# GLOMIDCO

## GLOMIDCO

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# Straight through XBRL processing

# Please be interactive

If you've a question, please **ask using a microphone**!

Please note: The speaker has **severe hearing problems**!

Interactivity has our preference !!

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# GLOMIDCO & XBRL

GLOMIDCO has taken a completely different approach to tackle the XBRL problem

Simplification and zero coding is what GLOMIDCO has to offer for XBRL usage.
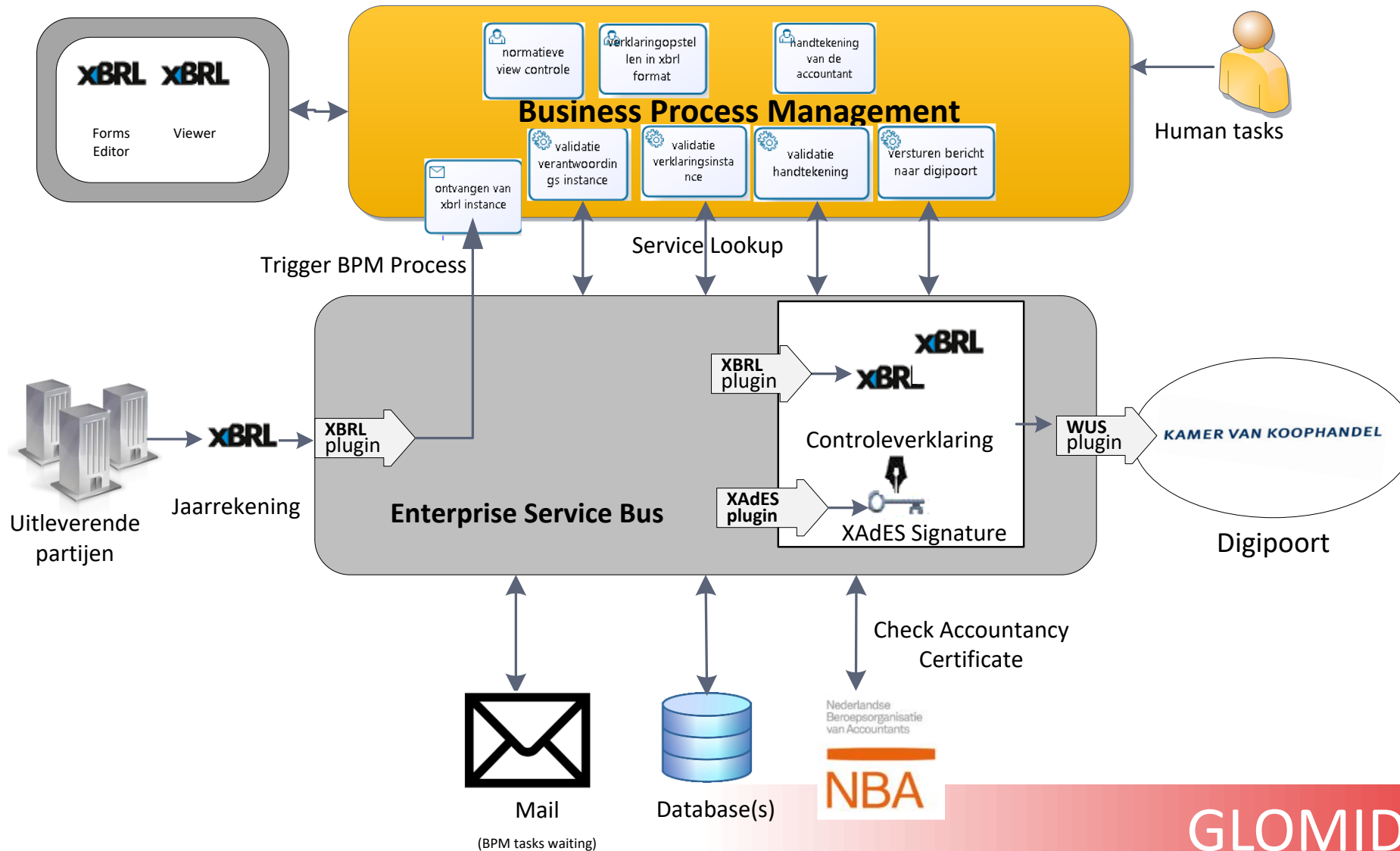
# my XBRL journey: 2008-2014

➢ Build middleware components for handling XBRL as component in a wide range of middleware products (Tibco BW, SF MuleSoft, IBM/SAG Webmethods)

