Move toward Zero Downtime for SAP Solutions

Downtime costs a lot—in revenue and reputation alike. Today’s customers demand anytime, anywhere access to services, and even a small interruption could be disastrous. You need the tools that will keep your SAP solutions and other applications up and running. With SUSE solutions, you get a range of advanced high-availability and disaster-recovery capabilities that can help nearly eliminate both planned and unplanned downtime.

SUSE Solutions for Near-Zero Downtime at a Glance:
Minimize planned and unplanned downtime with SAP-optimized technologies.
+ Stable, secure SUSE Linux Enterprise Server operating system
+ Automated SAP HANA system replication and failover
+ Built-in high-availability extension
+ Live patching for critical kernel patches

Products:
- SUSE Linux Enterprise Server for SAP Applications
- SUSE Linux Enterprise Live Patching
- SUSE Manager

Is IT downtime ever a good thing? Not in today’s businesses undergoing digital transformation. While 100 percent uptime might be a dream, technology is getting us extremely close. Now SUSE can get you even closer.

SUSE solutions deliver capabilities that can help you minimize unplanned downtime—by reducing hardware downtime, maximizing service availability and decreasing the likelihood of human error.

SUSE Linux Enterprise Server for SAP Applications
As the premier operating system for SAP environments, SUSE Linux Enterprise Server for SAP Applications can help reduce downtime of your SAP solutions and other applications. It includes a dedicated SAP HANA firewall to provide maximum system security and an online security hardening guide for SAP HANA1 (free registration required). Plus, SUSE Linux Enterprise Server for SAP Applications consistently provides outstanding uptime and performance—even under full CPU loads and high memory stress.

AUTOMATED SAP HANA FAILOVER
SAP HANA has a feature that replicates in-memory data to a secondary system in case the primary system experiences a failure, requiring manual failover. But with SUSE Linux Enterprise Server for SAP Applications, that failover action is automated through the use of two resource agents that continuously monitor the system. Designed to work with SAP HANA system replication setups for scale-up and scale-out deployments, it reduces data recovery time for large in-memory datasets from hours to minutes. It’s also fast and doesn’t require human interaction, so a failure doesn’t take you down for long.

SUSE LINUX ENTERPRISE HIGH-AVAILABILITY EXTENSION
The SAP-certified high-availability extension helps you maximize your system’s availability through the clustering of physical or virtual servers. This clustering capability eliminates single points of failure and lets you implement service failover. It comes with a graphical user interface that

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“...The partnership with SUSE not only improves how we run SAP, but also reduces operating costs for many thousands of global enterprises.”

MARTIN HEISIG
Senior Vice President SAP HANA Enterprise Cloud
SAP SE

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1 www.suse.com/promo/sap/hana/security-guide/
makes cluster configuration and management simple, even simulating failure scenarios before they happen.

**SYSTEM SNAPSHOT AND ROLLBACK**
If an operator makes a mistake that causes a problem, SUSE Linux Enterprise Server for SAP Applications can get your systems back up and operational in just one click. It has built-in automatic snapshot and rollback capabilities that let you quickly jump the whole system, including kernel files, back to a previous known state.

**SUSE Linux Enterprise Live Patching**
Maintaining system security is very important for mission-critical SAP systems, but so is maintaining uptime. Patches to fix security vulnerabilities usually require downtime to reboot the server. Based on kGraft technology developed by SUSE Labs, SUSE Linux Enterprise Live Patching allows you to perform live Linux kernel patching for stability and security issues—all without rebooting. No interruption, no downtime. That means it reduces the lengthy downtime of recovering huge in-memory databases like SAP HANA. Even better, it works independently from the applications that run on top, so you can use it on an SAP application server or on SAP HANA or other databases.

SUSE Linux Enterprise Live Patching is a subscription service that gives you access to SUSE Linux Enterprise Server 12 maintenance patches released in the last 12 months (CVE 6 and higher). It helps you:

- Increase security while minimizing downtime—because you don’t have to wait for the next maintenance window or interrupt mission-critical workloads.
- Stay compliant and audit ready without interrupting workloads—

 months since its SUSE solution went live. And German cooperative bank Mainzer Volksbank⁵ saves EUR 100,000 per year in IT costs while ensuring smooth operations with 99.999 percent system availability.

You can find more SUSE success stories⁶ online.

**Learn More**
Ready to see how near-zero downtime can benefit your business? Visit [www.suse.com/solutions/sap](http://www.suse.com/solutions/sap) or contact us today.

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“At the time our choices were SUSE or Red Hat, and after evaluating both options we felt that SUSE Linux Enterprise Server for SAP Applications offered clear strategic advantages in terms of the strong relationship between SUSE and SAP.”

JULIAN BOND
Head of ICT
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