

# SBOP Repository Explorer

## Installation and Configuration Guide v.2.0.3

(2014)

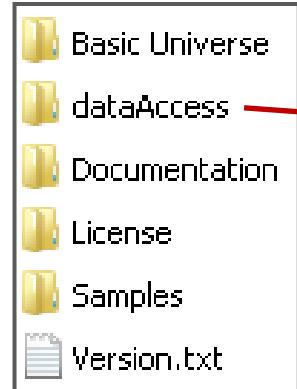


# Agenda

- I. Content Included
- II. Client Installation: API installation I
- III. Client Installation: API installation II
- IV. Client Installation: BUG in 4.1 SPx
- V. Client Configuration: Import Universe
- VI. Client Configuration: Configure Connection
- VII. Request License: Obtain Serial ID
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- XI. Server Installation: API installation
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# I. Content Included

## File Content and Description



■ License:  
Copyright, you can use but for noncommercial, no reverse engineering, ...

CopyRight\_HSQLDB.txt  
 CopyRight\_License.txt  
 CopyRight\_POI.txt  
 POI\_Notify.txt

■ Documentation:  
Architecture and installation documents.

SBOPRepositoryExplorer\_Architecture.pdf  
 SBOPRepositoryExplorer\_Installation201.pdf  
 SBOPRepositoryExplorer\_Update201.pdf

■ Samples:  
XML Sample for personal CMS queries and two Excel Samples for personal data.

SampleExcel.xls  
 SampleExcel.xlsx  
 TableSamples.xml

■ Basic Universe:  
Universe with basic definitions to explore repository.

SBOPRepositoryExplorer.unx

cache.jar  
 config.properties.sample  
 log4j.jar  
 poi-3\_10.jar  
 poi-dom4j-1.6.1.jar  
 poi-ooxml-3\_10.jar  
 poi-ooxml-schemas-3\_10.jar  
 poi-stax-api-1.0.1.jar  
 poi-xmlbeans-2.3.0.jar  
 SBOPRepositoryDriver.jar

■ Version.txt:  
Product description, History, author, contacts, version, ...

Version.txt

## II. Client Installation: API Installation I

### Initial Steps in client workstation where SAP BO BI Client Tools are installed

- Unzip file (see content in previous slide).
- Read “Version.txt” included in the root folder of zip file to review release.
- Read license files in “License” folder to understand the limitations and rules related to this connector.
- Copy from “[Path where SBOPRepositoryExplorer Unzipped]\dataAccess\connectionServer\open” folder  
to

“[Path where SAP BO is installed]\SAP BusinessObjects Enterprise XI 4.0\dataAccess\connectionServer\open”

Files: “**SBOPRepositoryDriver.prm**” and “**SBOPRepositoryDriveren.cod**”.

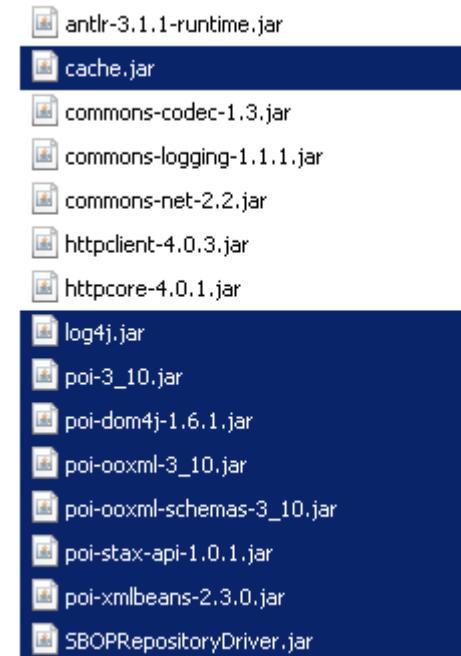
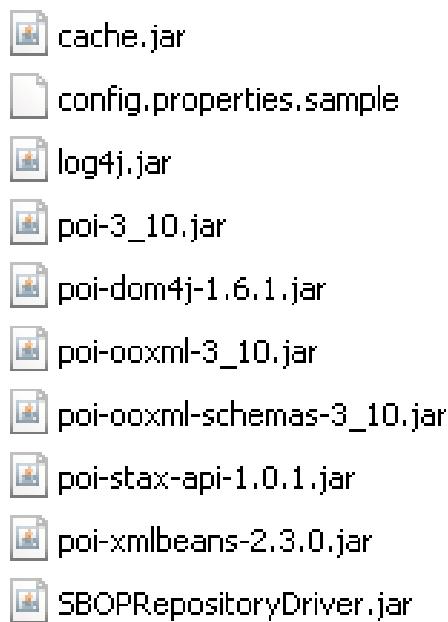
- In previous destination folder edit “**open.sbo**” file and insert between “<DataBases>...</DataBases>” next content:

```
<DataBase Active="Yes" Name="SBOP Repository Explorer">
  <Class JARFile="dbd_SBOPRepositoryDriver">com.jmlds.sboprepositoryexplorer.SBOPRepositoryDriver</Class>
  <Parameter Name="Extensions">SBOPRepositoryDriver,open</Parameter>
  <Parameter Name="Description File">SBOPRepositoryDriver</Parameter>
  <Parameter Name="SQL Parameter File">SBOPRepositoryDriver</Parameter>
  <Parameter Name="Max Rows Available">Yes</Parameter>
  <Parameter Name="Connection Shareable">Yes</Parameter>
  <Parameter Name="Shared Connection">Yes</Parameter>
</DataBase>
```

