

PL/SQL code fragments into Spring Batch configuration via Xtext

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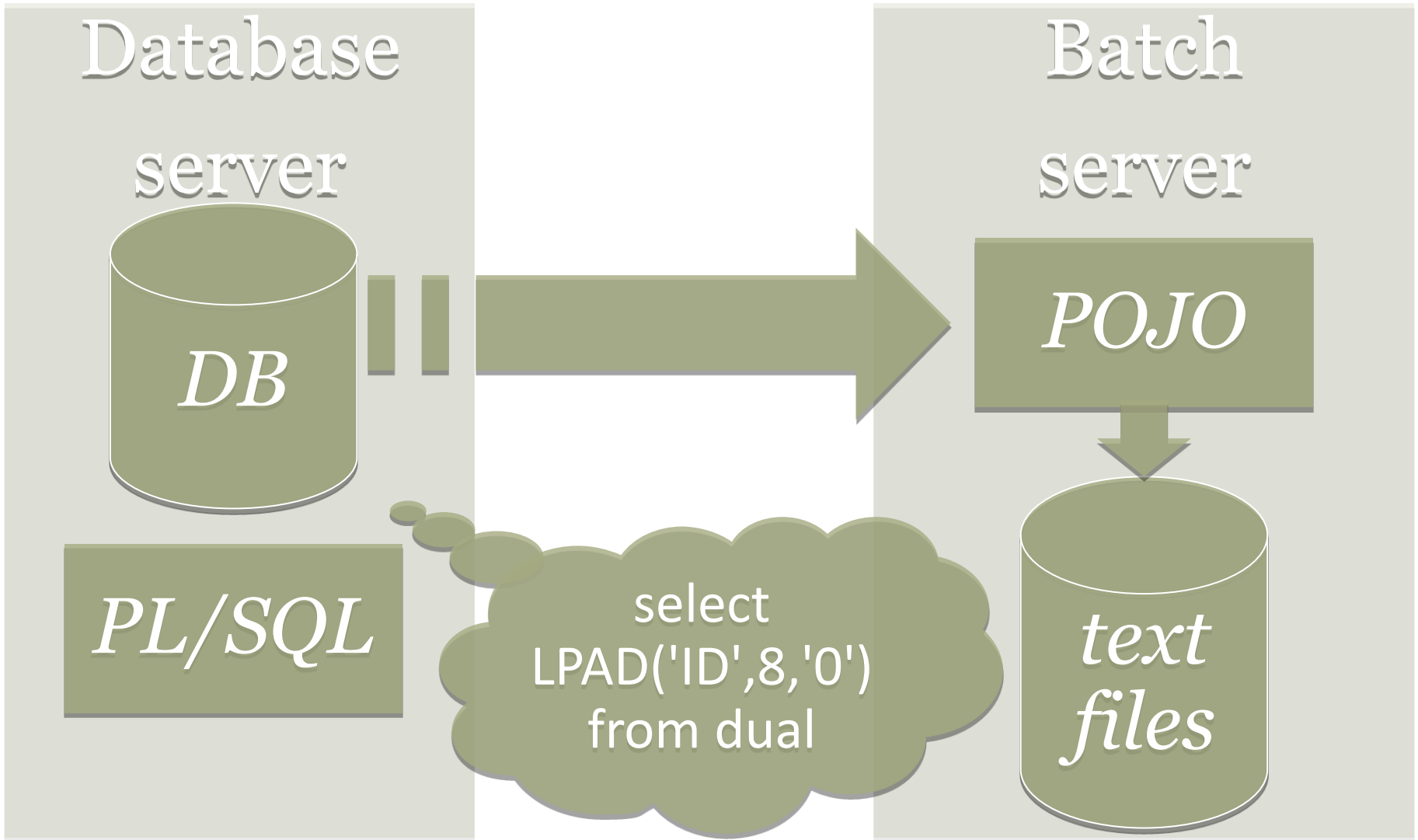
Objectives and Purpose

- State the purpose of one proof of concept
- What was the plan?
- Demo
- Look back
- «Architecture of uncertainty»
- Conclusion

