DELLTechnologies

Unity XT Hybrid Flash Arrays

Compelling storage for general purpose workloads without compromise

ESSENTIALS

- **Scalable**: 2U design future proofs your investment; scalable to 1500 drives and 16PB raw capacity with support for 15.36TB & 7.68TB SSDs in hybrid and all flash pools
- **Powerful:** Dual-socket Intel™ CPUs, dual-active controllers that drive HA and performance
- **Simple**: Install & configure in minutes with intuitive easy-to-use web based (HTML5) management
- **Efficient:** Expected data reduction for hybrid pools (~up to 2:1)* and all flash pools (~ up to 3:1)* providing more effective usable capacity; dynamic pools that lower drive expansion costs and accelerate data recovery
- **Multicloud:** Connect Unity XT HFA with several cloud deployment options to simplify operations, lower costs and reduce complexity.

BENEFITS

- **Investment protection:** Cost effectively scale systems with online data-in-place controller upgrades
- **Consolidation**: Consolidate mixed workloads (file, block, vVol data) onto a single array
- **All-inclusive:** Every Unity XT HFA comes to you with all-inclusive software making your investment easy to purchase and own
- **DevOps:** Expand Unity XT HFA operations with no-cost DevOps plug-in technologies.
- **Flexibility:** Deploy as a physical appliance, software-defined virtual appliance or included in a Dell converged infrastructure
- **Metro node:** True active-active synchronous replication over metro distances

*Specific configuration and data requirements apply

Designed for performance

Unity XT Hybrid Flash Arrays (HFA) are fully unified and start in a sleek 2U form factor with an architecture designed for workloads that don't require the sub-millisecond latencies of NVME/All Flash architectures. Unity XT HFAs take full advantage of the latest Intel™ dual-socket processors and sizable controller memory that doubles IOPs performance compared to previous Unity models. Unity XT HFAs include linear multicore scaling, inline data reduction with zero detect for block and file in both hybrid and all flash pools. Each array includes FAST Cache (SSD Read Cache) and FAST VP (Virtual Pools) software that automates performance and efficiency management across the array.

Optimized for efficiency

Unity XT HFAs implement a dual-active controller architecture that ensures data access to go along with 5-9's system availability.

Cost efficiency – Effectively upgrade array controllers to a higher-level Unity XT HFA when more performance, capacity and system limits are required while data remains in place and online.

Consolidation – If you have several demanding environments, such as databases and transactional processing, Unity XT HFAs are the easy way to consolidate them to save space and cost, while improving data management, data protection and response time.

Data migration – Even if you've been using legacy Dell systems (Unity, VNX, SC Series, PS Series), migrating data to Unity XT HFAs couldn't be simpler. Unity XT HFAs provide you with built-in block data migration utilities directly managed from Unisphere making your transition as seamless as possible. File migration from Unity and VNX is also available through host or application tools & VMware Storage vMotion.

Advanced file – Unity XT HFA provides a 64-bit file system that scales four times larger than older VNX platforms and includes features such as file system shrink and reclaim that improves utilization and flexibility, use of Top Talkers or file correlated stats and full sync/async file replication capabilities with Metrosync file failover management.

Integrated copy data management - Unity XT HFAs support snapshot mobility & thin clone integration with Dell AppSync application-aware and orchestration automation to provide customers with integrated copy data management (iCDM) increasing storage utilization.

Built for multicloud

Unity XT HFAs support cloud deployment options and functionality including Cloud Tiering Appliance, Cloud Edition and Microsoft Azure Arc-enabled services:

- Cloud Tiering Appliance, an automated policy-based virtual appliance for file tiering and block snapshot archiving to multiple S3-based clouds and PowerScale freeing up valuable capacity and considerably reducing backup windows.

- Cloud Edition, a full featured Unity XT software-defined virtual storage appliance with HA, flexibly deploys with VMware Cloud Foundation on AWS bringing file services to the cloud and for running workloads such as VDI, Test/Dev, replication services to a third site – and more.

- Microsoft Azure Arc-enabled services and certification for Unity XT extends storage to Azure clouds to run traditional Microsoft SQL & PostgreSQL on infrastructure of choice.

