Integration Architecture Tool Chain

Eclipse Finance Day 2013

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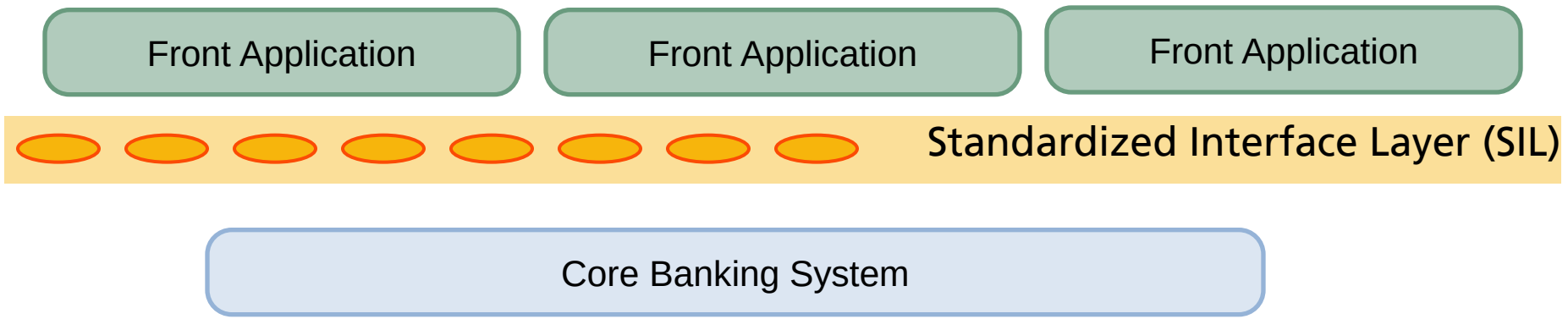
Overall Mission

- Tool Chain enables the IT Organization to define, maintain and manage coarse grained interfaces for their applications.
- Interfaces are defined, managed and maintained in a platform independent way using code generators to provide platform specific implementations of these interfaces.



Standardized Interface Layer

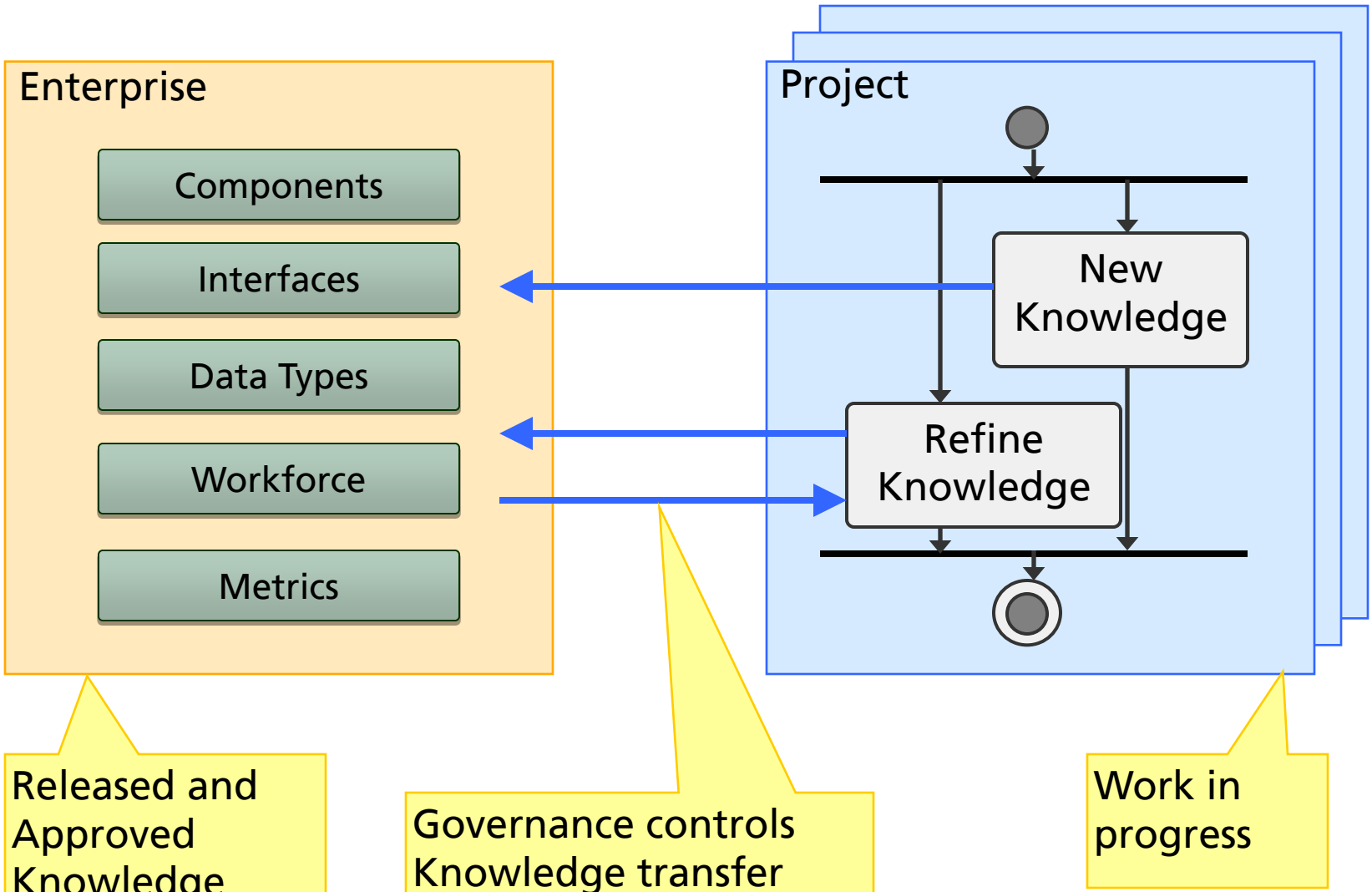
- Supported Interaction Patterns
  - Online Synchron
  - Batch File Transfer
  - Messaging