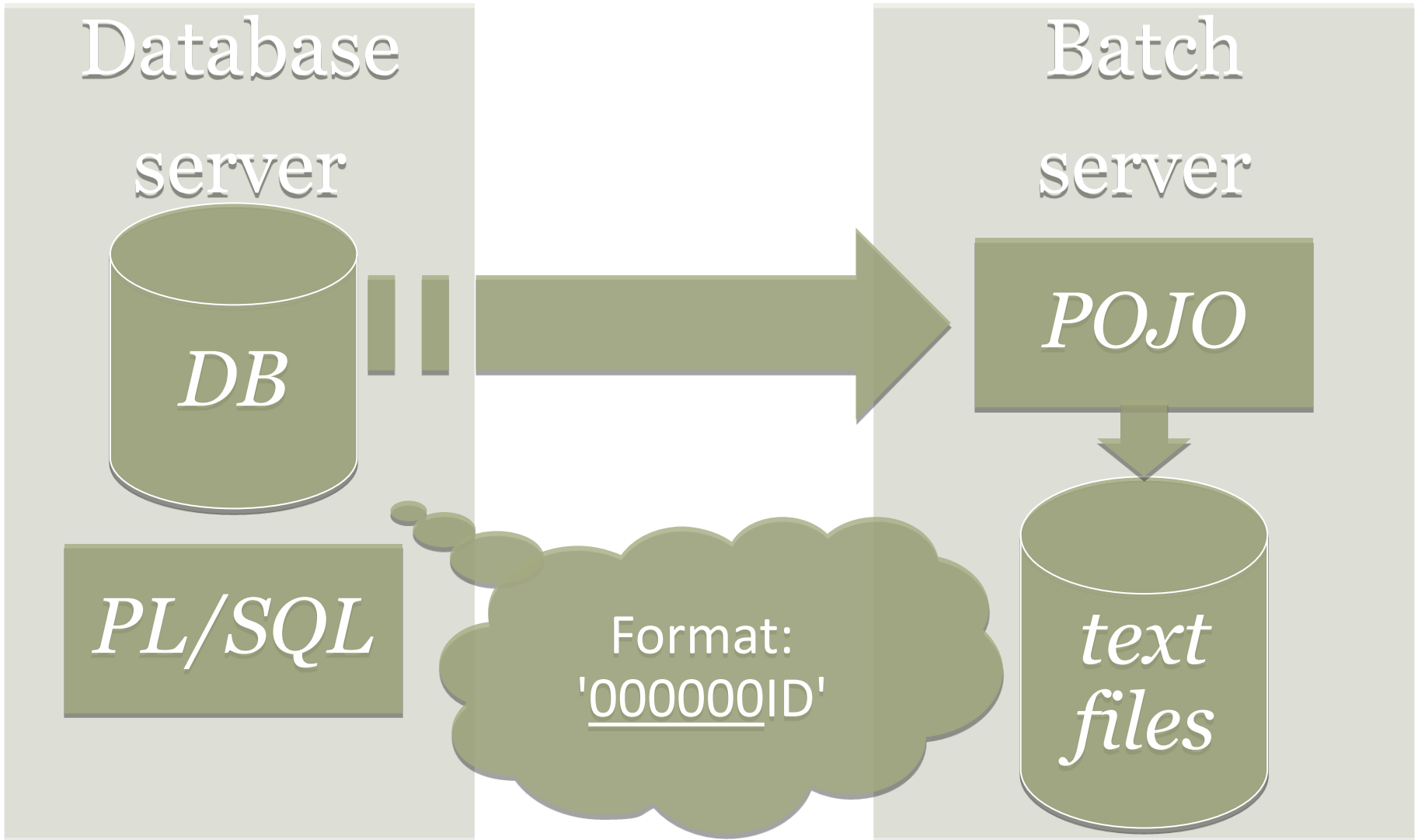
From issues to proof of concept

- Poor performance due to
 - Lack of parallel programming in PL/SQL code
 - Data formatting on database server (network latency)
- Poor maintainability because of
 - Missing central source container (e.g. as SVN for Java)

