

SAP HANA on VMware vSphere 6.0 Best Practices Resource Guide

Introduction

This guide provides references to best practices and related resources for virtualizing, configuring, deploying and optimizing SAP HANA running on VMware vSphere®. These documents will offer a convenient way to augment your knowledge or answer questions you might have about operating SAP HANA virtualized.

What is SAP HANA?

If you are not yet familiar with all aspects and capabilities of the SAP HANA platform, the Master Guide is where you should start. The Master Guide is the central starting point for the technical implementation of SAP HANA and touches on the following subjects: overview, architecture, software components, and deployment scenarios.

[SAP HANA Master Guide](#)

What is VMware vCloud Suite?

VMware vCloud Suite® is an enterprise-ready, cloud management platform that delivers the industry's most complete solution for managing a heterogeneous hybrid cloud. vCloud Suite supports companies addressing cloud management requirements across day-one and day-two operations for compute, storage, networking, as well as application-level resources. This extends the capabilities of a VMware vSphere private cloud environment. Learn more in the white paper and data sheet.

[Whitepaper](#)

[Datasheet](#)

Virtualizing SAP HANA

VMware vSphere is the preferred way to virtualize the high-performance SAP HANA database. Running SAP HANA virtualized can offer agility and hardware consolidation, and ease system provisioning, reduce total cost of ownership (TCO), and offer additional options for planning and managing multiple systems landscapes.

[SAP HANA on VMware vSphere](#)

[SAP on VMware vSphere](#)

[SAP HANA Support Note 1788665 for virtualized environments](#)

Choosing the Right Hardware Platform to Virtualize SAP HANA

The SAP HANA system setup needs to be done on SAP HANA and VMware vSphere certified hardware, and successfully verified with the SAP HANA hardware configuration check tool to be supported by SAP and VMware.

[VMware Hardware Compatibility Guide](#)

[SAP HANA Certified Hardware Directory](#)

[SAP HANA Hardware Configuration Check Tool](#)

Running on Shared Storage

The SAP HANA Tailored Data Center Integration (TDI) option allows customers to use certain components of their existing hardware and infrastructure instead of using the corresponding components that are delivered with an SAP HANA appliance.

Leveraging SAP HANA TDI to deploy SAP HANA on shared storage in customer environments is the preferred deployment model to enable features like vSphere HA, vMotion, DRS, and VMware vSphere Fault Tolerance.

[Overview—SAP HANA TDI](#)

Optimizing Performance

VMware and SAP have jointly tested SAP HANA running on vSphere and have ensured that performance will meet the most demanding of customer scenarios. The corresponding *Best Practices Guide for Deployments of SAP HANA on VMware vSphere 6* will be made available shortly after the GA announcement on www.vmware.com.

The following document outlines the different considerations that vSphere and network administrators must take into account when designing the network with VMware vSphere Distributed Switch™. It also discusses standard best practices for configuring vSphere Distributed Switch features.

[VMware vSphere Distributed Switch Best Practices](#)

This paper provides data on performance and system resource utilization at various load levels for different types of workloads so you can select the appropriate disk access method for your application.

[Performance Characterization of VMware Virtual Machine File System \(VMFS\) and raw device mapping \(RDM\) Using a SAN](#)

Configuring Availability for SAP HANA

Running SAP HANA on vCloud Suite ensures high availability for SAP HANA with capabilities like VMware vSphere vMotion®, VMware vSphere High Availability, and VMware vCenter™ Site Recovery Manager™ that support a broad range of recovery scenarios from planned and unplanned downtime due to various infrastructure faults, to disasters that can decommission an entire site. Learn more from these best practices resources.

[vSphere vMotion Best Practices document](#)

[vSphere Availability Best Practices](#)

[VMware vSphere 6 Fault Tolerance](#)

Learn More

To learn more about SAP HANA running on VMware virtual infrastructures please visit www.vmware.com/go/sap-hana or call your VMware representative.

