Prepare your mission-critical SAP workloads for migration to S/4HANA using SUSE on AWS

Maximize the benefit of migrating your SAP workloads

If you're like most organizations that still run mission-critical SAP applications on-premises, you've probably wondered about migrating them to the cloud. Today's fast-paced environment makes it harder than ever to justify the money and time you spend maintaining datacenters—especially since they can't provide the same scaling, compute, or high availability/disaster recovery (HA/DR) capabilities for the same price you could get in the cloud. And yet, organizations still hold back, not wanting to mess up essential SAP workloads that work just fine where they are—for the most part.

Well, the stakes just got higher. With SAP recommending customers standardize on Linux OS and transition to SAP HANA or S/4HANA on the SAP HANA database, you can no longer put off reconfiguring your applications—cloud or no cloud.

The good news is you don't have to do it alone. SUSE and Amazon Web Services (AWS) have teamed up to provide SAP customers an option to digitally transform their business during their migration and reconfiguration. Together, SUSE has collaborated with AWS on SAP deployments longer than any other Linux partner, bringing you rich insights and resources to help you plan your move.

Through the remainder of this eBook, we will describe key factors to consider in light of your business and migration goals, explain the benefits of adopting SUSE technology on the AWS Cloud, and describe deployment resources you can use to migrate quickly and confidently.

Consider key factors when planning your SAP migration

Before jumping into the migration, it's important to consider business factors that influence your project's success and define functional changes you want to undertake with your initial move.

Where are you in your hardware refresh cycle? Is this the right time to migrate?

What priority have your executives put on digital transformation? How can you leverage that to get support for the project?

Which partners do you trust to help you through a major migration?

Technical capabilities to consider

What experiences do you have with cloud deployments? How can you create efficiencies with those investments as part of this move?

Are you planning new SAP workloads that will run alongside other AWS services?

How critical is HA/DR to your SAP environment? Do you need to support scale up and scale out scenarios, production performance demands, and rapid service implementation?

Would you like to accelerate deployment with automation, improve monitoring, and/or simplify management of your SAP environment?

Are you looking for ways to manage the cost of running large-scale, global production environments?

Are you running SAP NetWeaver applications that can lift and shift to the cloud?

Depending on what seems right for your business based on these factors, your next step is to choose a Linux OS that is proven and trusted to help your business over the long term.

Choose SUSE Linux Enterprise Server for SAP, the most trusted Linux OS

SUSE Linux Enterprise Server for SAP Applications is the only Linux OS, purpose-built in collaboration with SAP, to optimize SAP HANA applications.

SUSE Linux Enterprise Server for SAP Applications (SLES for SAP Applications) is a leading Linux platform for SAP in a physical, virtualized, private, or public cloud environment and the preferred Linux platform for SAP with more than 30,000 customers. SLES for SAP Applications offers an enterprise-grade Linux OS in a fully supported environment to help you maximize your time to value.

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. Through the easy-to-use interface, you can configure and deploy your choice of multiple HA/DR recovery scenarios for SAP HANA applications using scale-up and scale-out deployments.

Foster innovation for new service delivery with automation features to free your SAP system administrators from routine maintenance tasks and make it easier for them to manage complex SAP environments. The SUSE platform can proactively identify issues before a failure occurs and help you generate data and cluster visualizations to improve troubleshooting.

Minimize the time and effort to deploy SAP landscapes with a unified solution that includes automated application installation and superior support. Ready-to-use configuration scripts make it easy to deploy a production ready SAP S/4HANA software stack, or a fully configured SAP HANA High Availability cluster with confidence, all backed by AWS who offers 24x7x365 support assistance staffed by experienced engineers.

Reduce downtime and administration of your SAP Infrastructure by taking advantage of additional capabilities included in the Pay-as-you-go (PAYG) or on-demand subscriptions. Built-in feature entitlements for SLES for SAP Applications include SUSE Linux Enterprise Live Patching and the SUSE Manager Lifecycle Management Module which make it easier to centralize management of the entire infrastructure, thereby eliminating downtime for Linux security patches and ensuring compliance across cloud and on-premise instances.

SUSE also provides a fully automated deployment toolset that is customizable. Customers can use building blocks as needed to suit their individual requirements. It can be integrated on existing solutions like SUSE Manager, or existing Terraform and Salt, and more for migrating an existing on-premise deployment to the cloud. The toolset is fully supported and enables customers to automate repeating tasks so administrators can focus on value-add topics.

Run SUSE Linux Enterprise Server for SAP Applications on AWS
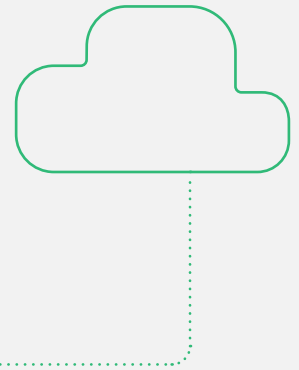
Drive new levels of efficiency and innovation by running your SAP workloads with SLES for SAP Applications on AWS. From infrastructure technologies, like compute, storage, and databases, to emerging technologies, such as artificial intelligence and machine learning (AI/ML), AWS makes it possible to run your mission-critical SAP applications and auxiliary workloads without patching together multiple cloud service providers.

By migrating to AWS you get a choice in how you provision resource capacity which can help you save money. For SAP workloads that have unpredictable demand, AWS offers on-demand resources you can use to scale up and down as your needs change. For workloads with more predictable demand or that require high availability, you can use Amazon EC2 Reserved Instances, available on the AWS Marketplace, and save up to 73%.

