



# Robust Queue Management and Data Stream Conversion



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Central Computing  
Services Manager  
California State University

## California State University

The operation and administration of a state university requires a high degree of versatility in printing capabilities. A print solution running in such an environment must be extremely reliable and flexible to satisfy demanding printing requirements, tight production windows and strict delivery deadlines. Solimar Systems interviewed the head of Central Computing Services at one of the largest and most prestigious schools in the California university system to discuss their implementation of the Solimar® Print/Director system.

The university's Central Computing Services organization is charged with printing a wide variety of internal documents that are generated with administrative data processing applications, including general ledger, employee payroll and student registration. When the administration of this educational bellwether was not satisfied with the pace of document distribution or the flexibility of their mainframe printing systems, they turned to the analysts of Xerox for a new printing solution. The answer was to trust a proven partnership: Xerox production printers and the Solimar Print/Director print solution.

Central Computing Services was operating both a wide area network and a mainframe computer system, but there was no connectivity between them. Two Xerox 4850 LPS production printers were directly connected online to the mainframe, limiting their capabilities to only printing mainframe applications. In addition, end users were connected to the university-wide network without being able to print their large volume jobs on the existing high-speed printers. As a result, input data and printed output for such jobs were hand-carried by couriers from the university delivery service to/from Central Computing Services.

“Originally, what we were looking for was to print large volume data from anywhere on campus to our 4850s,” says the Central Computing Services’ manager, who presented the issue to Xerox representatives. “We talked to them about various solutions to our problem and they came up with this solution – the Solimar solution.”

The Solimar Print/Director is a modular, multi-tasking, Windows-based print server that provides connectivity from mainframes, midrange hosts and networks to print common applications on high-speed production printers and distributed network printers. In addition, this system provides data stream conversion by emulating the Xerox LPS in online and offline modes, as well as IPDS, PCL, and PostScript printers.



## Business Profile

### California State University

Major California based university networked its production printers, cut turnaround time on document distribution, and maximized its equipment investment with increased output volume using the Solimar Print/Director system.

### Industry

Education

### Geography

Berkeley, CA

### Business Solution

- Output Management
- Device Connectivity
- Data Stream Conversion

### Solimar Products

- Solimar Print/Director
  - Base system with XIMAGE™
  - BUS/TAG Input
  - TCP/IP Input and Output
  - XCHANGE::PostScript
  - XCHANGE::PCL

### Benefits

- Enabled authorized network users to leverage production printers
- Improved production printer utilization
- Shortened turnaround time of jobs and access to print output
- Increased print capacity without adding additional printers

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**Print Anywhere**

Central Computing Services now uses a TCP/IP lpr connection to interface the Solimar Print/Director with the university-wide network. This permits any authorized user to print their Windows-based PCL applications on the Xerox 4850 LPS printers from the network. Solimar Print/Director's PCL::Metacode emulation module dynamically converts the network data to Xerox's proprietary printer language, Metacode. Once converted, Print/Director sends the Metacode data to either of the Xerox 4850 LPS printers via the high-speed SCSI SDI. In addition, the XCHANGE modules ingest EBCDIC, DJDEs and Metacode from the mainframe and convert the data streams and resources to PCL and PostScript. Print/Director then routes the jobs to distributed network printers across the campus.

**Fast Turnaround**

The Solimar Print/Director's connectivity and input/output modules brought the university some unexpected benefits. Did the abilities of the Solimar print server exceed the expectations of Central Computing Services? "Yes. That was the capability of printing to our network printers from our BUS/TAG input," says the manager. Solimar's XCHANGE legacy emulation modules convert the data streams intended to pass from the mainframe to the Xerox 4850 LPS printer into PCL and PostScript, the native languages of network printers. Not only can they print from the network to the high-speed printers, but they can also print MVS mainframe application data from JES to their ten campus-wide Xerox and HP LaserJet network printers. "It frees up our 4850s to do more large volume work, rather than print a bunch of small jobs that programmers would necessarily print on the 4850s."

**Cost Savings**

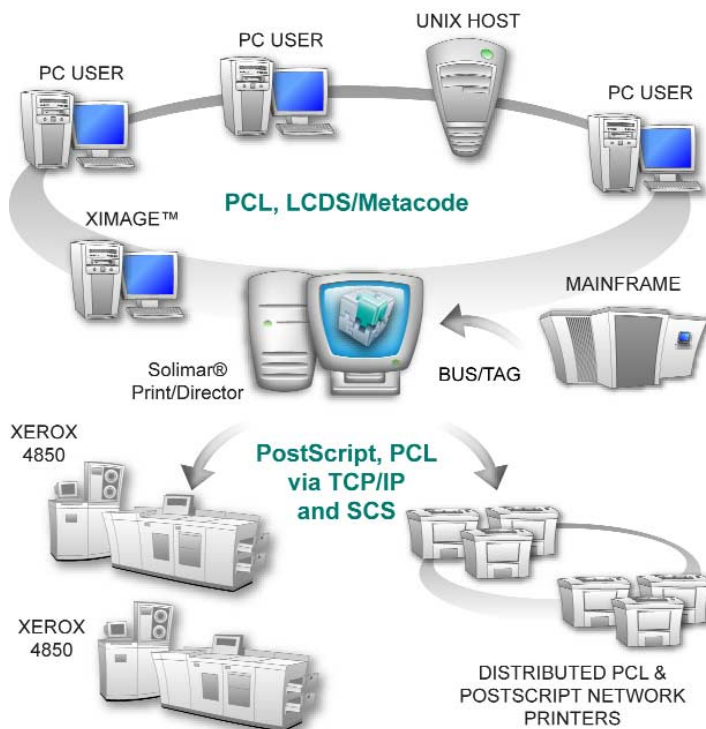
Central Computing Services is also realizing savings in their production costs, "One of the things we were able to do is get rid of a fairly costly older midrange printer", says the manager. "We've been able to replace it with a much less costly printer and still be able to do many of the same things, which is to print Xerox forms on it through the Solimar software. This is easily accomplished and with no deterioration in print quality."

In addition to quality, speed is crucial to the university. The manager explains, "XCHANGE now allows the various users to receive their input almost instantaneously, where before they had to wait for a delivery service from the Central Distribution Center. Sometimes they would get only one turnaround a day – now they can get many."

The university's Central Computing Services was able to accomplish printing between network and mainframe systems, plus increase their printing capacity, options, and flexibility, without having to add costly new equipment. The Solimar Print/Director's connectivity, adaptability, ease of use and sheer power makes it a central component of any printing system. With thousands of installations around the world, this robust system is backed by the friendly and knowledgeable Technical Support staff of Solimar, available to make the most of every printing environment.

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