

# newsletter



**PGCG**

Pretty Good Consulting Group

Got a problem? We create solutions.

**EOM News and Views  
Issue 25, Winter 2012**

## *EOM 9.1 to be released in February*

A handful of features you may want to know about

Enterprise Output Manager (EOM) 9.1 will be released in February. The highlights of this release are:

- EOM service & client run as 64-bit service & application
- EOM service & client can still run as 32-bit service & application
- New User Keyword feature to make your File Masking even MORE capable
- There are 3 new barcodes and new library for existing barcodes
- You can now define a Transfer Destination in a Print Attribute for TCP printers

The marquis feature of this release is the ability to run natively on 64-bit Windows

operating systems. You can still run just fine in 32-bit Windows environments if you need to do so. The installation program automatically installs the correct flavor for that operating system. Note that the client and service can be of different flavors and still operate together. This release requires the .Net Framework 4.0, but no additional hardware, software, or system settings.

QR, Aztec, and GS1 DataBar barcodes are now supported. "Why?" you ask. The easiest answer is because 2 of the 3 can hold a lot of data. The QR codes can hold over 7,000 numeric characters, 4,000 alphanumeric characters, and 2,900 binary bytes of data. Aztec can hold between

over 3,000 characters or nearly 2,000 binary bytes of data. GS1 barcodes do not hold a ton of data, but there are 7 variants available (4 for point-of-sale uses and 3 for "smaller" projects).

Remember from previous Newsletters how we used the File Mask File Description value within a DDA? Well, the User Keyword feature is a mechanism to define your own keywords in the File Mask to be utilized downstream (i.e. DDAs and where keyword substitution is allowed).

Contact your Unisys representative to order the upgrade, it should be free for most of you via subscription & support agreements.

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## *DDA Tip: DDA Item Column ranges*

Lets start a food fight: Do not use column ranges when defining DDA Items

If you have attended an EOM class then you have heard suggestions/recommendations/pleas to to minimize the use of column ranges when defining DDA Items. The primary reason is that handling partial lines leads to confusion and unexpected results. Why?

Comments	
Enabled for da	Yes
<b>Item Range</b>	
Line range	7-9
Column range	1-50

- DDAs are (typically) easier to debug when the DDA Item grabs the entire line.
- DDA has become more powerful & capable since DDA was first released, so DDA Item column ranges are not as useful as with the early releases.
- Handling the left-hand side of a line of data leaves a left-justified right hand side of data. This is confusing.
- There may be more work involved if the input data changes.

# How do I ...?

## Can other applications "feed" files to the Web Assistant?

Yes.

Now the question is whether you want to "feed" the Web Assistant directly or use the EOM service to "feed" the Web Assistant. Before we get too far into the subject, note that the original intent of the Web Assistant was to manage and present human readable file formats like text (.txt), TIFF (.tif) and PDF - in reality you can have any file managed by Web Assistant. The process is pretty straightforward:

You configure the Web Assistant service to watch one or more directories. When an INF file (.inf) and the corresponding output file (i.e .pdf, .txt, .tif) are found in one of the directories, the Web Assistant software loads the information from the INF file into the SQL database and moves the output file to another directory for safekeeping.

### Feeding the Web Assistant directly

The Fall 2010 Newsletter showed how to have EOM create the .INF file that Web Assistant uses. In our case the external application could create the .inf file along with the output file to be posted. This way the EOM service does not get involved at all. Clearly the INF file information has to follow the XML format as well as provide enough information to be useful for searching & displaying afterwards. The more information you stuff into the INF file, the more information is available in the SQL database for searching & displaying.

### Feeding the Web Assistant through the EOM Service

If you want the EOM service to get involved by creating the INF file, then the EOM configuration requires a Physical Printer with the that has properties "Print output file option" set to "Print to file" and "Action to perform with output file" set to "Build information file". EOM "prints" the file to disk and then creates the corresponding INF file, using the same file name but with the ".inf" extension. Both the "printed" file and the .inf are written to either the ./print subdirectory OR, more likely, the directory defined in the Print Attribute Web/File properties.

The reason why you might want EOM to get involved with this process in the first place is because EOM provides a transport option that your application can take advantage of - dropping a file into a directory. LPR directly to EOM, printing to a Windows printer that happens to "point" at the EOM service. Again, there has to be enough information sent along with the file to be useful for searching and displaying afterwards.

