# Accelerate Performance Up to 500%

**Off the charts I/O rates and exceptional throughput set apart DataCore installations around the globe. But you'll be surprised how this much-improved performance is done.**

High-speed, SAN-wide caching has long been a potent differentiator for DataCore's products. If you have been conditioned by other suppliers to believe that any form of virtualization brings a performance penalty, think again. In the process of virtualizing disks, DataCore software accelerates reads and writes by leveraging the powerful processors and large memories of the x86/X64 servers on which it runs.

Up to 1 Terabyte of cache may be configured on a DataCore node enabling it to perform at solid state disk speed without the expense. Caching essentially recognizes I/O patterns to anticipate which blocks to read next into RAM from the back-end disks. That way the next request can be fulfilled quickly from memory at electronic speeds. Of course, the faster the disks, the better the results.
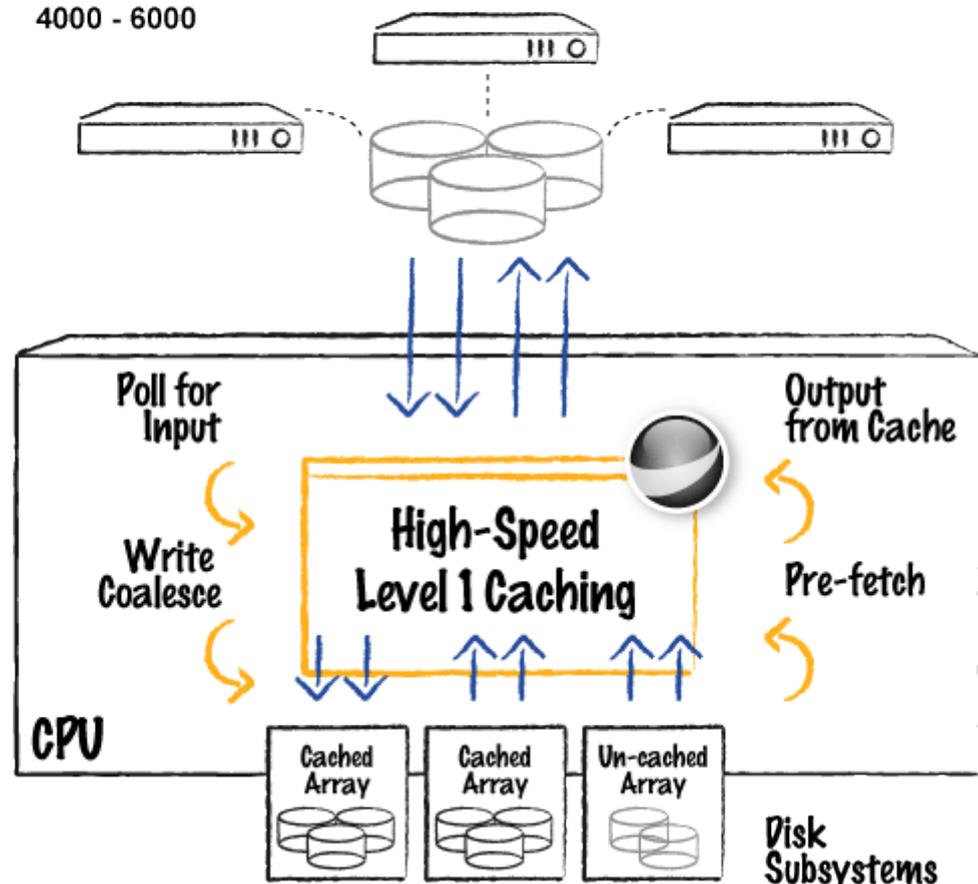


*Overcome I/O bottlenecks that slow down applications resulting in a poor user experience*

Whether you measure it in I/Os per second (IOPS) or throughput, DataCore shines when it comes to I/O performance. Largely because our design exploits the inexpensive processing speed and memory capacity of the latest and greatest x86/x64 servers to cache read and write requests across your entire storage infrastructure. We accelerate application response from the world's largest and fastest storage systems from EMC, IBM, Fujitsu, HDS, HP and NetApp to name a few, in the process offloading them from repeated disk requests. The benefits are most pronounced in clustered systems, consolidated IT environments, virtual servers and virtual desktops.

## Faster Response times for your applications and VMs

DataCore's storage virtualization software takes advantage of low cost RAM memory for high-speed caching, making it the most cost effective way to accelerate performance across any of your storage that sits within the virtual storage pool. Bottomline, users typically report 2 to 3 times faster response times with DataCore. The software automatically optimizes your read and write traffic to run efficiently within the cache memory and therefore your applications and systems get their responses back at much faster memory speeds versus having to wait for slower mechanical speed disk devices.