➢ Full functional and based on a **shared JAVA based XBRL processor**

➢ Build for fast and reliable Straight Through Processing (**STP**)

➢ All calculations and hard crunching on XBRL meta data done at **start/init-time**), Milliseconds for each XBRL transaction **run-time**
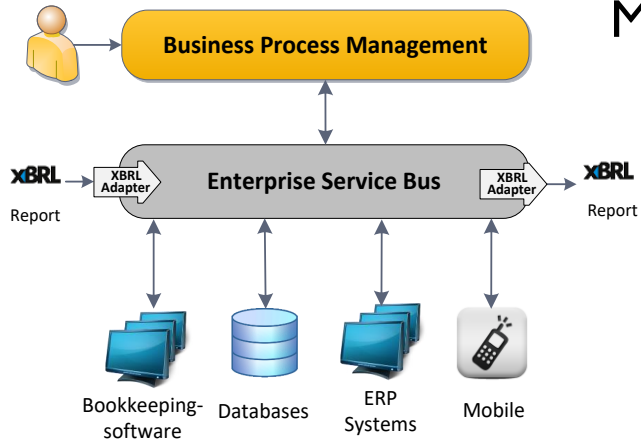
➢ Adhering to the Taxonomy package standard

BUT….

➢ XBRL standard was expanding faster than JAVA resources available

➢ Unfortunately, the world was not ready for Middleware based XBRL solutions

➢ Project Halted (suspended and ready for relaunch)

# Example NBA Assurance (NL)



**Business Process Management**

- normatieve view controle
- verklaringopstel len in xbrl format
- handtekening van de accountant
- ontvangen van xbrl instance
- validatie verantwoordin gs instance
- validatie verklaringsinsta nce
- validatie handtekening
- versturen bericht naar digipoort

xBRL xBRL

Forms Editor     Viewer

Human tasks

Service Lookup

Trigger BPM Process

**Enterprise Service Bus**

Uitleverende partijen

Jaarrekening

XBRL plugin

XBRL plugin

XAdES plugin

Controleverklaring

XAdES Signature

WUS plugin

KAMER VAN KOOPHANDEL

Digipoort

Check Accountancy Certificate

Mail

(BPM tasks waiting)

Database(s)

Nederlandse Beroepsorganisatie van Accountants
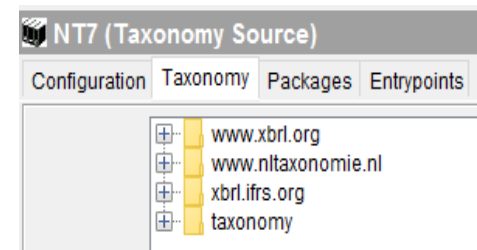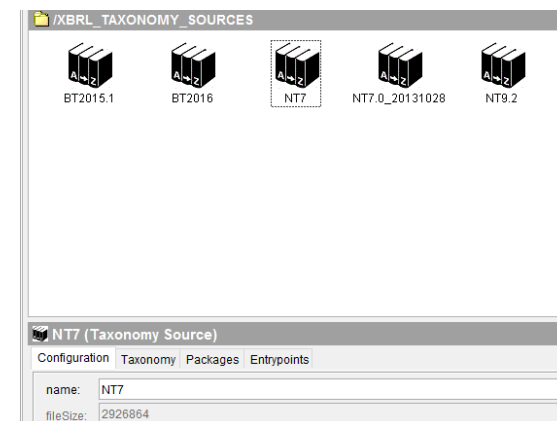
NBA