The File Mask(s) that handles these files can be configured as PassThru if you do not want the output file to be massaged by EOM, which means you can post any type of file to the Web Assistant.

```
<?xml version="1.0" encoding="utf-8"?>
<EnterpriseOutputManager>
  <FileGroup>Default</FileGroup>
  <FilePriority>M</FilePriority>
  <HostQueue>PrinterQ1</HostQueue>
  <HostPriority>M</HostPriority>
  <HostSystemName>MCPA</HostSystemName>
  <HostQualifier>TECH1</HostQualifier>
  <HostFileName>EOM/DEM07</HostFileName>
  <HostFCycle />
  <HostRunid>TECH1</HostRunid>
  <EstimatedPages>1</EstimatedPages>
  <TransportType>Remoting</TransportType>
  <TransferDate>11/23/2010</TransferDate>
  <TransferTime>09:43:01</TransferTime>
  . . .
  <PrintFileName>C:\EOM91\Print\DEM07.000</PrintFileName>
  <MostRecentPA>DEM07</MostRecentPA>
  <MostRecentPR>PDF1</MostRecentPR>
  . . .
  <UserTags>
    <UserTag1>$_LINE1$</UserTag1>
    <UserTag2>#BXBBGDD***5-DIGIT</UserTag2>
    <UserTag3>55041</UserTag3>
  </UserTags>
  . . .
</EnterpriseOutputManager>
```

# Printing from Android & iPads

Mobile devices and applications are proliferating at astounding rates. How do you print?

We have just "dipped our toes" into the Android and iPad realm so it is with a superficial understanding of the technology we say: Cool! Both platforms have very impressive capabilities and generally speaking the operating systems and applications work well. With high expectations we took a look at how EOM might be used for output from this class of device. Our first inclination is that we would print just like we print from other systems: dropping a file into a directory, "point" a printer at the EOM service and so on. Not so fast - both the Android and iPad have their own ways of outputting and many applications do not even have the concept of "File / Print.." menu selection as found on Windows applications. In fact, there are no print options in some applications or a 3<sup>rd</sup> party application is required to handle output.

Disclaimer - we are not nor do we claim to be experts yet with respect to output from Android nor iPad, but can relay experiences in both testing and a real-life project.

## Android

The first hurdle to get over is the idea that you can print from every application or list of data - there is no option to do so, probably because printed output is not a high priority or need from many mobile applications. So, lets take an easy case and start by just trying to print something. From our T-mobile tailored Samsung Android mobile device we jump into the Contacts application, select Menu, then select Print, and are shown a dialog box stating "You can only print on Samsung printer. Continue?" We have Canon and HP wireless printers, sure enough they were not identified. Same result when trying to print an email. Then we tried the Web browser - it has a Print option (that we cannot use because we do not have Samsung printers), but it also has a "Share" option that looks promising. The camera application ONLY allows sharing. Same with a few other applications. So, for this particular device you print to Samsung printers or you use the Share feature to output. By the way, we are told that other Android devices do not have similar manufacturer specific print restrictions.

The default Share feature allows for transporting the output via Bluetooth & Wi-Fi device to device connections, Email, Gmail, and Messaging, but not printing directly. However, installed applications can be included in the Share list, providing a mechanism to support print. It appears that printer manufacturers (i.e. HP) take advantage of the Share to support their line of printers. For example, the HP ePrint Home & Biz application provides wireless printing to HP printers from the Android. A non-printer specific application like "Lets Print Droid" (BlackSpruce Software) also allows "Share" to a printer as well as printing from files resident on the Android device. It does not require a printer driver, simply sends the document/page/file to that device natively using the LPR protocol. So, the file extension is also sent with the output data, so if the remote printer understands that extension it should print correctly.

## Android & EOM

A Lets Print Droid type products can "point" at the Unisys Enterprise Output Manager (EOM) service, so transporting the data from an Android device to EOM is not difficult. It is very similar to routing Windows printers to EOM via the LPR protocol, Lets Print Droid allows you to configure an LPR connection to an IP address, which could be the EOM service. The EOM File Masks must identify the type of file coming in and then output it it appropriately. The Lets Print Droid Help file has documentation on how to connect to EOM and even includes EOM configuration examples for starting the popular Open Office and IrfanView as Custom Jobs to process incoming files. Other files types likely would require other Custom Jobs to process the file type, but the mechanism is the same.

## iPad

Similar to the Android platform, you cannot always print what you want. The application has to support printing. From the Contacts application the best you can do is email the .vcf file. You can print directly from email and Safari. Printing is supported directly from the iPad o.s., but in this case the native support requires "AirPrint" printers. Manufacturers of AirPrint enabled printers include Brother, HP, Epson, Lexmark, and Canon. There are quite a few printers supported and in our limited testing it appears to work. Having said that, we

## *Printing from Android & iPads (continued)*

had to reset our HP 5510 printer once in a while to reestablish the wireless connection. As you might expect, there are iPad applications from printer manufacturers.