Security

Unity XT HFAs ensure that the data residing within the storage array as well as data in transit to and from the system is secure. Unity XT prevents unauthorized access to data with security software such as HTTP security headers, remote secure credentials, XML key generation integration and data-at-rest encryption across all drives.

Data protection

Enterprise data protection solutions deliver the resilience and availability to protect your organization from data and application outages or worse. Unity XT HFAs take the financial pain out of availability and disaster recovery deployment by including a complete suite of all-inclusive data protection software such as unified snapshots and thin clones, unified synch/asynch replication with throttling and snapshot replication, metro node synch replication, data-at-rest encryption and file level retention. Unity XT HFAs also support RecoverPoint continuous data protection and remote replication.

Unified Snapshots – Unity XT HFAs simplify daily operations by providing a single interface for creating and managing snapshots and thin clones for block and file storage, reducing operational complexity. And with UFS64, you get up to 256 snaps per file system and the ability to create thin clones direct from snapshots. Snapshots can be replicated, refreshed, applied to vVols and compared to report back differences.

Local and remote replication – Unity XT HFAs include a full complement of array-based asynchronous and synchronous replication capabilities for block and file as well as support for RecoverPoint replication options with no additional investment. Replicate snapshots for greater data protection and recovery options. The async replication capabilities include throttling, interface pairing and full copy avoidance while sync replication supports fan-out and cascading topologies. Unity XT HFAs also support the use of Metrosync Manager for automated file level failover and sync replication over metro distances.

Dynamic pools – Once a minimum drive count for a given RAID protection has been selected in either an all flash or hybrid pool, users can eliminate accounting for hot spares when configuring the array and select almost any number of drives to place within the pool, essentially increasing capacity one drive or as many drives at a time reducing cost. Additionally, dynamic pools reserve space within the pool to replace drives which may fail or have failed within the pool. The reserved space is not part of the usable capacity of the pool. This function accelerates the rebuilding of failed drives as more drives are used in the rebuild process.

File protection – Unity XT file data is protected with File-level Retention (FLR) for safeguarding files from modification or deletion until a specified retention date. FLR allows you to create a permanent, unalterable set of files and directories and ensure the integrity of data. There are two different types of file-level retention available: Enterprise (FLR-E) and Compliance (FLR-C).

Simplified management

Unity XT HFA's HTML5 management interface (Unisphere) brings new levels of visibility and control to your storage operations enabling you to rapidly configure your array and get it into production. A REST API is also supported leveraging the Unity XT HTTP interface to flexibly manage and automate operations for your Unity XT HFA and other REST-enabled platforms.

DevOps integrations

Containers are fast becoming the new software architecture paradigm and Kubernetes has emerged as a popular Container Orchestration platform choice. Dell is at the forefront of developing solutions that enable customers to efficiently run containerized workloads while leveraging powerful storage integrations for DevOps workflows. Unity XT HFAs support Dell's Container Storage Interface (CSI) plugin to interoperate with Kubernetes.

Automation is a major theme in IT Procurement discussions. The good thing is automation no longer means programming-intensive and hard-to-maintain scripting. Automation-enablers such as Ansible, Puppet, VMware vRealize Orchestrator (vRO) and PowerShell enable you to automate, protect and integrate DevOps operations and service delivery tasks.

Metro node connectivity

Metro node is a hardware add-on feature for Unity XT HFAs that provide true active-active synchronous replication over metro distances. In addition, metro node supports data mobility to non-disruptively relocate workloads to enable storage technology refresh without application downtime. Metro node is also the only solution available that provides true active-active configurations by allowing simultaneous writes at both sites and supports Recovery Point Objective (RPO) and Recover Time Objective (RTO) equal to zero downtime.

Services and support

Services and Support options are available for Unity XT HFAs, including:
- **Dell ProSupport for Enterprise** offers highly trained experts around the clock and around the globe to address your IT needs, minimize disruptions and maintain a high level of productivity
- **Dell ProSupport Plus for Enterprise** provides proactive and predictive measures to get ahead of problems before they happen.
- **Dell ProDeploy for Enterprise** provides expert planning, installation and configuration to help customers rapidly adopt new technologies and set the organization up for success.
- **Dell ProDeploy Plus for Enterprise** the most complete deployment offer available in the market, ensures you are ready for today and prepared for tomorrow.

Learn more about Dell Unity XT solutions   Contact a Dell Technologies Expert

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