

Creating an E-Text Template based BIP Report in Oracle ERP Cloud Application

By: Ashish Harbhajanka

Introduction

In some of the previous articles we have seen how to create a BIP Report in Oracle Cloud (applicable for any OBIEE environment actually) using various template types be it XPT or RTF. In this article, we will try to create a BIP Report using e-Text Template.

An e-text template is an RTF-based template that is used to generate text output for Electronic Funds Transfer (EFT) and Electronic Data Interchange (EDI). At runtime, BI Publisher applies this template to an input XML data file to create an output text file that can be transmitted to a bank or other customer. Because the output is intended for electronic communication, the e-text templates must follow very specific format instructions for exact placement of data.

An EFT is an electronic transmission of financial data and payments to banks in a specific fixed-position format flat file (text). EDI is similar to EFT except it is not only limited to the transmission of payment information to banks. It is often used as a method of exchanging business documents, such as purchase orders and invoices, between companies. EDI data is delimiter-based, and also transmitted as a flat file (text).

Files in these formats are transmitted as flat files, rather than printed on paper. The length of a record is often several hundred characters and therefore difficult to layout on standard size paper.

To accommodate the record length, the EFT and EDI templates are designed using tables. Each record is represented by a table. Each row in a table corresponds to a field in a record. The columns of the table specify the position, length, and value of the field.

These formats can also require special handling of the data from the input XML file. This special handling can be on a global level (for example, character replacement and sequencing) or on a record level (for example, sorting). Commands to perform these functions are declared in command rows. Global level commands are declared in setup tables.

At runtime, BI Publisher constructs the output file according to the setup commands and layout specifications in the tables.

Structure of e-Text Template

There are two types of e-Text templates: fixed-position based (EFT templates) and delimiter-based (EDI templates). The templates are composed of a series of tables. The tables define layout and setup commands and data field definitions. The required data description columns for the two types of templates vary, but the commands and functions available are the same. A table can contain just commands, or it can contain commands and data fields.

A very simple EDI would look as below:

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Format Setup:

Hint: Define formatting options...

<TEMPLATE TYPE>	DELIMITER BASED
<OUTPUT CHARACTER SET>	iso-8859-1
<NEW RECORD CHARACTER>	;

Setup Commands

Format Data Records:

Hint: This is the body of the format. Define your format records here.
Create one table for each record or group of records that are at the same level.
For example, RequestHeader is one level, and Payment is another level.

Data Field Definitions

<LEVEL>	ROWSET/ROW			
<NEW RECORD>	MainRecord			
<MAXIMUM LENGTH>	<FORMAT>	<DATA>	<TAG>	<COMMENTS>
99	Alpha	LAST_NAME		
2	Alpha	' '		
99	Number	SALARY		
2	Alpha	' '		
99	Alpha	JOB_TITLE		
2	Alpha	' '		
99	Alpha	DEPARTMENT_NAME		
<END LEVEL>	ROWSET/ROW			

Here we could see that we have three command instructions namely:

1. Template is of Delimited Based
2. Output Character Set is iso-8859-1
3. Every New Record will be preceded by ; or in other words each line would end with ;

We could also see that we have defined four data fields (which would be coming from the source data file) and are separated by comma. We may choose to use any other delimiter too.

Worked Example

In order to get started we would need to have a data source. For this, we would need a sample XML file created.

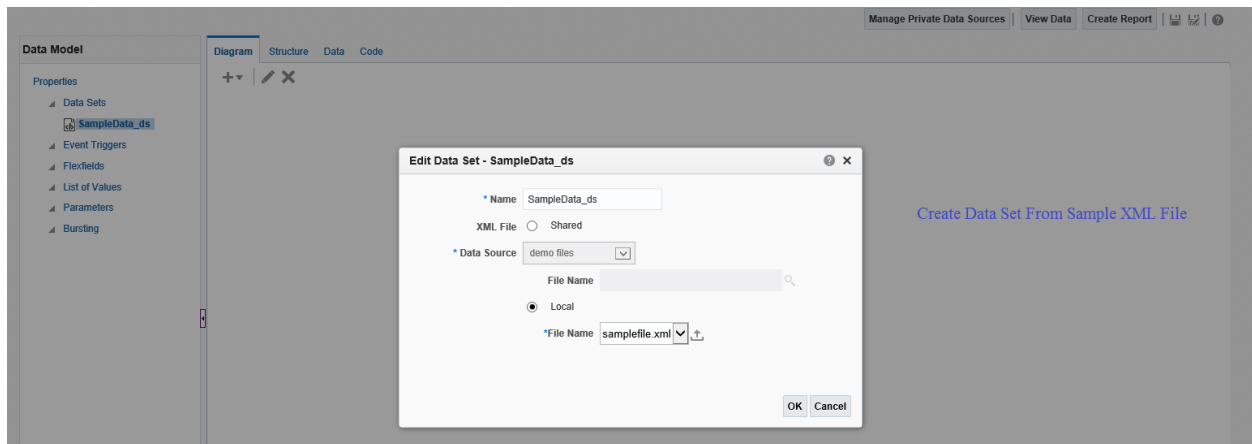
```
<?xml version="1.0" encoding="UTF-8"?>
<ROWSET>
  <ROW>
    <NAME>Andrew Thomas</NAME>
    <FIRST_NAME>Andrew</FIRST_NAME>
    <LAST_NAME>Thomas</LAST_NAME>
    <SALARY>2600</SALARY>
    <ANNUAL_SALARY>31200</ANNUAL_SALARY>
    <FED_WITHHELD>8736</FED_WITHHELD>
    <JOB_TITLE>Business Analyst</JOB_TITLE>
    <DEPARTMENT_NAME>Human Resources</DEPARTMENT_NAME>
    <MANAGER>Richard Mills</MANAGER>
  </ROW>
  <ROW>
    <NAME>Brian Hay</NAME>
    <FIRST_NAME>Brian</FIRST_NAME>
    <LAST_NAME>Hay</LAST_NAME>
    <SALARY>2600</SALARY>
    <ANNUAL_SALARY>31200</ANNUAL_SALARY>
    <FED_WITHHELD>8736</FED_WITHHELD>
    <JOB_TITLE>Accountant</JOB_TITLE>
    <DEPARTMENT_NAME>Finance</DEPARTMENT_NAME>
    <MANAGER>William Jones</MANAGER>
  </ROW>
  <ROW>
    <NAME>Demure Gale</NAME>
    <FIRST_NAME>Demure</FIRST_NAME>
    <LAST_NAME>Gale</LAST_NAME>
    <SALARY>4400</SALARY>
    <ANNUAL_SALARY>52800</ANNUAL_SALARY>
    <FED_WITHHELD>14784</FED_WITHHELD>
    <JOB_TITLE>Administration Assistant</JOB_TITLE>
    <DEPARTMENT_NAME>Administration</DEPARTMENT_NAME>
    <MANAGER>Thomas Berkley</MANAGER>
  </ROW>
</ROWSET>
```

