

Natural SPOTLIGHT

Using Entire Output Management's Open Printing Option to Centralize Printing

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Software AG's Entire Systems Management portfolio of tools provides automated production control in a distributed environment. Using a modern user interface, the tools of Entire Systems Management help you to control data center resources and services, automate job scheduling and event-driven batch-processing, improve output organization and optimize print-processing. You also gain a console to monitor events within the data center and interface with all system information and services.

As an important tool in Entire Systems Management, **Entire Output Management** gives you automated output organization and optimization of print-processing. As a hub between programs and spooling systems, Entire Output Management automates the electronic distribution and processing of print data before it is committed to paper or sent to the recipients. In this way, Entire Output Management converts the flood of printing tasks in heterogeneous environments regardless whether they originate from operating systems or applications into an organized, efficient and controllable printing and distribution process.

Data centers (like taxing authorities, etc.) that are interested in automatically processing generations of standardized reports and streamlining the print process to save on printing costs are heavily using Entire Output Management today. In addition, many organizations are receiving data from different locations or applications. They require the ability to print this incoming data to a central mainframe print station.

Software AG now provides a new Open Printing Option (OPO) available in Entire Output Management to handle these kinds of situations. The new OPO gives organizations the ability to centralize their entire print-outs (also on Windows systems) on a fast print system, making the installation of local printers obsolete. Using sorting mechanisms, like zip-codes in an address, it is possible to group incoming print-outs from all Windows work stations. Being able to print the sorted reports in this way reduces mailing expenses.

If you are looking for a central storage and archiving environment that is able to maintain any kind of incoming data from any location with any file format (like PDF, XML or even print data), you can make use of the archiving feature of Entire Output Management to bundle the incoming documents based on different attributes in order to determine which will be printed first.

Entire Output Management

With Entire Output Management you can process any kind of print data in heterogeneous client/server environments based on rules without changing the applications or programs that created the data. Entire Output Management automates the distribution of print data based on the incoming data. Reports are created by Entire Output Management that contain the parts of the output that are important for the recipient. Individual departments get only the relevant data needed for immediate decision-making, without having to resort to a hard copy.

Entire Output Management's rules make it easy to determine what is important. In addition, reports can be combined to form larger packets, even if the reports come from different data sources (e.g. jobs). This option is called bundling and the result is called a bundle. For documentation or revision purposes it is also possible to archive the reports or bundles. See Figure 1.

