



# VPSX

## Reliable Output Management for the Windows Environment

**The VPSX™ solution enables better service levels with fewer resources, providing guaranteed delivery of business-critical output and simplifying the overall output environment.**

This high-performance Windows-based output management solution can keep up with a company's growing business information delivery needs.

### Eliminate print problems and unnecessary costs

We have found that operating costs do increase for organizations relying on the native Windows operating system for their critical business printing. Windows print queue facilities offer little control or status information about printing, so even minor problems become costly as they involve help desk or other technical staff.

Lost or delayed mission critical output (e.g., batch printing pick lists from an ERP application) can cost substantially more. Business processes grind to a halt as trucks stand idle at loading docks, frustrated customers wait for service reps that cannot produce their forms, hospital patient admissions are delayed, etc. The costs are staggering and the impact on your business can be immeasurable.

The VPSX solution empowers the Windows environment with assured document delivery as well as rich print job and device status information. Most importantly, one VPSX solution can manage both business critical application output as well as Windows desktop output, enabling organizations to focus on improving business processes

instead of reacting to printing problems.

**Example:** A leading soft drink bottler chose a Windows-based VPSX solution to assure the delivery of SAP application output that drives their key business logistics processes. Running in a Windows cluster, the VPSX software provides bi-directional printing capabilities that can automatically recover from any hardware failure at the page where a print failure occurred. Result: The VPSX solution now centrally manages print delivery to hundreds of business critical printers located at fifty sites.

### Unleash advanced printing capabilities

VPSX software is architected to run reliably on the Windows Server platform, bringing with it powerful new standards like AES encryption, W3C extended log files, and communications protocols like SNMP, PJJ, and IPP to help companies fully exploit the capabilities of their existing printers, servers, and systems management applications.

Windows administrators can leverage powerful features like the print driver repository or advanced logging and analysis capabilities that capture printing metrics. The product can account for cost differences when requesting an alternate page size, color, and/or duplex mode printing. It can employ optional

*VPSX software for Windows provides a cost-effective bridge for using valuable business information – reliably delivering it in document form to users throughout an organization.*

data stream transforms or encryption to ensure output delivery to the most appropriate device, including a variety of printer types, MFPs, and production printing devices.

**Example:** A County of California implemented a Windows-based messaging application as part of a statewide law enforcement project. The customer found Windows printing could not confirm when these important documents had actually printed on their specialized continuous forms printers.

They implemented the VPSX product on a Windows platform to assure delivery of these critical documents. Result: The VPSX solution encrypts and delivers sensitive print data across California and confirms when every critical page has physically printed.



*When printing is critical to your operation, relying on standard Windows printing is risky. VPSX software decreases the occurrence and impact of print problems on users, helpdesk and applications staff, as well as customers.*

# VPSX Technical Highlights

*The VPSX solution enables print server consolidation, centralized document and device management, and simplified troubleshooting and configuration.*

## Capture Methods

Flexible capture capabilities enable the solution to manage and account for output from any platform. Both general and advanced capture methods are supported, including:

- LPR – standard method to print
- IPP – the solution acts like an Internet Print Protocol (IPP) print server, providing improved status information
- Add Printer Wizard – this Windows application uses IPP to connect VPSX defined printers for use with Windows desktop output (other methods available)
- LRSQ – this LRS® protocol transparently emulates the UNIX LP command, allowing the elimination of all native UNIX print queues on every server (clients also available for other platforms)

## Data Protection

- The product supports 128, 192, and 256-bit AES (RIJNDAEL) encryption of print streams for delivery to a variety of print servers and decryption-enabled devices
- Organizations can also encrypt data sent to a VPSX server from their applications

## VPSX Functional Component Overview:

**Client Input:** Applications on any platform can send output to a VPSX server using LPR and IPP clients. In addition, the powerful LRSQ command provides data compression, encryption, and greater control. VPSX software automatically identifies binary data types to trigger data stream conversion or to invoke special viewing software.

**Spooling:** The VPSX design supports scalability, stability, and high print volumes. The VPSX spool tracks print status and supports time-based retention, printer pooling, as well as automatic error recovery. VPSX software also provides automated spool management facilities.

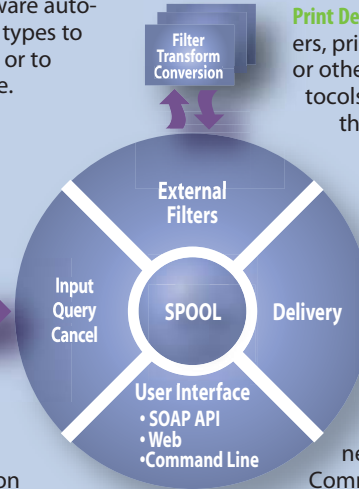
**Conversion Filters:** VPSX conversion filters can automatically transform print data formats into an appropriate format for a given output device. The modular design

ensures that any problem in an external filter or routine cannot affect stability. Document composition technology can be invoked as an external filter process.

**Print Delivery:** Output is delivered to printers, print servers, email and fax servers, or other devices via LPD or Sockets protocols. Depending on the capabilities of the target device, VPSX software can provide page-level control, display detailed job and device status information, and send or receive encrypted data.

**User Interface Control:** VPSX administrators and users can control one or more systems via an easy to use Web interface, eliminating the need to install client software.

Command line and SOAP interfaces are also available to facilitate integration with custom applications.



## Output Management Capabilities

- Efficient design enables one system to drive thousands of printers concurrently
- Communicates job and device status directly with printers using SNMP, IPP, and PJP protocols
- Provides assured delivery using PJP communication to verify when each page has physically printed
- Uses plain text printer definitions, enabling an administrator to define hundreds or thousands of printers quickly
- Establishes a centralized print driver repository with support for pre-configuring devices and preferences, and dynamic downloading to connected users
- Supports email delivery of text and binary attachments
- Supports use of optional data stream transforms
- Enables browser-based viewing of output, launching associated applications (e.g. Adobe Reader for PDF files)
- Supports inbound and outbound IPP communication, enabling VPSX to receive IPP print jobs and directly drive IPP compatible printers
- Tailored device and job notifications inform users and administrators via web browser, email notification, or external systems management tools
- Enables cost recovery using efficient VPSX page-level accounting with support for page size, color, and duplex printing
- Generates customizable log data for use with log analysis tools

## Support for Industry Standards

- HTML – standard browser based interface for managing cross-platform output distribution
- SOAP/XML – protocol for communication between various VPSX components
- PJP, IPP, & SNMP – protocols for communicating real-time status with output devices
- Active directory – security interfaces to an organization's existing user authentication modules
- W3C Extended Log Format – Web server protocol facilitates analysis of VPSX data with standard tools

Call us at 217-793-3800 or email us at [VPSXDemo@LRS.com](mailto:VPSXDemo@LRS.com) to find out more about using VPSX software for your business critical Windows printing.