

XML Publisher and Oracle EBS:
Automated Document Delivery via Email and Fax
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INTRODUCTION

Communications between companies is critical so that commerce may occur smoothly and effectively. Any delay in the delivery of information may seriously affect the ability of a company to complete the manufacture, assembly, or shipment of its product or service. Delays impact profitability. Therefore, it is important for every organization to evaluate its communications methods, improve speed and accuracy, and most of all, reduce or eliminate costs along the way.

Business documents tend to be well-defined (such as purchase orders, invoices, statements, packing slips), printed and distributed to the intended recipient. Some companies cling to the use of printing these documents on pre-printed, multi-part forms. More progressive companies have purchased "forms packages," replacing the pre-printed form with an electronic form which distributes to several printers dispersed throughout the company infrastructure.

Unfortunately, many companies overlook automating business communications by ignoring ways to improve the delivery of these critical business documents. They continue to use postal delivery, courier delivery, or manual faxing. All three of these methods include wasted material costs, human intervention, and delivery costs. Fortunately, this "pain" may be significantly reduced or completely eliminated by using an automated document delivery solution.

In late 2004, Oracle Corporation introduced XML Publisher (hereafter referred to as XMLP) available on Oracle E-Business Suite (EBS) 11i. XMLP effectively eliminates the purchase of other third-party tools to create electronic forms. Standard tools like Adobe Acrobat and Microsoft Word may be used to create a form, and "tokens" place data (such as the company, address, PO number, line items, etc.) from the Oracle database directly onto the form. The tokens are defined using an XML data stream. Additionally, XMLP touts the ability to deliver documents via fax and email. By using common applications to simplify forms creation and offering a delivery mechanism, XMLP greatly improves the efficiency of the document delivery process.

This paper is intended to educate users, developers, managers, and executives of companies using Oracle EBS to maintain and distribute critical business documents with a third-party automated document delivery solution.

DOCUMENT DELIVERY DEFINED

Document delivery is defined as the final transmission of a document from an application to a defined external and/or internal destination that may include a fax machine, an email inbox, a network printer, and/or a data archive.

Document delivery may be best understood when it is dissected into its four major components of the process: *submission*, *transmission*, *acknowledgement*, and *management*.

Submission includes the available tools, APIs, and other transparent software that effectively delivers the document (such as purchase orders, invoices, etc.) from Oracle EBS into the document delivery system. A valid submission includes data (i.e. the document) and one or more recipients (i.e. fax number, email address, printer IP address, or file name).

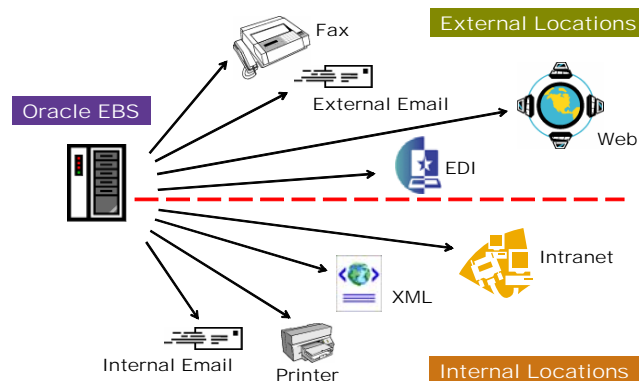
Transmission includes the delivery of the document using intelligent algorithms and queues for transport to fax devices, email inboxes, printers and archives. A delivery server of some kind is used to perform the connection to fax machines or integration with a company's mail server. The delivery server may be hardware-based and located within your company infrastructure or Internet-based and hosted by an outside provider. In either case, the document delivery system must report all errors, interpret and recover from them, and provide scalability as the volume of documents increases.

Acknowledgement is the process at which the sender is notified that the document has been delivered to the intended recipient whether successfully or unsuccessfully. Acknowledgement is automatic whereby the document delivery system sends detailed information in an email message, a printed copy, within a file, or to a database.

Management includes the intelligence of maintaining an accessible audit trail and transmission history of all documents processed in the document delivery system. Information should be retrieved easily from various user interfaces, be accessible to qualified users, and comply with any government regulations.

An ideal document delivery solution should permit the delivery of ANY document in ANY format on ANY version of Oracle EBS (see **Figure 1**).

Figure 1: Oracle EBS



IMPORTANCE OF DOCUMENT DELIVERY

The primary objective of a document delivery solution is the reduction or elimination of costs associated with labor and materials with postal, courier, or manual fax delivery of business documents. To remain competitive in today's global-centric business environment, management teams have mandated that costs be reduced while products and services improve. Organizations strive to decrease the "order-to-cash" cycle (with regards to invoices, sales orders, statements, etc.) and decrease the "procure-to-receive" cycle (request for quotations, purchase orders, etc.). Implementing an automated document delivery solution achieves all of these mandates and initiatives.

Consider the following scenario: Once a purchasing agent creates a purchase order, he or she typically submits the document to the printer and retrieves it once printed. Next, the employee creates a cover sheet and proceeds to the fax machine, then placing the material in the hopper, dialing the recipient fax number, and awaiting completion. Of course, this process has various caveats along the way whereby documents may be printed all at once and one person may collect them, burst them, create unique cover pages, and transmit them. Slightly better economy exists with one person performing this task, though time-intensive.

