Introduction to BI Publisher in R12: Getting Started

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Manager of Product Development
STR Software

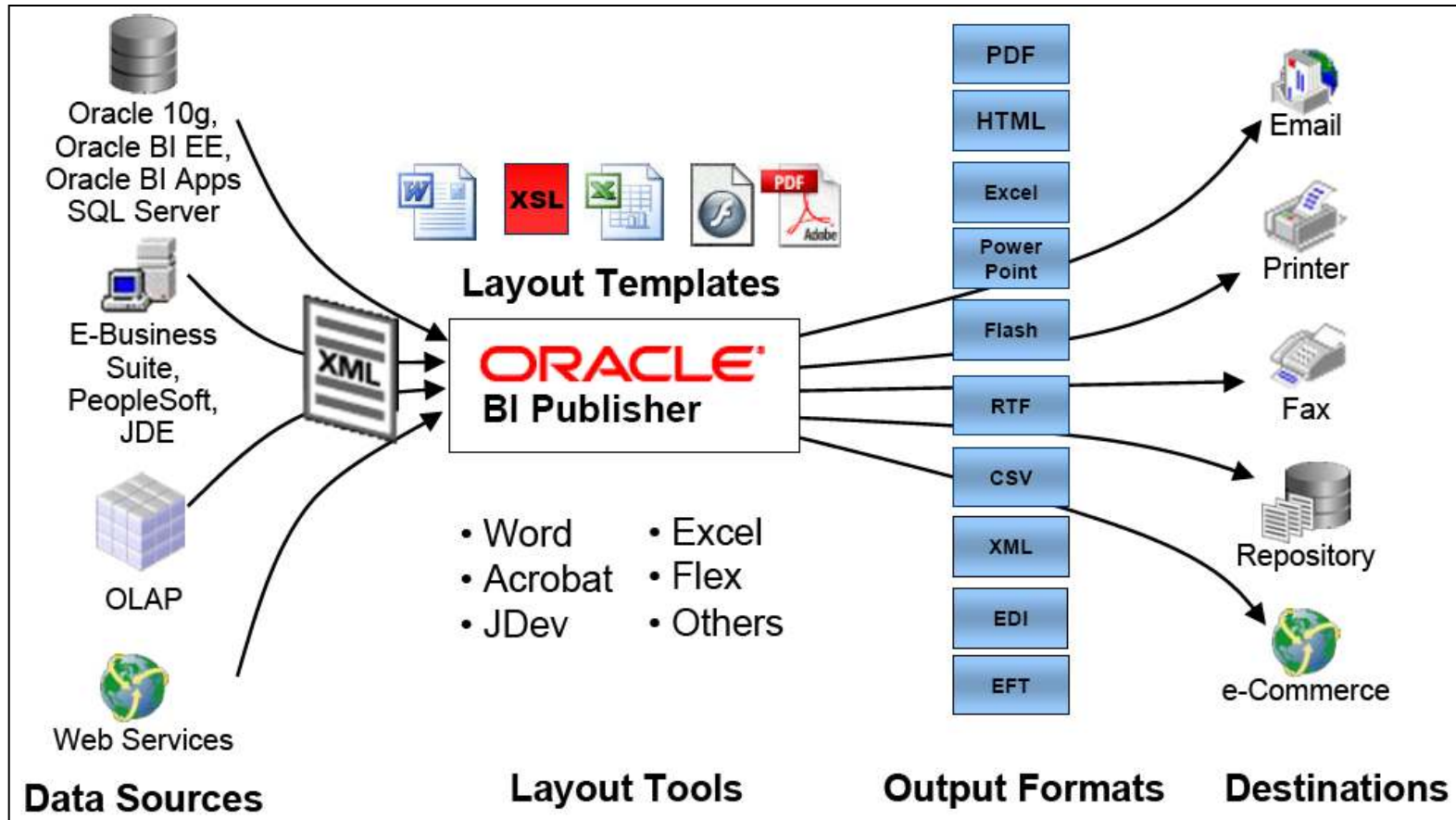# About STR Software

- **STR Software**
    - Located in Richmond, VA
    - Focused on document delivery solutions since 1988
    - Over 1,230 licenses of AventX in 47 states and 19 countries
    - Over 94% customer retention
    - Oracle Gold Partner with staff of Oracle Certified Professionals
    - OAUG 2-Star Elite partner for 2011
    - www.strsoftware.com

- **Brent Lowe**
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    - 804-897-1600 ext. 132 and brent.lowe@strsoftware.com
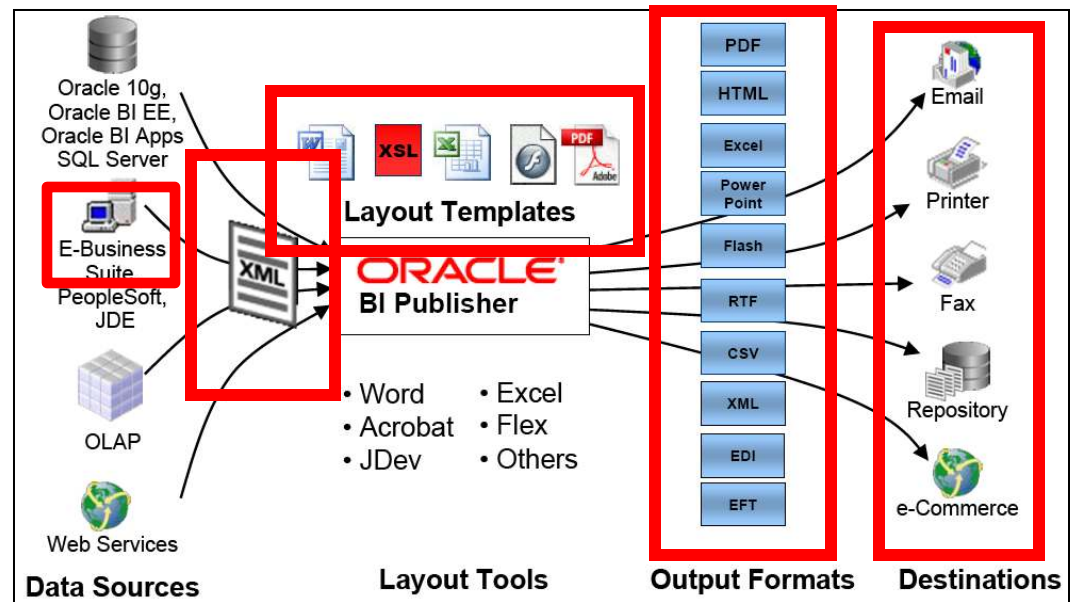   - http://www.thelowedownblog.com

