

Dell Compellent Flash-optimized solutions

Flash performance with high capacity at HDD prices

Enhance performance in enterprise applications and VDI environments with improved I/O and low latency. Dell™ Compellent™ Flash-optimized solutions' unique way of tiering data allows you to deliver high-speed SSD performance to more applications in your environment while reducing your costs significantly compared to other flash-optimized solutions.¹

Designed to drive down costs while boosting performance

The Dell Compellent Flash-optimized solutions can provide flash performance at rotating disk capacities and prices as the first solution in its class to automatically tier data from write-intensive, single-level cell (SLC) SSDs to lower cost read-intensive, multi-level cell (MLC) SSDs and traditional rotating disks.² Dell Compellent Flash-optimized solutions provide all-flash or hybrid-flash storage for your data center. The Dell Compellent innovative Flash-optimized solutions offer up to approximately twice the price advantage over competitive hybrid-flash solutions, and up to approximately five times the price advantage over competitive all-flash solutions.³

The Flash-optimized solutions are designed to provide high performance with low latency for enterprise databases, OLTP and ERP systems, and other I/O intensive workloads. With Compellent Flash-optimized solutions, you can achieve greater than 300,000 IOPS with low latency.⁴

Flexible configurations to meet your requirements

Dell Compellent Flash-optimized solutions provide all-flash or hybrid-flash storage with the energy-efficient SC220 flash enclosure that has 24 2.5" drive bays or slots. In the all-flash solution, the 24 2.5" drive bays are populated with SSDs; the hybrid-flash solution uses a mix of SSDs and rotating disks.

Flash-optimized solutions have six 400GB write-intensive SLC SSDs and six 1.6TB read-intensive MLC SSDs within the Dell Compellent SC220 enclosure.

You can fill the 12 remaining SC220 slots with a 6-pack of 400GB write-intensive SLC SSDs and a 6-pack of 1.6TB read-intensive MLC SSDs (one of the densest 2.5" enterprise-class MLC SSDs available) for an all-flash solution. For a hybrid-flash solution, you can fill the 12 remaining slots with two 6-packs of either SLC SSDs, MLC SSDs, or 1TB 7.2K RPM HDDs.



6-pack 400GB write-intensive SSD	6-pack 1.6TB read-intensive SSD	12 empty slots for 6-pack of: <ul style="list-style-type: none">• 400GB write-intensive SSD• 1.6TB read-intensive SSD• 1TB 7.2K RPM HDD
----------------------------------	---------------------------------	---

SC220 2U 24-drive Flash enclosure

An all-flash solution consists of one or more of SC220 flash enclosures and provides two tiers of storage with both read- and write-intensive SSDs for applications that require high IOPs and low latency. A hybrid-flash solution provides three tiers of storage and can be configured using one or more SC220 flash enclosures with both write- and read-intensive SSDs and HDDs, plus the option to expand capacity using additional SC220 enclosures with 7.2K, 10K or 15K RPM drives, additional SC200 enclosures with large capacity drives, or additional SC280 enclosures with 4TB 7.2K RPM drives.

