Hewlett Packard Enterprise

HPE 3PAR Online Import software

You're just five steps away from modern Tier 1 storage!

Key features and benefits:
- Effortless migration of data from HPE EVA Storage, EMC Storage, Hitachi Data Systems (HDS) Storage IBM XIV Storage to HPE 3PAR StoreServ Storage.[2]

- Orchestrates migration of data from HPE EVA Storage via HPE Command View EVA Software.

- Simplifies data migration from EMC, HDS and IBM XIV Storage via a simple, scriptable Do-It-Yourself utility called HPE 3PAR Online Import Utility.[3]

- Leverages HPE 3PAR Thin Provisioning and Thin Deduplication technologies, To minimize capital expenditure during technology refresh and to keep operating costs low over time.

- Does not require introduction of an external appliance in the data path.

Modernization made simple

With HPE 3PAR Online Import software, you can make the move from your legacy storage platform to HPE 3PAR StoreServ Storage in just five steps. With support for HPE Enterprise Virtual Array (EVA) as well as solutions from EMC and HDS, and now IBM XIV as well, HPE 3PAR Online Import software makes modernizing your storage infrastructure simple.[1]

Why make the move?
IT has never been more important to your business, and as virtualization and cloud play a larger role in your datacenter, your storage infrastructure has never been more important to meeting internal and external service-level demands.

HPE 3PAR StoreServ Storage is the only Tier 1 storage platform built to exceed the demands that virtualization, cloud, and IT-as-a-Service (ITaaS) place on storage infrastructure. It's storage built to meet the demands of the modern data center with built-in multitenancy, federation capabilities, and the same set of rich data services from the midrange to the enterprise. So regardless of whether you are a midsize organization experiencing rapid growth, a large enterprise looking to support ITaaS, or a global service provider building a hybrid or private cloud, HPE 3PAR StoreServ Storage has you covered. Need to accelerate the performance of your mission-critical applications or support virtual desktop environments? The flash optimized HPE 3PAR StoreServ family, supported by HPE 3PAR Online Import, is designed to deliver.

With HPE 3PAR StoreServ Storage, you get industry-leading thin technologies that make your storage more capacity efficient. You also get the ability to affordably replicate data between any model HPE 3PAR StoreServ array and non-disruptively move data between any model in the portfolio for greater efficiency without sacrificing performance or Tier 1 resiliency. And with HPE 3PAR Online Import software, it's never been easier to make the move to HPE 3PAR StoreServ Storage.

Making the move is easy with HPE 3PAR Online Import software

HPE 3PAR Online Import software gets you to a modern, Tier 1 storage solution quickly and effortlessly. Move data from HPE EVA Storage, EMC Storage, HDS Storage or IBM XIV Storage to HPE 3PAR StoreServ using specialized tools that make the process seamless and reduce it to only five steps:

• Setup the 3PAR Online Import environment

• Zone the host to the new system

• Configure host multi pathing

• Shutdown the host, unzone from the source, and start the migration[4]

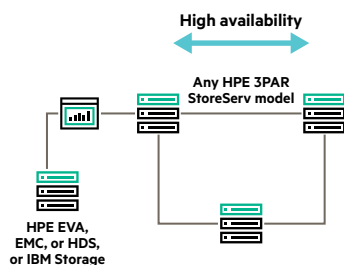• Start the host (if required) and validate application

Built in data migration
HPE 3PAR Online Import software is included in HPE 3PAR's All-inclusive licensing so you can perform self-directed migration that doesn't require professional services, hardware appliances, or consumption of host resources. This means that making the move from your EVA, EMC, HDS or IBM XIV system to HPE 3PAR StoreServ Storage[5] is not only easy, but can save you time and money.

Online Import for EMC VNX, CLARiiON CX4, VMAX, and DMX4
The EMC VNX arrays uses an array OS that is not supported on earlier VNX models, so the upgrade path from a first-generation VNX array to VNX2 is nothing short of a full data migration. Replacing your EMC VNX or EMC CLARiiON CX4 array with VNX2 involves either data migration tools that consume host resources and impact application performance or require the use of costly additional hardware appliances. As an alternative, consider migration to Tier 1 HPE 3PAR StoreServ Storage with Online Import. Online Import also supports the migration from EMC CLARiiON CX4, VMAX and DMX4.

