

The ADOxx[®] Metamodelling Platform: A Technical View

2nd OMI Workshop, Vienna

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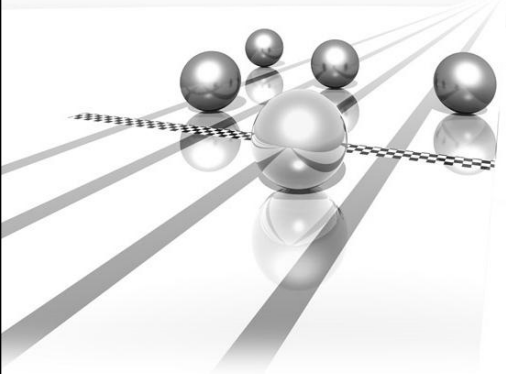
The OMI Perspective



universität
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Agenda



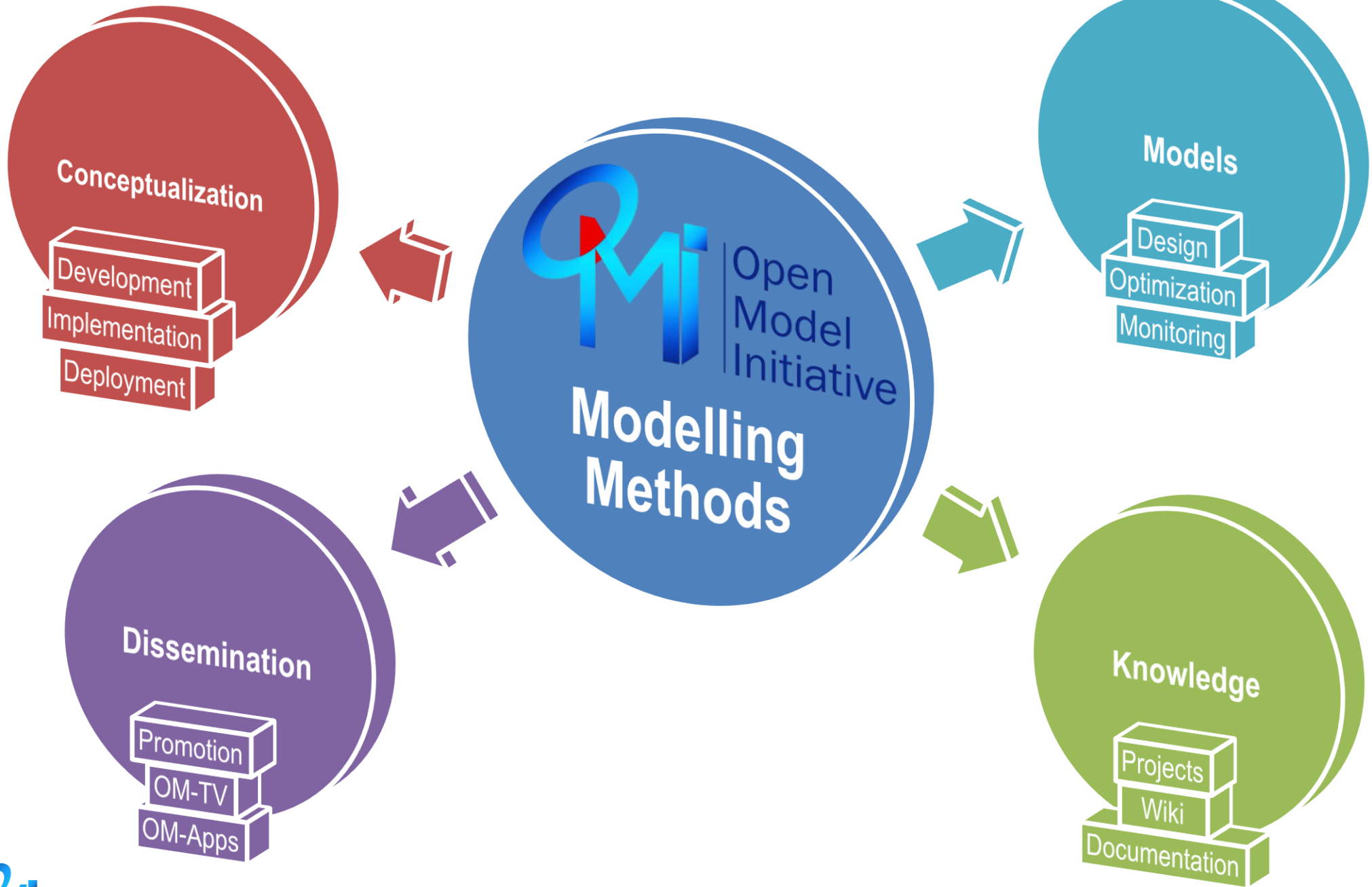
1 Overview

2 ADOxx[®] Platform Functionality

3 Modelling Method Implementation from ADOxx[®] Viewpoint

