

Get flexibility and choice for Microsoft SQL 2016

HPE Reference Architectures for Microsoft SQL Server 2016

Choose from three different options for hosting
Microsoft® SQL Server 2016 on HPE platforms



Hewlett Packard Enterprise and Microsoft help you innovate, adapt, and unleash new business value

- Hewlett Packard Enterprise and Microsoft share the longest relationship in the industry—more than 30 years
- Hewlett Packard Enterprise is one of the biggest users of Microsoft products and technology in the world
- Hewlett Packard Enterprise servers are a benchmark platform for Microsoft technologies
- Hewlett Packard Enterprise is the largest Microsoft Gold Certified Partner, with nearly 200 sites enrolled worldwide

Transform OLTP

Microsoft SQL Server 2016 is a powerful, cost-effective database solution for online transaction processing (OLTP). But as data loads, performance demands, and availability requirements increase, your infrastructure often struggles to keep up.

Database sprawl also creates a challenge, which may require a general purpose platform for consolidation. Deploying the right level of resources, scaling to meet performance needs, maintaining high availability, and managing the environment can all be challenging as well.

HPE Reference Architecture (RA) for Microsoft SQL Server 2016 database consolidation offer you a choice of platforms for consolidating OLTP workloads to increase performance and scalability, speed time-to-value, and reduce costs and risks.

These tested and proven blueprints are built on your choice of HPE Integrity Superdome X, HPE Synergy, or HPE Hyper Converged 250 (HC 250) Powered by Intel® Xeon® processor system to support your most demanding OLTP workloads.

With HPE and Microsoft, you receive a high-performing OLTP engine in a full-featured system that leverages standards-based x86 technology to ensure the optimal total cost of ownership for your investment.

Solution benefits



Speed time-to-value

Tested and proven Hewlett Packard Enterprise Reference Architectures are designed to help you cut deployment time and reduce costly design and configuration errors. These blueprints provide the fastest path to SQL Server 2016, delivered on your choice of platforms that provide scale-up and scale-out capabilities.



Reduce costs

Save costs through consolidation and greater system utilization, along with lower power, cooling, and space requirements. Protect investments using a flexible, standards-based infrastructure from best-in-class partners, with no vendor lock-in.



Reduce risks

HPE Reference Architectures are based on our deep deployment experience, built on HPE server, storage, and networking components, and aligned with Microsoft best practices for SQL Server.

¹ Performance results based on an HPE internal benchmark and an SDX that was slightly modified from that outlined in the two RAs. The Superdome X displays smooth, efficient, near-linear scaling from 1- to 2- to 4- to 8- to 16-sockets

² Performance improvements compared to a similar configuration from a Lenovo X6, 8-socket system

Our solution partner



Sign up for updates

★ Rate this document



HPE RAs for Microsoft SQL Server 2016

HPE Reference Architecture for SQL Server 2016 on HPE HC 250

The **HPE HC 250** is a scale-out platform for consolidating SQL databases so you can effectively manage unpredictable growth with confidence. Proven HPE ProLiant and StoreVirtual technologies are combined to deliver performance, density, and efficiency for scale-out workloads. The systems scale-out in a linear manner—just add another system and seamlessly add new nodes to a common cluster.

Use case: General purpose database consolidation/modernization for campuses and branch offices

- Deal with database sprawl
- Optimized for customers standardize on HC
- Consolidate Microsoft Windows® application/database or server to a single physical server
- Enjoy cost savings, greater efficiency
- Host other applications on distinct VMs relying on SQL Server database

HPE Reference Architecture for SQL Server 2016 Scale-up on HPE Superdome X

HPE Superdome X servers are an ideal choice for supporting SQL Server 2016 deployments requiring the highest levels of transactional throughput and low latency response times. A 1.9X scalability factor¹ up to 16 sockets and 12 TB memory—along with a 9X performance boost² for the most-demanding workloads—allows you to support SQL with confidence.

Use case: Mission-critical scale-up OLTP for enterprise

- Update or expand legacy infrastructure
- Leverage a scale-up platform that delivers functionality for large, enterprise-class databases
- Utilize SQL Server 2016's new in-memory 12 TB capacity
- Get performance and high availability features via storage
- Replace aging UNIX® systems, HPE Integrity, or HPE ProLiant DL980 Servers

HPE Reference Architecture for SQL Server 2016 on HPE Synergy

HPE Synergy 480/680 optimizes intelligence and automation via infrastructure as code to seamlessly bridge traditional and new IT environments for huge gains in application speed and operational efficiency for general-purpose, scale-up OLTP.

Use case: General purpose scale-up OLTP

- Update or expand legacy infrastructure
- Meet increasing app requirements and grow from 2- to 4-socket systems
- Leverage reliability, availability, and serviceability (RAS) features and functionality for mid-sized databases requiring additional compute or high memory density

Learn more at

hpe.com/info/cdilibrary

© Copyright 2016 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Intel Xeon and the Intel logo are trademarks of Intel Corporation in the U.S. and other countries. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. UNIX is a registered trademark of The Open Group.

4AA6-5036ENW, April 2016