

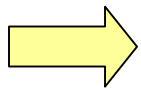
STEP implementations using EXPRESS-X and XML

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- **Part 14 (EXPRESS-X) will go out for CD after the meeting**
 - Part14 EXPRESS-X is a powerful declarative mapping language
 - practical usability has been proved in several pilot and real-world projects
- **Part 28 (XML representation of EXPRESS driven data) will get out for TS ballot soon**
 - Part 28 opens the door for applying powerful data processing tools of the XML world to STEP data

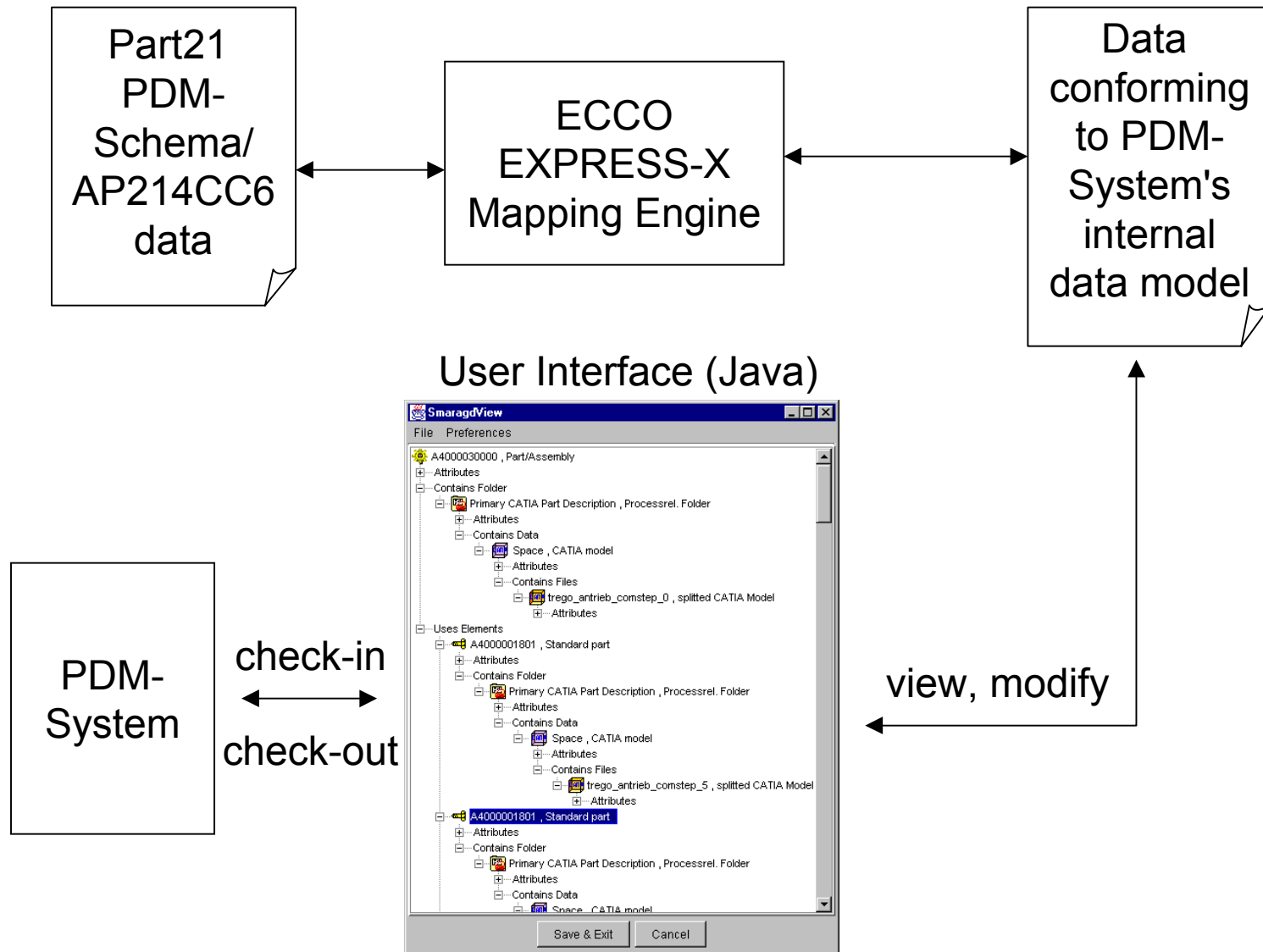


Both parts will change the STEP implementation world

- **Technology for using these parts is already available!**

Use of Part14 EXPRESS-X for the PDM-Schema processors

- **PDM-Schema/AP214CC6 data is mapped to an automatically generated EXPRESS-model corresponding to the internal data model of the target PDM-System**
- **the processor has been implemented with ECCO using Part14 EXPRESS-X (mapping) in combination with Java (user interface)**
- **implementation experiences/language improvements have been integrated into the current EXPRESS-X CD ballot document**
- **Expectations have been fully fulfilled**
 - ease of use
 - significant reduction of development time
 - efficiency
 - reliability and easy maintenance