Sample XML Data File

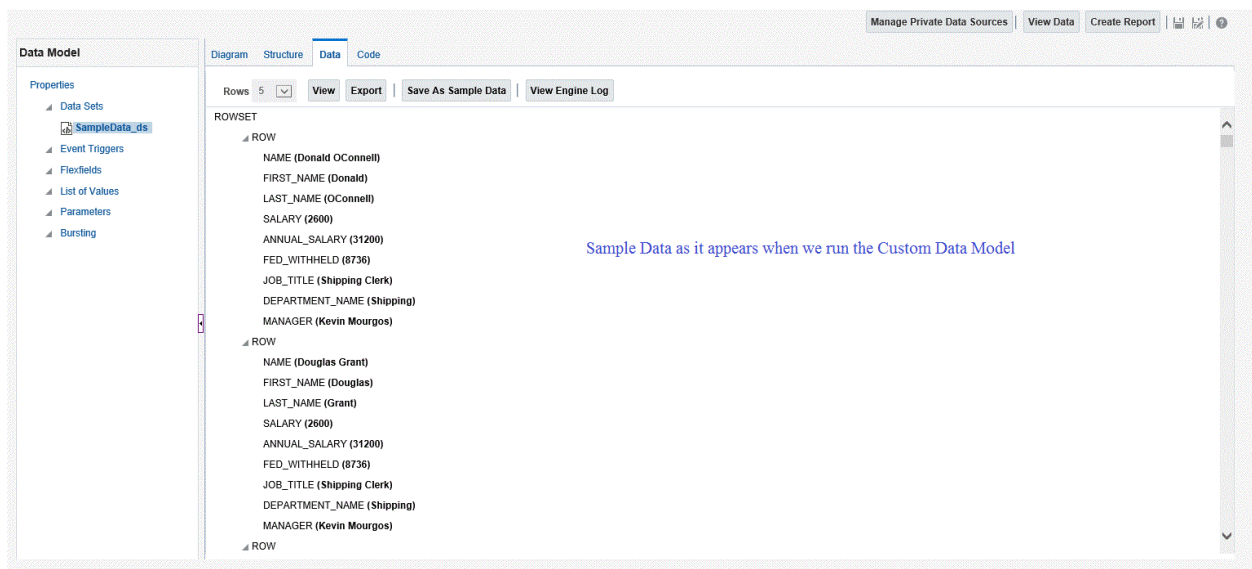
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Now we will try to create an e-Text Data Model with the same within the application.



Once we have the Data Set Created we can move to the 'Data' tab and check the results



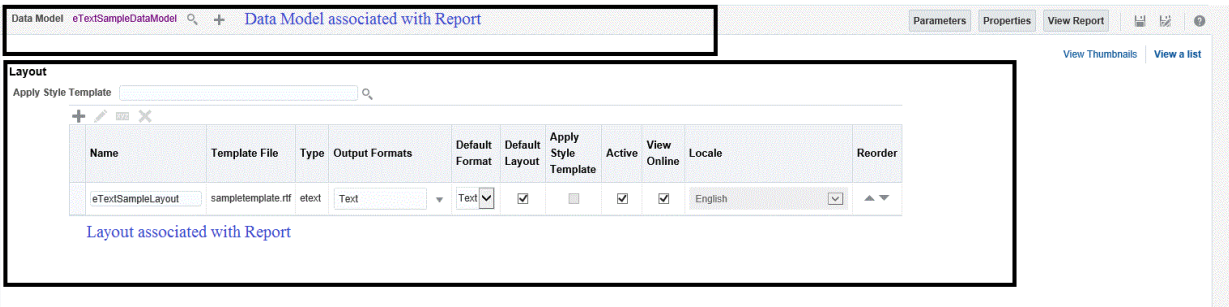
So thus, we have created the Data Model.

Now we will try to create a Report from this Data Model, which means we need to associate this data model and a layout with our report.

The below snapshot shows the Data Model and the layout associated with our Report.

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Now when we click on 'View Report' we would be able to see the E-Text Output