# XBRL & Integration – **FULL functional**



Middleware integrates OOTB with any ERP like SAP or any application
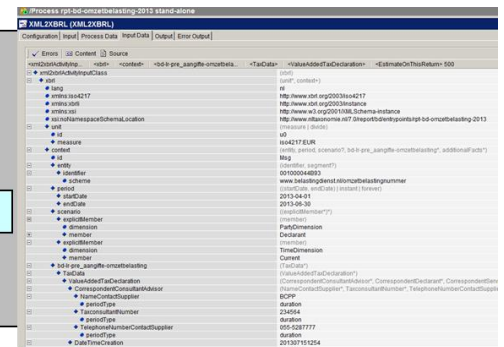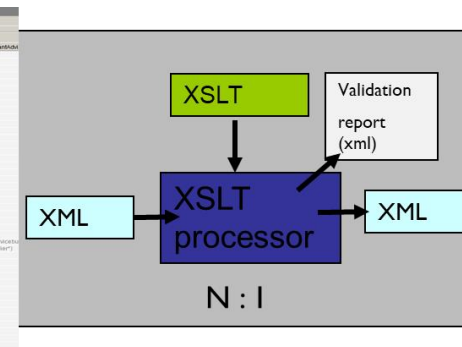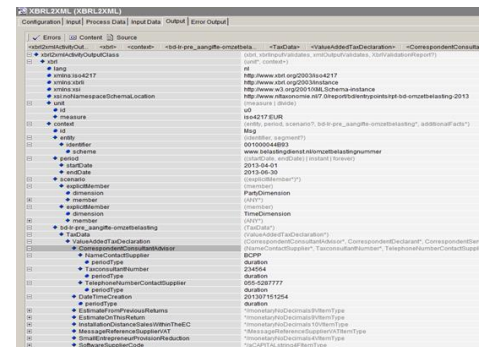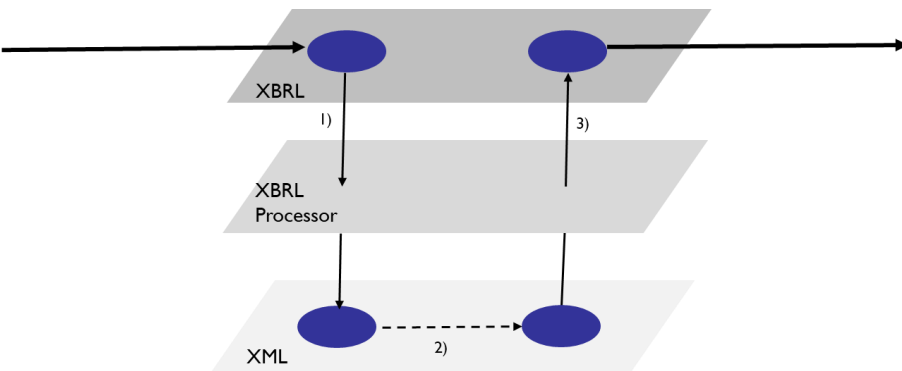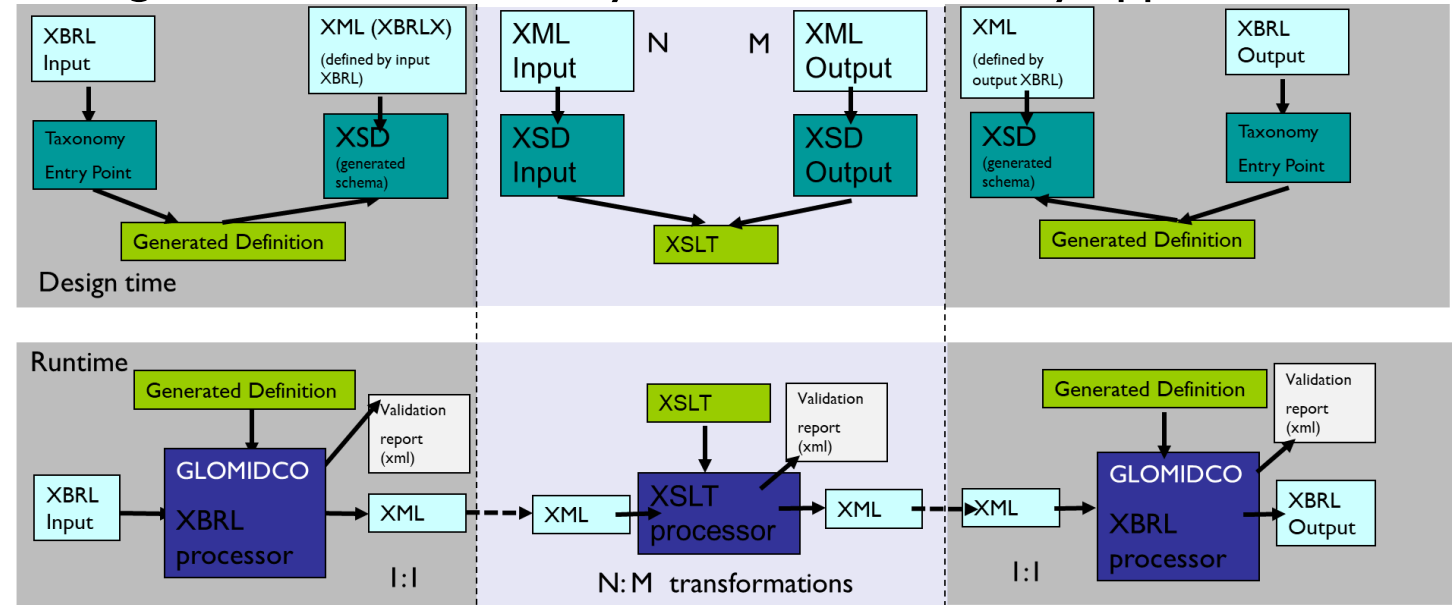
# Tibco BusinessWorks