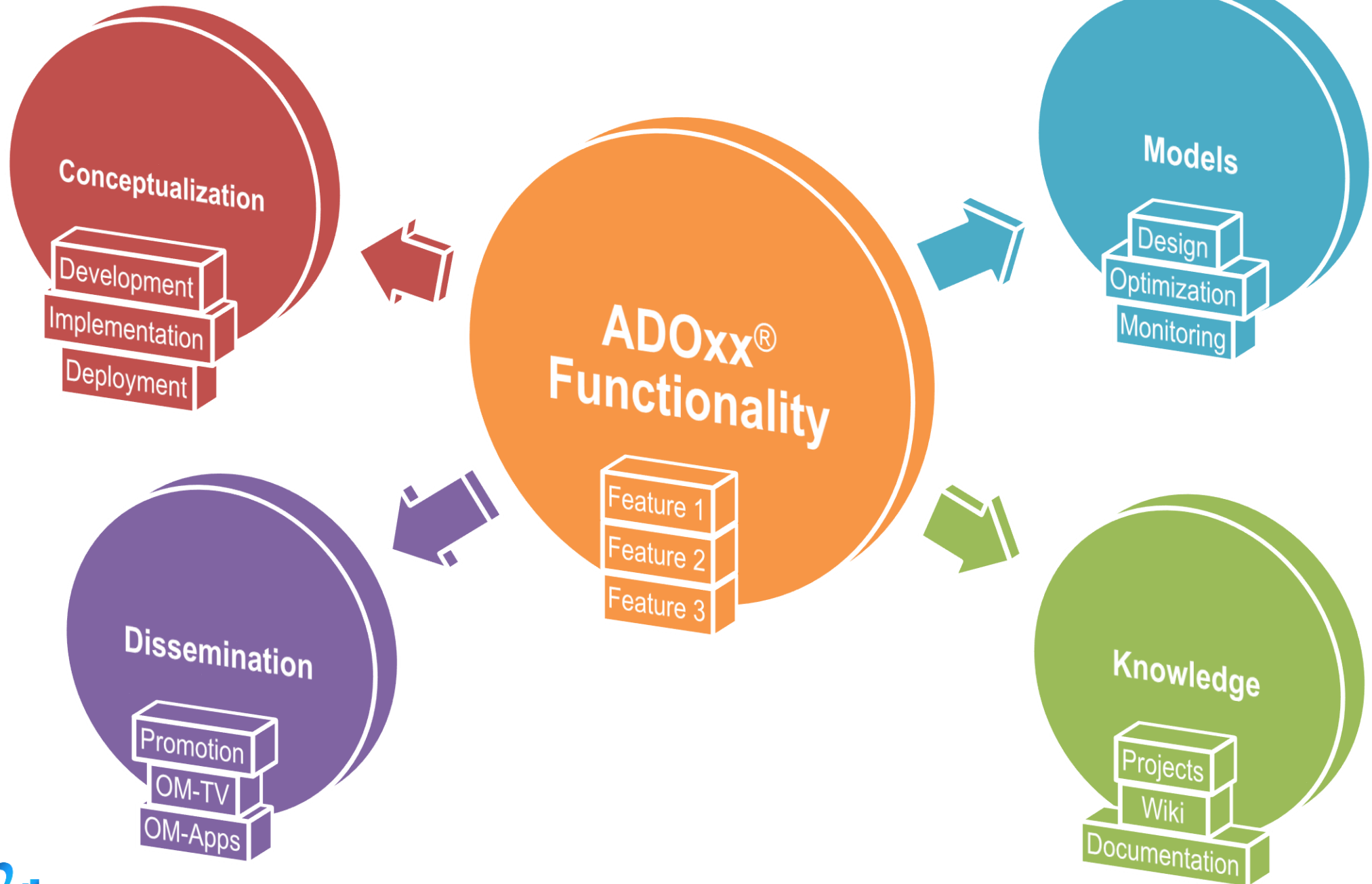


The Open Model Initiative: The Focus





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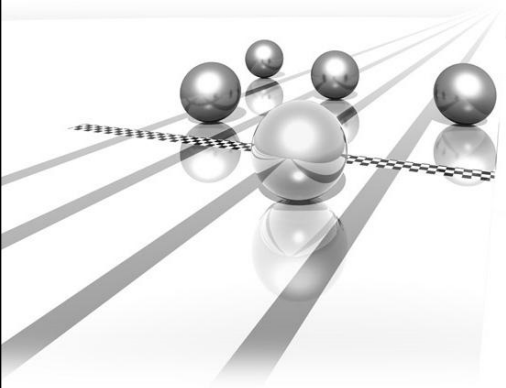




The ADOxx[®] Metamodelling Platform

ADOxx[®] is a metamodelling development and configuration platform for creating domain-specific modelling tools.

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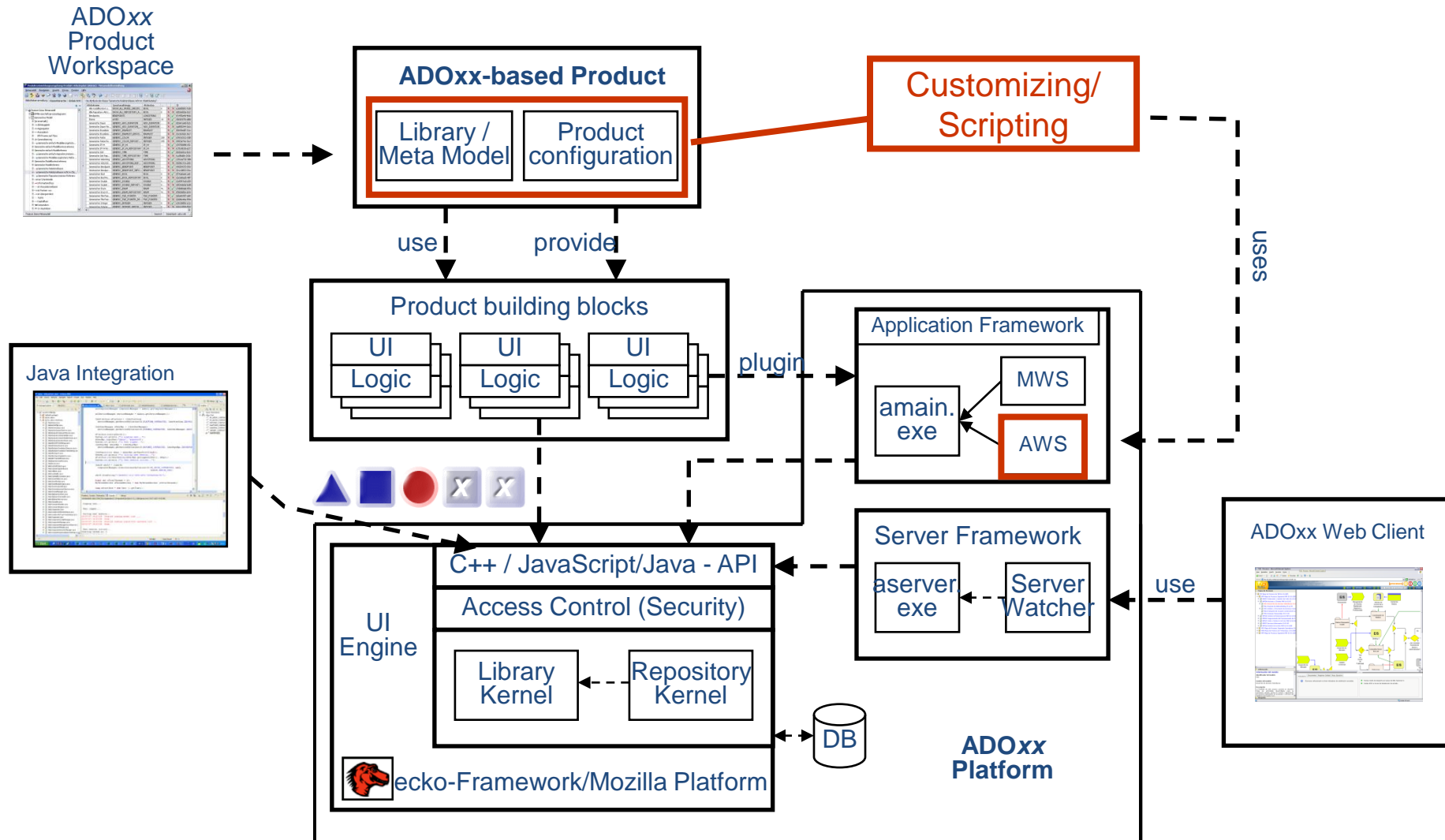


