

SOLUTION BRIEF

Maximize Business Continuity for SAP HANA

Gain confidence in data replication, high availability, and disaster recovery with Pure Storage® FlashArray™.

Your operations rely on your SAP HANA database. But how can you keep SAP applications running when a disaster strikes your data center? With so much at stake, ensure that your systems can handle these eventualities and minimize the risk of SAP HANA downtime.

The Challenge of Business Continuity

It can be difficult to find a truly effective and affordable business-continuity solution for SAP HANA. To prevent data loss, the in-memory SAP HANA database requires a complete copy to remain available in persistent storage. But it's not enough just to keep this copy available through the failure of one storage rack. For business continuity, you also need a solution with the resilience to handle catastrophes that can knock out an entire data center—or region. What's more, if the high-availability solution you choose for SAP HANA is too complex or expensive to set up and maintain, these hurdles might keep you from ever truly achieving or sustaining business continuity.

Simple, Dependable Data Replication

Purity ActiveCluster™ from Pure Storage offers a simple, dependable, and affordable business-continuity solution for SAP platforms. It helps ensure that your SAP HANA database remains available through an outage by providing synchronous, active-active replication between two Pure FlashArray units located in different sites within a single, larger region (such as a metro area). The ActiveCluster pair uses synchronous replication to maintain a read/write copy of your SAP HANA data on both arrays, presenting data as a single, consistent copy to hosts connected to either or both arrays. When one array fails, the other takes over transparently.

Then, to protect against larger disasters that can cause widespread outages affecting an entire geographical region, Purity 5.2 and later versions offer the ability to extend an existing synchronous ActiveCluster relationship through asynchronous replication to



ActiveCluster

Enables synchronous replication for low RPO and automatic transparent failover.



Flexible

Use clustered arrays and hosts in multiple sites within active-active bidirectional synchronous replication between data center configurations.

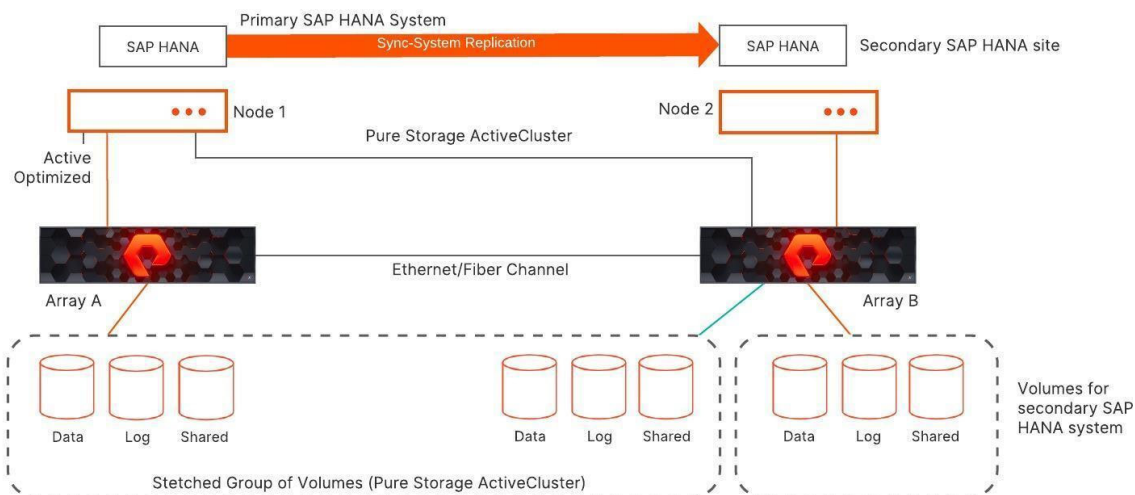


Simplicity

Managing an ActiveCluster stretch cluster is as simple as a single array and can be deployed in minutes.

a third site. This feature seamlessly replicates ActiveCluster volumes to a remote array located anywhere on the globe. This third array allows you to restore data in the event that both FlashArray units fail or experience data loss.

In addition to being resilient, the Purity ActiveCluster feature is simple to set up and maintain. You can configure it in minutes over your interface of choice. Managing an ActiveCluster pair is just as easy as managing a single array. Perform snapshot and clone operations from either array, and with volumes and snapshots synchronously maintained on both arrays. Failovers are transparent, and the arrays automatically resynchronize without extra effort from storage administrators.



Built-in High Availability for Business Continuity

Purity ActiveCluster is a built-in feature of FlashArray storage that helps keep SAP HANA and your business up and running. Choose to host SAP HANA on FlashArray products, and you can easily use the ActiveCluster solution to minimize the risks of downtime, at no extra cost.

Every moment of SAP HANA downtime costs money—easily tens of thousands of dollars a minute according to some SAP customers. So, it's not enough to have just any disaster-recovery plan in place. You need a business-continuity solution that keeps downtime to an absolute minimum, delivering 99.999% availability¹ without impacting system performance. You need a reliable and high-performing solution that enables a low recovery-time objective (RTO).

With its built-in features, Pure FlashArray storage meets your business-continuity needs. SAP HANA runs in memory, but also relies on a continuously updated copy in persistent storage to prevent data loss. If you store the on-disk copy of SAP HANA in any FlashArray product, you can use Purity asynchronous replication to enable near-real-time recovery in case of disaster.

Reliable, Resilient Disaster Recovery

Asynchronous replication is a multi-point feature that first replicates volume recovery points (snapshots) to any array in the FlashArray product family or any system running the Purity operating system software. It then enables recovery from those same snapshots. The FlashArray targets can be anywhere in the world, driving true resiliency and business continuity, even when a disaster takes an entire region offline.

Another advantage of FlashArray asynchronous replication is that it offers recovery points for the entire SAP HANA landscape, including the operating system and all applications, rather than just SAP HANA data. This feature makes backup and recovery simple, reliable, and comprehensive.

Replication design options for disaster recovery among FlashArray units are flexible, supporting one-to-many, many-to-one, and many-to-many deployments. One-to-many enables a single FlashArray system to replicate snapshots to multiple other FlashArray systems, providing multiple disaster-recovery sites for fall back.

Asynchronous replication delivers the high-performance disaster recovery and business continuity you need for SAP HANA. Snapshots are instantaneous, and replication doesn't affect the performance of FlashArray storage. Snapshots are also space-efficient thanks to deduplication, which reduces backup windows.

Protect Your Data and Ensure Business Continuity

Pure FlashArray storage gives your SAP application workloads the protection they need. Purity Protect Snapshots deliver simple and reliable disaster recovery for your SAP HANA data, allowing space-efficient backups from FlashArray solutions storage to a remote FlashArray unit, FlashBlade unit, third-party NFS server, or cloud target.

Additional Resources

For more information, read the [FlashArray Protection for SAP HANA](#) white paper.

¹ For FlashArray.