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# Creating Custom PDF reports with APEX 4.2.2

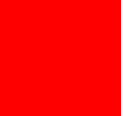
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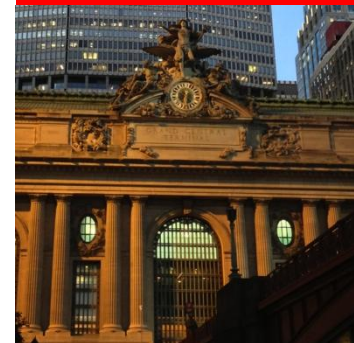




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# Agenda

- Report Printing Options
- Configuring PDF Printing
- Creating and using a fully customized report layout
- Q&A



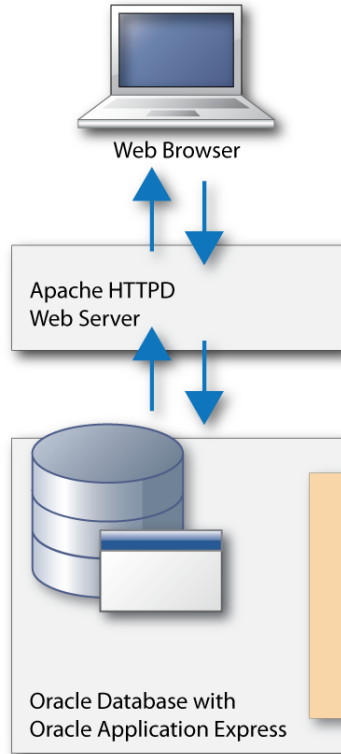
# Report Printing Options

## Overview

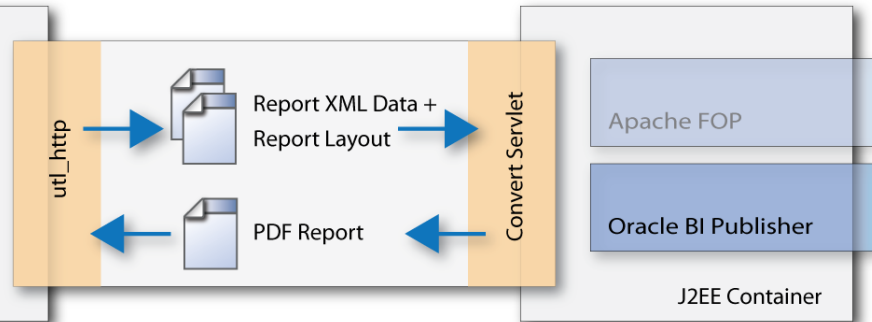
- Report Queries
  - Report generation based on one or more query result sets
  - Drag & Drop report design using Word Plug-In and XSL Tools
  - Inclusion of data driven charts and images
- Interactive Reports
  - Export of report data to PDF, Word, Excel, HTML and XML
- Classic Reports
  - Easy report printing using customizable generic report layouts
  - Full support for custom RTF and XSL-FO layouts

