Validation of a XBRL Document Instance in a RDBMS, Proof of Concept.

15th EuroFiling Workshop: International Reporting.
Banco de España (Bank of Spain), Madrid, Spain.
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Summary

- Introduction.
- Architecture.
- Automation Process.
- Conclusions and future work.
Introduction I

bullet In the past, we proposed the necessary structures and its semantic rules of the XBRL Data Model (XBRLDM) in the MDM.
bullet WEBIST 2011, The Netherlands, May. IADIS 2011, Shanghai, China, December.
bullet Presently we include the validation rules, but in the MDM, and the formalization of these rules, including mathematical definitions
bullet We provide a second way to validate XBRL reports through a RDBMS.
bullet Automatic mapping of XBRL Formulas in RDBMS.
bullet This research work will improve the interoperability among applications (e-government and others projects).
Introduction (II)

- Proof of Concept of mapping a XBRL report versus a RDBMS. 1st Openfiling General Assembly, September 5th, 2011. Banca d’Italita, Rome, Italy.

- FINREP 2012.

- No formulas at this moment.

Architecture (I)

• We have the structure of Data and metadata in a RDBMS.
• We extract the formulas through Arelle.
• We generate the validation rules in a RDBMS.
• We execute the validation rules.
Architecture (II)

General Structure XBRL vs RDBMS
Architecture (III)

Structure RDBMS from XBRLDM (UML).
Automation Process (I)

- Structure and data.

- **DEMO.**
Obtaining the “api” of validation
Automation Process (III)

- Arelle → Formulas

- DEMO.
Automation Process (IV)

Process of validation
Automation Process (V)

Our process of validation
Automation Process (VI)

• Validation.

• DEMO.
Conclusions and future work

- Mapping the validation rules.
- General process.
- Validation in other languages.
- Automation.
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