

Brochure

A man in a light blue shirt and dark trousers is standing in a server room. He is holding a handheld device with a yellow and blue handle, connected by a cable to a laptop on a desk. The desk also has a yellow object and some cables. In the background, there are rows of server racks. The entire image is framed by a thick green border.

# Autonomic storage management, your way

HPE 3PAR StoreServ storage management



**Hewlett Packard**  
Enterprise

### Consolidated performance and capacity reporting

The HPE 3PAR StoreServ Management Console provides answers to your most common system status questions, all in one place, along with the snapshot feature that gives you a picture of system health in the context of your converged infrastructure.

### Converged management for file and block

The HPE 3PAR StoreServ Management Console also provides you with converged management for file and block workloads and the ability to manage all of your systems—from midrange to high-end and including all-flash arrays—from a single console.

### Automated LUN provisioning and zoning

With HPE OneView, you can automate storage volumes creation, associating those volumes with server profiles and SAN zoning to reduce deployment time and ongoing management.

### Flexible, cost-effective, cloud-based open source platform

With support for open source integration over iSCSI and Fibre Channel, HPE 3PAR StoreServ Storage delivers high performance and non-disruptive scalability.

### HPE 3PAR Storage Federation

Single pane of glass for orchestration and management provided by SSMC, for multi-array bi-directional movement of data via HPE 3PAR Peer Motion software.

### SSMC 2.2 and HPE 3PAR Remote Copy

With new policies panel and column enabled for Peer Persistence, a separate directional topology diagram and RC historical chart is enabled in SMMC for HPE 3PAR Peer Persistence.

### Improve management productivity

The HPE 3PAR StoreServ Management Console unlocks user productivity with a new interface designed for flexible and intuitive task-based navigation. A modern, visually appealing Web-based console gives you comprehensive, consolidated management with an improved user experience suited for desktops as well as tablets. Thereby bringing for you management that is:

- **Clean:** Actions and settings are unified within a single selection area with visual indicators to help draw your attention to any problematic areas.
- **Focused:** View only the data that is required to complete a task.
- **Efficient:** Built-in flexibility lets you meet different needs, such as block and file management.
- **Organized:** A well thought-out panel-based structure provides you with a high-level dashboard as well as drill-down granularity.

The HPE 3PAR StoreServ Management Console is a new way of managing your HPE 3PAR StoreServ Storage. It is a sleek, Web-based console that gives you comprehensive, consolidated management of your entire converged storage deployment with HPE OneView integration. Support for a variety of application interfaces and for OpenStack® gives you unprecedented flexibility and increases productivity by giving your application and VMware® administrators greater visibility and control.

As an IT professional, you are asked to juggle many important responsibilities, which can leave little time for routine management. To work smarter and faster, you need storage management that balances simplicity with flexibility. For example, you need centralized management to give you immediate, comprehensive insight into your storage environment. At the same time, you need flexibility to provide your application owners and VMware administrators with the ability to perform common tasks from inside the management tools they already use. Tasks such as storage provisioning, tiering, and snapshots creation must be simple, integrated, and as automated as possible. Your storage must be self-managing and capable of proactively notifying you of issues, not the other way around.

HPE 3PAR StoreServ Storage offers you the flexibility, control, and automation to manage your storage, your way—whether you prefer command lines and scripting graphical user interfaces or administering your storage from inside VMware and Microsoft® Windows® management tools, or need open source application programming interfaces (APIs) to support cloud development. With the HPE 3PAR StoreServ Management Console, you can manage and report on multiple arrays at a granular level, in a manner consistent with the broader HPE OneView management experience. Get your job done faster and more accurately with less repetition thanks to a consistent user experience—regardless of whether you are provisioning a bare metal server or a storage logical unit number (LUN). Enjoy the flexibility of being able to perform storage tasks from inside application-specific management tools you already use.

## Management options and plug-ins

While the new HPE 3PAR StoreServ Management Console serves as the primary management interface for HPE 3PAR StoreServ Storage, your arrays can also be managed via plug-ins and additional management options that give you application-integrated control, such as:

- VMware vSphere integration via plug-ins, hardware-assisted integration with VMware vSphere APIs for Array Integration (VAAI), and support for VMware Virtual Volumes (VVols) as this new functionality becomes more broadly available from VMware
- Microsoft Windows integration lets you monitor the entire physical, logical, virtual storage, and cloud infrastructure via Microsoft System Center Operations Manager (SCOM) and System Center Virtual Machine Manager (SCVMM)
- Web Service (WS) APIs let you automate management of hosts, ports, volumes, common provisioning groups (CPGs), virtual LUNs (VLUNs), storage space, and system information
- OpenStack support over iSCSI and Fibre Channel protocols provides the flexibility and cost-effectiveness of a cloud-based open source platform
- HPE 3PAR Command Line Interface (CLI) gives you powerful customization capabilities that are simple to configure and reduce the need for extra management tools and costly consulting services

## Streamline storage administration

The following HPE 3PAR StoreServ Management Console features are designed to streamline your management experience:



Figure 1. Dashboard view

**Dashboard:** Through the dashboard view (figure 1), you can assess what is happening across your data center within seconds. Whether you have two HPE 3PAR StoreServ Storage arrays or sixteen, the dashboard view is equally simple; it puts you just one click away from more detail. For example, when provisioning storage, the console presents you with a high-level view of your systems, including details on free capacity by storage tier. In cases where you are managing multiple systems, this helps you choose the most appropriate system on which to configure storage for a new host or workload. Aligned with HPE OneView, the dashboard leverages the same look and feel shared across HPE ConvergedSystem products, placing you one-step closer to converged data center management.



