

Leading art school paints a clear storage picture with HP SAN



“The consolidation, scalability, and increased storage density we achieved with HP SAN technology enabled us to increase our capabilities and the services we provide – without increasing staff.”

– Ralph Fasano, Associate Vice President, Office of Information Technology, Rhode Island School of Design

HP customer case study: HP StorageWorks Enterprise Virtual Array, HP BladeSystem, Integrity servers, HP Services
Industry: Education

Objective:

Consolidate and expand storage capacity to meet the unique needs of key applications, art archive management, and the college’s strategic goals

Approach:

Unite storage arrays and heterogeneous servers onto a single HP StorageWorks Enterprise Virtual Array configured as a SAN

Business technology improvements:

- Consolidated storage management
- Scaled storage – without forklift upgrades – saving approximately \$75,000
- Enhanced business technology infrastructure without staff increase
- Supports heterogeneous operating system environment
- Increases options for reciprocal disaster-recovery agreements

Business outcomes:

- Saved as much as \$75,000 by upgrading HP SAN rather than forklift replacement
- Cost-effectively extended access to important library resources to further school mission
- Improved and expanded services without increasing staff
- Employed HP BladeSystem to help avoid cost of new or expanded data center



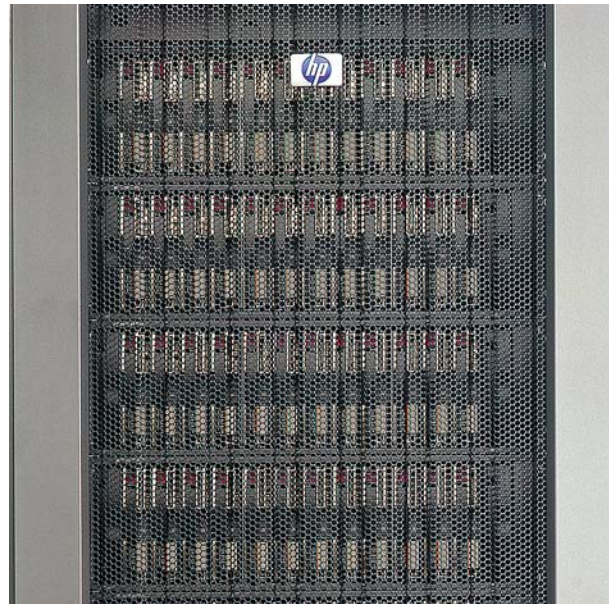
Storage consolidation offers new palette of options

When Rhode Island School of Design (RISD) needed a replacement for the Dell/EMC storage array supporting its critical Novell NetWare services and GroupWise e-mail, the college conducted an extensive vendor review, which included EMC, HP, Apple, and Xitech. In the end, the ideal solution was there all along: the same HP StorageWorks Enterprise Virtual Array-based storage-area network (SAN) that had powered the school’s Datatel Colleague enterprise resource planning (ERP) suite for the past year.

“Staying with an EMC array, which had reached the end of its support life, would have meant a forklift upgrade,” explains Ralph Fasano, Associate Vice President of RISD’s Office of Information Technology. “And we didn’t want to go through that again. When we looked at all the options, it became clear that the

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flexibility and scalability of the HP Enterprise Virtual Array offered a more cost-effective alternative and fit our strategic goals for managing our increasingly critical digital resources.”

RISD installed an HP StorageWorks 3000 Enterprise Virtual Array (EVA3000) in 2004 to support its Datatel ERP applications, which ran on an HP AlphaServer system under Tru64 UNIX. Datatel applications support the school’s admissions, accounts payables/receivables, student information, human resources, payroll, residence life departments, and other functions. In the fall of 2005, RISD upgraded its EVA3000 to an EVA6000 by adding additional controllers, switches, rack space, and disk drives. The upgrade enabled the school to consolidate its GroupWise e-mail and other NetWare applications onto the EVA6000 and eliminate an EMC array.

“We really liked that we could simply expand our current HP EVA SAN and retain much of our original investment and knowledge,” Fasano says. Additionally, by upgrading its HP SAN, the college saved as much as \$75,000 on the cost of purchasing a new SAN. “We had used some HP systems in the past, but we were essentially a Dell shop. The upgrade of our EVA system was the turning point in our relationship with HP. Since 2005, we have steadily become an HP shop from top to bottom.”

The EVA supports Microsoft Windows, HP-UX 11i, and Novell NetWare. According to Fasano, this multi-environment support, which was not possible with RISD’s previous storage solutions, was a key factor in RISD’s decision to consolidate on the EVA6000. The college has a wide mix of systems throughout the campus, including those used by the faculty, administration, and students.

Pay-as-you-grow SAN supports creative projects

The flexibility and scalability of the HP EVA6000 helps RISD’s Office of Information Technology meet the needs of its diverse college user community. The HP SAN provides centralized storage for all of the school’s major server environments – including those supporting the Datatel suite, faculty and student applications, continuing education, and more than 5,000 GroupWise e-mail boxes.

