The Reporting Platform for Applications: Oracle Business Intelligence Publisher

Noelle Bartlam
Senior Member of Technical Staff, BI Publisher
The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle’s products remains at the sole discretion of Oracle.
Program Agenda

- Overview of BI Publisher
- BI Publisher in Oracle Applications
- Application integrations with BI Publisher
  - Siebel CRM
  - JD Edwards Enterprise
  - JD Edwards World
  - PeopleSoft
  - E-Business Suite
- Appendix
Refresher?

How many ....

- Siebel?
- JD Edwards (World or EnterpriseOne)?
- Peoplesoft?
- E-Business Suite?
Overview of BI Publisher

- Purchase Orders
- Labels / Bar Codes
- Collateral
- Government Forms
- eText
- Order Forms
- Invoices
- Operational Reports
- Correspondence
- Financial Statements
- Checks
Integrated Out-of-the-Box with All Oracle Applications
Program Agenda

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• Appendix
BI Publisher in Oracle Applications Limited Use License

• Oracle E-Business Suite
  In 11i -- 500 templates
  In R12.1 -- ALL reports are BI Publisher: 2724 templates and 2092 data sources or data templates across 95 products
  Oracle Reports to Publisher Conversion Assistant

• PeopleSoft
  Integrated into 8.48
  Products shipping content in R9
  • Financials
  • Grants
  • HCM
  • CRM
  • SCM
  • Student Admin

• Siebel CRM
  Integrated in 8.1.1  119 reports OOTB
  Actuate to Publisher Conversion Assistant
BI Publisher in Oracle Applications
Limited Use License

- J.D. Edwards Enterprise One
  Integrated into 8.96
  Allow customers to develop their own templates
  Subsequent releases will add Apps content
  JD Edwards EnterpriseOne JDBC driver

- J.D. Edwards World
  Integrated in A9.1
  Produce XML that can be used as input to BI Publisher
  Automated integration in newly released A9.2
  JD Edwards World JDBC Driver
BI Publisher in Many Oracle Products

- Oracle Identity Management
- Oracle Life Sciences AERS
- Oracle Life Sciences Data Hub
- Oracle FLEXCUBE Universal Banking
- i-Flex FLEXCUBE Retail
- Oracle FLEXCUBE Direct Banking
- Oracle Reveleus
- Oracle Mantas
- Agile Product Lifecycle Management for Process
- Agile Product Lifecycle Management
- Oracle Hyperion Planning
- Oracle Hyperion Financial Management
- Oracle SOA Governance
- Oracle Retail
- Oracle Global Risk & Compliance
- iFlex FLEXCUBE – IFLEX Reinsurance
- Oracle FLEXCUBE Lending and Leasing
- Oracle Communications Applications
- Oracle Transportation Management
- Oracle Insurance Insbridge Rating and Underwriting
- Oracle Application Express (APEX)
- Enterprise Manager - Configuration Change Console
Program Agenda

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## Actuate Report Development vs BI Publisher Report Development

<table>
<thead>
<tr>
<th>Actuate (Developer)</th>
<th>BI Publisher (End User)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Create report in Actuate</td>
<td>2. Create report layout</td>
</tr>
<tr>
<td>3. Compile report</td>
<td>Compile Report</td>
</tr>
<tr>
<td>4. Stop report server</td>
<td>Stop report server</td>
</tr>
<tr>
<td>5. Deploy report executable</td>
<td>3. Upload template</td>
</tr>
<tr>
<td>6. Associate report with View and Deploy SRF</td>
<td>4. Associate with a View</td>
</tr>
</tbody>
</table>
Siebel – Steps for creating BI Publisher Report

Generate XML Data
Create Template
Upload Template
Associate report with a View

Without having to restart the application, you can test your report
Actuate Reports Conversion Assistant

- Command line utility that converts the Actuate layout design into BI Publisher layout design.
  - Actuate report layout convertor (from .ROD to .RTF)