# Report Printing Options

## Oracle BI Publisher

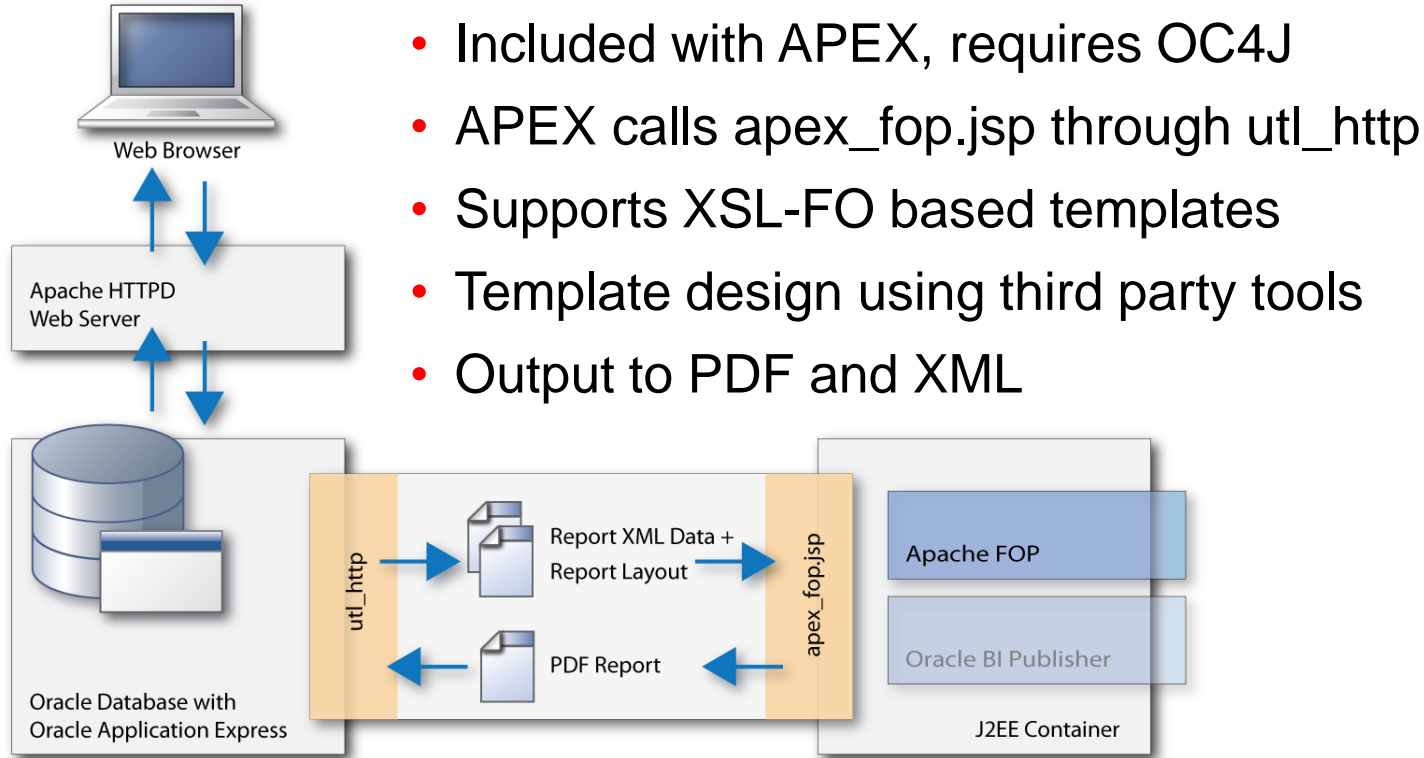


- BI Publisher 10.1.3.2.1 or above (license required)
- APEX calls “convert” Servlet through utl\_http
- Supports XSL-FO and RTF based templates
- Template design using MS Word Plug-In
- Output to PDF, Word, Excel, HTML and XML