“One of the beauties of the HP SAN is that we can expand it as we grow, and only as much as we really need,” explains Steve Boudreau, RISD Director of Network Services. He points to an ongoing project to digitally photograph and make accessible online images of RISD’s entire museum collection of more than 85,000 total objects, including paintings, sketches, ceramics, sculpture, and mixed media creations.

The RISD museum has committed to making its permanent collections more accessible to students, faculty, curators, administrators and, potentially, the public. The EVA6000 and the ARGUS collection-management system are the storehouse for this effort. RISD has digitally stored approximately one quarter of the collection so far.

“We recently added 5 TB of storage capacity to the EVA for the Museum digitization process by simply populating a disk shelf with drives ourselves. It took us about 30 minutes – it was easy,” Boudreau notes. “The HP EVA lends itself perfectly to challenges such as the museum project. We can store high-resolution images of each item and make them accessible to many users anywhere. If in six months or a year we need more storage, we can install more very quickly and cost effectively.” RISD library representatives are also

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considering the SAN for a separate project to digitize the library’s collection of slides, which many different departments send to the library for safekeeping.

HP server blades enable flawless, painless growth

As RISD migrates an increasing number of key applications to the EVA and HP ProLiant servers, overall business technology management has become increasingly more efficient. Storage consolidation also yielded a strong move toward server virtualization using the HP BladeSystem with 14 ProLiant BL20p and BL30p server blades to support the school’s many critical ancillary applications and web services.

“We are always looking for ways to become more efficient, including reducing our technology footprint,” Fasano explains. “We are just beginning to explore the potential of the HP blade technology, but we see it as a very important part of our business technology infrastructure going forward. The BladeSystem saves us rack and floor space, and helps us react faster to new demands.”

According to Boudreau, the school’s overall infrastructure has grown significantly in recent years due to an increasing reliance on technological solutions, yet the school has not had to add IT staff. In addition, secure, reliable access to high capacity, centralized storage resources is helping to improve the educational process at RISD.

“We rely heavily on the latest graphical design applications and high-resolution imaging for many of our programs,” Boudreau states. “Our students and

faculty have growing demands for storage and other IT services. In the past, it was difficult to meet this need efficiently. Today, thanks to consolidated storage management on the HP SAN and a more flexible technology environment, we can provide the network-based resources that students require for the creation and storage of digital content – be it video, animation, or high-end graphics.”

Crucial platform migration draws on HP Services

Recently, the school migrated its important Datatel suite from its AlphaServer-Tru64 UNIX platform to an HP Integrity rx2620 Server running HP-UX 11i v2. Assisting the school in the transition were HP reseller and infrastructure solutions provider AdvizeX Technologies and the HP Remotely Assisted Instructional Learning (RAIL) training service. The live, instructor-led RAIL training program saved RISD the cost of travel and other expenses typically associated with staff training.

“It was a terrific course,” says Boudreau. “One of my administrators took the RAIL class, which was designed for an experienced UNIX administrator moving into the HP-UX environment. It worked out very well.”

HP Services, in combination with services provided by HP resellers including AdvizeX, has helped RISD get the most from its technology investments. “We meet on a regular basis with our HP account manager,” Boudreau explains. “At a minimum, he’s here once a month and he is part of our IT project planning – from conception to implementation. There is no hand-off required because he is here and knows what’s going on.”

Customer solution at a glance

Consolidated, centralized SAN

Primary applications

- Educational ERP and information management
- E-mail
- Museum archiving
- Collection management
- Graphical design
- High-resolution imaging

Primary software

- HP StorageWorks Command View EVA software
- HP-UX 11i V2 operating system
- Novell NetWare Server 6.5 network software
- Novell GroupWise 6.5 collaborative suite
- Mac OS
- Microsoft Windows Server 2003
- Datatel Inc. Colleague educational ERP suite
- ARGUS collection management software from Questor Systems

Primary hardware

- HP StorageWorks 6000 Enterprise Virtual Array (EVA6000)
- HP Integrity rx2620 Server with Intel® Itanium® 2 processors
- HP BladeSystem – 6 HP ProLiant BL20p G4 and 8 BL30p server blades
- 8 HP ProLiant DL380 and DL360 G4 servers
- 6 HP ProLiant ML380 and ML310 G3 servers

HP Services

- Remotely Assisted Instructional Learning (RAIL) to aid the migration from Tru64 UNIX to HP-UX 11i v2
- Warranty support

Services from HP reseller AdvizeX Technologies for HP Integrity servers:

- Migration
- Integration
- Installation

About Rhode Island School of Design

Rhode Island School of Design (www.risd.edu) has earned a worldwide reputation as the preeminent art and design college in the United States. Today, with more than 17,000 alumni, the school enrolls roughly 2200 undergraduates and 375 graduate students from the United States and almost 50 countries, offering degree programs in the fine arts, architecture, design disciplines, and art education.

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