Hewlett Packard Enterprise

HPE XP8 STORAGE

XP Storage

WHAT'S NEW

- Get breakthrough performance and lower latency with new 375 GB Storage Class Memory (SCM) media. Perfect solution for hot data, with support for DeCo, Encryption, and Smart tiering.
- QoS enhancements for more service level control. Set upper limits on Volume Group IOPs and MB/s.
- Non-disruptive migration for CA-sync configurations from HPE XP7 to XP8.

OVERVIEW

Do you require 100% uptime on your data center storage infrastructure without compromising on other attributes such as performance, scale, and flexibility?

The HPE XP8 Storage array is the newest addition to the HPE XP storage family that has achieved 6-years of demonstrated 100% data availability [1] across the entire installed base. There is no room to improve on 100%, but XP8 is raising the bar by delivering industry leading 8-nines [5] of platform availability, nearly assuring continued 100% availability well into the future.

- Expanded Online Migration support for data movement from non-XP storage to XP8 storage.
- Online volume expansion support with HA/CA/CAJ/BC/FS.

Without compromise means that XP8 also provides unrivaled performance, scale and flexibility. In terms of performance, XP8 delivers over 20 million IOPs [2], well beyond the nearest competitor. XP8 enables scalability up to 69 petabytes of internal capacity, plus up to 255 PB of virtualized external capacity. Available in Hybrid or Flash, SAS or NVMe, HDD, SSD, FMD, or SCM, Entry or Performance configurations. Whatever your need, HPE XP8 has you covered.

FEATURES

Proven 100% Data Availability [1], and Backed-up with a 100% Availability Guarantee [2]

Operating a business demands constant uptime; the risk of data loss or downtime must be minimized. HPE XP8 Storage is designed for 8-nines [5] availability, virtually eliminating eliminating downtime risk. All active components are redundant, hot-swappable, and can be upgraded online.

XP8 protects data even if power fails since write cache is backed up to a Solid State Drive. RAID 6 14D+2P adds fault tolerance. HPE C-Track proactively monitors and XP8 proactively self-manages to avoid component failures. End-to-end checksum confirms data integrity from host port to disk and back.

HPE XP8 Storage with multi array virtualization provides 100% data availability [1] and storage uptime, even in the event of a data center disaster. Avoid both planned and unplanned downtime with disaster resistant XP8 Remote Replication Suite. There's never a need to take XP8 offline.

XP8 Storage enables continuous Disaster Recovery capabilities before, during and after array migrations with XP8 Online Data Migration. Move workloads from legacy XP disk arrays to XP8 with no interruption to applications, no server reboots and no suspension of your XP Disaster Recovery solution.

Ultimate Flexibility for a Wide Range of Workloads and Applications

HPE XP8 is a modular architecture that is fully scalable from a 2 DKC/2 controller system to one containing 6 DKC/12 controller system. Scale up to 69 petabytes of internal storage capacity, plus up to 255 PB of virtualized external capacity.

HPE XP8 offers a choice of media with NVMe and SAS SSDs, Storage Class Memory (SCM), Flash Module Device (FMD) and HDDs. Deploy the media that provides the best performance price for your application workload.

Start with an All-Flash or Hybrid two controller base DKC, then upgrade to a performance DKC and secondary DKC to scale performance and capacity as needed.

HPE XP8 storage offers universal ports with the flexibility to configure them as source, target or for replication.

HPE XP8 provides flexibility and convenience for server or operating system maintenance by insuring data access. By presenting a virtual storage layer to hosts, one side of an application cluster can be taken offline, while the other side

continues to access the XP8 data.

Dominant Performance that Meets Even the Most Extreme Workload Requirements

Delivering over 20 million IOPs [3], HPE XP8 storage provides plenty of performance to meet extreme workload requirements.

XP8 Flash Modules cater to your extreme performance and low latency needs which are efficiently met with the higher performance lower cost solid-state non-volatile data capacity. Attain both ultra-high performance and sustained extreme low response times for the most demanding application workloads.

With the HPE XP8 you get ultimate performance for your 24x7 demands to deliver your critical data at break-neck speed. The XP8 offers the flexibility you need to meet your performance and latency objectives without sacrificing availability or disaster recovery.

The HPE XP8 Storage Class Media modules offer the ultimate in performance and latency. Additionally, Flash Module Devices deliver guaranteed 2:1 [4] compression along with world class performance with zero performance penalty.

XP8 Smart Tiers and Thin Provisioning provides quick and automated flexibility for changing application needs. You can now configure all the capacity you will need for the future, only buy what you need today and allow the XP8 to automatically monitor and adjust for performance and capacity needs.

