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Usage of EMP in UBS

Robert Blust

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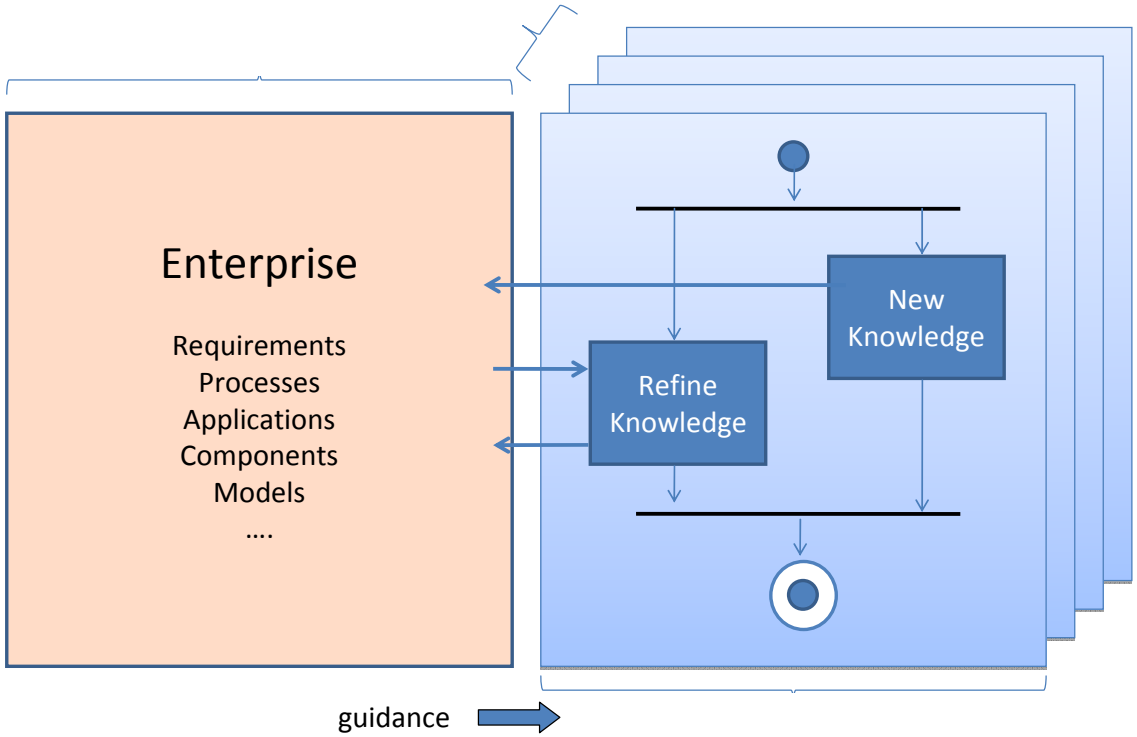
Vision Statement

Introduce a model centric approach to describe, manage and preserve the enterprise knowledge as a durable base (enterprise model). The enterprise model covers the decomposition of the application architecture (component model), the description of business capabilities, business concept, processes, requirements …. The enterprise model enables the IT architects to guide new project to the right architectural decision.

Well defined processes (workflows) guarantees the backflow of refined or new knowledge by a project into the enterprise.

The knowledge of the enterprise and the projects is captured in general purpose models based on industry standards like UML, BPMN and SYSML or in domain specific models.