What time savings can be achieved with an automated solution? What could that person do with that time being saved? Studies show that STR Software's customers experience time savings of at least 10%, effectively adding four hours of productivity per each user's week.

When calculating the costs associated with manual fax delivery versus automated document delivery (with perhaps some portion delivered via email), "phone time" is equivalent because it requires the same amount of phone time via an automated fax solution compared to manually faxing the same document. Therefore, the cost difference is computed primarily in the increased labor and time associated with manually faxing the printed materials. If expensive pre-printed forms are used rather than laser-printed forms, the materials cost becomes dramatic. The higher the volume of documents or employee salary, the greater the savings become when using an automated solution.

Solutions are purchased when the return on investment is quick and well calculated. Many companies demand a payback of less than two years when purchasing a system to improve upon a task or procedure. Automated faxing is no different. Fortunately, automated document delivery solutions provide an ROI measurable in months. The actual time and savings depends simply upon the daily volume of pages.

Take the following scenario:

- Average number of pages per fax: 2
- Average hourly wage of employee: \$10.00
- Long-distance telephone charges: 6¢/minute

Faxes per Day	Annual Cost Savings
25	\$9,875
50	\$19,750
100	\$39,500

With as few as 25 faxes transmitted per day, a company can save almost \$10,000 per year. To learn how STR Software came to these conclusions and determine what your company's ROI will be, please visit our company web site.

ORACLE'S NATIVE FUNCTIONALITY

Starting with version 11i, Oracle Corporation incrementally improved its capability of providing an automated document delivery solution. However, the purchase order is the only document enabled for document delivery.

Using the PO Approval Form functionality of Oracle EBS, the user is presented with a particular screen (see **Figure 2**) when approving the document. Note: the screen supports selection of delivery for print, fax, and/or email.

Figure 2: PO Approval Form

By default, the preferred method of delivery for the supplier is checked and the value for email or fax is automatically populated. Oracle refers to the “Supplier Site” setup (as shown in **Figure 3**) to determine the “Supplier Notification Method” and the associated addresses.

Figure 3: Supplier Site

If the checkbox is selected for print as shown in the form, then the printer associated with the Oracle log-on is used.

The output from Oracle Reports is a simple ASCII text report (as shown in **Figure 4**). If an organization purchases pre-printed forms, it must ensure that the text is properly aligned on the pre-printed form. Otherwise, a third-party forms package can be used to eliminate the pre-printed form. With the introduction of XML Publisher, the option to generate PDF

formatted reports is now enabled. In order to print a document created by XML Publisher, PASTA must be installed so that the PDF data can be converted to PostScript.

Figure 4: Printed Text Output

```

                                     4565      1      1

                                     3455 108th Avenue
                                     Seattle, WA 98101
                                     United States

STR Software                          90 Fifth Avenue
11505 Allecingie Parkway              New York, NY 10022-3422
Richmond, VA 23235                   United States
United States

                20025      12-OCT-06 B Lowe      12-OCT-06 B Lowe

45 Net (terms date + 45)              Origin

Due

All prices and amounts on this order are expressed in : US dollar
1  BUSCARDS                          4.00 BOX      35      140.00 N
Business Cards, Box of
250
o SHIP TO:
  Address at top of page
  
```

Returning to the PO Approval form, if the checkbox is selected for fax, then the fax number is extracted from the supplier table and displayed (as shown in **Figure 5**).

Figure 5: PO Approval Fax

The output from Oracle Reports is a simple ASCII text report (see **Figure 6**) or a PDF generated by XMLP. However, note that the text report has additional information at the beginning (header) and at the end (trailer). The PDF output has a similar mechanism whereby a separate command file is generated. Years ago, Oracle Corporation added this information (Fax Command Language) to support integration with a document delivery system. These commands effectively inform the delivery system of the recipient fax machine, document type, and other information. Note: an organization **MUST** have a third-party document delivery system in order to process and deliver these documents.

Figure 6: PO Approval Fax Text Output

```

((begin)){{fax 804-897-1638}}{(doctype pofax)}
                                     4565  0    1

                                     3455 108th Avenue
                                     Seattle,WA 98101
                                     United States

STR Software                          90 Fifth Avenue
11505 Allecingie Parkway              New York,NY 10022-3422
Richmond, VA 23235                   United States
United States

                20025      12-OCT-06 B Lowe

45 Net (terms date + 45)              Origin
Due

All prices and amounts on this order are expressed in : US dollar
1  BUSCARDS                          3.00 BOX      35      105.00 N
Business Cards, Box of
250
o SHIP TO:
  Address at top of page
  
```

With the PO Approval form, if the checkbox is selected for email, then the email address is extracted from the supplier table and displayed (as shown in **Figure 7**).

Figure 7: PO Approval Email

The screenshot shows a software window titled "Approve Document (Vision Operations) - 4565". It has two tabs: "Approval Details" and "Additional Options", with "Additional Options" selected. The window is divided into three main sections:

- Encumbrance:** Contains checkboxes for "Reserve" (unchecked) and "Unreserve" (unchecked). There are also fields for "Unreserve Date" and "Accounting Date".
- Approval:** Contains a checked checkbox for "Submit for Approval" and an unchecked checkbox for "Forward". There are fields for "Forward From", "Approval Path", and "Forward To". Below these are "Note" and "Change Summary" fields.
- Transmission Methods:** Contains checkboxes for "Print" (unchecked), "Fax" (unchecked), and "E-Mail" (checked). There are radio buttons for "XML" and "EDI". The "E-Mail Address" field is populated with "sales@strsoftware.com".