Poor performance: Data formatting

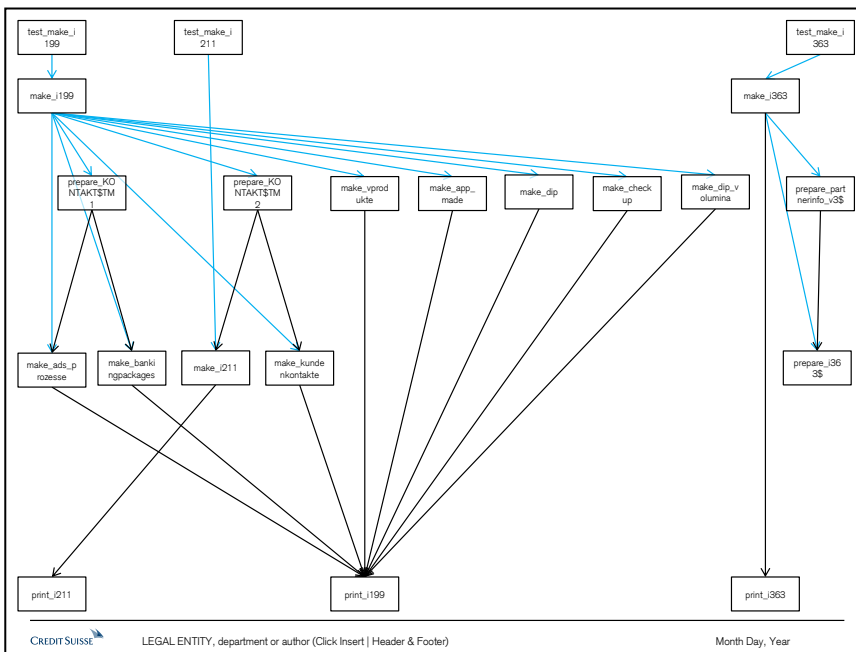


Poor performance: Data formatting



So what was the plan? (I)

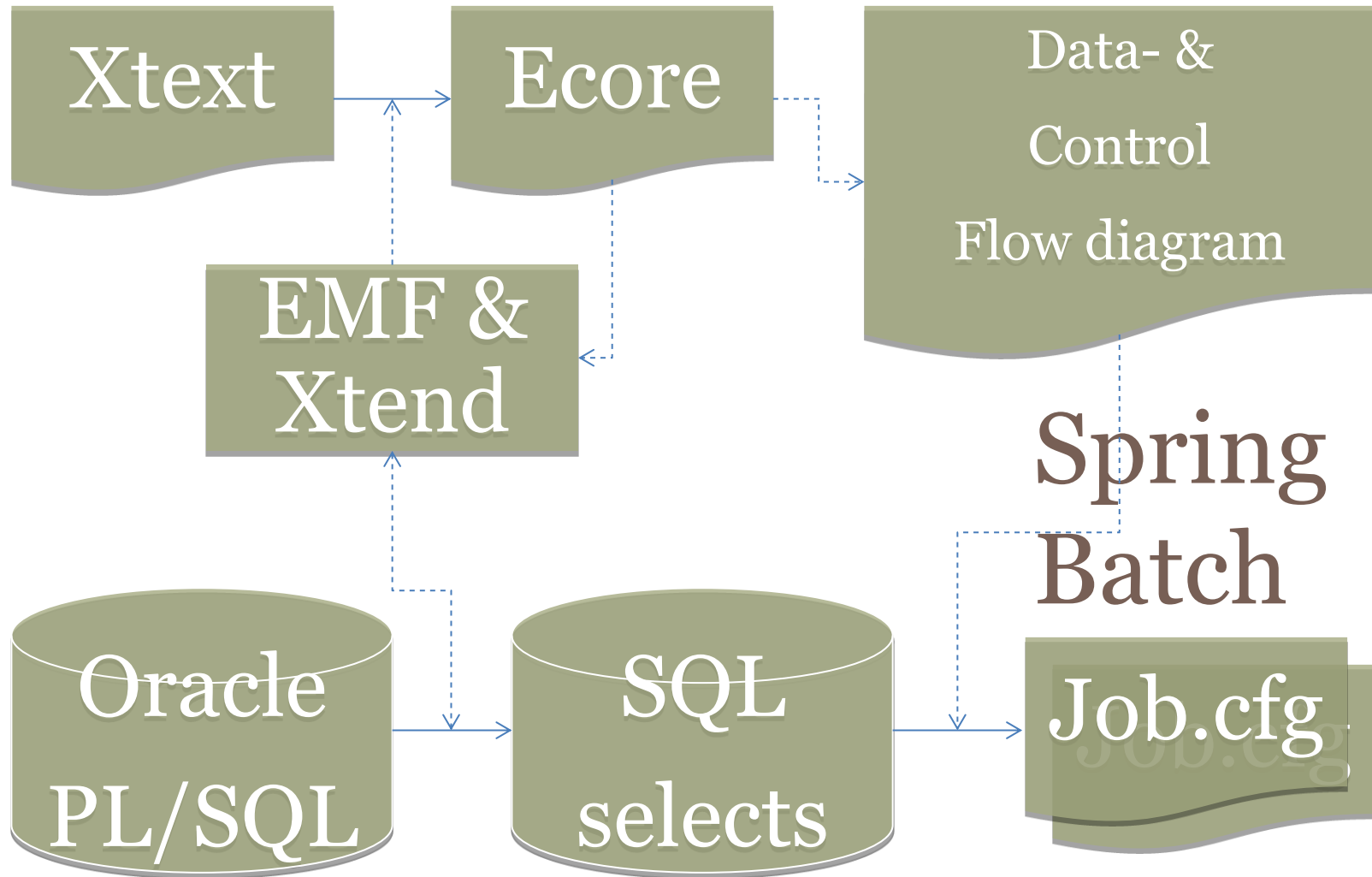
- Requirement: Generation of Spring Batch configuration
- For grouping Spring Batch jobs
 - Get overview of jobs and their dependent objects
 - Extract table names from PL/SQL code
 - create flowchart



