Reasons to Choose Pure FlashArray™ over NetApp AFF Series

Don't compromise with NetApp's legacy architecture. Take action now and experience how Pure Storage® revolutionized storage with FlashArray and Evergreen StorageTM. With a proven track record and 99.9999% availability—even across generational upgrades—Pure has eliminated data migrations and planned downtime for thousands of customers. It's simple to operate, always modern, and provides peace of mind.

Why Choose Pure FlashArray™?

Best-in-class Storage Experience

- Pure's proven data services platform is built from the ground up to deliver the agility you need to respond to changes in your business.

- FlashArray offers 100% NVMe performance, proven 99.9999% availability, consistent performance through non-disruptive upgrades and maintenance, and industry-leading predictive support.

Proven Track Record

- Users have performed more than 3,000 controller upgrades over eight generations with no downtime.

- Proven six-nines of availability, including time for maintenance, failures, and generational upgrades.

- Pure's global average Total Efficiency rate is greater than 10:1, about 2x that of the average competitor's efficiency claims.

No Forklift Upgrades, No Data Migrations

- Requires no disruptive, expensive rip-and-replace upgrades and storage re-buys.

- FlashArray//X leverages stateless, software-driven architecture and supports.

- non-disruptive upgrades of any part of the array with no planned downtime or performance.

Architected for Today's Performance Needs

- Designed for large-scale enterprise shared-storage deployments, high performance, and mission-critical applications.

- Addresses the most demanding enterprise application performance requirements with DirectMemory™ Modules with Intel Optane CPU and an 100% all-flash, end-to-end NVMe and NVMe-oF array portfolio.

- Experience new levels of performance for critical applications with latency as low as 100μs.

The Evergreen™ Experience

- Deploy FlashArray once and enjoy continuous innovation as you expand and improve performance, capacity, density, and/or features—all without planned downtime, performance impact, or data migrations.

- A single subscription offers satisfaction and capacity guarantees, flat maintenance fees, all-inclusive array software, and included/anytime controller upgrades that protect your investment for 10+ years.[†]

Storage with Certainty

"We don't want to have to change infrastructure every three or four years, or do painful data migrations. We want to stay with the same technology platform, but also see that technology evolve while protecting our investment. Evergreen does that. I've never seen anything like it from any other vendor."

CHIEF TECHNOLOGY OFFICER, IP TELECOM

Compare FlashArray to AFF Series

Pure Storage FlashArray™	NetApp AFF Series
Anytime Evergreen Controller Upgrades with Full Investment Protection • Upgrade to both latest-generation or higher-model controllers, whenever your business demands, via Evergreen Gold's Upgrade Flex. • Full trade-in credit for old controllers. • No renewal required, no limit on number of upgrades.	**Limited Credits for Upgrades** • Requires 6 years of SupportEdge Premium support.[1] • Can be exercised once every 39 months at renewal.[2] • Limited investment protection: the NextCredit[3] program requires unspecified hardware credits toward purchase of new controllers.

Proven Non-Disruptive, Data-in Place Upgrades
• Evergreen has delivered over 3,000 non-disruptive controller upgrades to users as they have modernized and expanded their Pure systems.
• All Pure products are engineered to be Evergreen with: non-disruptive upgrades even across generations; the ability to mix flash geometries and keep your existing capacity; hot-swappable media and controllers; and long-life chassis and components.
	No Data-in-Place Upgrades
	• Upgrading from one NetApp AFF system to a new one is either:
	  – disruptive, depending on the source and target AFF model‡, or
	  – non-disruptive[4], only if the systems are clustered together and doesn't impact overall performance, or if the utilization is below 50% per HA pair.

