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

Ben Bruno
President, STR Software

Dennis Collins
Systems Analyst, TM GE Automation Systems
About the Speakers

• STR Software
  – Located in Richmond, VA
  – Focused on document delivery solutions since 1988
  – Over 1,150 licenses of AventX in 47 states and 21 countries
  – Over 94% customer retention
  – Oracle Certified Partner with staff of Oracle Certified Professionals
  – OAUG 3-star partner for 2009
  – www.strsoftware.com

• Ben Bruno
  – President and founder of STR Software in May 1986
  – BS & MS in Computer Science from UCLA
  – 804-897-1600 ext. 100 and ben.bruno@strsoftware.com
About the Speakers

• TM GE Automation Systems
  – Located in Salem, VA
  – Joint venture between Toshiba Corporation, Mitsubishi Electric and General Electric
  – Designs and develops advanced automation and drive systems

• Dennis Collins
  – Systems Analyst
  – MS in Accounting Information Systems – Virginia Tech
  – 540-283-2041 and dennis.collins@tmeic-ge.com
Agenda

• Document Delivery Needs and Requirements
• Building a Document Delivery Solution
• Integrating with and without XML Publisher
• Integrating with Delivery Manager
• Integrating with AventX
• Secure, confirmed email; Attachment printing
• Case study from TE GM Automation Systems
• Q&A
“We just upgraded to 11i and would like to use XML Publisher to create customized reports from Oracle EBS and then fax, email, or print them based upon the supplier’s preferred communication method.”
“Is anyone faxing purchase orders and RFQ documents submitted as a batch?”
“How can I fax an Oracle output report?”
“Does anyone know how to integrate a 3rd party fax solution with XML Publisher?
“We have multiple organizations within our corporation. Can I apply different forms to our faxed output based upon the organization and document type?”
“Building a Solution”
Building a Solution: Questions to Ask

• Will documents be in multiple formats, i.e. PDF, Excel, etc?
• Will the user’s want to type in the fax number or email address? Or will the process be completely automated?
• If automated, will the report include many documents in the same request (batch processing)? If yes, then how will the report separate into individual documents?
Building a Solution: Questions to Ask

- Will the user want to attach other documents to the primary document, i.e. terms and conditions, diagrams, etc.? 
- Will the document be sent to different destination types, i.e. email, fax, print? 
- Will the process require sending documents to multiple recipients?
Building a Solution: Questions to Ask

- What method will be used to deliver a confirmation?
  - Individual emails per document
  - Scheduled summary reports
- When should the confirmation be sent?
- What should the confirmation look like?
- Who should receive the confirmation?
Building a Solution: Questions to Ask

- Who will manage failed documents? Or successful documents that need to be transmitted again?

- Where will users manage their documents? Inside or outside of Oracle EBS?

- How long will documents and their transmission history be saved?
Fundamentals of Document Delivery

- Submission
- Transmission
- Acknowledgement
- Management
Oracle EBS
Document Submission
Options
Document Submission: In Oracle EBS

• Oracle EBS recently added a few options to users for the purchase order report
  • 3 Purchase Order Options:
    – Purchase Order Approval – Workflow
    – Purchase Order Summary – Tools / Communicate
    – Submit Request (“Fax Enable” Fields)
  • XML Publisher Bursting and Delivery
PO Submission: PO Approval Form

PO, Rev: 4563
Supplier: Office Supplies, Inc.
Ship-To: V1- New York City
Buyer: Green, Mr. Terry

Description: Business Cards, Box of 250

<table>
<thead>
<tr>
<th>Num</th>
<th>Type</th>
<th>Item</th>
<th>Rev</th>
<th>Category</th>
<th>Description</th>
<th>UOM</th>
<th>Quantity</th>
<th>Price</th>
<th>Promised</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Goods</td>
<td>BUSCARDS</td>
<td>SUPPLIES.OFFICE</td>
<td>Business Cards, Box</td>
<td>BOX</td>
<td>3</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[Approve button]
PO Submission: PO Approval Form

Transmission Methods:
- Print
- Fax: 804-897-1638
- E-Mail: brent.lowe@strsoftware.co
PO Submission: Supplier Sites

Site Name: Richmond
Country: United States
Address: 11505 Alleongie Parkway
City: Richmond
State: VA
Postal Code: 23235
Customer Number:
Shipping Network Location:
Supplier Notification Method: Email

Communication:
Voice: [Redacted]
Fax: 804 897-1638
Telex: [Redacted]
E-mail: sales@strsoftware.com
PO Submission: PO Communicate
Select one of the communication methods below:

- Communication
  - Print
  - Fax
  - Email

Fax number: 804-897-1638

Email Address: 

- PO without contract terms

Language: English

[OK] [Cancel]
PO Submission: Submit Request

- **Run this Request...**
  - **Name:** Printed Purchase Order Report[Portrait]
  - **Parameters:**
  - **Language:** American English

- **At these Times...**
  - **Run the Job:** As Soon as Possible

- **Upon Completion...**
  - **Save all Output Files**
  - **Layout:**
  - **Notify:**
  - **Print to:** development

- **Submit**
PO Submission: Submit Request

“Fax Enable” Features

- Limited to Only Purchase Orders
- No Email
- Fax Fields Not Pre-Populated
- Only One Purchase Order
Oracle EBS
Document Formatting and Delivery
with
XML Publisher
Document Delivery with XML Publisher

From Data to Destination

Data Source
- Oracle, SQL Server
- PeopleSoft, SAP, Siebel
- Java, C++, Pearl, etc
- Web Services

Layout Tools
- Word
- Excel
- Acrobat
- Others

Templates
- XML Spy
- Scriptura
- Others

Output
- PDF
- RTF
- HTML
- Excel
- XML
- EDI
- EFT

Destinations
- Email
- Printer
- Fax
- Repository
- e-Commerce

Oracle XML Publisher
### PO Transmission: Email – Without XML Publisher

**Vision Services**
90 Market Street  
Philadelphia, PA 19103-4211  
US

**SUPPLIER**
Office Supplies, Inc.  
3605 Warrensville Center Road  
Shaker Heights OH 44122

**SHIP TO**
District of Columbia Office used in Services ScB  
1401 Pennsylvania Avenue  
Washington, DC 20002 US

**BILL TO**
District of Columbia Office used in Services ScB  
1401 Pennsylvania Avenue  
Washington, DC 20002 US

---

<table>
<thead>
<tr>
<th>Line</th>
<th>Part Number / Description</th>
<th>Delivery Date</th>
<th>Quantity</th>
<th>UOM</th>
<th>Unit Price</th>
<th>Tax</th>
<th>Extended Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X, Business Cards, Box of 250</td>
<td></td>
<td>2</td>
<td>BOX</td>
<td>(USD)35</td>
<td>N</td>
<td>(USD)70</td>
</tr>
</tbody>
</table>

**Purchase Order**

<table>
<thead>
<tr>
<th>PURCHASE ORDER NO.</th>
<th>REVISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3226</td>
<td>0</td>
</tr>
</tbody>
</table>

**DATE OF ORDER**
10-JUN-04

**BUYER**
Chappell, Mr. Ted

**SHIP VIA**
DHL

- HTML in Email Body
- Fax and Email Different Look
PO Transmission:
Fax Without XML Publisher

- Text output has a few “Fax Tags” in header
- Requires 3rd party fax solution to process “Fax Tags”
PO Transmission:
Email – With XML Publisher

- PDF Attachment
- Fax and Email Look the Same
PO Transmission: Fax – With XML Publisher

```xml
{(BEGIN)}
{((FAX 804-897-1638))}
{((ATTACH /disk1/oraapps/vis1comm/admin/out/VIS1_grimlock/o2842252.out))}
{(END)}
```

Separate fax command file
Separate PDF data file

- Requires 3rd party fax solution to process command file

---

Vision Operations
90 Fifth Avenue
New York, NY 10022-3422
United States

Supplier:
Office Supplies, Inc.
3000 Warrenville Center Road
Shaker Heights, OH 44122
United States

<table>
<thead>
<tr>
<th>Supplie No</th>
<th>Order Date</th>
<th>Revision Date</th>
<th>Shipped Via</th>
<th>PO #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1018</td>
<td>06-OCT-006</td>
<td></td>
<td>UPS</td>
<td>890</td>
</tr>
</tbody>
</table>

Payment Terms:
30 Net (Terms date + 30)

<table>
<thead>
<tr>
<th>Line</th>
<th>Part Number</th>
<th>Description</th>
<th>Quantity</th>
<th>UOM</th>
<th>Unit Price</th>
<th>Tax</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BUSCARDS</td>
<td>Business Cards, Box of 500</td>
<td>2</td>
<td>BOX</td>
<td>35</td>
<td>N</td>
<td>70.00</td>
</tr>
</tbody>
</table>

PO Number must appear on all shipping papers, packages, bills of lading, & invoices.

Subject to attached terms & conditions.