ADOxx[®]: **Functionality View**

Scalability	<ul style="list-style-type: none">▶ Openness▶ Client-side and server-side components▶ Multi-threaded
Multi Product Ability	<ul style="list-style-type: none">▶ Extension Capabilities▶ Component-oriented (incl. migrateable component settings)
Web-enabled	<ul style="list-style-type: none">▶ Web Service interfaces using standards▶ Web Client
Adaptability	<ul style="list-style-type: none">▶ Metamodelling with a rich set of concepts▶ Personalization, Scripting▶ Multi-Level Customizing▶ Event-based▶ Flexible view concept
Extended Multi User Support	<ul style="list-style-type: none">▶ Shared repository (incl. sophisticated search mechanisms)▶ Role-based Access▶ Extended Multi-Language Support and Unicode▶ SSO support

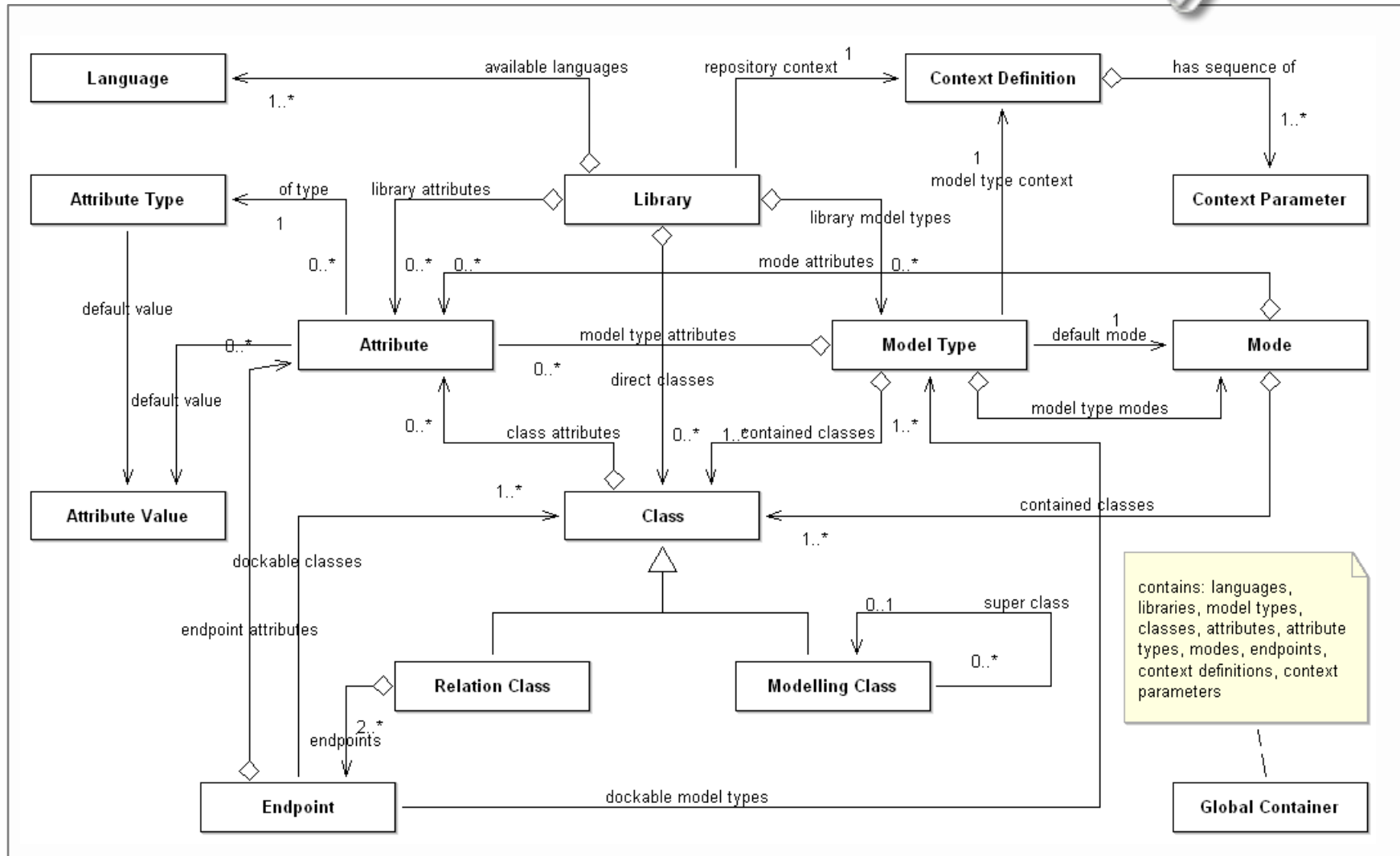
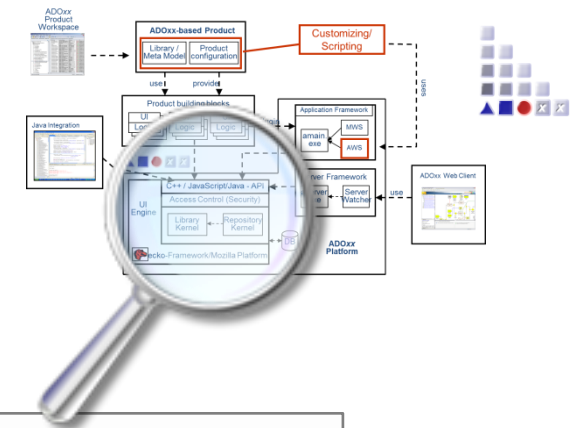


