication, compression, encryption,archiving, application support, snapshot, replication, tape and cloud backup</td>
</tr>
</tbody>
</table>

### Commvault appliance

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
<th>Data Protection Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable capacity</td>
<td>14.5 TB</td>
<td>ROA 1200</td>
<td>Integrated backup appliance for remote/branch offices</td>
</tr>
<tr>
<td></td>
<td>25, 50, 88 TB</td>
<td>HS 2300</td>
<td>All-in-one backup appliance. It provides mid-sized to large environments with a customizable, self-contained solution for professional backup</td>
</tr>
<tr>
<td></td>
<td>151, 264 TB</td>
<td>HS 4300</td>
<td></td>
</tr>
</tbody>
</table>

### Veritas NetBackup appliance

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Product</th>
<th>Description</th>
<th>Data-protection Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usable capacity</td>
<td>0.5 - 250 TB</td>
<td>NBU Virtual Appliance</td>
<td>Simplified remote office protection for virtual environments by leveraging existing hardware infrastructure</td>
</tr>
<tr>
<td></td>
<td>10 – 442 TB</td>
<td>NBU 5250</td>
<td>All-in-one backup appliance provides mid-sized to large environments with a customizable, self-contained solution for professional backup</td>
</tr>
<tr>
<td></td>
<td>120 – 1920 TB</td>
<td>NBU 5350</td>
<td></td>
</tr>
</tbody>
</table>

### Commvault Data Services

Simplifies an IT organization’s ability to manage data across its lifecycle with integrated modules for backup and recovery, archive, replication, analytics and more. Commvault HyperScale™ software is a powerful, cloud-ready solution bringing scale-out infrastructure to the Commvault data platform.

### Veritas NetBackup

Simplifies the protection of your information-driven enterprise by automating advanced technologies and standardizing operations across applications, platforms and virtual environments.

### Veritas EnterpriseVault

The industry’s most widely deployed archiving solution, is a platform that bridges the gap between a company’s legal department and IT by adding intelligence to the way organizations store, manage and discover information.

### Veeam Backup & Replication

The powerful, reliable and easy to use software reduces operational overhead with flexibility that fits your business and market-leading reliability that you can count on. It delivers dependable availability across all cloud, virtual and physical workloads with a simple, flexible and reliable solution.
Holistic approach for simplifying data center management

Fujitsu Software Infrastructure Manager (ISM)
Fujitsu Software Infrastructure Manager (ISM)

The holistic approach for simplifying data center management

The Fujitsu Software Infrastructure Manager (ISM) is a converged data center management solution that provides organizations centralized control over the entire infrastructure, includes servers, storage, networking and cloud management software as well as power and cooling using a single user interface.

Product highlights include:

Converged management: Simplified IT operations and consistent management across server, storage and networking

Increased agility: Intuitive software providing actionable insights leading to reduced customer response time

Accelerated growth and innovation: Streamlined delivery of IT services to speed the transition to hybrid cloud

Designed the way people work, ISM provides an integrated view and centralized control over heterogeneous environments.

Fujitsu Software Infrastructure Manager

Control IT — centralized,
- Node management
- Health status monitoring a control
- Capacity/threshold management
- Power management

Dynamize IT — simple, sophisticated, efficient
- Converged management
- Auto discovery
- Virtual-IO management
- Network topology management

Maintain IT — in any state, at any place
- Remote management
- Update management
- Logging and auditing

Integrate IT — seamless, manageable, uniform
- in enterprise management
- in vendor-specific management
- Monitoring of third-party platforms

Deploy IT — fast, easy, reliable
- Automated device configuration
- Mass OS installation

More information on ISM: www.fujitsu.com/infrastructuremanagement
Fujitsu Software Infrastructure Manager (ISM)
The holistic approach for simplifying data center management

**Servers-storage-networking**

### ISM Advanced Edition

<table>
<thead>
<tr>
<th>DEPLOY</th>
<th>CONTROL</th>
<th>MAINTAIN</th>
<th>DYNAMIZE</th>
<th>INTEGRATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automated device configuration</td>
<td>Node management</td>
<td>Update management</td>
<td>Dashboard</td>
<td>In enterprise mgmt.</td>
</tr>
<tr>
<td>Mass OS installation</td>
<td>Health status</td>
<td>Firmware baseline</td>
<td>Auto discovery</td>
<td>In vendor-specific management</td>
</tr>
<tr>
<td></td>
<td>Event management</td>
<td>Logging and auditing</td>
<td>Virtual-IO management</td>
<td>In third-party platforms</td>
</tr>
<tr>
<td></td>
<td>Capacity/threshold mgmt.</td>
<td>Performance management</td>
<td>Network topology management</td>
<td>(monitoring only)</td>
</tr>
<tr>
<td></td>
<td>Group power capping</td>
<td>Archive management</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Power consumption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inventory management</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ISM Essential Edition

**CONTROL**
- Node management
- Health status
- Event management
- Capacity/threshold mgmt.
- Group power capping
- Power consumption
- Inventory management

**MAINTAIN**
- Update management
- Firmware baseline
- Logging and auditing
- Performance management
- Archive management

**DYNAMIZE**
- Dashboard
- Auto discovery

**INTEGRATE**
- In enterprise mgmt.
- In vendor-specific management
- In third-party platforms
  (monitoring only)

ISM Essential Edition is a standard version of ISM, providing essential monitoring and update capabilities.


More information on ISM: [www.fujitsu.com/infrastructuremanagement](www.fujitsu.com/infrastructuremanagement)
Modernize with Windows Server 2022
The cloud-ready operating system that boosts on-premises investments with hybrid capabilities.

United Power Anywhere - Windows Server 2022 and Fujitsu PRIMERGY Server

Top Highlights

- Hybrid capabilities with Microsoft Azure
  Achieve greater IT efficiency and cost savings by extending your datacenter to Microsoft Azure using a cloud-ready operating system with hybrid capabilities.

- Advanced multilayer security
  Help protect your business apps and data with multilayer security capabilities like the Secured-core server and enhanced secure connectivity.

- More secure remote working
  Enable remote users to run applications and desktops from nearly anywhere with Remote Desktop Services, a platform that helps deliver more secure virtualized apps, remote desktop access, and simplified management.

- Modernized server infrastructure
  Transform infrastructure and applications with flexible solutions like software-defined storage and networking and a modern app platform.

United Power Anywhere
Windows Server 2022 & Fujitsu

Transform your IT environment with the latest hardware and software technologies by upgrading to the latest Fujitsu PRIMERGY Server generation and Windows Server 2022. By combining the united power of Windows Server 2022 and Fujitsu PRIMERGY, businesses can elevate their security posture, tackle any workload, and take advantage of hybrid capabilities. Experience the benefits of cloud-ready technology and innovative solutions for a more efficient and productive organization.
