Always-on availability for your data

HPE Peer Persistence for HPE Primera, HPE 3PAR, and HPE Nimble Storage

Be prepared for anything with always-on availability. Allow your hosts, virtual machines (VMs), and data to move freely across data centers and not be constrained by their physical boundaries.

Intelligent storage with built-in disaster recovery

HPE Primera, HPE 3PAR, and HPE Nimble Storage provide proven, highly available platforms with guaranteed availability. With HPE Peer Persistence, you can maintain continuous data availability with no data loss or downtime—even in the event of site-wide or natural disasters. We combine synchronous replication and transparent failover with the power of intelligent storage for a peace of mind solution that literally lets you sleep at night.

Always-on availability

Built from the resilient architecture of HPE 3PAR Storage, HPE Peer Persistence is available on HPE Primera, HPE 3PAR, and HPE Nimble Storage as part of our all-inclusive licensing structure.

Paired arrays are located at metropolitan distances, synchronously replicate data between them and present a highly available storage system to hosts connected to both the arrays. Peer Persistence allows you to configure a high-availability solution between two sites where storage failover and failback is automatic and completely transparent to the hosts and applications running them.

Guaranteed availability

HPE Primera: 100% Availability Guarantee
HPE 3PAR and HPE Nimble Storage: HPE Get 6-Nines Guarantee

1 HPE Peer Persistence supports homogeneous setup between HPE 3PAR Storage, HPE Primera, or HPE Nimble Storage.
Solution brief

Since failover at storage level is automatic and transparent with Peer Persistence your hypervisors and applications don’t have to be restarted even in case of a complete failure of an array. This results in an always-on resilient storage infrastructure for your hypervisors and applications.

A lightweight arbitration mechanism: Quorum Witness helps resolve split-brain conditions that can occur because of network outages between arrays in a Peer Persistence setup, to protect data integrity.

Full utilization and mobility

HPE Peer Persistence is bidirectional. You can set up the arrays in the primary and secondary sites to replicate to each other and mutually protect each other from failures. Essentially allowing you to fully utilize both the arrays by actively using them rather than setting aside one of the arrays as an expensive insurance.

Hosts from both the primary and secondary site can be connected to both arrays in a Peer Persistence setup, and data protected by Peer Persistence can be accessed concurrently. In virtualized environments, this allows you to move your VMs from hosts (hypervisors) in one site to other hosts (hypervisors) on the other site, based on your business and performance needs, without impacting the applications running on those VMs.

In Figure 1, a few VMs are being serviced by an HPE flash system on-site 1 while other VMs are being serviced by another HPE flash system at site 2 located within metropolitan distance from site 1.

Simple protection

Simple to choose—An automatic, transparent storage failover solution in traditional arrays typically requires external appliances, integration with host OS software, which add more cost and complexity. Professional Services are often a requirement with setup and installation typically lasting weeks.

HPE Peer Persistence is built in for HPE Primera, HPE 3PAR, and HPE Nimble Storage. There are no additional appliances or integration required.

Simple to operate—Automatic failover eliminates risky, error prone human intervention. Transparent failover ensures no disruption to application services.

Simple to manage—HPE Primera delivers an on-demand experience that gives you the agility of the cloud. Deploy, manage, and scale your storage in 93% less time with a platform that sets up in minutes, tunes itself, and upgrades transparently without any hassle.

Simple to deploy—HPE Peer Persistence is certified for VMware vSphere® Metro Storage Cluster and is qualified to be used with Microsoft® stretched Hyper-V hypervisor clusters. Easy point and click setup can be done without professional services.

Learn more at hpe.com/storage/flash

Based on HPE internal testing of a leading Tier-1 storage system versus HPE Primera, May 2019.