



# SUSE® Linux Enterprise Server for SAP Applications

Run your mission-critical SAP applications on the leading platform for SAP HANA, S/4HANA and SAP NetWeaver solutions providing optimized performance and reduced downtime as well as faster migration and deployments for SAP application landscapes.



## 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 automated application installation, system security and superior support.

## 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 boosts performance for mission-critical applications, reduces downtime of critical operations 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:

- Deploy a single Linux platform for both SAP HANA and NetWeaver applications on IBM POWER- and INTEL x86-64-based servers
- Sustain high-performance levels of memory-intensive SAP applications
- Reduce downtime of mission-critical SAP systems
- Recover replicated SAP HANA databases quickly
- Secure SAP HANA in-memory systems and remote storage volumes
- Reduce installation times for SAP applications on premise and in public clouds
- Minimize problem-resolution time
- Evaluate SUSE partner ecosystem solutions that complement SAP environments

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> Tested and validated with SAP as a reference development platform, performance tuning at installation, and configurable Workload Memory Protection feature to sustain high performance of SAP applications.	✓
<b>Additional security.</b> Secure SAP HANA in memory systems with a built-in firewall, and protect data in remote data centers with enhanced encryption management.	✓
<b>Rapid recovery.</b> Instantly recover data after system reboots with disk-less database support of Non-Volatile Dual In-line Memory Modules (NV-DIMMs).	✓

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Feature	SUSE Linux Enterprise Server for SAP Applications
<b>Fast SAP application deployment.</b> End-to-end installation framework installs and configures SAP applications 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.	✓
<b>Flexible cloud options.</b> Used with SAP Cloud solutions such as SAP Enterprise Cloud, SAP HANA One, SAP Cloud Platform and SAP certified Amazon EC2, Google Compute Engine, IBM Cloud and Microsoft Azure instances.	✓
<b>S/4HANA transition support.</b> Familiar Microsoft Windows Server desktop environment, enhanced Active Directory integration, and documentation ease transition to Linux-only S/4HANA environments for SAP administrators	✓

**REDUCE DOWNTIME OF CRITICAL OPERATIONS**

Business operations depend on SAP application 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 recover scenarios for SAP HANA and applications. The easy-to-use interface of the high availability extension includes the ability to configure automated Systems Replication with the server system fail-over for scale-up and scale-out deployments. SUSE provides SAP HANA Systems Replication agents, so recovery time of SAP HANA in-memory data is reduced 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.

Non-volatile memory (NV-DIMM) support for disk-less databases paves the way for instant database recovery after system reboots. Scalability to support greater than 32 TB SAP HANA databases on selected systems reduces the frequency of system restarts 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 built-in

**“The inclusion of high-availability components and the KVM hypervisor with SUSE Linux Enterprise Server for SAP Applications was one of the key points in its favor. Equally, the fact that SUSE uniquely offers integrated support with SAP for the entire ERP stack was a critical factor in our decision.”**

**SUNIL KUMAR**  
*IT Executive*  
 ONGC Tripura Power Company (OTPC)

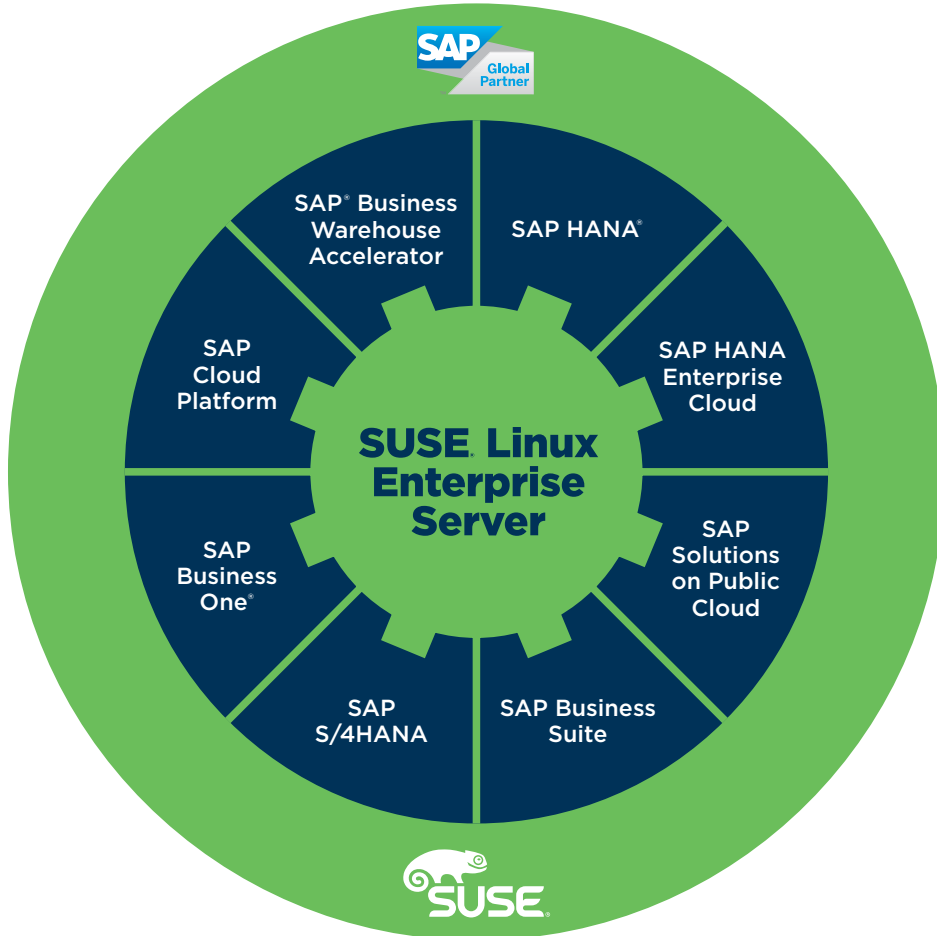
firewall that can be automatically configured, or easily set up with a configuration wizard. Enhanced encryption management for dedicated storage volumes protects data in remote data centers. Support for Key Management Interoperability Protocol (KMIP) enables the use of third-party key servers.

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. 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 SAP—whether in terms of performance, security or stability.



Workload Memory Protection gives IT administrators control to prioritize SAP application performance over the Linux file system. 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 and the high availability stack 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. Installation integration with SUSE Manager provides a single pane of glass to configure and manage the SAP environment.

Support for the Microsoft Remote Desktop Protocol environment provides a familiar interface for NetWeaver and SAP HANA administrators who need to transition those landscapes on Microsoft Windows to SAP S/4HANA environments built on SAP HANA, which runs exclusively on Linux. There is also documentation that includes a guide to executing common Windows commands in Linux. Enhanced Active Directory integration supports both

**“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 BRENCKMANN**  
*Program Manager,  
 Data and Analytic Engines  
 SAP*

**SUSE Linux Enterprise Server for SAP Applications is the leading platform for SAP solutions on Linux and a recommended and supported OS of choice for SAP HANA and S/4HANA. Fully optimized for all SAP solutions, it is a reliable, manageable and highly available platform for all SAP mission-critical applications.**

Contact us at:  
[www.suse.com](http://www.suse.com)

Linux and Microsoft user IDs and passwords, eliminating the need to rebuild or duplicate accounts.

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 downloaded and evaluated at no charge, and 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 from both SAP and SUSE. 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 leading operating system platform optimized for all mission-critical SAP software solutions on x86-64 and IBM POWER processor-based servers on-premise, and in public and private cloud environments. 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*
- *Certification to manage SAP NetWeaver clusters*