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White Paper

Integration with Oracle's WMS and MSCA

Automatically Print from the Oracle Applications
"Oracle Warehouse Management" (WMS) and
"Oracle Mobile Supply Chain Architecture" (MSCA)

Contents

Overview	3
Seagull Scientific's Commander Utility	3
Included Files	4
Configuring Commander for Integration with Oracle WMS/MSCA	5
Integration Steps	5
Testing the Commander Configuration	5
Finishing the Integration	5
Further Reading: The Two Tasks of OracleXML.tl	5
Related Documentation	6

Overview

This white paper explains how Oracle's Warehouse Management (WMS) and Mobile Supply Chain Architecture (MSCA), part of Oracle E-Business Suite, can be integrated with the Enterprise Automation edition of BarTender to automatically print labels.

Oracle WMS and Oracle MSCA are logistics management software products within the Oracle E-Business Suite. Both WMS and MSCA offer integration capabilities that allow for automatic printing when used with the right external software products, such as the Enterprise Automation edition of BarTender from Seagull Scientific.

There are two primary tasks that must be completed in order to implement this printing integration:

- **Configuring Oracle's WMS and MSCA Applications:** Printing integration with Oracle's WMS and MSCA is based on the generation of an XML file (called an "XML label request") containing all of the information needed to describe a print job. These applications must be configured to create the desired XML file and place it in the proper folder, or send it to a TCP/IP socket. The steps to do this are not documented here, but can be found in the "WMS Implementation Guide," available online to Oracle partners and customers from <http://metalink.oracle.com>.

NOTE: Oracle is responsible for training their users to properly generate these XML files. For additional information on Oracle WMS/MSCA and print integration, please see the [Related Documentation](#) section of this white paper.

- **Configuring Commander:** To handle Oracle XML print requests, Commander must be configured to monitor the folder in which the XML files will be created, or the TCP/IP socket over which the XML will be received. Then it must be configured to respond by executing the desired print job.

Seagull Scientific's Commander Utility

Commander is a utility provided with both BarTender Automation editions that allows BarTender to automatically print in response to certain triggering events from other software. One of these events can be the generation of a "trigger file" (such as an XML label request) in a particular file folder. When a file of a given name or type is detected, Commander reads commands and/or data from that file and passes them on to BarTender, which executes the print job. Commander can also be triggered by and process data sent over a TCP/IP socket.

For more extensive information about using the Commander utility, please see the Commander white paper at:

<http://www.seagullscientific.com/aspx/whitepapers.aspx>

Enhanced Capabilities with the Enterprise Automation Edition

In addition to detecting file and e-mail triggers, such as that for Oracle XML print requests, the Enterprise Automation edition of Commander can also trigger based on TCP/IP socket communications.

Also, the Enterprise Automation edition supports transformation of incoming XML data into other formats using XSL. The XSL-based conversion process built into Commander is a fast and direct

way to convert XML. For the special case of converting Oracle XML print requests into BarTender XML script, Commander includes a built-in XSL style sheet designed for this purpose.

Performance in heavy utilization environments is facilitated with the Enterprise Automation edition of Commander, as it can launch and communicate with multiple instances of BarTender.

Included Files

Several BarTender document files are installed with BarTender to make integration with Oracle applications easier. They are installed into the **BarTender\BarTender Documents\Oracle** subfolder of your Documents folder:

Built-in Oracle Integration BarTender Documents

1. LPN (License plate information)
2. LPN Content (LPN plus details about contents)
3. LPN Summary (LPN plus nested contents summarized)
4. Material (Item, quantity, lot, and revision details)
5. Serial (Material plus serial details)
6. Location (Organization, sub-inventory, and locator)
7. Shipping (Customer and address)
8. Shipping Contents (Shipping plus content information)
9. WIP Contents (Discrete manufacturing details)
10. Flow Contents (Flow manufacturing plus customer information)

Commander Task List

A sample Commander Task List called "OracleXML.tl" is also provided. This file implements reception of an Oracle XML print request through either a TCP/IP socket, or a file.

Configuring Commander for Integration with Oracle WMS/MSCA

Integration Steps

1. Install and activate the Enterprise Automation edition of BarTender. When BarTender installation is complete, use Windows Explorer to browse to the Oracle samples folder, which should be located on your PC in the following subfolder of your Documents folder:
BarTender\BarTender Documents\Oracle
2. Open the “OracleXML.tl” task list.
3. Start detection in Commander. This should cause a folder named “Scan” to appear in the Oracle folder.

Testing the Commander Configuration

To confirm that you have Commander properly configured, perform the following test:

1. Select one of the sample XML files in the Oracle sample directory and copy this file into the “Scan” folder which appeared when you started detection in Commander.
2. BarTender should respond to the appearance of this XML file by automatically printing, using data from the XML file.

Finishing the Integration

Once you have verified that Commander and BarTender are responding correctly to the creation of XML files, all that remains is to configure the Oracle application to create the XML file in the Scan folder, or send the data through a TCP/IP socket. You may also wish to use BarTender to load and edit some of the included Oracle “Seeded Documents” to better meet your specific requirements.

Further Reading: The Two Tasks of OracleXML.tl

This is an optional section you may want to read to aid your understanding of how integration works, but it is not required reading to set up the integration.

There are two tasks in the task list:

- One that detects file triggers.
- One that is triggered by TCP/IP socket communications.

Either method can be used.

Both tasks use an XSL style sheet to convert any Oracle XML print requests found in the trigger into BarTender XML script. This script contains all of the BarTender commands and label data needed by BarTender to handle a print request. After the script is generated by Commander, it is passed to BarTender’s Automation interface and executed.

Both tasks contained in the task list share a single Command Handler that is configured to use one BarTender process. You can increase the number of processes if you have multiple simultaneous print requests. For instructions on setting the number of BarTender processes, see the Commander white paper at: <http://www.seagullscientific.com/aspx/whitepapers.aspx>

Related Documentation

External Documentation

- [Oracle Home Page](#)
- [Oracle Warehouse Management \(WMS\)](#)
- [Oracle Mobile Supply Chain \(MSCA\)](#)

Seagull White Papers

- The Advantage of Drivers by Seagull
- Licensing for BarTender's Automation Editions
- Commander

For downloadable versions, visit:

www.seagullscientific.com/label-software/white-papers.aspx



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