- Available to BI Publisher customers at no additional charge

- Available via patch number 8968224
What’s new with Siebel 8.1.1.1 Fix Pack

• Integration with BI Publisher Scheduling
• Parametized reporting (parameters can be entered when running a report)
• Embedded reports server views into Siebel
  – More features for embedded reports coming in 8.1.1.2
• Sample of Publisher reports provided out of the box
  • Accounts:
    • Account List
    • Account Service Profile
    • Enterprise Selling Plan – Overview
  • Contacts:
    • Contact List
    • Contacts By Opportunity
    • Alphabetic Phone List
  • Opportunities:
    • Opportunity List
    • Opportunities By Sales Rep
    • Pipeline Report By Sales Rep
For More Information on Siebel

- Siebel Reporting Migration Guide for Reports Developers
  (Document 764191.1)

<table>
<thead>
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<th>TIME</th>
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<th>DESCRIPTION</th>
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<td>4/22/10</td>
<td>12:15pm - 1:15pm</td>
<td>3630</td>
<td>Upgrading to Siebel 8.x</td>
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Embedded BI Publisher for JD EnterpriseOne vs BI Publisher Standalone/JD Edwards EnterpriseOne

BI Publisher is available to JD Edwards EnterpriseOne users in two ways:

- **Embedded BI Publisher for JDE1**
  - Need to produce content rich reports that are part of the existing business process

- **Oracle BI Publisher Standalone with JDE1**
  - Need to empower business users to develop and execute user driven reports
Embedded BI Publisher
8.98.1 adds capability to save output to a file system
Oracle BI Publisher Standalone with JD Edwards EnterpriseOne

Layout Templates

- Word
- Acrobat
- JDev
- Excel
- Flex
- Others

Oracle BI Publisher

- PDF
- HTML
- Excel
- PowerPoint
- Flash
- RTF
- CSV
- XML
- EDI
- EFT

JDBC Driver

JDE EnterpriseOne

Layout Tools
Output Formats
Destinations

Email
Printer
Fax
Repository
e-Commerce
For More Information on JD Edwards EnterpriseOne

On support.oracle.com, search for 789074.1

<table>
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<th>DATE</th>
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<th>SESSION</th>
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<tbody>
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<td>76640</td>
<td>BI Publisher and Oracle BI for JD Edwards</td>
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<td>4/21/10 (Wednesday)</td>
<td>1:00pm – 2:00pm</td>
<td>71170</td>
<td>Empower JD Edwards Users with Oracle BI Publisher for AD Hoc Reporting</td>
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<td>4/22/10 (Thursday)</td>
<td>9:45am – 10:45am</td>
<td>73070</td>
<td>Reducing Cost with Oracle’s BI Publisher</td>
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JD Edwards World release A9.1 or A9.2

- Use the “Export” feature to create data in XML
- A9.2 will automatically generate a nice BI Publisher report
- A9.2 calls BI Publisher APIs
Oracle BI Publisher Standalone with JD Edwards World

Layout Templates
- Word
- Acrobat
- JDev
- Excel
- Flex
- Others

JDBC Driver

JDE World

Layout Tools
Output Formats
- PDF
- HTML
- Excel
- Power Point
- Flash
- RTF
- CSV
- XML
- EDI
- EFT

Destinations
- Email
- Printer
- Fax
- Repository
- e-Commerce
For More Information on JD Edwards World

On support.oracle.com, search for 789078.1

The JD Edwards World JDBC Driver is downloadable from Metalink’s Update Center.

<table>
<thead>
<tr>
<th>DATE</th>
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<th>SESSION</th>
<th>DESCRIPTION</th>
</tr>
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<tr>
<td>4/21/10 (Wednesday)</td>
<td>10:30am – 11:30am</td>
<td>70900</td>
<td>JD Edwards World – Technical Upgrade Considerations</td>
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<tr>
<td>4/21/10 (Wednesday)</td>
<td>1:00pm – 2:00pm</td>
<td>75460</td>
<td>BIP and JD Edwards World – Good Stuff!</td>
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<tr>
<td>4/21/10 (Wednesday)</td>
<td>4:00pm – 5:00pm</td>
<td>76320</td>
<td>Using Oracle BI Delivers to Send Reports to JD Edwards Users</td>
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</table>
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Peoplesoft – Generate XML Data

XML data can be generated using any means including PS Query, SQR, Application Engine, PeopleCode, File Layout and so forth.
Peoplesoft – Report Definition

Report definitions are used to:
- Associate a data source with a template.
- Define output options.
- Grant security to view report.
- Define bursting options.
Peoplesoft – Running BI Publisher Reports

Query Report Viewer
Enter any information you have and click Search. Leave fields blank for a list of all values.