ADOxx[®]: Component-Oriented View



MWS: Modelling Workspace, AWS: Administration Workspace

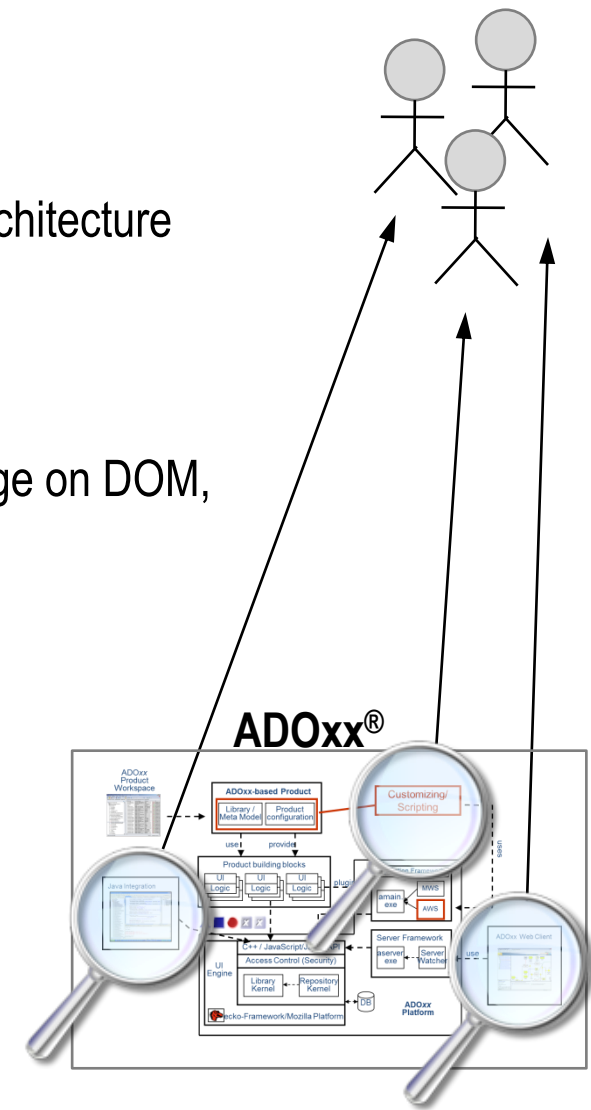
ADOxx[®]: Extract of the Meta-metamodel



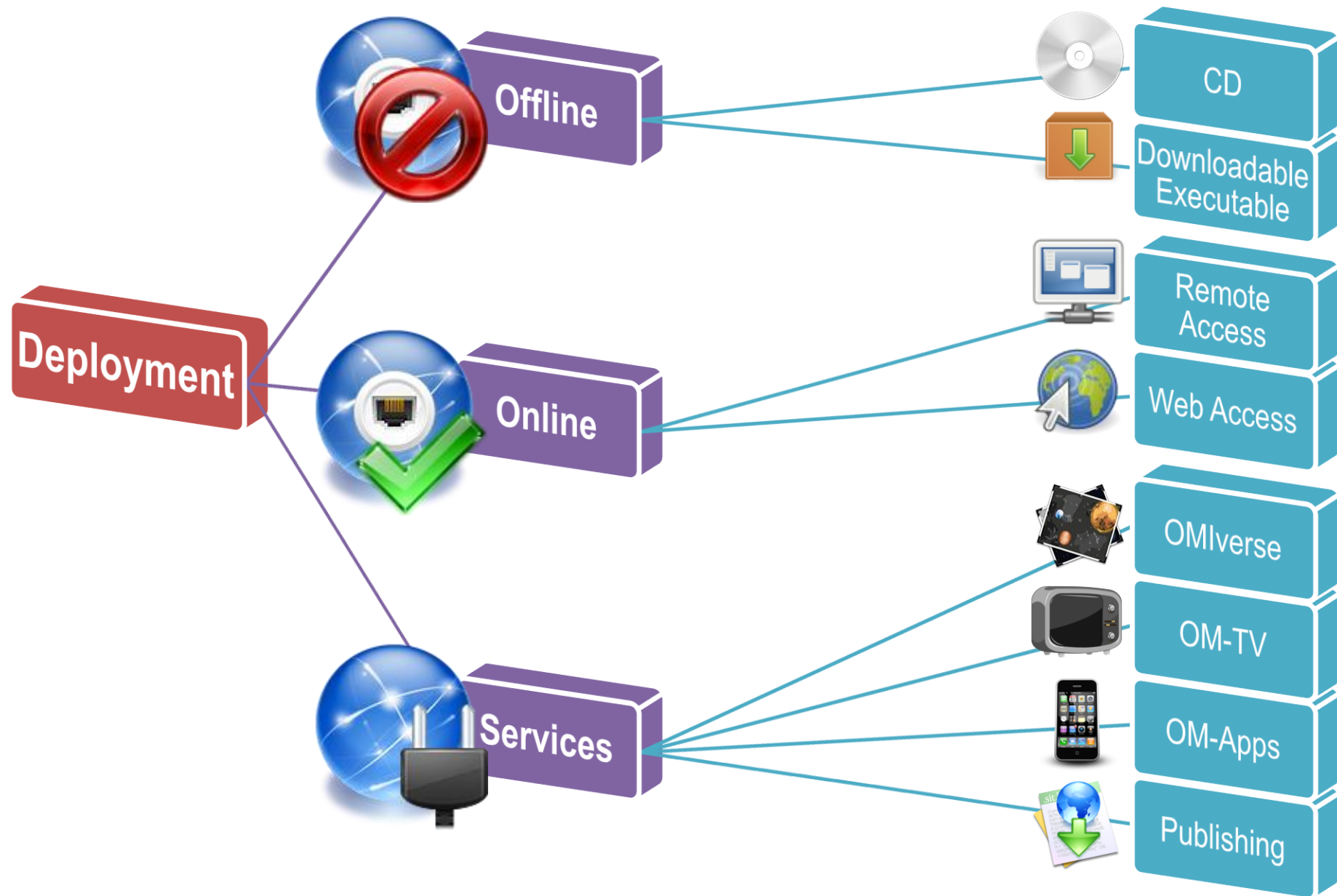


ADOxx®: Development View

- Basic
 - Examples: simple dialogs, menu structures
 - Skills: AdoScript, JavaScript, XUL, selected ADOxx APIs, ADOxx architecture
- Advanced
 - Examples: view development
 - Skills: skills for standard scripting plus XML, SVG, general knowledge on DOM, deep knowledge on ADOxx APIs
- Add-On Development
 - Examples: new publishing templates
 - Skills: XML/HTML, XSLT, JS, FOP, Ext JS
- Plug-In Development and Extensions for Web Client
 - Examples: web plug-ins,
 - Skills: JS, Ext JS, HTML, Java (for server-side extensions)