Agenda

- Introduction
- General Concepts
  - BIP in EBS
  - Data Creation
  - Layout Template Creation
  - Output
  - Delivery
- Deviations from the Standard
- Where/How to Get Help
- Wrap-up and Q&A

Introduction – BI Publisher

General Concepts

- BIP in EBS

- Data Model

- Layout Templates

- Report Creation

- Bursting and Delivery

10.1.3.4.1

5.6.3

?????????

BI Publisher

XML Publisher

BIP in EBS R12

BI Publisher == XML Publisher

For EBS: 5.6.3

Running R12? -> Congrats, you already have 5.6.3!

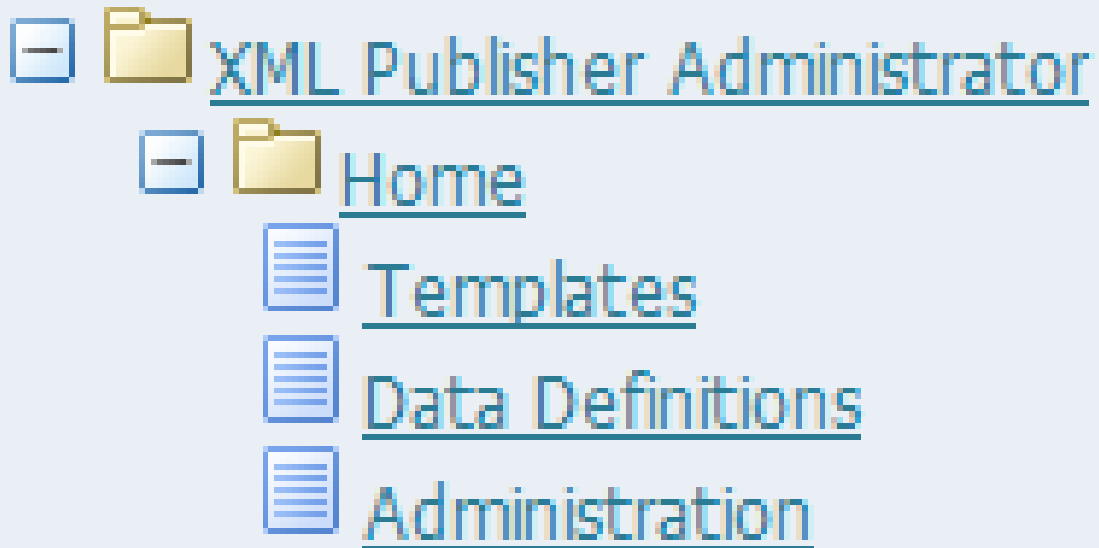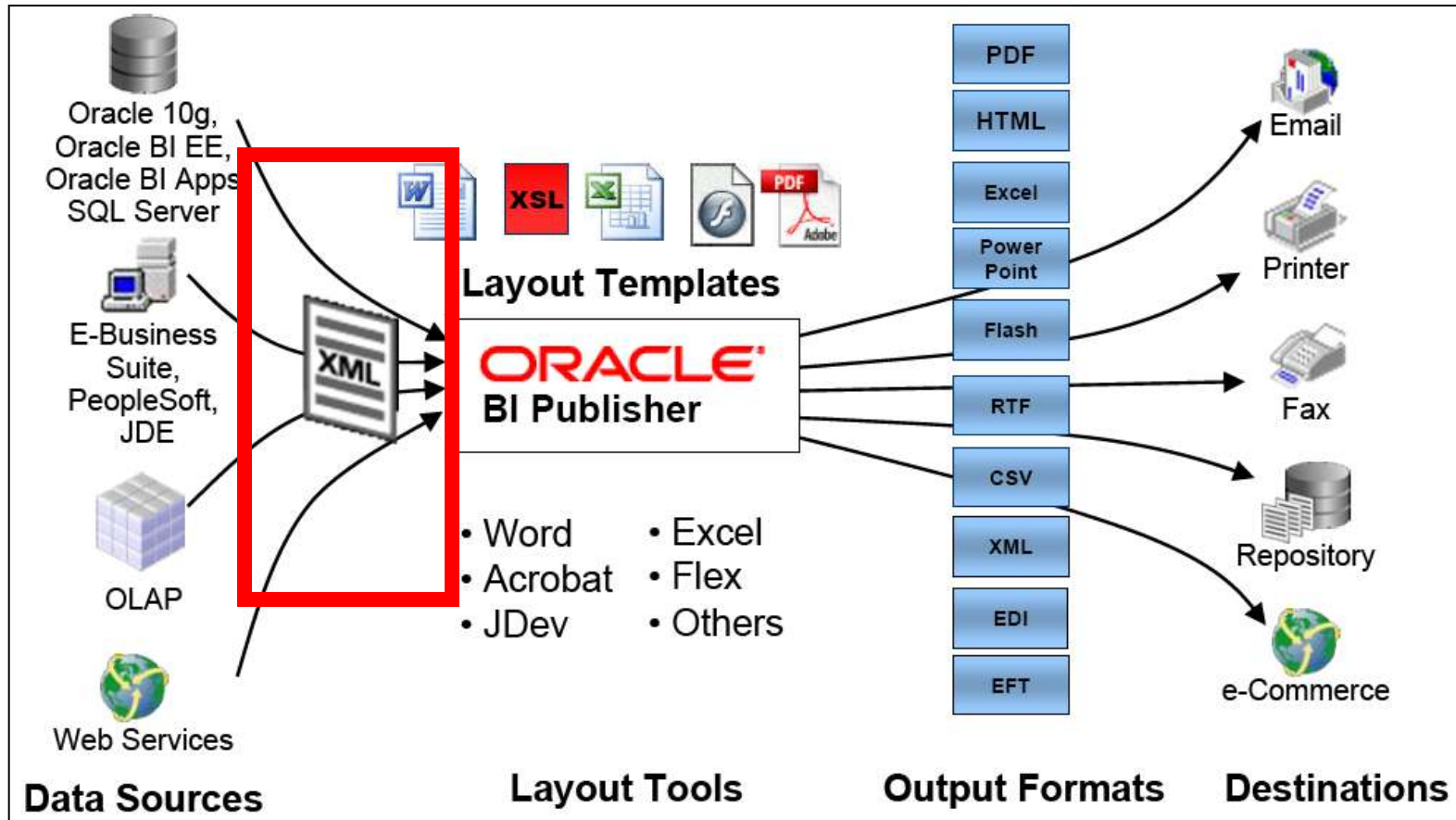Running 11i? -> MOS 422508.1 – About Oracle XMLP Release 5.6.3