The definition of a standardized interface layer (SIL) is key.

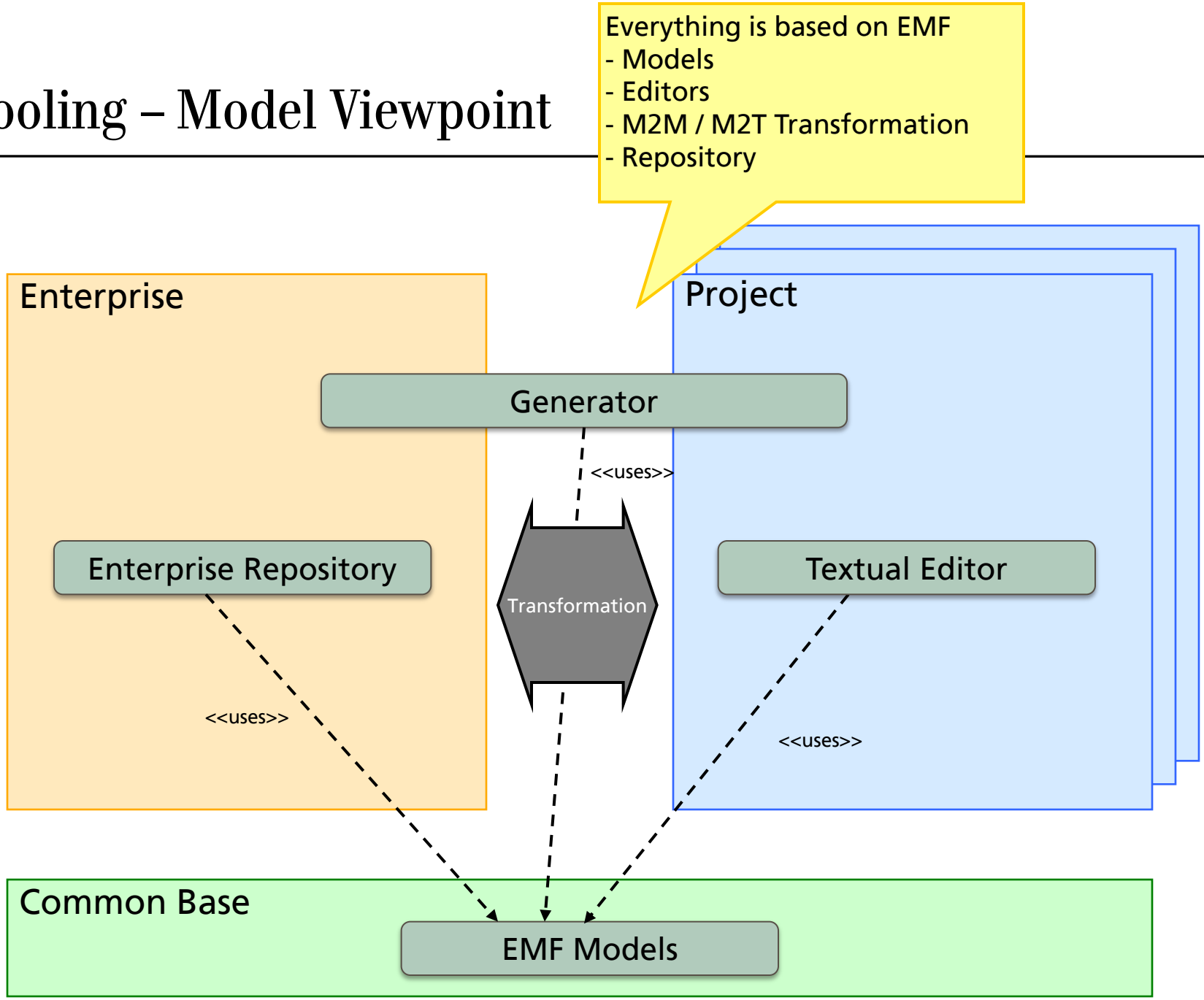
Requires:

Governance and Design of relevant Interfaces at a global Enterprise Level

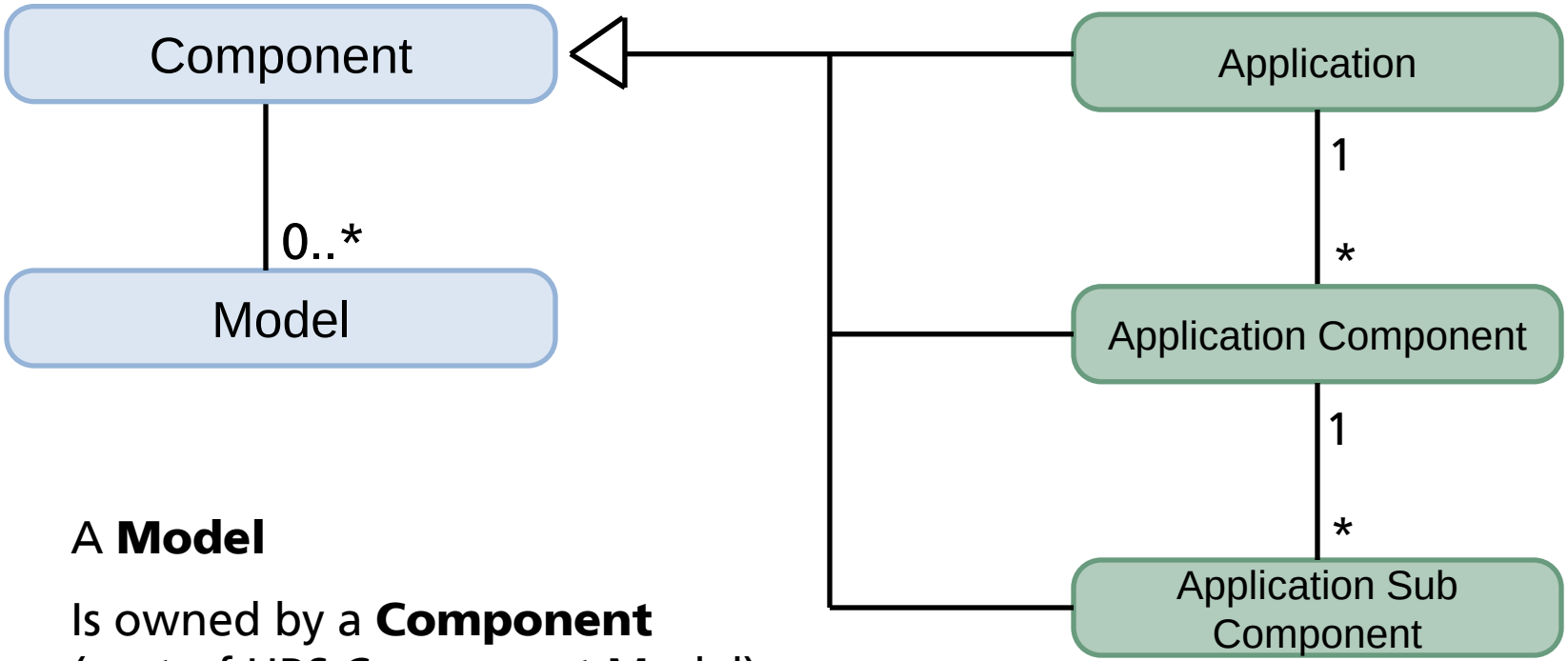
IA Tooling – Context



IA Tooling – Model Viewpoint



Model Ownership



A **Model**

Is owned by a **Component**
(part of UBS Component Model)

