



# 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 optimized performance, reduced downtime 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, system security 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 10,000 customers because it reduces downtime of critical operations, boosts performance for mission-critical applications 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 premise and with Amazon, Google, IBM and Microsoft public cloud services
- Minimize problem-resolution time

Feature	SUSE Linux Enterprise Server for SAP Applications
<b>Built-in business continuity.</b> SUSE Linux Enterprise High Availability Extension delivers multiple high-availability / disaster recovery configuration options, integrated with automated data recovery for SAP HANA.	✓
<b>Performance optimization.</b> Supports IBM Power Systems SMT8, extended virtual address space for large SAP HANA workloads, and Workload Memory Management to sustain high performance of SAP applications.	✓
<b>Scalability.</b> Supports large virtualized SAP HANA data sets in IBM Power Systems LPARs.	✓
<b>Additional security.</b> 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
<b>Fast SAP application deployment.</b> End-to-end installation configures SAP application installations in hours, not days	✓
<b>Integrated 24x7 support.</b> 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

**“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*

a secondary system. SUSE provides SAP HANA Systems Replication agents to 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.

Support for up to 512 TB virtual address space enables the implementation of SAP HANA databases that are greater than 32 TB on IBM Power servers with IBM PowerVM.. Larger databases reduce the frequency of restarts required due to memory fragmentation.

SUSE Linux Enterprise Server for SAP Applications also includes security features to reduce downtime. Secure SAP HANA in-memory systems with a builtin 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

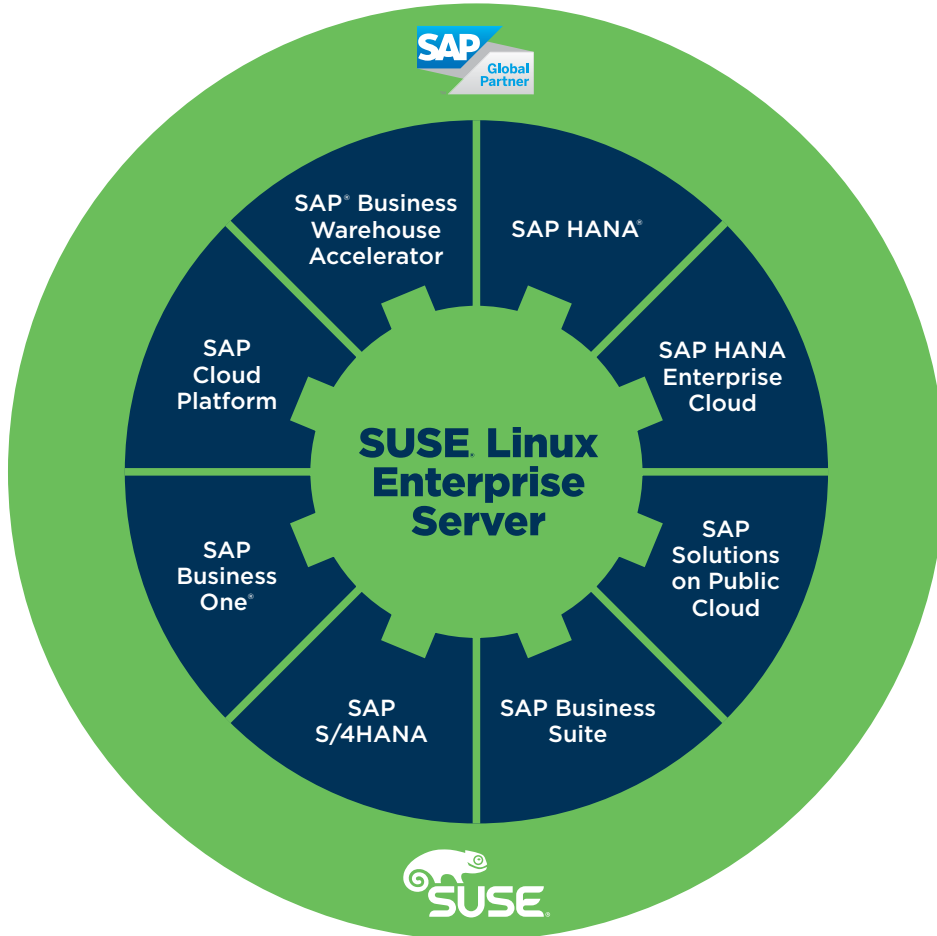
kernel is updated to bypass problems without impacting SAP system operations or performance.

**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, pre-testing 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 gives IT administrators control to prioritize SAP application performance over the Linux



filesystem. The Linux kernel page 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. With Workload Memory Protection, administrators can isolate the memory of SAP applications from Linux kernel maintenance to ensure high performance.

**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.

SUSE Connect delivers easy and dependable access to a broad set of applications and services that support SAP solutions from the SUSE partner ecosystem. Using SUSE Linux Enterprise Server for SAP Applications, IT teams can review a list of products and services to choose the solutions that address their business needs. Software products in SUSE Connect can be

**“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](http://www.suse.com)

downloaded and evaluated at no charge. Information is provided to contact the ISV partner for production licenses and subscriptions.

SUSE Package Hub provides the means to leverage and contribute to open source innovation with community-sourced and SUSE-validated SAP application packages 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*
- *Thousands of SAP HANA customers*
- *Over 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 1200 customers*