



## DRS V1 R3.4 Now in Beta Test

The newest release of DRS (Dynamic Report System), V1 R3.4, is currently in beta test. This major release of DRS will feature the following significant enhancements:

- SYSOUT Report Tracking
- LPR Query Support
- VPS® to DRS file transfer
- HFS File Option

Also in beta test are three new extension products which will require DRS V1 R3.4 – DRS/OutputManager, DMCF, and DRS/Secure™. DRS/OutputManager and DMCF are described in the accompanying articles; DRS/Secure receives and decrypts encrypted output sent via TCP/IP from VPS/Secure™ or AnyQueue/Secure™ and writes the output to the JES spool, providing the security necessary to use shared TCP/IP networks for LAN to Host transfer or mainframe to mainframe transfer.

Each DRS enhancement is described below.

### SYSOUT Report Tracking

DRS V1R3.4 will enable the creator of a spool file to request a unique token to identify the file. This token will then be used by DRS to monitor the status of the file from creation to final delivery.

The SYSOUT Report Tracking feature enables DRS to maintain real-time status information for all reports it creates. The tracking data includes the current status, such as Waiting, Printing, Printed, Purged, and Error; the time each report was created, printed and purged; and any information supplied to DRS by the originator of the print to identify this request, including originating userid/host, document title, file name, etc.

This feature allows DMCF (see *New Facility for Monitoring and Controlling DRS* on page 3) to display document tracking information.



### LPR Query Support

DRS V1 R3.4 will support LPQ, the LPR/LPD query request, which enables remote clients to route output to LRS EOM products using the LPR command and then query the print status using the LPQ command. The LPR/LPD print and query functions are available on all UNIX platforms, Windows NT/2000, and TSO.

### VPS® to DRS file transfer

This feature enables users to move a print file from one OS/390 system to another using a TCP/IP connection. VPS/TCPIP sends a JES spool file from one mainframe to DRS/TCPIP on another; DRS then creates a new JES spool file. VPS-to-DRS transfer utilizes LRSQUEUE, an LRS-defined protocol. VPS sends the original job name, SYSOUT attributes, print data with carriage control, and OUTPUT JCL characteristics including PAGEDEF, FORMDEF, CHARS, and others. DRS creates a spool file, giving the user the option to use the original job name or modify it or use the DRS/TCPIP job name. The user can also maintain the original SYSOUT and OUTPUT JCL characteristics or modify them.

### HFS File Option

This feature will give DRS the capability to write data to a Hierarchical File System (HFS) file. This feature will enable VTAM and TCPIP virtual printers to write output directly to HFS files, in addition to the JES spool and/or an MVS dataset.

For more information about DRS V1 R3.4 enhancements and new extension products, contact your marketing representative at 217-793-3800 or send an email to [askLRS@LRS.com](mailto:askLRS@LRS.com).

## PDF Conversion Utilities Are Now GA

A pair of LRS products that enable users to convert output to Portable Document Format (PDF) files are now Generally Available.

VPS/PDF runs on the OS/390 mainframe and provides the capability to convert Advanced Function Presentation (AFP) documents to PDF files. AnyQueue/Text to PDF runs on a WindowsNT/2000/XP server and converts text output to PDF files.

VPS/PDF is compatible with VPS/Email for sending mainframe-generated reports to email addresses; AnyQueue™ for delivery to multiple LAN destinations; and VPS/CDI for routing to CONNECT:Direct from OS/390 from Sterling Commerce, Inc., which enables high-speed file transfers to such remote systems as VSE, UNIX, AS/400, and Microsoft Windows NT. VPS will also be able to deliver PDF datasets to PDF-capable printers.

AnyQueue/Text to PDF performs its conversion as an AnyQueue backend process. To utilize it, a user must define an AnyQueue route that specifies AnyQueue/Text to PDF as the backend process. AnyQueue/Text to PDF converts text output to PDF files and passes the files to AnyQueue for routing to their destination.

PDF files are viewable on multiple computer platforms using Adobe's free Acrobat Reader.

For more information about VPS/PDF or AnyQueue/Text to PDF, contact your marketing representative at 217-793-3800 or send an email to [asklrs@LRS.com](mailto:asklrs@LRS.com).

# DRS/OutputManager Offers SAP Certified Integration

Organizations with SAP R/3 will gain the ability to route SAP R/3 output through Enterprise Output Management products on their OS/390 mainframe with the release of DRS/OutputManager, currently in beta test. SAP has certified DRS/OutputManager as a qualified interface for use by SAP R/3 customers.

