Evaluation of Enterprise Output Manager from Unisys

Enterprise Output Manger (E.O.M.) is a very powerful, versatile product with tremendous functionality, and use is only limited by your imagination. It is a Client Server product that runs on a PC platform under a Windows Professional Edition or higher. You can install the Client on as many PC's as you wish, but for the purpose of this Evaluation it is desirable to install it on the same PC as the Service (application). E.O.M. has evolved over the last 19 years from the days when the product accepted ASCII text data from Mainframes (Servers) and printed it out on attached Line printers, or Dot Matrix printers, to where we are today, printing graphical output to Inkjet, and Laser printers located anywhere in the world via Intranet or Internet. It also Emails pdf files like invoices direct to your customers. It will continue to be developed to meet your output needs of the future. This document has a number of references to EOM 9.1. Just read EOM 10.0, 11.0 or 12.0. EOM 10.0, 11.0 and 12.0 have some added new features over 9.1. The two zip files are for EOM 9.1 and EOM 10.0, 11.0, and 12.0

You may like to view the YouTube video clip below. It's a high level overview of this product.

http://www.youtube.com/watch?v=KOAfZzYFbIw

Thank you for downloading this Evaluation copy and taking the time to evaluate this product. We know that you will be surprised by what you can do with this product and how easy it is to use.

The Evaluation process can be broken down to five phases.

Phase 1: Installation.

To install this product you will need to have Administrator rights on the PC that you are installing this product. By default the Client will run under this Username. If you try to run the Client under a different Username then it will not connect to the Service unless this new Username is set up in the Windows (E.O.M.) Output Manager Administrator group. For more information refer to the Online Help Manual.

Go to the Folder that you downloaded the Evaluation copy to. Unzip the files. In the directory Output Manager Enterprise Edition 10.0, or 11.0, or 12.0 Evaluation Edition CD, double click on **Setup.exe.** After a short wait you should see E.O.M. Install window come up as per below.

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| OUTP | UT | all l | P.C. | |
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| MANA | OLK | C | | |
| Ci This program is | opyright © 2012U protected by US | Inisys Corporat and internation | tion al copyright law | /S. |
| | | Pleas | e read me f | irstl |
| Install | the Enterprise Outp | ut Manager Servi | ce | |
| Instal | I the Enterprise Outp | out Manager Clier | it | |
| 1 | Install the Sentinel / | Alert Service | | 76 |

Click on Install the "Enterprise Output Manager Service". Just go with the defaults if you can. This should not be a problem if the software can be installed under **C:\Program Files\-**. At the end of the install you will be asked if you want to read the information on setting up the Service, and the Windows Service management window will be opened so that you can set up the Service. At this stage take the default settings. Later you could change the Service to run under a specific Username. Now start the Service.

Install the Enterprise Output Manager Client by clicking on that button. Take the defaults for this also.

Finally click on Install Sentinel Alert Service. This software can send you Email messages, Texts to your cellphone and/or make an Alert Warning light flash, should E.O.M. encounter some kind of error that you have defined and wish to be alerted to. For more information refer to the Online Help manual.

All being well you now have installed all three pieces of software.

Start up the E.O.M. client. You will be asked to connect to a Server as below:-

| Select Server | × |
|----------------------|--------|
| Display name (option | nal) |
| Local | • |
| Server name or IP a | ddress |
| 127.0.0.1 | |
| Port number 8086 | |
| Encrypted conne | ection |
| ОК | Cancel |
| | |

In display name enter a descriptive name. In Server name or IP address enter the name or address of the PC that you installed the E.O.M. service on. Do not change the Port number or set Encrypted connection at this stage. These are just two options you may wish to use in the future.

If you cannot connect then you will have to Logoff and Logon again, or reboot the PC. This is due to Windows not recognizing that a new User Group has been set up for E.O.M. If it does connect then you should see a screen similar to below, but there will be no Management Windows shown.

| es E | nter | prise | Outp | ut M | anag | er : L | ocal (| Eval | uatio | m) | | | | | | | | |
|------|------|-------|--------|------|------|--------|--------|------|-------|----|---|---|---|---|----|----|------|---|
| File | View | Tool | s Helj | 5 | | | | | | | | | | | | | | |
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Click on those Icons at the top below the Menu bar and you should be able get the screen as below. The Icons that have been clicked on appear as if they have been pressed.

| 👒 Enterprise O | utput Mana | ger : Cor | npaq (Evaluatio | n) | | | | | | | | | | | _ 5 | × |
|-------------------|------------|------------|------------------|-------------|-------------|--------------|--------|----------------|---------------------------|----------------|--------------|------------------------|----------------|---------------|---------------|----------|
| File View Tools | Help | | TT 3 & | | | 1.2 | - 17 | - 3 | | | | | | | | |
| | | | | | | | | Printer | lanagement | | | | | | | X |
| Printer / | | | | Status | | | Pape | r Type | Pages | % Complete | e File Nam | e | | | | |
| - | | | | | | | 1 | | | | | | | | | |
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| | | | | | | | | File M | anagement | | | | | | | |
| File Group | File Mask | | | Data File N | lame 🕗 | 1 | Es | timated Page | s Numb | erofJobs Fi | e Priority | Host System | Host Full Fil | e Name | | |
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| • | | | | | | | | | | | | 1. | | | | |
| Data File Name | Т | arget Prin | tor | | Paper Tup | | Estin | Print Job | Management Rage Ranges | Lob Prior | itu (| Number of Copies | Print Attribut | Delete Tupe | Remove Tur | X |
| - Data File Maine | | argett in | (c) | | 1 oper 1 yp | <u> </u> | Coun | lated r ages (| ragerianges | 1 000 1 1101 | "X | Hamber of copies Eds | T THE AUTOR. | T Delete Type | Themove Ty | <u> </u> |
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| Data File Name | | IOD Enabl | ed E-mail L | Visplay Nam | e [E·I | mail Subject | User I | 9g U6 | E-mail Ad | dress User I | ag Ub | User Lag U4 | E-mail Error | Address | | _ |
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| Data File Name | Primary Pa | əth | Alternative Path | Transfe | r Day Limit | Transfer Ti | me Li | Job Enabled | | stimated Page | s Job Prio | nity | | | | |
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These are some of the E.O.M. Management Windows within E.O.M. and allow you to monitor the status and activities going on in E.O.M. As you can see we have no Printers declared or any data or print files being handled. All files coming into E.O.M. will appear in the **File Management** window. All declared printers and their status will appear in the **Printer Management** window. The same goes for the other E.O.M. management windows. For more information refer to the On Line Help manual.