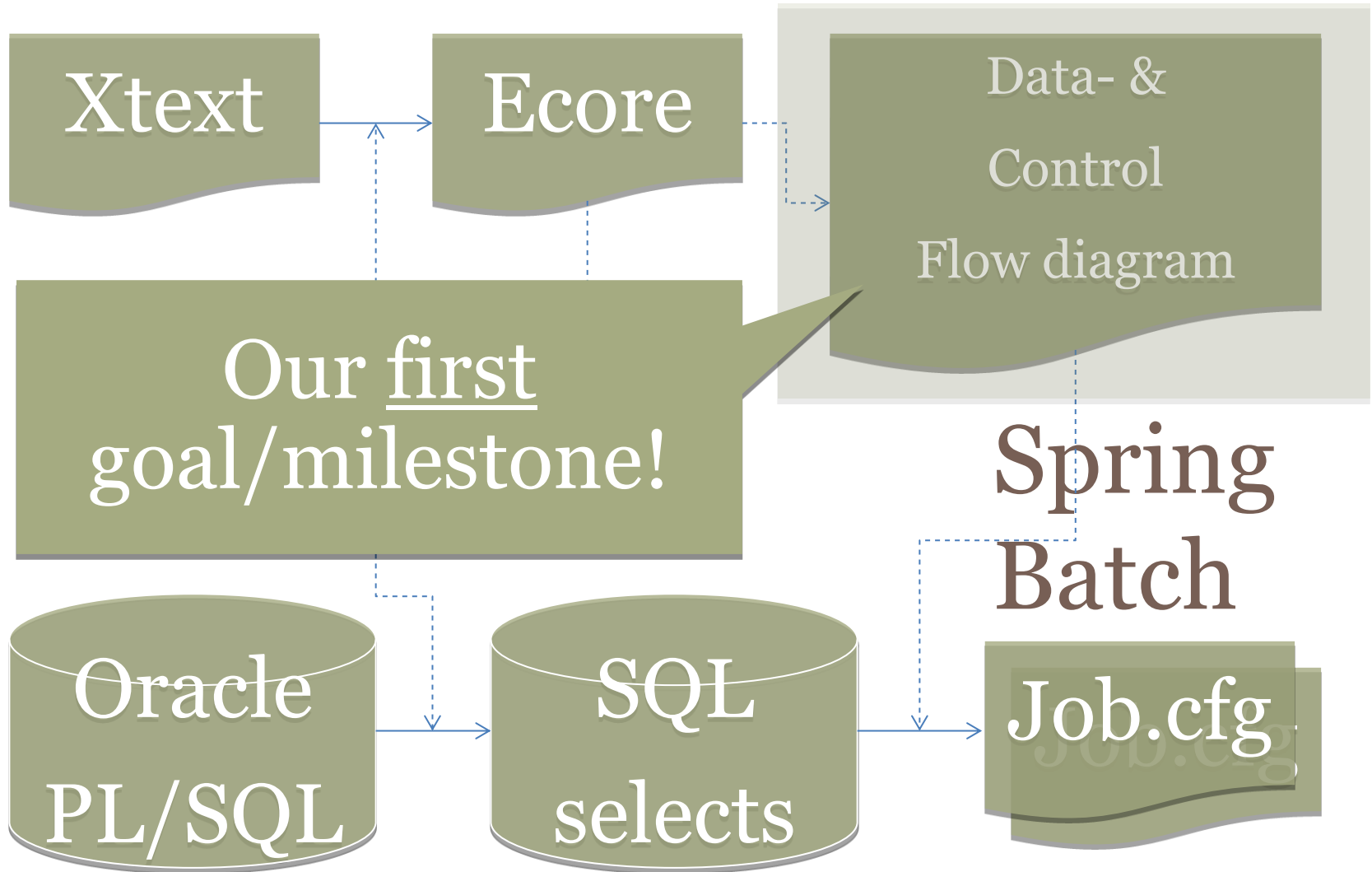
So what was the plan? (II)

