



Dell Fluid Cache for SAN:

Product specification sheet

Delivering the stability of a highly available write-back caching solution within a scalable, low-latency SAN environment; Dell™ Fluid Cache for SAN can provide extraordinary I/O performance for OLTP and VDI workloads.

A complete, end-to-end compute layer caching application acceleration solution; Dell™ Fluid Cache for SAN maximizes application horsepower. Designed around a shared server cache pool using PCIe SSDs, data is brought closer to compute and can significantly reduce application response times. Developed to keep business processes functioning even while scaling to meet ever-changing workload demands, an established cache pool can be adjusted on-the-fly.

Potentially reducing deployment requirements, the solution's flexibility can allow compatible existing hardware to be deployed in the solution. Protection of both read and write data is ensured due to the combination of innovative write-back caching technology plus coherency to Dell Compellent™ back-end SAN storage.

Deliver critical results faster

Boost business efficiency to optimize productivity of OLTP workloads with Dell Fluid Cache for SAN. Enabling increased transactions per second (TPS), and decreased average response times (ART), while simultaneously allowing an increased number of concurrent users; the solution can provide a three-fold benefit to the bottom line and give time back to the IT department for their next project.

Maintain confidence that write data is highly available and persistent due to groundbreaking cache pool design utilizing Dell PowerEdge™ servers with PCIe SSDs.

On demand acceleration

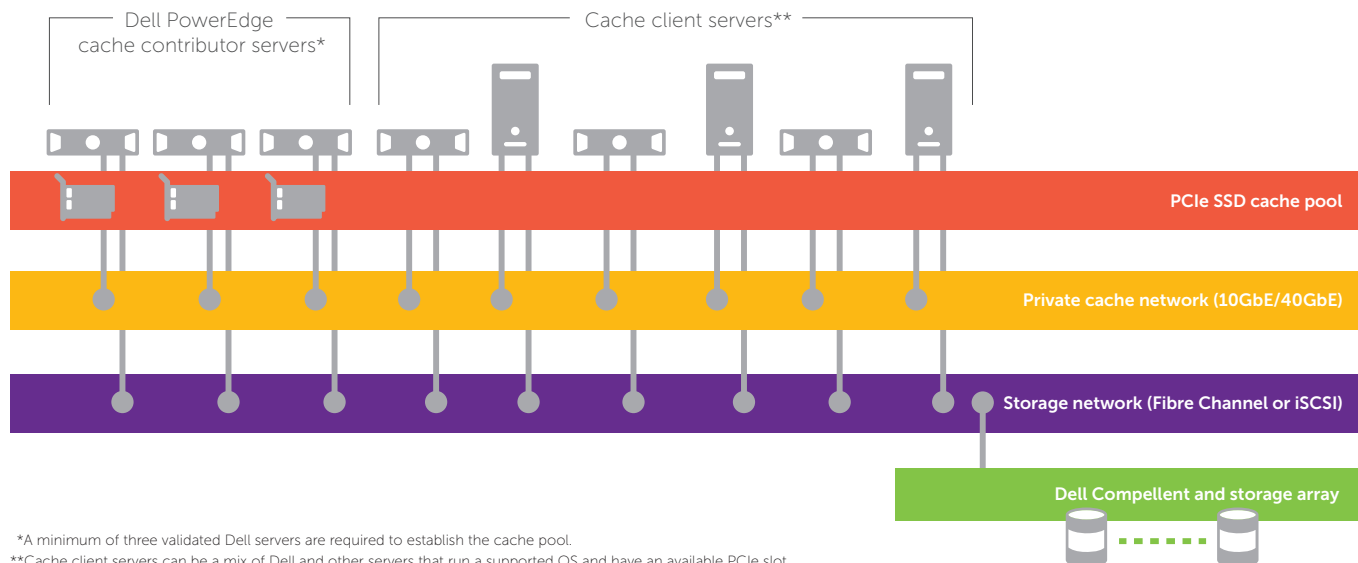
Continue application acceleration with no downtime AND increase computational speed. Using Dell front accessible, hot plug PowerEdge PCIe ExpressFlash SSDs in cache pool servers, the Fluid Cache pool can stay online to keep business processes running during new server and cache additions.

Achieve enhanced flexibility

Revitalize existing hardware by incorporating compatible hardware into a Dell Fluid Cache for SAN deployment. Take advantage of application performance increases on compatible legacy servers and select from a variety of available installation options, which can help IT to deploy with little to no disruption.

Performance with data integrity

Ensure both read and write data are safeguarded from server to SAN. Utilizing write-back SAN caching technology with connection to Dell Compellent, even in the event of a compute node or PCIe SSD outage, write data is highly available in the cache pool cluster.



*A minimum of three validated Dell servers are required to establish the cache pool.

**Cache client servers can be a mix of Dell and other servers that run a supported OS and have an available PCIe slot.

General Requirements

- Verify with your account team for supported VMware and Linux configuration for Dell Fluid Cache for SAN deployments.
- The cluster on which you deploy Dell Fluid Cache for SAN must contain a minimum of three servers per each cache cluster and maximum of nine servers.
- The maximum cache size must not exceed 3.2 TB per server for Linux systems and 1.6 TB per server for VMware systems.
- There must be a cache device installed on at least two servers in the cluster for write-back caching.
- A network adapter that supports RoCE must be installed on each server in the cluster.
- Enterprise Manager must be started and configured to manager the Storage Center (SC) in use with the Fluid Cache software.
- All servers in the cluster must be connected to the SAN and be displayed on the Dell Compellent array.

For information on Dell Fluid Cache for SAN deployment prerequisites, preparing the servers and cache network switch, installing and setting up the Fluid Cache software and configuring and managing Fluid Cache on VMware or Linux systems, see the respective Dell Fluid Cache for SAN deployment guides available at: <http://www.dell.com/CacheSolutions>.

For Dell Fluid Cache for SAN on VMware review details for Fluid Cache software version 2.0.10; and for Linux review details for Fluid Cache software version 2.0.0.

In addition to the hardware listed above, Dell Fluid Cache for SAN software licenses will be required.

License	License information
Perpetual license	Per server node required
Evaluation license	90-day free evaluation available
Software support	Included with ProSupport for hardware
Software maintenance	Annual maintenance available
Deployment services	Available

For more information on Dell Fluid Cache for SAN compatibility and limitations, please visit Dell.com/cachesolutions.

Global services and support

Reduce IT complexity, lower costs, and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage, and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services has a wide range of options to make technology acquisition easy and affordable. Contact your Dell sales person for more information.

Learn more at Dell.com/fluidcache. For additional information about Dell Fluid Cache for SAN, please contact your Dell sales representative.

