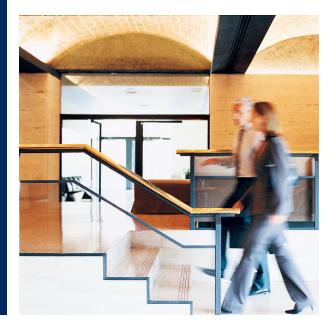
Standardizing on HP enables The College of Saint Benedict and Saint John's University to deliver enhanced learning



"We concentrate on HP and it concentrates on us – it's a very effective and powerful partnership. HP stands out among all other vendors serving higher education as having the most innovative, reliable and flexible solutions to enhance learning environments. We know we have accomplished more by standardizing on HP than we would have by managing multiple vendors."

– Jim Koenig Director of Information Technology Services The College of Saint Benedict and Saint John's University







Like so many educational institutions, CSB/SJU's Information Technology Services has to stretch budgets and find innovative solutions to accomplish its goals

The College of Saint Benedict and Saint John's University (CSB/SJU) are nationally recognized liberal arts institutions committed to providing an exceptional integrated education informed by Catholic and Benedictine values. CSB, for women, and SJU, for men, share one academic program, with 3,928 students attending classes together on both campuses. This integrated learning experience combines a challenging academic program with extensive opportunities for international study, leadership, service learning, spiritual growth, and cultural and athletic involvement.

CSB/SJU's Information Technology Services seeks to support the educational environment by delivering information into the classrooms, and consequently into the hands of students, via discipline-specific applications that support classroom endeavors.

Jim Koenig, Director of Information Technology Services, described, "We have one data center that serves both campuses, and we have a strong commitment to deploying technology that optimally fulfills the combined educational needs of CSB/SJU."

Seeking strength and flexibility

Like so many educational institutions, Information Technology Services has to stretch budgets and find innovative solutions to accomplish its goals. Koenig explained, "To keep the cost of the Schools viable for a wide range of students, severe limitations have been placed on the IT budget. Consequently, it has made us more creative in finding ways to do a lot with a limited amount of resources."

He continued, "Our vision has been to create a very strong infrastructure to allow us to be in a position of strength in handling short- and long-term changes as they occur. We believe flexibility is a key component of strength, which will in turn enable CSB/SJU to remain very competitive and attractive to prospective students. For example, there always is a perpetually growing need for more data storage, and an agile solution enables us to add more capacity swiftly, and manage it easily."

Information Technology Services' primary mission is to support the classroom environment, but it also has to ensure the core application software – formerly SunGard® SCT Plus migrated to SunGard SCT Banner, which is responsible for registration and accounting – is available almost 24x7. Paul Theis, LAN Server Administrator for Information Technology Services, recalled, "We specifically required a storage solution to meet the expectations of CSB/SJU for high availability."

Standardizing for simplicity

Koenig reflected, "It made sense to partner with one vendor so that we could interface efficiently with a single point of contact. We wanted to standardize with a company that could deliver the breadth and depth of solutions to meet our criteria at all levels of the infrastructure. Back in 1986, we had started a relationship with Digital Equipment Corporation when we purchased our first VAX-based computers, and these later evolved to the AlphaServer systems. Today, via company amalgamations, HP owns the AlphaServer system technology, and as these servers host the SunGard SCT Banner software and have proven to be very dependable, it was logical for us to evaluate all of the available HP solutions."

Finding the right storage environment was critical, and in 2003, Information Technology Services purchased the HP StorageWorks Enterprise Virtual Array 5000 (EVA5000) to replace its legacy SAN. Theis noted, "The EVA virtualized storage is accessed by all of our large application and database servers, and it currently has 10 terabytes of disk space. It was selected for top performance, large capacity and high availability, and the EVA5000 minimizes administration, space and cost. It enables us to optimize utilization of the disk space, and with seamless capacity expansion and instantaneous replication capabilities, we can scale the capacity according to specific application demands."

Koenig elected to standardize on HP at the server level, and the data center now has 70 HP ProLiant DL380 and DL360 servers running Microsoft Windows®. Five HP ProLiant DL380 servers are running Linux to serve some of the computer science courses' application requirements. Several HP AlphaServer systems remain in place to host

the SunGard SCT Banner application environment on the HP OpenVMS operating system. HP System Insight Manager – systems administration software that comes with the HP ProLiant servers – together with the built-in EVA5000 SAN management software, are leveraged to keep administration of the servers and storage as simple and efficient as possible.