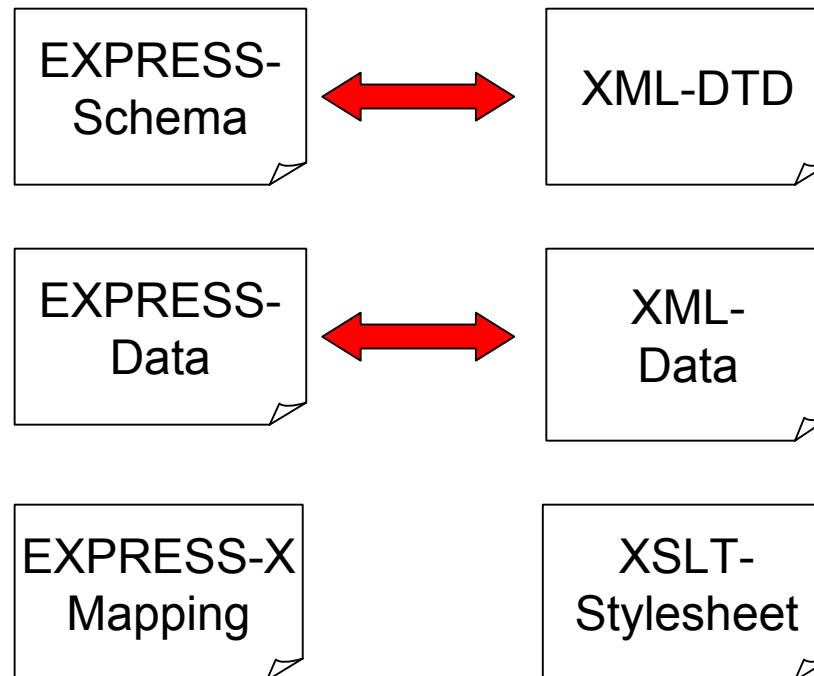


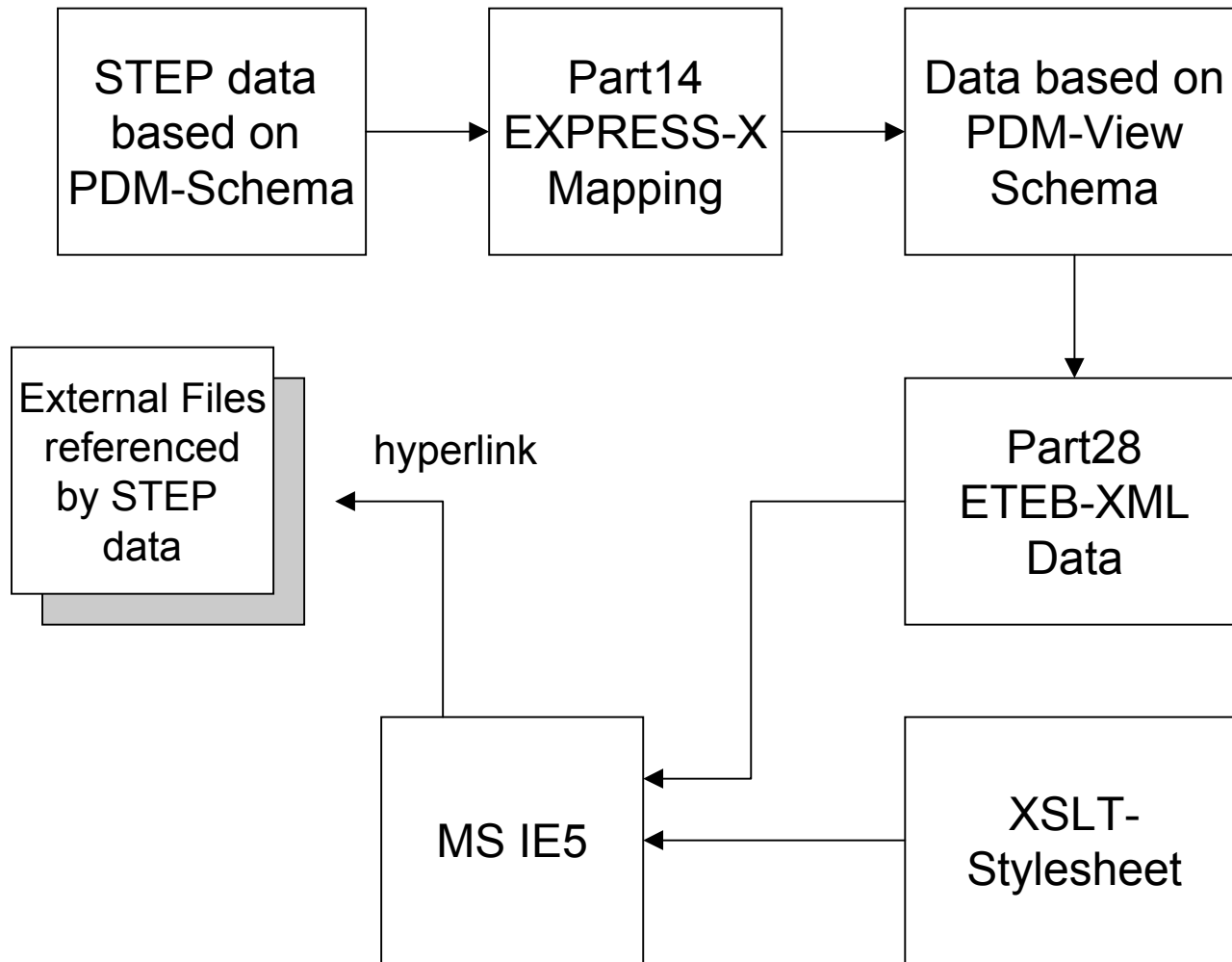
Use of XML and EXPRESS-X technology for PDM-data presentation

