HPE 3PAR Application Suite for Oracle

Bulletproof your Oracle environment

HPE 3PAR StoreServ Storage: Agile tier 1 storage capabilities from midrange to enterprise

As an organization that constantly makes leaps and strides toward growth, you've seen firsthand what it means to maintain a perfect balance between managing large and increasing data volumes, rising business demands, cost efficiency, and sustainable growth. And, while you juggle these multiple facets within your business, you also consider advancements and changes on the outside that can deeply impact what goes on inside your business.

HPE 3PAR StoreServ Storage is an easy-to-deploy, affordable, scalable, and future-proof system designed from the ground up to meet fluctuating and mixed workload demands. With efficient, autonomic, and bulletproof capabilities and unique, multi-node-capable storage architecture, HPE 3PAR StoreServ Storage provides affordable scalability to your data center, meeting your application demands and enabling sustainable growth. HPE 3PAR StoreServ Storage prepares and supports your data center regardless of what your future holds—whether it's server virtualization, an infrastructure refresh, or just simplifying storage to more efficiently handle rapid data growth.

Bulletproofing your Oracle environment with HPE 3PAR StoreServ Storage

With the HPE 3PAR Virtual Copy software and the HPE 3PAR Application Suite for Oracle, you can use HPE 3PAR Storage to

intelligently create, manage, and present time-consistent snapshot images of Oracle databases for rapid application recovery, near-continuous data protection, data sharing, and nondisruptive backup and recovery.

Traditional Oracle Database backup and recovery management can affect service levels or cause unnecessary cost and complexity. Backups often consume production host resources for extended periods and may be disruptive to users. In some cases, tape backups are found to be invalid too late. Of course, recovery from tape is time consuming and complex, and making a copy of a database for test and development purposes can take hours or days. Meanwhile, disk-based backup and recovery speeds up operations but is expensive with full-disk copy technologies, especially when frequent recovery points are needed. As a result, IT is forced to choose between performing fewer full backups and spending more for storage.

A better way to manage Oracle backup and recovery

The HPE 3PAR Application Suite for Oracle addresses the challenge of managing backup and recovery of complex, 24x7 Oracle databases with an optional bundle that provides everything you need for rapid, affordable protection of your Oracle databases. This suite includes HPE 3PAR Recovery Manager for Oracle and Oracle Space Reclamation capabilities.

HPE 3PAR Recovery Manager software for Oracle

The HPE 3PAR Recovery Manager software for Oracle automatically creates and manages hundreds of time-consistent, reservationless snapshot images of production Oracle and Oracle RAC databases. With the HPE 3PAR Recovery Manager software, IT can replay Oracle logs for up-to-the-minute database recovery, speeding up a variety of operations, including rapid application recovery of the Oracle production server itself. Snapshot images can also be used for application testing and decision support.

Tightly integrated with Oracle Database, the HPE 3PAR Recovery Manager software automatically discovers and intelligently maps all database elements—including table spaces, data files, control files, parameter files, and archive log files—to associated snapshots. It places the Oracle database in "hot standby" mode and nondisruptively creates consistent snapshots that are then presentable to other Oracle database instances. And all of these instances are managed from an easy-to-use graphical user interface on the host.

Oracle space reclamation capabilities

The optional HPE 3PAR Application Suite for Oracle works with the required HPE 3PAR Operating System Suite to provide unique space reclamation capabilities that are made possible through integration between Oracle Automatic Storage Management (ASM) and HPE 3PAR thin technologies. This integration allows the HPE 3PAR StoreServ Storage system to reclaim allocated but unused disk space using the HPE 3PAR Thin Persistence software and Oracle ASM Storage Reclamation Utility (ASRU) in order to extend the benefits of thin provisioning and help maintain thin savings over time.

Backup and recovery options

The HPE 3PAR Software Suite for Oracle delivers fast, reliable backup and recovery to tape through integration with Symantec NetBackup. Snapshots are intelligently presented as a class or policy to the NetBackup server so that backup jobs do not require reconfiguration. Without the HPE 3PAR Recovery Manager software, similar results and automation can only be achieved through costly consulting services and custom scripting.

For IT organizations that have adopted disk-based backup and archiving but still perform tape backups to safeguard against accidental or malicious deletion of volume copies, the HPE 3PAR Software Suite for Oracle and the HPE 3PAR Virtual Copy software can be combined with the HPE 3PAR Virtual Lock software to reduce this unnecessary cost and redundancy. The HPE 3PAR Virtual Lock software enables you to lock a virtual volume by setting a retention period during which that volume is protected from deletion, even by the highest-privileged storage administrator.

Integration with Oracle Data Guard

The HPE 3PAR Software Suite for Oracle is also integrated with Oracle Data Guard to provide application-level disaster recovery on the host. In Oracle Data Guard and Active Data Guard environments, the HPE 3PAR Recovery Manager software enables you to take snapshots of standby databases instead of production databases. This removes potential performance impact to production applications associated with quiescing an application. Snapshots on the standby database can also be used by other applications for data mining without impacting the production application.

HPE 3PAR Remote Copy software integration

The HPE 3PAR Software Suite for Oracle works with the HPE 3PAR Remote Copy software to allow organizations to simply and cost-effectively replicate Oracle databases to an HPE 3PAR StoreServ Storage system at a secondary site. The HPE 3PAR Remote Copy software keeps Oracle database copies at the remote site consistent with the primary site to protect against data loss in the event of a disaster. With this powerful combination, organizations have an ideal solution for cost-effective replication of Oracle databases over any distance to provide business continuity following a primary site outage.

