

SAP S/4HANA Infrastructure on Azure



SAP S/4HANA represents the digital core for modern enterprises, driving innovation and efficiency. Deploying and managing SAP S/4HANA on cloud platforms as Microsoft Azure offers immense benefits, including scalability, flexibility, and access to a vast ecosystem of services. However, building and maintaining a robust, highly available, and compliant infrastructure required for a mission-critical SAP S/4HANA environment on Azure is a complex undertaking task.

It demands specialized skills, significant effort in design and implementation, and continuous operational overhead, particularly concerning Governance, Risk, and Compliance (GRC) and keeping the underlying platform current.

This whitepaper explores the inherent complexities of SAP S/4HANA infrastructure on Azure and introduces MyPlatform as a transformative solution. MyPlatform automates the deployment, management, and maintenance of the Azure foundation for SAP S/4HANA, providing built-in GRC and an evergreen infrastructure that simplifies operations and accelerates SAP S/4HANA upgrades for SAP partners and customers.

SAP S/4HANA Infrastructure Complexity on Azure

Deploying SAP S/4HANA on Azure, especially for enterprise-scale scenarios involving large data volumes and user bases (like 100TB of data and 1000 users as outlined in the provided infrastructure details), requires a sophisticated and meticulously planned architecture. Key components include:

Network Design

Establishing a secure and performant network with segmented subnets, Network Security Groups (NSGs), Azure Firewall, and connectivity to on-premises or other clouds via ExpressRoute or VPN Gateway.

Compute Selection

Sizing and deploying SAP HANA certified Azure Virtual Machines (M-series or Mv2-series for the database) and appropriate VMs for application servers, ASCS/ERS, and Web Dispatchers.

Storage Configuration

Implementing high-performance and scalable storage solutions like Azure NetApp Files (ANF) for HANA data and log volumes, alongside Managed Disks for OS and binaries.

High Availability (HA)

Designing and configuring HA within a primary Azure region using Availability Zones, HANA System Replication (HSR), clustering for critical components (ASCS/ERS), and Azure Load Balancers.

Disaster Recovery (DR) / Always On

Implementing a robust DR strategy between Azure regions using cross-region HSR, storage replication (ANF volume replication or ASR), and standby infrastructure.

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Security Implementation

Integrating Azure Active Directory (Azure AD), Role-Based Access Control (RBAC), NSGs, Azure Firewall, Azure Security Center/Defender for Cloud, and Azure Key Vault across all layers.

Monitoring & Management

Setting up comprehensive monitoring using Azure Monitor, Log Analytics, and integrating SAP monitoring tools.

GRC Integration

Embedding GRC through Azure Policy, Security Center/Defender for Cloud, audit logs, and specific configurations to meet compliance requirements.

Building this infrastructure manually presents significant challenges:

Accurate Sizing and Performance Tuning

Incorrectly sizing VMs or storage can lead to performance bottlenecks or excessive costs.

Cost Management

Large-scale SAP S/4HANA deployments with HA/DR are inherently expensive, requiring continuous cost optimization efforts.

Complex HA/DR Configuration

Setting up and managing clustering, HSR, and replication across regions demands specialized skills and rigorous testing.

Networking and Security Design

Ensuring a secure, high-performance network with appropriate access controls is complex and critical.

Data Migration

Migrating large SAP datasets efficiently and with minimal downtime is a substantial project.

Operational Complexity

Managing a distributed landscape requires robust monitoring, patching, backup, and operational procedures.

Skill Set Requirements

A diverse team with expertise in SAP Basis, HANA administration, Linux clustering, and various Azure services is essential.

Compliance Adherence

Continuously ensuring the setup meets evolving regulatory and internal compliance standards is challenging.

Rigorous Testing: Thorough testing of HA and DR failover scenarios is non-negotiable but time-consuming.

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These complexities often lead to project delays, increased costs, and ongoing operational burdens, diverting valuable resources from core SAP S/4HANA initiatives.

The Automated Foundation for SAP S/4HANA on Azure

MyPlatform is designed to directly address these infrastructure challenges by providing a standardized, automated, and managed Azure cloud platform specifically tailored for demanding workloads like SAP S/4HANA. It acts as a disruptive force against traditional, complex, and costly consulting-led approaches to cloud adoption.

MyPlatform provides a **Standardized and Automated Foundation**. Instead of building from scratch, MyPlatform leverages best practices, such as the Cloud Adoption Framework (CAF), and productizes them into an agile, standardized model. This includes incorporating necessary local controls and identity management from the outset, automating the initial setup and significantly reducing complexity and deployment time.

