

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



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Summary

Summary

Introduction

Architecture

Automation Process

Conclusions

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

Introduction I

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

Introduction (II)

- Summary
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- Architecture
- Automation Process
- Conclusion

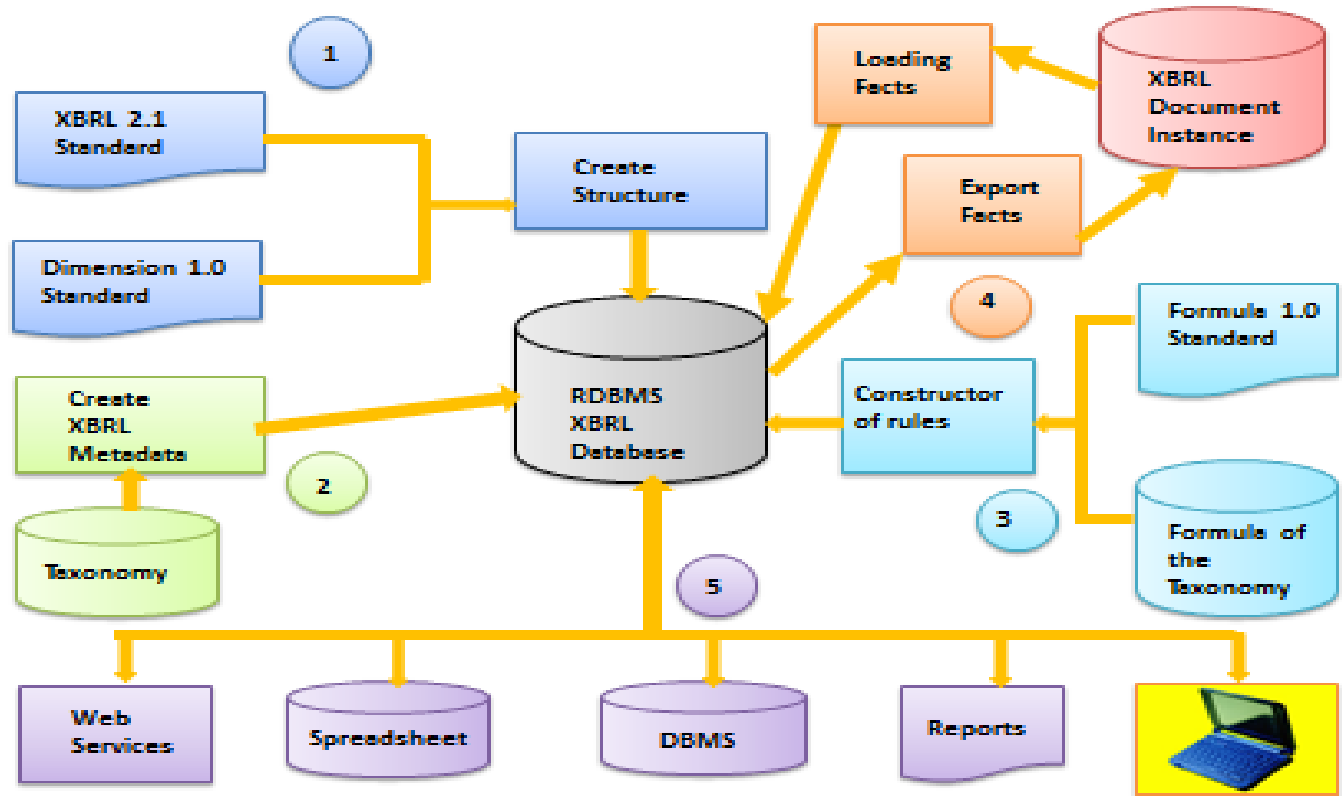
- Proof of Concept of mapping a XBRL report versus a RDBMS. 1st Openfiling General Assembly, September 5th, 2011. Banca d'Italita, Rome, Italy.
- FINREP 2012.
- No formulas at this moment.
- FINREP 2008, Bank of Spain. Report 6610.

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)