Now you have to set up a Folder and subfolder of -\Demo\MonitorDirectory\ under the \Enterprise Output Manager\ directory. When this is done you can import a small E.O.M. configuration which will allow you to get into the demonstration phase of this product. Click on the link below to pull down a .zip file that contains this Demo configuration. This file contains three input text Demo files and an .xml configuration file to be imported into E.O.M. Below is also a link to a YouTube Video taking you through the Import and set up process.

www.wantitconsulting.co.nz/EOM_Eval_9_1.zip

http://youtu.be/kMvolJVLNvw

To import the .xml configuration file, go back to Enterprise Output Manager and click on Tools\Configuration Explorer. When Configuration Explorer comes up,click on File\Import Export. On the right hand side set the **Type of file to access** as XML. Then point it to -\UpdatedEvaluationConfig.xml, then click on **Import All**, then click on File\Save all items. If the save is successful you should see **Ready** at the bottom left hand side of the Configuration Explorer window.

Phase II: Getting set up to run the demonstration.

The product as now installed has three print configurations set up. DEMO1, DEMO1a, and DEMO1b. The output of all three is the same but the inputs are quite different in format, even though the actual data information is the same. All three print out on blank paper but use an electronic form. The input data to be used for these demonstrations can be found in the folder named -\EOM_Eval_9_1_Setup\, which you loaded down in that zip file.

The electronic form is a Windows Meta File, which can be produced by a number of drawing applications, like MS Power Point, and Open Office Org.Impress. For Demo1 and Demo1a E.O.M. prints the form out on the blank paper then prints out the data by X and Y coordinates. For Demo1b the Form and data are printed using a special E.O.M. forms definition file, named Demo9.dff. This file contains the Windows Meta File and all the coordinate positions for the data. This special forms file was created by the E.O.M. Forms File Utility program. Below is what this form looks like when it is being built. Each field on the form has a unique name. You can have single fields and one and two dimensional tables. In this example there are some single fields and some one dimensional tables. These forms file are normally located in the \PrntCtrl\ directory.

| Edit Options View Help | | | | | |
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| | | RSB En 2276 Highcrest | terprises Road | | |
| 50455 50455 52 | | Roseville, Mn 5 | 5113 | | 11 12 12 12 |
| Billing Date: | | Cust | omer Mailing Address | | |
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Now to install a Windows printer in E.O.M. To do this we go to E.O.M. Configuration Explorer and configure a printer, and Map it to a Windows printer that can be seen by this PC. This could be a directly connected printer or a network attached printer. E.O.M. for this purpose can be considered to be a normal windows program like Word or Excel that wants to print to a Windows printer.

To start Configuration Explorer go to the Menu Bar and click on **Tools** and select **Configuration Explorer**.

| A new Application window should appear as below:- | |
|---|--|
| 🐼 Configuration Explorer : Compaq | |
| File Edit View Tools Help | |
| <u>+ 4 × 8 Ø</u> | |
| Back - Attribute Certificate Anasce Coded Character Set Tables Coded Character Set Tables Communication Listening Paths Communication Sending Paths Communication Sending Paths Control Sending P | |
| I ransform Attributes | |
| | |
| | |

Click on Physical Printers, then Click on the green plus sign, which will bring up the **Add new Physical Printer window.** This is where we declare the attributes for this printer and Map it to a Windows printer on the desktop.



In this example I have clicked on the Windows Printer name, Drop down menu, to a list of printers that are available to E.O.M. Just click on the one you want to wish to use during this evaluation. Under Name give it a descriptive name. Under **Printer available** click **Yes** and under **Initial lock state** you can also click on **Always unlocked**. This is a choice, because sometimes to maintain control you may always wish that printer to up Locked when E.O.M. starts. However you can unlock it on the E.O.M. **Printer Management** window by right clicking on the printer and selecting, Unlock. The other settings on that Add new Physical Printer window can be left as they are. At any time you can select a field on a configuration window and push F1, and you will get some Help information on that field. I have added a printer named Brother, as shown below.