### III. Client Installation: API Installation II

Initial Steps in client workstation where SAP BO BI Client Tools are installed

- Copy from “[Path where SBOPRepositoryExplorer Unzipped]\dataAccess\connectionServer\open\drivers\open” folder  
to  
“[Path where SAP BO is installed]\SAP BusinessObjects Enterprise XI 4.0\dataAccess\connectionServer\open\drivers\open”  
(In SAP BO BI 4.1 does not exist this last path, so you must copy same structure and content (“..\drivers\open”) inside of top **open** folder.)  
from: [UNZIPPED FOLDER SBOPRepositoryExplorer]\dataAccess\connectionServer\open\drivers\open



to: [SAP BO INSTALL PATH]\SAP BusinessObjects Enterprise XI 4.0\dataAccess\connectionServer\open\drivers\open

# IV. Client and Server Installation: BUG in 4.1 SPx

In version 4.1 SPx for WRC and Server Side, doesn't works in DDK the function to read CONFIGURATION parameters from SAP BO .COD files used in connection definition. We provide for you three options until SAP provide the patch:

a) get those parameters from environment variables:

For logs and debugging:

- SBOPREPEXP\_TRACELOG\_HERETHECMSNAME=YES\_TRACE or NO\_TRACE
- SBOPREPEXP\_TRACEFILE\_HERETHECMSNAME=path\_to\_file for example C:\SBOPREPOSITORYExplorer.log
- SBOPREPEXP\_LOGLEVEL\_HERETHECMSNAME=Debug or Error

To import XML Files:

- SBOPREPEXP\_XMLFILE\_HERETHECMSNAME=path\_to\_xml\_file for example C:\Samples\Samples.xml

To import EXCEL Files:

- SBOPREPEXP\_EXCELCFILE\_HERETHECMSNAME=path\_to\_excel\_file for example C:\Samples\Samples.xlsx

To set Query Limits:

- SBOPREPEXP\_MAXQUERYOBJECTS\_HERETHECMSNAME=Query\_limit

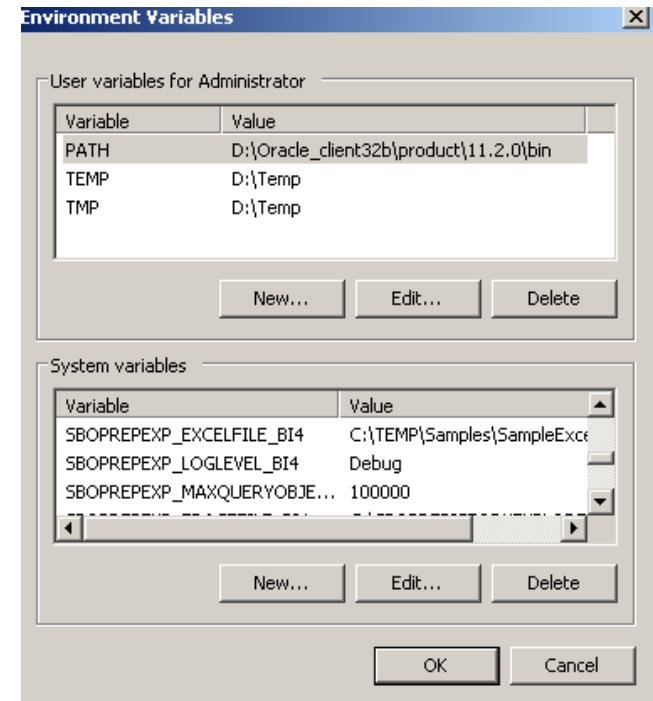
b) create a file called config.properties in same folder where SBOPRepositoryDriver.jar with next parameters:

- MAX\_OBJECTS\_QUERY=Query\_limit
- TRACELOG=Yes\_Trace or No\_Trace
- TRACE\_FILE=Path\_to\_file\_for\_logs\_in\_JAVA\_Format (use / for path)
- LOGLEVEL=Debug or Error
- XML\_FILE=path\_to\_xml\_file (use / for path)
- EXCEL\_FILE=path\_to\_excel\_file (use / for path)

```
1 MAX_OBJECTS_QUERY=100000
2 TRACELOG=Yes_Trace
3 TRACE_FILE=C:/SBOPRepositoryExplorerTraceLog.txt
4 LOGLEVEL=Debug
5 XML_FILE=C:/TEMP/Samples/TableSamples.xml
6 EXCEL_FILE=C:/TEMP/Samples/SampleExcel.xlsx
```

c) user environment variable with path of config.properties file:

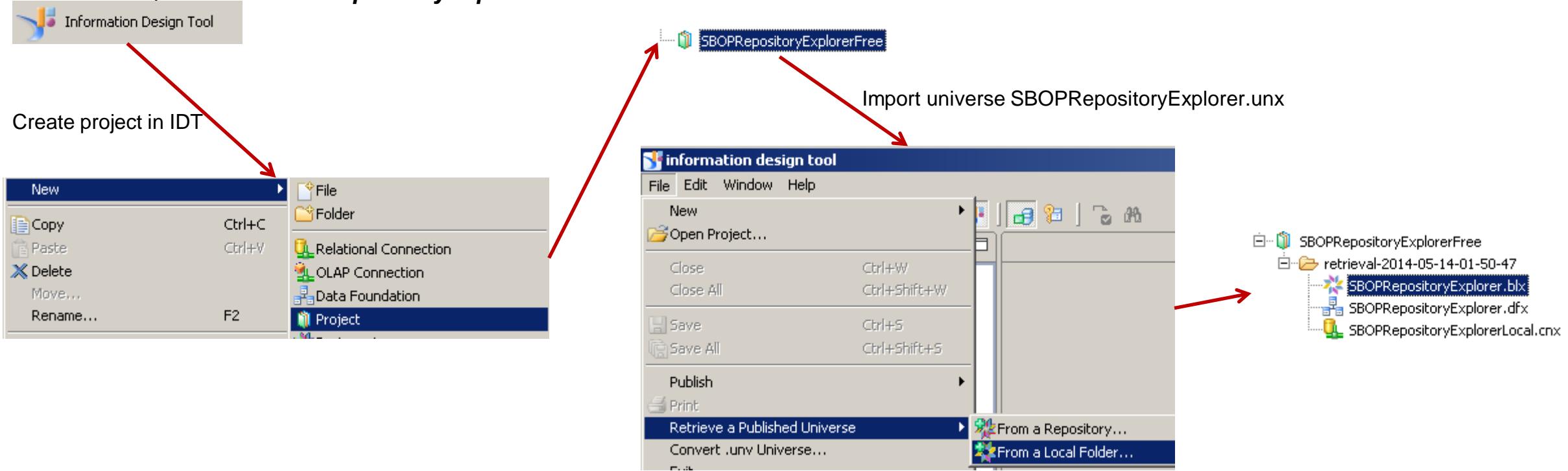
- SBOPREPEXP\_CONFIG\_FILE=path\_to\_config\_properties\_file(must\_include\_file\_name)



# V. Client Installation: Import Universe

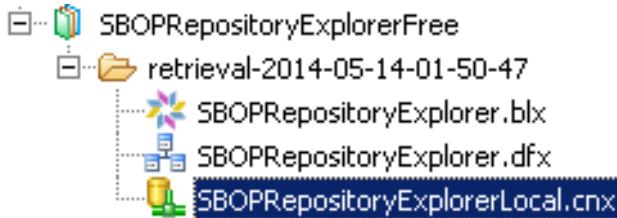
## Universe Import using IDT (Information Design Tool)

- Open **IDT** (Information Design Tool)
- Create a new project (For example: **File → New → Project → SBOPRepositoryExplorer**)
- Import the universe delivered in ZIP file (inside of **Basic Universe** folder). **Select project** already created → **File → Retrieve a Published Universe → From a Local Folder**
- Select to import the “**SBOPRepositoryExplorer.unx**” included in folder “**Basic Universe**” folder.



