Modernizing critical
Oracle infrastructure
Reduce costs and complexity with
HPE mission-critical servers

Database environment challenges
Does your enterprise depend on Oracle databases for core business processes such as enterprise resource planning, front-office services, or CRM? Then you know first-hand these challenges:

• Proliferating databases driving up license and support costs and increasing complexity
• Large and growing databases hitting performance bottlenecks
• Significant licensing costs to run scale-out x86 systems
• Pressure to maintain availability and to complete backups in a shorter timeframe

Whether running on UNIX® or relying on scale-out x86 servers (or proprietary appliances), meeting demands for more performance and capacity—while assuring high availability—can be a substantial strain on resources. HPE mission-critical x86 servers offer a better answer, helping you cut Oracle licensing costs while providing:

• Improved performance and scalability
• The highest levels of uptime
• A simplified scale-up environment

More data, higher fees
Data volumes, already enormous, continue to grow. A manufacturer might manage more than 100,000 components and coordinate with hundreds of suppliers to meet delivery deadlines, or a fast-growing retailer may struggle with surging data as it seeks a real-time view into finances. Improved application functionality, including mixed transaction and analytics processing, requires even more performance and capacity. Inadequate infrastructure risks disruption and delays that put your company at a competitive disadvantage.

As databases proliferate and reach into the tens and hundreds of terabytes, many organizations are contending with Oracle database sprawl. More databases running on more servers means greater complexity, higher licensing, and spiraling costs.

A better path
Proprietary UNIX platforms like IBM Power are increasingly costly to maintain and carry Oracle license fees twice that of x86 servers per processor core. But switching to scale-out x86 systems like Oracle Exadata has its own set of challenges. Clustering x86 servers with expensive Oracle RAC (Real Application Clusters) software multiplies complexity and inflates license costs even further, consuming much of the savings gained from switching to x86.

HPE scale-up mission-critical servers, led by HPE Superdome Flex, give you a better choice. You can significantly lower TCO over both proprietary UNIX systems and scale-out x86. Compared to Exadata, both Superdome Flex and HPE Integrity Superdome X can help you avoid the tremendous cost of RAC, while the efficient scale-up design needs fewer processors to handle many workloads—further reducing core-based licensing. They integrate seamlessly into your environment and let you work with preferred providers, supporting a wide variety of virtualization, storage, and configuration solutions. Maximize the value of your Oracle licenses with HPE Application Tuner Express, a powerful software utility that boosts OLTP performance as much as 58% without modifying software.1

Solution brief

“I’d recommend] HPE Superdome Flex due to its ability to run Linux® OS and high CPU density, as well as the reduction in the cost of Oracle license.”

– Infrastructure Manager, Medium Enterprise Banking Company

TechValidate, April 2018

1 HPE Server Performance Benchmarks Newsletter, February 2017
Less cost and complexity for your Oracle database environment

If you run your critical Oracle databases on: Move to HPE mission-critical x86 and achieve: Transform your critical Oracle environment

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<th>Proprietary UNIX platforms</th>
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Consolidate for efficiency

Flexible HPE servers can further lower software license costs. Consolidate physical servers to reduce sprawl and streamline management, run different environments in electrically isolated hard partitions, and update one partition while others run undisturbed. In addition, Oracle recognizes HPE nPars hard partitions as a license boundary—so you can stop paying for licenses you don’t need and avoid costly surprises at your next Oracle license audit. Licenses can be limited to specific server modules or blades (and as few as eight cores).

HPE mission-critical x86 scales on your terms. Superdome Flex starts with one 4-processor module, and scales all the way to eight modules—896 cores of powerful Intel® Xeon® compute in a single system—without adding servers or RAC licenses, for simpler management and lower operating costs. Fully realize the potential of Oracle Database In-Memory with 768 GB–48 TB memory capacity.

Available, always

While Linux and Microsoft® Windows® on x86 promise levels of efficiency and ease-of-management unavailable with legacy UNIX platforms, they must also offer comparable RAS (reliability, availability, and serviceability). No enterprise can tolerate breakdowns in mission-critical infrastructure, whether in supply chain, order handling, or other core processes.

Designed from the ground up to deliver the highest levels of uptime, HPE Superdome servers replicate a UNIX-like experience with reliability features not found in other x86 systems, including automated diagnostic tools, self-healing, and built-in fault management. HPE Serviceguard for Linux adds extra layers of protection, including rapid recovery and zero planned downtime. Although x86 systems clustered with RAC can offer quick recovery, Superdome extreme RAS with Serviceguard can keep your critical Oracle databases running with the highest cost of RAC.

Modular Superdome Flex offers the most affordable path yet to mission-critical availability in a 4 or 8 socket server. For workloads that don’t require the highest levels of availability, consider HPE Synergy SY680 and HPE ProLiant DLS80 Gen10 scale-up servers.

The time is now

Transform your Oracle environment today—a new Superdome can help you maximize the efficiency and reliability of your critical database systems, reach your performance goals, and reduce license and support costs.

Ask your HPE sales representative about an Oracle performance and cost assessment (no-charge to qualified customers), to learn how to eliminate bottlenecks that inflate core counts and optimize performance per licensed processor core.

HPE Reference Architectures for Oracle 18c: OLTP and OLAP workloads on HPE Superdome Flex and HPE 3PAR Storage, February 2019

Based on HPE internal analysis results using publicly available competitive data, February 2017

HPE Superdome Flex Server Sets #1 and #2 Records on SPEC CPU2006 Benchmark for 32 and 16 Sockets, January 2016