Advanced enterprise technology

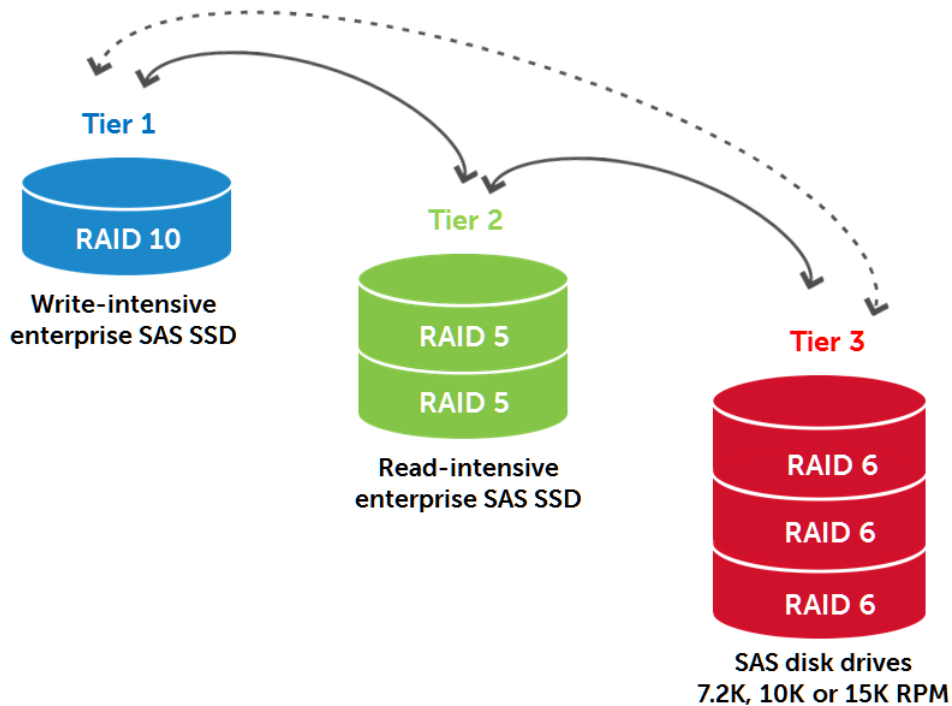
New storage profiles help ensure consistent low latency in performance-sensitive data volumes, while over-provisioned enterprise-class SAS SSDs provide endurance and sustained performance. To avoid any downtime due to SSD failure, the Dell Compellent storage software interface has a "gas-gauge" feature that indicates SSD life expectancy and alerts you when a replacement

becomes necessary. Enterprise-class SSDs in Compellent Flash-optimized solutions have an expected endurance of five years.

The Dell Compellent Data Progression feature offers intelligent auto-tiering that continually optimizes performance and data placement as your system grows, making Flash-optimized solutions ideal for multiple tiers of SSDs. Read-intensive data is automatically moved to read-optimized MLC SSDs,

while write-intensive data stays on high-endurance SLC SSDs and cold data is ultimately moved to spinning disk drives. Use one or several Compellent enclosures to increase your data center's efficiency and performance by keeping highly active data on high-performance Flash-optimized storage and placing less active data on high-capacity HDD storage all within a single array.

With Compellent Data Progression, you can automatically tier data from write-intensive SLC SSDs to lower cost read-intensive MLC SSDs and traditional rotating disks.



¹ G13001797: Dell's innovative Compellent Flash-optimized solution is approximately 1/5 the price versus competitive solutions based on competitive U.S. list pricing from June 2013 IDC Product Evaluation Service (USD). Street pricing calculated assuming a discounting of approximately 50% for all competitive systems and Dell Compellent.

² G13001252: Based on internal Dell analysis performed in May 2013, comparing similar Dell Compellent offerings to EMC VNX Family, HP 3PAR StoreServ, HP EVA, IBM V7000, IBM XIV, Hitachi Data Systems HUS 100 Family, and Oracle Sun ZFS Storage Family.

³ G13001797: Competitive U.S. list pricing from June 2013 IDC Product Evaluation Service (USD). Street pricing calculated assuming a discounting of approximately 50% for all competitive systems and Dell Compellent.

⁴ G13001116: Internal test performed by Dell in March 2013 with Storage Center v6.3.10 on dual SC8000 controllers running workloads using IOMeter with a 100% read, 100% sequential load with 4K sector transfer size. Actual performance will vary. based on configuration, usage and manufacturing variability.

Global services and support

Dell Services can help reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team delivers distinctive capabilities, including Copilot support and optimization as well as full data migration solutions to facilitate consolidation from multiple file systems. Dell takes a holistic view of your needs and designs solutions for your environment and business objectives while using established delivery methods, local talent and in-depth domain knowledge to help lower your total cost of ownership.

Dynamically unify your data center. Visit Dell.com/Compellent.

© 2013 Dell Inc. All rights reserved. Dell, the DELL logo, the DELL badge, and Compellent are trademarks of Dell Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. This document is for informational purposes only. Dell reserves the right to make changes without further notice to any products herein. The content provided is as is and without express or implied warranties of any kind.