At the bottom of the window are "OK" and "Cancel" buttons.

Rather than an ASCII text report, the report is formatted in a completely different format as HTML (as shown in **Figure 8**). Compared to the ASCII text reports sent to the printer or fax destinations, the format sent for email is an improvement. Unfortunately, the purchase order is not formatted identically for each of these destinations. If an organization is on 11i10 and using XMLP, the email is sent as a PDF attachment, and all 3 mechanisms (Print, Fax, and Email) have the same look and feel. The actual delivery of the email is done via the Workflow Mailer.

Figure 8: PO Approval Text Email

Vision Services 90 Market Street Philadelphia, PA 19103-4211 US		<u>SHIP TO</u> District of Columbia Office used in Services SoB 1401 Pennsylvania Avenue Washington, DC 20002 US		<table border="1"> <tr> <th colspan="2">Purchase Order</th> </tr> <tr> <td>PURCHASE ORDER NO. 3226</td> <td>REVISION 0</td> </tr> </table>		Purchase Order		PURCHASE ORDER NO. 3226	REVISION 0
Purchase Order									
PURCHASE ORDER NO. 3226	REVISION 0								
<u>SUPPLIER</u> Office Supplies, Inc. 3605 Warrensville Center Road Shaker Heights OH 44122		<u>BILL TO</u> District of Columbia Office used in Services SoB 1401 Pennsylvania Avenue Washington, DC 20002 US		<table border="1"> <tr> <td>DATE OF ORDER 10-JUN-04</td> <td>BUYER Chappell, Mr. Ted</td> </tr> <tr> <td>DATE OF REVISION</td> <td>BUYER</td> </tr> </table>		DATE OF ORDER 10-JUN-04	BUYER Chappell, Mr. Ted	DATE OF REVISION	BUYER
DATE OF ORDER 10-JUN-04	BUYER Chappell, Mr. Ted								
DATE OF REVISION	BUYER								
CUSTOMER ACCT. NO.	SUPPLIER NO.	PAYMENT TERMS	FREIGHT TERMS	F.O.B.	SHIP VIA				
	1008	30 Net (terms date + 30)	Due	Origin	DHL				
CONFIRM TO TELEPHONE				REQUESTOR/DELIVER TO					
Line	Part Number / Description	Delivery Date	Quantity	UOM	Unit Price	Tax	Extended Price		
1	X Business Cards, Box of 250								
	Ship To Please refer to Ship To Address at top of page		2	BOX	(USD)35	N	(USD)70		
Total							(USD)70		

As an alternative to the PO Approval Form for submission of purchase order output, Oracle EBS has also been modified from the Submit Request Form with the Concurrent Manager. The Submit Request Form has two parameters for user entry, "Fax Enable" and "Fax Number" (shown in **Figure 9**).

Figure 9: Submit Request

The screenshot shows a 'Parameters' dialog box with the following fields and values:

- Purchase Order Numbers From: [Empty]
- To: [Empty]
- Release Numbers From: [Empty]
- To: [Empty]
- Release Dates From: [Empty]
- To: [Empty]
- Approved: [Empty]
- Test: [Empty]
- Print Releases Option: **Yes**
- Sort By: [Empty]
- Dynamic Precision Option: **2** -9,999,990.00
- Fax Enable: [Empty]
- Fax Number: [Empty]
- Print Canceled Lines: **Yes**
- Print Blankets: **No**

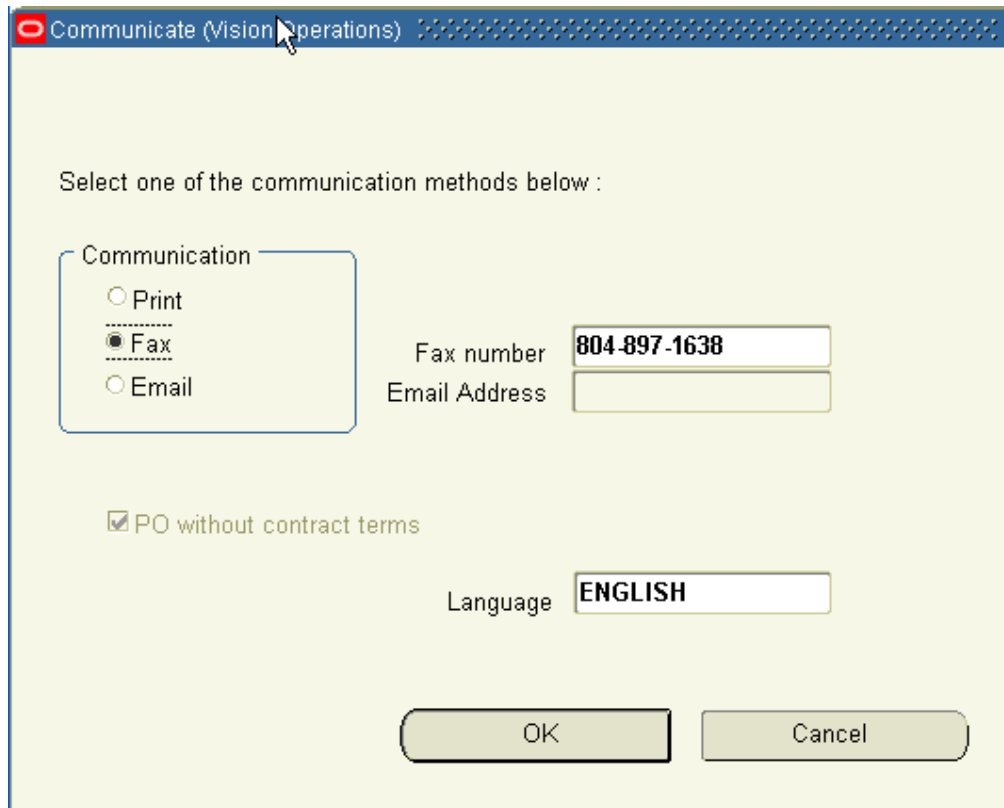
Buttons at the bottom: OK, Cancel, Clear, Help.

