

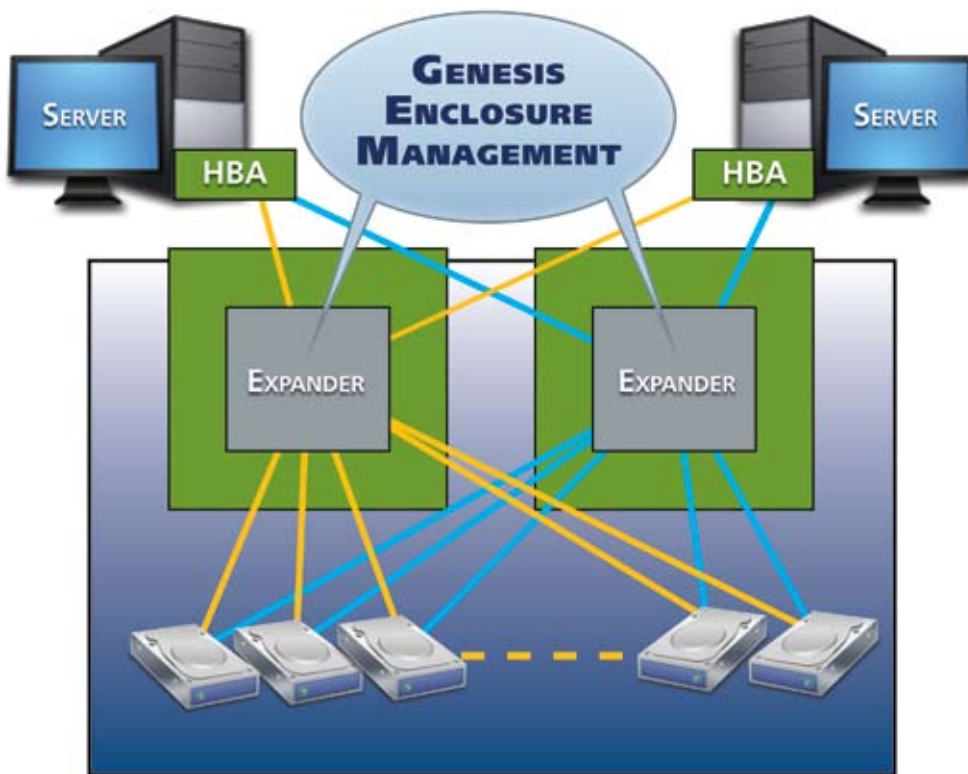


**Xyratex OneStor™:**  
**Versatile Storage, Customized Solutions**

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## OneStor Extensible Storage Platform (ESP)

The Xyratex OneStor Extensible Storage Platform (ESP) utilizes a modular, standards-based architecture designed to meet diverse needs, combining storage density, intelligent platform management, power efficiency and the industry's most versatile storage system design.



## Genesis Enclosure Management (GEM) Architecture

- Monitors and controls the enclosure
- Provides SES services to the host
- Provides HA services for hardware and software system components

## Key Benefits and Features Include:

- A single storage platform for a wide variety of storage and application environments
- Xyratex provides the storage building blocks with which server and storage OEMs compose problem-solving systems
- Leverages Xyratex industry-leading power packaging and cooling technology, low operational costs, and ultra-dense storage
- OneStor Personality Modules enable Advanced Enclosure Functions
- Abstraction layers minimize integration complexity and time-to-market

# OneStor™ ESP

## —● Overview

The OneStor Extensible Storage Platform (ESP) is a family of products designed to deliver operating and cost efficiency, enhanced reliability and versatility to meet the evolving needs of our customers. OneStor utilizes a modular, standards-based architecture designed to meet diverse needs combining storage density, intelligent platform management, power efficiency and the industry's most versatile storage system design. OEMs and solution integrators now require ever more sophisticated systems and solutions capable of managing, storing and maintaining a vast amount of business-critical data. The combination of performance and scalability makes OneStor the perfect choice for a wide variety of storage and application environments, including high performance computing, digital media, compliance, retention and data archival. By utilizing the Xyratex OneStor OEM Developers Kit (ODK) to design custom "personality modules", including server modules, RAID controllers and NAS devices, OEMs and solution integrators can easily tailor deployment of high performance storage solutions across the entire OneStor ESP family.

