Lenovo Hybrid Cloud Solutions for SAP with Microsoft Azure

Solution Brief

Lenovo Offerings in the SAP Hybrid Cloud Space

As SAP customers are increasingly faced with the challenge of cloud adoption and the need to comply with SAP's 2027 deadline moving them away from legacy SAP platforms, many are finding that a simple lift-and-shift approach does not work for their business critical applications.

There are thousands of customers globally, who have invested millions of dollars on optimizing their SAP systems over the last two decades, who now need a strategy to safeguard their mission-critical SAP systems while also embracing the cloud. Lenovo is a market leader in on-premises, private cloud solutions for SAP and offers a wide array of SAP certified solutions for SAP HANA and SAP Business Suite.

Lenovo can also offer flexible solutions to SAP customers considering Microsoft Azure public cloud for SAP workloads and allowing them to achieve a "best of both worlds" hybrid approach.

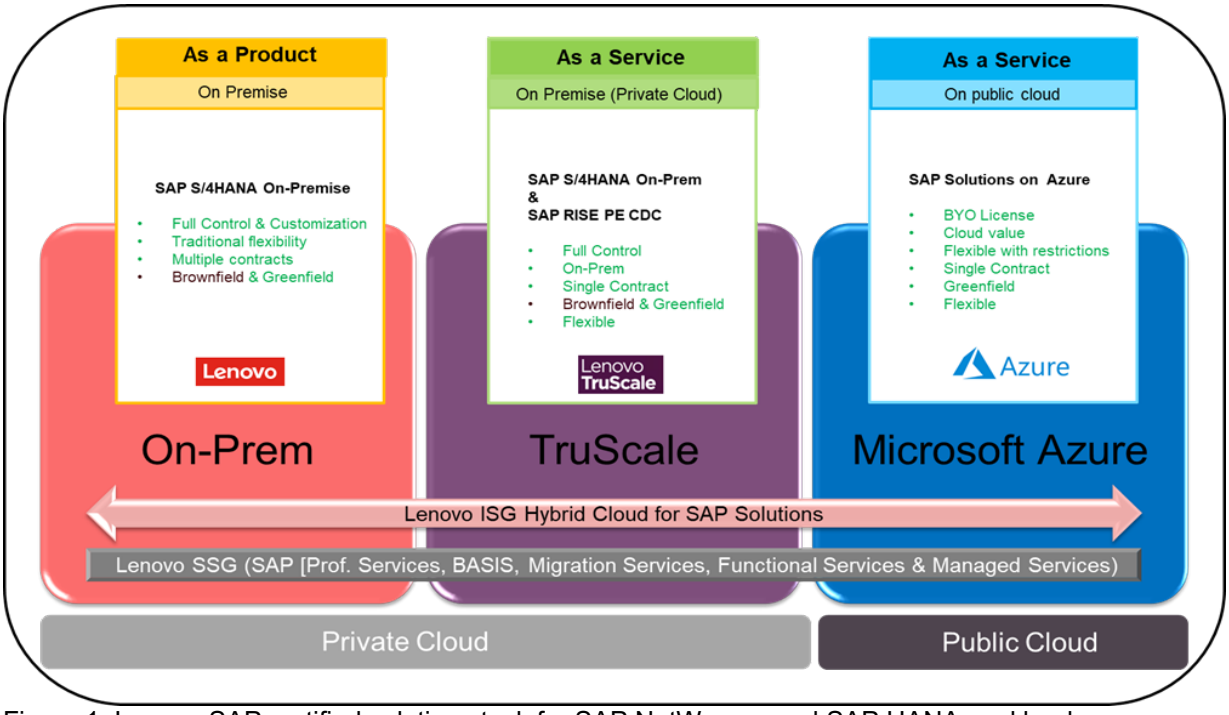

Figure 1. Lenovo SAP certified solution stack for SAP NetWeaver and SAP HANA workloads

As depicted in the figure above, Lenovo can offer a seamless solution with support and services, helping customers to deploy, manage, and monitor their SAP landscape.

