



SUSE® Linux Enterprise Server for SAP Applications on IBM Power Systems

Run your mission-critical SAP applications on the leading platform for SAP HANA and SAP NetWeaver solutions providing reduced downtime, optimized performance and superior support. SUSE® Linux Enterprise for SAP Applications on IBM Power Systems delivers rapid installation, reliability and scalability for data-intensive workloads.



SUSE Linux Enterprise for SAP Applications at a Glance:

- Reduce downtime of critical operations...**
 with built-in business continuity including an advanced high availability solution, and automated data recovery for SAP HANA.
- Boost performance for mission-critical SAP applications...**
 with the Linux OS that is performance-optimized and configurable to sustain high performance of SAP applications.
- Reduce the time and effort to deploy and maintain SAP landscapes...**
 with a unified solution that includes application installation, infrastructure management and superior support.
- Products:**
 SUSE Linux Enterprise Server for SAP Applications

The Leading Platform for SAP HANA, S/4HANA and NetWeaver Applications

SUSE Linux Enterprise for SAP Applications is the number one Linux platform for SAP in a physical, virtualized, private or public cloud environment. It is the preferred Linux platform of SAP and more than 30,000 customers because it reduces downtime of critical operations, enables optimal performance and reduces the time and effort to deploy and maintain SAP landscapes. SUSE Linux Enterprise for SAP Applications delivers more than

a Linux operating system giving you the ability to:

- Support SAP HANA databases that are greater than 32 TB
- Recover replicated SAP HANA databases quickly
- Secure SAP HANA in-memory systems and remote storage devices
- Reduce installation times for SAP applications on premises and with Alibaba, Amazon, Google, IBM and Microsoft public cloud services
- Minimize problem-resolution time

Feature	SUSE Linux Enterprise Server for SAP Applications
Built-in business continuity. SUSE Linux Enterprise High Availability Extension delivers multiple high-availability / disaster recovery configuration options, integrated with automated data recovery for SAP HANA.	✓
Performance optimization. Supports IBM Power Systems SMT8, extended virtual address space for large SAP HANA workloads, and Workload Memory Management to ensure SAP application data remains in memory.	✓
Scalability. Supports large virtualized SAP HANA data sets in IBM Power Systems LPARs.	✓
Additional security. Secure SAP HANA in memory systems with a built-in firewall, and protect data in remote storage volumes with enhanced encryption management.	✓

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Feature	SUSE Linux Enterprise Server for SAP Applications
Fast SAP application deployment. End-to-end installation configures SAP application installations in hours, not days	✓
Integrated 24x7 support. Priority Support is included and integrated with the SAP Global Support backbone through SAP Solution Manager, for one call to support application and operating system problems.	✓

REDUCE DOWNTIME OF CRITICAL OPERATIONS

Business operations depend on SAP applications and SAP HANA in-memory database environments. SUSE Linux Enterprise Server for SAP Applications includes features to reduce or eliminate application downtime.

An integrated clustering solution, SUSE Linux Enterprise High Availability Extension, enables compliance with business continuity requirements. Reduce downtime with the flexibility to configure and deploy your choice of multiple high availability/disaster recovery scenarios for SAP HANA and applications.

SAP HANA Systems Replication automates backup of SAP HANA in-memory data to a secondary system. SUSE provides SAP HANA Systems Replication agents to

“After testing, we concluded that it would be easier to deploy and manage SUSE Enterprise Linux Server for SAP Applications than the alternative from Red Hat. The SUSE OS provides everything we need in a single license—including high availability and integrated support from SUSE and SAP.”

RAMAZAN YILDRIM

IT Manager & SAP Basis Manager
Boydak Holding

automate failover, and reduce the recovery time from hours to minutes for large data sets. Operations pre-/post-scripts gives system administrators the flexibility to adapt SAP HANA system failover and recovery capabilities to their own high availability scenarios and tools.