| Add new Physical Printer | × |
|---|---|
| Copy values from: | |
| (Default values) | • |
| | |
| 🗆 General | |
| Name | Brother |
| Comments | |
| Printer type | Windows |
| Printer available | Yes |
| Initial lock state | Always locked |
| Print header page | Yes |
| Print trailer page | Yes |
| Translate Table | |
| Automatic retry on error | No |
| Windows Printer | |
| Windows printer name | Brother HL-630 |
| Document spooling method | Use printer's default spooling action |
| 🗆 Output File Options | • |
| Initial lock state | |
| Indicates the initial lock state of the locked, the printer must be manu- is unlocked, printing begins imme | he printer when the server starts. If it is ally unlocked before printing begins. If it diately. If 'Retain lock state on restart' is sping mode sublable, then the printer will |
| OK | Cancel |

Now click on OK to add printer and click on Save all modified items, the double floppy disk Icon at top on page. Now go back to the Enterprise Output manager Client and you should now see that you have a Printer and its status is Locked or Unlocked, depending on your setting.

| File View Tools Help | | | | | |
|--|---------------|-----------------------|--------------------|------------|-----------|
|) · [] [] [] [] [] [] [] [] [] [] [] [] [] | 🗯 🔳 🗞 🥺 🐸 🤗 🖠 | 🖳 🔸 • 🝞 • 🐻 | 9 | | |
| | | Printer Mana <u>c</u> | gement - 1 Printer | | v |
| Printer 4 | Status | Paper Type | Pages | % Complete | File Name |
| | | R INTERNATION | 10 N H | | 1 |

Summary: We have now installed all the software needed. We have configured in a Windows printer to print to. Now to actually do some printing.

Phase III: Print demonstration.

With E.O.M. you can send the print file into it using the LPR/LPD, HTTP, Raw TCP/IP or the Output Manager protocol. However you can also print a file manually by you using E.O.M. to select a print file from a directory and print it to a printer via an E.O.M. Print Attribute. Initially we will use the manual method, then, we will look at how it worked. To do this go to the E.O.M. Window and click on the Blue box at the top left hand corner and select **Create Print Job.** You should see something like below. The highlight fields are data that I selected from the various drop down menus.

| ile View To | ools Help | | | | | | | | |
|--|-----------|--------------------------|---------------------|-------------------------------|--------------------|------------------|-------------------|--|--|
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| 1 | | | | Printer Mana | igement - 1 Printe | 16 | | | |
| Printer 🕗 | | | Status | Paper Type | Pages | % Complete | File Name | | |
| Brother | | | Locked | Plain | | 19414 9493 94094 | | | |
| | | And the supervision of | | | | | | | |
| | | Create Print Job | | | | | × | | |
| | | File path | C:\EOM 9 | .1 - Enterprise Evalua | tion Edition CD | \Demos\De | moInput\demo1.txt | | |
| File Group Print Attribute Printer | | | 1Day | | | | | | |
| | | | DEM01 | DEMO1 | | | | | |
| | | | Brother | Brother | | | | | |
| | | File type | ASCII | | | | | | |
| | | File code page | 0 | | | | | | |
| | | Banner ID | | | | | | | |
| | | Priority | M | | | | | | |
| | | Number of copies | 1 | | | | | | |
| | | Pages | 11.9% | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| File Group | File Mask | Printer | | | | | | | |
| | - | Specifies the printer to | ouse to print the f | ile. Select any physical or I | ogical printer nam | ie. | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | 1 | | | | | | | | |
| 3 | | | 1 | | | | | | |
| | 1 | | | UK U | ancel | | | | |

The demo1.txt file is one of the input data files supplied in that directory -\EOM_Eval_9_1_Setup\-. Click in the File Path entry box and you should get a Drop Down box, which will allow you to select

a file to print. Select the demo1.txt file for input from the \EOM_Eval_9_1_Setup \ folder, select File Group 1Day (this tells E.O.M. to keep that file in its database for 1 day after it has printed, this is so you can reprint it without have to get the file again from the folder or from the application), select Print Attribute **DEMO1** (this tells E.O.M. what printer attributes you want set up in the Windows driver, like paper size, margins etc), then select the printer you wish to print to. Click on OK and you should see the output print queued on the printer if it is locked, else it should have printed out on you printer. If your printer is Locked, right click on it and select Unlock. It should then print and look like example below.

| 0/17/00 | Cus | tomer Mailing Address: | | |
|---|--------------------------|---|--------------------------|------------|
| e Date: 0/17/09 iount Due: \$13,659. | | BC Data Corporati 719 Province Lane Dallas, TX 75104- addicalification | on 1111 alladiidai | |
| | Cu | stomer Invoice | | |
| Date | Description | Part Number | Quantity | Amount |
| 9/ 1/09 | USB Cable | 1943-2194 | 3 | \$45.00 |
| 9/ 3/09 | Wireless Network Adapter | 1943-2415 | 1 | \$50.00 |
| 9/ 3/09 | Backup DVDs | 2144-1105 | 125 | \$500.00 |
| 9/12/09 | 600GB Hard Drive | 2211-614A | 1 | \$525.00 |
| 9/12/09 | 800GB Hard Drive | 2211-611A | 1 | \$750.00 |
| 9/13/09 | Mouse | 1084-193C | 15 | \$300.00 |
| 9/13/09 | Mouse Pads | 1084-S126 | 15 | \$60.00 |
| 9/13/09 | 512MB Video Cards | 621-APCI | 38 | \$4,500.00 |
| 9/13/09 | 1GB DDR-RAM | M813-72 | 4 | \$1,500.00 |
| 9/13/09 | Windows XP PRO | WIN-XP-60F | 10 | \$1,750.00 |
| 9/13/09 | Mailing Labels | 72-479491 | 10 | \$100.00 |
| 9/14/09 | Write Protect Labels | 514-A3421D | 200 | \$10.00 |
| 9/14/09 | UPS Backup | UPS151 | 1 | \$250.00 |
| 9/14/09 | Tower Case | T87005 | 2 | \$200.00 |
| 9/15/09 | Power Supply - 300W | PS15-1300 | 1 | \$59.00 |
| 9/15/09 | Static Bags | 1943-7713 | 10 | \$30.00 |
| 9/15/09 | Static Bags | 1943-7713 | 10 | \$30.00 |
| 9/15/09 | Windows 2003 Server | WIN-03-SERV | 10 | \$2.500.00 |
| 9/16/09 | Backup DVDs | 2144-1105 | 125 | \$500.00 |
| | | | | - |

Now follow the same procedure and print out **demo1a**, and **demo1b**. The results should be very similar.

