

Instant Insight

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EMC Shrinking Storage to Meet the Expanding Need?

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EMC has announced new high-density configurations of its EMC CLARiiON CX4 and EMC Celerra Gateway systems. The new high-density configurations feature 5,400 rpm 2TB SATA drives that provide double the capacity of 1TB 7,200 rpm SATA drives but at 60% less power per GB. These latest configurations also support EMC spin down technology that powers down inactive disk drives to reduce power requirements by up to 65% over traditional always-spinning solutions. In combination with high-performance enterprise flash drives, and storage efficiency technologies such as EMC FAST, these solutions target organizations that are seeking to more easily manage the growth of storage-intensive applications while reducing power consumption, cooling costs, and floor space requirements in the datacenter or remote office locations.

The high-density CLARiiON CX4 configurations support up to 390 2TB, 5,400, and 7,200 rpm SATA drives as well as high-performance flash drives in a single rack that requires half the floor space and number of power connections over conventional racks with full access to all disk drives from the front of the rack. Organizations that desire CIFS and NFS support can select the high-density Celerra Gateway system, which is based on the CLARiiON CX4.

Pricing/Availability

The new high-density CLARiiON and Celerra Gateway configurations are now available worldwide. EMC has indicated that it will make high-density EMC Celerra unified storage system configurations available later in 2010.

Net/Net

At first blush this announcement might be overlooked as simply an update to a venerable series of storage products. However, upon closer consideration, one can see that these new offerings are a clever approach to meet the growing need for corporate storage that simultaneously addresses several of the ongoing operational challenges in both the datacenter and the remote office. For many, the notion of 5400 rpm and 7200 rpm disk drives in a contemporary enterprise-grade storage solution may seem archaic, yet the crafty inclusion of these seemingly retro technologies facilitates the power-thrifty and high-density achievements of these solutions.

Although performance is always an important factor in any storage solution, not all data demands the highest echelon of performance. When dealing with large quantities of data, it is all the more imperative that organizations successfully match the business value of the data with the cost-effectiveness of its storage. The impressive price/performance ratio of SATA drives combined with the latest 2TB capacity is difficult to overlook especially when this raw capacity is incorporated into storage arrays that offer other performance boosting capabilities. For those who find energy consumption to be a driving consideration, the modest performance tradeoff of an energy-sipping 5400 rpm rotational speed may offer a means by which to increase overall storage capacity in the datacenter while further reducing the power envelope

over that of 7200 rpm platters. Additionally, EMC's inclusion of auto spin down technology further reduces energy consumption as otherwise unused drive arrays are idled and their impact on power consumption diminishes substantially.

Granted, these high-density, smaller footprint storage technologies will not match the performance of high-speed drives common to high-end storage solutions. But that is not the goal of these new offerings; these offerings are about efficiency as manifest in floor space, energy consumption, cooling, and financial performance. Hence it is important to remember how these systems fit into the big picture. First, these systems are not positioned as high-end, high-performance offerings. Second, these systems support EMC FAST, which allows the promotion and demotion of data to primary, secondary, and tertiary storage platforms as demanded by business need. Third, array technology can improve the overall performance of the storage solution, which is after all more than just a standalone storage platter. Last, and most importantly, the efficacy of a storage solution is not measured by the speed or capability of a specific component, but as a holistic undertaking that combines multiple hardware and software technologies with business process to align the solution with the goals of the organization.

With this in mind, we believe that these latest CLARiiON CX4 and Celerra Gateway systems are well positioned to address many of the storage needs within organizations. The focus on efficiency achieved through a clever use of tried, tested, and true storage technology should resonate with organizations that are seeking to balance the multiple constraints inherent in delivering storage services regardless of whether they are datacenter- or remote office-based. These new offerings serve as a reminder that in the quest for the latest and greatest, one can often find the answer in places that might be inadvertently overlooked or easily dismissed. It also illustrates that while EMC prides itself in being a forward-looking company from both a technical and market perspective, the company is quite able to leverage technologies that by themselves may seem less than cutting edge into a solution that addresses contemporary challenges with cutting edge creativity.