# MuleSoft

**XBRL** eXtensible Business Reporting Language
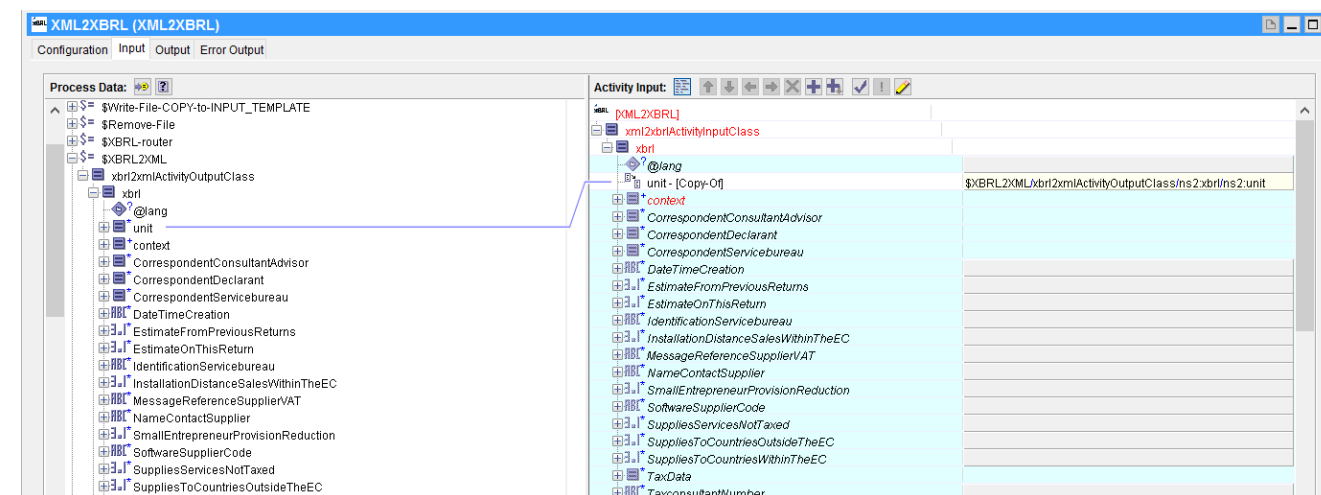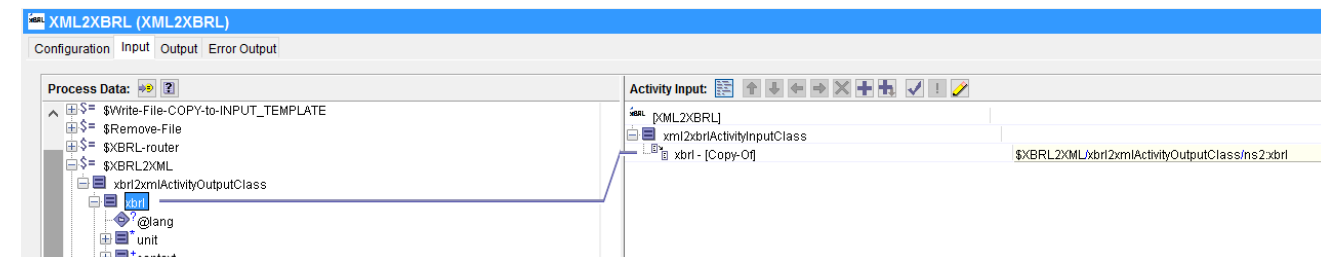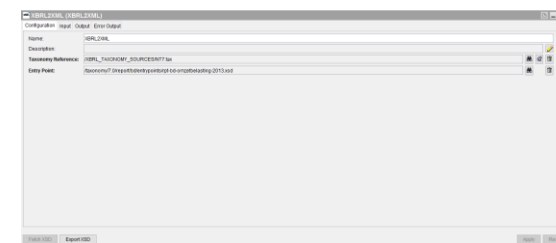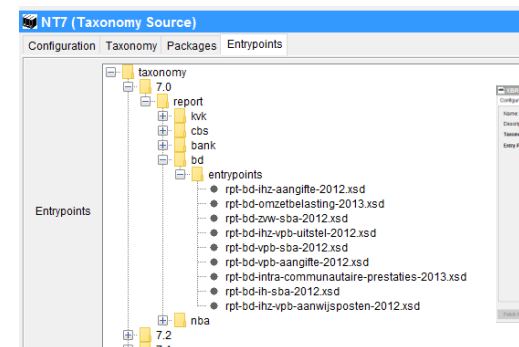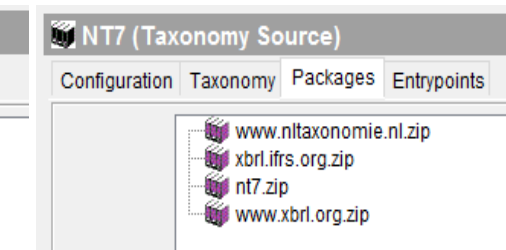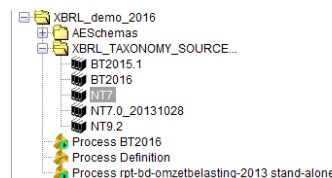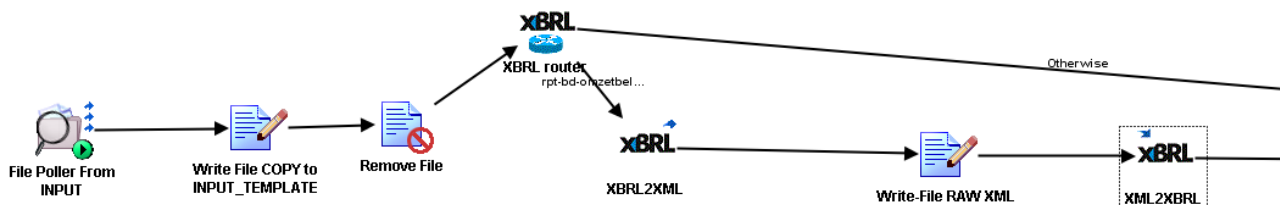
## XBRL to XML
Created by Christian Vermeulen, last modified by Bas Philippus on Oct 02, 2015