As in the fax selection method of the PO Approval Form, the purchase order report submitted via the Concurrent Manager creates identical output with the inclusion of Fax Command Language tokens in the text data or in a separate command file for XMLP output (see **Figure 6** above).

Once again, only purchase orders may be submitted for fax delivery with the Submit Request Form. "Fax Enable" and "Fax Number" are available ONLY if you select the report name of "Printed Purchase Order" or "PO Output for Communication" (11i10). They are not available for any other seeded Oracle Report.

Starting in 11i10, Oracle introduced the "Tools -> Communicate" method for delivering purchase orders. The purpose of this form is to allow buyers to fax/email/print a document without having to "re-approve" a purchase order. This form is accessed via the Purchase Order Summary form and is similar in functionality to the PO Approval form (as shown in **Figure 10**). This form is only accessible if using XML Publisher to format purchase orders.

Figure 10: Tools->Communicate

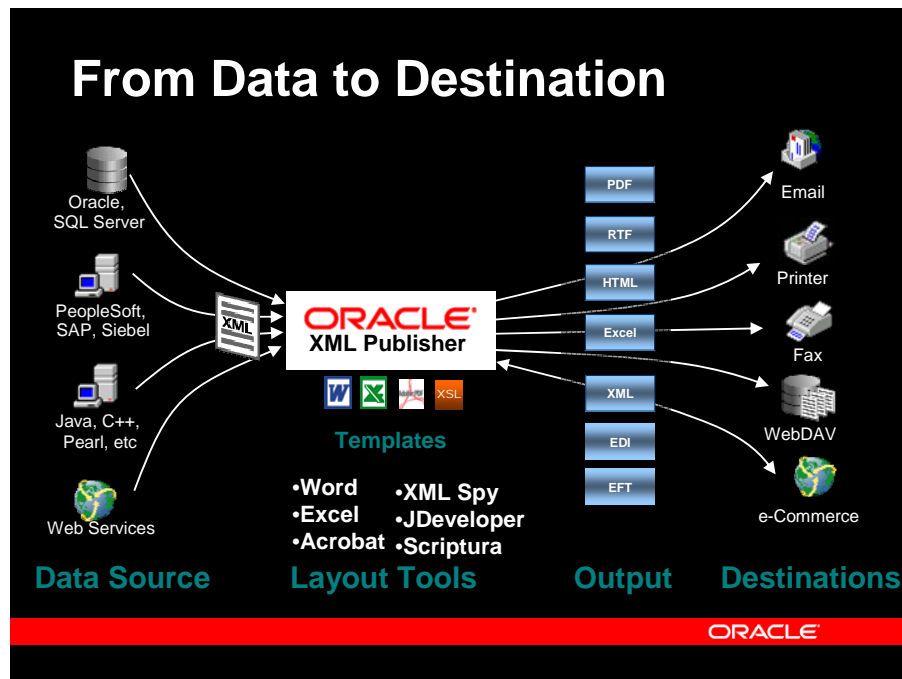


In all cases above, Oracle has enabled some commands via profile options that allow the addition of text based terms and conditions via email and the ability to send an email to a hard coded secondary recipient. Unfortunately, in all cases above, the submission of multiple purchase orders at the same time (i.e. a range of POs) is not permitted.

XML Publisher Functionality

As evidenced from the architecture diagram (see **Figure 11**), XMLP also has the ability to deliver data via fax and email. This is accomplished with XMLP's Delivery Manager.

Figure 11: XML Publisher Delivery Manager



Slide courtesy of an Oracle Corporation presentation

The XMLP Delivery Manager is a set of Java APIs that can be utilized to facilitate the delivery of your documents to their intended recipients. For complete specifications on the API, please consult the XMLP documentation.

For fax, the open source UNIX package, Common UNIX Printing Solution (CUPS), must be installed along with a fax package capable of communicating with CUPS. Oracle suggests the open source packages eFax and FAX4CUPS. These packages integrate with fax modems which unfortunately do not provide a high level of throughput or manageability such as resending, redialing, error correction/detection, and cancellation of documents. For email, the Delivery Manager API uses standard SMTP calls.

