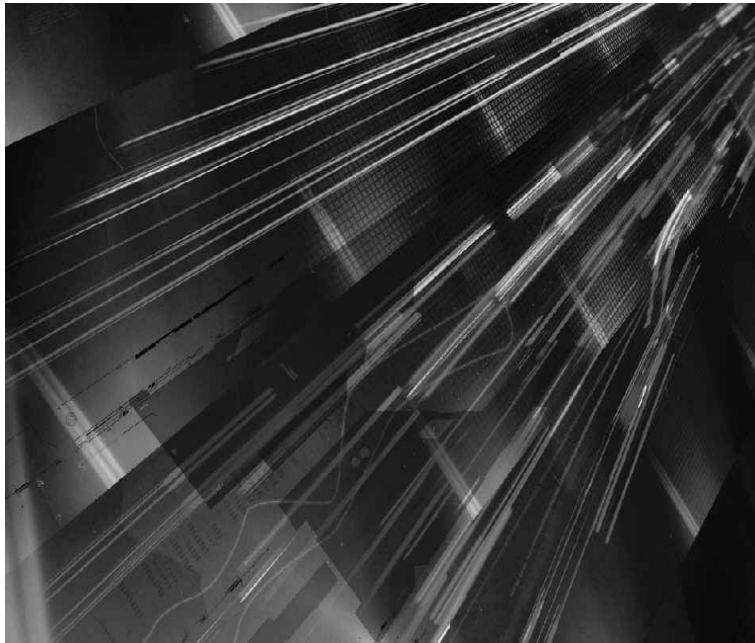


# Enterprise Output Management For Banking, Finance, and Insurance

Enterprise Output Management Series





Slumping markets, industry initiatives such as T+1, and deregulation that allows banks, insurance companies, and securities firms to sell the same products and services, are all adding intensity to the usual pressure on Information Services departments to keep costs down while improving service.

Information Services staff members are scrutinizing their departments and workflows to find every potential avenue for cutting costs. At the same time, they are evaluating all the software they use as they try to determine whether their software provides the value their businesses need.

In a consolidating industry, mergers and acquisitions mean that IS departments are supporting applications on mainframes, UNIX hosts, and Windows servers. Those IS departments also have to support the reports and other output those applications generate for production on printers throughout the enterprise. Often the output generated by mainframe applications can't be printed on the same network printers that UNIX and Windows applications use; businesses find themselves maintaining redundant network infrastructure and printers simply to satisfy their print resource need.

Where can they turn for solutions? LRS has provided answers for the top 15 US banks and more than 75 percent of the Fortune 100 companies. We've helped those organizations adapt to an ever-changing environment by supplying flexible, scalable and robust enterprise output management solutions.

LRS is the leading provider of enterprise output management software to banking, financial services, and insurance organizations—along with companies in all other business segments. From our position, we suggest that you and your IS staff study your organization's computing and printing environment for answers to these key questions:

- 1. How much can we save by replacing our old SNA architecture and delivering host output to remote branches over IP?**
- 2. Can we limit our exposure by securing print files traveling over TCP/IP?**
- 3. How much time and capital can we save by viewing host reports via a Web browser instead of printing and delivering them?**
- 4. Can we reduce the number of printer-related calls to our Help Desk?**
- 5. Can we deliver information directly from our mainframe to remote users outside of our corporate network?**
- 6. How much can we save by eliminating pre-printed forms?**
- 7. Can we reduce our total software cost by consolidating on a single Enterprise Output Management software vendor?**
- 8. Can we partner with LRS to service our customers more efficiently?**



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## **Proven Solutions**

How did we develop that list of questions? We heard them as we helped our customers in financial institutions find solutions for their printing needs. At LRS, we understand the banking, financial services, and insurance industries because we've worked with them for years. VPS, our first Enterprise Output Management (EOM) solution, is in use by 22 of the top 25 banks and holding companies in the US.

We have a solid record of listening to understand the needs of banks, financial services firms, and insurance companies. We help them achieve their goals by providing proven solutions. So let us help answer those key questions.

