

Downloading of Query Output in XML Format to Application and Presentation Servers



Applies to:

SAP BW 3.5, SAP BI 7.0 etc.,

Summary

This paper has an approach to download Query output in XML format to Application and Presentation servers.

Author : Nuru Shaik

Company : Deloitte Consulting

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Author Bio



Nuru Shaik is currently working in Deloitte Consulting India Pvt. Ltd. He is working on SAP BW/BI from last 5 years.

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Introduction

Using the concept of Broadcasting of BEx there is a possibility to mail the Query output in the form of XML and can publish the query in Portal. But, it is not possible to write the output of query in the form of XML to Application and Presentation Servers. This document has an approach of how to download the query output to Application and Presentations servers.

Scenario

To demonstrate the functionality, the required query output was written into a DataStore Object (DSO) using an APD and then the output was written to Application and Presentation Servers from the Active data table of the DSO using a program.

The steps to be followed for the approach:

1. Creation of Report on the top of an InfoProvider.
2. Creation of APD and taking the Input of the Query and writing it to a Direct update DSO.
3. Creation of an ABAP program to download the data from DSO in the form of XML into Application/Presentation servers.

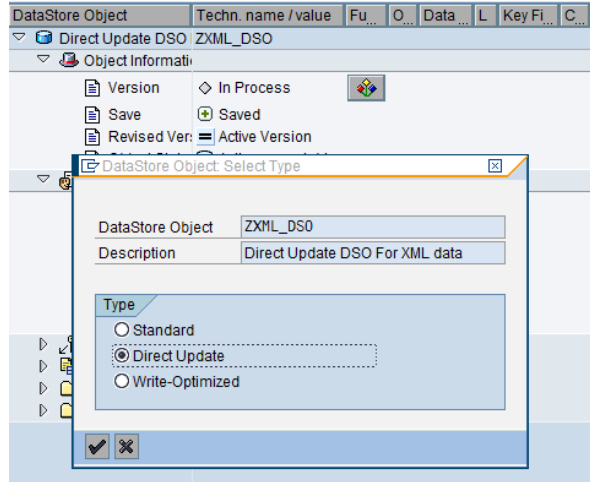
This functionality is demonstrated using an example.

Step1: Creating of report on the top of an InfoProvider


Create a report on the top an InfoProvider. In this example, a report has been created on the top of a cube. The report output is taken from BEx Analyzer.

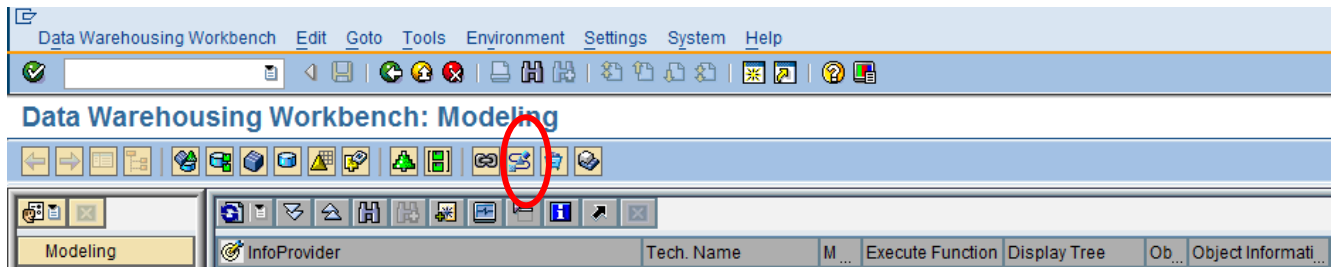
Employee Number	Employee Name	Employee Designation	Employee Address	State of Employee	Salary of Employee	Tax	Overall Salary (Salary - Tax)
12	ABCD	BTA	STREET 1	AP	10,000.00 INR	1,000.00 INR	9,000.00 INR
34	EFGH	CONSULTANT	STREET 2	MP	20,000.00 INR	2,000.00 INR	18,000.00 INR
56	UKL	SR CONSULTANT	STREET 3	UP	30,000.00 INR	3,000.00 INR	27,000.00 INR
78	MINOP	TECH MANAGER	STREET 4	TN	40,000.00 INR	4,000.00 INR	36,000.00 INR
100	QRST	BTA	STREET 5	KA	50,000.00 INR	5,000.00 INR	45,000.00 INR
122	UVWX	CONSULTANT	STREET 6	KE	60,000.00 INR	6,000.00 INR	54,000.00 INR
144	ABCD	SR CONSULTANT	STREET 7	AP	70,000.00 INR	7,000.00 INR	63,000.00 INR
166	EFGH	TECH MANAGER	STREET 8	MP	80,000.00 INR	8,000.00 INR	72,000.00 INR
188	UKL	BTA	STREET 9	UP	90,000.00 INR	9,000.00 INR	81,000.00 INR
210	MINOP	CONSULTANT	STREET 10	TN	100,000.00 INR	10,000.00 INR	90,000.00 INR
232	QRST	SR CONSULTANT	STREET 11	KA	110,000.00 INR	11,000.00 INR	99,000.00 INR
254	UVWX	TECH MANAGER	STREET 12	KE	120,000.00 INR	12,000.00 INR	108,000.00 INR
276	ABCD	BTA	STREET 13	AP	130,000.00 INR	13,000.00 INR	117,000.00 INR
298	EFGH	CONSULTANT	STREET 14	MP	140,000.00 INR	14,000.00 INR	126,000.00 INR
320	UKL	SR CONSULTANT	STREET 15	UP	150,000.00 INR	15,000.00 INR	135,000.00 INR
342	MINOP	TECH MANAGER	STREET 16	TN	160,000.00 INR	16,000.00 INR	144,000.00 INR