Figure 2. Smart Search

**Smart Search:** To help you find key information quickly including offline records, the HPE 3PAR StoreServ Management Console includes Smart Search (figure 2). Smart Search is aligned with nearly every task you can perform within the console for immediate access to the specific event, device, task, or task information you are looking for. Searches can be global, spanning all systems and objects or confined to a given object type. Previous queries are saved to expedite searches, and hints are offered to make your next operation more intuitive.



Figure 3. Map View

**Map View:** In a converged environment, you can use Map View to keep tabs on device status with visibility into relationships (figure 3). Quickly see how things are connected from the data center down to the device, so you can find, triage, and fix problems in seconds or minutes.



Figure 4. Activity Feed

**Activity Feed:** The Activity Feed is a single place for IT administrators to communicate, collaborate, and keep abreast of alerts, jobs, and projects (figure 4). Details pertaining to an activity can be seen on the Activity page, which contains task breakdowns. With Activity Feed, your administrators can become more connected, and communication happens in real time.



Figure 5. System Reporter

**System Reporter:** System Reporter functionality provides full visibility and control over the historical capacity and performance data for all HPE 3PAR StoreServ Storage arrays, regardless of location. It also provides custom thresholds and email notifications, which is particularly useful for service providers and enterprises with a broad range of report customizations and groupings for service-level agreement (SLA) and chargeback support.

## Manage your storage, your way

HPE 3PAR StoreServ offers you the flexibility, control, and automation to manage your storage, your way—whether you are a VMware or Microsoft Windows administrator, prefer command lines and scripting over graphical user interfaces, or are looking for open source APIs to support cloud development. The following options and technologies complement the HPE 3PAR StoreServ Management Console by enabling you to tailor your management experience to your specific needs and preferences.

### HPE OneView integration



The HPE 3PAR StoreServ Management Console features a Web-based interface that reflects a common user interface framework on which HPE is standardizing across enterprise servers, storage and networking. This framework, referred to as HPE OneView, allows new functionality to be implemented as plug-ins with reduced dependencies, thus enabling distributed development, device management, provisioning, performance management, and service or support tools that can all be centralized under one application.

HPE OneView delivers a single management platform that supports HPE DL servers, HPE BladeSystem, HPE 3PAR StoreServ Storage, and HPE ConvergedSystem, plus additional application-specific orchestration. A single interface provides the essential converged infrastructure management for HPE CloudSystem, along with simplification of management resources across physical, virtual, and cloud environments, which leads to more efficient infrastructure lifecycles.

### OpenStack support



With support for OpenStack technology, over both iSCSI and Fibre Channel protocols, HPE 3PAR StoreServ Storage provides the flexibility and cost-effectiveness of a highly resilient cloud-based open source platform that meets the requirements of your mission-critical applications.

With OpenStack support, HPE 3PAR StoreServ Storage enables:

- High performance to meet peak demands
- Non-disruptive scalability to easily support storage growth
- Increased efficiency and extended flash media lifespan
- Effortless storage administration to lower operational costs and reduce time to value

### VMware vSphere integration



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. The result is storage that allows you to double virtual machine (VM) density on physical servers. HPE 3PAR Thin Technologies deliver additional benefits that together deliver the ultimate in storage efficiency for VMware environments.

When deployed together, VMware vSphere and HPE 3PAR StoreServ Storage deliver a compelling virtual data center solution that increases overall resource utilization, provisioning agility, application availability and administrative efficiency, and reduces both capital and operating costs. VMware plug-ins allow you to provision and manage your storage from within the VMware management applications you already use.

### Microsoft Windows integration



Integration with Microsoft Windows provides you with a single-pane-of-glass monitoring view of physical, virtual, and cloud environments. Detailed information on virtual storage infrastructure such as volumes, LUNs and hosts as well as HPE 3PAR StoreServ Storage array properties and capacity utilization is made possible through the Microsoft System Center Virtual Machine Manager (SCVMM) plug-in.

The HPE Storage Management Pack for Microsoft System Center Operations Manager (SCOM) provides automated installation and discovery, as well as event monitoring and HPE 3PAR StoreServ Storage alerts without ever leaving SCOM.

### SMI-S support



Support for the Storage Management Initiative Specification (SMI-S) issued by the Storage Networking Industry Association (SNIA) enables delivery of business efficiency and provides greatly simplified storage management from within the Microsoft System Center Management framework. This support enables Microsoft System Center Virtual Machine Manager 2012 (SC-VMM 2012) to provide storage classification used in creation and deployment of VM templates, storage provisioning for Hyper-V clusters (for allocation of storage pools and individual LUNs to host groups), as well as rapid provisioning of VMs by leveraging the array's snapshot and cloning capabilities.

### Web services API



A Web services API enables you to automate management of hosts, ports, volumes, CPGs, VLUNs, storage space, and system information. It includes sample clients that can be referenced for the development of clients specific to your needs. Clients of the API interact with the server through HTTPS.

### HPE 3PAR CLI



The scriptable HPE 3PAR Command Line Interface (CLI) simplifies storage management by giving you powerful customization capabilities that are simple to configure and reduce the need for extra management tools and costly consulting services.

Learn more at  
[hpe.com/storage/3PAR](http://hpe.com/storage/3PAR)



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