### **1. How much can we save by replacing our old SNA architecture and delivering host output to remote branches over IP?**

The cost savings, the advantages of a single network protocol for all communications between devices, including printing, and the easier process for adding devices to the network combine to make TCP/IP the obvious choice over SNA for print distribution. Management may welcome the savings, but some IS professionals hesitate to embrace TCP/IP for routing production printing. Because of SNA's reputation for reliability, they consider TCP/IP printing to be a weak alternative.

TCP/IP printing can be as reliable as SNA for organizations that implement the LRS solution. We offer an exclusive bi-directional print communication capability called Bi-directional Internet Printing, or BIP, which enables the mainframe and TCP/IP-connected printers to talk back and forth. BIP enables the mainframe to know when a printer is out of paper, jammed, or out of toner. And the mainframe can tell the printer to restart your print job at the right page, so you don't have to throw away duplicate pages you don't need.

BIP combines its communications capability and TCP/IP networking with the output management capability that the LRS solution has offered since 1993. Ensuring delivery of mainframe print jobs all the way to the printer's output bin, BIP provides the reliability of SNA over any TCP/IP network.

How much can your organization save?

Ongoing support and maintenance of an antiquated SNA printing network?

\$ (Unit Costs \$\_\_\_ X # control units, # SNA lines, maintenance and support hours)

Unnecessary time spent setting up and maintaining current Host - IP printing solution?

\$ (Hourly rate \$\_\_\_X # of hours modifying or setting up duplicate definitions)

### **User Story**

*"By converting from our old SNA network and replacing all of the antiquated hardware with IP connections we had an ROI on our VPS/TCPIP licenses within 12 months."*



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## **2. Can we limit our exposure by securing print files traveling over TCP/IP?**

The best way to secure print jobs traveling over your TCP/IP network is to encrypt them to conceal sensitive customer information contained in the documents such as statements, claim reports and other reports that you route to branch banks, remote offices, and claim centers.

A print job in transit across public shared networks or your internal network is the most vulnerable type of network traffic. That's because it has been organized and formatted for people to read and understand—in many cases, an intercepted print job needs no further manipulation to reveal sensitive, confidential, or mission-critical information.

Any financial institution or insurance company faces the possibility of a breach in security; those making use of the Internet and other shared TCP/IP networks are especially vulnerable. Along with all the safeguards you have already implemented to protect your networks, including firewalls, intrusion detectors, and virtual private networks, you need to consider security for the output that applications send to network printers.

Providing security for the output streaming from applications to network printers is the purpose of LRS Secure software. This suite of products can encrypt application output for secure transmission over TCP/IP networks to printers capable of decrypting the data stream. The products also work together to provide a secure platform-to-platform file transfer or output delivery solution.

- The cost incurred by the theft of sensitive customer data or proprietary host print output?  
\$ (*Financial liability & damage to corporate image or public's trust is immeasurable*)

### **User Story**

*A United States federal agency was routing mainframe output over TCP/IP to a remote Novell server print queue, which in turn delivered the file on to the printer. A deceptive LAN administrator configured the sever to route the output to the correct printer but also had a copy of the print job sent to a second IP address traced to a country in the Middle East. LRS Secure software allows the output to be printable only at the designated printer with the correct decryption key.*

## **3. How much time and capital can we save by viewing host reports via a Web browser instead of printing and delivering them?**

Many organizations today are studying the feasibility of enabling users to view business documents using a Web browser instead of printing and distributing paper copies of those documents. PageCenter Web Access, the LRS solution, provides browser-based access on any platform with the security and scalability of a mainframe-based archive.

Along with the potential hard-dollar savings of reducing the amount of paper, toner, and other printing supplies used each year, browser-based viewing can provide the immeasurable benefit of faster access to information. The LRS solution makes reports available online almost as soon as they are processed, and browser-based viewing means that reports are viewable nearly everywhere your users work.



Archiving reports, both long term and short term, ensures that the information is available to users when they need it. Users can log into the archive, select the current generation of the report they need, or prior generations that are archived, and view, print, or analyze report information.

Security parameters set at the organization level, department level, and individual user and report level give you the capability to make sure only authorized users view your reports, and that they see only the information they're authorized to view.

