Modernize business processing with SAP

**Market insights**

Modernizing mission-critical business processing can increase agility, boost profitability, and reduce risk by improving responsiveness, availability, and data protection. With over 45,000 customers, the most significant provider of business processing software for the enterprise is SAP:

- More than 80% run SAP on conventional databases such as Oracle, DB2, and SQL Server, on x86 or UNIX servers.
- SAP HANA in-memory database is increasingly used by customers deploying SAP BW and Business Suite to gain real-time business insight and decision support. SAP’s next generation S/4HANA runs only on HANA.
- Support ends for R/2 and R/3 by 2025, when customers must transition to S/4HANA. It can take years and significant investment to transition typically customized SAP environments.

How will customers make their journey to S/4HANA? Move now? Wait several years, but begin to transform their IT infrastructure now? Or focus on optimal performance of their current SAP stack? HPE offers solutions for every stage.

**Elevator pitch**

Wherever you stand on your journey to S/4HANA, HPE provides the solutions and support you need. A 25-year SAP partner, HPE has delivered solutions to over 30,000 customers, and has over 11,000 support and consulting staff to optimize your SAP business processing environment.

The speed and reliability of your mission-critical SAP landscape depends on the performance, availability, and scalability of your back-end database server. Superdome X is the world’s fastest ERP server featuring both x86 efficiency and 5-nines reliability. It is the largest scale-up server certified to run SAP Business Suite on HANA. Superdome X can meet your processing needs today and in the future. Flexible Superdome X has unique partitioning technology allowing you to run mixed SAP BW and SAP Business Suite workloads, or different IT landscapes, e.g. development, test, production.

Running SAP with conventional databases like Oracle or SQL Server? Modernize the core of your SAP environment with Superdome X as a foundational step towards an eventual move to S/4HANA. Whether consolidating SAP workloads from scale-out x86 servers or migrating from costly proprietary servers, Superdome X exceed your expectations by enabling agile, responsive business processing with superb performance, scalability, efficiency, and uptime.

**Business outcomes**

- **Improve customer satisfaction and loyalty**
  - Continuous service availability, faster response on customer inquiries and better customer engagement with Superdome X’s extreme performance, availability, and SAP CRM

- **Reduce OPEX to fund innovation that feeds business growth**
  - Scale-up performance and nPars flexibility to help reduce Oracle licensing and operating costs
  - 32% lower TCO vs. IBM Power, and 40-45% lower TCO vs. Exadata scale-out environment

- **Improve competitiveness and business efficiency**
  - World’s fastest SAP ERP server with 99.999% high availability enables always-on decision-making and protects valuable enterprise data.

- **Innovation, not operation**
  - HPE provides end-to-end solutions for every stage of your S/4HANA journey. The CS900 appliance (based on Superdome X) delivers fastest time-to-value to increase business agility.

**Ready to transition?**

Superdome X is the largest scale-up server certified to run SAP Business Suite on HANA.

- **25 years of HPE - SAP partnership**
- **30,000+ solutions delivered to HPE customers**

- **11,000+ staff members providing SAP support and training**
Understanding your customer

Partner opportunities

Increasing share-of-wallet with more attach
Superdome X brings high attach rate, including server options, 3PAR storage, and networking products. In addition, Superdome X deals are rich in services and offer partners an opportunity to deliver HPE professional services. The HPE Support Service program attach rate of Superdome X is at least 30 points higher than the attach rate of HPE ProLiant DL 500s servers. This enables partners to grow new revenue streams while earning more profit margin.

Beating IBM Power and taking over Lenovo business
IBM has abandoned their x86 customers to Lenovo. Their proprietary Power business has been in a significant decline over the past two years. Superdome X is the perfect alternative with 32% lower TCO than IBM Power. HPE launched the Smart Choice program to help customers and partners find a better solution. HPE partners should actively engage with Smart Choice to accelerate business growth.

