DELL EMC CLOUDARRAY: CLOUD-INTERGRATED STORAGE

IT organizations today face a seemingly contradictory charter: reduce costs, maintain existing infrastructure, and ensure recovery in the event of a disaster, all while scaling storage capacities to meet business initiatives.

UNLIMITED STORAGE. WORRY-FREE.

For many organizations, this balance of priorities seems an impossible dictate, but with CloudArray cloud-integrated storage, it doesn’t have to be. By integrating the cloud into your storage strategy, you can more efficiently leverage your existing infrastructure by tiering archive and static data into the cloud.

Designed to combine the resource efficiency of the cloud with traditional, on-premises storage, CloudArray enables organizations to scale their storage area networks (SAN) and network-attached storage (NAS) with on-demand cloud capacity. With cloud storage available on a pay-as-you-go basis from public cloud providers or “in-house” from private clouds, it is easy to add the capacity your business demands. As an added benefit, CloudArray’s deduplication and compression optimize cloud capacity and affordability, offering immediate ROI.

LOCAL PERFORMANCE

CloudArray’s dynamic caching helps maintain performance suited to the type of the data stored. The cache uses local, protected disk storage to deliver fast data access while asynchronously replicating data to the cloud. Multiple individual caches can be sized and assigned to different data sets to support varying performance needs and access patterns.

Using the cloud to store active data offsite? Configure a cache so that 100 percent of your data sits locally as well as in the cloud. Thinking about archive? Use a cache sized to 1 percent of your data. Need to do both? Create multiple caches, assign and move volumes as needed.

SECURITY & ENCRYPTION

In order to ensure the security of your data, CloudArray employs in-flight encryption to the cloud, as well as at-rest encryption. Not only is each volume encrypted using 256-bit AES encryption prior to replicating to the cloud, CloudArray also encrypts the data and the metadata separately, storing the different encryption keys locally to prevent any unauthorized access by anyone, including your cloud storage provider.

DEDUPLICATION & BANDWIDTH CONTROL

When adopting cloud storage, many organizations worry about the impact the cloud can have on their overall network performance in addition to potential costs associated with large cloud capacities. CloudArray alleviates both of these problems with selectable deduplication and compression for massive data reduction and bandwidth throttling tools to control the amount of bandwidth used.

ESSENTIALS

- CloudArray makes cloud storage look, feel and perform like local storage

FRICTIONLESS

- Quickly integrate existing applications with public and private clouds using familiar SAN and NAS interfaces
- Installs in minutes
- Available as both physical and virtual appliances
- Virtual bulk licensing for multi-site, multi-tenant deployments

COST-EFFECTIVE

- Move infrequently accessed data to low cost cloud tiers
- Reduce your required cloud capacity with deduplication and compression
- More efficiently use existing storage resources based on performance requirements

POWERFUL

- Ensure data accessibility and performance with policy-driven local caching
- Quickly scale infrastructure to meet current and future storage needs
- Robust multi-factor encryption and security
CloudArray block-level deduplication means redundant data is not pushed to the cloud, thus reducing the amount of data that is actually stored and bandwidth required. By reducing the capacity usage, CloudArray not only significantly cuts total storage costs in the cloud, but also reduces access fees and bandwidth costs.

In order to better control cloud bandwidth needs, CloudArray’s bandwidth throttling allows you to adjust bandwidth usage. Featuring an easy to use scheduler, CloudArray enables you to create recurring weekly schedules to accommodate high-usage days or times, balancing network availability for CloudArray with the network needs of other applications.

**SPACE-EFFICIENT SNAPSHOTS**

Advanced scheduling and retention functionality within CloudArray’s snapshot feature allows organizations to gain additional data protection for data stored into the cloud. CloudArray snapshots are space-efficient, offering capacity savings over traditional full copies and reducing storage costs while providing continuous, offsite data protection in the cloud.

**CLOUDARRAY AND OTHER DELL EMC PRODUCTS**

In addition to being available as a standalone appliance, CloudArray has been specifically qualified and integrated with a number of Dell EMC products to provide a more complete end-to-end solution. These products include:

**VMAX All Flash & VMAX3:** CloudArray for VMAX gives users the ability to seamlessly tier archive and inactive data off of VMAX All Flash and VMAX3 arrays and into the cloud storage provider of their choice. The result is a more efficient storage environment that leverages the high scalability and lower costs of the cloud with the power of VMAX. Learn more about the solution and its benefits [here](#).

**VPLEX:** CloudArray allows VPLEX customers to lower their cost of storage and adopt a pay per use model for their low-tier storage for secondary copies and inactive data. Customers can seamlessly move workloads from primary storage arrays to low-cost cloud storage and back in order to lower the cost of their archive tier and take advantage of database level partitioning to move colder data to cloud storage. Learn more about the solution and its benefits [here](#).

**VxRail:** VxRail delivers a hyper-converged appliance that includes virtualization, compute, storage, network, and management resources. Each VxRail appliance also includes a license for CloudArray to expand NAS or SAN capacity using either public or private cloud providers without the need to add more physical drives. The net result is a
comprehensive storage solution that easily scales up and out to the cloud. Learn more about the solution and its benefits at VCE.com.

Object storage solutions: As CloudArray provides a gateway between object storage and traditional storage interfaces, many Dell EMC object storage products can operate as CloudArray's storage target. These include cloud solutions like Dell EMC Elastic Cloud Storage (ECS), Dell EMC Atmos and Dell EMC Isilon. Learn more about these solutions at EMC.com.