STOCKPORT COLLEGE DEPLOYS V-LOCITY
Improves Application Performance by 190% without Adding Hardware

STOCKPORT COLLEGE

CHALLENGES

- Daily helpdesk complaints caused by painfully slow access to student applications
- Bottlenecks and latency caused by excessive I/O, impacting student enrollment applications
- Expense and time invested in troubleshooting latency with no solution

V-LOCITY® BENEFITS

- Dramatic improvement in workload throughput and reduced helpdesk calls
- Ability to enroll more students in less time
- Significant improvement in response time across all applications
- Reduction in helpdesk calls and IT time spent troubleshooting and performance tuning

Latency and bandwidth issues on legacy systems caused student enrollment times at Stockport College to peak at an unacceptable 15 minutes. During the college's most intensive enrollment period, the system crashed and the finance director got involved, issuing an edict to find a solution—immediately.

THE CUSTOMER

Stockport College, based in Greater Manchester, England, offers a range of academic and vocational courses from pre-GCSE to degree level. They are a major provider of post-16 education and training, and a key regional and national center for a range of specialist courses.

With over 6,500 students requiring enrollment throughout the year, the IT infrastructure needs to operate at peak performance, especially during intensive enrollment periods.

THE CHALLENGE

While trying to maintain legacy systems that include EMC CLARiiON, Celerra, and HP Proliant devices, the IT team—whose headcount was reduced from 23 to eight during recent cuts—was facing regular helpdesk calls. The calls all pertained to increasingly slow application launch times and the amount of time it was taking to process standard queries, run reports, or operate Management Information Systems (MIS) applications.

Steve Bettoni, Technical Support and IT Procurement Officer, who provides second- and third-line support, was on the receiving end of those frequent support calls. "I would receive regular calls about applications not working and front-end systems crashing. We were being asked to troubleshoot on a regular basis and, even though we made several fixes, we just couldn't find the problem—we thought it was old hardware."

Following a major system crash on enrollment day, the IT team was taking heat from the Finance Director. "It was a very stressful time. If we don't operate at peak efficiency during an intensive period of two weeks, we lose money; students will just go and enroll elsewhere. We did look at putting flash cards in the server, but after testing V-locity on the MIS servers, it showed massive improvements almost immediately."

> "We have seen performance improvements of 522% on our SAP Crystal Server, 190% on the MIS student enrollment application, and an 85% improvement on our Exchange Server."

STEVE BETTONI
TECHNICAL SUPPORT AND
IT PROCUREMENT OFFICER

ENVIRONMENT

- EMC Cellera and CLARiiON (legacy systems)
- EMC VSPEX and EMC VNX 5500
- Cisco UCS C-Series
- EMC Avamar and RecoverPoint
- VMware vSphere 5.1

V-LOCITY FEATURES

IntelliWrite® I/O optimization technology automatically prevents split I/Os from being generated when a file is typically broken into pieces before write.

IntelliMemory™ intelligent caching technology caches active data from read requests using available server memory.

Benefit Analyzer embedded benchmark provides before/after performance comparisons, enabling IT to measure workloads and performance in a real-world environment.

Condusiv Technologies
7590 N. Glenoaks Blvd., Burbank, CA 91504
800-829-6468 // **www.condusiv.com**
Condusiv Technologies Europe
Goldvale House, 27-41 Church Street West,
Woking, Surrey, GU21 6DH
+44 (0) 1483.377.200 // **www.condusiv.co.uk**

THE SOLUTION

After initial testing, the team presented results to upper management and immediately received approval to roll out V-locity across 110 virtual servers. In a matter of days, helpdesk calls dropped significantly and enrollment processing times were reduced from 15 to five minutes—a 200% improvement.

Stockport College recently underwent a major technology refresh, which included EMC's cloud solution, VSPEX, and an EMC VNX 5500 SAN, utilizing a three-level tiered solution with Enterprise Flash Drives (EFD) and SAS drives to move data around depending on what is hot. They are now using EMC Avamar for their deduplication backup solution, along with EMC RecoverPoint for disaster recovery—all replicated to a remote site.

"When we upgraded the storage infrastructure, we wondered whether V-locity would make a difference on the new systems," says Steve. "But because it removes unnecessary I/O, as well as caching hot data blocks in RAM memory, we decided to install it across all the servers. The feedback from management and staff is overwhelmingly positive. They are amazed at the before/after difference in running V-locity, even after the technology refresh. Application requests used to be measured in minutes—now they take seconds."

THE RESULTS

Because of the reduction in the amount of I/O being generated, Steve's team is seeing measurable results with their I/O-intensive applications. "With V-locity's Benefit Analyzer reports, I've been able to clearly convey value to management: visibility into response time improvement, workload throughput, and I/O behavior has become completely transparent. This validates the investment over and above the user experience," says Steve.

Not only does the Benefit Analyzer show positive results, Steve received feedback from Accounting: "One of our accountants emailed me about V-locity," he says, reading the mail, "'Before V-locity, our payroll process required running a series of reports, each report taking 1½ hours to complete. The reports now take ten minutes. What had been a full day of running reports—with a person dedicated to the task—now takes less than a morning.'"

V-locity's IntelliWrite® technology prevents split I/Os from being generated at the time files are written. In addition, with V-locity's IntelliMemory™ server-side caching technology, frequently accessed data no longer travels the full distance from server to storage and back, saving significant time to serve up files.

According to Steve, "We have seen performance improvements of 522% on our SAP Crystal Server, 190% on the MIS student enrollment application, and an 85% improvement on our Exchange Server." He adds, "In addition to achieving these results, the fact that V-locity works automatically and silently in the background—without competing for resources—is a major benefit that saves time and effort."

CASE STUDY