Software suites for HPE 3PAR StoreServ Storage

HPE 3PAR Operating System Software Suite	Required for all new HPE 3PAR StoreServ systems, this foundational software suite gives you everything you need to get up and running quickly and efficiently. Powered by the HPE 3PAR Gen5 ASIC, HPE 3PAR Thin Technologies, including HPE 3PAR Thin Provisioning, HPE 3PAR Thin Persistence, HPE 3PAR Thin Conversion, and HPE 3PAR Thin Deduplication, form the base of this software suite. Performance acceleration is assured by HPE 3PAR Adaptive Flash Cache, which reduces application response times. Network simplification and security are covered with iSCSI VLAN tagging. Simplified management is offered by the HPE 3PAR StoreServ Management Console and HPE 3PAR Host Explorer software. HPE 3PAR System Reporter and HPE 3PARInfo software are designed to track performance and capacity utilization trends for multiple HPE 3PAR StoreServ Systems. Other highlights of this suite include HPE 3PAR Full Copy software and autonomic rebalancing capabilities that help optimize the use of future capacity expansions, and support for standard multipathing software for high availability in clustered environments. A 1-year license for HPE 3PAR Online Import is included to enable migration from HPE EVA, EMC[1], HDS[2], or IBM[3] systems.
HPE 3PAR Replication Software Suite	This suite bundles HPE 3PAR Virtual Copy Software with HPE 3PAR Remote Copy Software—both are sold separately for all HPE 3PAR StoreServ models. HPE 3PAR Virtual Copy Software protects and shares data affordably with rapid recovery using reservationless, non-duplicative, copy-on-write snapshots. HPE 3PAR Remote Copy offers simple and cost-effective data protection for efficient multi-tenant disaster recovery. Also included in this bundle is HPE 3PAR Peer Persistence, which ensures transparent automatic failover over metropolitan distances using Remote Copy Synchronous mode. For HPE 3PAR StoreServ 20000 Storage and HPE 3PAR StoreServ 8000 Storage, this suite also includes HPE 3PAR Cluster Extension Software, which enables automatic failover across data centers using Remote Copy Asynchronous mode.
HPE 3PAR Data Optimization Software Suite	This software bundle combines HPE 3PAR Dynamic Optimization, HPE 3PAR Adaptive Optimization, HPE 3PAR Priority Optimization, and HPE 3PAR Peer Motion software together. HPE 3PAR Dynamic Optimization delivers the required service levels for the lowest possible cost throughout the data lifecycle. HPE 3PAR Adaptive Optimization improves storage utilization by enabling cost-optimized storage tiering. 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. These four software titles bundled in this suite are also sold separately for all HPE 3PAR StoreServ models. Depending on the purchase date, titles included in this suite may vary. Check the HPE 3PAR Software QuickSpecs for complete details.
HPE 3PAR File Persona Software Suite	This licensed feature of the HPE 3PAR Operating System enables rich file protocols from SMB/CIFS to NFS and FTP, file data services from quota management to file snapshots, and retention as well as immutability, and a RESTful Object Access API for programmatic access to files. It extends the spectrum of workloads natively addressed by HPE 3PAR StoreServ Storage to include home directories and user shares, content management and collaboration, data preservation and governance, as well as custom cloud applications. Management is truly unified through the HPE 3PAR StoreServ Management Console and the powerful, scriptable HPE 3PAR CLI.
HPE 3PAR Security Software Suite	This software suite bundles HPE 3PAR Virtual Domains Software and HPE 3PAR Virtual Lock Software. With this suite, you can 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 Application Software Suite for Microsoft® Hyper-V	Protect your Microsoft Hyper-V environment with HPE 3PAR Recovery Manager for Microsoft Hyper-V and the HPE 3PAR VSS Provider software included in this software bundle.
HPE 3PAR Application Software Suite for Microsoft Exchange	This bundle gives you the essentials for use with Microsoft Exchange, including HPE 3PAR Recovery Manager for Exchange and the HPE 3PAR VSS Provider software.
HPE StoreOnce Recovery Manager Central (RMC)	This suite bundles everything you need to protect your critical applications running on HPE 3PAR StoreServ Storage. RMC software allows you to create, manage, and automate crash-consistent snapshots for any application and app-consistent snapshots for VMware® vSphere®, Microsoft SQL Server, and Oracle[4]. In addition, RMC allows you to perform flat backup to HPE StoreOnce systems for converged data protection.

[1] HPE 3PAR Online Import support for EMC Storage extends to EMC VMAX, EMC VNX, and EMC CLARiiON CX4 Storage systems.

[2] HPE 3PAR Online Import support for Hitachi storage system extends to Hitachi Data Systems (HDS), TagmaStore Network Storage Controller (NSC), Universal Storage Platforms (USP), and Virtual Storage Platforms (VSP) systems.

[3] HPE 3PAR Online Import support for IBM Storage extends to IBM XIV Gen 2 and IBM XIV Gen3 systems.

[4] Recovery Manager Central for Oracle (RMC-O) supports RHEL and OEL environments. For Solaris SPARC, IBM AIX, and HP-UX environments, use the HPE 3PAR Application Software Suite for Oracle.

HPE Factory Express

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**.

Customer technical training

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

HPE Technology Services

The support services portfolio will help complement the performance and reliability of the HPE 3PAR StoreServ Storage infrastructure. Hewlett Packard Enterprise 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.

Advice, 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 of 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.

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 our 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 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 Hewlett Packard Enterprise. Achieve up to 77 percent[5] reduction in downtime, near 100 percent[6] 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 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.

[5] IDC.

[6] HPE CSC reports 2014-2015.

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