Another option is email delivery. Reports delivered via email—either as the email message itself or an attachment to an email message—provides remote access to information for everyone in the enterprise no matter where they are. Any workstation that allows a user to log into email becomes an online report viewing station. That's useful for employees who are on the road and staff members whose job involves working at different locations throughout your enterprise during the course of a day or week.

LRS solutions give you the power to combine the security of archived reports with instant email delivery. The software can be configured to notify users by email that a report they view has been written to the archive.

How much can you save by implementing browser-based viewing of host reports?

- Printing hard copies of large weekly, monthly or quarterly reports?  
\$ (# of pages printed X avg. \$\_\_\_ per page)
- Manually separating, distributing, and storing large printed reports?  
\$ (Hourly rate \$\_\_\_ X # of hours to separate, distribute and store printed reports)

### User Story

*One of the nation's largest brokerage/clearing firms has utilized PageCenter Web Access to automate their internal distribution of thousands of reports. This LRS solution allows users to view reports via web browsers and has reduced printing by millions of pages per month, saving them several hundred thousand dollars in printing and distribution costs annually.*

#### 4. Can we reduce the number of printer-related calls to our Help Desk?

Numerous studies over the years have examined the burden that printing and printer-related problems place on your Help Desk staff. Estimates range from a low of 40 percent of all calls to a high of 80 percent of all calls.

The LRS solution provides two ways to reduce printer-related calls to the Help Desk: error recovery and assured delivery.

*Error Recovery*—All too often, when a printer jams, runs out of toner, or has some other error condition, the report that was being printed is lost and has to be rerun. Output management solutions from LRS offer the capability for printing to recover after an error is corrected and resume automatically. Even better, LRS solutions offer different levels of error recovery to meet the specific needs of your computing environment and the technology you've already implemented.



*Assured Delivery*—When users select a print command and don't see their report in the usual time, which usually means within minutes, they get frustrated and call the help desk to ask why the report isn't printing. Because printer status information is available in LRS solutions, end users can track the progress of their reports through the computing environment. Users can tell if their report is waiting in a print queue, printing, on hold because of an error condition, or printed.

How much can your organization save by reducing the number of printer-related Help Desk calls?

- Help Desk time spent receiving, tracking down and correcting printing problems?  
\$ (Avg \$ \_\_\_ per call X # of calls)

### User Story

*“After we implemented the LRS solution, our hot-line calls dropped by 95%. We are now more proactive with our users — many times we call them to let them know they are having a printer problem before they are even aware of it. This makes us look very good to our users. Because of the tremendous reduction in hot-line calls we are now able to use our hot-line staff to solve more important problems instead of nuisance calls.”*

### 5. Can we deliver information directly from our mainframe to remote users outside of our corporate network?

Yes, you can deliver information directly from your mainframe to your employees who don't work at a desk—traders on the exchange floor, for example, or claims adjusters.

Delivering information and documents directly from your mainframe to users at workstations on your network is fairly easy. Delivering to anyone outside of the network, including traders on the exchange floor or claims adjusters in the field, is much more difficult. Delivering information to those users *when they need it* is especially tricky.

The LRS solution offers options for delivering mission-critical documents via email to users anywhere in the world. Our solution enables you to route output directly from the JES spool to a single email address or a distribution list of multiple addresses. Flexible options enable you to send any line-mode report as an email attachment or send a brief reports as text in the email message itself. File format options for sending line-mode reports as attachments are PDF, HTML, or RTF; AFP documents can be sent as PDF files.

Because our solution utilizes communications protocols in use worldwide—SMTP and TCP/IP—users are able to receive mainframe reports wherever they can get email messages. Users can view their reports with the Windows email application, and other Windows applications, already installed on their PC or a handheld device such as the Palm Pilot.

Reports are delivered at the speed of email, giving your users access to information as soon as it's processed, regardless of where they're working at that moment.



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## **6. How much can we save by eliminating pre-printed forms?**

You can replace your pre-printed forms with electronic forms that are printable on the PCL printers you already have at many locations in your enterprise. The savings you can realize depends on the amount you currently spend on buying, storing, and using pre-printed forms.