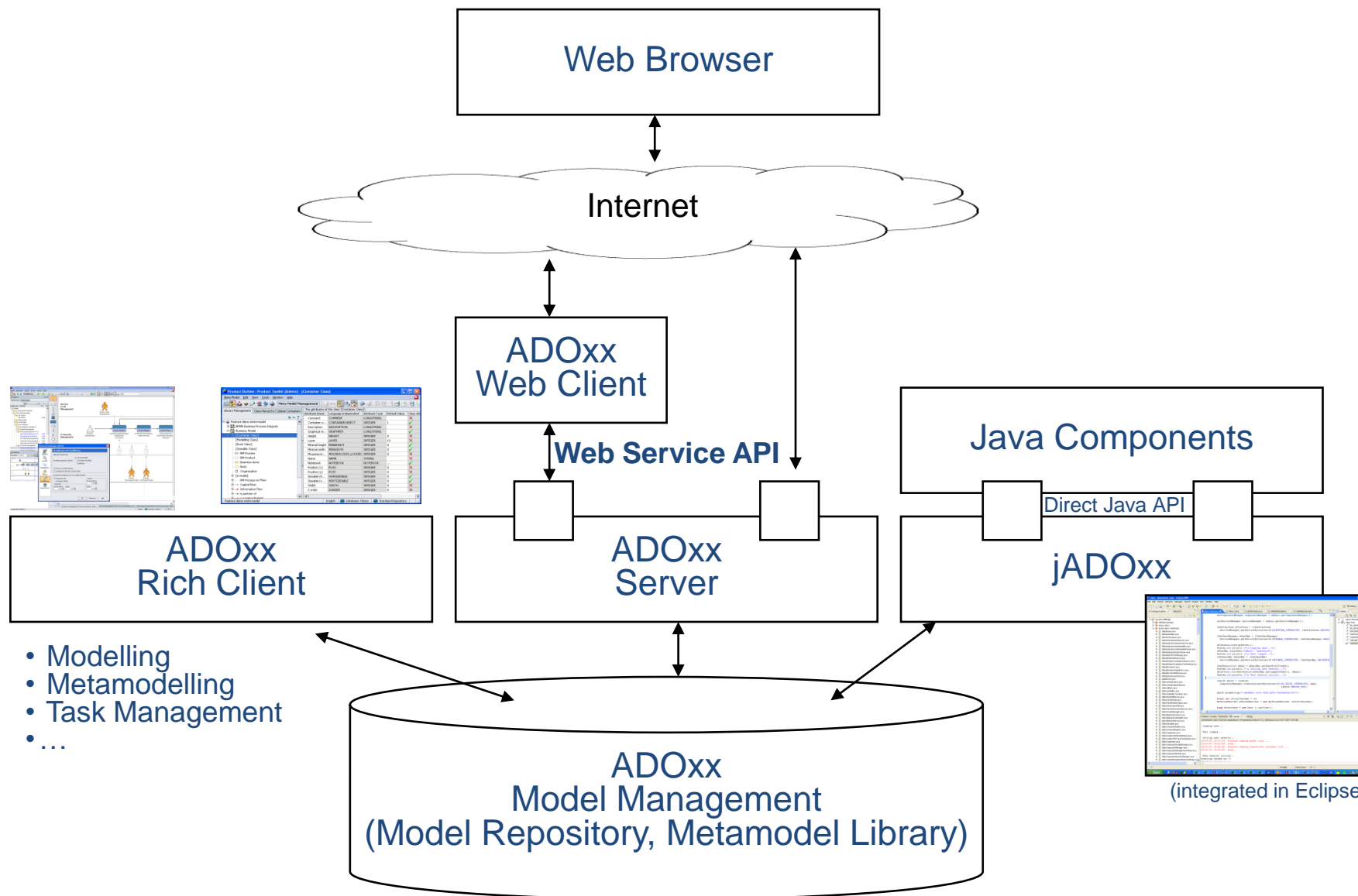


ADOxx[®]: Modelling Method **Deployment** Possibilities

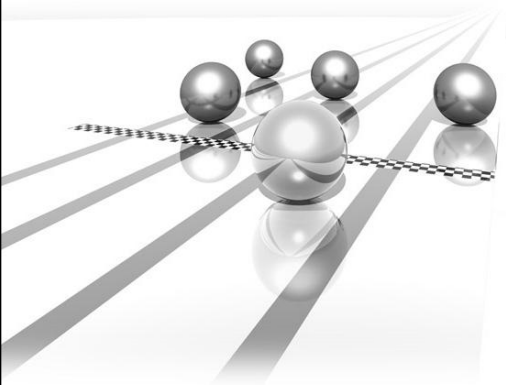




ADOxx[®]: Deployment Architecture



Agenda



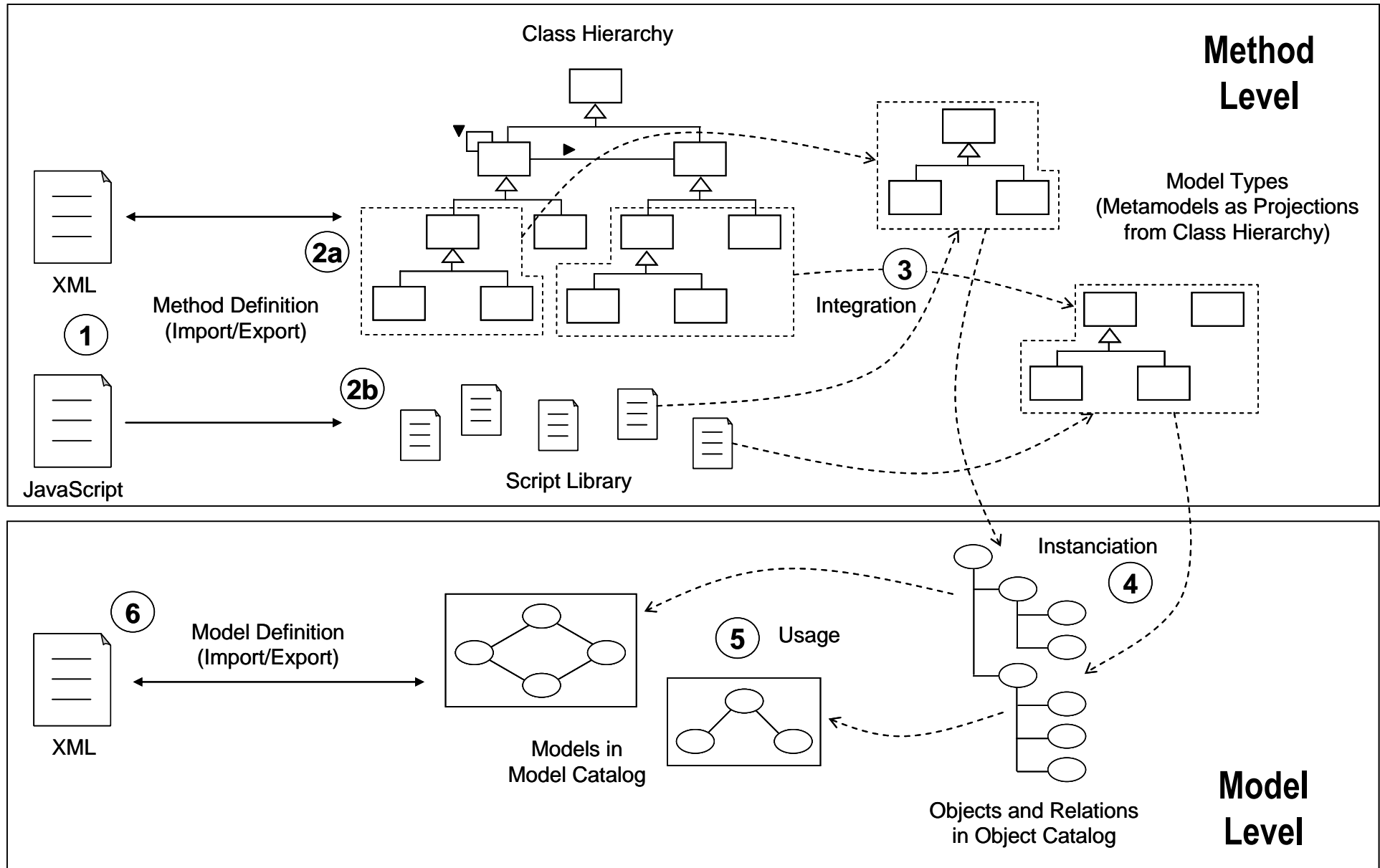
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ADOxx[®]: Metamodelling Hierarchy



Source: Kühn, H.: Methodintegration im Business Engineering (PhD Thesis, in German), University of Vienna, 2004, p. 212



Selected Characteristics: Metamodel Management

ADOxx: Administration Workspace (Admin) - BPMN Business Process Diagram

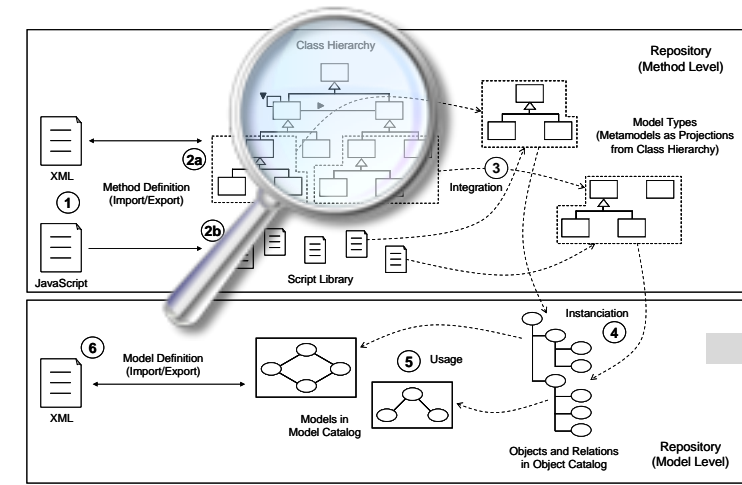
Meta Model Management

Library Management Class Hierarchy Global Conta Available Components

The @attributes of the model type 'BPMN Business Process Diagram':