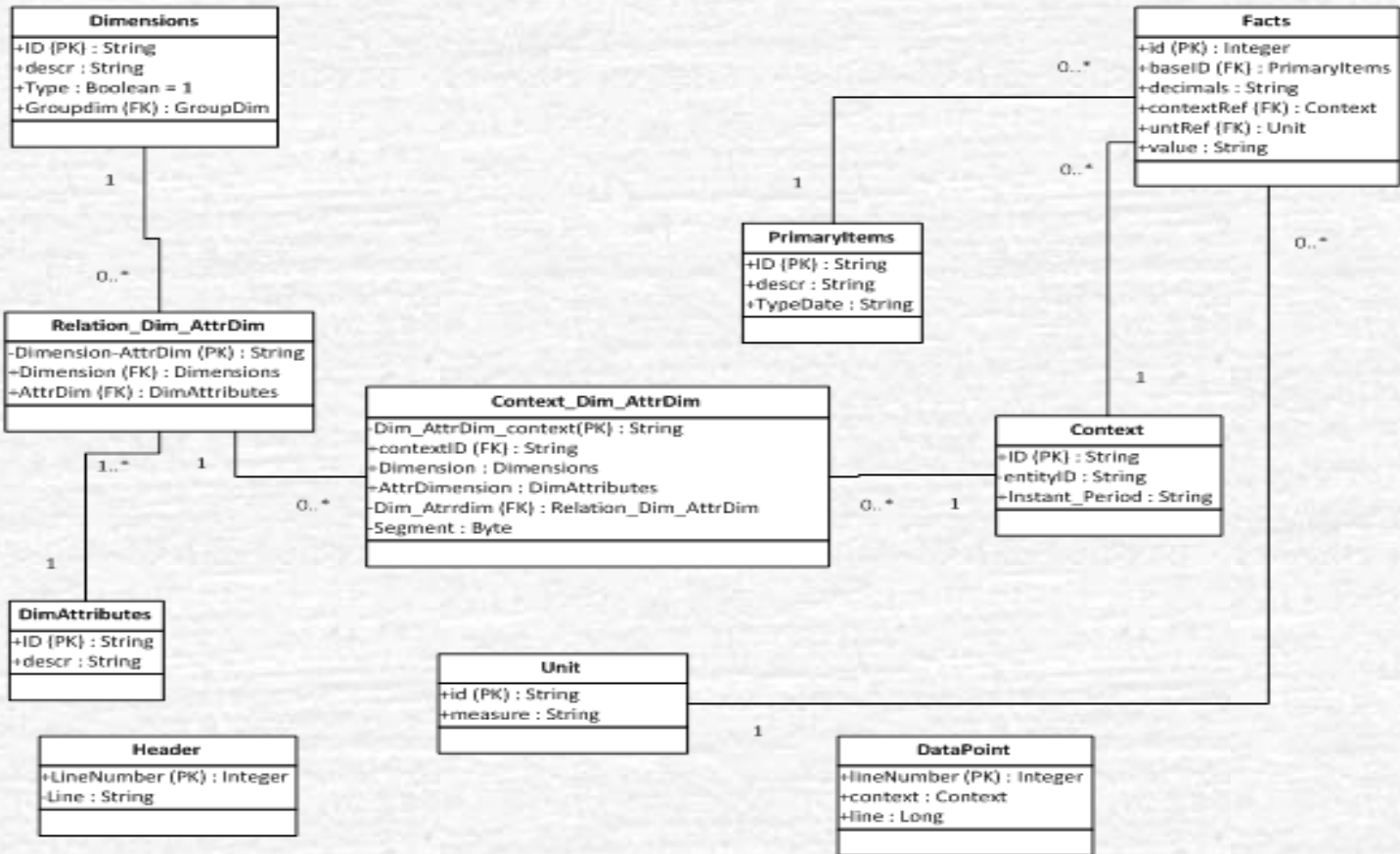
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General Structure XBRL vs RDBMS

Architecture (III)

UML Data Model of 6610 Document Instance of FINREP 2008 of Bank of Spain.
(XBRL proof of concept.
Release, 2011-11).