# VI. Client Configuration: Configure Connection

Configure Connection using IDT (Information Design Tool), locally.



- In IDT into the project already created, edit the local connection "**SBOPRepositoryExplorerLocal.cnx**"

**Edit Relational Connection**

**Edit SBOP Repository Explorer connection (1/2)**

Customer Name	SNAPSPACE
License Key	
System(CMS)	bi4
Authentication	Enterprise
Username	Administrator
Password	*****

**Edit Relational Connection**

**Edit SBOP Repository Explorer connection (2/2)**

Max Objects per Query	100000
Active Log?	No
File Log Path	C:\JMLDS_SBOPRepositoryExplorer.log
Log Level	Debug
Personal Tables (XML)	G:\BIN\sboprepositoryexplorer\SBOPRepositoryExplorerFree\Samples\TableSamples.xml
Personal Data (XLS)	G:\BIN\sboprepositoryexplorer\SBOPRepositoryExplorerFree\Samples\SampleExcel.xlsx
Connection Pool Mode	Disconnect after each transaction
Pool Timeout	60 Minutes
Array Fetch Size	100

- Max Objects per Query: this is the TOP in individual SELECT TABLE queries
- Active Log in case of trace errors or debugging
- Personal Tables (XML) to create tables using CMS SQL queries.
- Personal Data (Excel) to import data to tables from an Excel.
- Connection Pool Mode and Pool Timeout to manage connection timeout
- Array Fetch Size to control query blocks size

- Fill next required fields: **Customer Name (your name/company name)**, **System(CMS)**, **Authentication**, **Username** and **Password**

\* The License Key field in this step is not required and to use in free mode you must request your free license (see next topic request free license)

# VII. Request License: Obtain the Serial ID

## License Key Request using IDT

- Why must I request License Key? You must request a license key because it is a free version and we want to know how many people are using this connector.
- What is included in this Free version?
  - Without License Key: you can view only one row per table
  - With License Key: you can view 1.000 rows per table (thinking in small and medium SAP BO BI customers)
- What are the differences between the commercial and noncommercial version?

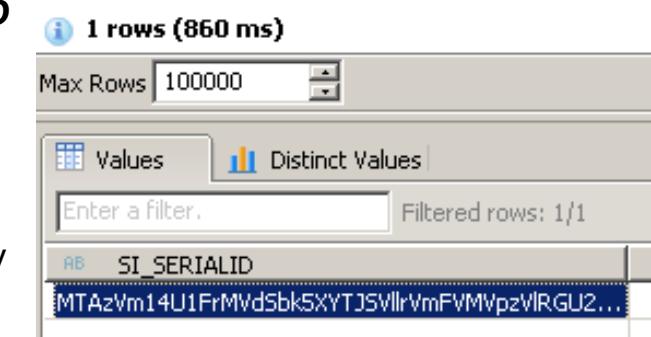
### Non-Commercial

- Limit rows per table to 1.000
- Reports are not included
- No support and maintenance

### Commercial

- No row limit per table
- Reports are included
- Full support and maintenance
- Request new features (SLA)

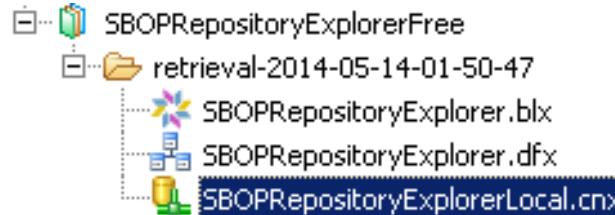
- After configure connection to request your free license key you must send the **SI\_SERIALID** provided in table **JMLDS\_SNAPSPACE\_GETSERIALID**. You can go to **SBOPRepositoryExplorer.dfx** and expand connection **SBOPRepositoryExplorer** to see list of tables, then select mentioned table (**JMLDS\_SNAPSPACE\_GETSERIALID**) and select **Show Table Values** option. From the unique field **SI\_SERIALID** select and copy the line and send to [info@snapspace.pt](mailto:info@snapspace.pt) to request the license key used in next step.