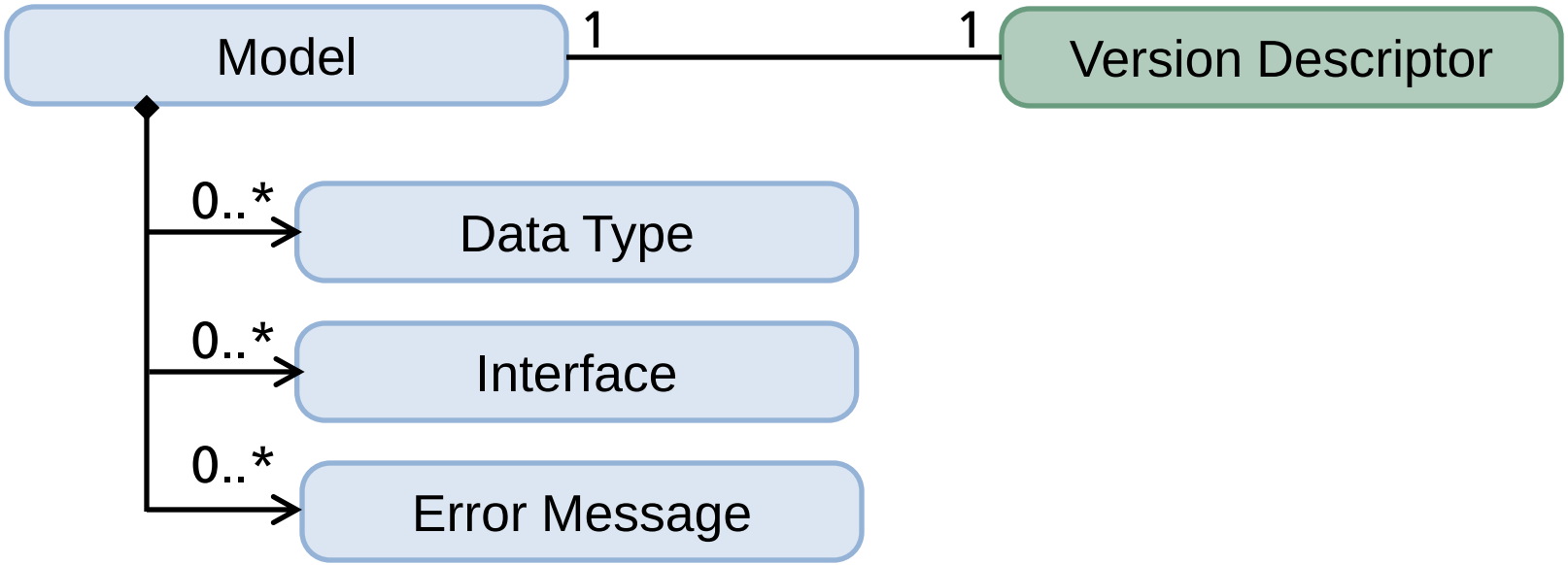
Requirements

- **Structured Data Models**
  - Describe
  - Create
  - Persist
  - Enterprise Persistence
  - Project Editing / Persistence

- **Model Ownership**
  - Maintain Component Model on Enterprise Level
  - Assign Model Ownership