Use WordPad or Notepad to look at the three input files. You will notice that **demo1a** is similar to **demo1** except that there is a 5 character line type identifier at the start of each line. If you look at **demo1b** you will see that is similar to **demo1a** except that only data to be printed is there and that the fields are all terminated with a tilde ~ character. It could have been a , (comma) but in this case we chose the ~ character as it is not likely to turn up in descriptive data. You will also notice that line 1 is a little different in that is has an E.O.M. control line at the start. This is called the \$DEPHDR\$ line and can have up to ten control parameters that can be passed to E.O.M. These parameters are called Usertag1 thru Usertag10. They are very useful when building the Masks and for passing specific parameters into E.O.M. For example you could pass in an Email address, Email subject etc. For more information refer to the Online Help Manual.

Now lets remove those three entries from E.O.M. To do this you mark and bound the three entries in the file manager window and right click on the, select Remove, then check Remove all without further confirmation. Rather than Mark & Bound you could have right clicked on a file and selected **Select All**, then Remove.

Now to demonstrate one of ways of getting data files to print through E.O.M. When files are sent into E.O.M. they all come in through a File Mask, and when a Mask condition is meet, E.O.M. will perform the task set up for that particular Mask. It could be one or up to six job types available. Those six are Create :- Print Job, Transfer Job, Email Job, Custom Job, Backup Job, Transform Job. We will just cover the Print Job.

This time we will use the E.O.M. Directory Monitor function to bring a print file into E.O.M. If you now go to Configuration Explorer (In the E.O.M. menu click on Tools, Configuration Explorer or this Job Windows may already be open and shown on Task Bar, in which case just click on the Icon on the Task Bar). In the Folder list you will see Directory Monitors, expand that and you will see a Directory Monitor Attribute named **MonitorDemoInputDirectory**. You will notice that it is pointing to a directory, which was set up during the install of E.O.M.

| 🔁 Configuration Explorer : Compag | | |
|-----------------------------------|---|--|
| File Edit View Tools Help | | |
| | | Directory Monitor : MonitoryDemoInputDirectory |
| Backup Attributes | 🖂 General | |
| Certificate Aliases | Comments | This monitors the directory that will contain the Demo input files to be processed by EOM. |
| Coded Character Set Tables | Enabled | Yes |
| 🗄 💋 Communication Listening Paths | Use Directory Alias to configure the Directory Path | No |
| Communication Polling Paths | Directory path | C:\Program Files\Unisys\Enterprise Output Manager\Demo\MonitorDirectory |
| Communication Sending Paths | File filter | x x * |
| Credentials | File discovery method | Immediate detection |
| Custom Job Attributes | Search subdirectories | No |
| 🖶 💋 Data Dependent Attributes | Automatic retry on error | Yes |
| 🐵 💋 Directory Aliases | Automatic retry interval (in minutes) | 5 |
| 🖨 💋 Directory Monitors | Process zero length file | No |
| MonitoryDemoInputDirectory | | |
| E-mail Attributes | | |
| File Expiration Searches | | |
| 🖶 💋 File Groups | | |
| 🕮 💋 File Masks | | |

Notice that the File discovery method has been set to Immediate detection. You can change that to a time period if you wish. You will also notice that there is a filter you can use. The * is the old MS DOS wild card character. The setting here indicate that any file that appears in that directory will be bought in and processed by E.O.M.

For this exercise could you copy the demo1.txt file from folder -\EOM_Eval_9_1_Setup\ to the folder that E.O.M. is monitoring -\MonitorDirectory\-. This should be picked up by E.O.M. and printed to a printer named DEFAULT. This is a logical printer that has not been mapped to a physical printer yet. To see what the output would have been like you can use the **Print Preview** method. Double click on an entry in the File Management or Print Management window. From this window you can create a print job to print the output to your printer. To do this go to File, in the menu and click on the drop down entry **Create a Print Job.** Click on the printer name entry box and in the drop down menu, select your printer and click OK.

In the File Management window you will notice that these jobs all came in through different File Masks entries.

You might like to go back to Configuration Explorer and look at the File Group, and File Mask Entries and work out how E.O.M. handled these files. We will cover this later.

Phase IV: Prints files coming in from a real application.

For this exercise we are going to send two print files, demo1a, and demo1b from Microsoft WordPad to a Windows Generic/Text only printer that will send the data file into E.O.M. To do this we must first set up the Generic/Text printer.

Depending on your Windows operating system the set up may vary a bit from what is described here. However the concept is you have a Windows Generic/Text only printer that communicates

via a LPR/LPD port to the PC that E.O.M. is running on. This means that you cannot have Unix printing allowed on this PC as it will have grabbed port 515.