# Report Printing Options

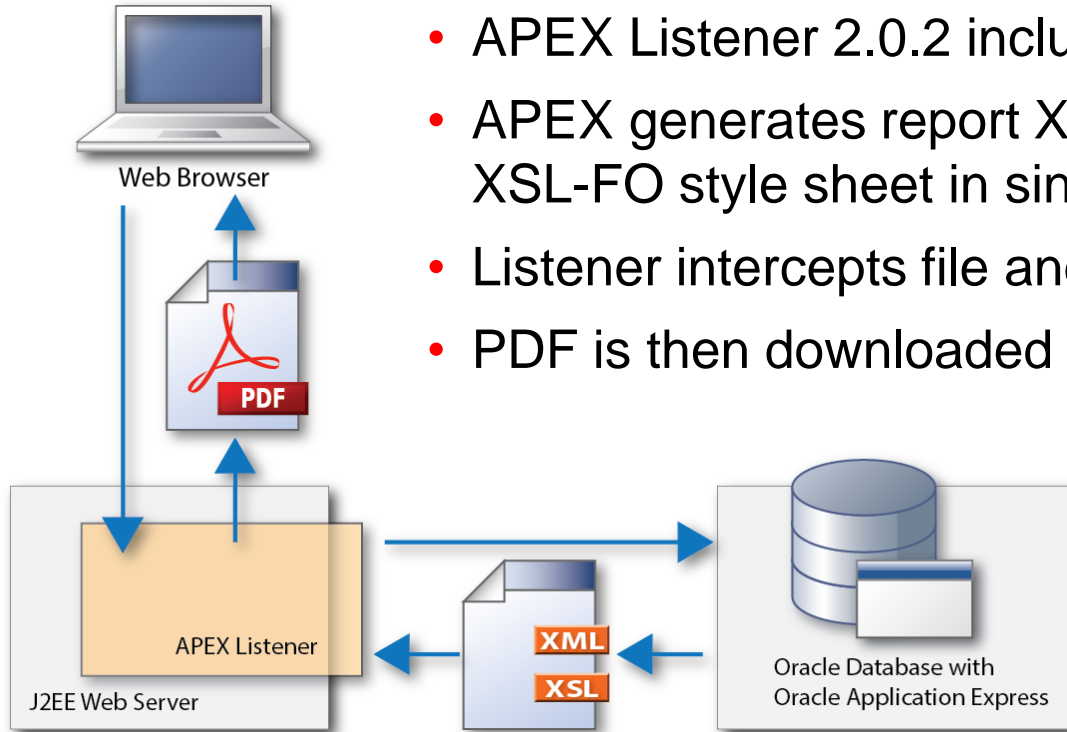
## Apache FOP



- Included with APEX, requires OC4J
- APEX calls apex\_fop.jsp through utl\_http
- Supports XSL-FO based templates
- Template design using third party tools
- Output to PDF and XML

# Report Printing Options

## APEX Listener

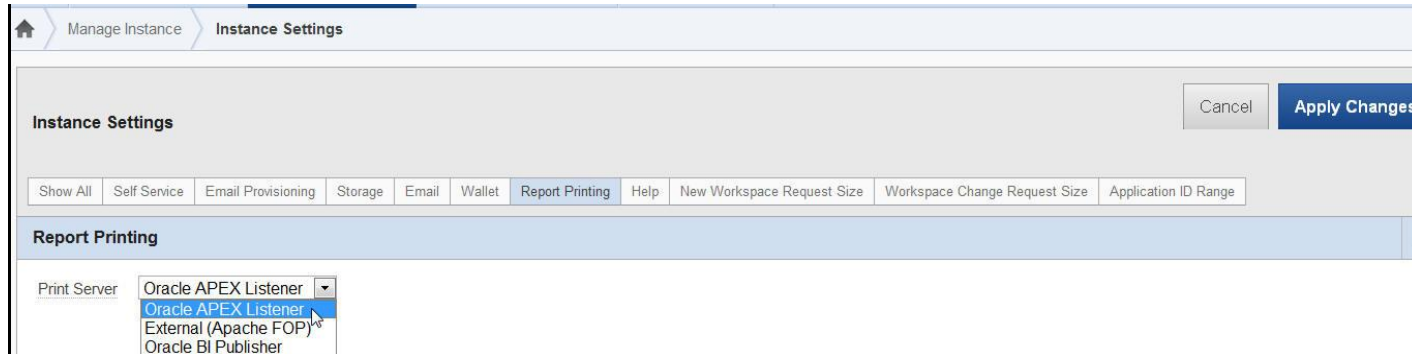


- APEX Listener 2.0.2 includes FOP support
- APEX generates report XML data with XSL-FO style sheet in single document
- Listener intercepts file and renders PDF document
- PDF is then downloaded straight to browser



# Configuring PDF Printing

- PDF printing configured via instance administration
- BI Publisher and FOP option require configuration of external URL, port and script
- APEX Listener option requires no further settings



# Configuring PDF Printing

- PL/SQL print APIs:
  - apex\_util.get\_print\_document
  - apex\_util.download\_print\_document
- Requires networking services to be enabled in 11g
- Edit APEX Listener /apex/default.xml file, add:  

