



Building model-based Applications with the EMF Client Platform

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Warning

- Only 6 slides until we get started with coding
- Please:
 - Install Eclipse Galileo Modeling Edition
 - Install EMFCP from Update Site
 - Report any problem to the co-instructors



You...

- ... want to build an entity-centric application?
- ... want to use EMF to model your entities?
- ... want to have a running version ASAP?

- ... do not (yet) know how the UI will exactly look like?
- ... do not (yet) know what additional frameworks to use?
- ... do not want to deal with files and adapters?

=> You should use the EMF Client Platform



Manifest of the EMF Client Platform

- One-click Application
- Extensible and Replaceable
- EMF-Centric





Features

Navigator

The Navigator view shows a hierarchical tree of project documents, including Sprint 50, Backlog, and various internal and external reports.

Editor

The Editor view displays a detailed form for creating an 'Actionitem' named 'feature branding'. It includes fields for Name, Description, Participants, Predecessors, Successors, Annotated Model Elements, Annotations, Comments, Activity, Containing Workpackage, Assignee, Reviewer, Due Date, Priority, Resolved, and Done.

Validation View

The Validation View lists validation constraints and their descriptions, such as 'Affected ModelElement' and 'Creator'.

Severity / Constraint	Description	Affected ModelElement	Creator
2 Section Annotation Constraint	LeafSection: 'New Bug Reports / Feature Requests / Action Items / Issues'	New Bug Reports / Feature Reque	unicease
1 ActionItem Assignee Constraint	ActionItem: 'Make Project's EOObjectMap attribute non-transient' has no	Make Project's EOObjectMap att	muelleid
2 ActionItem Activity Constraint	ActionItem: 'Make Project's EOObjectMap attribute non-transient' does n	Make Project's EOObjectMap att	muelleid
2 ActionItem Annotated Constraint	ActionItem: 'Make Project's EOObjectMap attribute non-transient' is not a	Make Project's EOObjectMap att	muelleid
1 ActionItem Assigned Constraint	ActionItem: 'Change of 'Assignee' including mapping has no Att' Change export functions to inclu	muelleid	muelleid
2 ActionItem Activity Constraint	ActionItem: 'Change of 'Activity' including mapping has no Att' Change export functions to inclu	muelleid	muelleid
2 ActionItem Annotated Constraint	ActionItem: 'Change of 'Annotations' including mapping has no Att' Change export functions to inclu	muelleid	muelleid
1 ActionItem Assigned Constraint	ActionItem: 'Migration from ModelElement to Plain EOObject mode' has no A	Migration from ModelElement to	muelleid
2 ActionItem Activity Constraint	ActionItem: 'Migration from ModelElement to Plain EOObject mode' does no	Migration from ModelElement to	muelleid
2 ActionItem Annotated Constraint	ActionItem: 'PerformanceTests for export functionality' has no Assignee.	PerformanceTests for export func	muelleid

Dialogs

The dialog boxes show the 'Search Model Element' and 'Add new model element' interfaces, which allow users to search for and add new model elements like tasks, actions, and work packages.

Model Workspace



EMF Client Platform (EMFCP)

Architecture

Your Application

Model

Custom View

Custom Control

Custom Constraint

EMF Client Platform (ECP)

Editor

Navigator

Validation

UI.common

Workspace

Eclipse Frameworks

EMF.Edit

EMF Validation

Databinding

...