Go to Windows printers and add a printer. Select local attached printer, use LPT1, use Generic/Text Only print driver, keep existing Driver (if given that option), name printer LP001, default printer set No, Shared printer set No (but may have to be Yes depending on how you want to print to this printer, a MS DOS program would need it to be Shared, a .bat script requires it to be yes). Click Finish. Now you have to add a LPR/LPD Port for the printer to use to connect to E.O.M. While in Windows Printers go Server Properties, Ports, Add a Port, Standard TCP/IP port (or LPR/LPD port if that option is available), Printer Name or IP address (enter PC name of PC IP address), Port Name (perhaps put Printer name, LP001), then OK. Now select Port and go Configure Port, configure it to be a LPR, with a Queue name of LP001 and check LPR Byte count enabled. Go OK. While still in Windows printer select your new printer LP001 and go Properties, Ports and select the Port you have just added. This Generic Printer driver should now be able to send data to the E.O.M. PC via the LPR Port 515. E.O.M. will be listening for data on that port.

| LP001 | | | Port Name: Printer Name or IP Address; | Pentium Computer D |
|---|--|------------------|---|--------------------|
| int to the following port(s). D necked port. | ocuments will print to the | first free | Protocol C Raw | © LPR |
| Port | Description | Printer | - Baw Settings | |
| PentD Freb Name | Standard TCP/IP Port Standard TCP/IP Port | LP001, BrothEC | Port Number: 515 | |
| Pentium Computer D | Standard TCP/IP Port | | LPR Settings | |
| LMICrosoft Document I | Local Port LogMeIn Printer Port | Microsoft Uffice | Queue Name: LP001 | |
| | Local Port | Auto Brother HL | LPR Byte Counting Enabled | |
| d. | 102 I | | SNMP Status Enabled | |
| Add Port | Delete Port | Configure Port | Community Name: public | |
| Enable bidirectional suppo | rt. | | SNMP Device Index | |

In E.O.M. Configuration Explorer look at the **Communications Listening Paths**.

Now to the exciting part. Start up WordPad and go File, Page Setup, and set all margins to 0. Now go File, Open, **demo1a.txt**. You should now see the demo1a data file. Print this file to printer LP001. If everything has been done correctly the file should have been sent into E.O.M. and be queued on the E.O.M. DEFAULT printer. It should have come in through File Mask **Demo1a**. If it has, then CONGRATULATIONS. Do the same with **demo1b**.

Now has come the time to make some configuration changes so the printing is going to the printer of your choice.

Line 1 of the demo1b.txt file is a \$DEPHDR\$ data line. These are usertags 1 thru 10. The number assigned to the tag is determined by its order. In this case Usertag1 has a value of DEFAULT, which is used to hold the printer name. The Usertag2 contains a value of DEMO1b, which is the print attribute to be used to print this file. Change the Usertag1 value to be the name of your printer in E.O.M. Print the file again to printer LP001 (E.O.M.). This should now print out on your printer.

How this all works:

The basic flow of a data print file coming into E.O.M. is the following:-

The files in the above examples enter E.O.M. via the LPR/LDP communications interface. They enter at the top of the File Masks and its control parameters are processed down through the various File Masks until a match is found. Then is this case a Print Job is executed. The Print Attribute in the print job, sets up the printer and then passes control to the DDA for that Print Attribute. That DDA formats the data and sends it to the Windows print driver.

NOTE:

This little Demo has worked using MS WordPad, but it's a fluke. If you confine your mockup test data to one page then this method of testing should work for you. If you want more than one page you can create a new print Form page. Give it a name like **EOM_Test_Input**, and a size of **30cm** Width and **99.9cm** Height. This should allow you to print from WordPad a file which contains lines up 256 Characters long and 470 lines long. Another option is to create a .bat file and put your data in a text file created by MS Notepad. The following is an example of a .bat file:-

Print /D:\\PentD\LP001 C:\JobX\Testdata\Invoice.txt

The Generic printer LP001 needs to be declared as Shared. Refer to the MS DOS run commands for more information on the **PRINT /D** command.

With E.O.M., one raw page of input data produces one page of formatted output. The input pages are normally separated by a Form Feed character. However as E.O.M. has a Form Feed command you don't necessarily need to have a Form Feed character in the input data, you can have a flag of some kind, like the word **eject**, which will indicates to E.O.M. that you want a Form Feed at this point in the output data.

Now go to the E.O.M. Configuration explorer and expand out the **Communications Listening Paths**. You will see a path for LPR_LPD_Protocol for receiving input data files. Expand File **Masks** and select **Demo1b**. This will display all the options and parameters enter for that mask. Expand out **Mask Statements** and **Print Jobs**. In the Mask Statement you will see that two conditions need to be met before this mask is activated. If conditions are met then the Print Job will be activated using <usertag2> print attribute DEMO1b / <usertag1> your printer. Expand out **Print Attributes** and select **Demo1b**, note that Demo1b has an entry pointing to a DDA Attribute **DEMO1b**.

Note: The attribute names are not case sensitive.

Print File Types:

There are two basic print file types. Batch print files and Transaction print files.

Batch print files

These are the old traditional type of print file that contained many print records. For example many customer invoices, statements or renewal letters etc.

Transaction print files

This is normally one record per file. For example one customer invoice, statement, or renewal notice etc. This is normally produced as a result of an online sales transaction, like buying an item over the internet.

