FreeStor® - Software Defined For Everything Oracle

Virtualization makes working with workloads easier, especially in multi-tenant environments. When your workload is an Oracle Real Application Cluster (RAC) then it makes sense to virtualize using Oracle VM. Virtualized or not, all workloads require storage. FreeStor is a true Software-Defined Storage (SDS) platform that is application aware and integrates into Oracle VM to provide optimal storage, especially in the heterogeneous environments so common in today’s datacenters.

FreeStor is fully certified with Oracle VM. It is multi-Protocol, offering both shared and RAW provisioned storage. FreeStor is capable of optimizing storage for general performance and also for specific Oracle requirements.

FreeStor creates zero copy VM clones and snapshots. As a result, an entire virtual datacenter’s worth of VMs can be spun up almost instantly with a very low load on the storage infrastructure. This is increasingly critical to enterprises as utilization of test and dev environments increases. FreeStor’s ability to take snapshots in different formats makes it ideal for datamining and other big data operations.

FreeStor is both a storage and data protection platform that integrates tightly with the Oracle VM stack. More than simple “SRM for Oracle VM,” FreeStor makes application-aware to Continuous Data Protection (CDP) a primary consideration and it is a fundamental part of the storage architecture.

The data services provided by FreeStor enable an Oracle-optimized Infrastructure as a Service and Database as a Service multi-tenant datacenters with minimal effort. FreeStor’s native support for heterogeneous storage hardware ensures that those datacenters can grow organically, coping with mergers, technical changes and normal vendor drift that occurs with time.

Use Cases

Data Migration is a real world storage problem easily addressed by FreeStor, offering the ability to easily move data between devices. This data can be array to array, site to site, cluster to cluster, and cloud to cloud or can be a many-to-one consolidation project. It can also be part of a storage tiering effort; moving tier one workloads to hybrid or all flash arrays while moving other workloads to traditional arrays and “cold” data like snapshots and backups off to tape or to the cloud.

Continuous availability of data in heterogeneous environments is another key use case for FreeStor. Consider for a moment an environment with both an EMC array and a NetApp array, where the storage administrator wants to be able to replicate data between the two devices. FreeStor lets the storage administrator do this. Two storage devices, for example an EMC array and an Oracle FS1, can be made into a single highly available storage cluster and presented to the server layer transparently as a single data source.

FreeStor uses different dedupe methods optimized for each storage type. Consider site-to-site replication versus tape storage. In site-to-site replication the master index of deduplicated blocks is replicated to both sites along with the data blocks. This is required for data to be retrieved from those devices. FreeStor also has automated tiering that moves data to tape or cloud storage as needed (older snaps, etc.).

It can also move high demand workloads to higher performing storage tiers such as all flash or hybrid arrays or demote lower demanding workloads. FreeStor provides data services parity across the entire range of deployed storage devices, combining a multiplicity of data protection and availability options. It is the storage solution for the real world needs of the modern datacenter.
What is FreeStor

FreeStor® gives customers the power to seamlessly migrate, recover, protect, and optimize data—on or off the cloud—without tying their business to specific hardware, networks, or protocols.

FreeStor simplifies the management of data for seamless migration to, from and across storage platforms. With the brilliance of a single, software-defined platform that works across legacy, modern and virtual environments, IT managers can tap the smartest data solutions from one pane of glass.

FreeStor combines cutting-edge horizontal platform architecture with the ability to leverage new storage options. The result is greater efficiencies, reduced downtime, lower costs, and improved simplicity.

FreeStor’s unique horizontal architecture simplifies the management of data for seamless migration across Legacy, Modern and Virtual storage environments, without needing to rip-and-replace existing resources.