With Lenovo's hybrid cloud solution for SAP, customers can now choose which of their workload elements will be hosted in their own datacenter or in a co-location. This can allow them to comply with local regulatory legislation for data integrity, data sovereignty and data security.

For on-premises deployments Lenovo offers two options to the customers:

1. CapEx - in this model customers buys all the infrastructure needed to run their SAP workloads upfront.
2. OpEx - with the Lenovo TruScale Opex model customers can opt for a Pay As You Go model, which provides the highest possible TCO savings especially for larger SAP workloads. Lenovo TruScale is an SAP certified private cloud option.

Customers can choose to deploy part of their SAP ecosystem on-premises (for example their Production workloads) while others can be hosted on cloud (for example Development /Quality Assurance /Test /Disaster Recovery).

The Lenovo hybrid cloud solution with Microsoft Azure can be used as a single platform to support this.

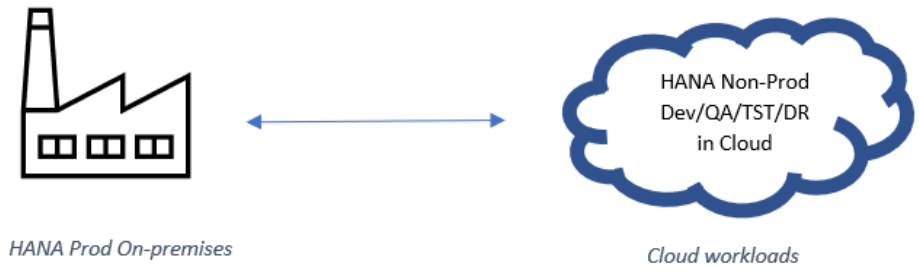

Figure 2. Lenovo hybrid cloud solution for SAP

Transitioning to the Cloud

As SAP customers contemplate their cloud strategy, there is often a perception that a cloud migration will no longer involve any on-premises element. However many industry experts believe that most SAP S/4HANA deployments will be a hybrid mix of on-premises and cloud and that cloud migrations may not be straightforward for SAP customers as they try to assess which workloads should go where.