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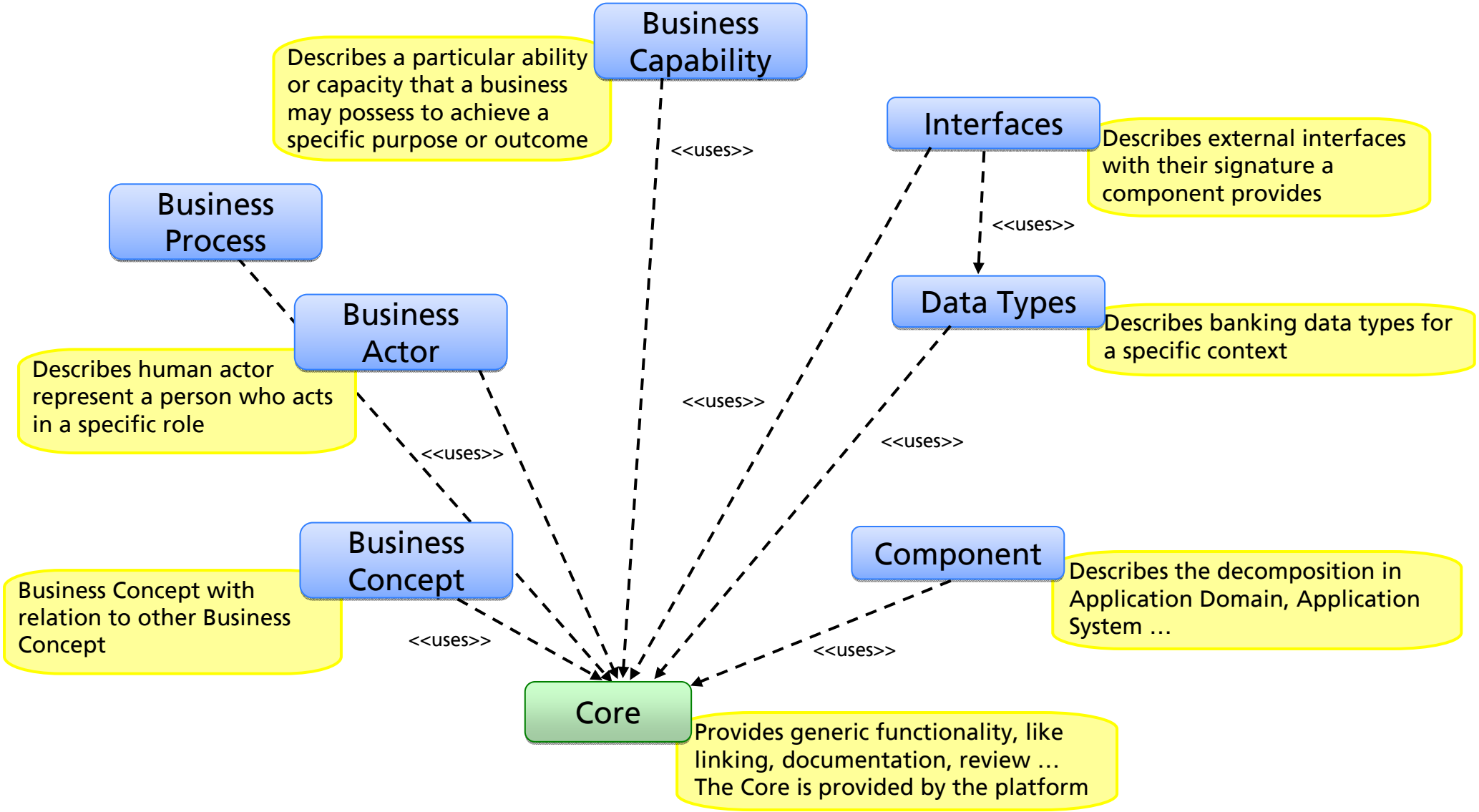
A Ecore model containing a EPackage

Enterprise Model (Assembly of individual meta models)



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Not complete !