The XBRL to XML component return an XML file, representing the processed XBRL instance, as a String. Entry points found i schema type and filter. Through Mule DataSense, the entry point can be mapped in Anypoint Studio.

Example XBRL to XML configuration:
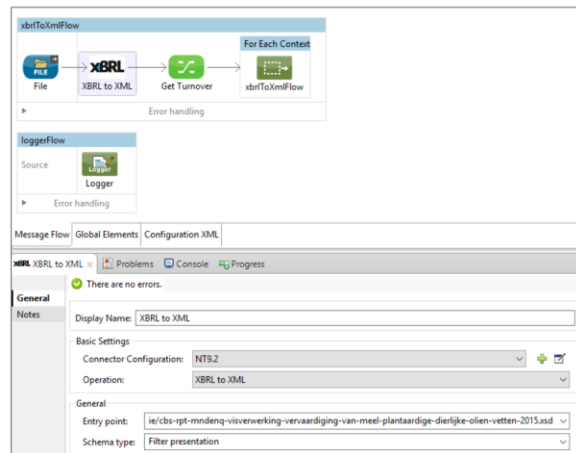
## Validate XBRL instance
Created by Christian Vermeulen, last modified on Sep 28, 2015

Validate XBRL instance is used to validate XBRL instances and an XML validation report is generated based on the selected entry point in a taxonomy. Schema type and filter are not applicable here. Through Mule DataSense, the XM

Example validate XBRL instance configuration:
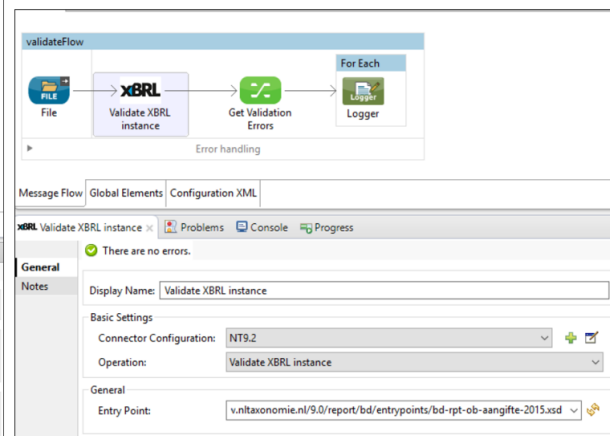
## Using DataWeave to map to XML
Created by Maarten van Benthem, last modified on Oct 19, 2015