The LRS solution for utilizing electronic forms works on the mainframe, where it checks the data stream for the presence of AFP data. Whenever it detects such AFP information as FORMDEF, PAGEDEF, or any AFPDS records, the software automatically converts the AFP document to PCL.

This automatic detection and conversion of AFP documents enables you to process AFP and non-AFP output seamlessly. You can route both types of documents to any printer in your enterprise that is PCL5 compatible. You don't need to route output based on which printer is loaded with what type of pre-printed form or schedule print jobs in advance so operators can make sure the right form is loaded on the printer. Also, when one PCL printer is off line, you can switch printing to another easily.

Because LRS offers a complete software solution, it doesn't force you to buy new printers or emulation cards. The LRS solution supports most laser printers manufactured after 1990, so chances are good that the majority of your laser printers are compatible with our solution.

### **User Story**

*One customer saved more than \$40,000 annually per form by converting its paper forms to electronic forms and the LRS solution. The customer was also able to eliminate the noise generated by impact printers it no longer needs and convert form storage space into a waiting area for its customers.*

## **7. Can we reduce our total software cost by consolidating on a single Enterprise Output Management software vendor?**

When you work with LRS to consolidate all of your EOM delivery and viewing solutions, we can reduce your current overall software cost.

LRS, the world's leading supplier of Enterprise Output Management solutions, has developed a line of products that offer a full range of functionality. Our range of products enables you to choose the functionality you need on the computing platforms you use, so you can custom configure a software solution for managing your business output effectively, regardless of your specific computing platforms. Our EOM products deliver robust functionality on mainframes, Windows servers, and UNIX hosts.

You decide the platforms for EOM solutions and LRS will provide the functionality.

LRS software also enables your company to implement centralized control of output management or distributed control. This flexibility enhances your ability to precisely configure the EOM solution you need.



## **8. Can we partner with LRS to service our customers more efficiently?**

LRS offers an Allied Partners Program for organizations who provide a variety of computing and data processing services to their clients. The efficiency and distributed output management capabilities our solutions provide to clients can lower their costs while improving and streamlining operations for our Allied Partners.

Allied Partner companies that have LRS solutions installed on a central mainframe can transmit documents to LRS software installed on various platforms at client locations. Clients can use our solutions to manage output, distribute it throughout their organizations, and archive it for online viewing. The result is simplified output management for the Allied Partner and its clients, along with improved operating efficiency and lower overall cost.

### **User Story**

*Siemens Medical Solutions Health Services, an LRS mainframe software customer since 1982, has generated more than \$2 million in revenue as an LRS Allied Partner over the past five years. LRS is the recommended output distribution solution for Siemens Medical Solutions customers.*

### **Summary**

Most organizations need to evaluate their print management software from time to time; today's budget pressures and industry initiatives give IS departments in banks, financial services companies and insurance companies the perfect opportunity for that evaluation. IS staff members need to decide whether their current software provides the value their organization needs.

Enterprise Output Management solutions from LRS can help businesses improve efficiency and lower costs. Whether you need to share print resources across applications, implement electronic forms, or add the security of encrypting print jobs for network transmission, LRS offers a software solution. The range of functionality we offer with our Enterprise Output Management products enables you to customize a solution for your business without buying products from multiple vendors.

The LRS commitment to providing output management solutions for the financial sector dates back to 1982. We understand the concerns of banking, finance, and insurance organizations and we continue to develop solutions for them.

### **Learn More**

For more information about LRS solutions for the financial sector, please call 217-793-3800 or visit us online at [www.vps.com](http://www.vps.com).



## About LRS

Levi, Ray & Shoup, Inc., is the industry leader in Enterprise Output Management products—our software runs on more than 5,000 Enterprise systems worldwide. Founded in 1979, LRS is now an information technology firm of 500 employees offering a variety of products and services. We developed the first software that enabled the MVS mainframe to distribute output to printers outside the data center, and today our Enterprise Output Management family of software products provides output distribution, data stream conversion, monitoring/control, and viewing/archiving throughout an enterprise.

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