This template was created by STR Software to demonstrate document delivery of XML Publisher output usi our Avezt Oracle Connector. For more information contact: sales@strsoftware.com or (804) 897 1600 extension 2
XML Publisher PO Integration: Recap

• For non XML Publisher purchase orders, fax and email have a different look and feel.
• Easy setup to concurrent program to format document via XML Publisher
• For email, delivery is handled through a separate process, Workflow Mailer
• For fax, commands are simply written out in order for a 3rd party solution to take over and actually fax the document.
XML Publisher Bursting and Delivery

- “Bursts” data stream into individual documents.
- Delivers finished XML Publisher formatted documents through “Channels”
  - Printer
  - Fax
  - Email
  - WebDAV
  - HTTP/HTTPS
  - FTP
XML Publisher Bursting and Delivery: Setup

Add Bursting Control
File to Data Definition
XML Publisher Bursting and Delivery: Setup

- Bursting Control File – Email Delivery

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<api:requestset xmlns:xapi="http://xmlns.oracle.com/oxp/xapi">
  - <api:request select="/POXPRPOP2/LIST_G_INIT_INFO/G_INIT_INFO/LIST_G_HEADERS/G_HEADERS'">
    - <api:delivery>
      - <api:email server="mail.strsoftware.com" port="25" from="AccountPayables@strsoftware.com">
        - <api:message id="${POH_PO_NUM}" to="${POH_PO_TOADDRESS}" cc="${POH_PO_CCADDRESS}" subject="Purchase Order #${POH_PO_NUM}" attachment="true" content-type="text/html">
          <![CDATA[<html><head><style type="text/css"> body {font-family:Arial}</style></head><body>
<p>Please find the attached Purchase Order #${POH_PO_NUM}.</p><br/><br/></body></html>]]>
        </api:message>
      </api:email>
    </api:delivery>
  </api:request>
</api:requestset>
```
XML Publisher Bursting and Delivery: Setup

- Bursting Control File – Fax Delivery

```xml
<?xml version="1.0" encoding="UTF-8" ?>
<xapi:requestset xmlns:xapi="http://xmlns.oracle.com/oxp/xapi">
  <xapi:request select="/POXPRPOP2/LIST_G_INIT_INFO/G_INIT_INFO/LIST_G_HEADERS/G_HEADERS">
    <xapi:delivery>
      <xapi:fax server="ipp://host:port/printers/axtkocupsprinter">
        <xapi:number id="FAX1">${POH_VENDOR_PHONE}</xapi:number>
      </xapi:fax>
    </xapi:delivery>
    <xapi:document output-type="pdf" id="FAX1">
      <xapi:template type="rtf" location="/home/faxmgr/axtko/com/strsoftware/axtko/samples/STR_Software_POP.rtf" />
    </xapi:document>
  </xapi:request>
</xapi:requestset>
```
XML Publisher Bursting and Delivery: Usage

• Step 1: Use Submit Request to run Report as normal.

![Submit Request window](image)
XML Publisher Bursting and Delivery: Usage

- Step 2: Run ‘XML Publisher Report Bursting Program’ against previous request.
XML Publisher Bursting and Delivery: Results

- Email:

```
From: AccountPayables@strsoftware.com
Date: Today

Subject: Purchase Order #900

Purchase Order #900
AccountPayables@strsoftware.com
To: Brent Lowe
Cc: Brent Lowe
Attachments: Purchase Order #900.pdf (12 KB)

Please find the attached Purchase Order #900.