Create a Direct Update DSO. The DSO must have the same InfoObjects as that of the query.

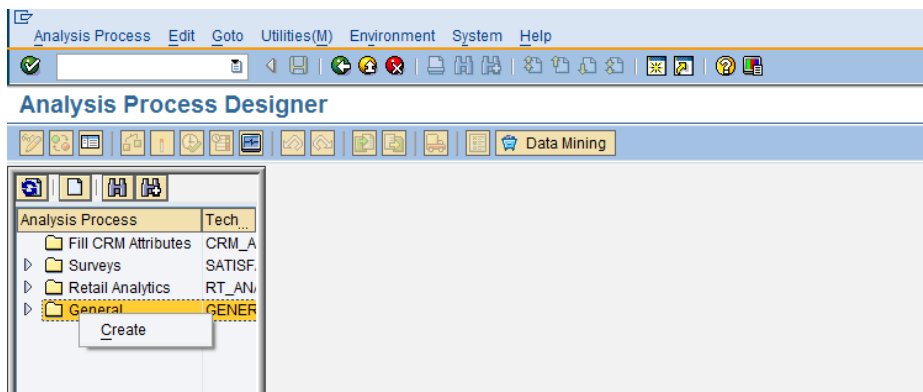


Step2: Creation of APD (Analysis Process Designer)

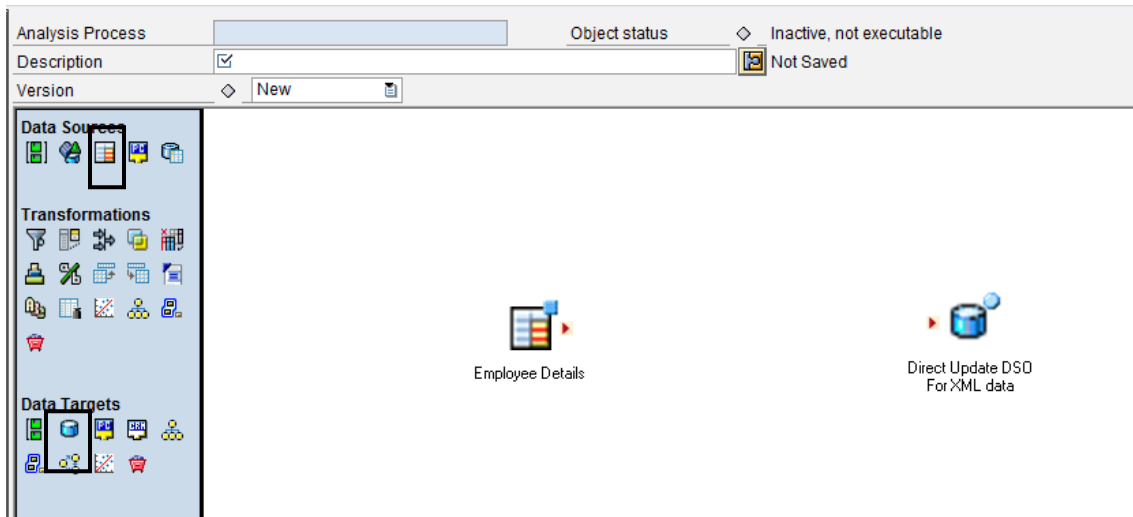
For creation an APD, go to RSA1, and click on the  present in application tool bar. Below screen shows where it is placed in RSA1 screen.



