

Case Study: SAP Migration from On-Premises to AWS

Problem Statement

A leading manufacturing enterprise was running its SAP ECC and HANA workloads on aging on-premises hardware that was nearing end-of-life. The environment faced **performance bottlenecks, high maintenance costs, and limited scalability**. Backup and disaster recovery processes were unreliable, and IT found it difficult to provision resources quickly for business growth. The customer wanted to modernize their SAP landscape, reduce TCO, and establish a platform ready for transition to **SAP S/4HANA**.

Solutions Offered

- **Assessment & Planning:** Conducted a full SAP Landscape Assessment, sizing, and dependency mapping aligned with **AWS Migration Acceleration Program (MAP)**.
 - **Migration Approach:** Executed a **lift-and-optimize migration** of SAP HANA, SAP ECC, and related workloads to **Amazon EC2 High Memory Instances** with **Amazon EBS gp3 volumes**.
 - **Database & Storage:** Migrated HANA DB to **Amazon EC2 with SUSE**, and enabled **Amazon S3** for cost-efficient backups and archiving.
 - **High Availability & DR:** Designed resilient architecture with **AWS Availability Zones** and **SAP HANA SR**.
 - **Security & Compliance:** Implemented **IAM, Security Group, and AWS KMS** for data encryption and compliance with ISO/IEC 27001.
 - **Automation & Monitoring:** Leveraged **AWS Systems Manager** and **CloudWatch** for patch automation, proactive monitoring, and cost governance.
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Business Outcomes

- **Performance Gains:** SAP HANA workloads ran **35–40% faster**, enhancing reporting and analytics.

- **Cost Optimization:** Achieved **30% reduction in TCO** through AWS savings plans and eliminated hardware refresh cycles.
- **Agility & Scalability:** Provisioning SAP environments now takes **minutes instead of weeks**, supporting faster business initiatives.
- **Resilience & Availability:** Ensured **99.99% uptime** with built-in HA and DR architecture.
- **Future Ready:** Established a cloud foundation supporting **seamless transition to SAP S/4HANA**.

 *This case study highlights how migrating SAP workloads from on-premises to AWS resulted in improved performance, reduced costs, and a future-ready platform for digital transformation.*