DRS/OutputManager, which requires DRS V1 R3.4 and DRS/TCPIP, builds on the SYSOUT Report Tracking and LPR Query Support features in the latest DRS release. The extension will enable SAP R/3 users to send print jobs to the JES spool via DRS utilizing the standard SAP print management interface.

DRS/OutputManager implements the SAP Basis Component – External Output Management (BC-XOM) interface. BC-XOM allows efficient and well-integrated coupling of the SAP R/3 spool system with an external output management system such as the LRS EOM suite of products.

The BC-XOM interface provides a tight connection between SAP and DRS and is transparent to SAP R/3 users. SAP R/3 users will continue to use the standard SAP GUI print management interface to control and monitor the progress of their reports. The BC-XOM interface consists of:

- Report submission
- National Language Support
- Asynchronous report status notification
- Queue query
- Report cancellation

The BC-XOM interface defines a protocol which enables DRS to asynchronously update the print status information in the SAP R/3 spooling system, constantly keeping it updated. SAP R/3 users can then monitor and control their print requests using the standard SAP R/3 print interface; they can also request pop-up window notification of major events, such as Printed, Error, etc.

The only software that must be installed on the SAP R/3 spool server is the report submission command. This command transfers the initial print request to DRS. All status notifications are handled directly from DRS to the SAP R/3 server using the SAP Remote Function Call (RFC) protocol.

Support for additional integrated business software suites, such as PeopleSoft, Baan, and Oracle, is being considered for future releases of DRS/OutputManager. If your organization has specific requirements for this type of support, please let us know. Contact your marketing representative at 217-793-3800, or email [asklrs@LRS.com](mailto:asklrs@LRS.com).

# New Facility for Monitoring And Controlling DRS

DRS customers will have a menu-driven interface for controlling DRS along with the capability to track SYSOUT written to the JES spool by DRS and display Output Reference Members with DMCF, the DRS Monitor and Control Facility.

DMCF, which requires DRS V1 R3.4, is currently in beta test.

Similar to VMCF in appearance and function, DMCF provides full-screen menus of options enabling users to control DRS without using console commands. DMCF users can start or stop DRS systems; modify DRS system parameters; and activate, modify or inactivate DRS virtual printers.

DMCF offers the user scrollable lists of DRS virtual printers and datasets. For each

defined virtual printer, DMCF can display a screen showing all SYSOUT that the printer has written to the JES spool.

For each dataset, DMCF screens display such information as last status, time and date of last status, name of the device used to print the dataset if it has been printed, and the number of pages and lines in the dataset. Dataset screens also show LPR/LPD tracking request information, SAP R/3 tracking request data, and SNA tracking request data.

DMCF users can also display all Output Reference Members that are defined in a DRS system.

CICS, VTAM, and TSO clients are available for DMCF.

## Current Version/Release Levels

| Product              | Version/Release | Fix Level |
|----------------------|-----------------|-----------|
| VPS®                 | V1 R7.0         | 318       |
|                      | V1 R8.0         | 296       |
| DRS                  | V1 R3.2         | 138       |
|                      | V1 R3.3         | 082       |
| VMCF™                | V1 R7.0         | 122       |
|                      | V1 R8.0         | 055       |
|                      | V1 R8.1         | 011       |
| VMCF Client for Win. | V1.1            | 008       |
|                      | V1.2            | 004       |
| PageCenter®          | V1 R1.0         | 018       |
|                      | V1 R1.1         | 105       |
| Web Access           | V1.1            | 009       |
|                      | V2.0            | 005       |
| Client for Windows   | V1.1            | 006       |
| PageCenter Plus®     | V1 R1.1         | 001       |
| VPSPrint             | V1 R6.1         | 023       |
| VPS/Report Browse    | V1 R2.1         | 005       |
|                      | V1 R2.2         | 000       |
| VPS/PC for NT        | V1.0            | 016       |
| VPS/PC for OS/2      | V1.0            | 019       |
| VPS/PC for NLM       | V1.3            | 025       |
| VPS/PC for Win.      | V1.1            | 009       |
| VPS/PC for DOS       | V1.3            | 019       |
| DRS/PC for NLM       | V1.3            | 022       |
| DRS/PC for DOS       | V1.3            | 019       |
| AnyQueue/PageSorter™ | V1.0            | 011       |
| AnyQueue™            | V1.1            | 011       |
| AnyQueue/WebTRAC™    | V1.1            | 011       |
| LRS® OS/API          | V1R1.0          | 025       |
|                      | V1R1.1          | 003       |
|                      | V1R1.2          | 003       |
| LRS MVS Server       | V1R7.0          | 078       |
|                      | V1R8.0          | 098       |
| LRS/LAN Server       | V1R1.0          | 008       |
| LRS/Web Connect      | V1R1.1          | 003       |
| LRS.Net              | V1R1.0          | 009       |

NOTE: "VPS" includes base VPS and all VPS extension products (VPS/PCL, VPS/IPDS, VPS/TCPIP, VPS/Email, and VPS/CDI).