Regards,
P Stock
```
XML Publisher Bursting and Delivery: Results

• Fax
  – Output is dependent on Transmitting Software.
XML Publisher Bursting and Delivery: Recap

- Email is robust and full featured.
- Email does not allow for Native Oracle Attachments.
- Fax is dependent on 3rd party to actually deliver document.
- No user interface to type in fax or email addresses for one off deliveries.
- Only allows for one fax number and no other identifying information. i.e. cover page data such as From Company, Subject, Memo, etc...
Integrating with Delivery Manager
Integrating with XML Publisher’s Delivery Manager

• What is the “Delivery Manager”
  – A set of JAVA APIs
  – Facilitates the delivery of documents through “Channels”
    • Printer Channel
    • Fax Channel
    • Email Channel
    • WebDAV Channel
    • HTTP / HTTPs Channel
    • FTP Channel
    • “Custom” Delivery Channel
Integrating with XML Publisher’s Delivery Manager

• What is needed to integrate with Delivery Manager?
  – Requires a developer with programming knowledge of JAVA and SQL
  – XML Publisher v5.6.2 or higher
  – BI Publisher v10.1.3.2 or higher
Integrating with XML Publisher’s Delivery Manager

• What are the steps to integrate with Delivery Manager with EBS?
  – Step # 1 - Install and configure 3rd party packages
  – Step # 2 - Develop Java based classes against XML Publisher Delivery Manager API
  – Step # 3 - Integrate Java classes with Oracle EBS

• Transmission via Fax (Two Options)
  • Integrate with CUPS > efax or FAX4CUPS > Fax Modem
  • Create a “Custom Delivery Channel”

• Transmission via Email
  – Uses standard SMTP calls to Delivery Manager API
Integrating with XML Publisher’s Delivery Manager

- Current Fax Limitations when using CUPS
- No user interface to type in fax numbers
- Only allows for one fax number
- Limited functionality using “freeware” applications, i.e. FAX4CUPS, efax
  - Only text and postscript output
  - No document scheduler to handle retries, fax busy signals, etc.
  - Class 2 Fax Modems
Oracle EBS
Confirmation and Management Options
Document Confirmation and Management: In Oracle EBS

• Confirmation
  – For email via workflow mailer and XML Publisher, only email bounce backs when email is sent to an invalid address.

• Management
  – For fax and email, you are 100% reliant on the 3rd party product you choose to deliver your POs for their acknowledgement and management capabilities.
AventX from STR Software
AventX: Fundamentals of Document Delivery

- Document Submission
- Document Transmission
- Document Acknowledgement

- AventX Oracle Connector (AOC)
- AventX Toolkit for Oracle (ATKO)
AventX Oracle Connector (AOC)

- Any version from 10.7 through R12.1
- Any output from Oracle Reports and XML Publisher
- Looks like it was written by Oracle themselves
- Document Submission
  - Interactive Delivery
  - Automatic Delivery
  - Application Program Interface (API)
AOC Submission: Interactive Delivery

- Deliver ANY document to ANY destination using Submit Request
AOC Submission: Interactive Delivery

- Common submission interface for ANY Oracle report
AOC Submission: Interactive Delivery

Subject: Purchase Order #1169

Options:
- Terms and Conditions
- Hold
- XML Archive Connection

Recipients:
- Email: pstock@vision.com
- Name: Pat Stock
- Email: jbond@vision.com
- Name: Jim Bond
AOC Submission: Interactive Delivery

Subject: Purchase Order #1169

Options:
- Terms and Conditions
- Hold
- XML Archive Connection

Recipients

Acknowledgements

Cover Page

Name: Generic Cover Page

Remarks:

Attached is the Purchase Order that we discussed.

If you have any questions, please let me know.

Thank you.
AOC Submission: Automatic Delivery

Automatic | Batch

- Name: Printed Purchase Order Report (Portrait)
- Parameters: Allowed 1.800.1000....Yes..2.No..Yes.No
- Language: American English
- At these Times... Run the Job: As Soon as Possible
- Upon Completion... Save all Output Files, Notify to: AventX Automatic

Submit Cancel
AOC Submission: API

- Application Program Interface provides ability to submit documents from any location in Oracle EBS (such as workflow, forms, packages, etc.)

- Only requires knowledge of PL/SQL

- Fully documented reference guide with code examples
AOC Transmission: Attachments
AOC Acknowledgement: Native Oracle Forms
AOC Acknowledgement: Confirmation Emails

To: Brent Lowe

Subject: FAX ARDA0000 Success

Subject: Purchase Order #897
Fax Id: ARDA0000
Fax Number: 897-6357
Pages: 2
Organization ID: 204
ERP Tracking Number: 2425675
ERP System: FNDSM
Document Type: inv
Document ID: 897

Server Used: testnt:1

Status: *** Transmitted ok to 897-6357 on 02/21/07 at 16:19
AOC Acknowledgement: Reporting
AOC: Fundamentals of Document Delivery

- Document Management in Oracle EBS
  - Allows user to resend documents that fail or need to be resent from inside of Oracle EBS
AOC: Fundamentals of Document Delivery

Displaying Query: Custom Query
Results 1 to 3 of 3

Fax & Email Transmissions

<table>
<thead>
<tr>
<th>Fax ID</th>
<th>Status</th>
<th>Date and Time</th>
<th>Delivery Address</th>
<th>Subject</th>
<th>Pages</th>
<th>Device</th>
</tr>
</thead>
<tbody>
<tr>
<td>DBC00001</td>
<td>Ready</td>
<td>03/05/2009 09:02 AM</td>
<td><a href="mailto:ptschak@vision.com">ptschak@vision.com</a></td>
<td>Purchase Order #1501</td>
<td>0 of 7</td>
<td>AW</td>
</tr>
<tr>
<td>DBC00002</td>
<td>Ready</td>
<td>03/05/2009 09:02 AM</td>
<td>brownrigstnc.com</td>