You may still be using Batch file printing to handle your invoices and would now like to send some or all out by Email, but don't want to rewrite your application. Unisys provide a Custom Job, UEOMSplit.exe (small application program) that can split that Batch print file up into individual transaction print files by customer account number or name. If you can modify your application to include a customers Email address on their invoice then E.O.M. could Email out invoices to customers who have Email address and print the others. You may also have Batch print files that contain reports by branch. These could also be split up by UEOMSplit and Emailed to the Branch Manager or printed out on a branch printer. If the number branches is not too great the Branch managers Email address could be held within E.O.M., hence not application changes required. The flow for this to happen is as follows. The Batch file comes into E.O.M. Some processing may be done on that file. It is then sent to UEOMSplit by E.O.M. UEOMSplit splits up the file by Branch or whatever and send the individual reports/invoices back into E.O.M. to be printed or Emailed.

Phase V: Using E.O.M. to Email out documents:

One particular useful feature of E.O.M. is the ability to Email out Print files like Invoices, Statements etc. These are pdf files which are attached to the Email. E.O.M. produces a Graphical print file as per example and sends it to a program like WIN2PDF from **Dane Prairie Systems** <u>http://www.win2pdf.com/</u> or PDF Converter from **Amyuni Technologies Inc**. <u>http://www.amyuni.com/en/enduser/pdfconverterend</u> From EOM 10.0 onwards Unisys supply a PDF Writer program named **Enterprise Output Manager PDF Writer**. These programs send the pdf file back into E.O.M. via the COMS interface, E.O.M. then attaches that file to an Email and sends it out via SMTP. In the Dem01b.txt demonstration input file you will see a Email address and a Email subject. These will come into E.O.M. as usertag3 and usertag4 and these could be used to send out that Demo as an Email with a pdf file attached.

Email and UEOMSplit Demonstration/example

In order to make this demonstration you will need to carry out a number of tasks. You will also have to set up E.O.M. Service to run under the Username that the Service was installed under. This is so that the program UEOMSplit.exe can run.

- 1. Copy the \Tools\ folder from the Evaluation-CD folder to the -\Enterprise Output Manager\folder.
- Load down a zip file, which contain the data and EOM configuration to demonstrate this feature. Use the link below to load down the zip file. http://www.wantitconsulting.co.nz/EOM_Eval_Email_9_1_Setup.zip
- 3. Copy EmailDemo1b_Body.txt from the -\Demos\EOM_Eval_Email_9_1_Setup\ folder to the -\Enterprise Output Manager\PrntCtrl\ folder.
- 4. Create a new folder under \Enterprise Output Manager\ named \UEOMSplit_WorkArea. This will hold the files that are split off the input batch print file.
- 5. Stop the E.O.M. Service and configure it so that it runs under the Username of that the Service was installed under.
- 6. Go to Configuration Explorer and Import the all the configurations from the EmailDemo1b.xml file, which is located in the \EOM_Eval_Email_9_1_Setup\ folder.
- 7. Go to the Tools\Option\Email\Send Options\ and set up E.O.M. to point at your SMTP server.

- 8. Configure a **From** Email address. This is so customers could reply to you or the Email server send you back an error message if it cannot deliver the Email.
- Configure the GenPDFReprocess printer to point at the Windows printer WIN2PDF, Amyuni PDF Converter or Enterprise Output Manager PDF Writer. In the Output File Options, set Print to file and Apply to file masks. Make sure that you enable the printer. Set it as Always Locked or Always Unlocked.
- 10.Go back to E.O.M. and suspend Email jobs. To do this, go File\Suspend Job Scheduling\Suspend Email Job Scheduling.
- 11. Using Notepad or WordPad edit all the \$DEPHDR\$ lines to contain the Email address and Email subject you want, then save it. Copy the EmailDemo1.txt file located in the \EOM_Eval_Email_9_1_Setup\ folder to the \Demo\MonitorInput\- folder.
- 12. If all has gone well should now see three Emails queued to go out.

Creating Code

In order to create code to map input data on to an Electronic form or Printed form you will need the **DDA Key**. To obtain this key send an email request to:- <u>eomservices@unisys.com</u>. You can also email any other questions to that same address.

When you have the DDA Key, you will be able to create code to map data on to an electronic form or printed form, from your application software. The DDA Key is required in the E.O.M. software development environment, but not on the Production side of E.O.M. You would normally have one copy of the E.O.M. Service for Software Development and one copy for Production Formatting and Print Distribution.

To install the DDA key go to the folder where you downloaded the DDA Key to, and start the Setup.exe program. Accept the conditions and click on Install. You have to do this on the PC that is running the E.O.M. Client software, which in this case will probably be the one that the E.O.M. Service is also running on.

| | Please read the Enterprise Output N Designer Key 9.1 License Agreemen | Manager DDA It |
|---------|---|---|
| | Software License Agreement for Unisys DDA Designer Key Software for use wit Corporation Enterprise Output Manager | Corporation A h Unisys Software |
| | PLEASE NOTE - This media contains Un Corporation ("Unisys") DDA Designer H Software ("DDA Designer Key Software code form only, which is intended solely with Unisys Enterprise Output Manager ("Output Manager Software"), and other materials, and may include third party so (collectively "Licensed Materials") that proprietary to Unisys and/or any applica party owner. | uisys Cey "), in object r for use Software r written nftware are able third |
| and the | ☐ I accept the terms in the License Agreeme | ent |
| Prin | t Back Instal | Cancel |

When you are creating an E.O.M. print job you would normally start by designing a mockup of what you want the output to look like. MS Excel can be very useful when doing this as it provides Table and Graphic capabilities. You can also use different fonts. Once you have designed your mockup you could use MS PowerPoint or some other drawing package to create the form part of your

mockup. Remember it must be able to produce a Windows Meta File (.wmf). You don't have to have a form. It all depends on what output you want.

