



## Partner Flyer

SUSE Linux Enterprise Server for SAP Applications  
SUSE Linux Enterprise Live Patching  
SUSE Manager

# 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.

- + Built-in high-availability extension
- + Automated SAP HANA system replication and failover
- + Live patching for critical kernel patches
- + Automated provisioning and configuration management

### ■ Products:

SUSE Linux Enterprise Server for SAP Applications  
SUSE Linux Enterprise Live Patching  
SUSE Manager

**“In part due to the great stability of SUSE Linux Enterprise Server, our system availability is 99.999 percent. ... 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

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 HANA<sup>1</sup> (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

<sup>1</sup> [www.suse.com/promo/sap/hana/security-guide/](http://www.suse.com/promo/sap/hana/security-guide/)

makes cluster configuration and management simple, even simulating failure scenarios before they happen.

#### PERSISTENT MEMORY FOR SAP HANA

Very large SAP HANA databases can take several hours to reload after a system reboot. Persistent memory technologies such as Intel Optane(tm) DC NVDIMMs and IBM PowerVM(tm) Virtual PMEM retain your SAP HANA data in memory that is not affected by the system shutdown. This significantly reduces the data load time and therefore the overall system downtime.

#### 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—

*the solution is ideal for in-memory databases such as SAP HANA, time-consuming simulations or when having to make a quick fix in a large server farm.*

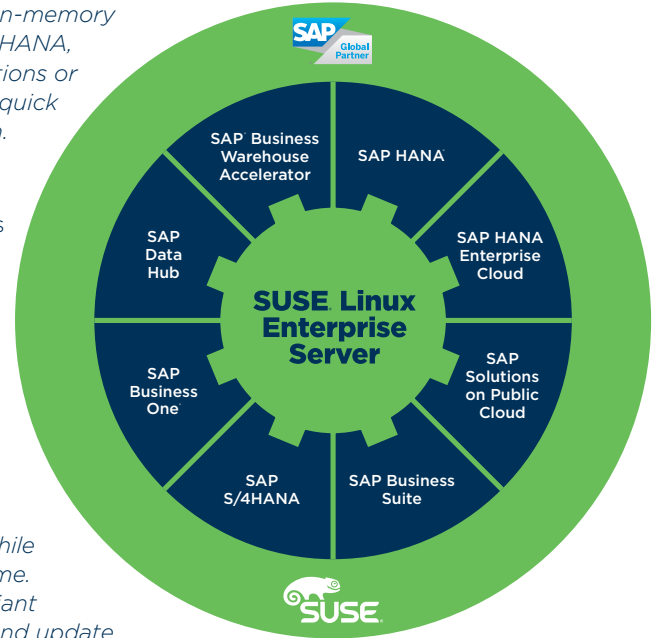
#### SUSE Manager

SUSE Manager delivers powerful management tools for SAP HANA that can maintain availability for both SAP and non-SAP applications. It helps you to:

- Perform management tasks faster and with fewer errors, which improves productivity while reducing server downtime.
- Stay current and compliant with automated patch and update management.
- Identify server performance issues earlier, reducing disruption to services and limiting business impact.
- Precisely control the environments needed for your unique business operations.
- Save IT time and money by automating a variety of recurring manual tasks.

#### Reducing Downtime around the Globe

Many organizations are significantly reducing downtime with SUSE. Danish SAP services hoster itelligence(2) enabled 99.999 percent availability for its clients with high uptime requirements. In the United States, construction firm Day & Zimmerman(3) increased its SAP system availability to 99.995 percent and saved \$70,000 by avoiding the cost for a separate high availability solution. Guerbet(4) in France has experienced no unplanned downtime and is better able to ensure security and regulatory compliance. German



manufacturer GESIS(5) avoids potentially 125 hours of accumulated downtime for every security patch.

You can find more SUSE success stories<sup>6</sup> online.

#### Learn More

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

2 [www.suse.com/success/itelligence](http://www.suse.com/success/itelligence)

3 [www.suse.com/success/day-zimmerman](http://www.suse.com/success/day-zimmerman)

4 [www.suse.com/success/guerbet](http://www.suse.com/success/guerbet)

5 [www.suse.com/success/gesis-2](http://www.suse.com/success/gesis-2)

6 [www.suse.com/success/](http://www.suse.com/success/)



**“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*  
Hillarys

[www.suse.com](http://www.suse.com)



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