Then the following screen is displayed. Create a new APD.

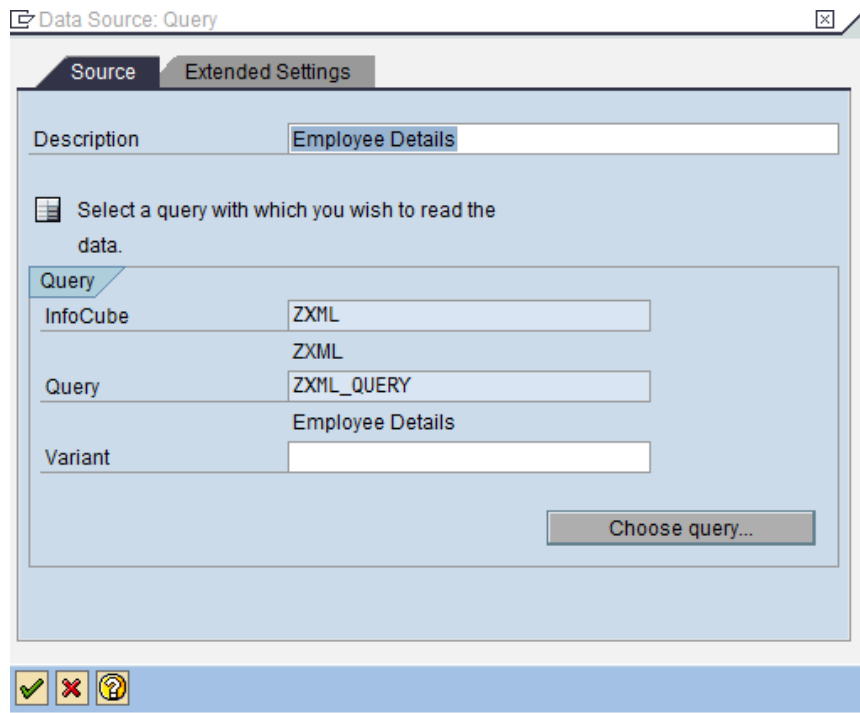


The Data Source will be Query (Employee Details query) and the Data Target will be DSO (ZXML). Drag and drop the query icons from Data Sources and DSO from Data Targets (See below screens)