Search Results

Report Definition

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUSTOMERLET</td>
<td>Customer Letter Report</td>
</tr>
<tr>
<td>CUST_LT</td>
<td>Customer Letter Report</td>
</tr>
<tr>
<td>BURSTING</td>
<td>Bursting Report</td>
</tr>
<tr>
<td>PRINT</td>
<td>Printing Report</td>
</tr>
<tr>
<td>TEST</td>
<td>Test Report</td>
</tr>
<tr>
<td>XRFWIN</td>
<td>XRF Win Report</td>
</tr>
</tbody>
</table>

Dear Sir/Madam,

Welcome to Nashville, TN!

According to our records as of 09/12/2008, we show the following open balances:

<table>
<thead>
<tr>
<th>Business Unit</th>
<th>Remaining Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP005</td>
<td>$650.53</td>
</tr>
<tr>
<td>US006</td>
<td>$100.00</td>
</tr>
<tr>
<td>US007</td>
<td>$600.00</td>
</tr>
</tbody>
</table>

Your total outstanding balance is $1,250.83.
New BI Publisher Features with PeopleTools 8.50

• PDF Full Path Mapping
• Descriptive Report Names
• Support for Email
• Alternative XML Preview
• XDO Properties Configuration
• Iterative Template Design
For more information

• Release Notes for PeopleSoft Enterprise PeopleTools 8.50

• Enterprise PeopleTools 8.50 PeopleBook: XML Publisher for PeopleSoft Enterprise

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<tr>
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<th>TIME</th>
<th>SESSION</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>4/20/10 (Tuesday)</td>
<td>8:00am - 9:00am</td>
<td>4349</td>
<td>Creating XML Publisher Documents with Peoplecode</td>
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<td>4/21/10 (Wednesday)</td>
<td>8:00am - 9:00am</td>
<td>75220</td>
<td>XML Publisher Tips for PeopleTools</td>
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<tr>
<td>4/22/10 (Thursday)</td>
<td>9:45am - 10:45am</td>
<td>72360</td>
<td>PeopleSoft Recruiting Enhancements You Can Use</td>
</tr>
</tbody>
</table>
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XML Publisher Releases vs. E-Business Suite Releases

• Release 11.5.10
  – XML Publisher 4.5 – 12/31/04

• Post Release 11.5.10
  – XML Publisher 5.5 – 01/06/05
    • Performance, Translation, Template Builder, Common Regions
  – XML Publisher 5.6 – 01/10/06
    • Administration UI, Data Engine, Book Binder

• Release 12
  – XML Publisher 5.6.3
    • Runtime Optimization, Enhancements
E-Business Suite

Release 12 and 12.1

- HRMS using many government forms from all around the world

Payments utilizing Publisher for Banking and Credit Card payment processing

- Financial Applications has consolidated many data sources and providing multiple templates

- Oracle Reports to BI Publisher Conversion Assistant
XML Publisher
Concurrent Manager

*XML Publisher = EBS Embedded BI Publisher
Setup and Process – Overview

**DEVELOPMENT SETUP**

1. Create Data and Layout Template Files
2. Load files and Metadata to Template Manager
3. Define concurrent Program using the data engine executable
4. Add concurrent Program to Request Group

**USER PROCESS**

1. Choose concurrent program via SRS forms
2. Select parameter values
3. Select layout template Language and output format
4. Submit Request

- Output document Generated
- Output document Printed or Viewed

Automated process
XML Publisher – Concurrent Program Process Flow
EBS

Two Step Publishing
1. Submit Oracle report with output format set to XML.
2. After request completes submit XML Report Publisher and select the completed output of your request and a template to run against.