While XMLP is certainly more than capable of delivering documents, there is neither a direct integration with Oracle EBS nor is there a packaged solution readily available for 'out of the box' use. For a company to fax and email using the XMLP Delivery Manager, Java classes would need to be developed that determine the recipient information, call the appropriate XMLP APIs, and then return the status of the document. Work would be required to integrate this solution into Oracle EBS so that users can deliver their documents directly from their native application. Methods would also be necessary to provide confirmations and reporting on document status to users. Lastly, a way to manage the system would be necessary as a whole, including how to schedule documents for delivery, how to resend or retry documents on failure, etc.

REQUIREMENTS FOR AN AUTOMATED SOLUTION

Before going further, STR Software suggests companies consider the following items to develop requirements for available functionality in any document delivery solution with Oracle EBS:

Submission

- *Batch submission of documents*, whereby an Oracle Report/XMLP output file has more than one document and each document may be delivered to one or more recipients with no user intervention.
- *Individual submission of documents*, whereby an Oracle Report/XMLP output file contains ONE document for delivery to one or more recipients whereby the user is allowed to enter all delivery details.
- *Document Types* should include virtually all information that is printed such as purchase orders, invoices, sales order acknowledgements, statements, custom reports and more.
- *Document Formats* should include text, PCL data stream, PostScript, PDF, HTML, and more.
- *Signatures*, one or more signatures at various positions within the document.
- *Attachments*, within the document and stored in Oracle EBS or in Oracle Content Services.
- *Cover Pages*, whether dynamic (changing per document type, per user, etc.) or static (not used or a default value).
- *Terms and Conditions*, whether dynamic (changing per document type, per user, etc.) or static (not used or a default value).
- *Report Formatting* using either standard Oracle Reports (with XML Publisher) or a third-party solution.

Transmission

- *Delivery Locations* should include any number and any combination of fax, email, print, and archive.
- *Volume* calculated in pages per day, used to justify the purchase of the solution to management.
- *Choices of Delivery Server* whether premise-based (using turnkey or build-your-own) or Internet-based.
- *Error Detection and Error Recovery* with complete audit trail of transmission.
- *Complete statistics* that provide effectiveness and projected capacity of the solution.

Acknowledgement

- *Acknowledgements*, to whom and how?
- *Controlled status*, whereby documents are confirmed if successful, unsuccessful, both or none.

Management

- *Configurable retention of transmission history* whereby the document delivery system automatically removes "old entries."
- *Secure retrieval of transmission history* using Oracle security.

For greater detail of these requirements with related caveats, quirks and general recommendations, please consider the following information:

A document delivery solution has two requirements during document submission, namely the existence of a document (data) and a destination (delivery address). In virtually every case, customers already have a document that they have been either manually faxing or postal mailing. Therefore, the biggest challenge exists in obtaining the destination address.

The destination address may be found from any of the strategies shown below:

- The destination address may be extracted from the output data itself. In this case, the report already contains the fax number or email address printed somewhere within the report.

- The destination address may be retrieved from the Oracle database or other data structures using a value from the output data itself. In this case, the purchase order number may be used upon submission of the Printed Purchase Order report to locate the stored fax number, email address, or printer specification in the tables.
- The destination address may be entered directly by the user when the Oracle report is executed. In this case, the document delivery system should prompt the user for the necessary destination information in an easy-to-use form in Oracle EBS.

Of course, the destination information is critical, but additional information may need to be retrieved to completely deliver your documents.

Consider the following questions:

- Where does the submission process originate in Oracle EBS? Will you use the PO Approval Form (supporting only purchase orders)? Or will you use the Submit Request form for all other documents? Certainly you should be able to use both methods of submission.
- How do you plan to submit documents? Will you submit one at a time? Will you submit many documents as a batch?
- Where should the documents be sent? Should they be sent to the vendor, vendor contact, customer contact, email address found on a sticky note, an archive solution, others?
- How should the final document be constructed? Should it contain a cover page, signatures, logos, electronic forms, terms & conditions, etc.?

Relating to document transmission, a document delivery solution requires a delivery server to fax, email, and print the documents. Ideally, the end result of the delivered document should be identical across all destinations.

For fax destinations, equipment may be purchased or a service may be secured to actually deliver the document as a fax. Purchased equipment may be completely plug-and-play (also known as “turn-key”) or sold as components. Of course, there are advantages to each. Plug-and-play solutions are ready to use, completely assembled and configured. You need only attach the fax boards to the phone system and connect the network card. Best of all, some vendors offer overnight replacement of the whole chassis to get you up and running quicker the next day. Component solutions contain the fax server software and one or more fax boards that require you to install, configure and test into a server that you supply. The advantage: the company can maintain its standards for chassis, O/S, data communication, racks, etc.

Rather than purchase hardware, a company may wish to consider an alternative using one of the many Internet-based fax service providers. Instead, the document delivery system integrates with one or more Internet-based Application Service Providers (ASP) for final delivery of the fax document. One disadvantage to this method is that users typically have no control over error handling, error correction, retries, etc.

For email destinations, the document delivery system is typically set up as a virtual server using an agent such as sendmail to transmit the documents via email. The system may either forward to the company mail server or forward directly to the Internet, dependent upon the firewall and other security established by the company.

