

DCIG 2015-16 All-Flash Array Buyer's Guide Now Available

DCIG is pleased to announce the September 29 release of the *DCIG 2015-16 All-Flash Array Buyer's Guide* that weights, scores and ranks more than 100 features of twenty-eight (28) all-flash arrays or array series from eighteen (18) enterprise storage providers.



The marketplace for all-flash arrays is both rapidly growing and highly competitive. Many changes have taken place in the all-flash array marketplace in the 18 months since the release of the *DCIG 2014-15 Flash Memory Storage Array Buyer's Guide* in March of 2014. We have witnessed substantial increases in capacity, storage density and performance. Over this same period, AFA's have established a track record of dramatic application acceleration and proven reliability.

All-Flash Arrays Now Replacing Traditional Enterprise Arrays in Mainstream Businesses

When we prepared the previous edition of this Buyer's Guide, multiple vendors indicated that prospective customers were looking to move to an all-flash environment for their critical business applications. These same vendors report that enterprises are now looking to use flash memory not just for critical applications, but for *all active workloads* in the

data center. In a recent study¹ by 451 Research, 22% of respondents have already implemented an all-flash array. Of those, 57% were using the array to speed up multiple applications and 26% had fully replaced legacy arrays.

The return on investment (ROI) of using flash for all active workloads already made sense in 2014; and subsequent improvements in all-flash performance and flash prices make the ROI of moving to all-flash storage compelling. As a result, organizations will increasingly replace primary enterprise storage systems with all-flash arrays. The *DCIG 2015-16 All-Flash Array Buyer's Guide* will help those organizations accelerate the all-flash array selection process.

Enterprises wanting to change storage vendors will discover a robust and competitive marketplace. Multiple vendors have created new storage architectures designed from the ground up for flash memory and have created new expectations around ease-of-use and analytics-based proactive support.

Enterprises that are generally happy with their current storage vendor and storage system (performance issues aside) are likely to find an all-flash version of the storage system is available. Such businesses can realize some or all of the benefits of an AFA without the risk associated with migrating to a new storage architecture, and without having to re-implement data protection strategies.

A Systemic Opportunity to Speed Up the Business

The purchase of an all-flash array (AFA) is most easily justified and will have the greatest benefit if approached as a systemic data center and business opportunity. Organizations taking this approach may discover that “flash is free”. That is, the return on investment within the IT budget is rapid, and accelerating all enterprise applications creates the opportunity to reduce costs and increase opportunities across

the entire business. As Eric Pearson, the CIO of InterContinental Hotels Group was quoted in Pat Gelsinger's VMworld 2015 keynote, "It's no longer the big beating the small. It's the fast beating the slow."²

Who's Who of All-Flash Array Providers

Vendors with products included in this guide are AMI, Dell, EMC, Fujitsu, Hitachi Data Systems, HP, Huawei, IBM, iXsystems, Kaminario, NetApp, Nimbus Data, Oracle, Pure Storage, SolidFire, Tegile, Violin Memory and X-I/O Technologies.

The *DCIG 2015-16 All-Flash Array Buyer's Guide* top 10 solutions include (in alphabetical order):

- AMI StorTrends 3600i Series
- Dell Compellent SC8000
- HP 3PAR StoreServ 20000 Series
- HP 3PAR StoreServ 7000c Series
- Hitachi Data Systems HUS VM
- IBM FlashSystem V9000
- NetApp AFF8000 Series
- Pure Storage FlashArray//m Series
- SolidFire SF Series
- Tegile IntelliFlash T3000 Series

The [HP 3PAR StoreServ 20000 Series](#) earned the *Best-in-Class* ranking among all all-flash arrays evaluated in this Buyer's Guide. The HP 3PAR StoreServ 20000 Series stood out by offering the following capabilities:

- Achieved the *Best-in-Class* rank in 3 out of 4 categories; meaning it has the most comprehensive set of features expected of a primary enterprise storage array
- Multi-protocol SAN, NAS and object access, with support for data migration to OpenStack-based clouds; meaning it can handle any workload

- Provides up to 46 TB raw flash capacity per rack unit (TB/U) making it one of the highest density arrays in this guide
- Robust VMware and Microsoft technology support including VMware VVols and Microsoft SCVMM, ODX and SMB3

About the *DCIG 2015-16 All-Flash Array Buyer's Guide*

DCIG creates Buyer's Guides in order to help end users accelerate the product research and selection process; driving cost out of the research process while simultaneously increasing confidence in the results.

The *DCIG 2015-16 All-Flash Array Buyer's Guide* achieves the following objectives:

- Provides an objective, third party evaluation of products that evaluates features *from an end user's perspective*
- Provides insight into the state of the all-flash array (AFA) marketplace
- Identifies the significant benefits organizations should look to achieve through an AFA implementation
- Identifies key features organizations should be aware of as they evaluate AFA's
- Provides brief observations about the distinctive features of each array
- Ranks each array in each ranking category and presents the results in easy to understand ranking tables that enable organizations to get an "at-a-glance" overview of the AFA marketplace
- Provides a *standardized one-page data sheet* for each array so organizations may quickly do side-by-side product comparisons that enable organizations to quickly get to a short list of products that may meet their requirements.
- Provides a solid foundation for getting competitive bids from different providers that are based on "apples-to-

apples” comparisons

The *DCIG 2015-16 All-Flash Array Buyer’s Guide* is available immediately to subscribing users of the [DCIG Analysis Portal](#). Individuals who have not yet subscribed to the DCIG Analysis Portal may test drive the DCIG Analysis Portal as well as download this Guide by following this [link](#).

¹ Coulter, Marco. “Flash Storage Outlook.” Proc. of Flash Memory Summit 2015, Santa Clara, CA. Flash Memory Summit, 12 Aug. 2015. Web. 28 Aug. 2015. <https://www.flashmemorysummit.com/English/Collaterals/Proceedings/2015/20150812_S203D_Coulter.pdf>.

² *Pat Gelsinger on Stage at VMworld 2015, 15:50*. YouTube. YouTube, 01 Sept. 2015. <<https://www.youtube.com/watch?v=U6aF00M0bZA&list=PLeFlCmV0q6yt484cUB6N4LhXZn0so5VC7&index=3>>.