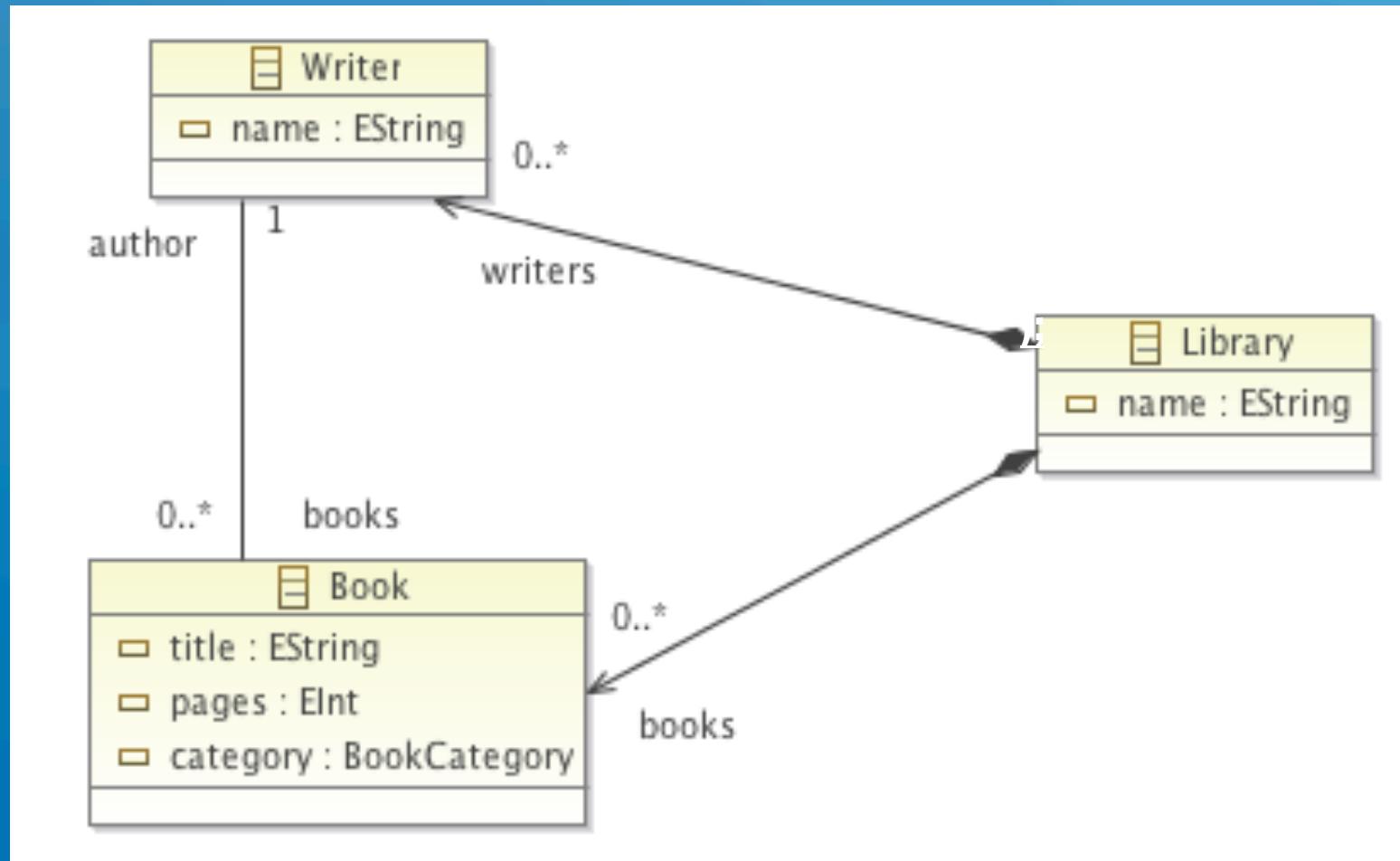
EMF Client Platform (EMFCP)



Tutorial



The Library Model Example



EMF Client Platform (EMFCP)



Generic UI

The screenshot displays the EMFCP interface with three main windows:

- Navigator**: Shows a hierarchical tree view of project documents, sprints, and other artifacts.
- Editor**: A detailed view of an "Actionitem" named "feature branding". It includes fields for Name, Description, Participants, Predecessors, Successors, Annotated Model Elements, Annotations, and Attachments. It also shows comments, activity, containing workpackage, assignee, reviewer, due date, priority, resolved status, and done status.
- Validation View**: A table listing validation constraints and their descriptions, such as "Affected ModelElement" and "Creator".

The screenshot shows two dialog boxes:

- Search Model Element**: A search interface with a text input field and a list of matching items, including various model elements like "Actionitem", "WorkPackage", and "Milestone".
- Add new model element**: A dialog for creating a new model element, with a "Select model element type" dropdown and a "Search" field.