### Example overview
This section contains an example how you can use the Mule Dataweave component to map several input types to xml, using a taxonomy XSD schema. When the input is mapped to a valid XML message, the XBRL component can be used to transform the message into a XBRL message. In our example we use the following entrypoint: www.nltaxonomie.nl/9.0/report /bd/entrypoints/bd-rpt-ob-aangifte-2015.xsd. This example contains a step-by-step guide on howto successfully create a XBRL message using multiple sources as input. Figure 1 contains the complete example flow.
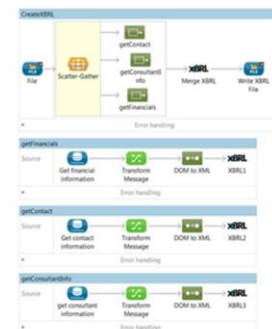
Figure 1: Complete example of XBRL flows

## XML to XBRL
Created by Christian Vermeulen, last modified by Bas Philippus on Oct 02, 2015

The XML to XBRL component return an XBRL file, representing the processed XML file, as a String. E schema type and filter. Through Mule DataSense, the entry point can be mapped in Anypoint Studio.

*Please Note that an Object to String transformer must be placed before the XBRL component, i*
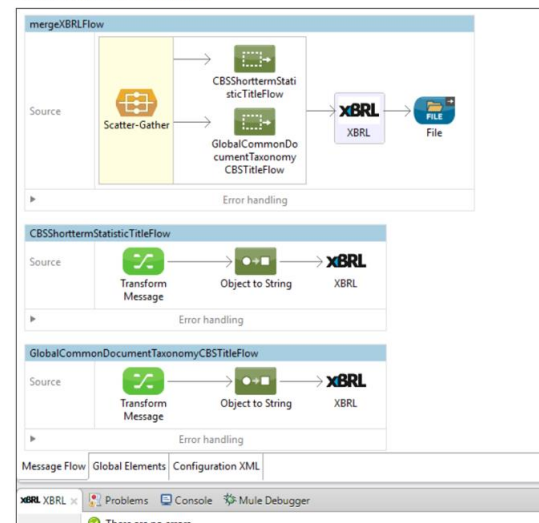
Example XML to XBRL configuration:
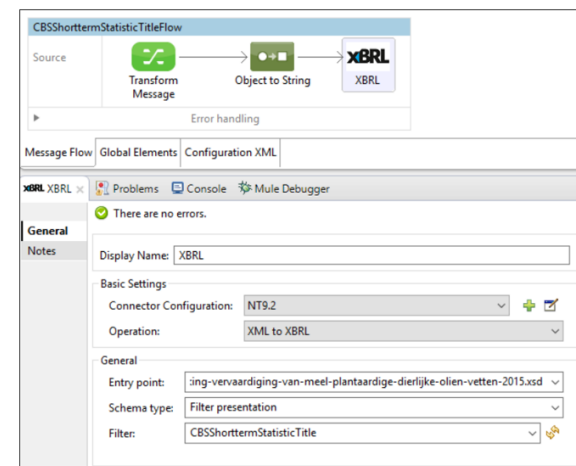
## Merge XBRL
Created by Bas Philippus, last modified on Oct 02, 2015

The merge XBRL operation is used to create a single XBRL instance from multiple XBRL files.

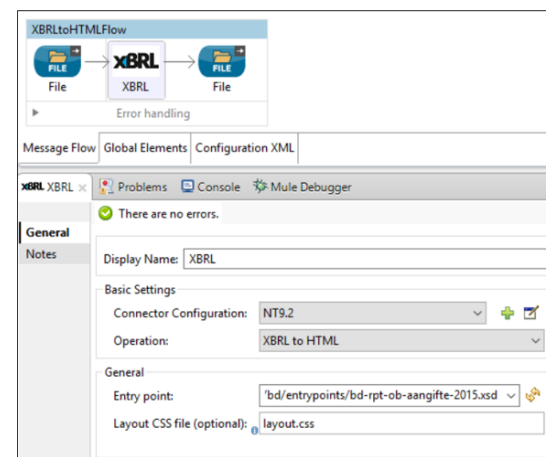Example merge XBRL configuration:

## XBRL to HTML
Created by Christian Vermeulen, last modified by Bas Philippus on Oct 02, 2015

XBRL to HTML generates a HTML report based on the selected entry point and processed X custom layout to the generated report. Schema type and filter are not applicable here.