<td>Purchase Order #1501</td>
<td>0 of 7</td>
<td>AW</td>
</tr>
<tr>
<td>DBC00003</td>
<td>Success</td>
<td>03/05/2009 09:11 AM</td>
<td>21628333355</td>
<td>Purchase Order #1501</td>
<td>3 of 3</td>
<td>testWin1</td>
</tr>
</tbody>
</table>

Displaying Query: Custom Query
Results 1 to 3 of 3
AventX Toolkit for Oracle

• What is it?
  – Truly a toolkit that leverages XMLP Delivery Manager

• Who is it aimed at?
  – XMLP consultants and companies that would prefer to ‘build their own’ solution

• How is it implemented?
  – AventX Software installs in less than 30 minutes
  – Using sample code, you can create a working system in less than a day!
AventX Toolkit for Oracle

• What tools does it provide?
  – CUPS printer to fax and email
    • Simple. Dynamic fax/email info but all confirmations and cover page info is ‘hard coded’
  – Custom channel to fax and email
    • Different properties for multiple destinations, cover page, confirmations and acknowledgement
  – Bursting tools
  – Working examples and sample code
AventX Toolkit for Oracle

• Why use this toolkit?
  – Better Submission
    • Single source – all email and faxes flow through same queue for easy management
    • Deliver ANY document type from PDF, TEXT, PCL, PS, MS office documents and more
  – Better Transmission
    • Choice of delivery mechanisms via premise-based multi-line network fax servers and ASP fax servers
    • Include multiple email attachments and dynamic email message bodies
AventX Toolkit for Oracle

• Better Acknowledgement
  – Multiple email confirmations based on the success or failure of a document
  – Multiple management interfaces for users and administrators to redeliver or correct errant document information

• Better support – NOT freeware

• Simply better and easier to use!
Secure, Confirmed Delivery

Sender
Oracle EBS
Secure Portal
Recipient
Secure, Confirmed Delivery

- User submits document (PO, invoice, etc..) to email recipient as normal through AventX.
Secure, Confirmed Delivery

- Recipient receives email notice that there is a message waiting for them at a particular web address.
Secure, Confirmed Email

- Recipients click on the URL and are directed to a web portal where they sign in to see the document.

Welcome to STR Software's software and documentation download site. This site provides access to downloading software and documentation. Please enter your username and password to sign in.

Register
If you don't have a username, then contact STR Software's Services Team to obtain a user name and password.

Home Page
Interested in learning more about STR Software products?
Secure, Confirmed Email

- Once recipient signed in, user is presented with a screen to view the document.

Your Delivery
Delete the delivery

Click on the files to download them to your computer

Package name: Purchase Order #4724
To: Brent
Subject: Purchase Order #4724
From: STR Software Purchasing Department

Delivery last Updated on 01/05/2009 05:12 PM by STR Software Purchasing Department

Secure message
Here are the files you will need to download. Right click on the files and select "Save Target As" to save the files to your computer.

Notification message
Below you will find a link to files that are located on a secure website. The link will attempt to log you into the site so you can download the files. If you don't have a username, then you will be prompted to register as a new user. Downloads sent to you from this site will automatically delete after 45 days.

<table>
<thead>
<tr>
<th>File name</th>
<th>Description</th>
<th>Date Created</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase_Order_#4724.pdf</td>
<td></td>
<td>01/05/2009 05:12 PM</td>
<td>113.6 KB</td>
</tr>
<tr>
<td>signed_agreements.doc</td>
<td></td>
<td>01/05/2009 05:12 PM</td>
<td>23.5 KB</td>
</tr>
<tr>
<td>Time_Sheet.xls</td>
<td></td>
<td>01/05/2009 05:12 PM</td>
<td>16.4 MB</td>
</tr>
<tr>
<td>Original Proposal.pdf</td>
<td></td>
<td>01/05/2009 05:12 PM</td>
<td>95.4 KB</td>
</tr>
</tbody>
</table>
Secure, Confirmed Delivery

- Once viewed, original sender will receive confirmation.

---

Delivery 'Purchase Order #4724' viewed by Brent - Message (Plain Text)

From: support@strsoftware.com
To: Brent Lowe
Cc: 
Subject: Delivery 'Purchase Order #4724' viewed by Brent

Your delivery has been viewed.

Delivery : Purchase Order #4724
Delivery viewed by : Brent

Delivery sent on : 1/5/09 5:12:13 PM EST
Delivery viewed on : 1/5/09 5:13:05 PM EST

Package : Purchase Order #4724

Please note: This email was sent from an address that cannot accept incoming emails. Please do not reply to this message.
Problem – Printing Oracle Database Attachments

• Significant need to automate printing

• Hours being spent per week printing attachments from invoices, purchase orders, work orders, etc.

• Discouraging use of Oracle to store asset documents
AventX and eAM – Work Orders

- AventX bursts the Oracle report
- AventX collates with the native database attachments
Supported Document Types

- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- HTML
- PDF
- Lotus 123
- Lotus WordPro
- Lotus Freelance
- Corel WordPerfect
- Visio
- TIFF
- RTF
- JPEG, GIF, PNG
Case Study - TM GE Automation

- Company Background
- Product Usage
- Benefits Realized
- Challenges and Issues
- Future Plans
Dennis Collins, A Bit About Me

• 3 ½ years at TM GE Automation Systems
  – User Role: Staff Accountant and Payroll Administrator
  – Support Role: Systems Analyst