One Step Publishing
- Submit the original program (output type = XML), at runtime select the template and output format (RTF, PDF, EXCEL).
- The program being submitted is usually the old Oracle Report 6i request. The request is run and OPP manager submits XML Publisher to create PDF.
XML Publisher – User Process

- User selects the report from a list
- User enters parameter values
- User can select a template, language and output format and submit the report
- User can view the final output via the Monitor Requests form
User Selects the Report From a List and Enters Parameters
User Can Select a Template, Language and Output Format

1. User can select a different template from the LOV
2. Then a different language if available
3. Then an output format
User Can View the Final Output via Monitor Requests Form
Output Post Processor (OPP) Manager

• Note 291792.1 – Using the OPP in Oracle Applications Concurrent Processing

• OPP is an extension to Concurrent Processing
• Takes care of all post-processing actions for concurrent requests
• Required for single-step reporting using XML Publisher.
• Triggered by Conc. Manager upon completion of the XML output generation

• Maximum throughput defined as:

  \[ \text{#processes} \times \text{#threads} = \text{MAX #parallel reports} \]

  \[ \rightarrow \text{if needed, increase the default values} \]

• Profile Options:
  – Concurrent: OPP Response Timeout
  – Concurrent: OPP Process Timeout
OPP Manager Setup

- The OPP Service is multi-threaded and will start a new thread for each concurrent request it processes.
- You can control the number of simultaneous threads for an OPP Service Instance by adjusting the Threads per Process parameter for the instance.
- If all the OPP process have reached their respective maximum number of threads, the requests waiting to be processed remain in a queue to be processed as soon as threads become available.

```
<table>
<thead>
<tr>
<th>Select Item and...</th>
<th>Remove</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Select Name</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Standard</td>
<td>Active 24 hours every day</td>
</tr>
</tbody>
</table>

TIP Threads per Process should be between 1 to 20
```
1. Choose a report to publish in XDO.

To avoid breaking the seeded Concurrent program, copy the current program to a new name (such as Active Users XML) using the Copy Program functionality in FNDCMMCP. This provides a new Alias but doesn’t touch the seeded definitions. Any patches to the seeded program will update the copy as it points to the seeded program. Only maintenance is the need to update the parameter list if the seed programs parameters are changed. Add the report to a responsibilities report/request group.
2. Change the output format to XML and run the report to get a sample data set.

3. Using the XML data, create an RTF template in the Template Builder (Or you can create a PDF or XSL-FO template.)

4. Create a Data Definition and Template definition in Applications as XML Publisher Administrator.

5. Link Template to Report using System Administration responsibility (Self-Service).


7. Submit the request and view the output.

8. Enable printing of the report (To print PDF output requires pasta and ghostview or acroread.)
Getting XML Sample or Runtime Data
Getting XML Sample or Runtime Data
<?xml version="1.0" ?>
<!-- Generated by Oracle Reports version 6.0.3.24.0 -->
- <FNDSCURS>
  - <LIST_OSAF_FIRST_QUERY>
    - <OSAF_FIRST_QUERY>
      <X> </X>
    - <LIST_BREAK>
      - <BREAK>
        <USER_NAME />
        <SECURITY_GROUP_NAME> Standard </SECURITY_GROUP_NAME>
      - <LIST_G_RESPS>
        - <G_RESPS>
          <APPLICATION_NAME> Self-Service Web Applications </APPLICATION_NAME>
          <RESPONSIBILITY_NAME> Preferences SSWA </RESPONSIBILITY_NAME>
          <START_DATE> 23-JUL-03 </START_DATE>
          <END_DATE />
        </G_RESPS>
        - <G_RESPS>
          <APPLICATION_NAME> Service Contracts </APPLICATION_NAME>
          <RESPONSIBILITY_NAME> Service Contracts Electronic Renewals </RESPONSIBILITY_NAME>
          <START_DATE> 23-JUL-03 </START_DATE>
          <END_DATE />
        </G_RESPS>
      </LIST_G_RESPS>
    </LIST_OSAF_FIRST_QUERY>
  </LIST_OSAF_FIRST_QUERY>
</FNDSCURS>
XML Publisher
Development Setup
Development Setup – Overview

- Create Data Template
- Create Layout Template
- Register data and template definition metadata and load data template and layout template
- Define concurrent program
- Add concurrent program to request group
Create Data Template