The next step would be to create the Definitions Form File (.dff) using the E.O.M. Forms File utility. You can start this utility by clicking on Tools/Form File Utility. This comes up as a separate job in a new window. Go File/New DFF. Set up the page size you want then Load you Windows Meta File. There is an Icon for this function. Once you have loaded the .wmf file you can start adding your data fields to the form. For more information on the Forms File Utility refer to its On Line Help manual.

The next step is to go back to E.O.M. and start the E.O.M. Configuration Explorer. Now declare a DDA Attribute, which maps data from your input file on to the form, and declare the Print Attribute, which will set the printer up for you and point to the DDA that you have just created. The last thing you would do is set up the File Mask to handle your new print job.

Now you are in a position to start creating DDA code.

A Practical exercise creating a EOM Print job from scratch.

When running a print job you need at least two parameters. One is the printer you wish to print on and the other is the Print Attribute/DDA set you wish to use to produce the formatted output. If this is a new application then you can code a \$DEPHDR\$ line into your application to carry the Usertag values, which would contain Printer name and Print Attribute name. However if it is an existing application and it cannot be easily changed, then you can still pass those parameters via the following method. Create a Generic printer for every printer you want to print to with that application. Have it point at E.O.M.

For example:

Real printer = BOSTF1P1 Generic printer = EOM_BOSTF1P1

When the print job comes into E.O.M. a system Keyword of HOSTQUEUE will contain that Generic printer name. E.O.M. can have that Generic Printer name mapped back to the real printer you want to print to. That will handle the printer parameter.

Now for the Print Attribute/DDA bit. If no \$DEPHDR\$ lines are found, then E.O.M. will scan looking for the first line of data in the file. If data is found, User Tag 1 is set equal to \$LINE1\$. Setting User Tag 1 equal to \$LINE1\$ will indicate that the user tags were not defined using \$DEPHDR\$ lines. Since User Tag 1 is set to \$LINE1\$, only User Tag 2 through User Tag 10 are available for user data file masking. That first line of data found will be parsed into Usertag2 thru Usertag10. A space character will be the field delimiter for that line. Providing that first data line in that applications print file has some constant data then you can use a Usertag2 thru Usertag10 for Masking on, and thus you can set up your print job to use a certain Print Attribute and print to your desired printer.

| 🛿 Configuration Explorer : Local | | | | | | |
|----------------------------------|--------|---|---------------------------------------|--|--|--|
| File Edit View Tools Help | | | | | | |
| 🕂 💐 📕 🗐 | | P | hysical Printer : EOM_BOSTF1P1 | | | |
| 🖉 🔤 🖉 Default | ~ | 🖯 General | | | | |
| 🖶 💋 File Masks | | Comments | | | | |
| ✓ Demo1b_Dir_Monitor | | Printer type | Windows Yes Always locked | | | |
| - Demo1b | | Printer available | | | | |
| 🚽 🖌 🖉 Demo1 Dir Monitor | | Initial lock state | | | | |
| Demo1a | | Print header page | Yes | | | |
| 🚽 Demo1a Dir Monitor | | Print trailer page | Yes | | | |
| | | Translate Table | 12015/ | | | |
| ✓ Default | | Automatic retry on error | No | | | |
| Header Trailer Pages | | Windows Printer | | | | |
| | | Windows printer name | BOSTF1P1 | | | |
| Logical Page Attributes | | Document spooling method | Use printer's default spooling action | | | |
| E G Logical Printers | | E Output File Options | and provide the second second second | | | |
| V DEFAULT | | Print output file option | (None) | | | |
| Message Queue Monitors | | | (),((),()) | | | |
| | | | | | | |
| | | | | | | |
| Composition 1 | | | | | | |
| T 🧐 🥱 🗖 🖬 | | File Mask : D | emo1_No_Dephdr_Line | | | |
| 🚽 🥪 Default | 🔼 🖂 Ge | eneral | | | | |
| 🖻 📁 🚺 File Masks | Co | mments | | | | |
| Demo1b_Dir_Monitor | En | abled | Yes | | | |
| Vemolb | File | e type | Determine dynamically | | | |
| Demoi_Dir_Monitor | | ide page | (None) | | | |
| Demota | F RE | e group - description | 1Day | | | |
| Demot No Deptdr Line | Con Co | e description Intinue search after match | No | | | |
| | E | e Selection Criteria | 110 | | | |
| - G Header Trailer Pages | All | statements must be true | Yes | | | |
| Index Attributes | | ask statements | 2 statements configured | | | |
| - 📁 Logical Page Attributes | | User Tag 02 equal to RSB | | | | |
| 🗄 📁 🕼 Logical Printers | | Field | User Tag 02 | | | |
| DEFAULT | | Operator | equal to | | | |
| 📁 📁 Message Queue Monitors | | Value | RSB | | | |
| 🗄 📁 🕼 Physical Printers | | Case sensitive | No | | | |
| EUM_BUSTFTPT | | Transport Type equal to LPR / LPD | | | | |
| E I Print Attributes | | | I ransport lype | | | |
| | | Value | | | | |
| DEMO1 | 8 11. | vauc ser k enword | | | | |
| Demo1b | | User keywords Ouser keywords configured | | | | |
| ⊯ G Security Roles | | | | | | |
| G Transfer Attributes | 🗆 Pri | Print jobs 1 jobs configured | | | | |
| - 📁 Transform Attributes | | DEM01/ <hostqueue>/No</hostqueue> | | | | |
| 🕞 🕼 Translate Tables | | Print Attribute | DEM01 | | | |
| ML Processing Directives | | Printer | <hostqueue></hostqueue> | | | |
| | × 1 | Create print inh when transfer begins | No | | | |

