

# Scaling Microsoft SQL Server to new limits

## HPE mission-critical servers

Modernize your core mission-critical business processing environment

### SQL Server enterprise readiness

SQL Server 2017 brings flexible, reliable data management to the platform of your choice—Windows®, Linux®, and Docker containers. With scalable mission-critical performance to empower analytics, SQL Server can provide you deeper insights. SQL Server 2017 has everything built-in, industry leading in-memory performance, trusted security, and game-changing in-database Advanced Analytics. It is also the only commercial database with built-in AI.

### SQL Server 2008 End of Support

Microsoft has announced the End of Support (EoS) for SQL Server 2008 and SQL Server 2008 R2, effective July 9, 2019. That means the end of regular security updates, increasing difficulty meeting compliance requirements, and likely mounting operational expenses.

If you're planning to upgrade your existing SQL Server 2008 deployments, you'll need modernized servers to take full advantage of the new capabilities built into SQL Server 2017 and future versions.

### Reaching the next level

With the introduction of HPE Superdome Flex and the advanced capabilities of Microsoft® SQL Server®, customers can take SQL Server environment to a new level on the platform of their choice.

Whether deploying complex or large SQL Server environments, supporting high transaction rates for online transaction processing (OLTP) applications, or leveraging business transaction data for real-time analytics with mixed workloads on a single server, HPE Superdome Flex provides the right foundation. Additionally, you can consolidate SQL Server instances into one Superdome server dramatically simplifying management.

Hewlett Packard Enterprise stands ready to help you take SQL Server to new levels. Microsoft and Hewlett Packard Enterprise engineering teams work together to optimize SQL Server performance on HPE Superdome. In fact, we have one of the longest-standing partnerships in the industry, more than 30 years—HPE provides end-to-end Microsoft solutions including consulting, servers, storage, networking, deployment, training, and support. We have over 29,000 joint partners.

No matter what your data requirements are, if you plan to scale up SQL Server, one choice is surprisingly easy: host your

SQL Server database on HPE Superdome Flex. A cost-efficient scale-up x86 design, Superdome Flex offers an industry-leading combination of reliability, performance, and capacity.

### The need for speed

Enormous volumes of data, generated in our data-rich, globally connected, and always-on world, strain the capacity and performance of existing infrastructure. The resulting delays in reporting and responsiveness can turn business processing into a critical competitive weakness.

In these always-connected environments, the speed of transaction processing can be a core differentiator. Hewlett Packard Enterprise has achieved record-breaking performance for large OLTP workloads with SQL Server using industry-standard technologies.

### Protect your critical data

When dealing with sensitive business or customer data in OLTP databases, security is a paramount concern. Hewlett Packard Enterprise leverages the capabilities of SQL Server to monitor activity, as well as to control and provide access to critical data. This is in conjunction with transparent data encryption to protect key data.



48 TB

memory capacity<sup>1</sup>

24x7

service levels with HPE Serviceguard for Linux

30+ year

Microsoft-HPE partnership

## Achieve critical continuity

For many enterprises, it's fair to say that if the business-processing database isn't running, the business isn't either. Meeting the needs of customers and staff demands 24x7x365 availability. When every minute of downtime translates to significant costs, there's no room to take chances with your environment's reliability or availability.

While standardizing on x86 platforms running Linux or Windows is a compelling idea from a management and efficiency standpoint, it can be a risky choice for mission-critical applications if the underlying platform lacks high levels of availability and reliability.

HPE Superdome Flex is designed from the ground up to achieve very high availability, with automated diagnostic tools, self-healing, and built-in fault management, replicating a UNIX®-like experience on an x86 platform while providing far greater reliability than general purpose x86 servers.

## Enable flexible and scalable environments

Supporting faster reporting and ever-higher transaction volumes will require a system that can flexibly grow with your business. HPE Superdome Flex will meet your SQL Server needs now and in the future:

- Scale from 4 up to 32 Intel® Xeon® Scalable processors (16 to 896 processor cores). Choose 4 or 8 socket systems (at 45% lower cost than previous generations), and scale-up as needed.

- Supporting 24 TB of memory with Windows or 48 TB with Linux, Superdome Flex can take full advantage of SQL Server's in-memory capabilities and dramatically speed up conventional database transactions by reducing storage latency.

Flexible, electrically-isolated partitions enable a single system enclosure to support different OS versions, SQL Server revisions, and diverse workloads, all running independent of each other. In fact, OLTP and data analytics workloads can co-exist in the same system to enable real-time analytics.

## Exceed your expectations

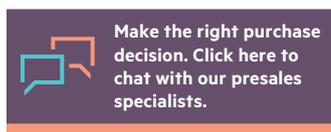
HPE Superdome Flex offers relief from the inefficiencies of scale-out platforms and the escalating maintenance and support costs of proprietary servers.

Whether consolidating, deploying business processing or mixed workload environments, or migrating to a SQL Server environment, Superdome Flex enables agile business processing with superb performance, scalability, efficiency, and uptime.

Wherever you stand on your SQL Server journey, Hewlett Packard Enterprise will provide the solutions and support you need to succeed.

Learn more at [hpe.com/superdome](https://hpe.com/superdome)

<sup>1</sup> with Linux



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