

DEPLOY SAP HANA® AT YOUR OWN PACE AND WITHIN YOUR BUDGET

Achieve exceptional return on investment (ROI) and business value from SAP HANA by deploying it on the FlashStack® converged-infrastructure (CI) solution from Pure Storage and Cisco.



WHAT'S BLOCKING YOUR PATH TO SAP HANA?

In this age of digital transformation, SAP HANA® has become the gold standard for modern businesses seeking real-time analytics and the insights they provide. The SAP HANA platform offers businesses a way to tap into the flood of data available from the Internet of Things (IoT), internal business applications, social media, and the vast increase in mobile devices. Organizations can use the SAP HANA platform to roll out innovative apps and services that help generate new revenue streams. And if your business is currently running SAP® Business Suite on a traditional relational database-management system (RDBMS) such as Oracle® Database 12c, Microsoft® SQL Server®, or IBM® DB2®, the incentive to move to the SAP HANA platform is even stronger because you only have until 2025 to complete your migration before SAP ends support for SAP Business Suite on those platforms.

With so much incentive, what's holding companies back? For many businesses, the predominant answer is cost. After all, the initial migration to SAP HANA, including licensing, infrastructure, deployment, and support, can easily exceed \$1–2 million, as demonstrated in the ["Pure Storage FlashStack for IoT Solution" white paper](#) from SAP.¹ Companies need to justify that cost by demonstrating clear business value and ROI. But even the exceptional speeds that the SAP HANA platform brings to analytics might not provide a quantifiable increase in value for the business — especially in the short-run. Without quantifiable benefits, businesses can have a hard time measuring and identifying an overall ROI that justifies the heavy upfront investment.

Pure Storage® FlashStack® can help you overcome the obstacles blocking your migration to the SAP HANA platform. The CI solution can help you reduce upfront and ongoing hardware costs, achieve clear business benefits, and achieve a faster ROI, so you can begin your digital transformation today.

Jump Start Your Migration to SAP HANA

Pure Storage FlashStack is the first 100-percent all-flash storage solution for SAP environments. FlashStack combines Pure Storage all-flash storage with the latest compute and networking components from Cisco. The solution is available as a [Cisco® Validated Design \(CVD\)](#), an integrated architecture that speeds time to deployment and reduces deployment risks for SAP HANA implementations. Cisco engineers comprehensively test and document every CVD to ensure a faster, more reliable, and fully predictable deployment.

FlashStack CI helps you jump start your SAP HANA migration by:

- Significantly lowering upfront capital costs and long-term operating expenses by providing a fully integrated, validated CI solution built with a highly efficient, affordable all-flash storage array²

PURE STORAGE COLLABORATES CLOSELY WITH CISCO AND SAP

Pure Storage and Cisco

Pure Storage collaborates closely with Cisco to deliver industry-leading ROI for FlashStack® converged infrastructure. As a Cisco® Preferred Solution Provider, Pure Storage actively participates in the following Cisco initiatives:

- **Cisco Validated Designs:** A Cisco published solution that lowers risk and speeds time to deployment
- **Cisco Solution Support for Critical Infrastructure:** Provides a single support number for Cisco and Pure Storage joint solutions
- **Cisco Capital:** Provides tailored financing for FlashStack solutions, including coverage for Pure Storage
- **Cisco Solution Incentive Program:** Encourages Cisco partners to develop, market, and deliver industry solutions that create successful business outcomes

Pure Storage and SAP

Pure Storage is an SAP® PartnerEdge® program member, an SAP® Application Development partner, and has completed qualification with the SAP HANA® in-memory computing platform under the SAP Certified Enterprise Storage program. All Pure Storage® FlashArray families are certified for SAP HANA Tailored Datacenter Integration (TDI).⁴

In addition, Pure Storage:

- Supports SAP solutions running Sybase®, Oracle® Database, IBM® DB2®, and Microsoft® SQL Server®
- Develops and tests joint solutions and use cases at SAP's Co-Innovation Labs (COIL)
- Is an active member of the Americas SAP Users Group (ASUG)
- Supports any SAP workload virtualized on VMware® or Microsoft® Hyper-V® solutions, in addition to on bare-metal deployments

- Allowing you to implement and grow your SAP HANA solution incrementally, which helps control capital expenses and offers a path to a faster ROI for your business
- Employing SAP HANA Dynamic Tiering, which can cut costs up to 75 percent, with negligible impact on performance³
- Making it easier for IT to manage and run multiple SAP workloads simultaneously
- Providing a zero-downtime, highly available solution with one call to Cisco for support

Deploy an Efficient, Scalable CI Solution

With Pure Storage FlashStack CI, you can cut time-to-value for IT services in half and simplify infrastructure management.⁵ Everything you need is provided in one complete package built on a fully tested and validated CVD reference architecture.⁵ That simplicity allows IT to set up and optimize the Pure Storage FlashStack CI in hours, instead of days, with no tuning or workload-specific setup required. All those saved deployment hours can help reduce your IT costs and free up your highly paid IT admins for other critical business needs.

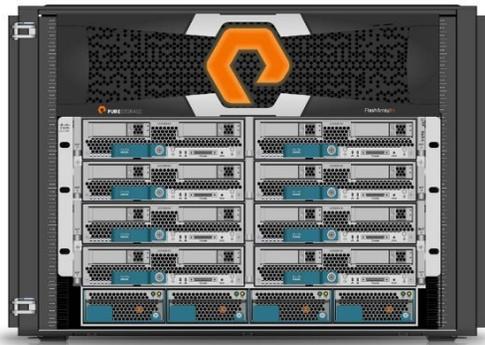
FlashStack CI also helps your bottom line by reducing upfront capital expenditures, because you only have to buy the infrastructure that you need to get started today. Deploy once, and then upgrade as needed for a decade or more. The solution can also easily scale to meet your business needs, so you never have to worry about future growth.