Patch 5.6.3!

MOS 1138602.1 – Overview of Available Patches for Oracle XML Publisher (embedded in Oracle E-Business Suite)

Some Individual Patches are available

Patch Sets are rolled into ATG Family Packs.

New Responsibility

Data Model – Creating the XML

The Standard Offering – Data Model

Having Oracle EBS generate **XML data** is the key to reporting.

- Oracle Reports

- Data Templates

Data Model: Oracle Reports

- Utilize your EXISTING Oracle Reports!

- But aren't Oracle Reports going away?
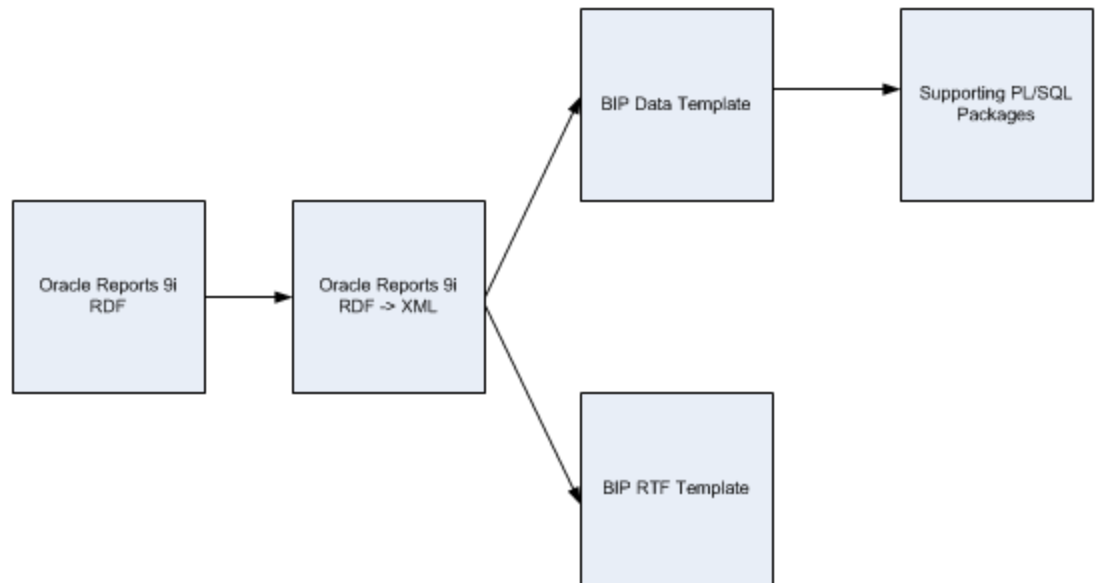
Data Model: Oracle Reports

- Demo – How to setup Oracle Reports to output XML

Data Model: Data Template

- Native BI Publisher Concept – Exists as text based file that looks like XML

- Serves two functions.
  - Retrieve Data using SQL queries.
  - Define how the data is to be formatted as XML.

- Why Use Data Template over Oracle Report?
  - Speed
  - Flexibility
  - Removes duplicity of layout
  - 2000+ Data Templates included in R12.1