- Extract exporting SELECT statements:
 - Go down the recursion
 - Built Abstract Syntax Tree (AST) as EMF model
- Model-to-Text transformation:
 - Generate Spring Batch Job.cfg files with the use of Xtend

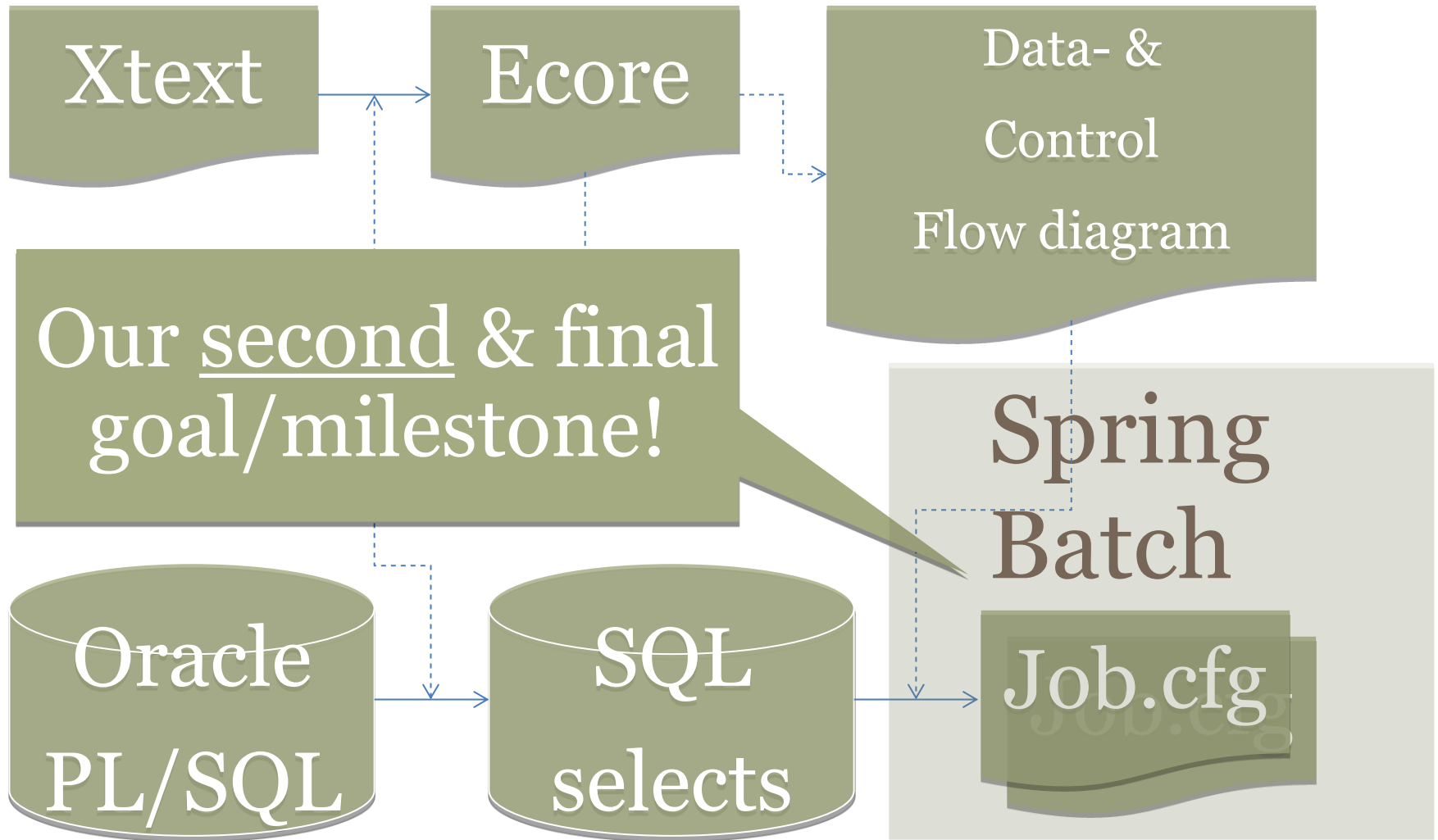
One proof of concept (I)