Attribute Name	Language Independent	Attribute Type	Default Value	Class Attribute	Context-Specific	ID
Author	AUTHOR	String (STRING) (STRING)				(850ec35c-...)
Chapter "Common"						
Name	NAME	String (STRING) (STRING)				(33e23487-...)
Description	DESCRIPTION	Long String (LONGSTRING) (L...)				(bd135b53-...)
Comment	COMMENT	Long String (LONGSTRING) (L...)				(b5d83252-...)
Is Principal Component Behavior	IS_PRINCIPAL_COMPONENT_BEHAVIOR	Bool (BOOL) (BOOL)				(af7d6c60-...)
Classes resp. model types displayed	DISPLAYED_CLASSES	String (STRING) (STRING)	TASK_DATA_O...			(115bb16f-...)
Classes with locked mouseaccess	LOCKED_MOUSEACCESS_CLASSES	Long String (LONGSTRING) (L...)				(beb13e8c-...)
Connectormark align	CONNECTORMARK_ALIGN	Integer (INTEGER) (INTEGER)	0			(dd1fb150-...)
Connectormark mode	CONNECTORMARK_MODE	Integer (INTEGER) (INTEGER)	2			(c0760b1d-...)
Connectormark visible	CONNECTORMARK_VISIBLE	Bool (BOOL) (BOOL)	0			(7ab8b679-...)
Creation date	CREATION_DATE	Date (DATE) (DATE)				(9522bd78-...)
Documentation	DOCUMENTATION	Long String (LONGSTRING) (L...)				(bab38861-...)
Expression language	EXPRESSION_LANGUAGE	String (STRING) (STRING)				(71202276-...)
Grid enabled	GRIDENABLED	Integer (INTEGER) (INTEGER)	1			(9dbf2afc-...)
Grid size (x)	GRIDX	Integer (INTEGER) (INTEGER)	5			(412485db-...)
Grid size (y)	GRIDY	Integer (INTEGER) (INTEGER)	5			(27af74a5-...)
Height	HEIGHT	Integer (INTEGER) (INTEGER)	12000			(84974cb6-...)
Info text	INFO_TEXT	Long String (LONGSTRING) (L...)	Ywith the BPMN ...			(ddb1d866-...)
Language	LANGUAGE	String (STRING) (STRING)				(80f112a1-...)
Mode	MODE	String (STRING) (STRING)	MODE_COMPLETE			(610ce8bc-...)
Modification date	MODIFICATION_DATE	Date (DATE) (DATE)				(b67ced59-...)
No. of pages - height (print)	PRINT_PAGESCOUNT_HEIGHT	Integer (INTEGER) (INTEGER)	1			(3c69a708-...)
No. of pages - width (print)	PRINT_PAGESCOUNT_WIDTH	Integer (INTEGER) (INTEGER)	1			(3cdee4ce-...)
Notebook	NOTEBOOK	Notebook (NOTEBOOK) (NOTE...)				(4886bb62-...)
Orientation (print)	PRINT_ORIENTATION	Integer (INTEGER) (INTEGER)	0			(ca5b005e-...)
Pagemargin visible	PAGEMARGIN_VISIBLE	Bool (BOOL) (BOOL)	1			(0c1bb2e5-...)
Pagenumber visible	PAGENUMBER_VISIBLE	Bool (BOOL) (BOOL)	0			(87aeff9d-...)
Query language	QUERY_LANGUAGE	String (STRING) (STRING)				(9db5af161-...)
Role (to)	ROLE_TO	String (STRING) (STRING)				(59f1d4e7-...)
Role (to)	ROLE_FROM	String (STRING) (STRING)				(833f9864-...)
Scale type (print)	PRINT_SCALETYPE	Integer (INTEGER) (INTEGER)	0			(8af1ecc0-...)
Scroll position (X)	SCROLLPOX	Integer (INTEGER) (INTEGER)	0			(7af13f12-...)
Scroll position (Y)	SCROLLPOSY	Integer (INTEGER) (INTEGER)	0			(f57d63fa-...)
Show grid	SHOWGRID	Integer (INTEGER) (INTEGER)	0			(e6ab61da-...)
TRANSLATION_COMPLETE	TRANSLATION_COMPLETE	String (STRING) (STRING)	de en			(412bab13-...)
TRANSLATIONDEF	TRANSLATIONDEF	Long String (LONGSTRING) (L...)				(73aaefc2-...)
URI for Class Icon	ICON_CLASS	String (STRING) (STRING)	chrome://most_ji...			(88c194c1-...)
Version	VERSION	String (STRING) (STRING)				(349dc6f8-...)
Width	WIDTH	Integer (INTEGER) (INTEGER)	8950			(bd0fab03-...)
X-offset (grid)	GRIDOFFSETX	Integer (INTEGER) (INTEGER)	0			(85e6e68e-...)
Y-offset (grid)	GRIDOFFSETY	Integer (INTEGER) (INTEGER)	0			(c10a6067-...)
Zoomlevel	ZOOMLEVEL	Double (DOUBLE) (DOUBLE)	1			(d4df1723-...)

English Database: adoxxdb Standard-Repository



Definition and maintenance of classes, relations, model types, and attributes. These can be packaged to libraries. Various libraries can be managed within one database.





Selected Characteristics: Dynamic Metamodelling, Event-based

ADOxx Interfaces

Ausblenden Suchen Zurück Vorwärts Abbrechen Aktualisieren Startseite Drucken Optionen

Inhalt Index Suchen Favoriten

- Main Page
- File List
- Data Structures
- Class Hierarchy
- Data Fields
- Modules
 - Events
 - Graphical Representation - events
 - Graphical Modelling - user action manager events
 - Modelling Exchange - events
 - Relations Control Events
 - Tasklist events
 - Core library events
 - Repository manager events
 - Repository events
 - Security events
 - ActionMgr events
 - Clipboard events
 - ADOxx UI Events
 - chrome events
 - component manager events
- Deprecated interfaces
- Flavours
- Frozen interfaces
- Contract IDs and CIDs
- Globals
- Related Pages

[Main Page](#) | [Modules](#) | [Class Hierarchy](#) | [Alphabetical List](#) | [Data Structures](#) | [File List](#) | [Data Fields](#) | [Globals](#) | [Related Pages](#)

Repository events

[Events]

This contains events of the repository component. [More...](#)

Defines

```
#define REPO_EVENT_BEFORE_MODEL_LIST_UPDATE "core.repository.before.model.list.update"
#define REPO_EVENT_AFTER_MODEL_LIST_UPDATE "core.repository.after.model.list.update"
#define REPO_EVENT_BEFORE_OBJECT_LIST_UPDATE "core.repository.before.object.list.update"
#define REPO_EVENT_AFTER_OBJECT_LIST_UPDATE "core.repository.after.object.list.update"
#define REPO_EVENT_BEFORE_MODEL_UPDATE "core.repository.before.model.update"
#define REPO_EVENT_AFTER_MODEL_UPDATE "core.repository.after.model.update"
#define REPO_EVENT_BEFORE_OBJECT_UPDATE "core.repository.before.object.update"
#define REPO_EVENT_AFTER_OBJECT_UPDATE "core.repository.after.object.update"
#define REPO_EVENT_BEFORE_SHUTDOWN "core.repository.before.shutdown"
#define REPO_EVENT_AFTER_SHUTDOWN "core.repository.after.shutdown"
#define REPO_EVENT_BEFORE_REPO_RENAME "core.repository.before.repo.rename"
#define REPO_EVENT_AFTER_REPO_RENAME "core.repository.after.repo.rename"
#define REPO_EVENT_AFTER_DS_TRANSACTION_START "core.repository.after.ds.transaction.start"
#define REPO_EVENT_BEFORE_MODEL_ADD "core.repository.before.model.add"
#define REPO_EVENT_AFTER_MODEL_ADD "core.repository.after.model.add"
#define REPO_EVENT_BEFORE_MODEL_REMOVE "core.repository.before.model.remove"
#define REPO_EVENT_AFTER_MODEL_REMOVE "core.repository.after.model.remove"
#define REPO_EVENT_AFTER_MODEL_MODIFY "core.repository.after.model.modify"
#define REPO_EVENT_BEFORE_MODEL_LOAD "core.repository.before.model.load"
#define REPO_EVENT_AFTER_MODEL_LOAD "core.repository.after.model.load"
#define REPO_EVENT_BEFORE_MODEL_DISCARD "core.repository.before.model.discard"
#define REPO_EVENT_AFTER_MODEL_DISCARD "core.repository.after.model.discard"
#define REPO_EVENT_AFTER_MODEL_DISCARD_KEEPING_QUERY_ITEMS "core.repository.after.model.discard.keeping.query.items"
#define REPO_EVENT_BEFORE_MODEL_SAVE "core.repository.before.model.save"
#define REPO_EVENT_AFTER_MODEL_SAVE "core.repository.after.model.save"
#define REPO_EVENT_BEFORE_MODEL_DROP_CHANGES "core.repository.before.model.drop.changes"
#define REPO_EVENT_AFTER_MODEL_DROP_CHANGES "core.repository.after.model.drop.changes"
#define REPO_EVENT_BEFORE_INSTANCE_ADD "core.repository.before.instance.add"
#define REPO_EVENT_AFTER_INSTANCE_ADD "core.repository.after.instance.add"
#define REPO_EVENT_BEFORE_INSTANCE_REMOVE "core.repository.before.instance.remove"
#define REPO_EVENT_AFTER_INSTANCE_REMOVE "core.repository.after.instance.remove"
#define REPO_EVENT_BEFORE_RELATION_INSTANCE_ADD "core.repository.before.relationinstance.add"
#define REPO_EVENT_AFTER_RELATION_INSTANCE_ADD "core.repository.after.relationinstance.add"
#define REPO_EVENT_BEFORE_INTERREF_ADD "core.repository.before.interref.add"
#define REPO_EVENT_AFTER_INTERREF_ADD "core.repository.after.interref.add"
#define REPO_EVENT_BEFORE_INTERREF_REMOVE "core.repository.before.interref.remove"
```