software

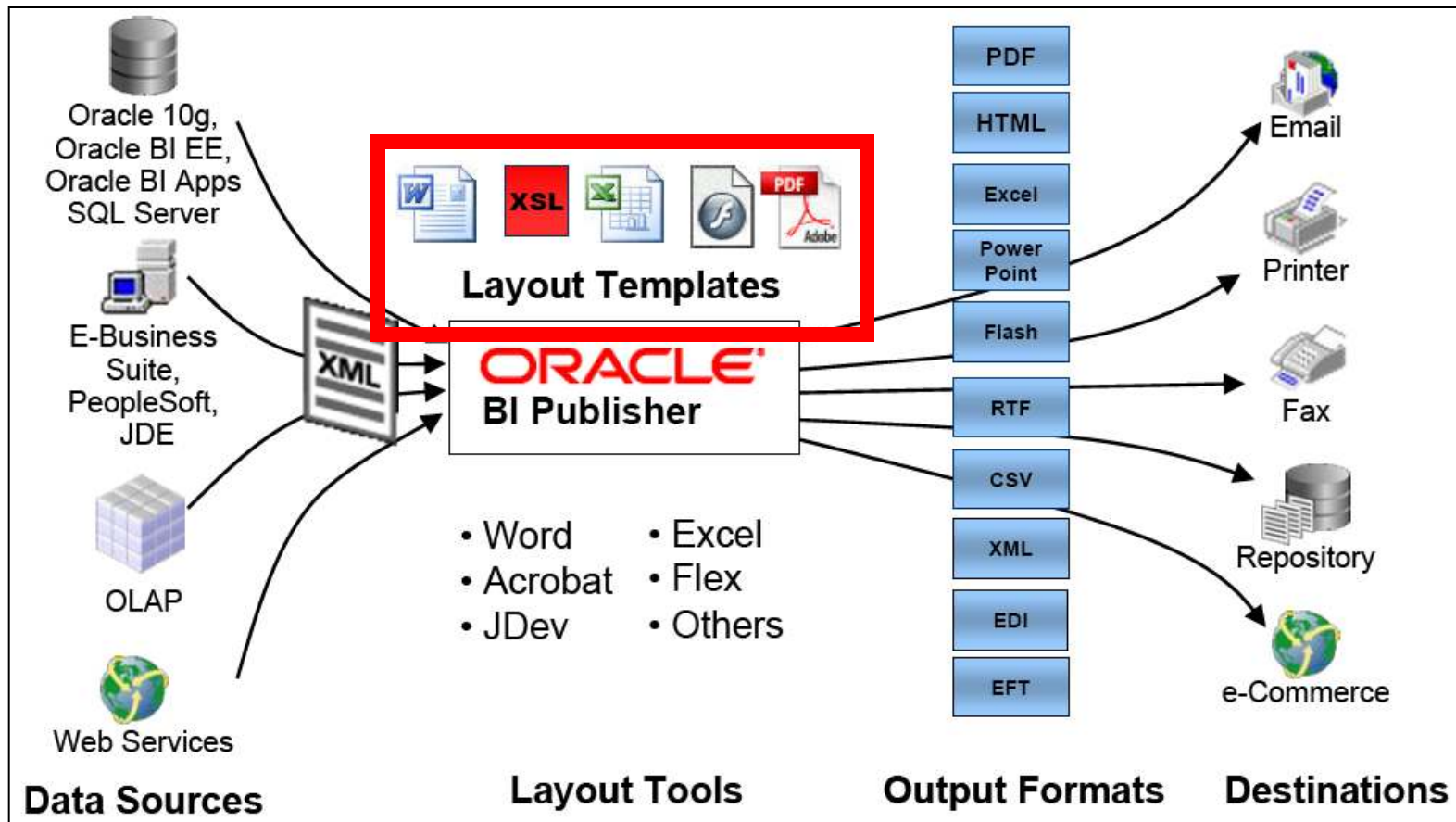# Data Model: Data Template

- Example

- Conversion API

Data Model: Data Template –> Concurrent Program

- Concurrent Manager must have Program Definition to generate output!

- Set 'Executable' to XDODTEXE

- Demo

Data Model -> Data Definition

- Regardless of Oracle Report or Data Template, must register a Data Definition.

- XML Publisher Administrator Responsibility

- Demonstration

Layout Templates

Layout Templates

- Define the look and feel of the finished output.

- Layout Templates can be created in a number of formats including eText, **PDF, RTF**, XSL-FO, XSL-HTML, XSL-XML and XSL-TEXT.

- BI Publisher Desktop

  Latest version is 11.1.1.3.0

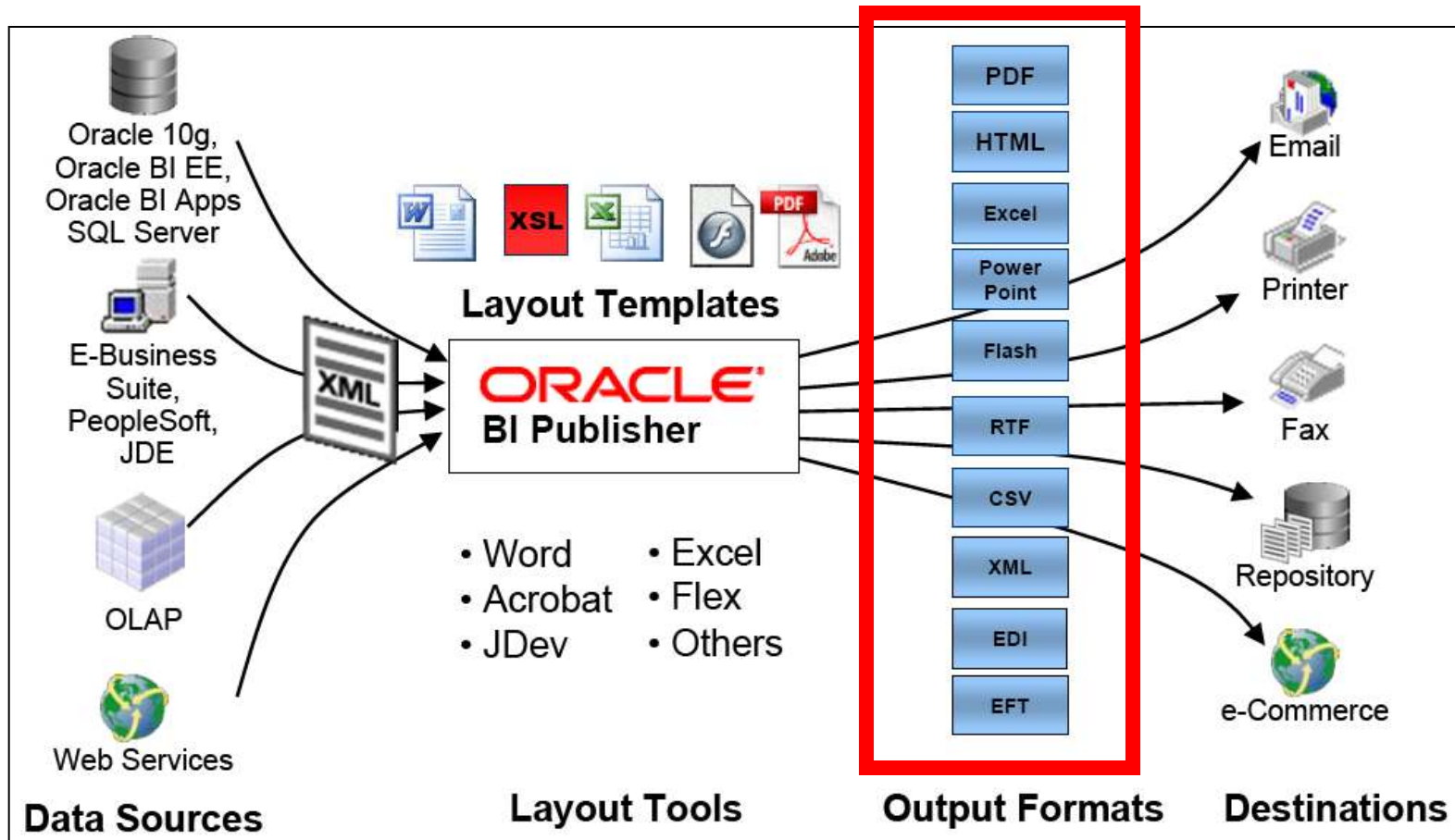 Use the version built with the same libraries as 5.6.3 -> 10.1.3.2