Once again, a company has numerous considerations as it explores the features and benefits of any of these transmission methods such as the following:

- Can you fax and/or email with the solution?
- How many pages per day can the system handle?

- Can the solution scale as capacity/volume is increased?
- How quickly must any document be transmitted? This defines the capacity in order to define the number of fax lines to handle the traffic during peak volumes.
- Do you need intermediate status response? Is it important to know the status of delivery at any stage of the delivery, i.e., page one of N, page 2 of N, etc.
- What document formats do you wish to submit? Text, PDF, PCL, PDF, HTML, etc.?
- Do you want to send faxes from your network of desktop PCs or other applications on your Windows servers?
- Do you wish to receive faxes and intelligently route them to various recipients, printers, files, etc.?
- What control do you want at any time? Do you wish to cancel active transmissions? Do you want to change the scheduling and priority of the transmissions?

Once the document is transmitted, the document delivery system offers various reports and confirmations about the status of the delivery. Consider the questions below:

- Who should the confirmation be sent to? Should it be sent to the user, the buyer, the requestor or others?
- When should the confirmation be sent? Should it be sent only if the transmissions were successful, unsuccessful or both? Should it be sent at any stage of the transmission starting at ready, active, queued, completed?
- How should the confirmation be sent? Should it be sent as an email to the sender's inbox or a general administrator? Should it be sent to a configurable printer? Should it be sent to a web interface?
- What should the confirmation look like? Should it contain a simple statement (or statements) of the outcome? Should it be a copy of the actual document? Should it be a report in either summary or detailed format?

What about document management? This is the most critical piece of any software, how to determine when something is not working and how to recover from any failure.

- I noticed that the document has failed, now what do I do?
- My customer wants another copy sent to an alternate destination? How do I do this?
- Who manages my documents? Me (the user)? Or, my boss or administrator?
- Where are my documents managed? Are they in Oracle EBS, a separate database, or available from the web?
- Can I see document delivery in the various stages of processing?
- Can I cancel any active document and change its priority in the transmission queue?

SUMMARY OF COMMON DOCUMENT CHALLENGES

Issues:

1. High manpower costs, limited employee productivity with manual delivery
2. Lack of control and wasted time when determining documents' receipt
3. Lack of flexibility in choice of output, only single destination
4. Limited document type capabilities
5. Low-quality documents or high-cost forms packages
6. Complexity of integration with Oracle EBS
7. Complications and incompatibilities associated with upgrades or new requirements

Solutions:

1. Electronic document delivery via an automated, unattended system

2. Information delivery management, immediate real-time feedback within Oracle, via email, and detailed reports
3. Multiple delivery destinations: fax, email, print
4. Multiple document types with no limitations to customizations
5. Formatting and Presentation, including forms overlay capabilities and forms package integration
6. Connectors, engineered specifically for a seamless “hook” into Oracle EBS
7. Scalability, support of multi-org configurations with multiple document types available

FINDING THE BEST VENDOR

STR Software offers the following questions to consider and ask each vendor when considering the purchase and implementation of an automated document delivery system.

- Ask for product documentation rather than marketing collateral.
- Ask for a live demonstration of the vendor’s product operating with Oracle EBS rather than a slide presentation.
- Ask to speak to references, specifically companies that have experienced several product upgrades of the document delivery system and upgrades of Oracle EBS.
- Ask what you receive from the purchase of an annual support agreement.
- Ask how support is provided. Ask if it is the vendor or an outsourced company.
- Ask if the vendor will document and support any customizations that arise during the life of the relationship.
- Ask how the product is implemented. Ask for a detailed outline and list of tasks for implementation.
- Ask if you may implement it yourself and ask for references of those who did.

CONCLUSION

As evidenced, there is a significant amount of complexity and consideration behind automated document delivery. Oracle provides some email and fax functionality, however, it does not address all facets of document delivery. A third-party solution must be present to actually “deliver” a fax. Key points such as how a document is submitted, methods of transmission, and how documents are acknowledged and managed must be considered for a successful implementation. Understanding your requirements for document delivery is a crucial first step in determining the best solution for your company.

About STR Software

Founded in 1986, STR Software, an enterprise software company, is headquartered in Richmond, Virginia. Providing a single point of contact for its AventX Product Suite, the company develops, markets, and supports automated document delivery solutions for fax, email, and internet fax for host ERP applications such as Oracle E-Business Suite, PeopleSoft, and SAP in Unix, Linux, MPE, and Windows environments. STR Software, a Certified Oracle Partner, has been recognized for engineering reliable “Solutions That Run.”

For more information, please call 800.897.7097 or visit our website at <http://www.strsoftware.com>

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CASE STUDIES

STR Software offers three recent case studies detailing each company's implementation and use of AventX Product Suite. From a major tire distributor to a power cooperative and an international communications company, each of the companies referenced have the following themes in common:

1. Replacement of a competitive solution that was unable to meet their needs
2. Rapid implementation of AventX, measurable in hours
3. Successful utilization of XMLP output with AventX integration

Learn how these companies significantly reduced costs, improved employee efficiency, and streamlined their business processes.