Mining 45,000 SAP installed base customers
SAP S/4HANA, the next generation of SAP Business Suite, opens up a new business opportunity. There are currently 45,000 SAP customers running on SAP R/2 or R/3 Business Suite. All customers have to migrate to SAP S/4HANA since previous SAP Business Suite maintenance will expire in 2025. Customers will consider upgrading their existing hardware infrastructure to support new business processing functions. Get in early and ride the journey with HP Superdome X to help customers migrate to S/4/HANA. Become a trusted advisor to your customer and generate more revenue and profit for your business.

Global enterprise company
Runs SAP ERP/HCM and SAP CRM to manage open enrollment, salary and bonus administration, and performance evaluation. They need very fast response time, high availability, scalability to handle peak workloads during open enrollment, and high-quality daily reporting. Running on IBM Power with AIX, maintenance costs are a growing expense.

Modernization: Moved SAP business-processing to Superdome X with SAP HANA. Used nPars to create multiple SAP ERP modules for easier maintenance and software upgrades. Estimated TCO savings of 32% over IBM Power. Customer also benefits from a smaller database, quicker, more accurate daily reports and improved employee loyalty and retention.

Global manufacturing company
Vehicle builder runs SAP ERP, SRM, and SCM on Oracle for all core business processes across procurement, manufacturing, finance, and supply chain management. Manages more than 100,000 component parts; coordinates with hundreds of suppliers to meet delivery deadlines. Running on multiple scale-out x86 servers, SAP transaction volume has outgrown server capacities; aging servers suffer from performance and RAS gaps. Potential costs of downtime are severe.

Modernization: Consolidated from aging ERP servers to latest Superdome X. Used nPars to run multiple ERP, SRM, and SCM modules to increase flexibility and availability. Customer can do maintenance and software upgrade without bringing entire system down.

Consumer goods company
Uses SAP ERP as backbone of core business processes, interacting with SAP CRM to manage marketing programs, call center, and customer relationships. After recent merger, urgent need to expand SAP workload without increasing the datacenter footprint. One predecessor company ran SAP on DB2 with legacy UNIX server, while other ran SAP on Oracle with x86 servers.

Modernization: Migrated to Superdome X with SAP HANA to improve efficiency of sales ordering, invoicing, and real-time accounting, and to quickly provide business insights to sales team. Customer benefited from IT cost reduction, improved performance, quicker response times, and higher-quality daily reporting.
# Breaking the ice...starting the conversation

## Green zone

1. Customer running their SAP databases on costly proprietary servers, considering industry-standard x86 servers:
   - To improve long term TCO; reduce overall system OPEX
   - Seeking a credible vendor specializing in delivering mission-critical solutions

2. Customer looking to consolidate SAP workloads and complex SAP landscapes
   - Reduce datacenter footprint and simplify IT management
   - Improve scalability and performance

3. Aged x86 IT infrastructure can no longer support business transaction volumes or meet HA and DR requirements.
   - Must assess SAP workload sizing to choose the right class of hardware solution.
   - HPE Serviceguard provides extra layer of protection.

4. LOB requires new SAP functionality to make faster and better business decisions
   - Customer is ready to accelerate SAP HANA and S/4HANA adoption
   - Customer needs new business functions, e.g. Simple Finance for frequent financial analysis and reporting

## Red zone

1. Choose the right server solution for customers preparing to move to S/4HANA.
   - Run entry-level to mid-size SAP landscapes with built-in availability and data protection on CS500 or HPE ProLiant DL580. CS900 or Superdome X is ideal for large and demanding workloads with uncompromised DR and HA requirements.
   - For those customers who are running conventional database and do not demand complex workload, HPE ProLiant DL580 is the ideal solution with nearly 169,000 SAPS performance.

2. Customer is not ready to migrate to SAP HANA and/or S/4HANA immediately
   - Migrating applications to S/4HANA requires significant IT investment. It may take a few years to complete the migration. HPE is the trusted advisor to help customer on the journey.
   - It is often a LOB decision since they need faster and better business insights such as more frequent financial closings with SAP Simple Finance.
   - For customers not yet ready to commit to SAP HANA, Superdome X delivers a new level of x86 performance, scalability, and availability across the database solutions your customer chooses – Oracle, SQL Server, DB2, or SAP Sybase.