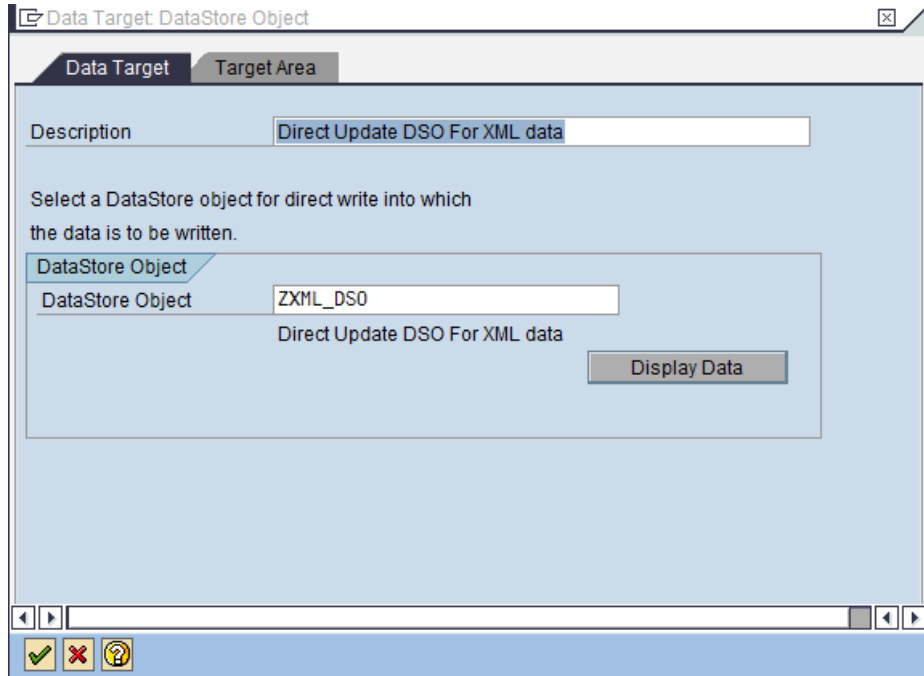



Enter the details for DSO & Query.
 Below screens display the details of both Query and DSO.

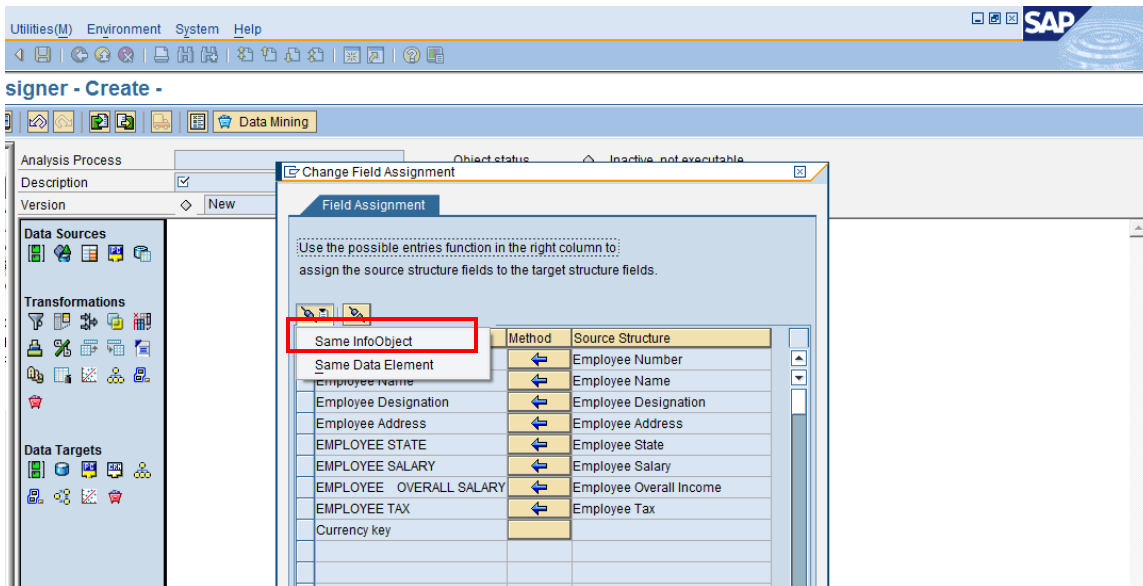
Input Query:



DSO:



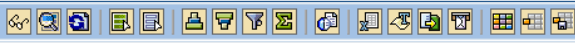
Join the Query and the DSO and make the fields assignments by clicking on . The following screen applies. Map the fields of Query to DSO. Click on Same InfoObject in the field assignment. Then automatically all the InfoObjects assignments will be done.



Save and Activate the APD and Execute.

The Contents will be updated to the Active data Table of DSO.

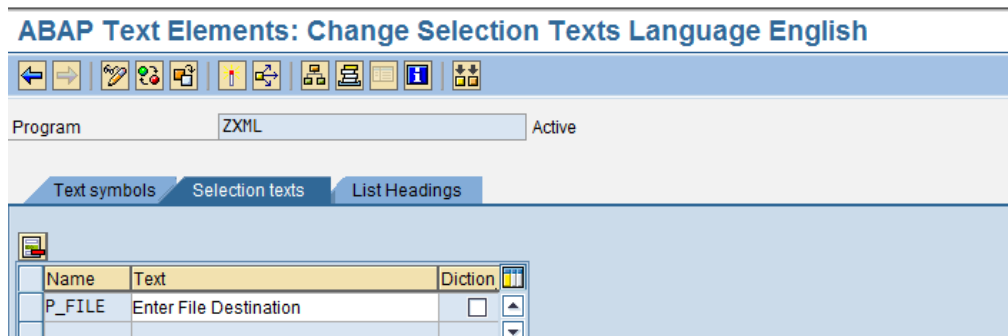
Data Browser: Table /BIC/AZXML_DSO00 Select Entries 16