Example XBRL to HTML configuration:

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# SAG (now IBM) Webmethods



Select Taxonomy package

(depends on .tax files

found in Package selected in Connection)

Select Entry Point from dropdown list

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# GLOMIDCO XBRL Design principles

- Event driven / message driven
- Real-time / transactional
- Data in-flight, no databases
- STP (Straight Through Processing)
- ESB (Enterprise Service Bus)
- SOA/BPM based principles
- Full API Led architecture support
- Enables Data Lake House
- Supported by GEN-AI

# What differentiates our XBRL solution?

## Significant costs and quality improvements
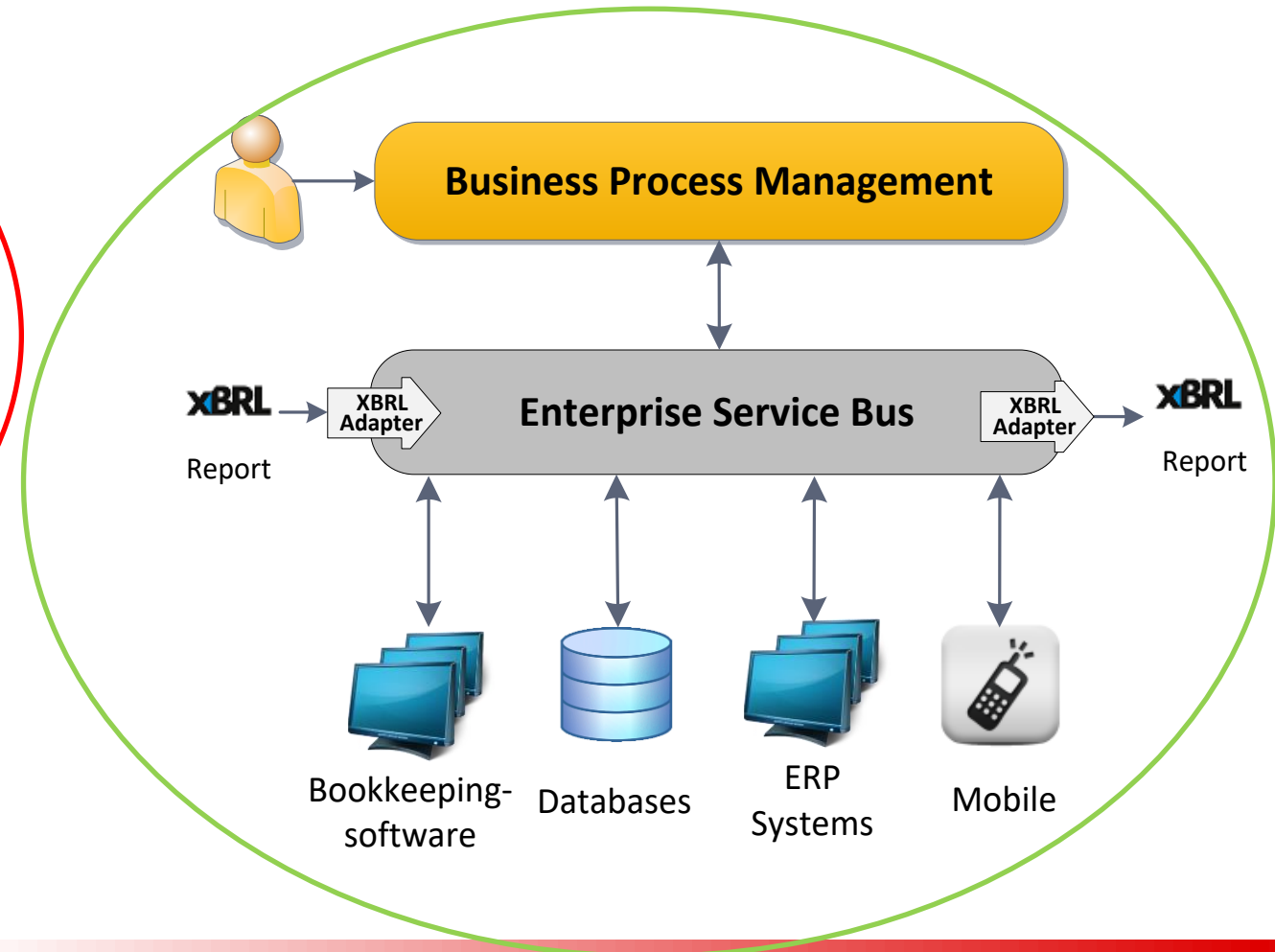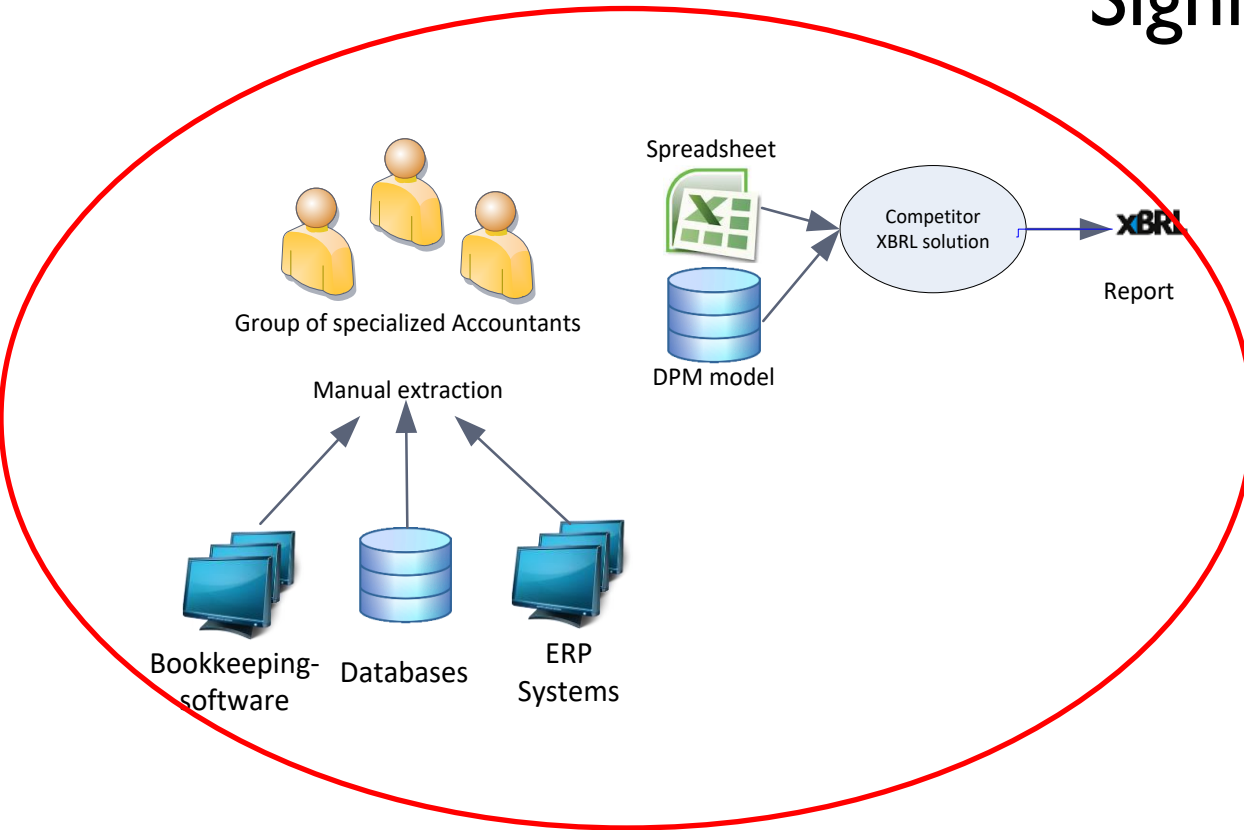
# Present - 2025