The first configuration shown above is for the Physical printer EOM_BOSTF1P1 mapped to the real Windows printer BOSTF1P1. The second configuration below, shows the Mask set up to make all this work for the Demo1 input file. We are masking on Usertag2, which contains the value RSB and the type of Transport method used to get the file into E.O.M. When the mask is satisfied it starts the print job using Print Attribute and prints to the printer held in system Keyword HOSTQUEUE, which contains the name of the printer that sent the file into E.O.M. This printer name is mapped to the real Windows printer in Physical printers.

Prior to you creating you own Print Job using your own data I will lead you through the creation of a small print job. This will be via a YouTube video. Below you will find two hyperlinks, one to the YouTube video and to all the data used, which may help you in designing your own E.O.M. print job. The EOM Configuration .xml file supplied can be imported using the **Configuration Explorer** software. To do this go **File/Import Export** and a new window will open on the right hand side.

Type of file to access should be set to XML. Point it at the .xml file **ABC_Inv_Demo.xml** and Import all. When you have finished make sure to un-tick **Import Export** or you will not see the contents of the Attributes displayed for the Attributes types on the left hand side. That right hand side is a shared space. The DDA is not complete as I am going to show you how complete this in the video. We will also build the mask in the video, even though it is provided.

http://youtu.be/nCJKGfM_sGo

www.wantitconsulting.co.nz/ABC_Demo/ABCDemo.zip

Below are images of the various screens you will see in the video:-

| AE | 3C Computers | Tax I Invoice Date : Page : Order | nvoice ∈#:046 10 1 #: XY | e 54341 June 2012 (548734 | | A | BC Computers | | Tax In Invoice Date : Page : Order # | nvoice #: | | |
|--|--|--|--|------------------------------------|-------------------------------|---|------------------------------|---|--|--|----------|---|
| John Si 7377 Si Apartm Sparks Nevada | mith lerra Bivs ent #1 a 89431-5324 | ABC Compu 423 East Pla Reno Nevada 895 Tel: 555 576 Fax: 555 56 | iters aza 601-25 64378 74389 | 32 | | | | | ABC Comput 423 East Pla: Reno Nevada 8950 Tel: 555 576 Fax: 555 567 | ters iza 01-2532 i4378 74389 | | |
| Date | Description | _ | Qty | Unit | Total | | | | | l and l | are sec. | - |
| | | 1 | | | | | | ł | | | | |
| n (n (n (n (n (n | | | Sub |) Total | 924.50 | | ra statetetetetetetetetetete | | | | | |
| | | | Sub Tax Tot |) Total (| 924.50 92.45 9.1016.95 | | | | | Sub Tc | tal | |
| n jar in jar jar j | | | Sub Tax Tot |) Total (al | 924.20 92.45 \$1,016.95 | | | | | Sub Tc Tax Total | tal | |

On the left is the mockup of the expected out. On the right is the form to be used.

| 🗟 Form File Utility - ABC_Invoice.dlf | 🗃 ABC_Demo_Input.txt - WordPad |
|---|---|
| File Edit Options View Help | File Edit View Insert Format Help |
| C I I I I I I I I I I I I I I I I I I I | |
| ABC Computers Invice Invint | \$DEPHDR\$ ABC_Invoice DEFAULT ADDR1John Smith 0454341 ADDR17377 Sierra Blvd 10 June 2012 ADDR1Apartment #1 1 ADDR15parks XY548734 ADDR15/06/12 Laptop 2.3Ghz 1 899.00 899.00 BOPY109/06/12 Laptop Carry Bag 1 25.50 25.50 TOTAL 924.50 10 707AL 924.55 TOTAL 92.45 707AL 92.45 |

On the left is the Definitions Form File we will end up with. On the right is the dummy data input.

In the video I will use a partially completed build of a print job and show you how to complete it. The data provided in the zip file will be the same data I will use in the Video. However the code I will build for line ID ADDR1 will not be quite complete. You will have to add some extra code to put the Invoice # in the field Inv_Tot at the bottom of the page. You will need to construct some code to pull the invoice # from the first ADDR1 line and put it into this field. The variable, Total_Count maybe useful. Refer to how I handled the invoice Total in subroutine TOTAL.

SUMMARY:

You have now installed E.O.M. Configured E.O.M. to use one of your desktop printers. Installed a Generic/Text Windows printer driver, which you can use to send data from your application into E.O.M. You have tested two ways of sending data into E.O.M., the Directory Monitor on LPR/LPD methods. Three data print files have been printed via E.O.M., with one coming in from a true Windows application, that being WordPad. You may also have succeeded in sending out an Email with an invoice attached.

Supplied with this evaluation copy is a number of other Demonstrations, which use these and other features of the product. Refer to the Online Help Manual for more information on these.

For more information about the options that can be set via Configuration Explorer refer to the Online Help manual.

If you require any help in performing your evaluation of this product please contact your local Unisys office, send an email to <u>eomservices@unisys.com</u> or myself at <u>info@wantitconsulting.co.nz</u>.