Employee Number	R	Employee Name	Employee Designation	Employee Address	EMPLOYEE STATE	EMPLOYEE SALARY	EMPLOYEE OVERALL	EMPLOYEE TAX	Currency
12		ABCD	BTA	STREET 1	AP	10.000,00	9.000,00	1.000,00	INR
34		EFGH	CONSULTANT	STREET 2	MP	20.000,00	18.000,00	2.000,00	INR
56		IJKL	SR CONSULTANT	STREET 3	UP	30.000,00	27.000,00	3.000,00	INR
78		MNOP	TECH MANAGER	STREET 4	TN	40.000,00	36.000,00	4.000,00	INR
100		QRST	BTA	STREET 5	KA	50.000,00	45.000,00	5.000,00	INR
122		UVWX	CONSULTANT	STREET 6	KE	60.000,00	54.000,00	6.000,00	INR
144		ABCD	SR CONSULTANT	STREET 7	AP	70.000,00	63.000,00	7.000,00	INR
166		EFGH	TECH MANAGER	STREET 8	MP	80.000,00	72.000,00	8.000,00	INR
188		IJKL	BTA	STREET 9	UP	90.000,00	81.000,00	9.000,00	INR
210		MNOP	CONSULTANT	STREET 10	TN	100.000,00	90.000,00	10.000,00	INR
232		QRST	SR CONSULTANT	STREET 11	KA	110.000,00	99.000,00	11.000,00	INR
254		UVWX	TECH MANAGER	STREET 12	KE	120.000,00	108.000,00	12.000,00	INR
276		ABCD	BTA	STREET 13	AP	130.000,00	117.000,00	13.000,00	INR
298		EFGH	CONSULTANT	STREET 14	MP	140.000,00	126.000,00	14.000,00	INR
320		IJKL	SR CONSULTANT	STREET 15	UP	150.000,00	135.000,00	15.000,00	INR
342		MNOP	TECH MANAGER	STREET 16	TN	160.000,00	144.000,00	16.000,00	INR

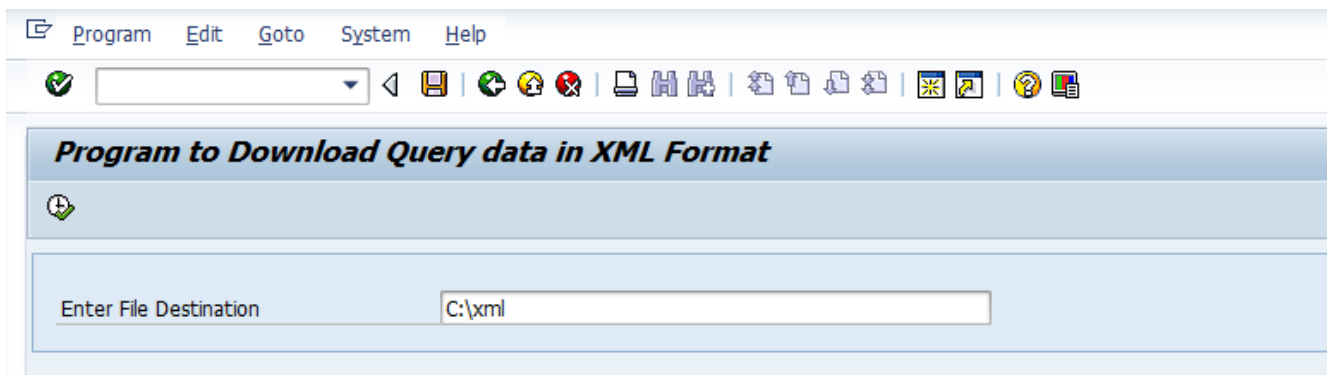
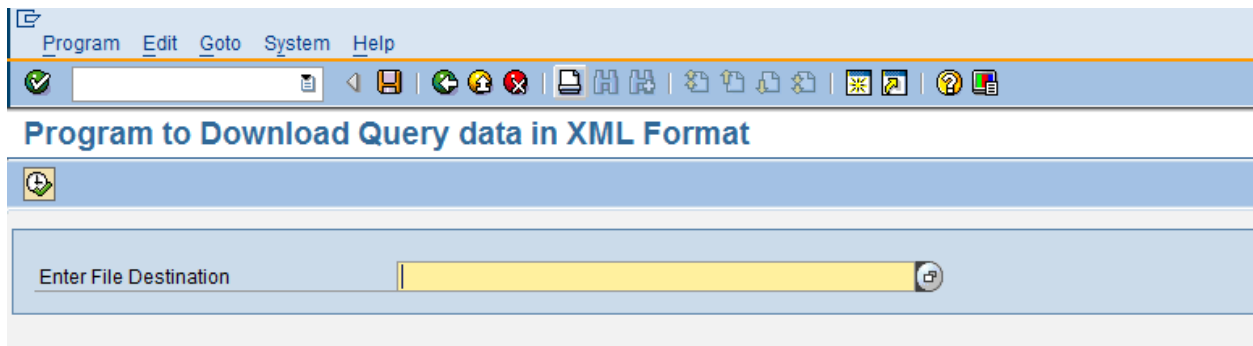
Step3: Creating of Program to download the DSO data in the form of XML to Application/Presentation Servers.