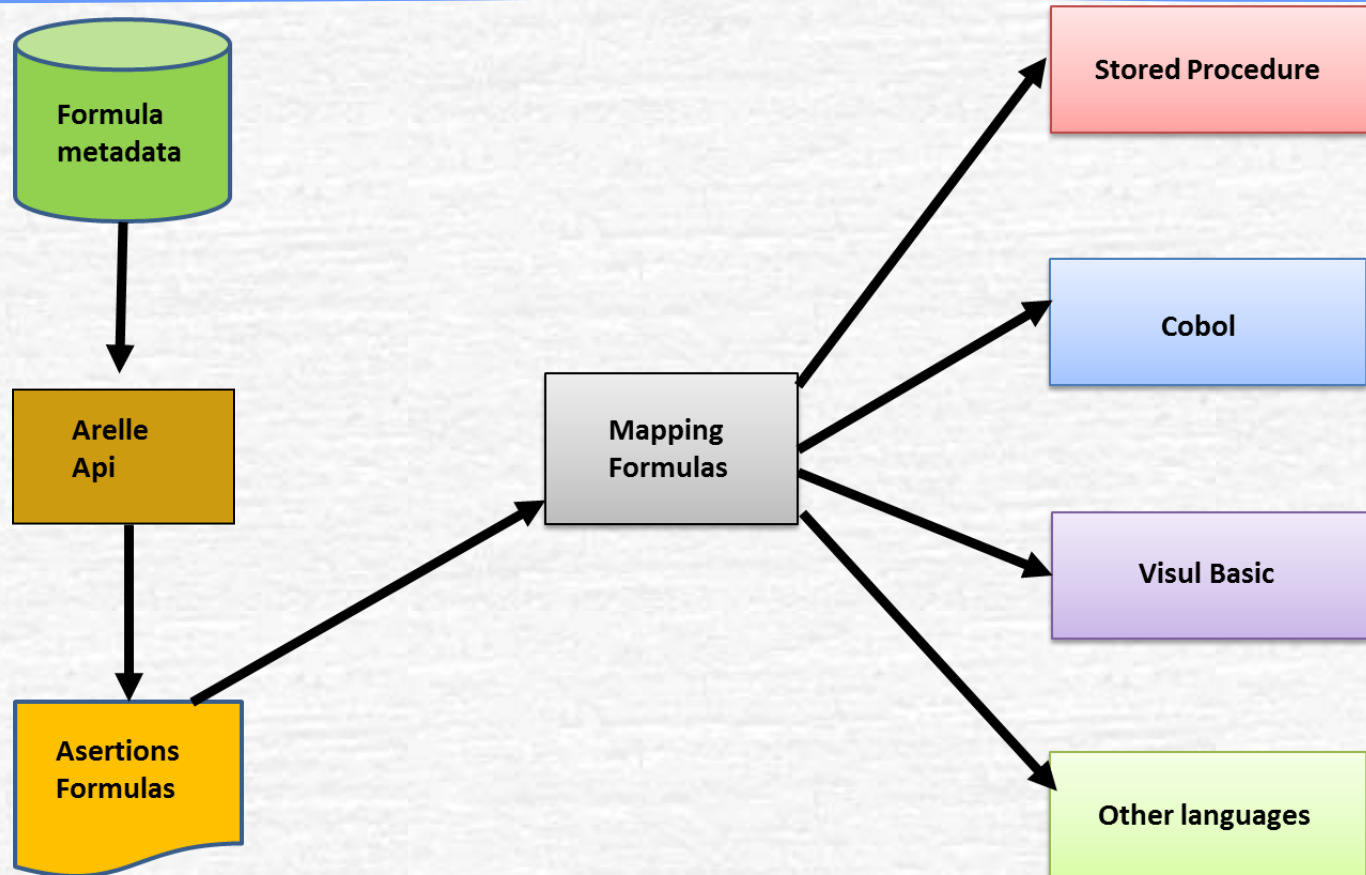


Structure RDBMS from XBRLDM (UML).

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Automation Process (II)

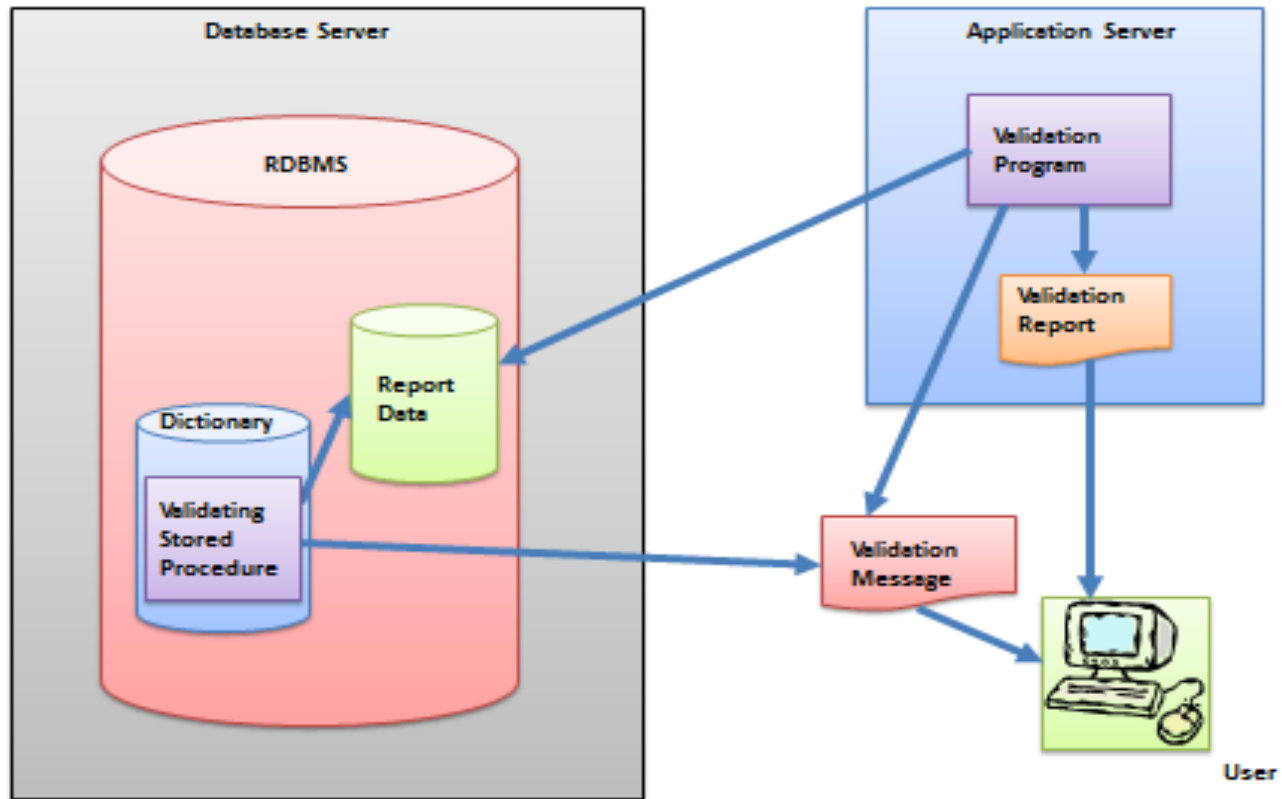
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Obtaining the "api" of validation