American Tire Distributors

The Company

For over 70 years, American Tire Distributors (ATD) has been known as the largest tire and wheel distributor to retailer dealers throughout the automotive world. Today, they operate America's most complete and best-managed network of coast-to-coast distribution centers in their industry. With a focus on staying innovative and increasing efficiency, ATD realizes the importance of reliable workflow automation solutions able to streamline business processes.

The Problem

Three years ago, ATD replaced their homegrown solution with the industry's gold standard ERP solution, Oracle's E- Business Suite, operating on the HP Unix Hardware. As part of the project, they planned to deliver purchase orders and invoices using automated fax. They also intended to utilize Oracle's latest technology, XML Publisher, to output documents in PDF.

ATD soon discovered that their existing third-party automated document delivery application, RightFax, did not meet their needs within Oracle EBS. Unable to achieve satisfactory integration with XML Publisher, the solution presented management difficulties for users and administrators. The ATD IT staff received little assistance from the vendor with the implementation and ongoing problems.

Steve Peppard, CIO, American Tire Distributors, explains, "We needed to resolve the issues with our purchase orders and invoice delivery and move on doing what we do best; sell tires, wheels and other products to our dealers."

The Solution

On January 4th, 2006, Peppard and representatives of ATD's functional and technical users attended a live web demonstration of AventX Oracle Connector. Impressed with the ease of navigation and integration with XML Publisher, the demonstration ended with a commitment to buy.

Just two weeks later, STR Software engineers arrived on site and worked closely with ATD's IT staff to implement their AventX solution in a production and non-production environment. Additionally, STR Software installed their solution for application faxing and emailing from a Windows-based software package, OnBase, to fax overdue customer invoices. By the end of the second day, ATD went live with both products.

STR Software has embraced XML Publisher, realizing its functionality offers cost savings and efficiency to its customers. By integrating its functionality, AventX Oracle Connector can deliver XML Publisher output via fax and email. Ben Bruno, President of STR Software, explains, "Our product works with XML Publisher by scanning for information in the PDF report such as the PO number. This template-based publishing solution provides a new approach to report design and publishing by creating a variety of outputs to meet our customers' diversity of business needs."

Companies such as ATD manage corporate growth, build customer relationships and remain competitive in their retail space by making sound decisions about IT investments. STR Software's AventX Product Suite is designed to streamline, manage and automate document delivery processes from Oracle E-Business Suite, allowing companies to reduce operating costs, lessen demand on administrative resources and realize greater value from existing and future IT investments.

Peppard states, "Since the implementation, our team has worked with STR Software to determine additional enhancements to continually improve our users' productivity. There is a huge advantage when you take the time for a thorough competitive review of products, including a live demonstration, and choose a software solution engineered to provide the latest functionality and exceptional customer service."

Minnkota Power Cooperative

The Company

Founded in 1940 to generate electricity during the Depression era, Minnkota Power Cooperative, Inc. (MPC) today serves eleven distribution cooperatives and twelve municipal utilities. With more than 300 employees on staff, MPC is able to meet the energy needs of more than 125,000 customers over 34,500 square miles of eastern North Dakota and northwestern Minnesota. With expectations of future growth, MPC realizes the importance of cutting costs and improving productivity within their business processes.

The Problem

Over a period of ten years, a satisfied MPC utilized a legacy document delivery solution on their IBM System 390 mainframe. Though automating and batching a modest volume of 200 purchase orders and requests for quotation per day, MPC became interested in utilizing Oracle's latest technology, XML Publisher, to easily format their PO data. Their goal: to better communicate with their customers via fax and email by utilizing Oracle reports.

To MPC's dissatisfaction, while upgrading the company's server and software to accommodate Oracle E-Business Suite, they learned that their current document delivery solution was unable to integrate with XML Publisher output. Tim Sanger, Systems Programmer II, reported problems with documents being held in the queue, despite having the correct fax number and contact information. Additionally, he was told that the solution might only allow for one fax per print stream which would not meet users' needs. After MPC repeatedly attempted to salvage its investment with a 3rd party reseller, Sanger reports, "Our management was getting upset with the approach of selling us more add-ons that did not work."

The Solution

After learning of STR Software's name through a XML Publisher thread on the Oracle Technology Network's discussion forum, Sanger called STR Software on July 10th, 2006 to discuss AventX's integration with XML Publisher output. Impressed with what he learned,

Sanger stayed on the phone with Ben Bruno, President of STR Software until after midnight.

Ben Bruno, President of STR Software, explains, "Since fall of 2004, STR Software has integrated with XML Publisher by using hidden text to find the PO number and then properly burst the documents. We have created sample templates of Purchase Orders, Request for Quotation, Sales Orders Acknowledgements, Invoices, and Statements to accelerate usage of this new technology."

After Sanger reported back to MPC, several members of the team viewed a live demonstration of AventX Oracle Connector on July 12th . Karen Thingelstad, Procurement Manager at MPC, states, "After viewing your web demo of AventX, I knew that our current solution was not going to meet my same level of satisfaction." On Friday, July 14th , just two days later, MPC issued a purchase order to STR Software. Ted Chappell, Sr. Systems Engineer for STR Software, implemented the solution overnight, meeting MPC's deadline to go live with the solution and Oracle EBS by July 31st .

Since then, Sanger reports, "Our PO and RFQ templates are working without a hitch, we can fax and email the same document to multiple locations, just like we envisioned . . . STR Software also has the option of faxing from the PO Approval or Summary forms; AventX is integrated extremely well with Oracle."