FlashArray//X Proven Track Record of Simplicity • FlashArray//X and Purity have a proven track record for stability and an all-inclusive array feature set. • Provisioning storage only requires 3 things: a name, capacity and QoS limits.	**ONTAP Operating System is Old and Complex** • Becoming a certified storage admin requires at least seven days of training[5]. • ONTAP documentation center has over 44 manuals for a total of 7,000+ pages.[6] • Storage volume provisioning has more than 30 tunable parameters.[7]

Simple, Native Clustering and Replication for Business Continuity and Agility
• FlashArray//X offers native stretch clustering and synchronous replication, that is simple to set up and use.
• Full support for virtualization including vVols.
	MetroCluster or SnapMirror Synchronous
	• NetApp MetroCluster[8]
	  – is complex and rigid (mirror aggregates, not volumes).
	  – is Active/Passive, with manual failback.
	  – requires a 3rd site and all controllers must be the same model.
	  – doesn't support vVols.
	• NetApp SnapMirror[9] is not active-active, RTO and RPO are not zero, and it has a manual failover process (which can be scripted).

Cloud Block Storage for Mission-Critical Applications
• Pure Cloud Block Store™ delivers consistent data services, resiliency, and APIs to run applications seamlessly across the hybrid cloud.
• Pure as-a-Service™ unified subscriptions apply to both Pure Cloud Block Store and true on-premises StaaS, offering the ultimate in Pure choice, flexibility and agility.
	Cloud Volumes ONTAP and Cloud Volumes Service[10]
	• NetApp Cloud Volumes ONTAP
	  – does not support MetroCluster
	  – has a High Availability option between 2 availability zones that is created by mirroring all the data between 2 instances
	  – is not optimized for cloud performance
	  – requires the use of NetApp Cloud Central[10], a NetApp proprietary portal.
	• Limited availability of NetApp Cloud Volumes Service in Public Cloud regions[11].
	• Latency between Amazon EC2 instances and Cloud Volumes Service (random read & write) can vary from 1 to 5ms, depending on the AWS region[12].

Storage without Tradeoffs

"No disruption. No new purchases. Zero downtime. Pure Storage certainly delivered on their promise and proved that we made the right choice to move to all-flash storage."

HEAD OF GROUP INFORMATION MANAGEMENT & TECHNOLOGY, ASCENDAS-SINGBRIDGE GROUP

References

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blog: https://blog.netapp.com/blogs/powerful-program-helps-you-evolve-your-it-technology-netapp-nextcredit/

2   Article: https://www.wwt.com/article/netapp-insight-2019-keystone-platform-updates-cloud-and-more

3   NextCredit: blog.netapp.com/blogs/powerful-program-helps-you-evolve-your-it-technology-netapp-nextcredit

4   Considerations for upgrading controller hardware: docs.netapp.com/platstor/index.jsp?topic=%2Fcom.netapp.doc.hw-upgrade-controller%2Fhome.html

5   ONTAP Training Courses: www.fastlaneus.com/course/netapp-cdotdp9?hl=cdotd & www.fastlaneus.com/course/netapp-mcciiw?hl=mcc

6   ONTAP Documentation Resources: www.netapp.com/us/documentation/ontap-and-oncommand-system-manager.aspx

7   ONTAP 9 Documentation Center - Volume Create: docs.netapp.com/ontap-9/index.jsp?topic=%2Fcom.netapp.doc.dot-cm-cmpr-970%2Fvolume__create.html&cp=5_1_29_1

8   MetroCluster: www.netapp.com/us/media/tr-4705.pdf & www.netapp.com/us/media/tr-4375.pdf & www.netapp.com/us/media/tr-4689.pdf

9   SnapMirror Synchronous: www.netapp.com/us/media/tr-4733.pdf

10   NetApp Cloud: cloud.netapp.com/home

11   NetApp Cloud Volumes Service Global Regions: cloud.netapp.com/cloud-volumes-global-regions?hsCtaTracking=11cf108c-5dc8-4924-b776-a2350350f9af%7C7d17b80c-3778-418b-987b-20551d8ca931#cvsAws

12   NetApp Cloud Volumes Service AWS Regional Performance: cloud.netapp.com/cloud-volumes-service/aws-benchmarks

†   See Evergreen Terms and Conditions.

‡   See https://docs.netapp.com/platstor/topic/com.netapp.doc.hw-upgrade-controller/GUID-24F398DF-C12C-401C-A923-D76D71253140.html#:~:text=You%20plan%20to%20upgrade%20controller,it%20to%20the%20new%20nodes