"VMCF" includes VMCF/TSO, VMCF/CICS, and VMCF/VTAM.

"DRS" includes DRS/API, DRS/VPI, DRS/STI, and DRS/SAPR2.

If you are running at an old fix level and wish to receive updated distribution materials, contact your marketing representative.

Please remember that we cannot ship materials to a site where maintenance has lapsed.

## VPS/LCDS Routes Output to Third Party Software Products

Organizations have learned that routing Line Conditioned Data Stream (LCDS) print jobs from their OS/390 mainframes to printers over TCP/IP networks enables further elimination of redundant SNA hardware. LRS jointly developed VPS/LCDS with Xerox to provide TCP/IP support to the Xerox DocuSP family of printers instead of bus/tag or RJE.

Customers using this LRS® product are learning that it works well with products from other vendors. VPS/LCDS can form an integrated output management solution with BARR Enterprise Print Server, Solimar Print/Director, and RSA M.I.S. Print.

- A large insurance and financial services company has implemented VPS/LCDS as part of its initiative to migrate enterprise printing from SNA to TCP/IP. The company is purchasing newer Xerox printers that support TCP/IP but is not ready to retire all of its channel-attached Xerox printers. PC-based **Barr Enterprise Print Server** from Barr Systems works with special modules to receive LCDS print jobs and drive both TCP/IP-attached and channel-attached printers.
- A major manufacturer is using VPS/LCDS to route LCDS jobs from a mainframe in one state to Windows NT servers in two other states. **Solimar Print/Director** running on those servers receives the LCDS output, converts it to PostScript, and routes it on to TCP/IP-connected Xerox printers located in other states. The company's Xerox printers feature native PostScript support.
- A large insurance and financial services company sought a solution that would enable it to print LCDS print jobs on TCP/IP-connected printers that could also print LAN/WAN output. The company purchased new Xerox midrange production printers equipped with IP connectivity; these printers require a conversion of LCDS jobs to PCL or PostScript. The company implemented **M.I.S. Print** from **RSA**, which runs co-resident on most production printers or separately on a

low-cost Sun workstation. M.I.S. Print automatically converts mainframe data streams, including LCDS print jobs, to PostScript for printing on Xerox network printers.

VPS/LCDS, which requires VPS® V1 R8.0 and VPS/TCPIP, maintains the integrity of LCDS output, ensuring print jobs arrive with LCDS commands intact. VPS/LCDS converts ASA character control to machine control as necessary, adds carriage control if the print job has none, and sends the FCB to the printer. VPS/LCDS adds a length value to each data line to ensure accurate transmission and interpretation of LCDS data.

With VPS/LCDS, output sent over TCP/IP looks to an IP-based printer like it had been sent over a channel.

# BARR



**Rochester Software Associates, Inc.**  
Digital Printing Software Solutions

## New EOM Web Area Enables You to Share Product Suggestions

What feature would make VPS® even better in your environment? What functionality should we add to AnyQueue™?

As a user of Enterprise Output Management products, you may have thought about the features and functionality you would like to see included in our software. If you have, tell us what you think—we've made it easy for you to share your suggestions and ideas about EOM products.

We've added a new area to the EOM website, [http://www.LRS.com/eom/Enhancement\\_Request.htm](http://www.LRS.com/eom/Enhancement_Request.htm), that makes it easy for you to share your thoughts directly with the EOM Product Development staff. Simply log in with your customer ID and tell us what features you would like to see in specific EOM products.

Your comments will go directly to EOM Product Development, and you will receive a personal reply via email. Share the suggestions you have for making our software even better.

## 2002 Trade Show Schedule

*SHARE Technology Exchange*  
August 18 – 23  
San Francisco, CA

*Networking Solutions Technical Conference*  
September 23 – 25  
Orlando, FL

*OS/390 Expo and Performance*  
October 7 – 9  
Miami, FL

*Xplor 2002*  
October 27 – 30  
Anaheim, CA

## IBM's New z800 Server Available from LRS

With its recent announcement of the z800 e-server, IBM has made the advantages of the zSeries server available to organizations at a lower price than the z900.

The z800 family includes several models which work with the z/OS operating system. LRS® mainframe products have been tested with z/OS and work without problems (specific fix levels are required; please see sidebar article for details).

