FlexPod

FlexPod Datacenter for SAP HANA Tailored Data Center Integration Solution Brief

Celebrating 15 years strong: FlexPod and SAP HANA

The year 2025 represents a milestone for Cisco, NetApp, and SAP. In 2010, Cisco and NetApp announced their landmark partnership to bring the FlexPod® converged infrastructure solution to market—combining best-in-class solutions from both companies. That same year, SAP introduced SAP HANA 1.0. Fast-forward to 2025, and both solutions continue to thrive, with FlexPod steadily advancing compute, networking and storage innovations, and SAP HANA growing from 10 to 31,000+ customers worldwide.

Validated designs built on certified SAP HANA hardware

The FlexPod for SAP HANA Cisco Validated Designs (CVDs) bring together Cisco Unified Computing System (Cisco UCS) compute, Cisco Nexus networking, and NetApp® ONTAP® all-flash storage in a converged, modular platform. At the compute layer, customers use Cisco UCS X-Series modular or UCS C-Series rack servers managed by redundant fabric interconnects; the network core relies on Nexus 9000 series switches for high bandwidth 10/25/100GbE connectivity (with optional Cisco MDS for Fibre Channel SAN). Storage is delivered by NetApp AFF all-flash arrays in high-availability (HA) pairs running ONTAP, presenting NFS datastores or FC LUNs for HANA data, log, and shared volumes. The design is fully redundant across compute, network, and storage, and the platform scales up or out to support both single-node and multinode SAP HANA deployments.

Consistent, predictable performance for SAP applications

FlexPod is engineered to keep SAP applications highly available and predictably fast by eliminating single points of failure and enforcing consistent I/O behavior end to end. Redundant UCS fabric interconnects, dual Nexus fabrics with virtual port channels (vPCs) , and NetApp AFF HA pairs provide active-active paths for compute, network, and storage. NIC bonding and multipath I/O enable seamless failover with no application disruption. ONTAP all-flash storage delivers submillisecond latency and uses quality of service (QoS), traffic separation, and dedicated volumes to prevent “noisy neighbor” effects; jumbo frames and carefully segmented VLANs further optimize throughput for NFS or FC designs. At the application layer, SAP HANA system replication with SUSE/Red Hat clustering enables automated failover, and both Cisco UCS and ONTAP support rolling, nondisruptive upgrades to

maintain SLAs during maintenance. These CVD best practices help customers meet SAP HANA storage KPIs for consistent performance under load and resilient operations during failures or growth.

Infrastructure as code expedites hybrid cloud journey

Ansible playbooks accelerate FlexPod for SAP HANA deployments by codifying the entire reference design. They automate deployment and configuration of Cisco UCS server profiles and policies, Nexus VLANs/vPC/QoS, and ONTAP SVMs, exports, and volumes so teams get repeatable builds that cut provisioning time from days to hours while eliminating configuration drift and manual errors. The same automation approach extends to resilience: Disaster recovery (DR) combines SAP HANA system replication with NetApp SnapMirror® technology to replicate to a secondary FlexPod deployment (asynchronous or synchronous) and can be orchestrated for predictable RPO/RTO with scripted failover and failback. For hybrid scenarios, SnapMirror replication to NetApp Cloud Volumes ONTAP or Amazon FSx for NetApp ONTAP enables public cloud DR, where Ansible can create the landing zone, rehydrate datasets, and prepare compute/networking so HANA can be brought online quickly in the cloud and returned on premises later. Wherever you are in your SAP HANA journey, FlexPod can help you achieve your business objectives.

Learn More

- netapp.com/flexpod
- cisco.com/go/flexpod
- Read about NetApp ASA storage performance
- Read about Cisco UCS X-Series servers
- Read the Design Guide
- Read the Deployment Guide