  Patch 5887917

- Oracle's "Anatomy of a Template" Presentation (MOS 740964.1)

- 2700+ Templates included in R12.1
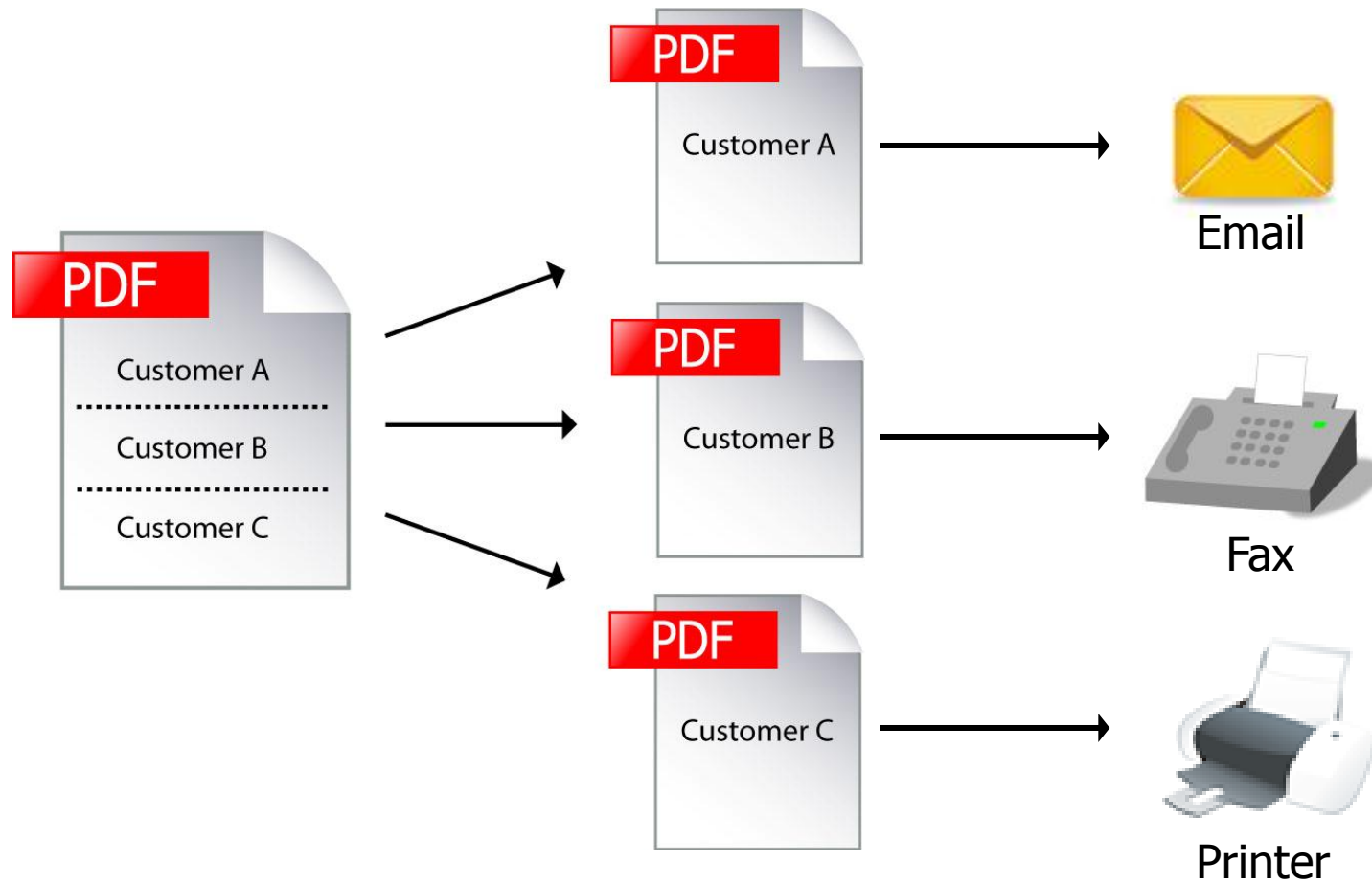
Layout Template -> Registration

- XML Publisher Administrator Responsibility -> Templates.

- Upload Template, Associate with Data Definition, Assign Locale, Preview Finished Report.

- Demonstration

Report Creation

Report Creation

- EBS Supported Output Formats
  - Excel
  - FO
  - HTML
  - PDF
  - RTF

- Simple as running a Concurrent Request

- Demonstration

Report Bursting and Delivery

Bursting Control Files

- A bursting control file is an XML based file that defines the answers to 4 main questions.

