Hewlett Packard Enterprise

Leverage x86 Linux for mission-critical workloads

HPE Integrity Superdome X with SUSE Linux Enterprise Server

Get the cost advantages of standard x86 computing with the reliability, availability, and serviceability you need for mission-critical workloads—powered by HPE and SUSE

HPE Integrity Superdome X advantages

- Advanced RAS features that are tested and certified with SUSE Linux Enterprise Server
- Breakthrough scalability of up to 16 sockets and 12 TB of memory
- Up to 44X faster transaction processing than legacy systems*
- As much as 20X more reliability than other x86 platforms*
- Up to 60 percent reduction in downtime with scale-up vs. scale-out architecture*
- As much as 32 percent lower total cost of ownership (TCO) than competitive UNIX®*

Take x86 to the next level

When it comes to your mission-critical systems, you can't leave anything to chance. You need to provide employees and customers with 24x7 access to business systems and data. But you also need to do so within your budget.

While standard, cost-effective x86 platforms have become the norm in enterprise data centers, you need to be sure that any solution you adopt delivers the reliability, availability, and serviceability (RAS), performance, and scalability that mission-critical workloads require. And you need to be sure it doesn't contribute to x86 server sprawl, which drives up costs for maintenance, power, and cooling.

HPE Integrity Superdome X with SUSE Linux® Enterprise Server delivers the memory, processing performance, and RAS features you need to power your most-demanding mission-critical workloads, in a standard, cost-effective x86 design. As a scale-up solution, it integrates compute, storage, and networking into a single, efficient system with a larger number of sockets and cores to achieve a better cost/performance ratio—with lower networking, power, and cooling costs and a smaller data center footprint.

RAS features you can rely on

Together, Hewlett Packard Enterprise and SUSE provide a comprehensive RAS strategy that covers all layers—from application to hardware. HPE Integrity Superdome X provides RAS features in key hardware subsystems—processor, memory, and I/O—while SUSE Linux Enterprise Server fully leverages the synergy between OS and hardware RAS capabilities. HPE Integrity Superdome X running SUSE Linux Enterprise Server provides always-on availability through a layered approach to application, file system, and operating system protection.

* "HP (now Hewlett Packard Enterprise) Launches New Enterprise Infrastructure Technology to Drive Positive Business Outcomes," 02 December 2014

Solution brief

HPE Integrity Superdome X
Robust RAS has always been a designed-in philosophy for HPE Integrity Superdome servers, and the Superdome X builds on that strategy with such RAS strengths as:

- Fault-tolerant crossbar (Xbar) design with:
  - Hard partitioning for reliability
  - Fully fault-resilient fabric that re-routes traffic around failed links automatically
  - Passive midplanes with end-to-retry and link failover
- HPE Onboard Administrator with built-in analysis engine providing error-correcting, self-healing, and advanced diagnostics
- Hot-swappable components

HPE Serviceguard Solutions for Linux
HPE Serviceguard Solutions for Linux encompass proven high availability (HA) and disaster recovery (DR) solutions that are easy to deploy and manage, fully automated, and ready to support your multiplatform environment and diverse workloads.

Our solution partner

SUSE

SUSE Linux Enterprise Server
SUSE Linux Enterprise Server provides a scalable, open source foundation for secure enterprise computing. Deploying SUSE Linux Enterprise High Availability Extension with your mission-critical solution lets you implement highly available Linux clusters to help maintain business continuity, protect data integrity, and reduce unplanned downtime for mission-critical Linux workloads.

While many vendors offer HA solutions, SUSE is unique because it layers uptime into its solutions beginning at the operating system and on through to management tools and virtual clustering. SUSE helps you work toward zero downtime by:

- Leveraging virtual machines to reduce the cost of "mirrored" servers and extend the breadth of HA coverage
- Performing important security patches without reboot
- Reducing the impact of human error
- Including clustering for geographically dispersed sites with unlimited distance
- Preventing downtime by leveraging and augmenting RAS features on the underlying Superdome X hardware

Transform your mission-critical environments

HPE Integrity Superdome X with SUSE Linux Enterprise Server delivers a new level of x86 availability, scalability, and performance to power your critical Linux workloads. It allows you to:

- Standardize, consolidate, and reduce costs
- Migrate from costly proprietary systems
- Alleviate concerns about x86 availability and reliability
- Provide extra scalability, performance, and uptime
- Grow seamlessly without the complexity of a scale-out deployment

Drawing on expertise and experience gained from a partnership that spans more than 20 years, the Hewlett Packard Enterprise-SUSE combination delivers optimized, highly reliable computing solutions that can be tailored to the needs of your always-on data centers running mission-critical applications.

Learn more at
hp.com/go/superdome

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