



# Dell Fluid Cache for SAN

## Frequently asked questions

December 2013

THIS DOCUMENT IS FOR INFORMATIONAL PURPOSES ONLY, AND MAY CONTAIN TYPOGRAPHICAL ERRORS AND TECHNICAL INACCURACIES. THE CONTENT IS PROVIDED AS IS, WITHOUT EXPRESS OR IMPLIED WARRANTIES OF ANY KIND.

© 2013 Dell Inc. All rights reserved. Reproduction of this material in any manner whatsoever without the express written permission of Dell Inc. is strictly forbidden. For more information, contact Dell.

Dell, the DELL logo, and the DELL badge 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 any proprietary interest in the marks and names of others.

# Frequently asked questions: Dell Fluid Cache for SAN

## **What is Dell Fluid Cache for SAN?**

Dell Fluid Cache for SAN is a complete, flexible enterprise application acceleration solution producing stable, unprecedented I/O performance which can help businesses and organizations reduce online transactional latency, allow increased concurrent users, and improve computational performance for applications such as online transactional purchasing (OLTP) and virtual desktop interface (VDI).

## **How does Dell Fluid Cache for SAN work?**

Dell Fluid Cache for SAN is a scale-out caching solution that can accelerate application performance for multiple servers (a minimum of three servers is required) accessing data from our Compellent SAN, leveraging the ultra-high speed caching pool.

## **What is required to deploy Dell Fluid Cache for SAN?**

A complete solution that can be deployed with little to no disruption to existing IT environments, Dell Fluid Cache for SAN requires Fluid Cache software; a minimum of three compatible Dell PowerEdge Servers supporting PCI Express Flash drives; connection to a 10/40 GbE low latency private network; and connection to a Dell Compellent SC 8000 controller and Compellent Expansion storage.

## **What benefits does Dell Fluid Cache for SAN offer?**

**Performance:** Utilizing Dell Express Flash PCIe SSDs and Dell Compellent storage technologies, Dell Fluid Cache for SAN brings the most frequently accessed data closer to compute resources minimizing data travel from storage through the network, improving response time and accelerating both *reads* and *write* performance.

**Flexibility:** Adaptive, the solution offers database and virtualization performance is scalable on the fly. Interoperability options can allow compatible server inclusion in the cache pool, revitalizing existing servers running virtually any application.

**Stability:** Maintain confidence that cache pool data is highly available and safeguarded by unique write-back caching technology with full coherency to Compellent storage, with no single point of failure from server to SAN.

## **Who can benefit from Fluid Cache for SAN?**

Many businesses and organizations could benefit greatly from the Dell Fluid Cache for SAN solution which can address issues with heavy to power read/write workloads such as OLTP and VDI.

## **How large can a Dell Fluid Cache for SAN cache pool become?**

As business and workloads grow, Dell Fluid Cache for SAN enables scaling of the cache pool which can help you meet computational demand. At launch we anticipate Dell Fluid Cache for SAN can achieve approximately 50 TB of capacity per cache pool.

**What licenses are required for Dell Fluid Cache for SAN?**

For each cache pool, a minimum of three licenses will be required for Dell Fluid Cache for SAN. One additional license will be needed for each server added to the cache pool.

**What kind of PCIe SSD Flash can be used for the solution, and what are the benefits?**

To both create the initial cache pool, and also increase the quantity of cache in the pool, Dell PowerEdge Express Flash drives or Micron P420M SSD cards in compatible Dell Servers will be required. Compatible Dell PowerEdge Servers that do not have hot pluggable capability can leverage Micron P420M SSD Cards.

Dell Express Flash provides a front-accessible and hot-swappable high performance storage infrastructure localized within the server itself, providing the hardware foundation necessary for Enterprise-class serviceability and availability.

**Is Fluid Cache for SAN software RNA?**

The software technology at the heart of Fluid Cache was the result of Dell's acquisition of RNA.

**I have heard about Flash at the price of disk. Is that Fluid Cache for SAN?**

In addition to benefits of Fluid Cache, Dell is already redefining the economics of enterprise storage with our latest generation of Compellent and EqualLogic arrays, which can provide all-flash performance at the cost of traditional 15K disk drive arrays.

Dell Fluid Cache for SAN is different – it is an application acceleration technology designed to address issues customers face with high use databases and virtualization.

**How is Fluid Cache for SAN different from Fluid Cache for DAS?**

Fluid Cache for DAS is applicable only for standalone servers with Direct Attached Storage (DAS). Fluid Cache for SAN is a scale-out caching solution that accelerates application performance for multiple servers (a minimum of three servers is required) accessing data from our Compellent SAN, leveraging the ultra-high speed caching pool.

**Is Dell Fluid Cache for SAN supported on VRTX?**

Currently, Dell Fluid Cache for SAN is not supported on VRTX.

**When will Dell Fluid Cache for SAN be available for purchase?**

We will be announcing the availability of Fluid Cache for SAN in first half of 2014.