  1. How do I burst the document?

  2. How do I deliver the burst file?

  3. Where do I deliver the burst file?

  4. What should the delivered file look like?

Bursting Control File

```xml
<?xml version="1.0" encoding="UTF-8" ?>
- <xapi:requestset xmlns:xapi="http://xmlns.oracle.com/oxp/xapi">
  - <xapi:request select="/RAXINV/LIST_G_ORDER_BY/G_ORDER_BY/LIST_G_INVOICE/G_INVOICE">
    - <xapi:delivery>
      - <xapi:email server="mail.strsoftware.com" port="25" from="qa@strsoftware.com" reply-to="qa@strsoftware.com">
          <xapi:message id="email1" to="brent.lowe@strsoftware.com" cc="" content-type="text/html" attachment="true" subject="Invoice #${TRX_NUMBER}">Dear
            Sir/Madam, Please find the attached invoice #${TRX_NUMBER} for ${BILL_CUST_NAME} dated ${TRX_DATE}. <br><br> Regards,<br> STR Software
            Receivables</xapi:message>
        </xapi:email>
      - <xapi:fax server="ipp://grimlock:631/printers/axtkocupsprinter">
          <xapi:number id="fax1">${BILL_ADDRESS4}</xapi:number>
        </xapi:fax>
      </xapi:delivery>
    - <xapi:document key="${BILL_CUST_NAME}" output="Invoice_#${TRX_NUMBER}.pdf" output-type="pdf" delivery="email1">
        <xapi:template type="rtf" location="xdo://AR.COPY_RAXINV_SELB.en.US/?getSource=true" filter=".//G_INVOICE[BILL_ADDRESS3='EMAIL']" />
      </xapi:document>
    - <xapi:document key="${BILL_CUST_NAME}" output="Fax_Invoice_#${TRX_NUMBER.pdf" output-type="pdf" delivery="fax1">
        <xapi:template type="rtf" location="xdo://AR.COPY_RAXINV_SELB.en.US/?getSource=true" filter=".//G_INVOICE[BILL_ADDRESS3='FAX']" />
      </xapi:document>
    </xapi:request>
  </xapi:requestset>
```
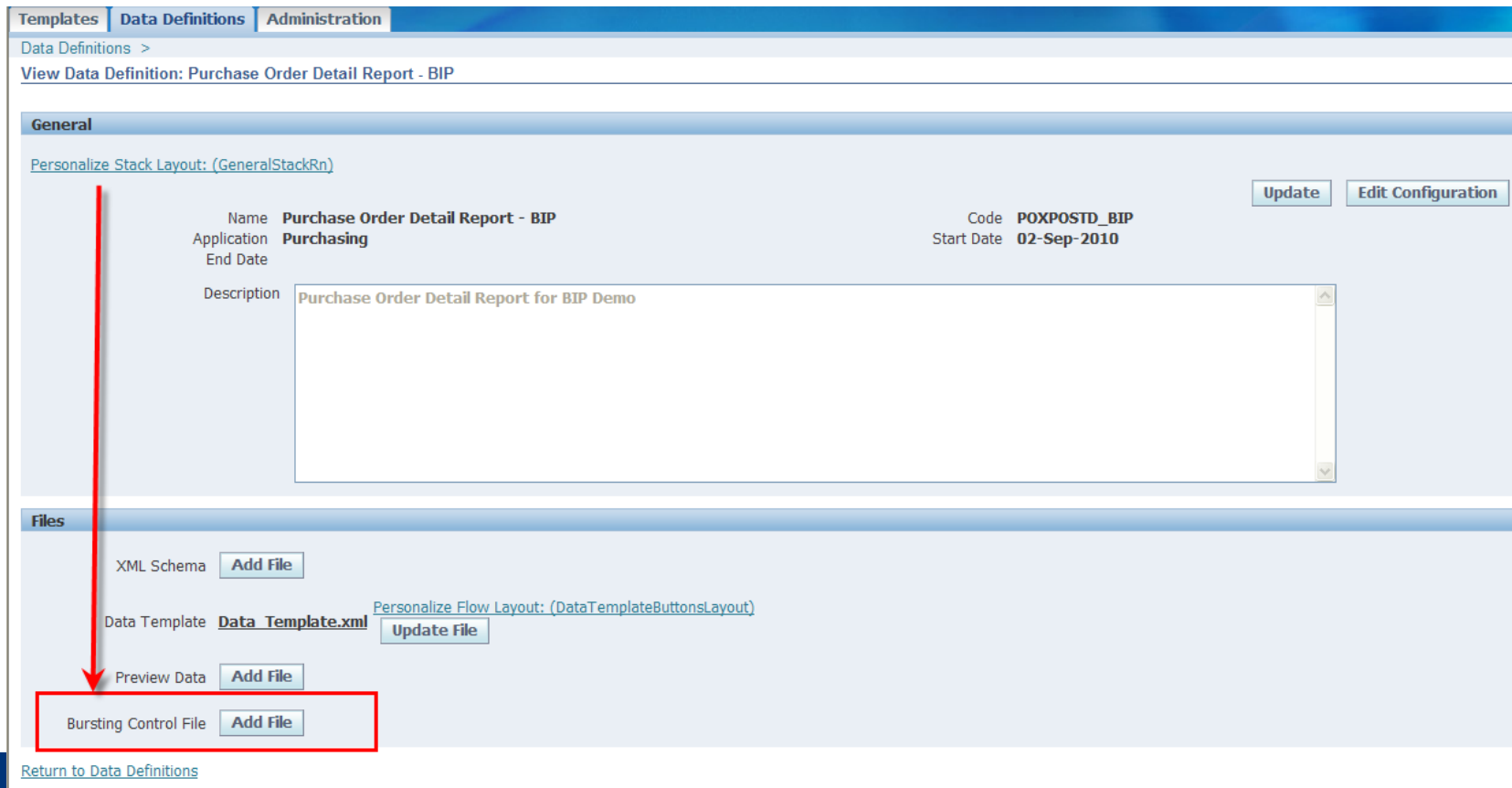
How to burst the document?
How to deliver the burst file?
Where to deliver the burst file?
What should the delivered file look like?

