

**PIM → PSM → Syntax**

# What is new

**Old:** from XMI to XSD through XSLT directly

**New:** two steps

# Challenge 1: PIM → PSM

XML, JSON, SQL

## Element B

- a1
- a2
- b1

## Element C

- a1
- a2
- c1

original model,  
object-oriented, SQL

<abstract>

## Class A

- a1
- a2

## Class B

- b1

## Class C

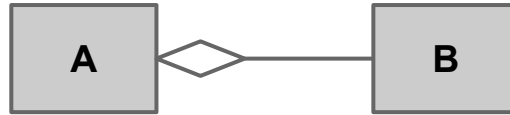
- c1

SQL

## Table A

- a1
- a2
- class
- b1
- c1

# Challenge 2: PSM $\rightarrow$ Syntax



```
<A>
  <Bs>
    <B/>
  <B/>
</Bs>
</A>
```

```
<A>
  <B/>
  <B/>
</A>
```

```
<A>
  <refB ref="1"/>
  <refB ref="2"/>
</A>
<B id="1"/>
<B id="2"/>
```

# Transformation

PIM → PSM → Syntax

## First step: **platform adaptation**

- ★ XMI → XMI
- ★ rules as config files
- ★ loss of information
- ★ default -vs- element-specific -vs- context-specific bindings

## Second step: **syntax generation**

- ★ XSLT
- ★ rules as config files

# Thoughts

- We separate the transformations.
  - Step 1: platform adaptation
  - Step 2: syntax generation
- We need a comparable documentation for all bindings (for developers).
- How to define the configuration?
- Documentation of both steps: human readable! machine actionable?
- How to handle element-specific