14 Event Categories
221 Events

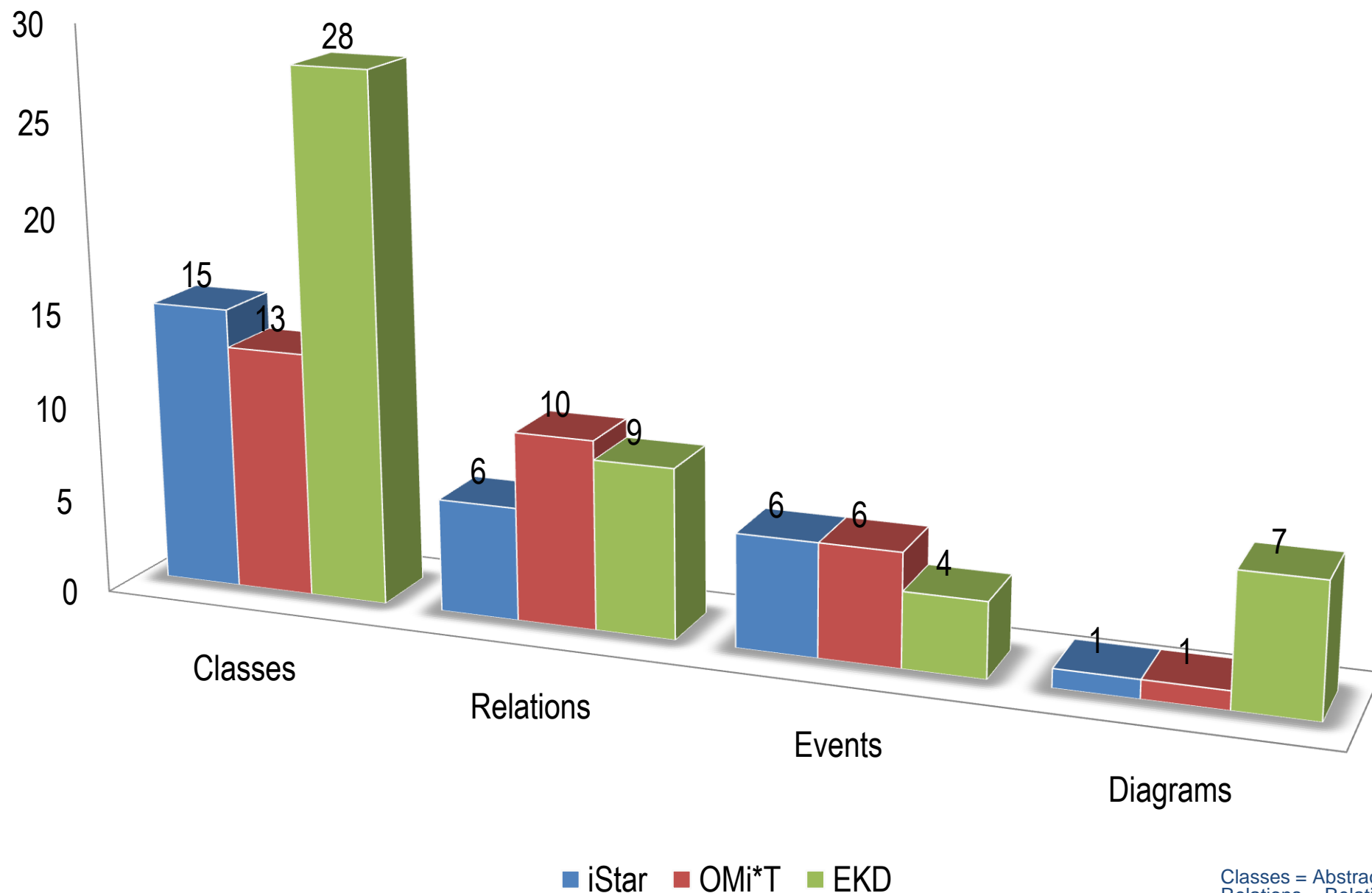
Events

- Graphical Representation - events
- Graphical Modelling - user action manager events
- Modelling Exchange - events
- Relations Control Events
- Tasklist events
- Core library events
- Repository manager events
- Repository events
- Security events
- ActionMgr events
- Clipboard events
- ADOxx UI Events
- chrome events
- component manager events





ADOxx[®]: Method Building Blocks



Classes = Abstract + Normal
 Relations = Relational Classes
 Events = On Event Calls
 Diagrams do not include Modes.



Questions?

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