



# 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 reduced downtime, automated maintenance, and faster SAP landscape deployments.

#### SUSE Linux Enterprise for SAP Applications at a Glance:

- Reduce risk from outages of critical services...
   with built-in business continuity including an advanced high availability solution, and automated data recovery for SAP HANA.
- Foster innovation for new service delivery...
   with automation features that free system administrators from routine maintenance.
- Minimize the time and effort to deploy SAP landscapes...

with a unified solution that includes automated application installation, superior support and eases the transition to SAP S/4HANA.

# 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 endorsed by SAP and preferred by more than 30,000 customers because it reduces risk from service outages, fosters innovation with maintenance automation, and deploys new services faster on premise and in the cloud. 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 ppc64le and x86-64 processorbased servers and in the cloud
- Reduce the complexity of infrastructure management with automation
- 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 premises and with a broad set of hyperscalers and regional cloud service providers
- 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.	$\checkmark$
<b>Performance optimization</b> . Tested and validated with SAP as a reference development platform, performance tuning at installation, and ensure SAP application data remains in memory with Workload Protection Management.	$\checkmark$
Additional security. Secure SAP HANA in memory systems with a built-in firewall, and protect data in remote data centers with enhanced encryption management.	$\checkmark$
Rapid recovery. Instantly recover data after system reboots with support for all SAP-validated SAP HANA persistent memory options.	$\checkmark$
Fast SAP application deployment. End-to-end installation framework installs and configures SAP solution stacks quickly on premise and in the cloud.	$\checkmark$
Advanced monitoring. Proactively identify system issues before failures with server and SAP application-specific opera- tional data collection and export for visualization.	$\checkmark$
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.	$\checkmark$
Flexible cloud options. Used with SAP Cloud solutions such as HANA Enterprise Cloud, SAP HANA One and SAP certified Alibaba Cloud, Amazon Web Services (AWS), Google Cloud, IBM Cloud and Microsoft Azure instances.	$\checkmark$
S/4HANA transition support. Familiar Microsoft Windows Server desktop environment, enhanced Active Directory integra- tion, and documentation ease transition to Linux-only S/4HANA environments for SAP administrator	~

#### 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 recovery 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-/postscripts gives system administrators the flexibility to adapt SAP HANA system failover and recovery capabilities to their own high availability scenarios and tools.

Reduce in-memory data load times after system reboots with persistent memory support for Intel® Optane Non-volatile Dual In-line Memory Modules (NVDIMMs) and IBM PowerVM®-based Virtual PMEM technologies. Loading large SAP HANA databases from storage into traditional RAM can take hours. 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 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.

"We had one vendor try to sell us a hardware-based high availability solution that cost \$70,000. With SUSE, the high availability features are built directly into the operating system, so there's no additional cost or complexity. It's really a no-brainer."

CHRIS NEGA Manager, Systems Engineering Day & Zimmermann 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 infrequently 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.

#### FOSTER INNOVATION WITH MAINTENANCE AUTOMATION

Delivering new and innovative services is critical to remaining competitive. This can be challenging if the IT staff is distracted from this important work by routine maintenance and troubleshooting. SUSE Linux Enterprise Server for SAP Applications includes automation features that make it easier for SAP system administrators to manage complex SAP environments.

SAP Basis Administrators can proactively identify issues before there is a failure with server and SAP-specific operational data that is automatically collected and available for export to monitoring tools, like SUSE Manager, for graphical display. Another feature improves the effectiveness of troubleshooting SAP HANA System Replication with tooling that helps Basis administrators to visualize and validate cluster decisions and to replay failover transitions.

A wizard handles the complexity of disconnecting and reconnecting a clustered configuration while the administrator upgrades the SAP HANA software. This not only saves time but also can eliminate errors that lead to longer planned downtime.

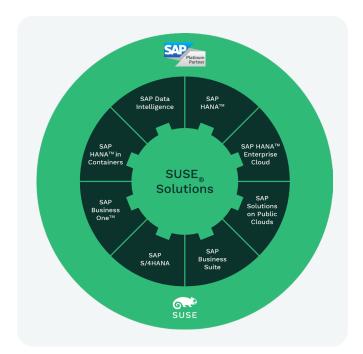
Support for the Microsoft Remote Desktop Protocol environment provides a familiar interface for SAP Basis Administrators who need to transition SAP landscapes to Linux platforms.

Enhanced Active Directory integration supports both SUSE Linux and Microsoft Windows Server user IDs and passwords, eliminating the need to rebuild or duplicate accounts. There is also a guide to executing common Windows commands in Linux.

All of these capabilities are available for both on premise and cloud deployments.

REDUCE THE TIME AND EFFORT TO DEPLOY SAP LANDSCAPES

With SUSE Linux Enterprise Server for SAP Applications, you can reduce the time and effort for configuring SAP applications, the high availability stack and system monitoring SUSE automated deployment for on-premise, cloud and hybrid implementations. This is ideal for migrating existing environments to SAP S/4HANA and to streamline repeatable deployments.



Administrators can reduce the time to install and configure SAP landscapes with consistent, repeatable results using configuration scripts and automated deployment of a full SAP S/4HANA software stack for single node and clustered configurations. This capability is available with SUSE Linux Enterprise Server for SAP Applications as well as with SUSE Manager (separate subscription required).

The product also includes an Installation Wizard that is designed to speed up on-premise server deployments with high-availability and performance tuning. Optimized pre-configured templates are also available for Alibaba Cloud, Amazon Web Services, Google Cloud, IBM Cloud and Microsoft Azure.

Pay-as-you-go (PAYG) or "on-demand" subscriptions include additional capabilities to reduce downtime and administration of SAP infrastructures. Built-in entitlements to SUSE Linux Enterprise Live Patching and the SUSE Manager Lifecycle Management Module make it easier to centralize management of the entire infrastructure. This includes reserved instances offered by some hyperscalers. Contact your Cloud Service Provider to learn more.

Implement SUSE innovations for SAP environments sooner with new and updated features specifically-designed for SAP environment with a dedicated update channel.

## SUSE Linux Enterprise Server for SAP Applications

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.

"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

The SUSE Linux Enterprise Server modular design makes it possible to confidently deploy new features that are independent of the Linux kernel without lengthy OS evaluations.

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 ppc64le processor-based servers on-premise, and in public and private cloud environments. SUSE Linux Enterprise Server for SAP Applications is an SAP Endorsed App; one of a select few offerings in this new category of SAP ecosystem partner solutions. SAP Endorsed Apps are proven solutions to complement and extend SAP products, and deliver value quickly, easily and with support from SAP.

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
- 85 percent share in the SAP HANA market

