

Unity XT All-Flash Storage Arrays

Compelling storage without compromise

ESSENTIALS

- **Scalable:** 2U design future proofs your investment; scalable to 1500 drives and 16PB raw capacity or 48PB effective
- **Powerful:** Dual-socket Intel™ CPUs, dual-active controllers to drive performance and availability
- **Simple:** Install & configure in minutes with intuitive easy-to-use web based (HTML5) management
- **Efficient:** Guaranteed 3:1 DRR with inline data reduction (deduplication, compression, zero-detect) providing more effective usable capacity
- **Multicloud:** 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 AFA comes to you with all-inclusive software making your investment easy to purchase and own.
- **DevOps:** Expand Unity XT AFA 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 performance

Dell Unity XT All-Flash Arrays (AFA) start in a sleek 2U form factor with a modern architecture designed for all-flash performance. Unity XT AFAs take full advantage of the latest Intel™ dual-socket processors and sizable controller memory that doubles IOPs performance compared to previous Dell Unity models. The all-flash design includes linear multicore scaling, inline data reduction with zero detect for block and file, zero impact drive firmware-based garbage collection, write coalescing minimizing IO, intelligent wear leveling and high-density SSD's up to 15.36TB.

Optimized for efficiency

Customers can offset data growth with a guaranteed 3:1 DRR and no assessment with inline compression and deduplication. Users can apply this DRR to configure a dense Unity XT AFA base model with an 80 drive 3U expansion enclosure and 15.36TB SSDs to achieve up to 900TBe per RackU. Also, unlike some competitive systems, Unity XT AFAs implement an dual-active controller architecture that ensures data access to go along with 5-9's system availability.

Consolidation – If you have several demanding environments, such as databases and transactional processing, Unity XT AFA systems are the way to easily consolidate them to save space and cost, while improving performance, efficiency 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 AFAs couldn't be simpler. Unity XT AFAs 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 AFA unified design supports a 64-bit file system that scales four times larger than VNX and adds features like file system shrink and reclaim that improves utilization and flexibility, Top Talkers or correlated file stats and full sync/async file replication capabilities with Metrosync file failover management.

Integrated copy data management - Unity XT AFAs 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 multicloud

Unity XT AFAs 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 AFAs 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.



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Data protection

Enterprise data protection solutions deliver the resilience and availability to protect your organization from data and application outages or worse. Unity XT AFAs 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 sync/async replication with throttling and snapshot replication, metro node synch replication, data-at-rest encryption and file level retention. Unity XT AFAs also support RecoverPoint continuous data protection and remote replication.

Unified snapshots – Unity XT AFAs 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 from snapshots. Snapshots can be replicated, refreshed, applied to vVols and compared to report back differences.

Local and remote replication – Unity XT AFAs include a full complement of native array-based as well as RecoverPoint replication options, providing robust protection with no additional investment. Replicate snapshots for greater data protection and recovery options. Unity XT AFAs include native asynchronous and synchronous replication for both file and block data with async throttling, async interface pairing and full copy avoidance. Unity XT AFAs also support the use of Metrosync Manager for automated file level failover and synch 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 AFA 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 AFA'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 Technologies is at the forefront of developing solutions that enable customers to efficiently run containerized workloads while leveraging powerful storage integrations for DevOps workflows. Dell Unity XT AFAs support the 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 AFAs support 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 AFAs that provides 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

- 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



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