

# Dell Unity XT Hybrid Flash Arrays

Compelling storage for general purpose workloads

## ESSENTIALS

- **Scalable:** 2U design future proofs your investment; scalable to 1500 drives and 16PB raw capacity
- **Powerful:** Dual-socket Intel™ CPUs, dual-active controllers to drive performance
- **Simple:** Install & configure in minutes with intuitive easy-to-use web based (HTML5) management
- **Efficient:** Inline data reduction (deduplication, compression, zero-detect) for hybrid and all flash pools providing more effective usable capacity
- **Multi-cloud:** Choose from multiple cloud deployment options to help simplify IT, 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



## Designed for price-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 performance and sub-millisecond latency of all flash. 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. Unity XT HFAs are also equipped with FAST Cache (SSD Read Cache) software that automates the performance of flash with the economics of disk.

## 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 (Dell Unity, VNX) or 3rd party storage systems, migrating data to Unity XT HFAs couldn't be simpler. Unity XT HFAs provide you with built-in and best practice data migration capabilities for file and block data directly managed from Unisphere making your transition seamless. File migration from NetApp and VNX is also available through the Cloud Tiering Appliance.

**Advanced file** – Unity XT HFA unified architecture supports a 64-bit file system that scales four times larger than older VNX platforms and adds features like 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 interoperability with Dell AppSync application-aware and orchestration to provide customers with integrated copy data management (iCDM) saving capacity and costs.

## Built for multi-cloud

Unity XT HFAs are built to support multi-cloud interoperability enabling you to configure deployment options that fit your business model and expected business outcomes.

**Validated designs** – Unity XT HFAs with block and file storage are validated for use with VMware Cloud Foundation (VCF) enabling you to build your own hybrid cloud that's based on VCF and best of breed components to easily provision storage.

**Multi-cloud Data Services enabled by Faction for Unity XT** – Enabled by Faction, Unity XT HFAs can participate in automated DRaaS solutions with VMware Cloud on AWS for seamless, enterprise-grade, pay-as-you-go DR in the cloud. Additionally, you can achieve agile, multi-cloud access letting you seamlessly switch between clouds for implementing use cases including workload migration, analytics, test/dev and more to maximize business outcomes.

**Expand to the Cloud** – Expand to the cloud with Dell 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.

**Consume in the Cloud** – Unity XT 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.

**Cloud Data Insights** – CloudIQ is Dell's cloud based AIOPs that uses telemetry, machine learning and other algorithms to provide users with notifications and predictive analytics indicating the operational health of the array, remediation advice, anomalies, capacity projections, reclaimable storage, and more.

# Dell Unity XT Hybrid Flash Storage

## 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 and data migration

Unity XT HFA's HTML5 management interface (Unisphere) brings new levels of visibility and control to your storage operations as well as built-in file and block data migration capabilities from legacy Dell systems (Dell Unity, VNX) or 3rd party storage systems to a Unity XT HFA – all directly managed from Unisphere. (File migration from NetApp and VNX systems is also available using the virtual Cloud Tiering Appliance) 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 run Kubernetes workloads.

**Automation** is a major theme in IT Procurement discussions. The good thing is Automation no longer means programming-intensive and hard-to-maintain scripting. Tools like VMware vRealize Orchestrator (vRO) provides a drag and drop environment to quickly automate infrastructure operations and service delivery tasks. Unity XT HFAs support Dell's vRO plugin enabling customers to automate end to end workflows spanning the entire infrastructure stack.

## Metro node appliance

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

There are two Support options available for Unity XT HFAs. Customers can choose from:

- **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.
- **Learn more at [ProSupport Enterprise Suite](#)**

There are two Deployment options available for Unity XT HFAs. Customers can choose from:

- **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 at [ProDeploy Enterprise Suite](#)**



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