A large Midwestern university implemented a VPSX™ output management server on the Sun Solaris platform. The solution provided scalable open systems print management, streamlining the university’s transition from their mainframe environment to a distributed environment.

**ORGANIZATION**

The University of Minnesota (U of M) offers more than 370 fields of study and supports over 60,000 students. The university operates five separate campuses across the state (Crookston, Duluth, Morris, Rochester, & Twin Cities) as well as dozens of regional extension offices. Universities are paper-intensive organizations that need to provide students, staff, and departments a variety of documents including transcripts, certification letters, checks, and more. Just as timely, secure delivery of documents is crucial to a university’s ongoing business, saving time and money is crucial to its bottom line. Printing delays can adversely affect perceived quality of service and contribute to overall inefficiency.

**ENVIRONMENT**

From its data center in Minneapolis, the U of M Central Computing Operations manages 45 servers running Sun Solaris, AIX, z/OS, Linux for zSeries, and Windows operating systems. From PeopleSoft and JD Edwards to DARwin and ServiceCenter software, as well as internally developed applications, their staff maintains a variety of business-critical systems.

An extensive TCP/IP network links all of the university’s IT facilities, including the main data center and a disaster recovery site at an alternate campus. The university’s systems need to direct output to 400 remote network laser printers, as well as high-speed Canon and Xerox printers located in their print shop.

**NEED**

Starting in 1999, the university began to migrate financial and administrative applications from the mainframe to PeopleSoft applications on Solaris servers. One consequence of the move was the impact on managing application output. With close to four hundred printers and several dedicated print servers, U of M systems administrators often did not know where to begin diagnosing problems. This negatively affected their ability to solve print problems quickly.

The U of M needed to simplify their environment and reduce staff time spent installing and maintaining UNIX and Windows printer management software. One U of M staff member explains, “We were regularly spending significant amounts of time finding and installing new drivers and packages. Things got even more complicated when we would upgrade our operating systems.” Additionally, the U of M wanted to improve their Xerox job ticketing process and reduce the amount of Windows print servers and other print-related software.

According to a U of M staff member, “With the shift in platforms, we could no longer solely use the mainframe-based output management system we had relied on since 1989.” For the U of M, output management had become a significant issue for the support team — and as new printer makes and models were added to the network, the time spent managing the print environment grew exponentially.

**REDUCED COMPLEXITY AND GREATER CONTROL OF OUTPUT DELIVERY**

The university began researching and investigating several output management solutions. A U of M systems programmer notes, “Our previous experience working with Levi, Ray & Shoup, Inc. was very positive. So we were eager to see how their VPSX solution could address our open systems requirements.”

Using the VPSX solution on a Sun Solaris server, the U of M established a powerful single point of control over all their open systems printing and devices. Upon upgrading to the Solaris 9 operating system, their technicians found that the VPSX solution could manage and deliver their output without the need for additional print vendor components or drivers. According to a U of M staff member, “We recovered more than a month of dedicated staff time as a result of using VPSX.”

As they had been using an LRS® output management solution on the zSeries platform, the U of M staff required little
training to use the VPSX software. The solution provides real-time information on printer status and supports longer descriptive names for printing devices. The U of M staff can now quickly resolve print issues and take advantage of usage statistics, SNMP and PJL device communications, and tailor their printer lists for faster administration. A U of M staff member identifies an additional benefit for their operation, “VPSX was extremely easy to incorporate into our disaster recovery process, versus the previous approach.”

Using built-in VPSX page separator functionality, the U of M was able to print special customer routing information on banner pages, thus replacing their Xerox job ticket process. U of M technical staff quickly learned how to select different trays (with colored paper) for banner page inserts and how to insert PCL commands to specify portrait and landscape modes.

Further cost reduction came from eliminating unnecessary hardware. LRS System Engineers noticed the U of M’s use of an intermediary print server to manage PeopleSoft output. A U of M systems programmer adds, “The LRS folks showed us how to submit our PeopleSoft applications jobs directly to VPSX, resulting in accurate status and improved control. This eliminated the need for a Windows print server.”

“We were regularly spending significant amounts of time finding and installing new drivers and packages. We recovered more than a month of dedicated staff time as a result of using VPSX.”
— IT Staff Member, University of Minnesota

**PRODUCTIVE OUTPUT MANAGEMENT FOR OPEN SYSTEMS**

In the end, the University of Minnesota Central Computing Operations staff found the VPSX output management solution enabled them to:

- Eliminate the need to re-generate application output
- Reduce time spent diagnosing and solving printing problems by nearly 75%
- Improve printed document delivery with more specific banner page information
- Recover an unnecessary print server
- Simplify the disaster recovery process for their output management environment
- Establish a scalable, platform-independent output management solution for all their open system printing needs

**THE VPSX SOLUTION**

The VPSX solution enabled the University of Minnesota to consolidate their output management environment using a single solution that enhanced the delivery and formatting of the output to various network devices. By implementing a VPSX server, the university reduced staff time spent on printing issues, simplified their environment, and reduced the use of Windows hardware for printing. In addition, the solution helped the U of M streamline printer administration and provide a more reliable, secure print environment for their PeopleSoft and other UNIX-based application output.

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