Built-in Intelligent Storage Management

HPE XP8 is intelligent storage that solves problems before they can affect storage availability or performance. This is achieved with integrated AI capabilities like Performance Advisor VM analytics, Continuous Track data analytics functionality, and future InfoSight support.

All-inclusive software such as HPE XP8 Intelligent Storage Manager streamlines storage management, enables at-a-glance status of resources, simplifies deployment, management, and maintenance of XP storage.

HPE XP8 Data Protection Manager provides simplified modern data protection and copy management to improve data availability, compliance, and agility. Data Protection Manager uses built-in intelligence to guide users in policy and workflow creation to automate replication and copy data management.

New and improved Performance Advisor Software has an all new simplified GUI and improved reporting capabilities with VM Analytics.

The HPE XP8 storage has an easy to use task based GUI; Common/Consistent Command Line Interface (CLI); simplified serviceability, and simple provisioning with one-click volume creation, dynamic/automatic provisioning and optimization.

## Technical specifications   HPE XP8 Storage

Capacity	69 PB Raw ~60 PB Usable 255 PB External Storage
Drive description	SAS SFF SSD and HDD, LFF HDD, SCM (Storage Class Memory), FMD (Flash Module Device) and NVMe SFF
Host interface	16Gb FICON SW FC (192 Ports) 16Gb FICON LW FC (192 Ports) 16/32Gb FC HBA (192 Ports) 10G iSCSI (96 Ports)
Cache	6 TB Maximum supported cache capacity 32 GiB or 64 GiB Memory with Encrypted Back-up Modules
Availability features	All active components are redundant, and hot-swappable. On-line scalable fully redundant hardware platform with unique High Availability SW solutions for complete business continuity and data protection. Supports multiple RAID levels for data protection.
RAID support	RAID 1 (2D + 2P), RAID 1 (4D + 4P), RAID 5 (3D + 1P), RAID 5 (7D + 1P), RAID 6 (6D + 2P), RAID 6 (14D + 2P)
Compatible operating systems	HPE NonStop VMware® HP-UX IBM AIX Linux® Mainframe Microsoft® Windows® Oracle Solaris
Minimum dimensions (H x W x D)	HPE XP8 Performance Disk Controller Chassis 483 x 763 x 434 mm (W/D/H)
Weight	148.1 kg HPE XP8 Performance Disk Controller Chassis Pair (includes chassis, controllers, PCB, no drives or adapters.
Warranty	Warranty level of hardware reactive support is 3-years, 24×7, with 4-hour onsite response.
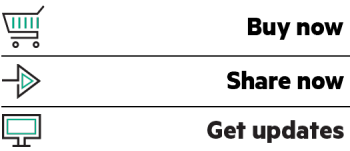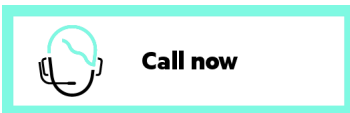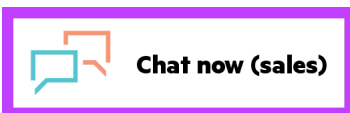
HPE POINTNEXT

Access expertise at every step of your IT journey with HPE Pointnext Services. Advisory Services focuses on your business outcomes and goals, to design your transformation and build a roadmap tuned to your unique challenges. Our Professional and Operational Services help speed up time-to-production and keep your IT stable and reliable.

Operational Services from HPE Pointnext Services

- **HPE Datacenter Care** helps modernize and simplify IT operations. Partner with an assigned account team, access technical expertise, an enhanced call experience gives you priority access, choose hardware and software support, implement proactive monitoring to help stay ahead of issues, and access HPE IT best practices and IP.

- **HPE Proactive Care** offers an enhanced call experience and helps reduce problems with personalized proactive reports and advice. This also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.). Read more

- **HPE Foundation Care** helps when there is a problem and has a choice of response levels. Collaborative software support is included and provides troubleshooting help for ISVs running on your server. Read more.

Other related services

Defective Media Retention is optional and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

HPE Service Credits offers a menu of technical services, access additional resources, and specialist skills.

HPE Education Services delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

HPE GREENLAKE

HPE Greenlake is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please explore them here.

[1] Based on HPE Quality Support tracking data

[2] Based on HPE internal performance testing

[3] HPE XP8 100% Data Availability Guarantee Program

[4] HPE XP7 Compression Guarantee Program

[5] The HPE XP7 Storage 8-nines reliability is determined by the Symbolic Hierarchical Automated reliability and Performance Evaluator (SHARPE) tool that models and predicts overall system availability using continuous time Markov chain (CTMC) methodology. Availability predictions for HPE XP8 Storage were performed by the HPE Solution Design Services team in October 2019. Contact your local HPE Sales representative for more information.

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