- In 2023 Gen-AI (chat-GPT) made entrance
- XBRL standards and sub-standards moved on
- Java XBRL processor needs to be updated
- XBRL too complex for AI to handle without XBRL processor (for example to validate)
- Base design of existing JAVA XBRL processor is good (XBRL, XML, JSON, inline XBRL ready)
- New demand for XBRL for example sustainability standards like ESG

The main question of today:

- Is there in 2025 a market **demand** for XBRL components in middleware? (IBM, Tibco, SF, expanding to Java based integrations for example SAP CPI?)

If the answer is yes

- Updating all middleware connectors, adapters and plugins to latest versions of middleware is required
- An updated version of the Java XBRL processor needs to be build! (accelerate build using AI?)
- Is there **funding** for a such?

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# GLOMIDCO Facts

➢ Founded in 2000

➢ Focus on Integration with first class vendors (Tibco, SoftwareAG, MuleSoft and many more leaders in integration)

➢ 2014 Rebranded to GLO-Integration (termination of XBRL effort)

➢ 2022 GLO-Integration (55 staff) sold to Deloitte (XBRL and GLOMIDCO as brand excluded from sale)

➢ April 2024 GLOMIDCO operational again

➢ Research driven and focus on education

➢ April 2024 also partnership in Digitect (focused on Meta Data), see my Meta Data presentation using EC-API-Design

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# Questions

Please note: The speaker has **severe hearing problems**!