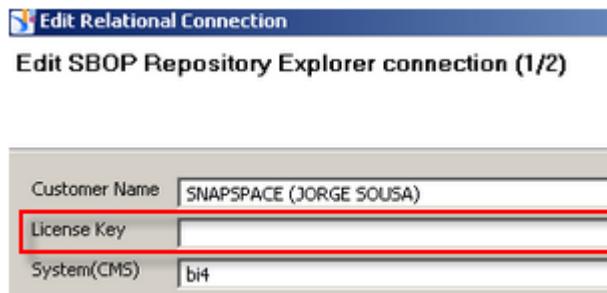
# VIII. Configure License Key

Configure License Key using IDT (Information Design Tool) for connection already configured.

- After receive the license key, in IDT into the project already created, edit the local connection “**SBOPRepositoryExplorerLocal.cnx**”



- It is important **no change Customer Name** and **System (CMS)** because License Key is associated to those parameters.



- After **License Key** is provided and set you must save changes and **restart IDT**.

# IX. Test in IDT: Retrieving data from CMS Server

Using IDT (Information Design Tool) to explore and test SBOPRepositoryExplorer connector.

When all configurations where done in client tools side we must test if we can retrieve data from CMS. Here you can find next examples:

- Select Folder Structure in **SBOPRepositoryExplorer.dfx**:

The screenshot shows the Information Design Tool (IDT) interface. On the left, there is a tree view of a database structure under the heading "FOLDERS". A context menu is open over the "Folders" node, with the "Show Table Values..." option highlighted at the bottom. A red arrow points from this menu to the main query results window on the right. The main window title is "SBOPRepositoryExplorer.dfx" and the sub-title is "Show values in table FOLDERS. - 403 rows (22387 ms)". It displays a table with columns: SI\_ID, SI\_CUID, SI\_PATH, SI\_NAME, SI\_DESCRIPTION, and SI\_PARENTID. The data includes rows such as (3931, Ac1aK2lzj5V..., \, LCM, <Null>, 0), (3941, AYtU9ijcgpxFs..., \DEFAULT, Probes, <Null>, 8438), etc.

- Select some fields from Connections, Universes and Documents at the same time (in **SBOPRepositoryExplorer.blx → Queries**) :

The screenshot shows the Query Panel interface. On the left, the "Universe : SBOPRepositoryExplorer" tree view is expanded to show categories like Applications, Folders, Categories, and Documents. Under "Documents", several fields are selected: Document ID, Document CUID, Document Name, Document Description, Document Kind, Document Parent ID, Document Owner, Document Owner ID, Document Author, and Document Creation Time. These selected fields are shown in the "Result Objects for Query #1" pane, which displays a table with columns: Connection Name, Universe Name, and Document Name. The data includes rows such as (efashion, eFashion, Charting Samples), (efashion-webi, eFashion, Fold Unfold Sample), (efashion, eFashion, Input Controls And Charts), (efashion, eFashion, Input Controls and variables), (efashion, eFashion, Formatting Sample), and (Monitoring TrendDB Connection, Monitoring TrendData Universe, MonitoringTrend Data-Sample).

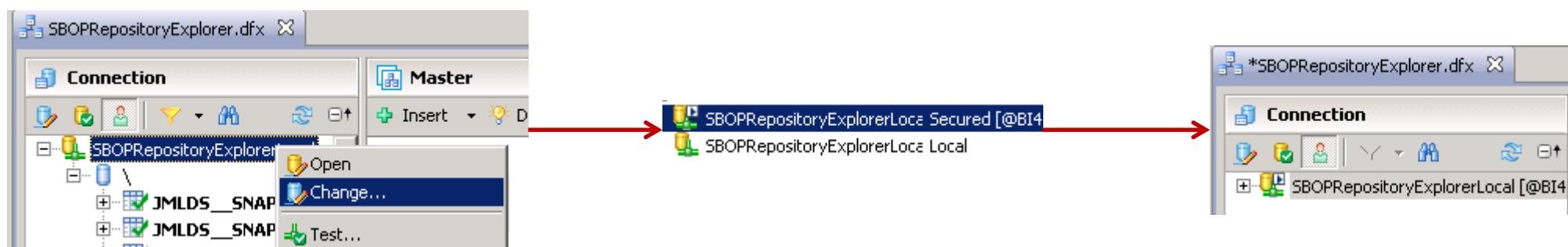
# X. Publish the Connection and Universe to CMS

