

TwinStrata cloud-enables business applications

CloudArray™ software provides data protection and network-ready availability for mid-sized businesses

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TwinStrata's introduction of CloudArray™ software to enable integration between business applications and on- or off-premise cloud storage marks one of the first real-world business implementations of cloud-enabled storage. CloudArray provides the look, feel and performance of local storage to the cloud with enhanced availability, security and agility. With CloudArray, companies can easily and quickly implement a variety of solutions such as disaster recovery (DR), data replication, backup / restore, data and application mobility, archiving and many more. Enabling the storage cloud for companies reduces the amount of on-premise infrastructure needed to accommodate business and rapid data growth and thereby reduces the capital required for expansion.

Enter CloudArray

CloudArray software allows businesses to seamlessly integrate business applications with cloud storage without requiring changes to applications or programming to cloud storage APIs. Solutions such as DR for Microsoft Exchange Server, Office Sharepoint Server and SQL Server are prime examples. The software, which can be installed as a virtual appliance supports applications running on both physical and virtual servers. It supports both public and private cloud storage and provides secure, offsite data protection with onsite access to data.

CloudArray operates on VMware, Citrix XenServer, Microsoft Hyper-V, Amazon EC2 and supports connectivity to Windows, Linux, Macintosh, HP-UX and VMware host computers. It interfaces with a variety of cloud storage providers including Amazon S3, AT&T Synaptic and EMC Atmos onLine. The company plans to announce additional providers this year. On the application end, CloudArray presents iSCSI block data storage in the form of data volumes. On the cloud storage end, CloudArray interfaces with both private and public cloud storage APIs. No programming is required to store data to and from cloud storage.

CloudArray's data volumes can be managed, created and modified with user-defined policies for intelligent, adaptive caching, snapshot and replication. CloudArray volume can exist entirely in the cloud and parts of the volumes cached locally for fast access to data. CloudArray replicas exist in the cloud and are cached 100% locally. This volume policy provides asynchronous replication to the cloud, giving the organization two copies of the same volume at all times. And, CloudArray zero-footprint snapshots reside in the cloud and are mountable by the host.

CloudArray's unique feature of Compute Anywhere™ allows business applications instant accessibility to data volumes on-premise, off-premise and in the cloud. For DR, DR-test, test and development, data distribution and many other use-causes, business applications can mount CloudArray volumes and begin operating instantly.

CloudArray is managed through a variety of means depending on the user's choice. IT can access a Web portal for management, use a command line interface (CLI) or even use the included graphical user interface (GUI).

CloudArray software supports solutions providing standard file-level protocols – CIFS and NFS – and offers AES encryption of both in-flight data and at rest data. Data transfer to the cloud is minimized via caching and data compression. And local caching can take place on direct attached storage, network attached storage, solid-state disk or

storage area networks, with support for multiple dynamic caches on multiple storage types. With these policies, caches can be optimized for cost, performance or availability to best meet application requirements.

CloudArray supports several main business-critical application categories: Data protection applications, File and Archive, and Disaster Recovery (DR) for Business Applications. For Data Protection, applications include support for Symantec's BackupExec, Veeam Backup and Replication, PHD Virtual's esXpress, Vizioncore's vRanger Pro, CA's ARCserve and Oracle RMAN, among others. For File and Archive, CloudArray supports popular file systems – Symantec's NFS-based FileStore, Oracle's ZFS and Windows CIFS-based NAS. Finally, DR for Business Applications, CloudArray presently supports Microsoft Exchange Server 2010, SharePoint Server 2007 and SQL Server 2008 providing companies with a method to replicate and archive data to cloud storage.

One of the most important features of CloudArray is its space-efficient snapshot capability. Snapshots can be taken at any interval to create a retention policy that is instantly accessible and can serve as a first line of data recovery with virtually no restore time. Because snapshots contain only changed data relative to the primary image, disk capacity requirements are minimized and because snapshots occur in the cloud, there is no associated bandwidth penalty.

SSG-NOW Assessment

TwinStrata's CloudArray is impressive and its real-world business implementations have resulted in significant benefits by its customers. CloudArray reduced monthly operational expenses by 90 percent in some cases. It reduced data restore times from days to minutes. CloudArray increased data availability to levels of 99.99 percent. It removed storage limits at companies allowing an increase in business agility and provided mid-sized businesses with an instant DR strategy.

The CloudArray software is versatile in both the number of cloud providers it supports as well as its ability to provide management across both private and public storage clouds. CloudArray avoids lock-in with cloud providers and even lets organizations replicate or migrate data between cloud providers. And in supporting block-level as well as file interfaces, CloudArray delivers choice to the customer.

CloudArray also gives businesses instant availability of data whether it's stored on-premise, off-premise or in the cloud. Its snapshot and replication capability allow instant access and recoverability from disaster. Finally, CloudArray volumes are cached locally while stored in the cloud. Having flexible caching policies that can meet the performance needs of applications, they promise the same performance and speed of access as locally-cached volumes.

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