A 4 PB virtual address space provides the infrastructure for future application growth of SAP systems. Support for SAP HANA databases that are greater than 32 TB is possible with IBM PowerVM, reducing the frequency of system reboots after memory fragmentation.

SUSE Linux Enterprise Server for SAP Applications also includes security features to reduce downtime. Secure SAP HANA in-memory systems with a built-in firewall that can be automatically configured, or easily set up with a configuration wizard. Enhanced encryption management for dedicated storage volumes protects data in remote data centers. Support for Key Management Interoperability Protocol (KMIP) enables the use of third-party key servers,

The painful choice of planned downtime to reboot servers or waiting for the next service window for critical security patches can be virtually eliminated by deploying the optional SUSE Linux Enterprise Live Patching solution (separate subscription required). With live patching, the Linux kernel is updated to bypass problems without impacting SAP system operations or performance.

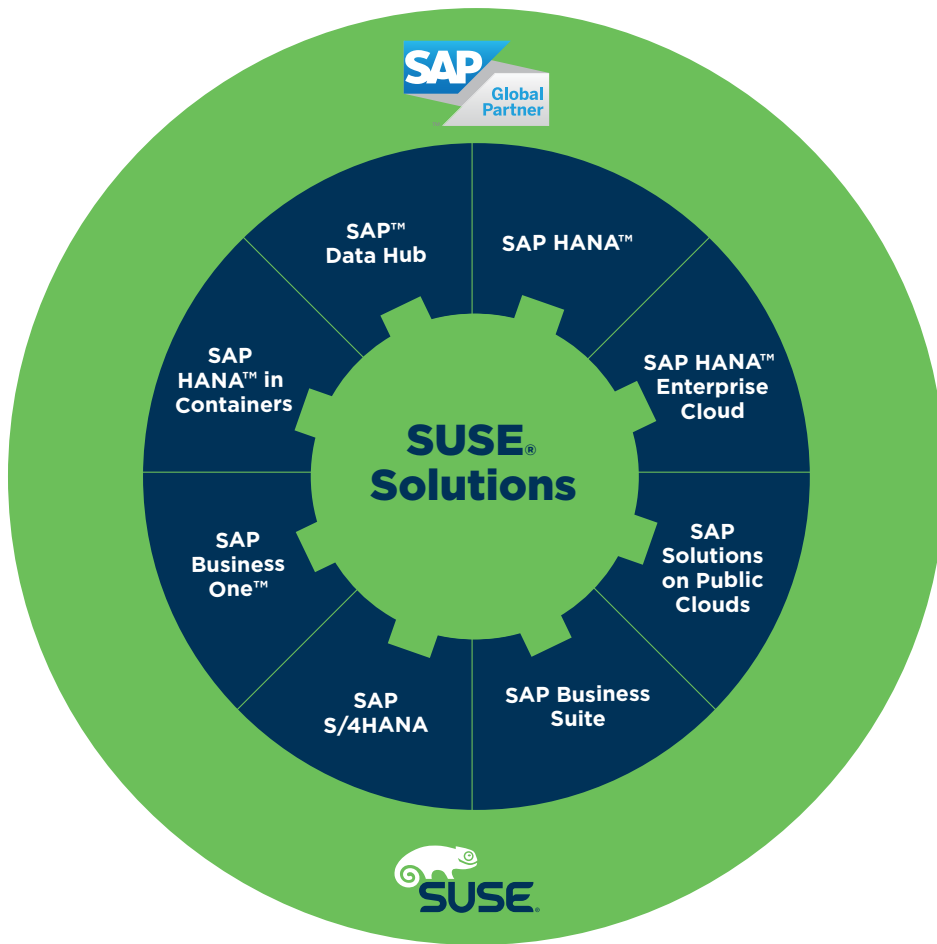
BOOST PERFORMANCE FOR MISSION- CRITICAL SAP APPLICATIONS

High performance is a fundamental requirement for mission-critical applications. SUSE Linux Enterprise Server for SAP Applications is optimized to consistently deliver high performance for mission-critical applications even under full CPU loads and high memory stress.