• System Administrator for CRM package.
• Professional Interests:
  – Expanding the existing functionality of the system.
  – Integrating all systems to increase efficiency.
  – Automation of manual processes.
  – Mapping business processes to isolate potential growth.
Company Profile

- Joint venture between Toshiba, Mitsubishi, and General Electric operating 5 foreign branch offices.
- Oracle OnDemand Customer
- Oracle Apps - E-Business Suite
  - Implemented all Financials, Projects, Purchasing, HR, Benefits, OTL, Internet Expenses, Order Management, Inventory
- Development, Test, and Production Environments
- IT Staff of 9
  - Director of IT, 4 System Analysts, 2 Infrastructure, 2 Internet Application Developers
- 2 distinct groups of licensed users
  - 45 Professional Users (Core Apps)
  - 300 + Business Users (Time Cards, Expense Reports, HR Self-Service)
Our Former Process

- Business Requirements dictated that all POs are to be faxed and all Invoices and Statements be mailed to customers.

- Fax Transmission documents were attached to the front of all POs and filed in project folders.

- Requisition Engineers and Project Managers created a note to supplier to advise buyer to print and manually fax attachments with documents.
Search For An Automated Solution

• Discovery of STR Software's AventX solution at Collaborate 07.
• Registered for free webinar after receiving followup email from inquiries at Collaborate 08.
  – Organized champions to attend the webinar.
• Requested funding for the Q1 08 IT budget for an automated solution.
• Researched other solutions.
• Conducted benefit analysis.
  – Survey of man hours spent printing, faxing, and mailing documents
  – Number of sheets faxed
• Negotiated contract with STR Software and EasyLink.
• Signed contract April 08
ROI Calculation

- Identified primary users that fax/email/mail business documents.
- Polled the group for average number of weekly hours spent distributing documents. Also, the average number of pages (including cover and T&Cs).
- Calculated the average salary of the group (including company benefits).

\[
\text{Average Weekly Hours} \times \text{Average Weekly Salary} \times \text{Average Weekly Cost Savings} \times \text{Weeks Per Year} = \text{Estimated Annual Savings}
\]

Other variables considered but not calculated:
- Cost of paper and printer toner.
- Cost for transmitting the faxes.
- Cost of postage.
Requirements

- Documents faxed directly out of Oracle.
  - Seamless integration with EBS so users do not have to launch an independent program.
- Specified attachments could be faxed along with corresponding document.
- Increase efficiency of the process by reducing the time users spend printing, manually faxing, and filing the documents.
- Reduce the cost.
  - Salary expense for man hours spent on manual process.
  - Internal faxing per page vs. Outsourcing delivery via Easylink.
  - Cost of Paper/Toner for fax machines.
- Previously implemented in the OnDemand environment.
- Compatible with our newly implemented XML document formats.
Implementation

- Installed and Configured AventX solution in Development Instance.
- Rolled the configuration into Production Instance.
- Limited rollout to a power user.
- Scrub Oracle supplier list and updated delivery method.
Issues

• Implementing in an OnDemand Environment
  – Creating Unix User
  – Permissions
  – Apps and System passwords for database
  – Opening Ports on firewall for Easylink and Web Manager
Successes

• Within hours, AventX was installed and configured and ready to test.
• Configured specifically for our business processes.
  – Custom select statement to pull Invoice recipients.
  – Custom cover pages
• New attachment category to automatically send specified attachments.
Take Aways

• Start simple. Once you begin using the solution, you will immediately find 10 other ways to use the solution to meet other business needs.
• Add a message on your coversheets to encourage customers and suppliers to receive their documents via email.
  (Example: If you are interested in receiving future POs via Email, please send your requests to sourcing@tmeic-ge.com)
  – It’s free!! No faxing costs!!
• Do your homework on who should be recipients.
• Evaluate your customer/supplier data in Oracle.
  – Make sure it is updated and in the correct format.
Future Plans

• Add more custom select statements
  – Project Coordinators are automatically added as recipient
• Add custom coversheets that will use tokens specific to each user/buyer for more personalized look and feel.
• Create an indicator on the contact to indicate they are a secondary recipient.
### Notification Preferences

- **Site Name**: 11505 Allecinge
- **Country**: United States
- **Address**: 11505 Allecingie Parkway
- **City**: Richmond
- **State**: VA
- **Postal Code**: 23235

### Site Uses

- **Pay**
- **Purchasing**
- **BFO Only**
- **Procurement Card**

### Communication

- **Voice**: 804-897-1600
- **Fax**: 804-897-1638
- **Telex**:
- **E-mail**:

- **Customer Number**:
- **Shipping Network Location**:
- **Supplier Notification Method**: Fax

- **Customer Number**:
- **Shipping Network**:
- **Supplier Notification**: Printed Document, Fax, E-mail

- **Telex**:
- **E-mail**:

- **Notification Method is set for each individual site**
### Notification Preferences

**Transmission Type** is set as a flex field value for the Customer Contacts : Roles.
Sample: Select for Custom Invoice