- Part28 provides different bindings for the representation of STEP data to XML
- for our approach the ETEB (EXPRESS typed early binding) was used

STEP World

XML World

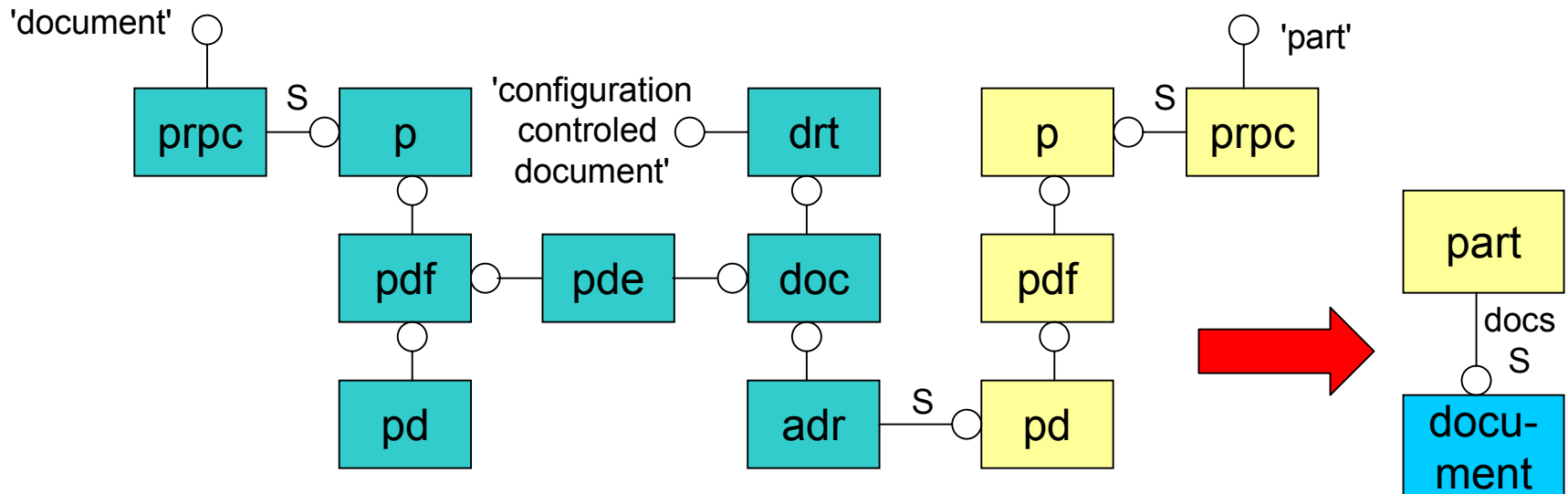




- **Used for complex structural data transformations**
- **Example:**
 - Map complex "document as product structure" model to a simple tree-like data model

PDM-Schema/AP214 CC6 data

PDM-View data



- **Generates HTML + JavaScript**
- **Generates a Tree-View based on the structure of the PDM-View Schema**
- **Contains Hyperlinks to files referenced by the STEP data**