  → **Custom Manifest for Model Projects**

Model Versioning



A **Model**

Contains many **Data Types**

Contains many **Interfaces**

Contains many **Error Messages**

Contains **at least one Single Element**

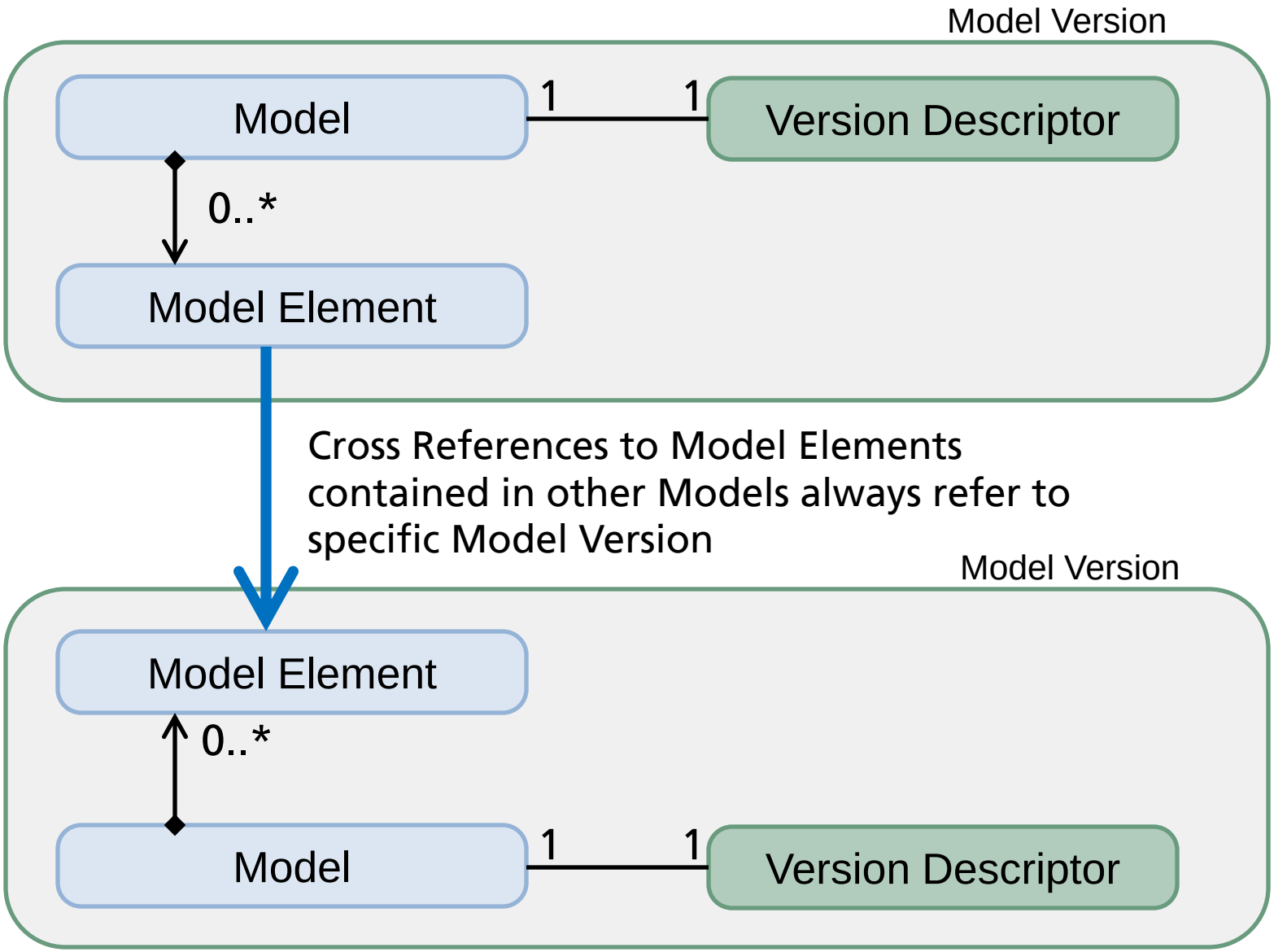
Has a **Version Descriptor**

Requirements

- **Model Versioning**
  - Descriptor for Model Version
  - Release of Versioned Model
  - Global Distribution of Versioned Models