Bursting Control File - Registration

- Upload Bursting Control File to Data Definition

Invoke Bursting

- 2 Step Process

Step 1: Run Concurrent Request to Generate Data.
Step 2: Run 'XML Publisher Report Bursting Program'

Demonstration

Bursting Status Report

- **XML Publisher Report Bursting Program creates it's own Report -> Bursting Status Report.**
  - How document was burst
  - How documents were delivered
  - Status of delivery

Bursting Status Report

Bursting Status Report

Date: 2010-08-16 03:08:14
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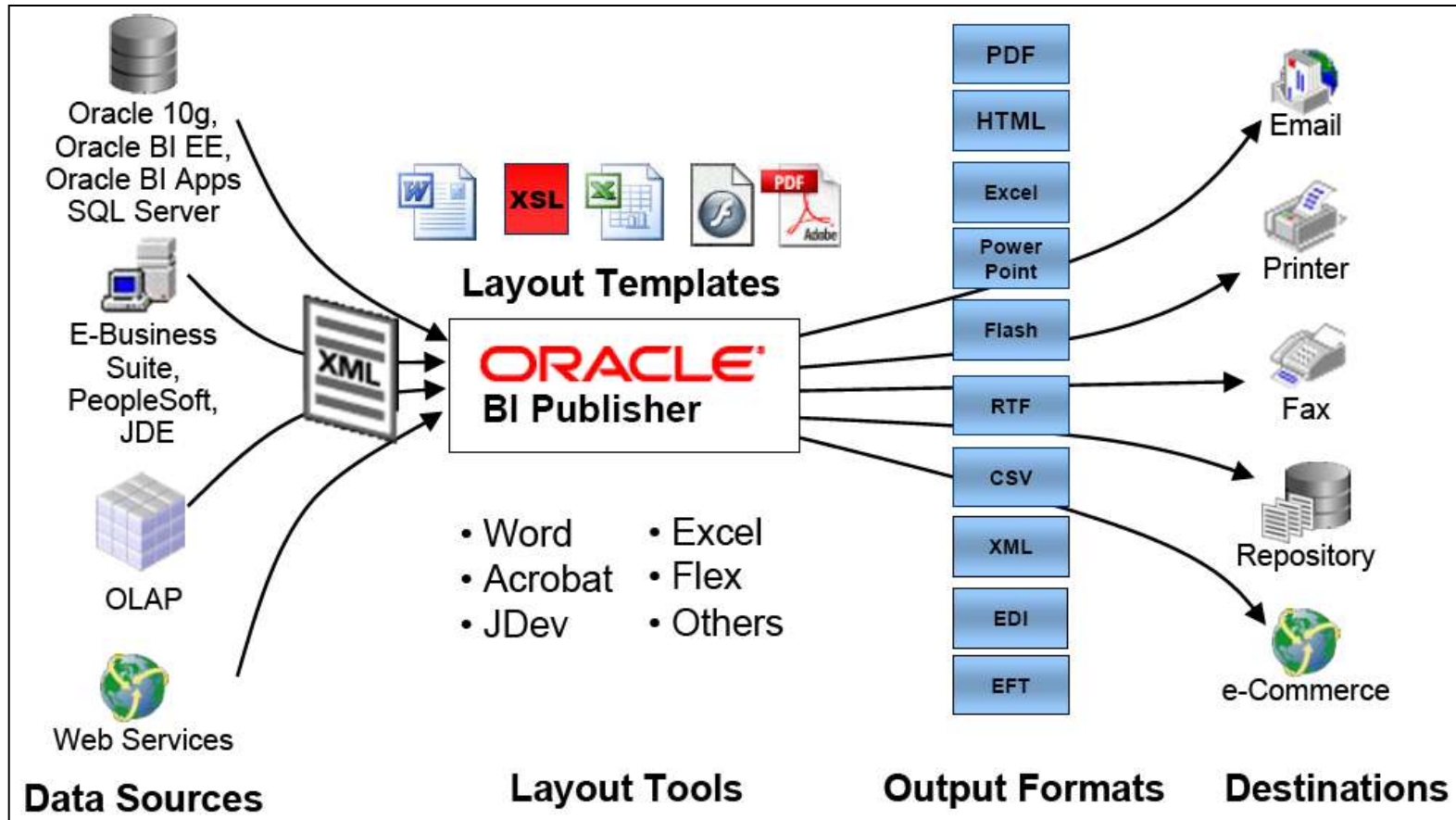|	
Request ID	4446348
Parent Request ID	4446347
Report Name	Invoice Print Selected Invoices - Bursting Demo
Output File	/disk1/oraapps/inst/apps/VIS1_silverbolt/logs/appl/conc/out/o4446348.zip

Key	Output Type	Delivery	Output	Status
Business World	pdf	Fax	/tmp/081610_035610028/Invoice_fax#10007144.pdf	Success
Hilman and Associates	pdf	email	/tmp/081610_035610028/Invoice_#10007145.pdf	Success

Delivery Engine

- Email
  - Allows for dynamic Recipient, CC, BCC, Subject, Message Body
  - Single Attachment – The report that was generated.
- Print
  - Utilizes IPP to print to CUPS based printers.
  - Depending on printer, specify tray, duplex, copies, etc…
- Fax
  - Utilizes IPP to print to CUPS based printers that communicate with Fax Modems.
  - Allows for dynamic fax number.
  - Status determined based on print job, not final outcome of fax.
- File
  - Output data to named file on file system.
- FTP
  - Send data to remote machine.

