

Storage solutions for Microsoft SQL Server

Cut SQL maintenance time and speed up new application projects

Predictive flash storage for SQL

Cut SQL maintenance time and speed up new application projects

Worry-free SQL infrastructure

HPE storage takes care of itself and your entire SQL infrastructure stack

SQL Copy Data Management

For dev/test, data protection, business continuity, reporting, audits, analytics, upgrades

Speed up SQL DevOps

With industry-leading container and cloud-ready storage

HPE Cloud Ready flash arrays



HPE Cloud Volumes



- Enterprise-grade cloud storage service for Azure/Amazon Web Services (AWS)
- Move SQL data between cloud and on-premises

All software is included

- HPE InfoSight
- Manage data with PowerShell, SQL Server:
 - HPE Recovery Manager Central for HPE 3PAR StoreServ
 - Windows® & Linux® toolkits for HPE Nimble Storage

Figure 1. Gain a cloud on-ramp for data, flash performance for all SQL workloads

Data: The core of every enterprise

Enterprises rely on data to improve key business metrics—for supply chain, operations, customer engagement, and even ROI. In this digital age, the quality of your data and how you operate on it makes your business unique.

The IT generalists' challenge

While slow data delivery—the leading cause of slow application performance—costs about half a million per hour,¹ demands on overworked IT generalists and SQL DBAs continue to increase. How do you:

1. Deliver consistently high performance and availability without spending all your time finding and resolving problems that could be anywhere in your stack?²
2. Deliver data copies to all who need them while protecting data simply, quickly, and cost-effectively?

3. Find time to support new application projects—in the cloud and on-premises?

With growing demands and fewer storage experts, one thing is clear: modern infrastructure must do more, so teams can focus on important work.

Run SQL Server on predictive flash

Hewlett Packard Enterprise offers worry-free, cloud-ready storage that cuts SQL maintenance time and speeds up new application projects.

Worry-free infrastructure with AI and predictive analytics

HPE storage takes care of itself and your entire SQL infrastructure stack, so you don't have to. Every **HPE Nimble Storage** and **HPE 3PAR StoreServ storage** comes with HPE InfoSight, our cloud-based engine that gathers analytics from compute, storage sensors, networking, and virtual machines, and analyzes it all with machine learning.

¹ "Maintaining virtual system uptime in today's transforming IT infrastructure." Aberdeen Group, February 2016

² Based on HPE Nimble Storage installed base: hpe.com/us/en/storage/infosight.html



Solution brief

With almost a decade of experience training with real data from our install base, **HPE InfoSight** is an expert you can trust to

- **Deliver consistently fast performance** for SQL and Microsoft® applications automatically
- **Guarantee six-nines of availability**³ with all HPE Nimble Storage and HPE 3PAR StoreServ storage
- **Predict and prevent even the toughest cross-stack infrastructure problems** before they affect SQL applications
- **Eliminate guesswork and pilot projects.** Use our data in your network operations center for accurate forecasts and capacity planning

With every system and issue analyzed, HPE InfoSight and our entire install base get smarter and more reliable.

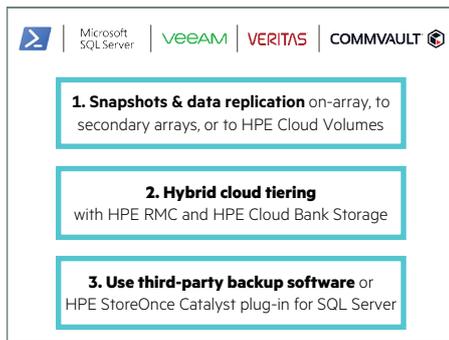


Figure 2. SQL copy data management options

³ **HPE Get 6-Nines Guarantee**

⁴ **"Makin' copies! How many copies of data are you storing?"** Computerworld, 2013

⁵ **HPE Nimble Storage delivers up to 5X data reduction**

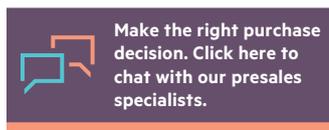
⁶ **Reduce your storage capacity requirements by 75 percent: HPE 3PAR Get Thinner Guarantee**

⁷ The "20X reduction in backup storage required" quant assumes a 20X dedupe ratio and is backed up with our **Get Protected Guarantee Program**

⁸ **Timeless Storage: HPE Nimble Storage**

⁹ **HPE 3PAR Timeless Storage**

¹⁰ The most recent HPE internal testing substantiating the "23X faster backup and 15X faster recovery" quant was performed in 2017



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Fast, efficient SQL copy data management

Data copies now cost enterprises more than production data.⁴ That's why HPE copy data management capabilities deliver greater speed, efficiency, and savings than commodity storage. HPE cuts capacity consumption for primary and secondary storage by up to 80%^{5,6} and backups by up to 20X.⁷

All software is included with our appliances.^{8,9}

- **SQL copies for everyone:** So simple and efficient that anyone can create them; no need to disrupt your production database; no storage expertise required. With reduction and policy-based retention and cleanup, you can deliver temporary copies to anyone for anything: reporting, analytics, auditing, or IT upgrades.
- **Comprehensive on-array backup and disaster recovery options:** From simple snapshots and data replication to sophisticated hybrid cloud tiering
 - Achieve 23X faster backups, 15X restores compared to traditional approaches¹⁰
 - Control backups/restores with third-party backup or copy data management applications
- **Improved developer productivity:** Create hundreds of data copies in minutes for continuous integration and deployment: dev/test, QA, and staging. Copying terabyte data sets to train AI and machine learning algorithms is quick and easy.

Speed up DevOps

SQL Server 2017 is containerized, but what about your SQL user data? With cloud and container-ready arrays, you can move data whenever and wherever you need it for new and existing apps.

- **Containers your way**—Convert legacy SQL application data to persistent volumes for Windows and Linux containers in minutes; manage them with **Docker, Kubernetes, or Mesosphere**.
- **Cloud ready**—Say goodbye to slow, manual data migrations. Move SQL data between on-premises arrays and Azure or AWS with **HPE Cloud Volumes**.
- **Self-service automation**—No more waiting or delays. Developers can automate data management with their favorite tools or container platforms.



Figure 3. Developers control data using rich HPE integration to tools and platforms they like

Rely on one accountable partner

In addition to storage and data protection, HPE offers a range of solutions for SQL, including Advisory and Professional Services from **HPE Pointnext**, and 24x7 support.

Learn more at hpe.com/us/en/storage/microsoft.html

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