AWS is certified to run the broadest range of SAP applications among cloud providers allowing you to keep more of your workloads together when you migrate. Its purpose-built infrastructure offers a variety of Amazon EC2 instance types (x1 series, i3, Nitro (C5/M5), bare metal, and EC2 High Memory), high availability configurations, high memory workloads, and large scale-out clusters, that are SAP-certified for production to handle your environment with ease.

Furthermore, AWS is the only cloud provider that offers an SAP Competency for partners to ensure they have the technical expertise required for your projects. When you move your SAP workloads to SLES for SAP Applications on AWS, you have the confidence of SUSE's 20+ year engineering relationship with SAP combined with the expertise of AWS SAP Competency Partners to assist with your end-to-end migration.
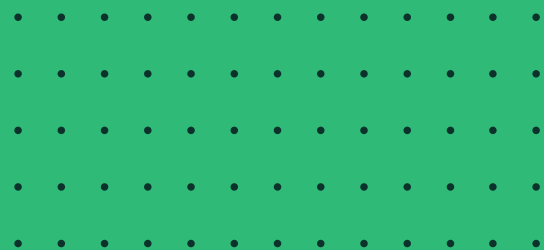
Build on decades of experience

SLES for SAP Applications is the first Enterprise Linux OS to be certified by SAP to run on the AWS Cloud, building off:
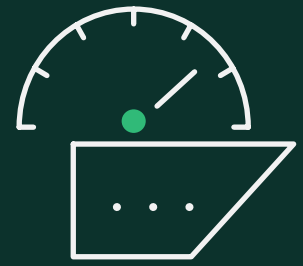
20+ years
of SUSE working together with SAP

10+ years
of SUSE working with AWS

12+ years
of AWS supporting SAP workloads—more than any other cloud provider

Launch SAP apps in as little as one hour using AWS automation

AWS Launch Wizard offers a wizard-based experience to key in critical info for an SAP deployment and provides automation, integrations, and shared support line between SAP and SUSE to help accelerate your migration.

Accelerate your SAP migration to the cloud using step-by-step deployment instructions, created through collaboration between SUSE and AWS. On average, organizations deploy production-ready environments within an hour, using best practices for security and high availability on AWS for SAP S/4HANA, SAP HANA DB, and the OS.

Automated Deployment for SAP AWS Launch Wizard offers a guided way of sizing, configuring, and deploying AWS resources on HANA-based SAP systems without the need to manually identify and provision individual AWS resources. Input your application requirements, including SUSE Linux Enterprise Server OS settings, HANA settings, SAP landscape settings, and deployment details on the service console, and the Launch Wizard identifies the AWS resources to deploy and run your application.

Launch Wizard provides an estimated cost of deployment, and lets you modify your resources and instantly view the updated cost assessment. When you approve your settings, Launch Wizard provisions and configures the selected resources in a few hours to create a fully-functioning production-ready SAP application.

The AWS Launch Wizard is available at no additional charge. And you only pay for the AWS resources that are provisioned for running your SAP NetWeaver applications and SAP HANA.

# Choose the AWS Launch Wizard right for your workload

AWS Launch Wizard supports deployment of NetWeaver stack on SAP HANA database deployments and HANA database deployments.

Customer can use SUSE standard images from AWS via EC2 console/AWS Marketplace or have ability to Bring Your Own Images built following enterprise image building process for these versions.

(AWS Launch Wizard for SAP)

AWS Launch Wizard support

SLES 12 SP4, SLES 12 SP4 for SAP, SLES 12 SP5, SLES 12 SP5 for SAP, SLES 15, SLES 15 for SAP, SLES 15 SP1 and SLES 15 SP1 for SAP.
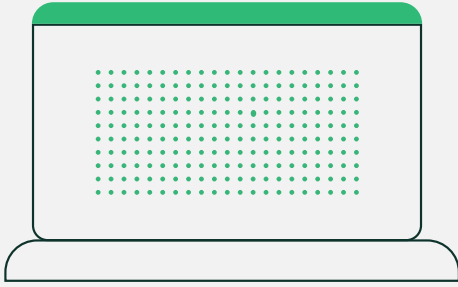
For HANA DB, AWS Launch Wizard supports

- Single-Node
- Multi-Node
- High Availability deployments

For NetWeaver based applications, Launch Wizard supports

Single Instance where App and HANA DB on a single Amazon EC2 instance

Distributed deployment where SAP application and HANA DB are deployed on multiple Amazon EC2 instances with a single AZ

High-Availability deployments where SAP application and HANA DB are deployed in different Amazon EC2 instances across two availability zones

Get started with SUSE on AWS

SAP workloads play a critical role in your business today. Many workloads have been around for years, if not decades, and run on their original infrastructure. Thanks to the options available through SUSE and AWS, old infrastructure doesn't have to hold you back anymore.

Meet the challenges of a modern world head on and reallocate the time and money you spend maintaining on-premises deployments to drive innovation instead.

It's easier than ever with SUSE Linux Enterprise Server for SAP Applications on AWS.

SUSE in the AWS Marketplace

SUSE Linux Enterprise Server for SAP Applications is the leading OS platform for SAP solutions on Linux—recommended and supported for SAP HANA and S/4HANA. It offers a reliable, manageable, and highly available platform fully optimized for all SAP mission-critical applications. Find the SUSE solution that is best for your organization in the AWS Marketplace or contact aws@suse.com to learn more around how SUSE can guide you on your SAP modernization journey.

SUSE Consulting Services

SUSE consultants will share and deploy the best practices and expertise that your SAP projects demand. SUSE has a global delivery team, trained by SAP to assist with discovery, design, and deployment, that can support you at any point along your SAP migration journey. Learn more about SUSE Consulting Services.

AWS Launch Wizard for SAP

Get started with the AWS Launch Wizard for SAP.