IBM's z800 servers use key functional characteristics of IBM z900 in a package that delivers excellent price/performance for those requiring zSeries functionality with total capacity less than that currently offered by the z900. The z800 provides a transition into the new world of IBM e-business servers and is intended to take full advantage of the IBM Framework for e-business.

The z800 server is:

- An ideal lower-entry-point, new workload platform for those who want the zSeries qualities of service using z/OS

- Ideal for VSE customers who have growing traditional OS/390 workloads or are migrating to z/OS
- Ideal for customers who want to consolidate smaller server workloads onto a single zSeries server
- An excellent choice to meet the application development needs of those who require a 64-bit target platform

As an IBM Premier Business Partner, LRS offers VPS® customers a wide range of IBM hardware products including the new z800. Our LRS IT Solutions division can help customers analyze their zSeries needs and select the model that provides the best fit.

For information on purchasing a z800 server or other IBM hardware, contact Kurt Repholz at 217-793-3800, ext 1340, or email [krepholz@LRS.com](mailto:krepholz@LRS.com).

## LRS® Products Pass Test on IBM z/OS 1.3

We have tested LRS® Enterprise Output Management products using the z/OS 1.3 operating system and found no problems.

The EOM products must be at the fix levels associated with the fixes implemented for the z/OS 1.2 operating system. Those fix levels are:

For V1R8.0:

VPS® V1R8.0.200  
VMCF™ V1R8.0.045  
LRS/MVS Server (VSV) V1R8.0.066

For V1R7.0:

VPS V1R7.0.282  
VMCF V1R7.0.118  
LRS/MVS Server (VSV) V1R7.0.073  
Report Browse 2.1.004

If you have any questions regarding the appropriate fix levels of EOM products for use with MVS, OS/390, or z/OS operating system levels, check the table on our web site at <http://www.LRS.com/eom/OS390.htm>, call Product Support at 217-793-3800, or send an email to [EOMSupport@LRS.com](mailto:EOMSupport@LRS.com).

## LRS IT Solutions Offers IBM's Passport Advantage Program

IBM application software-DB2, WebSphere, Lotus and Tivoli-is available from LRS IT Solutions through the IBM Passport Advantage program.

As an IBM Premier Business Partner, LRS IT Solutions offers IBM's Passport Advantage program. Passport Advantage is a simple, flexible way for workgroups and departments in decentralized and mid-sized organizations to acquire IBM distributed software and maintenance services in volume.

Passport Advantage delivers flexible worldwide volume licensing for DB2, WebSphere, Lotus and Tivoli software. Software maintenance that includes subscription services ensures customers can take advantage of the latest technology. Technical support helps keep users up and running around the clock, regardless of location.

Along with the benefits provided by Passport Advantage, LRS IT Solutions offers the expertise of its consultants to analyze an organization's software needs. LRS IT Solutions consultants can help an organization select and implement the software which will best address its needs.

In addition, LRS IT Solutions will monitor an organization's participation in Passport Advantage to ensure that it is getting the best pricing available and that it is up to date on maintenance, updates, and licenses on all IBM software.

For complete information on the Passport Advantage benefits offered by LRS IT Solutions, contact Scott Scheidenhelm by phone at 217-793-3800, ext. 1718, or by email: [Scheidenhelm@LRS.com](mailto:Scheidenhelm@LRS.com).

# Administrative Functions to be Included in PageCenter Web Access V1 R2.1

PageCenter Web Access customers will soon have the capability to perform administrative actions using a standard Web browser. Administrative functionality will be included in PageCenter Web Access V1 R2.1, currently in development.

PageCenter® users with the appropriate level of authority will have the capability to control Administrative Privileges, Mailbox Access, Printer Access and Document Application Access over the web.

Since security is handled from PageCenter, no changes to Web Access settings will be required to make administrative screens viewable. If an end user does not have any Administrative Privileges, those screens will never be displayed.

Users with appropriate privileges will be able to perform the functions via a Web browser that they have been able to perform using the Windows client or a 3270 terminal or emulator with PageCenter's CICS, VTAM or TSO client. A user's administrative privileges can be set to allow access to PageCenter System Administration, Pageset Administration or Security Administration functions.

All administrative screens available through PageCenter Web Access feature an easy-to-use graphical interface with pull-down selection lists, check boxes and radio buttons. PageCenter Web Access V1 R2.1 builds on the flexibility provided by LRS/Net and the architecture introduced in the previous release of PageCenter Web Access, so all administrative screens can be customized by altering the HTML templates.