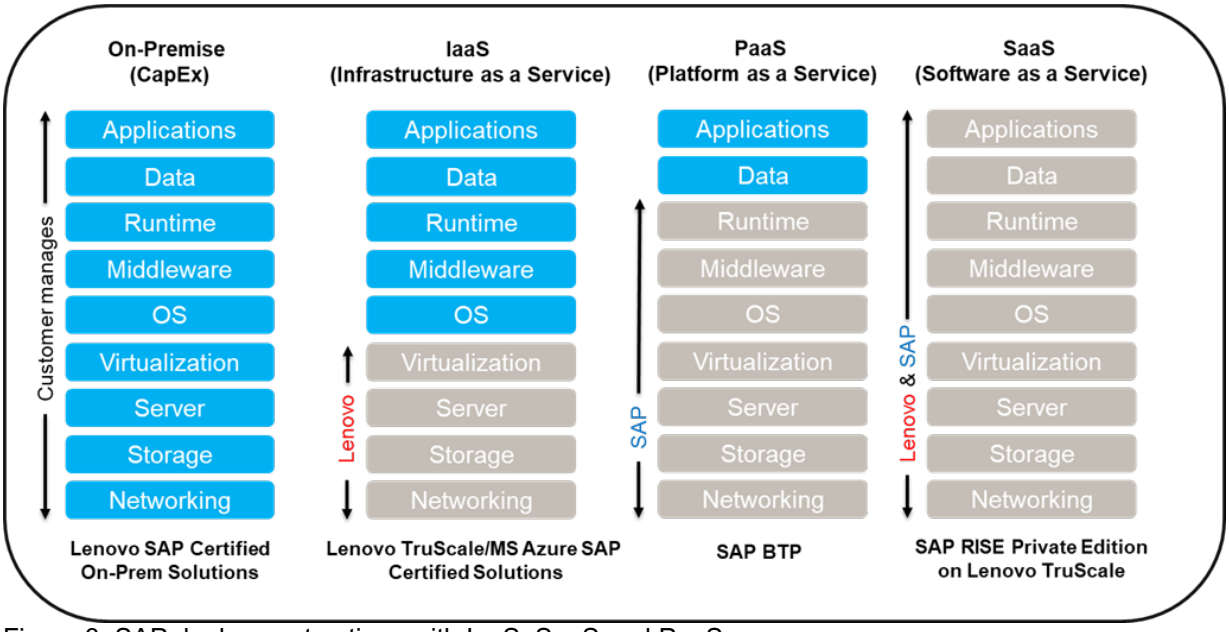

Figure 3. SAP deployment options with IaaS, SaaS and PaaS

As the diagram shows there are a variety of as-a-service options available, giving customers the choice of where and how to run their SAP workloads. Many customers have requirements to accommodate sizeable but stable business applications where the load profile is fixed.

When we consider the added pressure brought to bear by the 2027 SAP deadline, customers feel they are having their decisions shaped for them.

It is an open question whether it is more economical to host SAP workloads on-premises or on the cloud, especially as in recent years Lenovo has started seeing a trend whereby some customers are moving systems back on-premises.

The Promise of Hybrid Cloud for SAP Workloads

The SAP hybrid cloud is a combination of on-premises infrastructure, private cloud services, and the public cloud. It allows for the exchange of information between different environments.

Some benefits of hybrid cloud include:

- Control and visibility: over on-premises computing, storage, and networking resources
- Flexibility: scalability and reduced capital cost
- Security: world-class security
- Scalability: organizations can scale up their IT infrastructure quickly
- Cost: lower costs
- Speed: superior option when compared to other cloud or non-cloud-based solutions

The primary advantage of the hybrid cloud approach for business-critical applications like SAP is mostly the workload-based choice. A customer can choose an on-premises deployment for critical production workloads which are not expected to change in size. Non-production or disaster recovery workloads could be hosted on cloud where the impact of dynamic changes on the system are minimal.

What are the SAP Solutions Supported by Lenovo Hybrid Cloud with Microsoft Azure

To support moving enterprise operations to the hybrid cloud, Lenovo provides support for the following SAP solutions on Azure:

SAP S/4HANA	**SAP BW/4HANA**	**SAP BW on HANA**
SAP Business One	**SAP Business Suite**	**SAP Netweaver**
SAP Hybris	**SAP Business Technology Platform**	

Key Benefits of Running SAP Hybrid Cloud with Lenovo and Microsoft Azure

Increased Scalability and Flexibility

A significant advantage of running SAP applications on hybrid cloud is the ability to scale up or scale down non-critical and dynamic application/DB instances and related resources - depending on the changing needs of the business. On the same lines, you can choose to deploy some of your most business critical and mission critical SAP production systems on-premises with a Lenovo ThinkSystem stack for SAP solutions. In addition, customers can choose from a range of compute options, such as virtual machines, containers, mission critical servers and storage to best suit their specific needs and budget providing cost-effective and efficient options for running business critical SAP software.

Cost-effective Solution

Migrating SAP workloads to the hybrid cloud can result in sizable cost savings for businesses that leverage the pay-as-you-go Lenovo TruScale and Azure pricing model that only charges for the resources used. This approach can greatly reduce the sizable upfront costs typically associated with running SAP ERP software with an all-CapEx approach. With a selective deployment of critical and non-critical workloads in the cloud and in the on-premises datacenter, it brings an effective TCO savings without compromising on performance, reliability, or security.

Enhanced Security

Aside from performance and availability, security is a top priority for businesses running SAP mission critical applications and who are considering migrating those workloads to the cloud. As we all know, security is essential to the functionality of effective, managed cloud solutions.