### Reduced End-User Operating Cost

Reducing capital expenses (CAPEX) associated with IT equipment is important, however operating expenses (OPEX) now account for up to seven to ten times this acquisition cost. These costs include energy consumption and restrictions of megawatt production capacity (a prominent "green" topic today); data center space costs and space limitations, as well as high volume air conditioning (HVAC) capacity limitations. Meanwhile, OEMs and solution integrators are under pressure to reduce administrator and other costs associated with complex IT environments.

OEMs rely on Xyratex to address these concerns and also enable them to create a unique competitive selling advantage. OneStor ESP is a complete family of storage enclosures presenting a single adaptable solution to meet a diverse range of enterprise storage needs. OneStor combines a modular, standards-based architecture, with intelligent platform management, power efficiency, and the industry's most versatile storage system design.

This architecture keeps pace with changing market needs, providing a flexible, efficient platform for future growth. OneStor's Genesis Enclosure Management software enables efficient storage operations based on 85%+ efficient power conversion, adaptive cooling, individual drive power control, low-power modes for fail-safe conditions, and very high storage density to reduce floor space in the data center. Additionally, robust "green" features provide scalable power supply profiles based on disk selection while meeting stringent worldwide requirements for recycling and environmental friendliness.

# OneStor™ ESP

## —● **Faster Time-to-Market**

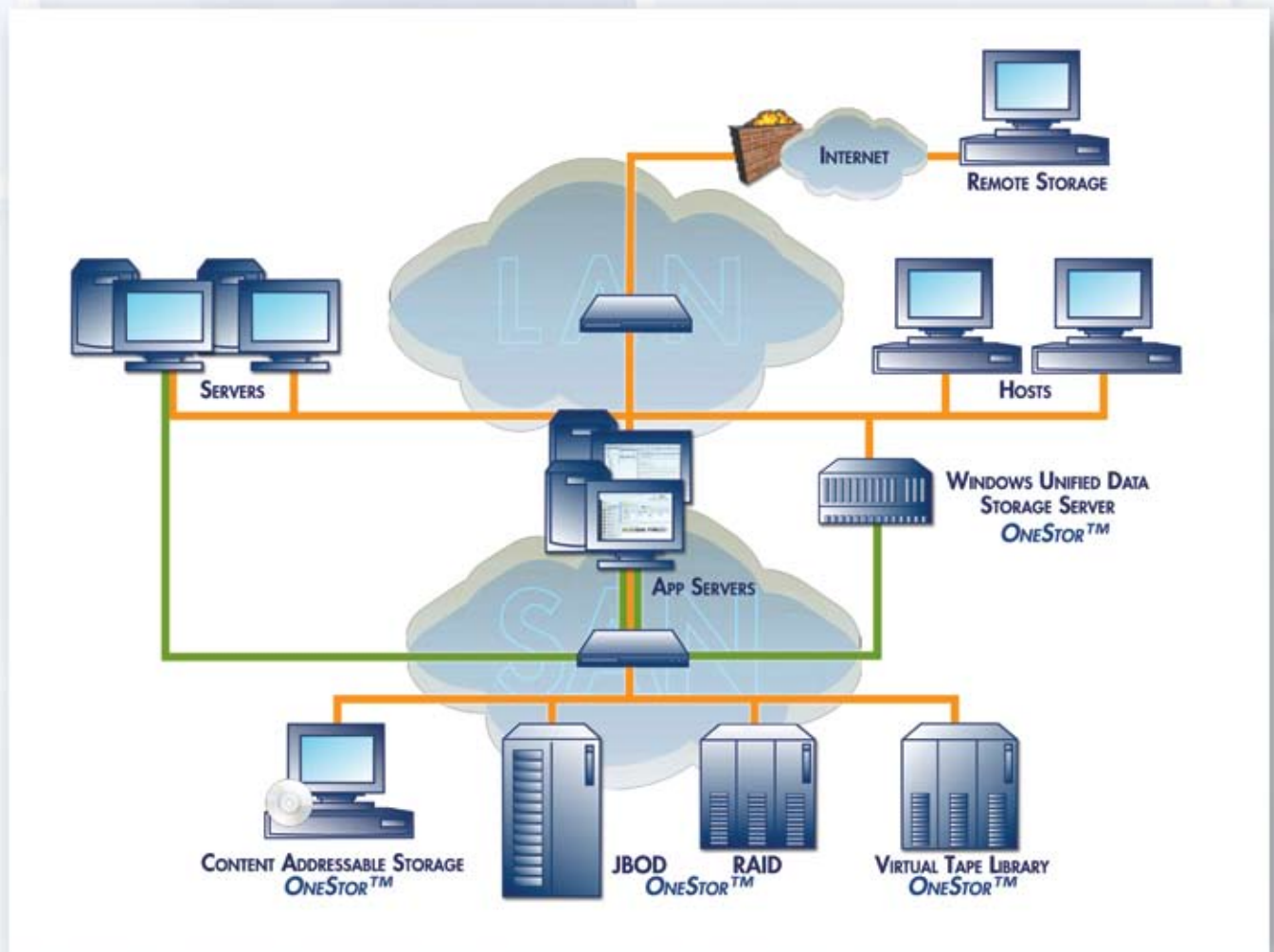
OneStor OEM Developers Kit (ODK) enables the design of custom “personality modules”, including server modules, RAID controllers and NAS devices, allowing OEMs and solution integrators to easily tailor deployment of high performance storage solutions as their requirements and technologies evolve. For example, using the ODK, OEMs can combine the drive carriers, power control module, I/O module, Intelligent Platform Manager, and the Storage Bridge Bay specification to create custom modules.