Dialogs



Modify the model

- Add E-Mail to author
- Add Date of Birth to author
- Add LP with Title and digitalized
- Modify Label Provider



Customize the Editor

- Add control for E-Mail attribute
- Add new page to editor

Writer hallo [Writer]

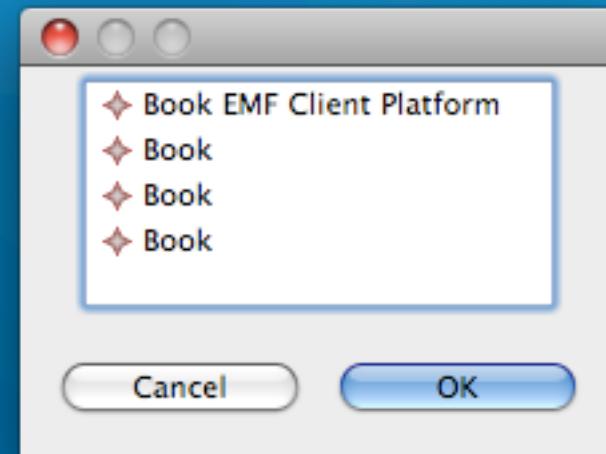
Name	<input type="text" value="hallo"/>
EMail	<input type="text"/> <input type="button" value="send Mail"/>
Date Of Birth	(Not Set)

Standard View Custom Page



Customize the Navigator

- Add custom drop adapter for Book
- Add custom opener for Library





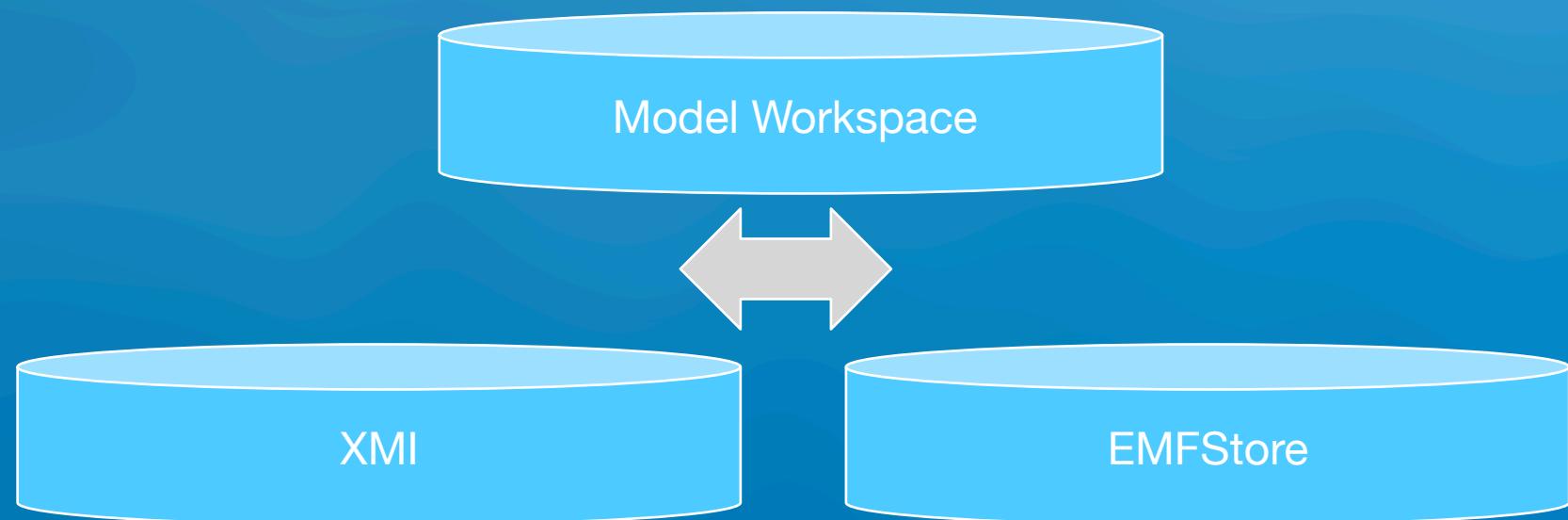
Validation

- Show existing Validation rule
- Add new Validation Rule

Severity	Constraint	Description	Affected ModelElement	Creator
4	Book Author	This book has no author	Book EMF Client Platform	unknown
4	My constraint	This Book has no title	Book	unknown
4	My constraint	This Book has no title	Book	unknown
4	My constraint	This Book has no title	Book	unknown



Transparent Workspace





More Information about EMFCP

- www.emfcp.org => Developer Wiki
- unicase.blogspot.com
- Twitter/[emfcp](#) #emfcp
- Eclipse Project