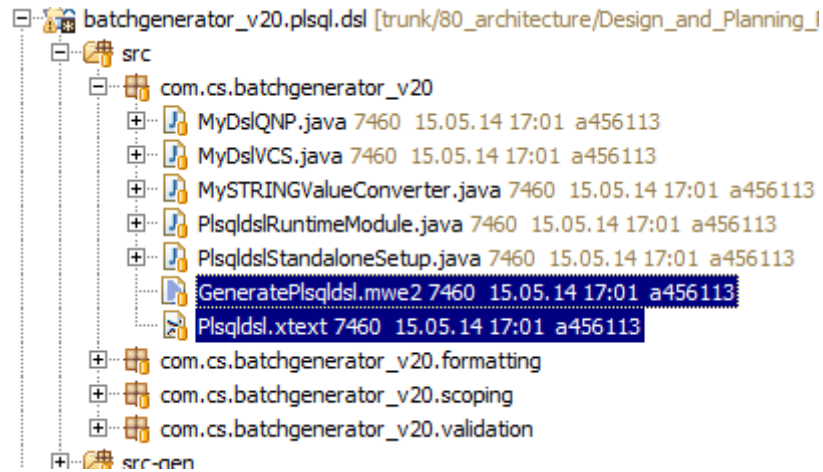
One proof of concept (II)



One proof of concept (III)



Demo



Look back

- We started with Xtext before it moved
 - from openArchitectureware
 - to the Eclipse Modeling Project
- For us this project was great exercise, since 2010:
<http://code.google.com/a/eclipselabs.org/p/plsql-editor/>
- We were uncertain, if for example memory consumption will explode
- We knew about the impact, if Spring Batch configuration will change (=> changes to Xpand files)

Conclusion

- “Uncertainty is an uncomfortable position, but certainty is an absurd one.” (@2nd Annual PHP North West Conference: Kevlin Henney)
- First know exactly the target (“know, where the finish line is”)
- Uncertainty: Find out impacts (then no probability of occurrence) on your “way”
- Be part of early design rendering in code to reveal additional design efforts
- We will carry on
 - Model-to-Model transformation (M2M): BMC Control-M model to Credit Suisse AG Java batch model
 - Eclipse Graphical Modeling Framework (GMF): Graphical Credit Suisse AG Java batch model editor

Q & A

- Please let me answer you questions
- Thank you for your time!

Backup slides