In addition, FlashStack CI is built on 100-percent all-flash storage. Compared to hard-disk drives, flash storage provides exceptional ROI through power and cooling savings of up to 50 percent, in addition to capital expenditure (CapEx) savings of 33 percent over a six-year period.⁶



Grow Your SAP HANA Deployment on Your Own Terms

FlashStack CI is designed from the ground up to scale capacity and performance independently. Compute nodes can be allocated and retired on demand, and storage can be expanded without disrupting service or performance. That agility gives you the freedom to begin your SAP HANA migration with a small, affordable configuration, and then grow incrementally as needed, up to 160 servers and more than a petabyte of storage in a single rack.



Boost Your Savings by Utilizing SAP HANA Dynamic Tiering

The integrated, agile, and scalable design of FlashStack CI can eliminate the cost barriers blocking you from migrating to SAP HANA. You can reduce costs even further by taking advantage of SAP HANA Dynamic Tiering, which is an optional add-on for SAP HANA databases that allows warm data to be moved to extended storage. When you run SAP HANA on a Pure Storage all-flash solution and use SAP HANA Dynamic Tiering for warm data, it's possible to reduce overall costs by up to 75 percent, with only minimal impact on performance — less than two seconds for 500 million records.⁷

Manage SAP Workloads and Data with Ease

Pure Storage snapshots let you use automation to reduce copy, clone, and refresh times by up to 90 percent.⁸ Snapshots let you automate the backup and recovery processes, so you can achieve low recovery-time objectives (RTOs) and recovery-point objectives (RPOs) without investing in backup and recovery tools.

Pure Storage solutions also let you run dev, test, quality assurance (QA), production, and SAP and SAP HANA solutions on the same Pure Storage all-flash array. That eliminates the need to run mission-critical SAP workloads in silos on separate platforms.

Eliminate Downtime and Simplify Support

Evergreen™ Storage by Pure Storage lets you access the latest hardware and software for your CI platform with no downtime, no disruption, and no data migrations. And because the FlashStack CI all-flash array delivers six-nines — 99.9999 percent — availability, your data is always available for your SAP HANA workloads, with no downtime and no performance loss.

Achieve ROI Within One Year

The pressure to modernize your business with SAP HANA is strong and growing; your competitors rely on SAP HANA for real-time analytics that provide the insights they need to stay ahead. With the FlashStack CI solution, the barriers to migration — from infrastructure and deployment costs to upgrades, management, and support — are eradicated. That's how FlashStack can provide a full ROI within nine months.⁹ With benefits like these, it's no wonder Gartner has named Pure Storage as a leader in solid-state arrays three years in a row.¹⁰

Get started on your journey to SAP HANA today.
Download the FlashStack CVD or visit the
Pure Storage FlashStack web site to learn more.

¹ SAP Co-Innovation Lab and Pure Storage. "Pure Storage FlashStack for IoT Solution: A Reference Architecture for Using Virtualized SAP HANA® with Dynamic Tiering on Pure Storage®." 2015. www.sap.com/documents/2016/12/b437d5d2-997c-0010-82c7-eda71af511fa.html.

² Forrester. "The Total Economic Impact™ of Pure Storage FlashArray FA-400 Series Storage Solutions." August 2014. www.purestorage.com/content/dam/purestorage/pdf/AnalystReport/Pure%20Storage%20-%20TEI%20Case%20Study.pdf.

³ Pure Storage. "FlashStack IoT Solution (@SAP COIL): IoT Design Guide Using Virtualized SAP HANA® with Dynamic Tiering on Pure Storage." August 2016. www.purestorage.com/content/dam/purestorage/pdf/whitepapers/IoT_Design_Guide_using_Virtualized_SAP_HANA_with_Dynamic_Tiering_on_Pure_Storage.pdf.

⁴ SAP. "Find Certified Enterprise Storage." <http://global.sap.com/community/ebook/2014-09-02-hana-hardware/enEN/enterprise-storage.html#page=1>.

⁵ Pure Storage. "Rev Your ROI with Smart Infrastructure." www.purestorage.com/solutions/infrastructure/flashstack.html.

⁶ Pure Storage. "Evergreen™ Storage. It's the New Reality." www.purestorage.com/why-pure/evergreen-storage.html.

⁷ Pure Storage. "Lower Costs and Comparable Performance Justify Migrating to SAP HANA Sooner." 2016. www.purestorage.com/content/dam/purestorage/pdf/whitepapers/PureStorage_SAP_HANA_Dynamic_Tiering_WP.pdf.

⁸ In an SAP system-copy comparison of legacy storage versus Pure Storage, Pure Storage performed 3–4 times faster than the legacy system. Source: Pure Storage. "End to End SAP System Copy."

⁹ IDC. "The Business Value of Cisco UCS Integrated Infrastructure for Big Data." February 2016. www.cisco.com/c/dam/en/us/products/collateral/servers-unified-computing/idc-business-value.pdf.

¹⁰ Source: Pure Storage. "Gartner Names Pure Storage a Leader in Solid-State Arrays 3 Years in a Row." www.purestorage.com/microsites/gartner-mq-2016.html. And Gartner. Magic Quadrant for Solid State Arrays. August 2016.

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