Create a new program. Paste the program code available in this document at the [Report Source Code](#) section. Activate the program and enter the selection texts, so that the descriptions will be available in the selection screen.

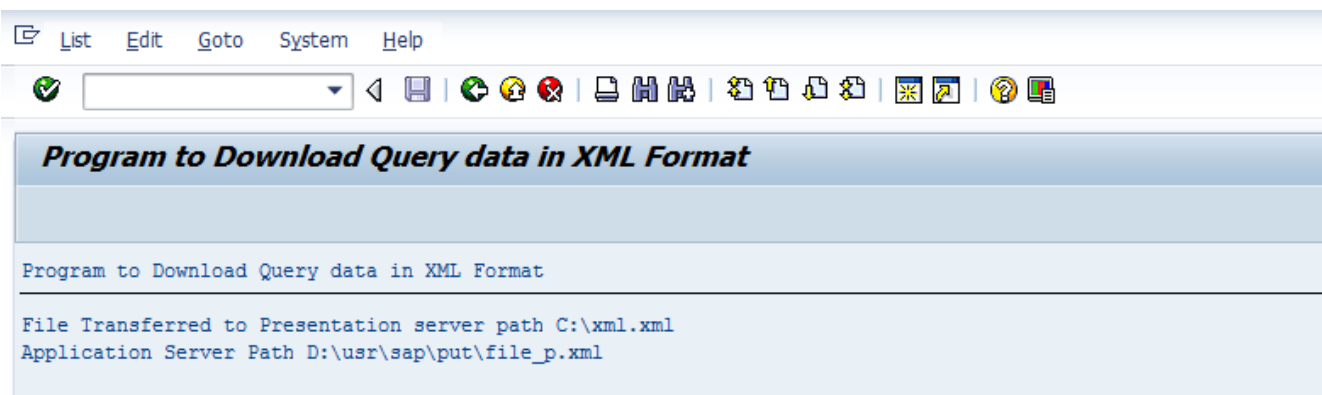


Output

The application server path is mentioned in the program. So, after execute the program we need to enter the file destination for Presentation server.



After execution the screen will display the paths of Application/Presentation servers, where this file has been outputted.



Application Server Output of XML File:

Directory : D:\usr\sap\put

Useable	Viewed	Changed	Length	Owner	Lastchange	Lastchange	File Name
				Administ	23.03.2011	00:07:05	.
				Administ	19.01.2011	11:22:50	..
X			552	SAPServi	21.02.2011	06:20:31	file.xml
				SAPServi	21.02.2011	07:27:58	file1
				SAPServi	21.02.2011	06:39:53	file1.csv
				SAPServi	21.02.2011	06:40:24	file1.exe
				SAPServi	21.02.2011	06:41:11	file1.pad
X			552	SAPServi	21.02.2011	07:29:45	file12
X			13600	SAPServi	22.03.2011	07:47:34	file_p.xml
X			552	SAPServi	21.02.2011	07:39:17	file_p.xmlio
X			13600	SAPServi	23.03.2011	00:13:46	file_p1.xml