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### Conversation Starters

**Q1.** Will you upgrade your Oracle or SAP environment in 2016?

**Q2.** Do you have a number of scale-out x86 servers supporting a large SAP business processing workload?

**Q3.** Do you have OPEX challenges to maintain your critical business processes?

**Q4.** As you consider deploying your critical business processing applications to industry-standard x86 servers, do you find the need for extra scalability, performance and uptime?

**Q5.** Are you worried about running your company’s critical business processes on the IBM Power server when you are unsure of how long IBM will continue to invest in their hardware business?

**Q6.** Are you concerned about the long-term viability of deploying your SAP HANA and SAP S/4HANA on IBM Power server?

**Q7.** Is your current SAP business processing workload performance meeting your business needs including peak times such as open enrollment and finance closing?

**Q8.** Are you under pressure to grow your SAP transaction volume and SAPS performance while needing to maintain or reduce your datacenter footprint because of the OPEX reduction or merger / acquisition?
Which solution is right for the customer?

- SAP application workloads with conventional databases
  - >150K SAPS
  - Smaller scale workload
    - HPE ProLiant 580
    - HPE Superdome X
    - Need future growth
    - Consolidated workloads

- SAP Workloads with SAP HANA
  - Entry to mid-size SAP Landscapes
    - Scale-up node < 3TB
    - Single Scale-out node < 1.5TB
    - CS900
    - CS500
    - Complex SAP landscapes
    - Scale-up node > 3TB
    - Single Scale-out node > 1.5TB

- Infrastructure flexibility with SAP HANA
  - Fast time-to-deployment
  - HPE CS900 Appliance
  - HPE Superdome X for SAP HANA TDI
  - Hardware flexibility
    - Plan to adopt HANA and S/4 HANA in 2-3 years
    - Configuration flexibility
      - HPE Superdome X
      - HP Superdome X for SAP HANA TDI

The competitive advantage: The world fastest SAP ERP server--exceed your expectations when modernizing your critical SAP environment.

<table>
<thead>
<tr>
<th>Capabilities/Essentials</th>
<th>HPE Superdome X</th>
<th>IBM Power</th>
<th>Lenovo</th>
<th>Cisco</th>
<th>Fujitsu</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAP HANA certification</td>
<td>Scale-up, scale-out, TDI</td>
<td>No (behind and announced scale-out only)</td>
<td>Scale-up, scale-out, TDI</td>
<td>Scale-up, scale-out, TDI</td>
<td>No</td>
</tr>
<tr>
<td>Max memory - single appliance</td>
<td>12 TB</td>
<td>2 TB</td>
<td>6 TB</td>
<td>6 TB</td>
<td>6 TB</td>
</tr>
<tr>
<td>SAPS performance</td>
<td>World’s fastest SAP ERP server</td>
<td>20% less performance</td>
<td>n/a</td>
<td>n/a</td>
<td>77% less performance</td>
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<tr>
<td>Scalability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard partition</td>
<td>yes</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>High availability and disaster recovery</td>
<td>HPE Serviceguard for SAP HANA</td>
<td>IBM General Parallel File System</td>
<td>IBM General Parallel File System</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>TCO</td>
<td>32% lower TCO</td>
<td></td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>SAP experience</td>
<td></td>
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<tr>
<td>Key takeaway</td>
<td>Most experienced vendor with end-to-end SAP solution; superior performance, scalability, high-availability and best TCO</td>
<td>High risk, high cost; future investment is uncertain</td>
<td>Vendor complexity; lack of capability to offer total SAP solution</td>
<td>Minimum SAP experience; vendor complexity (no end-to-end solution); OEM’d from Fujitsu</td>
<td>Inferior server architecture; less scalable and fewer RAS features</td>
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# Top capabilities