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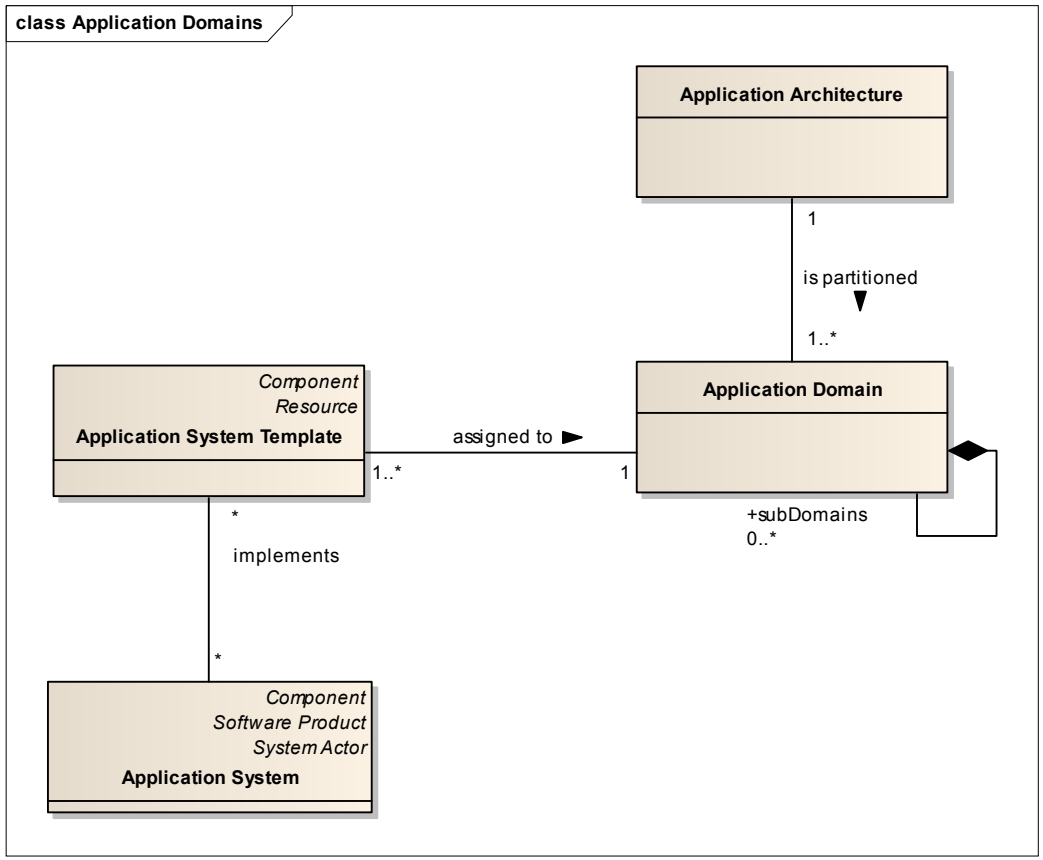
Application Architecture

- The component model structures the IT system into functional building blocks holding business capabilities and data; these are called Application System Templates. Application Domains are used as a taxonomy to classify application system templates and to define fundamental delineation principles for application systems templates. Application domains provide a structure which guarantees long-term stability.
- Each functional building block has assigned architects to maintain the building block and the related problem domains



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Enterprise Model (Assembly of individual meta models)

- The enterprise model (**large shared model with distributed editing**) is an assembly of individual meta models based on general purpose or domain specific languages dedicated to a particular problem domain
  - The base for all meta models is Ecore (isomorphic with OMG's EMOF)
  - Constraints on the meta model level are expressed using OCL
  - Each meta model
    - Has a specific purpose
    - Follows the same versioning standards
    - Follows the same naming conventions
    - Bases on the same meta meta model (ecore)
    - Has minimal external dependencies which are explicitly declared
    - Is formal
  - The overall meta model is
    - an assembly of the individual meta models
    - properly layered (avoids cyclic dependencies)

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Major Requirements (Eclipse Modeling Platform Requirements Version 1.0 April 27, 2010)

- **Model Version Management**
  - 1. Managing versions on various model granularity, meta-model and instances
    - 1.2 Create branches and merge back to the main (**temporality**)
  - 3. Merging of different models and version of models
  - 6. Support for meta-model change and update to appropriate instances
- **Model Audit Support**
  - 1. Overall end-to-end life cycle management / model governance (elements can be in different 'review' states)
  - 2. Quality Checks for Models
- **Core Platform Feature for Enterprise Use**
  - 1. Support for large models, including lazy loading, partial collection loading
  - 3. Support for modeling standards and open formats. Lowest denominator is the EObject (ECore)
  - 4. End-to-End project support from business architecture to code and testing
- **Flexible Content Support**
  - 1. General purpose models based on industry standards like UML, BPMN and SYSML
  - 2. Domain Specific Models
  - 3. M2M Transformation
  - 4. M2T Transformation

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Summary

- Enterprise
  - One large shared model with distributed editing captures the enterprise knowledge based on the assembly of many related meta models describing a specific problem domain.
  - Each problem domain is edited with a specific editor
  - The platform for maintaining the model supports temporality, branching and merging
  - Well defined processes (workflow) guarantees the backflow of refined or new project knowledge into the enterprise
  - Changes on the enterprise model are suspect to supervision (Governance)
- Project
  - Refine or invent new knowledge to the enterprise.
  - Reference architecture exists to standardize the design of a project. The development and continuous integration gets initialize from the design and the underlying reference architecture (M2M / M2T)

Contact Information

Robert Blust
robert.blust@ubs.com

UBS AG
Postfach
8098 Zürich
Tel. +41-44-234 11 11

www.ubs.com