Polk County (Florida)

The Company

With population nearing 600,000, Polk County is Florida's fourth largest county and a proud winner of the All-America Community Award. Divided into five districts and sixty-seven county offices, officials at Polk County know the importance of streamlining back-office processes with automated technologies.

The Problem

Since 2000, Polk County utilized a low-end, Windows-based fax package to deliver purchase orders from the organization's mainframe computer. After making the decision to implement Oracle E-Business Suite, Polk County's IT Department realized a new electronic solution was necessary to deliver its orders and reports from Oracle. Selection criteria were defined as ease of use, advanced functionality with Oracle, and exceptional reliability. The challenge: the county required such a solution to be in place by October 2006 to stay on schedule with its ERP implementation.

The Solution

On June 26, 2006, Polk County's DBA contacted STR Software, tasked to find a solution as quickly as possible for its RedHat Linux environment. The following day, STR Software hosted a live web demonstration for members of the County's functional and technical teams.

After attending the AventX Oracle Connector webinar, Michele Rawlins, Office Manager and Purchasing Specialist, commented, "The demonstration proved that the product supports out-of-the-box advanced features of XML Publisher in Oracle EBS. We were especially impressed with how your demonstrator effortlessly weaved through the screens, queries, commands, and reports...STR Software clearly knows Oracle."

By mid-July, within 23 days of initial inquiry, AventX was selected from two other competitors for its support of XML Publisher and the solution's management entirely from

within Oracle. STR Software's team was able to remotely implement the solution consisting of AventX UNIX and AventX Oracle Connector within days.

Purchasing employees now use AventX's "Add Your Own" document wizard to integrate purchase orders through the PO Approval workflow. The result: 100 outbound pages of purchase orders daily using XML Publisher in PDF format. When asked if he would purchase the solution again, Buddy Storey, Purchasing Director for Polk County, replies, "Absolutely . . . your product looks like Oracle wrote it."

Rogers Communications

The Company

Since becoming Canada's largest cable operation in 1981, Rogers Communications, Inc. has done anything but lose momentum. Today, the Toronto-based media and communications company operates with 21,000 employees in four different divisions under the Rogers name: Media, Telecom, Wireless, and Cable. Providing a diversified range of services from voiceover cable telephony to sports entertainment, success at Rogers depends on the streamlining of business processes and reliability of their technology applications.

The Problem

Since 1995, Rogers used a legacy delivery provider to deliver documents from its HP9000 server. In October 2005, the team at Rogers anticipated no problems integrating their existing document solution with implementation of Oracle E-Business Suite and its latest technology, XML Publisher. Frustration quickly escalated when the situation did not turn out as planned, and it became clear that the two applications were not compatible. Neither supporting vendor was able to provide the appropriate response to fulfill Roger's need to fax and email purchase orders at a volume of 700 to 1,000 pages per day. Users at Rogers found themselves unable to get the third-party provider to update the status of their faxes within Oracle, support multiple copies adequately, or pass the appropriate field details necessary to identify the status of requests.

After spending six months and significant resources in a joint integration effort with internal staff, consultants, and their current vendors, Rogers Communications began the search for alternative document delivery vendors.

The Solution

On Wednesday, April 26th, 2006, a consultant for Rogers located STR Software, a Certified Oracle Partner, through the OAUG Vendor Directory. Within one day of being contacted, four engineers from STR Software's team spent a combined twenty-three hours to completely remote-install, configure, and test their AventX solution. Further, they were able to easily train the consultant to use the new solution, making evident its integration with XML Publisher on Oracle EBS. That Friday, Rogers' consultant was comfortable enough with both navigation and training of AventX to give the company's users a live, on-site demonstration. It was only Monday before executives at Rogers participated in the same demonstration, overseen by STR Software's Technical Services via WebEx.

Ben Bruno, President of STR Software, explains the importance of the demonstration; "We have invested significant resources in owning instances of Oracle in-house as well as training on the application. In just a short amount of time, a demonstration visibly proves our seamless integration into Oracle, product scalability, and ease of user management to audiences ranging from system administrators to high-level executives."

After learning that Rogers' subsidiary, The Shopping Channel, was a current and satisfied AventX customer of twelve years, Larry Michieli, VP of Financial Systems at Rogers, did not need any more convincing: "I quickly called The Shopping Channel's Director of IT and asked him about AventX. He stated that they had been using AventX since February 1996 to fax 500 purchase orders per day without any problems whatsoever. That did it for me." In less than three weeks from the company's initial inquiry, Rogers Communications made the decision to purchase and implement STR Software's AventX Solution.

Going live with AventX on June 12th, Rogers was able to retain both of its two-channel fax servers by replacing the existing server software with FAXCOM software in less than one hour. Now, users at Rogers' additionally benefit from AventX's advanced features such as the bursting of any document using the document wizard, support of the multi-organization model, and confirmation of delivery directly into Oracle tables.

When asked if Rogers would purchase AventX over again, Dave Fitzsimmons, VP of Corporate Systems, attests, "Absolutely...I have been in IT for over thirty-five years, and never, in my life, have I found a product that was installed in one day and has been used flawlessly ever since."