**Publish connection and universe to the CMS repository using IDT (Information Design Tool).**

In IDT into the project already created, select the local connection “**SBOPRepositoryExplorerLocal.cnx**”



- In **File → Publish → Publish Connection to a Repository**
- Change data foundation (**SBOPRepositoryExplorer.dfx**) pointing to the connection short cut (secured connection): **SBOPRepositoryExplorerLocal.cns**



- After save the datafoundation you can publish the universe to CMS: Select **SBOPRepositoryExplorer.blx** → Right Button → **Publish → To a Repository**.

# XI. Server Installation: API Installation

## Steps in server side where SAP BO BI WebIProcessingServer is installed

- Like in client tools installation, we must follow topic II and III (Client Installation: API installation I & II)
- Copy from “**\dataAccess\connectionServer\open**” folder

to

**“[Path where SAP BO is installed]\SAP BusinessObjects Enterprise XI 4.0\dataAccess\connectionServer\open”**

Files: “**SBOPRepositoryDriver.prm**” and “**SBOPRepositoryDriveren.cod**”.

- In previous destination folder edit “**open.sbo**” file and insert between “<DataBases>...</DataBases>” next content:

```
<DataBase Active="Yes" Name="SBOP Repository Explorer">
  <Class JARFile="dbd_SBOPRepositoryDriver">com.jmlds.sboprepositoryexplorer.SBOPRepositoryDriver</Class>
  <Parameter Name="Extensions">SBOPRepositoryDriver,open</Parameter>
  <Parameter Name="Description File">SBOPRepositoryDriver</Parameter>
  <Parameter Name="SQL Parameter File">SBOPRepositoryDriver</Parameter>
  <Parameter Name="Max Rows Available">Yes</Parameter>
  <Parameter Name="Connection Shareable">Yes</Parameter>
  <Parameter Name="Shared Connection">Yes</Parameter>
</DataBase>
```

- Copy from “**\dataAccess\connectionServer\open\drivers\open**” folder

to

**“[Path where SAP BO is installed]\SAP BusinessObjects Enterprise XI 4.0\dataAccess\connectionServer\open\drivers\open”**

(In SAP BO BI 4.1 does not exist this last path, so you must copy same structure and content (“..\\drivers\\open”) inside of top **open** folder.)

- Sometimes if the connector is already in use is required restart of WebIntelligence Processing Servers.

## XII. Test in Web Intelligence: Create a simple report

Using BI Launch Pad (Webl) or using WRC (Web Intelligence Rich Client) to explore and test SBOPRepositoryExplorer connector.

When all configurations where done in client tools side and in server side we must test if we can retrieve data from CMS using WRC or Webl by BILaunchPad. Here you can find one example:

- Select some fields from Users and Groups at the same time using the universe published to CMS (**SBOPRepositoryExplorer**):

The screenshot shows the BI Launch Pad (Webl) interface. On the left, the 'Universe outline' pane displays a 'Master perspective' and a list of objects under 'Users': User ID, User CUID, User Name, User Full Name, User Email Address, User Description, User Parent ID, User Force Password Change, User Password Expire, and User Owner. In the center, the 'Result Objects' pane lists four selected fields: Group Name, Group Path, User Name, and User Last Logon Time. A 'Query Panel' window titled 'Retrieving Data' is open, showing a message: 'This document has never been refreshed.' To the right, a table displays the retrieved data:

Group Name	Group Path	User Name	User Last Logon Time
Administrators	>>Administrators	Administrator	2014-05-21 16:49:32.000
Administrators	>>Administrators	SYS_SAPSUPPORT	2012-12-21 11:35:45.000
Cryptographic Officers	>>Cryptographic Officers	Administrator	2014-05-21 16:49:32.000



#### Contact Information:

Jorge Sousa  
SAP BO BI Senior Consultant  
+351 915 590 500  
[info@snapspace.pt](mailto:info@snapspace.pt)