

## Validation of a XBRL Document Instance in a RDBMS, proof of concept.

We explain in this document the diverse steps for generating the proof of concept of the validation of a document instance XBRL in a Database. If you have some doubt, please, you can write to:

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As we don't have the formulas of FINREP 2012<sup>1</sup>, for that, we have used FINREP 2008, that the Bank of Spain has published, and especially in the report 6610 ("IS.1. Consolidated Public Sector Balance")<sup>2</sup>.

In the first step, we download the taxonomy FINREP 2008 adapted by the Bank of Spain, we enclose here. This file is "FINREP\_2008.rar", however, we have renamed it as "FINREP\_2008.txt", and you have to change ".txt" as ".rar".

After, we download the software of Arelle<sup>3</sup>, according to your operative system.

Through to Arelle, we obtain the formulas. For that, we have the script "xbrl\_FINREP2008\_005.cmd". You have to change the paths of "cd \Program Files\Arelle" where it is Arelle. Also, the path of XBRL instance, in our case "C:\Trabajotardes\FINREP\_2008\es-be-FINREP\_Informes\IS1\_6610.xbrl" by "x:\xxxxxxxxxxx\FINREP\_2008\es-be-FINREP\_Informes\IS1\_6610.xbrl", where you install the taxonomy. In the same way "C:\Trabajotardes\Congresos\Madrid\_201205\Presentation\_1\_June\XBRLFormula6610.CSV", by your formula file path: "x:\xxxxxxxxxxx\XBRLFormula6610.CSV".

We rename the file "XBRLFormula6610.CSV", by "XBRLFormula6610.txt". And we obtain a subset, and we give it the name "XBRLFormula6610\_val\_6610\_sh\_2\_X6.txt". We analyze this subset of assertions and we have find five types of templates, or five different ways to do queries to the database.

We use in this Proof of Concept Microsoft SQL Server 2012. Through the SQL Management Studio, we create the database or through the command "xbrls001\_Lab6\_createdB.sql".

After, we create the structure, through the SQL command "xbrls002\_Lab6\_createStruct.sql".

Through SQK Management Studio is possible to analyze the tables, or to obtain a database diagram.

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<sup>1</sup> <http://www.eurofiling.info/finrepTaxonomy/taxonomy2012.shtml>.

<sup>2</sup> <http://www.bde.es/es/fr/documentacion/es/es-be-finrep/6-2008/2008-11-26/index.html>.

<sup>3</sup> <http://arelle.org/download/>.

We load the database with the followings scripts:

1. "xbrls004\_Lab6\_InsertDataStruct.sql", the dimensions, attributes of dimensions (members), etc.
2. "xbrls005\_Lab6\_InsertDataContext.sql", the context of this report. This report is "IS1\_6610.xbrl".
3. "xbrls006\_Lab6\_InsertFacts.sql", the facts of the report is "IS1\_6610.xbrl".

Now, we execute the script "xbrls033\_Lab6.cmd". You have to change "xbrls033\_Lab6cmd.txt" by "xbrls033\_Lab6.cmd". Also, you have to change the path, "cd \Trabajotardes\Congresos\Madrid\_201205\Presentation\_1\_June" to your path in your computer. This scrip execute the Visual Basic Script "xbrls033\_Lab6vbs.txt" (You have to change "xbrls033\_Lab6vbs.txt" by "xbrls0"

1. "xbrls033\_Lab6.log" with log information.
2. "xbrls033\_Lab6\_procedure.sql" with the set of stored procedures of validation.
3. "xbrls033\_Lab6\_validation.sql", the set of T-SQL that runs the stored procedures of validation.

Now, through SQL Server Management Studio, we load the file "xbrls033\_Lab6\_procedure.sql" and we execute the set of stored procedures.

For validation, through SQL Server Management Studio, we load the file "xbrls033\_Lab6\_validation.sql" and we execute the set of stored procedures of validation.

With the SQL script "xbrls034\_Lab6\_excuteDeleteProcedure.sql", you can delete the stored procedure that we have created.