High availability

Any HPE 3PAR StoreServ model

HPE EVA, EMC, or HDS, or IBM Storage

Figure 1. Move data from HPE EVA Storage, EMC Storage, HDS Storage, or IBM XIV Storage to HPE 3PAR StoreServ

[4] Shutting down the host is required only if using the minimally disruptive migration method or using non-native multi-pathing

[5] Please refer to HPE SPOCK to see what is the minimum 3PAR OS requirement for respective source arrays

Online Import for HPE EVA Storage

Using the familiar HPE EVA Command View as the orchestration platform, HPE 3PAR Online Import software enables direct migration of data from a source HPE EVA Storage system to a destination HPE 3PAR StoreServ Storage array without requiring host resources for data migration. The entire process can be completed with only minimal to no disruption (depending on host OS), sending EVA virtual disk and host configuration information to the HPE 3PAR StoreServ array without the need to change host configurations or interrupt data access in most cases.

HPE 3PAR Online Import and Oracle RAC environments

HPE 3PAR Online Import now supports data migration for your Oracle RAC environments from your HPE EVA, EMC, or HDS platforms. This configuration is supported with IBM XIV, EMC DMX4 and EMC CX, VNX and VMAX. You can easily migrate your Oracle RAC environment while maintaining consistency.

Online Import for HDS Systems

To enable ease of management, thin technologies including deduplication, scale out architecture, you can now migrate from your HDS NSC, HDS USP, HDS USP_V, HDS USP_VM or HDS VSP to HPE 3PAR StoreServ Storage. Using HPE 3PAR Online Import for HDS Storage, you can migrate HDS LDEVs and host configuration information to a destination HPE 3PAR StoreServ Storage system without changing host configurations.

Online Import for IBM XIV

IBM XIV customers can now migrate 3PAR and utilize the offerings of the storage solution that has higher efficiency, options of converged migrations, thin technologies, deduplication, and a rich feature set. XIV Is limited to a certain number of maximum configuration of drives and poor capacity utilization and footprint, which 3PAR overcomes by offering multiple arrays based on performance and capacity requirements. Also, Online Import Support will be available within SSMC for IBM XIV.

Table 1. Say "Yes" to HPE 3PAR StoreServ Storage

	EMC Storage	HDS Storage	IBM XIV Storage	HPE 3PAR StoreServ Storage
Self-directed data migration without relying on host resources or additional hardware	No	No	No	Yes
Tier 1 Capabilities at a midrange price	No	No	No	Yes
50% capacity reduction, guaranteed*	No	No	No	Yes
2x virtual machine density, guaranteed†	No	No	No	Yes
99.9999% data availability, guaranteed‡	No	No	No	Yes
Common OS and feature set across the portfolio	No	No	No	Yes
All-flash array with enterprise data services	No	Yes	No	Yes

* Refer to the Get Thin Guarantee Terms and Conditions for details.

† Refer to the Get Virtual Guarantee Terms and Conditions for details.

‡ Refer to the Get 6-Nines Guarantee Terms and Conditions for details.

Refresh for less—up to 50 percent less!

Whether you are moving from HPE EVA Storage, EMC Storage, HDS Storage or IBM XIV Storage, HPE 3PAR Online Import software saves you time and money when it comes to refreshing your storage infrastructure. It uses the HPE 3PAR Gen5 Express Protect ASIC to power the simple and rapid conversion of traditional "thick" volumes on your legacy array to more efficient volumes built with 3PAR Adaptive Data Reduction technologies. This translates into a minimum 50 percent reduction in capacity requirements when you replace legacy storage with HPE 3PAR StoreServ Storage—guaranteed.[6]

For supported configurations, please refer to **HPE SPOCK**.

[6] Requires the use of HPE 3PAR Thin Conversion and HPE 3PAR Thin Provisioning software. For details, refer to the Get Thinner Guarantee Terms and Conditions. For more information: **hpe.com/storage/getthinner**

The complete HPE 3PAR software portfolio

Manage

StoreServ Management Console
Command Line Interface
System Reporter
Service Processor
File Persona
Smart SAN
HPE OneView integration
WSAPI, SMI-S and SNMP
OpenStack® integration
VMware® integration
Dockers containers support

Protect

Remote Copy
Peer Persistence & CLX
Recovery Manager Central
Data-at-rest encryption
File Store snapshots
Persistent Checksum
Persistent Cache
Persistent Ports
Virtual Lock and File Lock
VSS Provider

Optimize

Adaptive Sparing
Adaptive Flash Cache
Priority Optimization
Federation (Peer Motion, Online Import)
Adaptive Optimization
Express Protect
Adaptive Reads and Writes
Express Writes
Autonomic Cache Offload
Mixed Workload Technology

Efficient

Zero Detect
Deduplication
Compression
Data Packing
Thin Provisioning
Virtual Copy
Thin Conversion
Thin Persistence
Express Layout
Express Indexing
Express Scan