Customers can modify screens to include company logos and colors, different help information and even different languages by altering the HTML templates. The PageCenter Web Access architecture allows an organization to use multiple groups of templates at the same time to meet the individual needs of different users.

PageCenter Web Access users with appropriate privileges can:

- Generate, on demand, numerous administrative reports that provide document analysis and listings of the PageCenter environment.
- View the System Statistics screen, which displays statistical counts accumulated since the last time the LRS/MVS Server was initiated.
- Capture individual request and task statistics for later reporting and extracting; these statistics can be used for various functions including charge back and performance tuning.

PageCenter Web Access V1 R2.1 will require:

- VPS® V1 R8.0
- PageCenter V1 R1.1
- LRS/NET V1 R1.0
- LRS/Web Connect V1.0

## Product Support Via Email

Whenever you have a technical question about Enterprise Output Management products from LRS, you can get the answer via email.

Simply send your question to [EOMSupport@LRS.com](mailto:EOMSupport@LRS.com).

PageCenter Web Access - Microsoft Internet Explorer provided by Levi, Ray & Shoup, INC.

PageCenter Web Access VPC Admin | User List | Preferences | Close | Help

Update | Cancel

### Update Application Definition

\* - Indicates a Required Field

Application: [SAMPLE]

Description: [SAMPLE APPLICATION]

#### Archive Data

Archive Active: [Default]

DDGroup: [ ]

Archive Retention: [005] [Years]

Vault Retention: [005] [Years]

Message Retention: [ ] [Value From \$\$\$ Application]

#### Print Codes

Print Codes: [Default]

Codes: [ ] [Printer List] [ ] [Printer List]

# PageCenter® Enhancements Add Functionality, Performance

PageCenter® users will find greater functionality and performance with enhancements LRS has added to the product this spring.

PageCenter imports datasets from VPS® on the OS/390 host and stores them in a host-based archive. Users throughout the enterprise can immediately view the archived reports using web, Windows, and 3270 clients.

## Spring 2002 enhancements are:

- *Event logging*  
LRS has enhanced PageCenter to log programmatic events occurring within the PageCenter database. Customers can now define the events that will be logged, such as the number of times a report was viewed and by which user.
- *Batch Client Parameter dataset*  
Retrieve requests can optionally generate parameters in a user-specified dataset that can be used to perform mass updates to maintain PageCenter definitions.
- *Improved Vault Restore performance*  
We have improved the speed of restoring vaulted datasets to the PageCenter archive for viewing. This enhancement enables PageCenter to record the location of each dataset when it is vaulted and then use that location information to scan directly to

the desired dataset during a restore without processing through all the datasets. In addition, an Open End of Volume exit enables the restore process to use only the required volumes from a multi-volume vault file.

- *Multiple Datasets, One Tape*  
With this enhancement, users are able to write multiple vault datasets to one physical tape if the device supports it.
- *View During Backup*  
PageCenter users can now view reports stored in the PageCenter database while the database is being backed up.
- *Separate Security for L1 and L2 Restore*  
With this enhancement, PageCenter customers are able to allow users to restore pagesets from Level 1 vault for viewing without allowing them to restore pagesets from Level 2 vault. Customers who write Level 2 vault to tape can use this enhancement to minimize the number of tapes operators must retrieve and mount for PageCenter users.

Scheduled for completion by December 31, 2002, is a PageCenter Application Programming Interface (API) which will allow external programs to modify administrative settings on a real-time basis.

## VPS® User Conferences Planned for Dallas and Washington, DC

The Spring 2002 VPS® User Conferences, in Las Vegas, New York, and Chicago, attracted VPS users from more than 100 organizations in all industry segments. Plans are now underway for Fall 2002 conferences in Dallas, Texas, and Washington, DC.

VPS User Conferences are free, but registration is required.

During each conference, VPS experts from LRS detail everything that's new in our Enterprise Output Management product suite, including our output encryption products—VPS/Secure™ and AnyQueue/Secure™—along with VPS V1 R8.0, VPS/PDF, VPS/LCDS, BIP support in VPS/TCPIP, and AnyQueue/WebTRAC™. We offer training on configuring and operating a range of VPS products, including VPS, VPS/TCPIP, VPS/PCL, VPS/Email, VMCF, and the AnyQueue™ product family.

The conference also features training for the entire DRS suite of products, including DRS/TCPIP and DRS/Natural, and an update on our product development plans.

For more information about the Fall 2002 VPS User Conferences, send an email to [VPSNews@LRS.com](mailto:VPSNews@LRS.com). Details will be posted online at [www.LRS.com/EOM](http://www.LRS.com/EOM) as soon as they are available.



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# The Print Line



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