The data template consists of:

- A `<parameters>` section in which parameters are declared in child `<parameter>` elements
- A `<dataQuery>` section in which the SQL queries are defined in child `<sqlStatement>` elements
- A `<dataStructure>` section in which the output XML structure is defined
Create Layout Template
Create Layout Template
Register Data Definition

1. Use XML Publisher Administrator responsibility
2. Create data definition metadata
3. Load sample data and schema if required (only pdf layouts)
4. Load data template file
Register Layout Template

1. Use XML Publisher Administrator responsibility
2. Create layout template metadata
3. Load template file
Define Concurrent Program & Executable

1. Use System Administrator responsibility
2. Create a concurrent program definition using the XML Publisher Data Template executable
Add Program to Request Group

<table>
<thead>
<tr>
<th>Type</th>
<th>Name</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>Workflow Background Process</td>
<td>Application Object Library</td>
</tr>
<tr>
<td>Program</td>
<td>ADS Financials</td>
<td>General Ledger</td>
</tr>
<tr>
<td>Program</td>
<td>Publish RX Reports</td>
<td>Assets</td>
</tr>
<tr>
<td>Program</td>
<td>Collection Effectiveness Indicators</td>
<td>Receivables</td>
</tr>
<tr>
<td>Program</td>
<td>Autoinvoice Import Program</td>
<td>Receivables</td>
</tr>
<tr>
<td>Program</td>
<td>Aging - 7 Buckets - By Amount Report (of)</td>
<td>Receivables</td>
</tr>
<tr>
<td>Program</td>
<td>Aging - 4 Buckets Report</td>
<td>Receivables</td>
</tr>
<tr>
<td>Program</td>
<td>Aging - 7 Buckets - By Salesperson/Agent</td>
<td>Receivables</td>
</tr>
<tr>
<td>Program</td>
<td>Aging - 7 Buckets Report (obsolete)</td>
<td>Receivables</td>
</tr>
<tr>
<td>Program</td>
<td>Billing and Receipt History</td>
<td>Receivables</td>
</tr>
</tbody>
</table>

Description: Workflow background process for deferred and timeout activities
Run the Report

1. Switch from System Administrator to the appropriate responsibility
2. Select Concurrent: Run
3. Select any parameters need for the request
BI Publisher Desktop 5.6.3

- BI Publisher Desktop 5.6.3 (10.1.3.2)
- 5.6.3 = 10.1.3.2 for Enterprise users, same basic code tool can be used to login and connect to 10.1.3.2 BI Publisher Enterprise.
- Patch 5887917 Oracle XML Publisher Desktop Patch 5.6.3 includes
  - Template Builder for Word
  - Template Builder Tutorial
  - Template Viewer
  - RTF, PDF and eText examples.
XML Publisher References

- Note 364547.1 – Troubleshooting Oracle XML Publisher For The Oracle E-Business Suite
- Note 737311.1 – How to Configure the Account Analysis Report in Release 12 for Large Reports
- XML Publisher 5.6.3
  - Note 422508.1 - About Oracle XML Publisher Release 5.6.3
  - Oracle XML Publisher Administration and Developer's Guide Release 12 B31412-01
  - Oracle XML Publisher Report Designer's Guide Release 12 B31410-01
Fax Your Documents through RightFax Server

- Deliver faxes directly from the BI Publisher Delivery Manager to any fax destination and query the status of the job using RightFax 9.3 or above.

- Implemented by the Oracle Collections team for the Strategy Dunning Program.

