



Why SUSE Is the SMART Choice for SAP HANA

As you transform your SAP operations and processes to become a digital business, you have a critical decision to make in choosing the foundation for your SAP HANA and SAP S/4HANA systems. SAP's open source strategy gives you two operating system options: SUSE® Linux Enterprise Server and Red Hat Enterprise Linux. Digital transformation is a new world. Regardless of your current operating systems, SUSE is the best option for SAP HANA and SAP S/4HANA in the future.

SUSE Leadership and Innovation

SUSE Linux Enterprise Server is the first and leading operating system for SAP HANA, and is the operating system of choice for 95% of all installations. SAP and SUSE have a history of joint testing and development at the SAP LinuxLab for over 18 years. SUSE Linux is a reference development platform for SAP applications, which facilitates collaborative performance optimization. Also, SUSE is a preferred and recommended operating system vendor for SAP HANA. In fact, SUSE Linux Enterprise Server for SAP Applications is the leading OS for SAP S/4HANA, SAP Business Warehouse, SAP BI for SAP HANA, SAP HANA Enterprise Cloud, SAP Cloud Platform and SAP Vora.

SAP is not only a SUSE partner, but is also a customer, using SUSE Linux Enterprise Server for SAP Applications as the

foundation for SAP HANA Enterprise Cloud¹, building it on SUSE OpenStack Cloud and SUSE Enterprise Storage.

INNOVATION FOR SAP SYSTEMS

SUSE understands SAP client requirements and challenges. This is why for the last 7 years we have offered one solution—SUSE Linux Enterprise Server for SAP Applications—that not only delivers a high performance and resilient operating system for SAP NetWeaver and SAP HANA, but also offers innovative features specifically for SAP environments. A few examples include:

- **Configuration and tuning agents:** Reduce the time and effort to configure SAP applications and SAP HANA for optimal performance.
- **SAP HANA resource agents:** Automate the failover and recovery of a primary SAP HANA system to a secondary system.
- **Installation Wizard:** Reduce the time to install the SAP software stack with high availability from days to hours on-premise or in the public cloud with Alibaba, Amazon, Google, IBM and

Microsoft. Upgrade clustered SAP HANA instances with ease.

- **S/4HANA transition support:** Ease the transition from Microsoft Windows Server to Linux by integrating Microsoft Active Directory and using Microsoft Remote Desktop Protocol.
- **System security:** Protect SAP systems with an SAP HANA Firewall, and automated remote disk encryption/decryption.
- **Workload Memory Protection:** Ensure memory cache is available to sustain SAP application performance.
- **SUSE Connect:** Access a marketplace of software and services from SUSE and SAP partners.

Reducing Downtime of SAP Operations

Because SAP operations are mission-critical, SUSE Linux Enterprise Server for SAP Applications has always included the SUSE Linux Enterprise High Availability Extension, which makes it faster to configure high availability SAP systems. It is fully integrated with the SAP HANA resource agents and SUSE offers

¹ SAP SE Success Story: www.suse.com/success/stories/sap-se/

² NetWeaver Certified HA (NW-HA-CLU) solutions list: www.sap.com/dmc/exp/2013_09_adpd/enEN/search.html#search=NW-HA-CLU

best practices guides for a variety of recovery scenarios. SUSE Linux Enterprise High Availability Extension is certified to manage SAP NetWeaver clusters.²

Another way to reduce downtime of SAP HANA systems is by using non-volatile memory (NVDIMM). SAP has validated the use of NVDIMMs for SAP HANA databases to enable instant database recovery after system reboots, and only SUSE supports this feature. This eliminates the need to wait for data to load into traditional RAM from storage, which can take several hours for large SAP HANA databases.

SAP HANA Benchmarks

Hardware vendors and public cloud service providers consistently choose SUSE Linux Enterprise Server for SAP Applications as their platform for SAP HANA performance benchmark testing. Why? Because they want the fastest operating system to showcase the performance of their own systems. As of December 2018, there are 80 benchmarks for SAP HANA running on SUSE Linux Enterprise Server, and 5 benchmarks running on Red Hat Enterprise Linux. These benchmarks are BW Edition for HANA³, BW AML⁴, Cloud⁵ and the BW EML⁶.

“When deciding which Linux distribution to implement, we compared Red Hat offerings with SUSE Linux Enterprise Server. It was clear that SUSE Linux Enterprise Server was better suited for our company, thanks to the high degree of compatibility between the operating system and the SAP solutions. Indeed, the strong partnership between SUSE and SAP gave us great confidence in the solution.”

SUBODH KUMAR PATRO

DGM IT—IDC & SAP Infrastructure
Pearl Global Industries

“If I would have gone with Red Hat, I think there would have been certain challenges with not knowing how well HANA would run on Red Hat. The inherent features [e.g., Page Cache Management, Live Patching, HA/DR] that SUSE has running on HANA made me much more comfortable making the move to Amazon.”

RANJIT PRITHVIRAJ

Managing Director
Fitch Ratings

SAP Systems Management

SUSE Manager helps Linux and SAP Basis Administrators automate monitor and automate installation, inventory management, patch management, configuration management and security compliance from a single pane of glass. Unlike Red Hat Satellite, it runs on both x86-64 and ppc64le (IBM POWER) based servers. Security vulnerabilities in the OS are a significant problem for mission-critical SAP systems. The solution? SUSE Linux Enterprise Live Patching can execute multiple security patches while the SAP systems are running, enabling security compliance without impacting performance or uptime.

Superior Support

All SAP Partners are required to provide 24x7 priority-level support working with SAP Support. SUSE provides direct access to SUSE Level 3 support engineers for OS issues. There is also a dedicated SUSE channel for SAP application-specific updates to the OS. With 4-1/2 years of Lifecycle Priority Support for each service packs specifically for SAP systems, you maintain a consistent operating environment longer than the standard SUSE Linux.

Contact us at:
www.suse.com

³ BW Edition for HANA: www.sap.com/dmc/exp/2018-benchmark-directory/#/bwh

⁴ BW AML: www.sap.com/dmc/exp/2018-benchmark-directory/#/bwaml

⁵ Cloud: www.sap.com/about/benchmark/appbm/cloud.html

⁶ BW EML: www.sap.com/about/benchmark/appbm/netweaver.sap-bw-enhanced-mixed-load-bw-eml-standard-application-obsolete.html#sap-bw-enhanced-mixed-load-bw-eml-standard-application-obsolete