SAP Directories

Directory: D:\usr\sap\put
Name: file_p.xml

```

##<?#x#m#1# #v#e#r#s#i#o#n#=#"1#.#0#"# #e#n#c#o#d#i#n#g#=#"u#t#f#-#1#6#"?#>#
#<#a#s#x#:#a#b#a#p# #x#m#1#n#s#:#a#s#x#=#"i#t#t#p#:#/#/#v#w#w#.#s#a#p#.#c#o#m#/#a#b#a#p#x#m#1#"# #v#e#r#s#i#o#n#=#"1#.#0#"#>#<#a#s#x#:#v#a#1#u#e#s#>#<T#A#B#>#
    
```

Presentation server output of XML file:

```
★ Favorites C:\xml.xml
<?xml version="1.0" encoding="utf-16" ?>
- <asx:abap xmlns:asx="http://www.sap.com/abapxml" version="1.0">
- <asx:values>
- <TAB>
- <_-BIC_-AZDQXML00>
  <_-BIC_-ZEMP_X>000012</_-BIC_-ZEMP_X>
  <_-BIC_-ZEMP_NA_X>ABCD</_-BIC_-ZEMP_NA_X>
  <_-BIC_-ZEMP_DE_X>BTA</_-BIC_-ZEMP_DE_X>
  <_-BIC_-ZEMP_AD_X>STREET 1</_-BIC_-ZEMP_AD_X>
  <_-BIC_-ZEMP_ST_X>AP</_-BIC_-ZEMP_ST_X>
  <_-BIC_-ZEMP_SA_X>10000.0</_-BIC_-ZEMP_SA_X>
  <_-BIC_-ZEMP_OV_X>9000.0</_-BIC_-ZEMP_OV_X>
  <_-BIC_-ZEMP_TA_X>1000.0</_-BIC_-ZEMP_TA_X>
  <CURRENCY>INR</CURRENCY>
  <RECORDMODE />
</_-BIC_-AZDQXML00>
- <_-BIC_-AZDQXML00>
  <_-BIC_-ZEMP_X>000034</_-BIC_-ZEMP_X>
  <_-BIC_-ZEMP_NA_X>EFGH</_-BIC_-ZEMP_NA_X>
  <_-BIC_-ZEMP_DE_X>CONSULTANT</_-BIC_-ZEMP_DE_X>
  <_-BIC_-ZEMP_AD_X>STREET 2</_-BIC_-ZEMP_AD_X>
  <_-BIC_-ZEMP_ST_X>MP</_-BIC_-ZEMP_ST_X>
  <_-BIC_-ZEMP_SA_X>20000.0</_-BIC_-ZEMP_SA_X>
  <_-BIC_-ZEMP_OV_X>18000.0</_-BIC_-ZEMP_OV_X>
  <_-BIC_-ZEMP_TA_X>2000.0</_-BIC_-ZEMP_TA_X>
  <CURRENCY>INR</CURRENCY>
  <RECORDMODE />
</_-BIC_-AZDQXML00>
- <_-BIC_-AZDQXML00>
  <_-BIC_-ZEMP_X>000056</_-BIC_-ZEMP_X>
  <_-BIC_-ZEMP_NA_X>IJKL</_-BIC_-ZEMP_NA_X>
  <_-BIC_-ZEMP_DE_X>SR CONSULTANT</_-BIC_-ZEMP_DE_X>
  <_-BIC_-ZEMP_AD_X>STREET 3</_-BIC_-ZEMP_AD_X>
  <_-BIC_-ZEMP_ST_X>UP</_-BIC_-ZEMP_ST_X>
  <_-BIC_-ZEMP_SA_X>30000.0</_-BIC_-ZEMP_SA_X>
Done
```