- Blog article by Pradeep K. Sharma
<table>
<thead>
<tr>
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<tr>
<td>4/20/10 (Tuesday)</td>
<td>10:30am – 11:30am</td>
<td>4726</td>
<td>Moving to BI Publisher, Now What? Automated Fax and Email from Oracle EBS</td>
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<td>4/20/10 (Tuesday)</td>
<td>2:00pm – 3:00pm</td>
<td>3356</td>
<td>Custom Check Printing Framework using XML Publisher</td>
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<td>2:00pm – 3:00pm</td>
<td>3815</td>
<td>Smart Reporting in Oracle Financials Release 12.1</td>
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For More Information

- Publisher Home Page

- Publisher Demo Catalog

- Publisher Blog
  http://blogs.oracle.com/xmlpublisher/

- Publisher Forum

- White Paper – Converting Crystal Reports to Oracle BI Publisher
  http://download.oracle.com/otndocs/xmlp/CrystaltoBIP.pdf
For More Information

http://search.oracle.com

BI Publisher

or

http://www.oracle.com/technology/products/xml-publisher
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<td>Introduction to Oracle Business Intelligence Publisher</td>
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<td>BI Publisher Hands on Lab</td>
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<td>4/20/10 (Tuesday)</td>
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<td>218</td>
<td>Oracle Business Intelligence Publisher Best Practices</td>
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<tr>
<td>4/21/10 (Wednesday)</td>
<td>1:00pm – 2:00pm</td>
<td>243</td>
<td>Oracle BIEE End-to-End</td>
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</tbody>
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XML Publisher
Troubleshooting
Agenda

• EBS Basic Setup – Administration
• Troubleshooting Basics
• Location of Log Files
• Turning on Debug
• Setup for Large Reports
Basic setup to prevent JAVA memory errors use the XML Publisher Administrator responsibility.

1. Navigate to **Administration > Configuration**.

2. Select a Temporary Directory for BI Publisher.
   - Preferably not APPLCSF as this area already has a lot of I/O. Must be a valid path on the concurrent processing node and the web node.

3. Set these XSLT properties to true:
   - Use XML Publisher's XSLT processor
   - Enable XSLT runtime optimization.
XML Publisher Administrator: Administration > Configuration
Troubleshooting – Getting Started

• Get error log showing specific error.
• Improve error messages by turning debug on.
• Try to replicate on internally.
• Requires layout template and XML data file.
How to Get BI Publisher Log Files

- **One Step Publishing Concurrent Requests:**
  Request Log: Requests > View > Log
  Output Post Processor Log:
  a. Navigate to Concurrent Manager Administer.
  b. Select the Output Post Processor.
  c. Choose the "Processes" button.
  d. Choose the "Manager Log" button.

- **Two Step Publishing – XML Report Publisher**
  Request Log – Requests->View->Log

- Increase logging by turning on Debug for these processes.
How to Get the Log File of the OPP
How to Get the Log File of the OPP

Template app: FND
Language: en
Territory: US
Output type: RTF
[9/8/05 10:58:01 AM] [750931:RT2756310] XML Publisher post-processing action complete.
[9/8/05 10:58:01 AM] [750931:RT2756310] Completed post-processing actions for request 2756310.
[9/8/05 11:02:17 AM] [OPPServiceThread] Post-processing request 2756311.
[9/8/05 11:02:17 AM] [750931:RT2756311] Executing post-processing actions for request 2756311.
[9/8/05 11:02:17 AM] [750931:RT2756311] Starting XML Publisher post-processing action.
[9/8/05 11:02:17 AM] [750931:RT2756311] Template code: FNDSCURS2
Template app: FND
Language: en
Territory: US
Output type: EXCEL
[9/8/05 11:10:20 AM] [750931:RT2756311] XML Publisher post-processing action complete.

[9/12/05 9:46:19 AM] [OPPServiceThread] Post-processing request 2756339.
[9/12/05 9:46:19 AM] [750931:RT2756339] Starting XML Publisher post-processing action.
[9/12/05 9:46:19 AM] [750931:RT2756339] Template code: FNDSCURS2
Template app: FND
Language: en
Territory: US
Output type: PDF
[9/12/05 9:49:03 AM] [750931:RT2756339] XML Publisher post-processing action complete.
[9/12/05 9:49:03 AM] [750931:RT2756339] Completed post-processing actions for request 2756339.
How to Turn on XDO Debug in EBS R12

Turn on debug on the concurrent processing node.
1. Select node_name, status, support_cp, support_web from fnd_nodes;
2. For each node identified as active (status='Y') for support_cp and/or support_web = ‘Y’ do:
   a. Create a directory temp under $XDO_TOP.
   b. Create a directory resource under $XDO_TOP.
   c. Under $XDO_TOP/resource create a file xdodebug.cfg.
      This file has only two lines:
      LogLevel=STATEMENT
      LogDir=<absolute path to $XDO_TOP/temp on the current node>
   d. The applmgr user (owner of the $APPL_TOP file system) needs rw permissions on both directories created under $XDO_TOP.
   e. Test your program.