Predictive analytics powered by StoreFront Remote

Manage: Everything you need to get up and running quickly and efficiently.	Simplified management is offered by the **HPE 3PAR StoreServ Management Console (SSMC)**. The scriptable **HPE 3PAR Command Line Interface (CLI)** gives you powerful customization capabilities that are simple to configure and reduce the need for extra management tools. **HPE 3PAR System Reporter** helps track performance and capacity utilization trends for multiple HPE 3PAR StoreServ systems. Remote error detection along with support for diagnostics and maintenance activities is offered via **HPE 3PAR Service Processor**. Rich file protocols from SMB/CIFS to NFS and FTP, and a RESTful Object Access API for programmatic access to files are offered with **HPE 3PAR File Persona**. Built-in automated SAN configuration is offered with **HPE 3PAR Smart SAN**. **HPE OneView integration**, gives you a web-based interface that is common across enterprise servers, storage and networking. Support for the **Storage Management Initiative Specification (SMI-S)** provides simplified storage management from within the Microsoft® System Center Management framework. With **OpenStack integration**, over both iSCSI and Fibre Channel protocols, the flexibility and cost-effectiveness of a highly resilient cloud-based open source platform that meets the requirements of your mission-critical applications, is offered. HPE 3PAR StoreServ Storage **integration with VMware vSphere®** enables you to take advantage of architectural benefits such as wide striping, a Mesh-Active clustered controller design, mixed workload support, and hardware-assisted VMware vSphere APIs for Array Integration (VAAI) support. **Dockers containers support** helps deliver enterprise-grade storage availability, resiliency and performance for stateful containers.
Protect: Safeguard your most mission-critical of applications.	**HPE 3PAR Remote Copy** offers simple and cost effective data protection for efficient multi-tenant disaster recovery. **HPE 3PAR Peer Persistence** ensures transparent autonomic failover over metropolitan distances. **HPE 3PAR Cluster Extension Software** enables automatic failover across data centers using Remote Copy Asynchronous mode. **HPE Recovery Manager Central** allows you to create, manage and automate crash-consistent snapshots for any application and app-consistent snapshots for VMware vSphere, Microsoft SQL Server, Oracle, and SAP HANA®. **HPE 3PAR StoreServ Data-at-Rest Encryption** protects data from both internal and external security breaches by securely encrypting all data as it is written to the drive. End-to-end data integrity, protection against silent corruption from the host to the storage array is offered via **HPE 3PAR Persistent Checksum. HPE 3PAR Persistent Cache** maintains service levels, so they are not impacted by unplanned component failures—a key requirement for the virtual data center. Non-disruptive upgrades to HPE 3PAR StoreServ 8000 Storage systems without relying on multi-pathing software and without initiating failover is initiated via **HPE 3PAR Persistent Ports. HPE 3PAR Virtual Domains and HPE 3PAR Virtual Lock Software** helps segregate access and deliver robust storage services for different applications and user groups with additional security attached to the retention of storage volumes. **HPE 3PAR File Lock** enables data preservation to meet the enterprise governance requirements.
Optimize: Make the best use of the available storage capacity.	**HPE 3PAR Adaptive Sparing** leverages the system's sparing approach to improve the performance and endurance of flash. Performance acceleration is assured by **HPE 3PAR Adaptive Flash Cache**, which reduces application response times. **HPE 3PAR Priority Optimization** assures service levels with QoS controls for mission-critical applications. **HPE 3PAR Peer Motion** enables load balancing at will, wherein movement of data and workloads between arrays does not impact, applications, users, or services. **HPE 3PAR Online Import** is included to enable migration from HPE EVA, EMC, HDS or IBM Storage systems. **HPE 3PAR Adaptive Optimization** improves storage utilization by enabling cost-optimized storage tiering. **HPE 3PAR Express Protect** enables backups to StoreOnce—all through the familiar RMC GUI. **HPE 3PAR Adaptive Reads and Writes** helps to avoid unnecessary data reads and writes to reduce latency, enhance backend performance and extend flash media lifespan. **HPE 3PAR Express Writes** enhances write acceleration that helps optimize CPU utilization and depending on workload, delivers greater throughput. **HPE 3PAR Autonomic cache offload** helps reduce cache bottlenecks by automatically changing the frequency at which data is offloaded from cache to flash media based on utilization rate. **HPE 3PAR Multi-tenant I/O processing** enables performance improvement for mixed workloads or virtual desktop infrastructure (VDI) deployments by breaking large I/O into smaller chunks so that small read requests don't get held up behind larger I/O requests, ensuring reduced latency.
Efficient: Get maximum performance with minimum expenditure.	**HPE 3PAR Zero Detect** reduces the cost of storage by identifying and removing repeated data from incoming data streams. **HPE 3PAR Deduplication** helps reduce the amount of flash needed to store data by preventing the storage of duplicate data. **HPE 3PAR Compression** helps reduce the amount of flash needed to store data by reducing the data footprint. **HPE 3PAR Data Packing** helps improve storage efficiency and bandwidth by condensing multiple smaller data sets together. **HPE 3PAR Virtual Copy Software** protects and shares data affordably with rapid recovery using reservation-less, non-duplicative, copy-on-write snapshots. **HPE 3PAR Thin Technologies**—including **HPE 3PAR Thin Provisioning, Thin Conversion, Thin Persistence, and Thin Copy Reclamation**—achieve data compaction by leveraging built-in hardware capabilities. **HPE 3PAR Express Layout**, allows HPE 3PAR controller nodes to share access to SSDs in order to drive efficiency. **HPE 3PAR Express Indexing** helps deduplicate data inline and with a high degree of granularity. **HPE 3PAR Express Scan helps** remove redundant data inline and prevents wastage of CPU cycles.