Report Source Code

```
REPORT zxml.
```

```
*&-----*  
*& Report ZXML  
*&  
*&-----*  
*&  
*&  
*&-----*
```

```
REPORT ZXML.
```

```
DATA : BEGIN OF upl OCCURS 0,  
f(255) TYPE c,  
END OF upl.  
DATA: xmlupl TYPE string .
```

```
DATA: lo_gui TYPE REF TO cl_gui_frontend_services,  
lv_title TYPE string,  
lv_folder TYPE string,  
lv_dir TYPE string,  
v_filetype TYPE string,  
v_filename TYPE string,  
lv_filename TYPE string.
```

```
SELECTION-SCREEN BEGIN OF BLOCK layar2 WITH FRAME TITLE judul2.  
PARAMETER p_file LIKE rlgrap-filename.  
SELECTION-SCREEN END OF BLOCK layar2.
```

```
START-OF-SELECTION.
```

```
PERFORM z_convert_excel.
```

```
AT SELECTION-SCREEN ON VALUE-REQUEST FOR p_file.  
PERFORM f_browse CHANGING p_file.
```

```
DATA : tab1 LIKE TABLE OF /BIC/AZXML_DSO00 WITH HEADER LINE.  
DATA : BEGIN OF itab OCCURS 0,  
a(100) TYPE c,  
END OF itab.
```

```
DATA: xml_out TYPE string ,  
path TYPE rlgrap-filename VALUE 'D:\usr\sap\put\file_p1.xml'.
```

```
*----- Fetch Data
```

```
SELECT * FROM /BIC/AZXML_DSO00 INTO TABLE tabl.
```

```
*----- Convert data to XML Format
```

```
CALL TRANSFORMATION ('ID')  
SOURCE tab = tabl[]  
RESULT XML xml_out.
```

```
CALL FUNCTION 'SCMS_STRING_TO_FTEXT'  
EXPORTING  
text = xml_out  
* IMPORTING  
* LENGTH =  
TABLES  
ftext_tab = itab.
```

```
* Exporting to Application server
```

```
OPEN DATASET path FOR OUTPUT IN BINARY MODE.  
LOOP AT itab .  
TRANSFER itab TO path.  
ENDLOOP.  
CLOSE DATASET path.
```

```
*-----*  
* Form f_browse *  
*-----*  
* text *  
*-----*  
* -->FC_FILE text *  
*-----*
```

```
FORM f_browse CHANGING fc_file.  
DATA: lo_gui TYPE REF TO cl_gui_frontend_services,  
lv_title TYPE string,  
lv_folder TYPE string,  
lv_dir TYPE string.
```

```
CREATE OBJECT lo_gui.  
lv_title = ''.  
lv_folder = 'C:'.  
CALL METHOD lo_gui->directory_browse  
EXPORTING  
window_title = lv_title  
initial_folder = lv_folder  
CHANGING  
selected_folder = lv_dir.  
fc_file = lv_dir.
```

```
ENDFORM.
```

```
*-----*
```

```

*&      Form  z_convert_excel
*&-----*
*      text
*-----*
FORM z_convert_excel .

TYPES : BEGIN OF l_infocube,
        infocube TYPE rsinfocube,
        END OF l_infocube.
DATA : lt_infocube TYPE TABLE OF l_infocube,
        wa_infocube TYPE l_infocube.
DATA : tab1 LIKE TABLE OF /BIC/AZXML_DSO00 WITH HEADER LINE.
DATA : BEGIN OF itab OCCURS 0,
        a(100) TYPE c,
        END OF itab.

v_filetype = '.xml'.
v_filename = p_file.
CONCATENATE p_file v_filetype INTO lv_filename.

DATA: xml_out TYPE string ,
        path TYPE rlgrap-filename VALUE 'D:\usr\sap\put\file_p.xml'.
SELECT * FROM /BIC/AZXML_DSO00 INTO TABLE tab1.

*----- Convert data to XML Format
CALL TRANSFORMATION ('ID')
SOURCE tab = tab1[]
RESULT XML xml_out.

CALL FUNCTION 'SCMS_STRING_TO_FTEXT'
EXPORTING
text = xml_out
* IMPORTING
* LENGTH =
TABLES
ftext_tab = itab.

CALL FUNCTION 'GUI_DOWNLOAD'
EXPORTING
filetype = 'BIN'
filename = lv_filename
TABLES
data_tab = itab.

write : 'File Transferred to Presentation server path', lv_filename .
write : '/Application Server Path', path.

ENDFORM.

```

Related Content

For more information, visit the [Business Intelligence Home Page](#)

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