As you also might expect, there are a few manufacturer specific applications and a handful of applications that enable additional printing options from the iPad. The primary goal of these applications is to support a non-AirPrint printers. One example, "Printing for iPad", supports thousands of printers. One drawback is that the document you want to print must first be imported into Printing for iPad. You can configure many printers, all of which require a driver and IP address/port in order to make the connection.

### **iPad & EOM**

EOM could certainly be used to receive the output from iPad applications if they supported LPR or simple TCP, but the big concern is that all of the received data is already composed for a specific printer. For example, the Printing for iPad application requires a driver and there are no "Generic - Text Only" type drivers. This means that the files would be handled as PassThru and you would not be able to use EOM's DDA feature.

### **General Observations**

First off, printing was not as easy as we would have guessed for new operating systems. Next, clearly mobile device applications have uses and goals different than many PCs/laptop applications, sometimes not intending to support output. Using these devices for output in a corporate environment is going to cause headaches, both in operation and expectations. Is there a need for EOM with these devices? Yes, but most likely as a routing tool to get the composed output to the right device. One of the really cool features of the Lets Print Droid software is that installation and print routing can be controlled by QR barcodes. For example, using the Android device the user reads the QR Barcode 1 to install the application, then reads QR barcode 2 (taped to a printer) that defines that printer on the device, and then prints to the newly defined device.

Please let us know how mobile devices are being used in your environments, related to output of course. We would be happy to relay information on EOM use with these devices too.

# Training is available

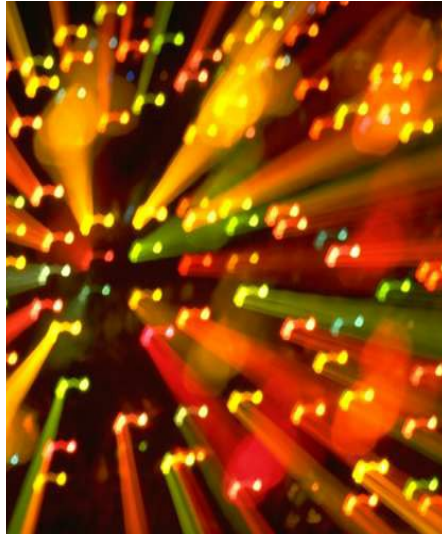
Unisys Customer Education has EOM classes... Both the EOM Basic and Advanced Workshops have been scheduled. The EOM Basic Workshop, starting March 27<sup>th</sup>, spans 4 days of 4-hours per day of remote training. The EOM Advanced Workshop, starting April 16<sup>th</sup>, spans 5 days of 4-hours per day remote training. On-site classes can also be arranged via Unisys Customer Education (800-222-0966 or email at [UnisysCustomerEducation@Unisys.com](mailto:UnisysCustomerEducation@Unisys.com)).

## Who are we?

Highly skilled, creative, solution provider focused on the Unisys Enterprise Output Manager product (formerly known as DEPCON) with a sense of urgency sums up who we are and what we do. We provide general Enterprise Output Manager consulting, migrations, upgrades, configuration, training, and custom programming.

On-site services, remote services, and general consulting are available now.

Why use PGCG? Deep knowledge of the EOM product integrated into a variety of customer environments sets us apart. Our customers production environment depends on solid, working solutions that we provide.



Pretty Good Consulting Group, LLC  
4235 Ivy Court  
Lake Elmo, MN 55042  
[www.prettygoodconsultinggroup.com](http://www.prettygoodconsultinggroup.com)

## Quick Hits

For those of you working on 64-bit Windows and trying to create PCL forms: Some of the "old standby" PCL drivers are not in the initial list of Windows printer drivers (when adding a printer). Simply select the "Windows Update" button when asked to select a driver, then there are many more to chose from. The LaserJet 5Si and LaserJet 4 drivers appear to create the most consistent PCL macros. The LaserJet III did not create PCL macros as well as in the past.

Comment on the Master of the universe DDA from EOM guru Darrel Fenstad: You mention turning Data Output Off and then doing the End Report to not produce any output from the original print job. Take this one step further and configure a Windows printer that uses a Local Port that is set to the special device name "NUL:". This points the printer to the NUL device and won't generate any output and won't initiate any communication with a real printer or device. Alternately you could set the Local Port to a fixed file path (such as "C:\Temp\dummyprinter.txt"), but I think the NUL device is slicker as that is its intended purpose and a actual file port may execute code to open the file for writing. Of course, they should definitely still turn Data Output Off and use End Report to avoid the extra overhead.

Have a suggestion for "How do I ...?" Write a brief description and send it to [SteveD@PrettyGoodConsultingGroup.com](mailto:SteveD@PrettyGoodConsultingGroup.com) for future newsletter discussion.