Standard Offering w/in Oracle EBS

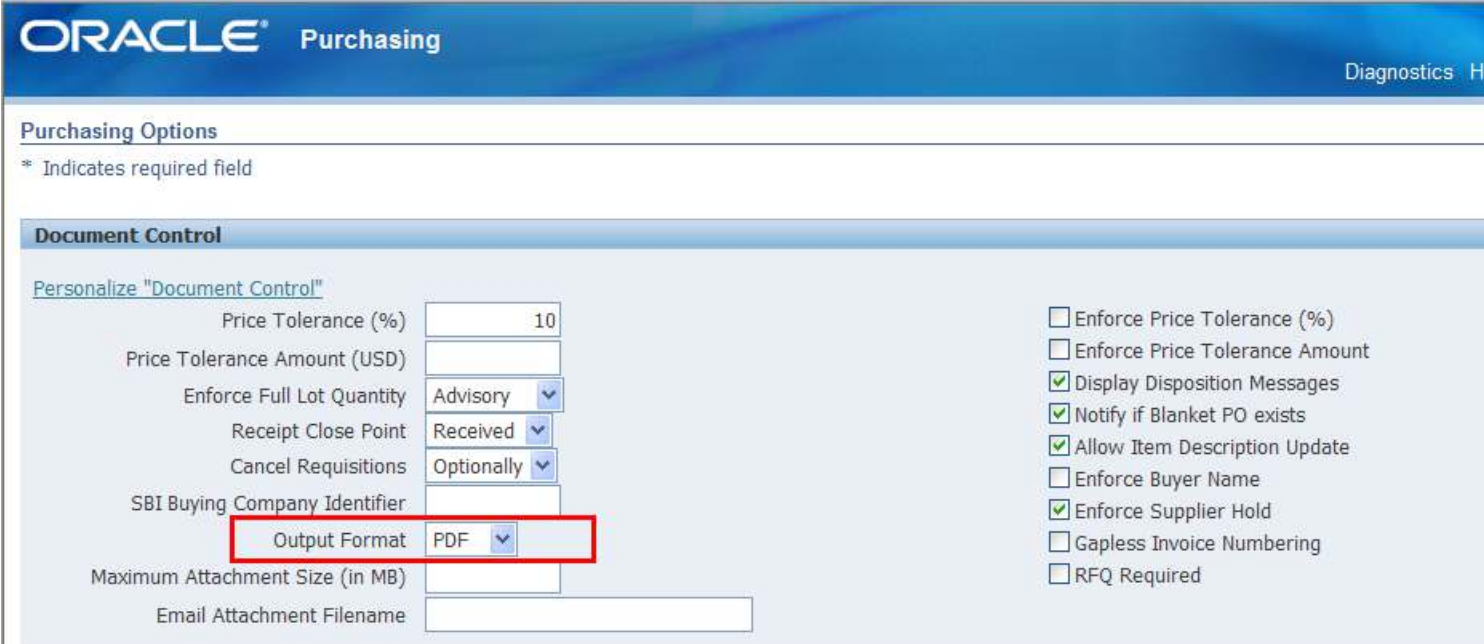# Deviations from the Standard

- EBS Application developers have used BIP APIs outside of ATG's standard
  - **Advanced Procurement**
  - Advanced Collections
  - Payables

Advanced Procurement

- PO Approval Process – Release Purchase Orders based on workflow process.

- Variations
  - Setup
  - XML Generation & Layout Templates
  - Report Generation & Delivery
  - Other Uses

Advanced Procurement

- Setup
  - Purchasing Super User Responsibility -> Setup -> Organizations -> Purchasing Options

Advanced Procurement

- **Setup**
  - Associate Templates with Document Types
  - Purchasing Super User -> Setup -> Purchasing -> Document Types

Advanced Procurement

Document Types

Personalize "Document Types Table"

Create

Type	Name	Document Type Layout	Contract Terms Layout	Update	Delete
Auction Buyer Auction	Sourcing Buyer Auction	Sourcing Style Sheet	Oracle Contract Terms Template	✎	🗑
Change Order Request Requisition	Change Order Request: Requisition			✎	🗑
Purchase Agreement Blanket	Blanket Purchase Agreement	Blanket Agreement Stylesheet with Logo	Oracle Contract Terms Template	✎	🗑
Purchase Agreement Contract	Contract Purchase Agreement	Contract Agreement Stylesheet with Logo	Oracle Contract Terms Template	✎	🗑
Purchase Order Planned	Planned Purchase Order			✎	🗑
Purchase Order Standard	Standard Purchase Order	Standard Purchase Order Fax	Oracle Contract Terms Template	✎	🗑
Quotation Bid	Bid Quotation			✎	🗑
Quotation Catalog	Catalog Quotation			✎	🗑
Quotation Standard	Standard Quotation			✎	🗑
Release Blanket	Blanket Release	Blanket Release Stylesheet with Logo		✎	🗑
Release Scheduled	Scheduled Release			✎	🗑
Requisition Internal	Internal Requisition			✎	🗑
Requisition Purchase	Purchase Requisition			✎	🗑
Request for Quotation Bid	Bid RFQ			✎	🗑
Request for Quotation Catalog	Catalog RFQ			✎	🗑
Request for Quotation Standard	Standard RFQ			✎	🗑
Sourcing RFI Sourcing RFI	Sourcing RFI	Sourcing Style Sheet	Oracle Contract Terms Template	✎	🗑
Sourcing RFQ Sourcing RFQ	Sourcing RFQ	Sourcing Style Sheet	Oracle Contract Terms Template	✎	🗑

Create

Advanced Procurement

- XML Generation
  - XML is generated based on the seeded views:
    - PO_HEADERS_XML
    - PO_LINES_XML
    - PO_DISTRIBUTION_XML

Advanced Procurement

- **Report Generation and Delivery**
  - Once PO gets final approval (via workflow rules) the PO output gets created programmatically and "delivered" based on rules associated with PO Approval/Tools->Communicate.

    Email – Workflow Mailer

    Print – Concurrent Output (PO Output for Delivery)

    Fax – Concurrent Output (PO Output for Delivery)

Help!

- Where to find help when you need it!

Help! - Documentation

- Documentation!

http://www.oracle.com/technetwork/middleware/bi-publisher/overview/index.html

Help! - Blogs

- Tim Dexter/BIP Official Blog: http://blogs.oracle.com/xmlpublisher

- A BI Publisher developer's diary:
  http://blogs.oracle.com/BIDeveloper/

- Oracle BI Publisher Consulting: http://bipconsulting.blogspot.com/

- BI Publisher Blog - Ike Wiggins: http://bipublisher.blogspot.com/

- In Depth Apps - eBusiness Suite - Gareth Roberts:
  http://garethroberts.blogspot.com/

- The Lowe Down – http://www.thelowedownblog.com

Help! Oracle Forums

http://forums.oracle.com/forums/forum.jspa?forumID=245

How to Get Help on Forums:

a. Search First, Ask Second

b. Be someone (not user8840234)

c. Be Specific

Help! – Oracle Community

- Oracle E-Business Suite -> BI Publisher

Forums

Community Contributed Resource Documents
   examples: Troubleshooting Oracle XML Publisher
                    How To Install a Font Using XMLP Admin

Help! – My Oracle Support

Open an official SR

Conclusion

- BI Publisher is a powerful tool

- BIP is tightly integrated within R12

- Not all applications are utilizing what is considered to be the standard.

- Hopefully able to give a good intro to BIP in R12

Contact Information:

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