  → **Out of the box Maven usage → POM**

Model Cross References

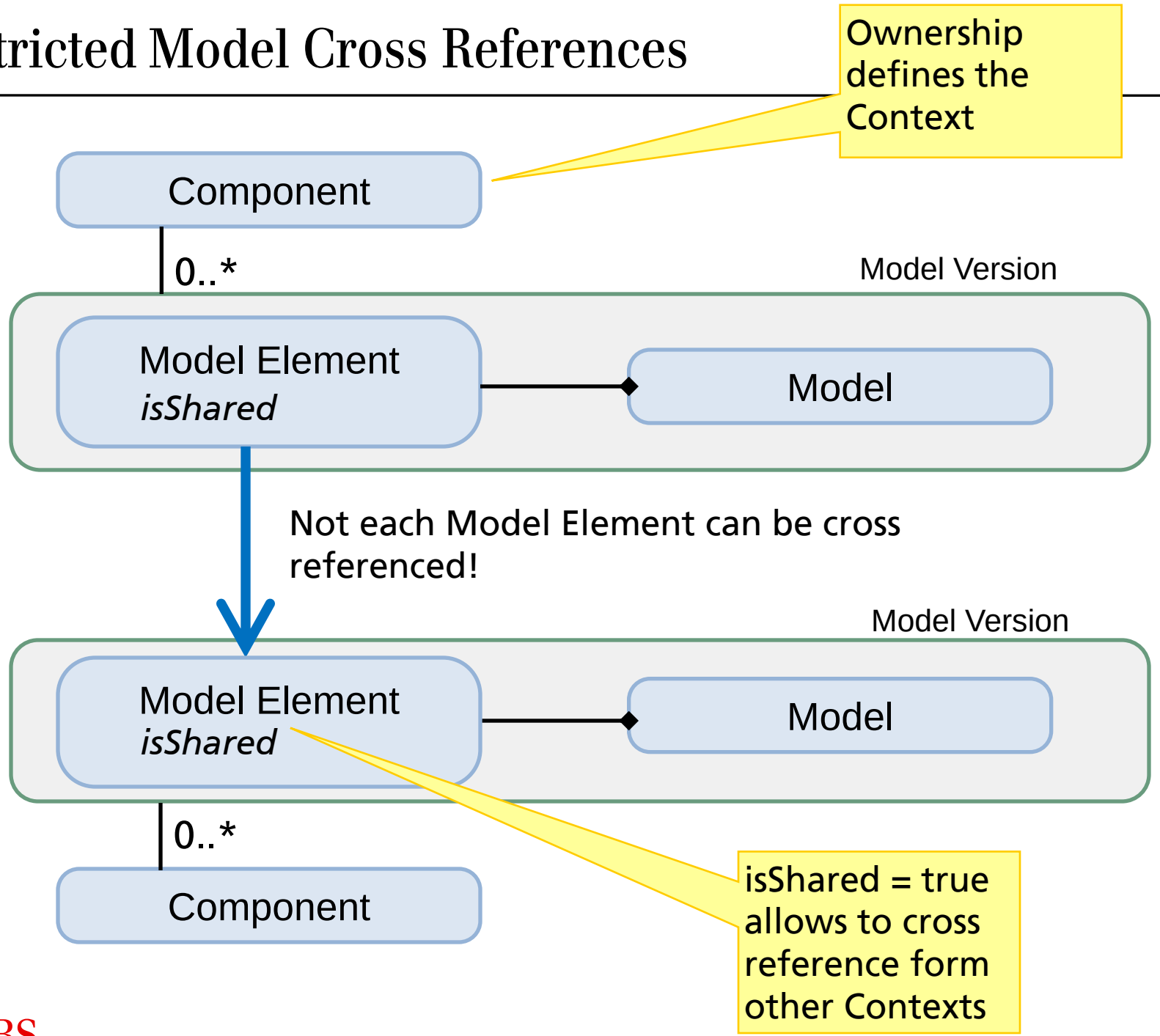


Requirements

- **Model Cross References**
  - Dependency Management
  - Dependency Resolving

  → **Out of the box Maven usage → POM**

Restricted Model Cross References



Requirements

- **Restricted Model Cross References**
  - Xtext Scoping Feature

  → **Custom Scope Provider works with custom Manifest for Model Projects**

Abstract

- UBS Integration Architecture Tool Chain
  - The Tool Chain enables the IT Organization to define, maintain and manage coarse grained interfaces for their applications. These interfaces are defined, managed and maintained in a platform independent way using code generators to provide platform specific implementations of these interfaces.
  - The talk will give an overview about the concepts and how they are implemented using Eclipse and Open Source Technologies.
  - Clear separation of Interface Definition, Implementation and Instantiation
  - Versioning, Ownership and Cross References of Artifacts
  - Continuous Integration

