



Dell Compellent Controllers

Storage hardware with the flexibility to meet cost, performance and availability requirements

The Dell™ Compellent™ Storage Center™ SAN is an all-in-one storage array that always puts data in the right place at the right time for the right cost. With its open, agile hardware platform, Storage Center allows organizations to intermix the latest industry-standard technologies in the same array. You can also introduce new and emerging technologies over time on the fly, and scale up and out on demand, quickly adapting to ever-changing business needs without disruption or downtime. You don't need to upgrade to a new hardware platform just to take advantage of new technologies. Instead of undergoing a costly forklift upgrade, you can simply add or change out components.

Deliver high availability, now and in the future

Dell Compellent storage controllers are designed to deliver high availability while meeting specific organizational cost and performance requirements. Redundant and hot-swappable power supplies and cooling fans help to ensure non-stop operation. Dell Compellent controllers—whether Series 40 or Series 30—provide automatic failover capabilities and are hot-swappable when implemented in a clustered configuration.

Dell Compellent controllers also offer the flexibility to meet changing enterprise requirements. Customers can select one or two controllers per system, and then opt to use any combination of 4Gb or 8Gb FC, 1Gb or 10Gb iSCSI, or 10Gb FCoE front-end server interconnects. The controllers connect to any open-system servers without the need for dedicated server agents. On the back-end, Dell Compellent controllers support a combination of 4Gb FC, 3Gb SAS or 6Gb SAS connectivity, depending on the HBAs utilized. Virtual ports increase port capacity, drive bandwidth, I/O connectivity and port failover.

Go enterprise with a Series 30 controller

The Series 30 controller features a 32-bit operating system and a 3.0GHz Dual-core processor. Each unit offers five I/O expansion slots for a maximum of 20 ports. The maximum cache size per controller is 3.5GB, and the battery-backed cache features multi-threaded, read-ahead mirrored write technology for continuous data protection.

Push performance with a Series 40 controller

The Series 40 controller features a 32-bit operating system and a 2.53GHz Quad-core processor. Each unit offers six I/O expansion slots for a maximum of 24 ports. The maximum cache size per controller is 4.0GB, and the battery-less cache features multi-threaded, read-ahead mirrored write technology for continuous data protection.

Next-generation hardware capabilities set the Series 40 controller apart. When used in conjunction with 6Gb SAS technology, I/O performance is improved by 25 percent with the Series 40. Also, the Series 40 features memory that is 20 percent faster than the memory available in the Series 30.

Both the Series 40 and 30 controllers offer support for a fabric switch, as well as Microsoft Cluster Server and Multipath Input/Output (MPIO) technology. The controllers also support leading host operating systems, including Microsoft Windows, Sun Solaris, HP-UX, Linux, IBM AIX, Novell NetWare, Apple, Tru64 and VMware ESX.

Dell Compellent Controllers	
Feature	
Processor	2.53GHz Quad-core processor (Series 40) 3.00GHz Dual-core processor (Series 30)
Cache	4GB, battery-less, multi-threaded, read-ahead, mirrored (Series 40) 3.5GB, battery-backed (72 hr), multi-threaded, read-ahead, mirrored (Series 30)
I/O Expansion Slots	6 PCI-E (Series 40) 1 PCI-X and 4 PCI-E (Series 30)
RAID Level Support	Support for RAID levels 0, 5, 6 and 10 Any combination of RAID levels can exist on a single Storage Center Multiple RAID levels can exist on the same storage tier within an array Storage is virtualized and pooled across array without RAID group limitations
Host Connectivity	
Single Controller Configuration	Supports up to 22 servers directly connected Connecting storage to servers through switches significantly increases flexibility
Clustered Controller Configuration	Supports up to 44 servers directly connected in a non-HA configuration or 22 servers in an HA configuration Connecting storage to servers through switches significantly increases flexibility
Redundancy/Failover	Cooling fans and power supplies redundant and hot-swappable Drives redundant and hot-swappable Automatic drive failover and rebuild, max. number of hot spares configurable Dual paths from controllers to enclosures when clustered Virtual ports increase port capacity, drive bandwidth, I/O connectivity and port failover Microsoft Cluster Server and Multipath Input/Output (MPIO) support
Host Operating System Support	Microsoft Windows, Sun Solaris, HP-UX, Linux, IBM AIX, Novell NetWare, Apple, Tru64 and VMware ESX
Inlet Type	NEMA 5-15/CS22.2, n ⁴ 2
Power Supplies	
Wattage	400 W peak output (Series 40), 360 W peak output (Series 30)
Heat Dissipation	1,365 BTU/hour (Series 40), 1,229 BTU/hour (Series 30)
Physical	
Height x Width x Depth	5.2" (13.2cm) x 17.2" (43.7 cm) x 25.5" (64.8 cm)
Weight	75 lb. (34.1 kg)
Environmental	
Temperature	Operating: 50-95° F (10-35° C)
Relative Humidity	Operating: 8% to 90% (non-condensing)

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