Furthermore, **MyPlatform** offers **Managed Cloud Operation Excellence**. It is a managed platform designed to keep the environment secure, compliant, and efficient. This includes an always updated – **evergreen platform**, proactive management, and transparent configuration compliance. This managed approach drastically reduces the burden on SAP partners and customers to maintain a large team of specialists required for ongoing infrastructure management.

Built-in GRC and Evergreen Infrastructure

One of the most significant advantages of MyPlatform for SAP S/4HANA deployments is its **Built-in Governance and Compliance**. Recognizing the risks associated with neglecting GRC, MyPlatform includes all necessary prebuilt controls to support Identity and Access Management (IAM), Cloud security, and Governance as part of its mandatory subscription service. This provides robust GRC guardrails from day one, ensuring that the underlying infrastructure for SAP S/4HANA is compliant with relevant standards and regulations without requiring extensive manual configuration and ongoing audits. This built-in GRC significantly reduces the risk of misconfigurations and compliance failures that can plague complex cloud environments.

Crucially, MyPlatform ensures an **Uniform Evergreen Infrastructure**. The managed service includes proactive management and continuous updates, ensuring the underlying Azure platform components are always current. This evergreen approach provides a stable and predictable foundation for operating SAP S/4HANA. When it comes time to perform SAP S/4HANA upgrades, the process becomes significantly easier because the underlying infrastructure is standardized, well-maintained, and consistently up-to-date. Partners and customers can focus on the SAP application layer upgrade itself, rather than battling with an outdated or inconsistent infrastructure.

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Benefits for SAP Partners and Customers

Adopting MyPlatform for SAP S/4HANA infrastructure on Azure offers compelling benefits for both SAP partners and end customers:

For SAP Partners:

Accelerated Deployments

MyPlatform's automated and standardized foundation allows partners to deploy the Azure infrastructure for SAP S/4HANA significantly faster, reducing project timelines and costs.

Reduced Implementation Risk

The built-in GRC and best-practice architecture minimize the risk of errors and compliance issues during deployment.

Focus on Value-Add Services

By offloading the complexity of infrastructure management to MyPlatform, partners can focus their expertise on higher-value activities like SAP S/4HANA implementation, customization, and application management.

Predictable Costs

MyPlatform's transparent pricing model (including enablement fees, monthly operation charges, and platform cost percentages) allows partners to offer more predictable infrastructure costs to their customers.

Enhanced Customer Satisfaction

Delivering a stable, compliant, and evergreen infrastructure leads to happier customers with smoother SAP S/4HANA operations and upgrades.

For SAP Customers:

Faster Time to Value

Get your SAP S/4HANA environment up and running on a solid Azure foundation quickly.

Reduced Operational Burden

MyPlatform's managed service significantly reduces the need for in-house Azure infrastructure expertise and the effort required for ongoing maintenance, patching, and monitoring.

Assured GRC

Benefit from built-in GRC capabilities that help meet compliance requirements from day one, reducing risk and audit complexities.

Simplified SAP S/4HANA Upgrades

The evergreen and uniform infrastructure provided by MyPlatform makes future SAP S/4HANA upgrades smoother and less disruptive.

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Cost Efficiency

MyPlatform offers a cost-effective alternative to traditional consulting engagements for building and managing Azure infrastructure, with transparent and predictable costs.

Increased Focus on Innovation

Free up your IT resources to focus on leveraging SAP S/4HANA capabilities to drive business innovation.

Conclusion

The journey to SAP S/4HANA on Azure is a strategic one, promising agility and innovation. However, the underlying infrastructure's complexity can pose significant challenges.

MyPlatform offers a compelling solution by providing a standardized, automated, and managed Azure platform with built-in GRC and an evergreen approach.

By automating the heavy lifting of infrastructure deployment and maintenance, MyPlatform empowers SAP partners to accelerate their customers' cloud journeys and focus on delivering core SAP S/4HANA value. For SAP customers, MyPlatform ensures a secure, compliant, and stable foundation for their digital core, simplifying operations, reducing risk, and making future SAP S/4HANA upgrades a more manageable process.

Embrace the future of SAP S/4HANA on Azure with **MyPlatform** – your shortcut to a secure, efficient, and evergreen cloud infrastructure.

To learn more about **MyPlatform** and how it can benefit your SAP S/4HANA initiatives, visit www.myplatform.net.