These modules enable OEMs to minimize development time and shrink their time to market. An OEM could shave one, two, or even three months from their development and production schedules, increasing profits and competitive barriers to entry.

OneStor also improves storage system functionality by:

- Incorporating a new level of intelligence, instrumentation, and management capability into JBODs
- Leveraging the evolution of a new standard, SBB 2.0 (Storage Bridge Bay)
- Delivering green features to lower storage operational costs
- Offering a new level of self-healing and operational efficiency by displaying a consolidated view of components for more control and response to environmental changes

# OneStor™ ESP



*OneStor — Versatile Storage for Multiple Needs*

# OneStor™ ESP

## —● Improved OEM Flexibility and Scalability

OEMs and solution integrators need an extensible storage infrastructure that adapts to diverse application requirements for markets such as digital media, enterprise compliance and retention, data archival and even virtual tape libraries (VTL).

Traditional solutions might be suitable for high performance computing (HPC) or enterprise compute applications, or even a small to medium scale enterprise, but not all three. They also might be good solutions for customer-facing applications or for backend storage infrastructure applications such as virtual tape libraries (VTL) or disk-to-disk (D2D) backup. A “one size” storage solution approach does not work.

OneStor ESP is the first platform designed with the versatility and scalability to meet these diverse needs. OneStor's architecture enables OEMs to deliver application-tuned storage platforms by selecting drives and personality modules from across the OneStor family. Storage availability is enabled by high availability configurations supported as JBODs, RAID systems, or application-enabled platforms. Common field replaceable units (FRUs) enable OEMs to accelerate market introduction and reduce the costs of spare inventory.

## —● Improved Reliability, Availability, Serviceability (RAS)

Ensuring continuous access to critical data is imperative for organizations, and through its intelligent platform management, Xyratex OneStor ESP allows OEMs to safeguard data and ensure maximum availability to their customers' diverse data repositories. OneStor provides high availability features such as N+1 PSU, dual I/O modules and dual data paths to all drives, while allowing users to leverage fault diagnosis and resolution capabilities, error logging and monitoring.

The Xyratex Combined Environmental Reliability Test (CERT) process has enabled Xyratex storage to achieve a proven track record of delivering highly reliable, available storage to its customers. CERT reduces test, integration, warranty, and service costs as well as enabling the lowest warranty claims costs. Rigorous defect screening and CERT, in combination with our advanced methods for qualifying disk drives and a superior enclosure design, are the basis for long-term data and data systems reliability.

## About Xyratex

Xyratex is the ultimate partner to the storage industry. We are a leading provider of enterprise-class data storage subsystems and storage infrastructure manufacturing equipment & automation solutions. Working with over 50 A-list companies, Xyratex ships over 14% of the world's external storage capacity, and 75% of all 3.5" drives are processed using Xyratex test systems. With unmatched expertise and a history of innovation and technological excellence, Xyratex delivers products which are high-performance, energy-efficient and extremely reliable.

For more information, please visit [www.xyratex.com](http://www.xyratex.com)

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