SAP uses SUSE Linux Enterprise Server as a reference development platform for its applications including SAP HANA. As SAP applications are enhanced, SUSE updates the SUSE Linux Enterprise Server for SAP Applications platform to ensure continually optimized operations for SAP landscapes. SUSE also maintains a separate update channel for this distribution, pretesting all new and updated packages and reverting to the last good version of any package that is found to create problems in the SAP system—whether in terms of performance, security or stability.

SUSE Linux Enterprise Server for SAP Applications is also performance optimized for IBM Power Systems that are based on POWER8 and POWER9 processors, running in base compatibility mode for both. It supports multi-threaded operations for processing more simultaneous analytics data queries than commodity servers, and large memory bandwidth to move data more quickly through the system. This enables faster analytics results for more users who need to make critical operational decisions quickly.

Workload Memory Protection ensures that data in memory is accessible when the SAP application is ready to retrieve it. The Linux kernel is designed to speed up performance of the file system by caching data in memory that is rarely accessed.



This can slow the operation of SAP applications that require large amounts of memory. Workload Memory Protection ensures that SAP transactional and analytics data remains in memory, shielding it from Linux kernel memory management.

REDUCE THE TIME AND EFFORT TO DEPLOY AND MAINTAIN SAP LANDSCAPES

With SUSE Linux Enterprise Server for SAP Applications, you reduce the time

and effort for configuring SAP applications on IBM Power Systems servers using SUSE’s Installation Wizard, including support for SAP HANA Tailored Datacenter Integration (TDI) deployments and multiple database containers. The Installation Wizard automates configuring the required prerequisites for optimal performance of SAP applications.

The SAP HANA implementation on IBM Power Systems is inherently a virtual environment. SUSE Linux Enterprise Server for SAP Applications supports virtualization with PowerVM LPARs, with KVM virtualization support as a technical preview.

Reduce the complexity of upgrading SAP HANA software in clustered systems. A built-in wizard automates managing the cluster, updating the software and then reconnecting the cluster. The ability to fully automate the installation and configuration of SAP HANA clusters with selected Hyperscalers is available as a technical preview.

SUSE Package Hub provides the means to leverage and contribute to open source innovation with community-sourced and SUSE-validated SAP application packages

“Our relationship with SUSE demonstrates the power of co-innovation and is a strong example of how SAP’s ecosystem of industry-focused and community-powered partners delivers value to our customers. Having SUSE Linux Enterprise Server available in support of SAP HANA and our in-memory computing initiative, our customers can further maximize the value of implementing our leading-edge technology in Linux environments.”

INGO BRECKMANN

*Program Manager, Data and Analytic Engines
SAP*

SUSE Linux Enterprise Server for SAP Applications lets you consolidate all of your mission-critical SAP applications on a single platform that is validated, optimized and certified for SAP HANA database and software solutions on IBM Power Systems.

Contact us at:
www.suse.com

built using Open Build Service (OBS) and additional software.

SUSE Linux Enterprise Server for SAP Applications includes integrated Priority Support and maintenance through SAP Solution Manager. For known Linux OS problems, customers also have direct access to SUSE Level 3 Support. This support subscription provides seamless support from both SAP and SUSE. SAP customers can initiate a support request using the regular SAP escalation channels including telephone, internet, CSN and the SAP Solution Manager. For known Linux OS problems, customers also have direct access to SUSE Level 3 Support.

SUSE Linux Enterprise Server for SAP Applications

This is the only operating system platform optimized for all missioncritical SAP software solutions on IBM Power Systems. SUSE Linux Enterprise Server for SAP Applications is a market leader with:

- *Tens of thousands of SAP customers and over 100 references*
- *Over 27,000 SAP HANA customers*
- *90 percent share in the SAP HANA market*
- *The first operating system validated for SAP HANA and S/4HANA on IBM Power Systems with over 2,000 customers*