

Brochure

Grow confidently with HPE storage solutions

HPE entry storage solutions for Microsoft SQL Server
and Exchange environments



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Microsoft SQL Server challenges

- Inability to rapidly process a growing number of SQL Server online transactions or data queries can hamper productivity and impact revenue.
- Mission-critical SQL Server workloads demand high data availability.
- Consolidation demands efficient storage infrastructure that does not trade-off performance and high availability (HA).

Technology environment today

We all know that IT is essential to a company's success. However, matching the right technology and business needs is an ongoing challenge. Accelerating time to market, driving productivity and collaboration within your company, removing management complexity and unexpected downtime are the primary concerns for IT decision makers. Add to these the constant challenge to stay ahead of your competition—and you got a problem to solve.

A leader in entry storage solutions for all size of businesses, Hewlett Packard Enterprise offers simple, affordable data storage solutions for Microsoft® SQL Server and Exchange workloads that meet their performance and availability needs.

SQL Server environment

SQL Server 2016 enhances 2014 features and enables customers with industry-leading OLTP solution, ability to protect data with Always Encrypted feature, end-to-end mobile business intelligence insight on any device, ability to analyze operational data using SQL Server R Services, and capability to build mission-critical applications both on premises or hybrid cloud.

SQL Server deployment challenges

Many organizations with SQL Server infrastructures typically run a number of SQL Server installations. This results in increased hardware and management costs and challenges to maintaining business continuity. At the same time, there is a need not only to support more transactions but also to efficiently manage and store information.

Accommodating all these demands by deploying different SQL Server workloads on multiple platforms leads to management complexity and increased costs.

It is an even more pressing issue for small and medium-sized organizations. Small business needs are different from those of larger organizations.

Typically, it is rare to have extra budget for personnel focused only on SQL Server management. Therefore, solutions need to be simple and low maintenance. As your business grows, you need to be able to have a flexible solution that is scalable, high performing, and doesn't require costly maintenance.

You need to have an HA solution to meet common SQL Server challenges such as inability to rapidly process data queries or meet demand for HA and technology consolidation.



Microsoft Exchange challenges

1. Labor-intensive Exchange deployment and management
2. Ever-shrinking budget for maintaining performance and availability
3. Inherent inefficiencies from trying to fully provision capacity and accommodate growth and flexibility

Virtualized SQL Server environment

Server virtualization increases utilization of your servers and hardware components, and in turn, increases your ROI. From a database perspective, there is no difference whether running an SQL Server on a physical instance or as a virtual machine. However, virtualization introduces challenges for database administrators.

Some of these are:

- Virtual machine sprawl
- Bottlenecks, which are similar to physical server instance environments
- Inability for any of the solution components to meet the flexibility and environment growth needs

Whether you run a virtualized or a physical instance of SQL Server environment, ensuring that you have a resilient and flexible storage solution is the most important step.

Microsoft Exchange environment

Microsoft Exchange Server 2016 is built on Exchange Server 2013 with more efficient cataloging and search capabilities, simplified server architecture and deployment models, faster and more reliable eDiscovery, and expanded data loss prevention features.



HPE StoreVirtual 3200 Storage

key benefits

1. Affordable

One of the smallest and most affordable building block in entry shared storage

2. Simple

Quick and intuitive setup for storage availability in minutes

3. Resilient

HA and investment protection in its DNA with application-aware snapshots, thin provisioning, and optional Network RAID

4. Flexible

Designed for traditional spinning media as well as solid-state drives (SSDs); scale up capability—add capacity when you need it; ability to add disk expansion shelves in a dual controller; active-active design

Exchange deployment challenges

Communication tools are critical to any organization, and challenges need to be addressed to improve and continue productivity and collaboration. There are existing and new business-critical challenges that have emerged:

- The volume and complexity of business communications are steadily increasing.
- Employees want the ability to use any client device, including tablets, thin clients, smartphones, and more, for anytime and anywhere access.
- IT organizations must scale the infrastructure to support more users and larger mailboxes.
- There is constant pressure to deliver better performance and to meet more demanding service-level agreements (SLAs)—all while minimizing complexity, assuring continuity, and with decreasing IT budgets.

Virtualizing your Exchange environment

In order to optimize IT resources, reduce energy costs, and streamline the management, businesses choose to virtualize their Exchange environment.

Virtualizing Microsoft Exchange does not change the Exchange Server requirements from an application perspective. Exchange Server virtual machine needs to follow the same requirements as a physical instance and have the appropriate sizing to handle the workload. Same requirements apply for Mailbox, Client Access, and server roles for transport that need flexibility, reliability, and performance.

These requirements call for an appropriate storage sufficient to handle the load and sizing depending on the particular usage profiles of the system.