| Speed                  | HPE benchmarks the FASTEST x86 SAP system in the world  
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<th>Superior architecture of Superdome X delivers breakthrough performance—#1 SAP ERP benchmark with 459,580 SAPS.</th>
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| Agility and efficiency | 20 times more reliable and 30% lower TCO with flexible consolidation  
|                       | Unique design electrically isolates Superdome X into physical partitions, letting multiple SAP workloads or different IT landscapes (development, QA, Test, production) run in different partitions on same server. |
| Business uptime        | 99.999% availability and zero planned downtime with Serviceguard for Linux  
|                       | Superdome X is designed from the ground up to achieve high levels of RAS—experience-proven diagnostics, self-healing and built-in fault management; Serviceguard provides extra layers of protection for the strictest HA and DR. |
| Scalability            | The largest SAP HANA certified scale-up server  
|                       | Certified with multiple scale-up configurations—up to 16-sockets and 12 TB in single database node—Superdome X supports up to 24 TB memory, providing a large memory footprint for hosting in-memory SAP HANA database. |
| A partner              | HPE provides end-to-end services  
|                       | As the essential core of business operations, SAP business-processing can't be trusted to commodity server vendors. HPE offers end-to-end services for all applications, database, and hardware/infrastructure layers to protect customer investments. |
Handling Objections/Resources

Why HPE is the best choice in running SAP

Strategic partnership
- HPE and SAP, two global technology leaders, have been partners for over 25 years
- HPE and SAP jointly run Co-Innovation Labs with over 200 engineers working together
- HPE has over 15,000 SAP consultants to help customers design, modernize and implement SAP solutions
- HPE is leading the SAP HANA scale-up and scale-out market with over 1,800 SAP HANA installations
- HPE is a consistent SAP Pinnacle Award winner—four consecutive years since 2012
- SAP is using HPE’s hosting capabilities and Helion cloud technology to run HANA Enterprise Cloud

Investment protection
- HPE SAP competency centers – sizing and performance tuning for customers; training and consulting to partners
- HPE consulting services – offering deployment, assessment, high availability and disaster tolerance, and migration services for SAP applications to speed time-to-value
- HPE Proactive Care – Single point of contact for all components including hardware, OS and SAP software; identifying and addressing IT issues in SAP environment before the problem occurred, resulting in up to 66% less downtime

Leader in Mission-Critical business
- First viable commercial UNIX server for the enterprise—HP9000 Series 840—shipped November 1986, which accelerated the growth of UNIX in the enterprise
- HPE servers power the most mission-critical businesses:
  - 8 out of 10 of world’s stock exchanges
  - 8 out of 10 top telecommunications companies
  - 8 out of 10 top pharmaceutical companies
  - 8 out of 10 top media companies

Handling Objections

Question #1: Why should I buy a Superdome X instead of buying the scale-out servers for my SAP Business Suite applications?

Response:
HPE Superdome X offers a massively scalable 16-socket/12 TB scale-up system that will enable you to simplify and consolidate all your SAP Business Suite applications onto one single in-memory pool and allow you to manage and analyze extremely large and diverse data sets to make fast, real-time, data-driven business decisions. In an IDC research study, SAP customers migrating to scale-up environments experienced double the server utilization rates, 18% software licensing cost reduction, 18% lower power and cooling costs, and 55% reduction of IT infrastructure costs.

Question #2: I am currently running all my critical SAP business applications on a conventional database. I am not sure when I should migrate to SAP HANA.

Response:
SAP announced that they will keep the maintenance commitment of current SAP Business Suite applications on any database until at least 2025. HPE understands many customers have invested in application code modification, from the current IT infrastructure to SAP HANA and S/4HANA will take time and effort. Whether you are ready to take a fast SAP HANA migration path or you decide to modernize your current SAP landscape with a conventional database, Superdome X is the best solution for running your critical SAP business processes. HPE also offers the consulting, migration, and deployment services for every stage of your journey.

Question #3: Why should I buy the highly scalable HPE Superdome X instead of other ‘socket servers’ to run my SAP business processes in the SAP HANA environment?

Response:
SAP strictly defines SAP HANA certified hardware configurations. Among the 12 hardware vendors and 465 SOH (SAP Suite on HANA) certified systems, Superdome X is the first and only SAP-certified 12 TB/16-socket system for SAP HANA. Its extreme flexibility and superior data protection enables you to run the most demanding and complex SAP business processes. The closest SO-certified servers have only half the performance and scalability.

Resources
http://intranet.hp.com/eg/sales/servers/Pages/SuperdomeX.aspx
http://intranet.hp.com/eg/sales/convergedsystems/bigdata/Pages/saphana.aspx