HPE Technology Services

The support services portfolio will help complement the performance and reliability of the HPE 3PAR StoreServ Storage infrastructure. HPE provides complete, end-to-end lifecycle services for your entire infrastructure—servers, storage, networks, and software. Our services also help you consolidate your support management and whenever necessary, we collaborate with independent software vendors directly. By integrating hardware and software services, we offer you a support experience that is relevant to your business needs.

Advise, transform, and integrate
Navigate through the complexities of storage, backup, archive, disaster recovery, and Big Data with advisory, transformation and integration consulting.

Deploy and implement
Access expertise to support deployment, operations, relocation, sanitization and disposal plus improvement-focused education.

Operate and support
Find the level of personalized, proactive and simplified support right for your business.

Note: Specific service availability varies by product.

HPE Foundation Care
A comprehensive suite hardware and software services aimed to help increase the availability of IT infrastructure.

HPE Proactive Care
An integrated set of reactive and proactive services designed to help you improve the stability and operation of your converged infrastructure to achieve better business outcomes. HPE Proactive Care has been specifically designed to support devices in IT environments, providing enhanced support that covers servers, operating systems, hypervisors, storage, storage area networks (SANs) and networks.

Optimize your IT investment strategy with new ways to acquire, pay for and use technology, in lock-step with your business and transformation goals. **hpe.com/solutions/hpefinancialservices**

HPE Factory Express provides customization and deployment services along with your storage and server purchases. You can customize hardware to your exact specifications in the factory—helping speed deployment. Visit **hp.com/go/factoryexpress**

Take five minutes to calculate the potential three-year cost savings and ROI you can expect by migrating from your current storage to an HPE 3PAR StoreServ Storage solution. **Click here** to go to the HPE Storage Quick ROI Calculator.

Gain the skills you need with ExpertOne training and certification from Hewlett Packard Enterprise. With HPE Converged Storage training, you will accelerate your technology transition, improve operational performance, and get the best return on your Hewlett Packard Enterprise investment. Our training is available when and where you need it, through flexible delivery options and a global training capability. Visit **certification-learning.hpe.com**

HPE Proactive Care Advanced
This service expands on HPE Proactive Care Service and is designed to help maximize the benefits of IT investments, maintain IT infrastructure stability, achieve business and IT project objectives, reduce operational costs and free IT staff for other priority tasks. An assigned HPE Account Support Manager (ASM) provides personalized technical and operational advice, including HPE best practices gleaned from HPE's broad support experience.

HPE Datacenter Care
HPE's most comprehensive support solution tailored to meet specific data center support requirements. It offers a wide choice of proactive and reactive service levels to cover requirements ranging from the most basic to the most business-critical environments.

HPE Lifecycle Event Services
These services are sold on a per-event basis and include services to help deploy technologies and solutions as well as assessments and other services to help optimize and operate the IT infrastructure.

Get connected and get back to business Unlock all of the benefits of your technology investment by connecting your products to HPE Enterprise. Achieve up to 77 percent[7] reduction in downtime, near 100 percent[8] diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7 monitoring, pre-failure alerts, automatic call logging and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server, storage and networking products, securely connected to HPE support.

To learn more, visit: **hpe.com/services/storage**

Learn more at
hpe.com/storage/3PAR

[7] IDC
[8] HPE CSC reports, 2014–2015

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