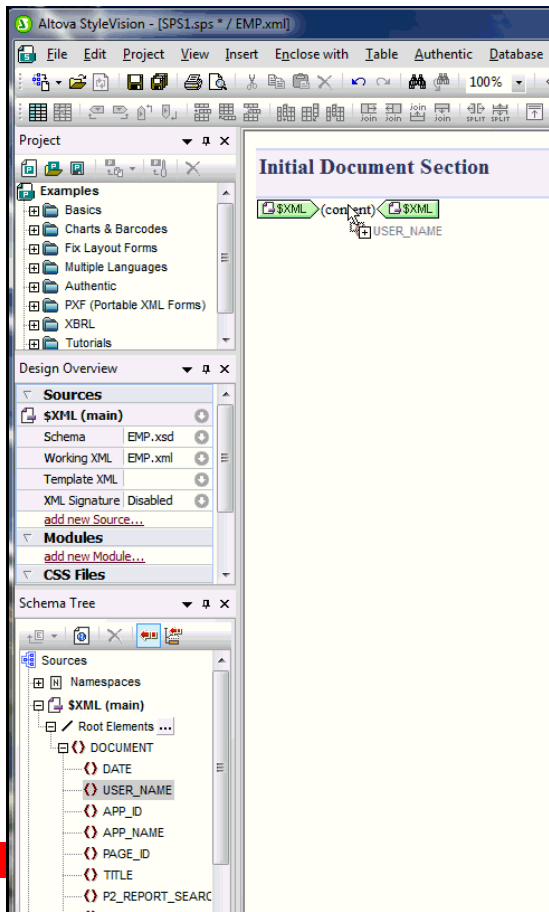
```
<entry key="misc.enableOldFOP">true</entry>
```

# Creating a Fully Custom Report Layout

- Custom XSL-FO report layouts supported with Classic Reports and Report Queries
- Export report in XML format or as XML schema
- Load XML into XSL Layout tool
- XML structure is used for drag & drop design

# Creating a Fully Custom Report Layout

## Creating a report layout with Altova Stylevision

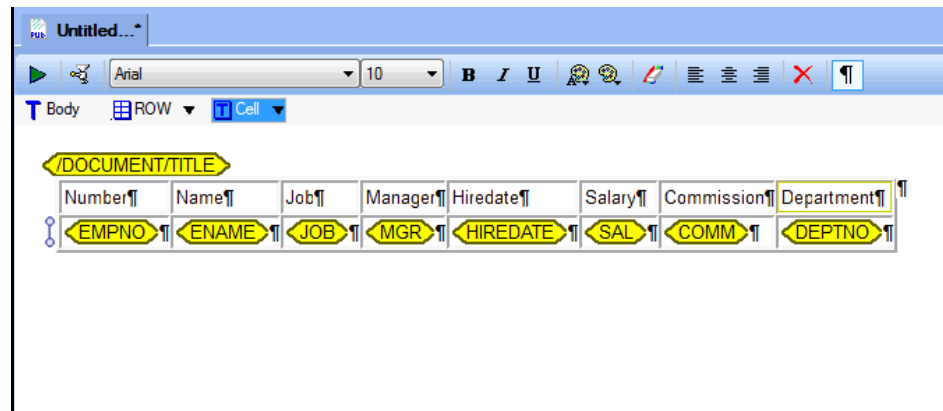


- Create new file from XML file
- Open exported XML report data
- Tool creates corresponding XML schema
- Create free-flow document
- Need to generate XSLT 1.0 compliant file

# Creating a Fully Custom Report Layout

## Creating a report layout with Altova Stylevision

- Use elements from XML structure for drag & drop design
- XML structure provides access to:
  - Application and Page Information
  - Session State
  - Report Data
- Save completed layout as XSL-FO file



# Creating a Fully Custom Report Layout

## Creating a report layout with Altova Stylevision

- Completed XSL-FO layout file can be uploaded back into APEX as a Shared Component -> Report Layout
- Report Layouts can be used for Report Queries and Classic Reports
- Interactive Reports currently do not support custom report layouts but allow for PDF export using generic layout

# Demo Custom Report Layout

# Creating Custom Report Layouts

## Summary

- New PDF printing option available in APEX 4.2.2 using APEX Listener 2.0.2
- Build custom report layouts using third-party tools
- Key benefits:
  - No separate external printing engine is required
  - Using a supported Oracle product: APEX Listener
  - Single step configuration as a print server for APEX





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