Automation Process (IV)

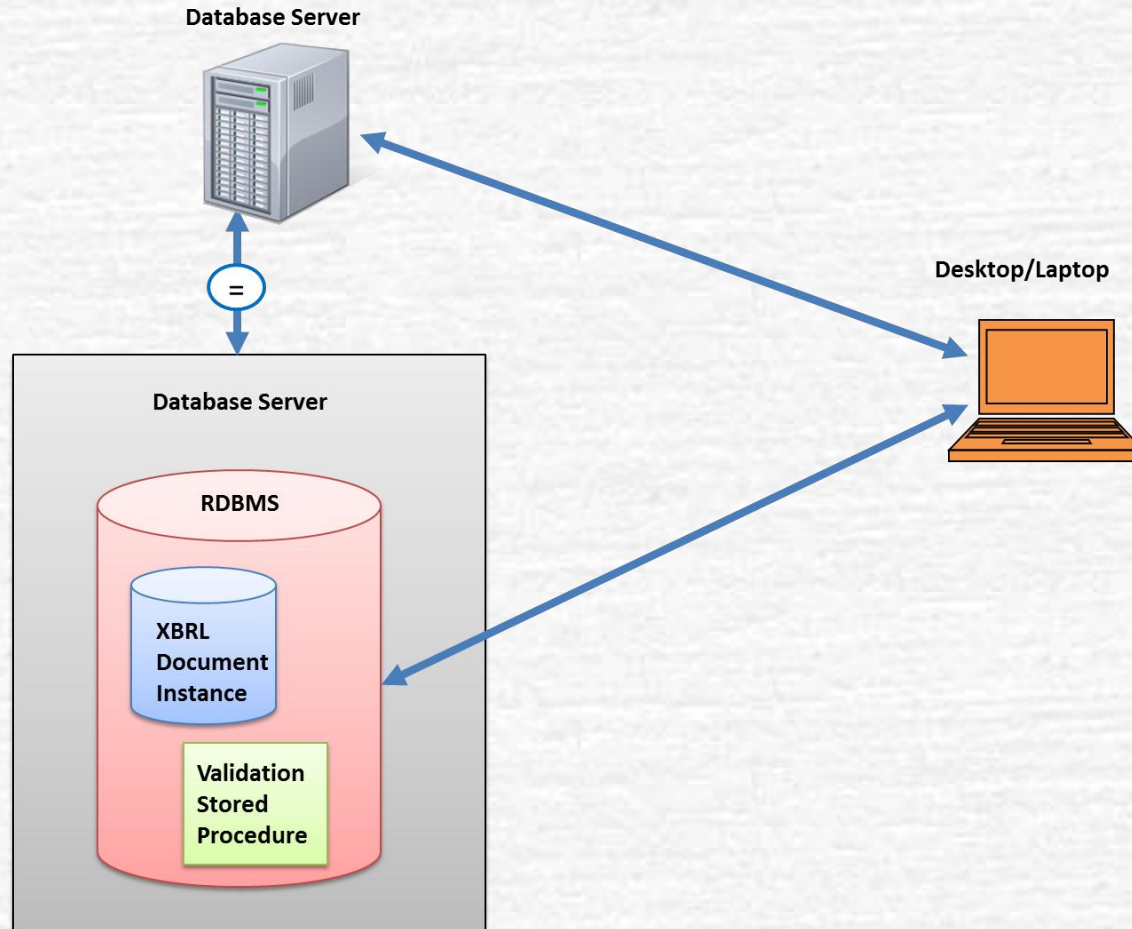
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Process of validation

Automation Process (V)

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Our process of validation

Automation Process (VI)

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- Validation.
- ***DEMO.***

Conclusions and future work

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

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