Back in 1991, the two campuses – which are five miles apart – were linked via single mode fiber for data, video

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and telephone communication. "As our legacy network switching equipment came up for renewal, we replaced it with HP ProCurve devices – models 5304 and 5308 – which offer more virtualization, are easy to manage and highly reliable. It has given us a very low cost – and because we've built in redundancy – a fault tolerant network that supports the Colleges' business operations," noted Koenig.

At the desktop level, CSB/SJU have over 2,000 machines, of which 87 percent are Windows-based HP PCs. Koenig commented, "We standardize on one model for a year – currently it is the dc7100 – so that we can keep a standard image on file. This enables our operations staff to simplify support and to resolve problems faster."

He added, "We're just embarking on a three-year mobile computing program, and we've contracted with consultants from HP to develop the wireless plan. We have specifically asked them to perform the site surveys; recommend the most appropriate HP laptop and tablet PC devices to meet our needs; and deliver a comprehensive deployment plan. We expect to hire them for a substantial portion of the implementation too."

HP delivers a reliable and agile infrastructure

Operational costs have decreased due to simplification of both the environment and processes. Theis elaborated, "By standardizing on HP, our operational effort has been greatly simplified because we only have to turn to one partner. With the tools that HP provides with the servers and storage, we have been able to implement more proactive processes that enable us to deliver the very highest levels of availability and performance."

A reliable and flexible infrastructure enables Information Technology Services to accomplish a great deal, while keeping human resource costs as low as possible. "One of the best examples of simple, self-managing systems is the HP EVA5000. Availability is a top priority and this SAN has provided a substantial improvement in uptime,

while reducing the cost associated with storage support. It has allowed us to consolidate all of our storage, and we have bought fewer disks because we can treat all of our storage as one single virtual pool. It delivers a high degree of flexibility, and we can scale simply without limits. It also allows us to consolidate backup processes," observed Koenig.

Theis agreed, "The hours taken to manage storage have dropped dramatically – it really runs itself. Our staff is now freed up to focus on managing the environment at the application level. It's given us the flexibility to be able to add storage quickly without any disruption of services. If we don't estimate enough disk space for a specific application when it is deployed, we can add more capacity very simply several months down the road, and the users are unaware."

The entire infrastructure has become highly available and flexible. Koenig enthused, "When servers are down, it is



expensive because of the impact to CSB/SJU's registration, classroom and business activities. We must have an infrastructure that's highly available 24x7, and with the innovative solutions from HP as our standard, we have dramatically improved our uptime. The value of this is huge."

Koenig concluded, "Every vendor affiliation takes time and effort, and with HP we only have to manage one relationship across the breadth and depth of our infrastructure. We are able to leverage volume buying agreements that help make our budget stretch to meet CSB/SJU's needs. Simply stated, we concentrate on HP and it concentrates on us – it's a very effective and powerful partnership. HP stands out among all other vendors serving higher education as having the most innovative, reliable and flexible solutions to enhance learning environments. We know we have accomplished more by standardizing on HP than we would have by managing multiple vendors."

At a glance

- Organization: The College of Saint Benedict and Saint John's University (CSB/SJU)
- Location: CSB and SJU are located five miles apart in central Minnesota, minutes away from the Saint Cloud metropolitan area
- Founded: College of Saint Benedict: 1913, Saint John University: 1857
- Size: 294 full-time and 65 part-time faculty, total undergraduate enrollment: 3,928
- Telephone: 800-249-9840 for CSB and 800-544-1816 for SJU
- URL: www.csbsju.edu
- Primary focus: Committed to students' intellectual, spiritual and physical development.

Challenges

- Make a limited IT budget stretch to meet CSB/SJU's classroom and core business processing needs.
- Deliver an infrastructure capable of quickly embracing change.
- Provide highly available access to all applications from all locations across two separate campuses.

Solution

- Standardize on HP across all tiers of a virtualized infrastructure:
 - Several HP AlphaServer systems hosting SunGard SCT Banner;
 - HP StorageWorks Enterprise Virtual Array 5000 with 10 terabytes of disk capacity;
 - 70 HP ProLiant DL380 and DL360 servers running Windows;
 - Five HP ProLiant DL380 servers running Linux;
 - Multiple HP ProCurve network switches – models 5304 and 5308;
 - 1,650 HP Desktop PCs currently model dc7100; and
 - Consulting services from HP to develop a comprehensive wireless computing plan.

Results

- Improved infrastructure utilization and flexibility
- Enhanced support via simplification of the environment and use of more streamlined proactive processes.
- Dramatically improved application and infrastructure availability.
- With HP solutions, the CSB/SJU budget stretches to meet needs.

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