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 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 the preferred Linux platform of SAP and more than 3500 IBM Power Systems 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:

- Reduce the complexity of infrastructure management with automation
- Reduce downtime of mission-critical SAP applications
- 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 many hyperscalers
- Minimize problem-resolution time

SUSE Linux Enterprise Server for SAP Applications on IBM Power Systems

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.	✓
Fast SAP application deployment. End-to-end installation framework installs and configures SAP solution stacks quickly on premise and in the cloud.	✓
Advanced monitoring. Proactively identify system issues before failures with server and SAP application-specific operational data collection.	✓
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.	✓
Rapid recovery. Instantly recover data after system reboots with SAP HANA database support of virtual persistent memory (PMEM) with IBM PowerVM(tm).	✓

REDUCE RISK FROM CRITICAL SERVICE OUTAGES

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 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.

Reduce in-memory data load times after system reboots with persistent memory support for IBM PowerVM®-based Virtual PMEM.

A 4 petabyte 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.

"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

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 thirdparty key servers,

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.

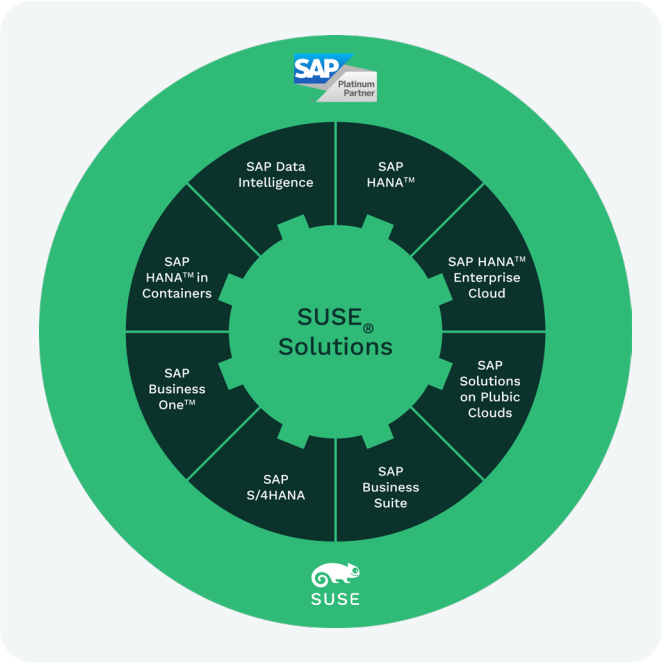
Support for the Microsoft Remote Desktop Protocol environment provides a familiar interface for SAP Basis Administrators who need to transition SAP landscapes to Linux platforms. Enhanced Active Directory integration supports both SUSE Linux and Microsoft Windows Server user IDs and passwords, eliminating 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 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 when deployed on premise.

For cloud and hybrid implementations, 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). 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. 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 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.

"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 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 mission-critical SAP soft ware 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 30,000 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 3,500 customers