Decades of experience have set Lenovo apart and allowed them to create some of the most reliable and secure solutions existing today. Lenovo has capitalized on all this experience and industry-leading cybersecurity values. SAP customers migrating to Lenovo hybrid cloud can take advantage of features like data encryption, network isolation, identity and access management, and advanced threat protection to secure their mission critical business applications. HIPPA, SOC, and GDPR compliance certifications and attestations provided by Lenovo and Azure can help SAP customers meet regulatory requirements while ensuring data privacy and protection.

Improved Performance and Reliability

Performance and reliability are critical factors that can impact success especially for business applications from SAP. Providing a range of compute options, such as memory-optimized SAP Servers and high-performance virtual machines, Lenovo hybrid cloud with Azure provides businesses with choices to meet their very specific IT needs.

Simplified Management

Managing SAP applications across a large landscape is a resource-intensive and challenging task for IT. With Lenovo hybrid cloud, customers who migrate can simplify the management of their applications by leveraging Lenovo TruScale, xClarity, Azure Portal, Azure Monitor, and Azure Advisor.

Equipped with these tools, SAP customers who migrate to Lenovo hybrid cloud can achieve greater visibility into their infrastructure and applications enabling them to proactively monitor and manage their SAP applications in a cost-effective and efficient manner.

Lenovo hybrid cloud also provides SAP-run businesses with tools like Red Hat Ansible and Azure Automation, which allows users to automate the creation, deployment, monitoring, and maintenance of resources in the hybrid cloud.

Global Reach and Accessibility

There are several benefits afforded an SAP customer who migrates part or all of their SAP landscape to Lenovo hybrid cloud with Azure, but of chief importance, is the advantage of Microsoft's global datacenter network to deploy their SAP applications closer to their customers and users. This can result in improved performance and user experience. Azure offers an extensive number of regions and availability zones across the globe, enabling businesses to deploy their SAP applications in regions that best meet their business needs and compliance requirements.

Each Azure region is a geographical area in which one or more physical Azure datacenters reside. These datacenters exist as part of a latency-defined perimeter to offer the best possible performance and security to Azure users.

In addition, many Azure regions provide availability zones, which are separated groups of datacenters within a region with their own independent power, cooling, and networking infrastructure. These are designed so that if one zone experiences an issue, then regional high availability is supported by the remaining zones.

Read more about **Azure Geographies here**.

The Customer Experience Modernized with Microsoft CSP

The Microsoft Cloud Solution Provider program, CSP for short, is a licensing agreement that Microsoft introduced in 2015 which allows organizations to procure Microsoft cloud services and software licenses directly from Microsoft partners, one of which is Lenovo, a direct and indirect CSP provider. Services and products available through CSP include Microsoft Office 365, Microsoft Azure, and a subset of desktop and server licenses. With CSP, organizations enjoy the flexibility of how they're billed – they can be invoiced monthly or annually and can even take advantage of hourly rates for specific services like Azure SQL.

Lenovo is a direct and indirect global **Microsoft CSP provider**!

Why Lenovo

Lenovo is a leading provider of x86 servers for the data center. Featuring rack, tower, blade, dense and converged systems, the Lenovo server portfolio provides excellent performance, reliability and security. Lenovo also offers a full range of storage, software, solutions, and comprehensive services supporting business needs throughout the IT lifecycle.

Who to Contact?

For presales support with an SAP deployment leveraging Microsoft Azure, please contact Lenovo's SAP Centre of Competence at SAPSolutions@lenovo.com

Resources

1. Lenovo Cloud Marketplace (cloud software subscriptions)
2. Microsoft SAP Solutions on Azure page
3. SAP Gateway for Microsoft: Azure Integration
4. SAP on the Microsoft Cloud
5. SAP on Lenovo

Related product families

Product families related to this document are the following:

- Microsoft Alliance
- SAP Alliance

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