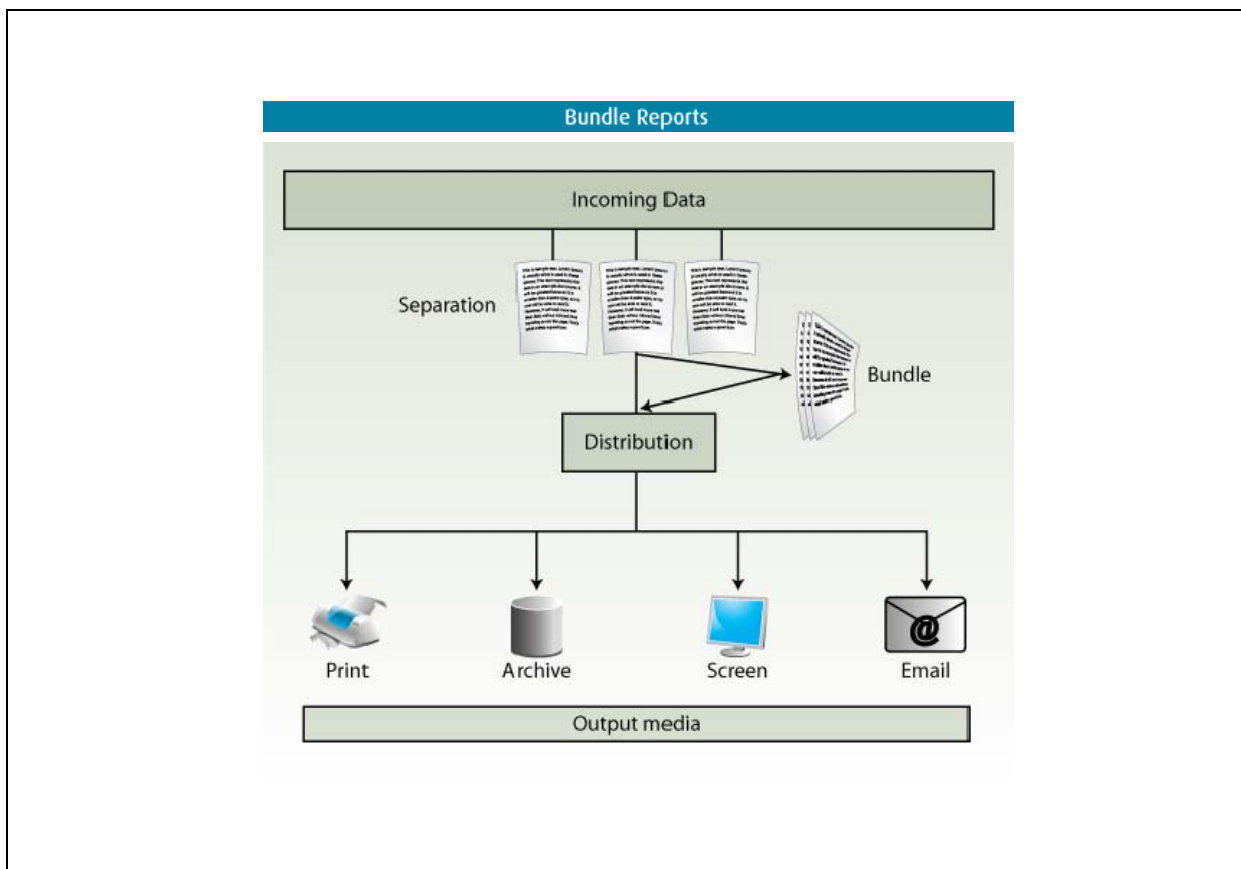


Figure 1. Bundle Reports

Binary Data Processing

With the new version 3.2.1 of Entire Output Management (released in March 2008), the product now also processes binary data. This means that any kind of file or print-out can be kept in Entire Output Management and archived, printed, distributed, and passed to a destination system.

There are two ways to get binary data into Entire Output Management - using OPO or trigger queue.

Using OPO

You can use the direct input interface together with the Entire Output Management Open Printing Option (product code: OPO). A Windows client passes output of the Windows system to Entire Output Management. This can be the output of a Windows printer driver or any program that can forward data to OPO using the pipe mechanism of Windows. *nomrpt.exe* converts the print data passed to the program into an XML data stream and sends it to the Entire Output Management RPC server NOMRPC. If the parameter *Input_Format* is set to "B" or not at all, the print data are converted into the format BASE64. The text, which then must not contain any non-printable characters, will be passed in text lines.

The data need not necessarily be redirected print data from a Windows printer driver. The type of data is irrelevant for *nomrpt.exe*. If you specify in *nomrptConf.xml* that the data are text data (with the parameter *Input_Format=T*), it is even possible to send print data to Entire Output Management with a simple Windows echo command:

```
echo "Hello, world."|nomrpt.exe
```

Any report Entire Output Management receives via the OPO can be enriched with user-defined meta-data. The meta-data can be viewed via PF2 on the spooling attributes screen of an active report, or in any user exit that uses the field SPOOL-ATTRIBUTES-EXTENDED. Meta-data are passed to Entire Output Management via an XML file that can be defined in an OPO printer definition. See Figure 2.