```
SELECT substr(ch.customer_name,1,50),1,40) company, substr(substr(rc.last_name,1,30),1,40) last_name, substr(substr(rc.first_name,1,20),1,40) first_name, substr(substr(rcr.attribute1,1,3),1,25) delivery_type, substr(decode(rp.extension,'',hp.PRIMARY_PHONE_COUNTRY_CODE ||' ' || rp.area_code||' '||rp.phone_number,hp.PRIMARY_PHONE_COUNTRY_CODE ||' ' || rp.area_code||' '||rp.phone_number ||' '||rp.extension),1,255) fax_address, substr(substr(rc.email_address,1,45),1,255) email_address, substr(' ',1,512) other FROM     apps.ar_customers ch
               ,apps.ra_site_uses_all cs
               ,apps.ra_addresses_all ca
               ,apps.ra_contacts rc
               ,apps.hz_parties hp
               ,apps.ra_customer_trx_all rcta
               ,apps.ra_contact_roles rcr
WHERE rcta.trx_number = :UID1
and rcta.org_id = :ORGID
and rcta.bill_to_customer_id = ch.customer_id
and ch.customer_id = ca.customer_id
and ch.status = 'A'
and ca.status = 'A'
and ca.bill_to_flag is not null
and cs.status = 'A'
and cs.site_use_code = 'BILL_TO'
and cs.address_id = ca.address_id
and cs.site_use_id = rcta.bill_to_site_use_id
and cs.org_id in (106,215,216,217,254,256,354)
and rc.status = 'A'
and ch.customer_id = rc.customer_id
and rp.contact_id = rc.contact_id(+)
and rc.contact_id = rcr.contact_id(+)
and rcr.usage_code = 'INV'
and rp.address_id = ca.address_id(+)
and rp.customer_id = ch.customer_id(+)
and rp.status = 'A'
and rp.phone_type = 'FAX'
and rp.owner_table_id = hp.party_id ORDER BY substr(ca.city,1,25)
```
How we use AventX

PO Process Example

• A single request is submit to transmit the PO (print, fax, email). Before AventX solution was implemented, this was the same process used to generate the PDF and print it before manually faxing.
PO Process Example Continued

- The AventX Style and Printer can be set as defaults for the concurrent request.
PO Process Example Continued

- According to the document setup, the recipient is selected.
- In the Options section, the user can choose to not send a copy of the Terms and Conditions.
PO Process Example Continued

- If you want to add other recipients, they can be added on the fly using the Interactive Delivery Method.
PO Process Example Continued

- According to document setup, the person receiving Acknowledgement of the delivery is selected.
- You can also add additional people to receive the Acknowledgement.
PO Process Example Continued

- The default coversheet is selected according to setups. If others have been created, the user can choose a different cover.
- Any text added to the Remarks section will print on the coversheet.

![PO Process Example Image]
TMGE PO #213030965

TO: JEAN.CHANEY@TMEIC-GE.COM

Subject: TMGE PO #213030965

This e-mail message has been automatically delivered to you by TK GE AUTOMATION SYSTEMS.

Send acknowledgements or order confirmations to fax # 940-283-2399 or e-mail them to JEAN.CHANEY@TMEIC-GE.COM

Also, please fax or e-mail the following information ASAP for the items on new orders:

1. Promising Date
2. Country of Origin
3. Supplier Item #

Thank you,
PO Process Example Continued

- Body of the Acknowledgement

---

**From:** STR FAXING SOFTWARE SOLUTION Account [bp_faxmgr@AtOracle.com]  
**To:** dennis.collins@tmeic-ge.com  
**Sent:** Thu 10/2/2008 1:33 AM  
**Subject:** TMGE PO #213030955 Sent To dennis.collins@tmeic-ge.com --> Success

---

**To:** Dennis Collins  
**Subject:** TMGE PO #213030955  
**Company:** TM GE Automation Systems  
**Fax Id:** DU1@0000  
**Fax Number:** dennis.collins@tmeic-ge.com  
**Pages:** 1  
**Organization ID:** 106  
**ERP Tracking Number:** 2042326  
**ERP System:** FNDSR  
**Document Type:** po  
**Server Used:** email:1  
**Status:** *** Transmitted ok to dennis.collins@tmeic-ge.com on 10/01/08 at 21:32**
PO Process Example Continued

- Body of the email sent to recipients