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Robert Blust works as an IT Architect for UBS WM&SB IT and is responsible for the strategic tool landscape supporting the software development lifecycle.
Since 2009 he leads a growing team realizing the vision of an integrated tooling platform based on the Eclipse Modeling Framework with a strong focus on model based engineering, scalability and collaboration.

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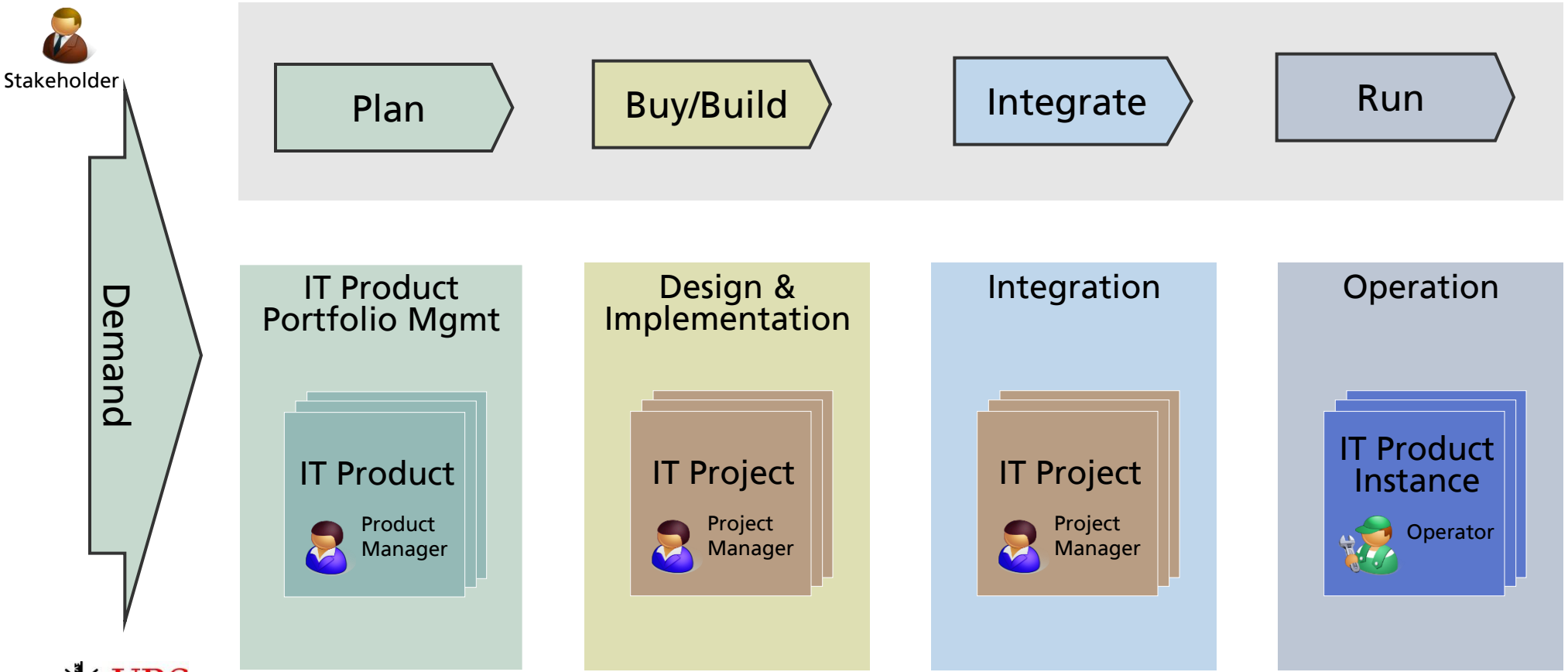
Vision

Model-Based Engineering

- **Capture & Preserve knowledge as models**
  - Along the IT Supply Chain



IA Tooling – Common Base