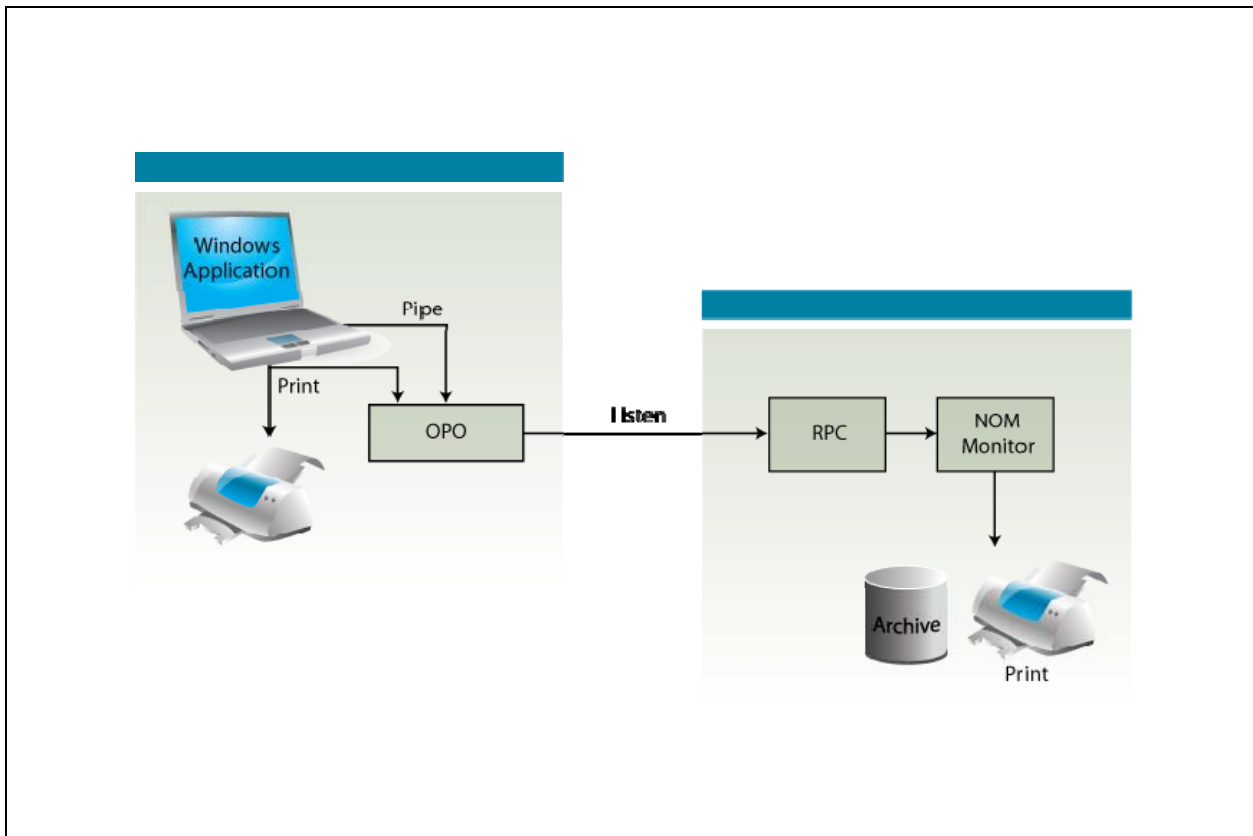


Figure 2. Using OPO

Trigger Queue

You can also define a report that receives data from a UNIX or Windows directory. A parameter "binary reading" can be filled with "B" to indicate that the file is to be processed in binary format. The report is passed through the Entire Output Management trigger queue, similar to the NOMPUT interface. Therefore, the trigger queue must be activated by Entire Output Management's API and User-Exit Defaults. The opened active report receives the type "binary" (a special CC type).

A binary report that is an output of a Windows printer driver will be bound to the hardware it was created for. The decision of where to print the data Entire Output Management may have received a long time ago is made at creation time. Consider using file formats like PDF if you want to keep binary data for a long time.

With the Entire Output Management GUI Client you can browse binary documents with the Windows default application of the specific file type, like the Adobe Reader which interprets PDF files. The Windows default application will be invoked as an external viewer.