```
This e-mail message has been automatically delivered to you by TM GE AUTOMATION SYSTEMS.

Send acknowledgements or order confirmations to fax # 540-365-2394 or e-mail them to JEAN.CHANEY@TMEIC-GE.COM

Also, please fax or e-mail the following information ISAP for the items on new orders:

1) Promise Date  
2) Country of Origin  
3) Supplier Item #(s)

Thank you,  
JEAN CHANEY  
TMGE Sourcing

You can add a message to this area and it will print on the cover page.

Example:

John,  
There is a copy of PO 213030955 you requested.
```
Summary

• The AventX solution is completely configurable to any business process.
• Each Customer and Supplier Site can be configured individually
  – Different Notification Methods
  – Different Fax Numbers
• Additional recipients can be added to receive the document or acknowledgement on the fly using the Interactive Mode.
• Users are able to Fax/Email/Print from within Oracle Apps using the same concurrent request they use to print and manually fax.
  – Users better utilize their time when they are not standing in front of a fax machine.
  – Users do not have to launch an additional program to fax or email the document.
• AventX will send attachments to accompany their corresponding documents.
Summary

• Native functionality of Oracle EBS for email and fax is limited to single document purchase orders ONLY
• XMLP formatted purchase order output is delivered the same for email, fax and print
• Java delivery manager is a start for document delivery but requires programming talent to complete
• Third-party solution is required for actual “fax delivery”
• Search for a solution that makes it easy for the Oracle user to submit, transmit and confirm delivery of ANY document
Automated Document Delivery

AventX Oracle Connector

*any document. any format. any volume.*

- Email, fax and print from Oracle EBS, including database attachments
- Support for XML Publisher and Document Formatting Solutions
- Flexible Delivery Methods (1-off & batch)
- Real-time delivery status within Oracle EBS
### STR Software (www.strsoftware.com)

<table>
<thead>
<tr>
<th>% Rating</th>
<th>STR’s Performance</th>
<th>Excellent or Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>The reliability of AventX</td>
<td>99.4 %</td>
<td></td>
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<tr>
<td>The knowledge of the Technical Support Team</td>
<td>97.8 %</td>
<td></td>
</tr>
<tr>
<td>The timeliness of the resolution to your product issue</td>
<td>97.2 %</td>
<td></td>
</tr>
<tr>
<td>The overall value of Support services</td>
<td>97.7 %</td>
<td></td>
</tr>
<tr>
<td>Your increased efficiency from using AventX</td>
<td>94.7 %</td>
<td></td>
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<tr>
<td>The cost-effectiveness of AventX</td>
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<td></td>
</tr>
<tr>
<td>Your overall impression of AventX</td>
<td>97.8 %</td>
<td></td>
</tr>
</tbody>
</table>

### % Answering Yes

- Would you purchase STR Software’s products again? 98.2 %
- Would you recommend STR Software to a colleague? 98.8 %
Satisfied Oracle EBS Customers
Q and A

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