HPE storage solution for your SQL Server and Exchange environment

Hewlett Packard Enterprise and our partners provide you with the solution that supports your IT needs. HPE StoreVirtual 3200 Storage and the HPE MSA 2042 SAN Storage provide application acceleration, simplicity, resiliency, and future flexibility at an affordable price point for your Microsoft Exchange and SQL Server environments.



HPE StoreVirtual 3200 Storage

HPE StoreVirtual 3200 Storage is a next-gen, flexible, shared storage system built on our leading software-defined storage platform—HPE StoreVirtual. StoreVirtual 3200 Storage provides advanced features at a highly affordable cost via the HPE StoreVirtual Virtual Storage Appliance (VSA).

The new StoreVirtual 3200 Storage is ideal for Microsoft SQL and Exchange—whether those applications are virtualized with Hyper-V or running physically.

In addition, if you are looking to deploy your Microsoft workloads using your existing capacity or in the form of an external storage, you can take advantage of the shared storage from HPE. You can get more out of the capacity you already have—whether that capacity is on your existing servers (using HPE StoreVirtual VSA) or in the form of a new external storage system such as the StoreVirtual 3200 Storage. Our entry-level storage offering is ideal if you are looking to consolidate Microsoft SQL Server and Exchange workloads onto a single shared storage system, whether these applications are virtualized with Hyper-V or running physically.

Summary: HPE StoreVirtual 3200 Storage and VSA for your SQL Server deployment

- Simplify with easy deployment and management with a built-in best practices engine, so your storage simply runs itself
- Expand flexibly with this cost-effective hybrid array for your ever-growing SQL Server data and accelerate online transactions in virtualized SQL Server OLTP workloads
- Take advantage of tiering—new writes go to the highest tier; cold data migrates to lower tier (This frees up the available space.)
- Transforms your server's storage into shared storage array with StoreVirtual VSA



Summary: HPE StoreVirtual 3200 Storage and StoreVirtual VSA for your Exchange deployment

- Deploy and manage complex Exchange environments with ease
- Quickly adapt to increasing number of Exchange users by adding additional server or storage resources without significant upfront costs
- Improve data resiliency by deploying Exchange content onto HPE entry level, highly available storage in a single enclosure
- Transform your server capacity into storage with HPE StoreVirtual VSA

HPE MSA 2042 SAN Storage

With the MSA 2042 SAN Storage, Hewlett Packard Enterprise has taken the industry's leading entry-level storage platform—with over 400,000 MSA arrays sold—and added 800 GB of SSD capacity standard for built-in flash acceleration. MSA 2042 SAN Storage is a hybrid flash array ready to accelerate your applications.

The MSA 2042 SAN Storage is ideal for supporting virtualized and physical instances for Microsoft SQL Server and Exchange workloads. This array provides an efficient solution for performance-intensive databases in addition to productivity apps as well as solutions where sequential performance is a key requirement.

Summary: HPE MSA 2042 SAN Storage for your SQL Server deployment

- Accelerate online transactions in virtualized SQL Server OLTP workloads
- Meet HA, rapid response, and resiliency demands for performance-critical Microsoft SQL Server 2016 OLTP database
- Lower OPEX and CAPEX in your Microsoft SQL Server environment with highly efficient storage that is easy to administer and manage



HPE MSA 2042 SAN Storage

key benefits

1. Affordable

Entry-level SAN storage reduces cost and inefficiency

2. Simple

Efficient management tools to deploy and manage complex Exchange environments and ever-growing SQL Server data

3. Resilient

HA and investment protection in its DNA; includes a rich set of software licenses with built in 512 snapshots, which allows for instant recovery in the event of failure

4. Flexible

Designed for traditional spinning media as well as SSDs

Summary: HPE MSA 2042 SAN Storage for your Exchange deployment

- Improve deployment and management of complex Exchange environments with easy-to-set-up-and-manage storage solution
- Grow flexibly and choose the features and functions you need now and add additional capacity as you grow
- Remove bottlenecks, improve performance of Microsoft Exchange deployments, and facilitate data security using HPE storage built-in resiliency

Winning solution for your business

Along with HPE storage, HPE ProLiant servers provide one of the industry's most comprehensive built-in management tools—helping to increase administrator productivity and system uptime. HPE ProLiant Gen9 servers provide a rich set of capabilities that accelerate application performance, protect data, simplify server operations, improve energy efficiency, and streamline the support experience.

Whether you choose HPE MSA 2042 SAN Storage or HPE StoreVirtual 3200 Storage, these entry storage systems deliver affordable, simple to manage, flexible, resilient solution for your Microsoft SQL Server and Exchange deployments so you can stay competitive and focused on your success.

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Resources

www8.hp.com/us/en/products/data-storage/mission-critical-applications.html

www8.hp.com/us/en/products/proliant-servers/product-detail.html?oid=7271241#!tab=features

hpe.com/us/en/services.html

Learn more at

hpe.com/storage/sv3200

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