Debug files are generated in $XDO_TOP/temp. They include: .xml data file, .xsl template translation, .fo formatted output, .out output, and xdo.log which is a detailed log of the process.
Debug for the XML Report Publisher

- As System Administrator, Navigate to Concurrent > Program > Define.
- Query up XML Report Publisher (XDOREPPB).
- Change the Debug Flag Parameter to Visible (checkbox).
- Run the Request, set the Debug Flag Parameter to Y.
- Request log will now be more detailed
Debug for the XML Report Publisher
Debug for the XML Report Publisher
Debug for the XML Data Template Extract – XDODTEXE

• As System Administrator, Navigate to Concurrent > Program > Define.
• Query up the report using XDODTEXE as its executable..
• Add a Parameter **Debug Flag**.
  – Value set should be **yes_no**
  – Default value should be **Y**.
  – Select checkboxes **Enable** and **Required**.
  – Token needs to be **DebugFlag** (case sensitive value).
  – If you select the check box **Displayed**, users can turn this off at runtime. In production you will usually want the default to be ‘N’.
Debug for the XML Data Template Extract – XDODTEXE
Debug for the XML Bursting Report – XDOBURSTREP

- The program definition comes seeded with a **DebugFlag** parameter.
- If called using `fnd_request.submit_request` then the **DebugFlag** parameter should be set to ‘Y’.
Debug for the XML Bursting Report – XDOBURSTREPD
Set Up for Large Reports

• Many large reports in R12 use XDODTEXE to generate the XML data file extract.
• The output is generated by merging the data and a layout template by the Output Post Processor (JAVA) concurrent manager.

• There are two bottlenecks for these reports: XDODTEXE and the OPP both require tuning to avoid JVM memory issues.
Set Up XDODTEXE For Large Reports

The log of this program will show this error:
Calling XDO Data Engine...
****Warning!!! Due to high volume of data, got out of memory exception...***
****Please retry with scalable option or modify the Data template to run in scalable mode...***

As System Administrator:
1. Navigate to Concurrent > Program > Define.
2. Query up the report.
3. Add a parameter: **Scalable Flag**
   - Value set should be **yes_no**
   - Default value should be **Y**.
   - Select checkboxes **Enable** and **Required**.
   - Do not select the check box **Displayed**, or users could turn this off at runtime.
   - Token needs to be **Scalable Flag** (this is a case sensitive value).
   - Under Execution Options enter **–Xmx1024m**.
   - If the error persists this value may need to be increased (I suggest .5 GB intervals.)
Set Up the OPP for Large Reports

The Output Post Processor log will show this error: "java.lang.OutOfMemoryError: Java heap space"

Configure the Output Post Processor's JVM.
These steps set the JVM to 2GB, depending upon the server's size you might find 3 GB (-mx3072m), 4GB (-mx4096m) or even 5GB (-mx5120m) is a better value.

Login to SQL*Plus as APPS.

SQL> update FND_CP_SERVICES set DEVELOPER_PARAMETERS = 'J:oracle.apps.fnd.cp.gsf.GSMServiceController:-mx2048m'
where SERVICE_ID = (select MANAGER_TYPE from FND_CONCURRENT_QUEUES
where CONCURRENT_QUEUE_NAME = 'FNDCPOPP');

Bounce the concurrent managers.
XML Publisher References

- Note 364547.1 – Troubleshooting Oracle XML Publisher For The Oracle E-Business Suite
- Note 737311.1 – How to Configure the Account Analysis Report in Release 12 for Large Reports
- XML Publisher 5.6.3
  - Note 422508.1 - About Oracle XML Publisher Release 5.6.3
  - Oracle XML Publisher Administration and Developer's Guide Release 12 B31412-01
  - Oracle XML Publisher Report Designer's Guide Release 12 B31410-01
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