

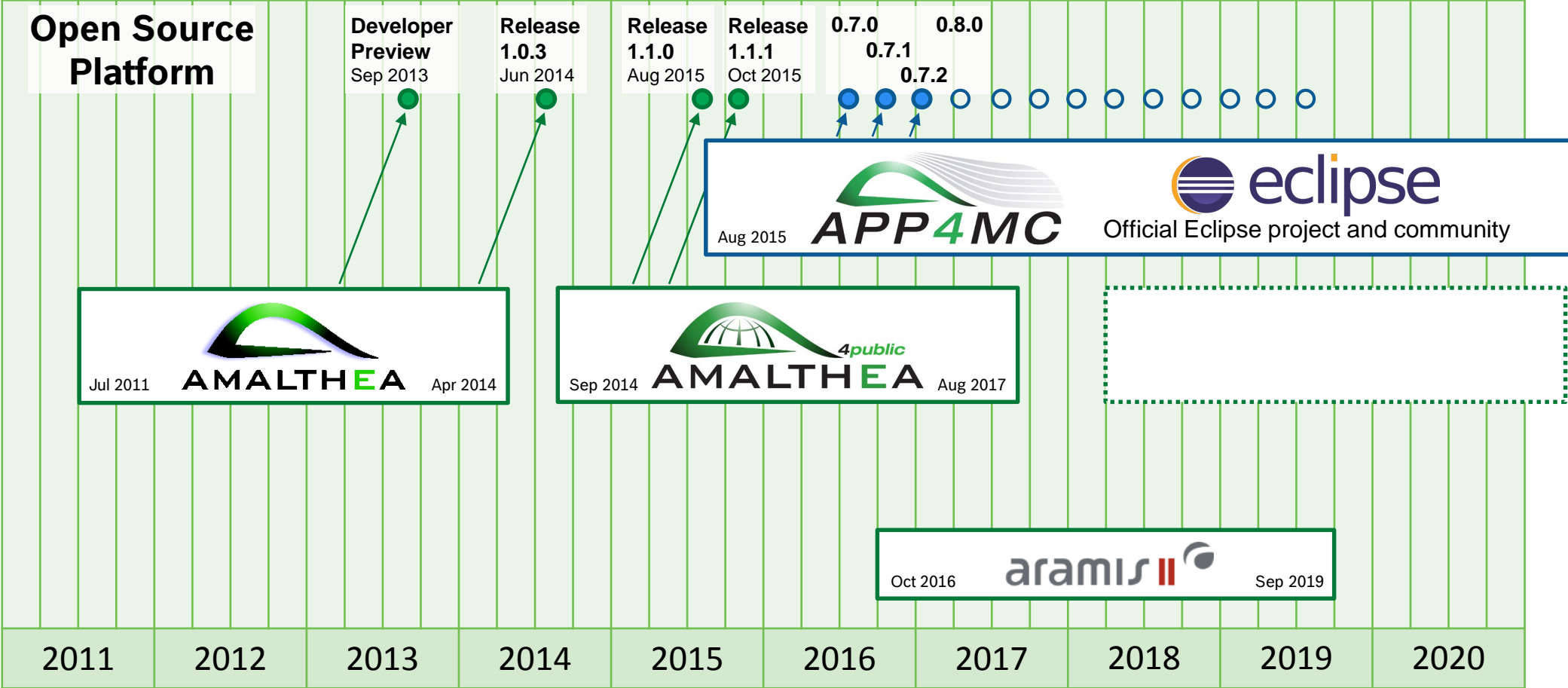
# ECLIPSE APP4MC

AMALTHEA4public  
Advisory Board Meeting

2017-02-16 München

# AMALTHEA4public Advisory Board Meeting

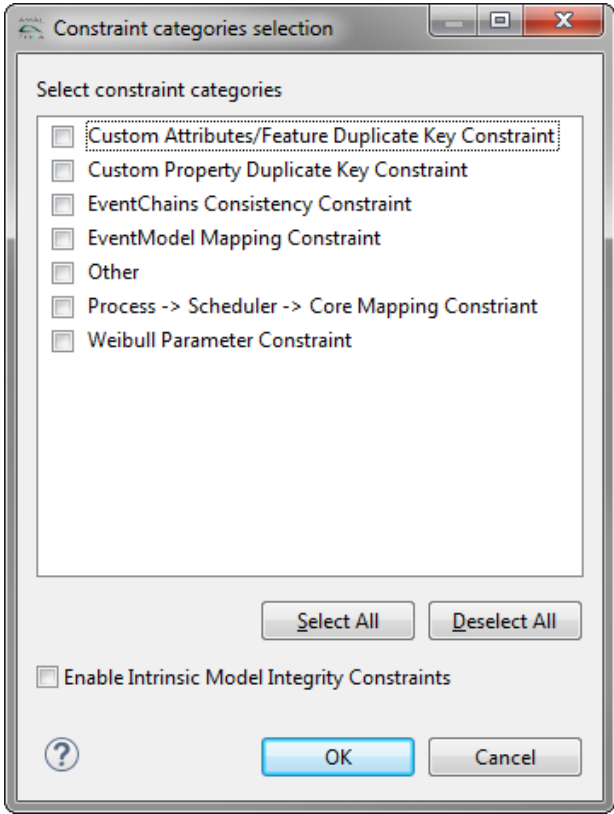
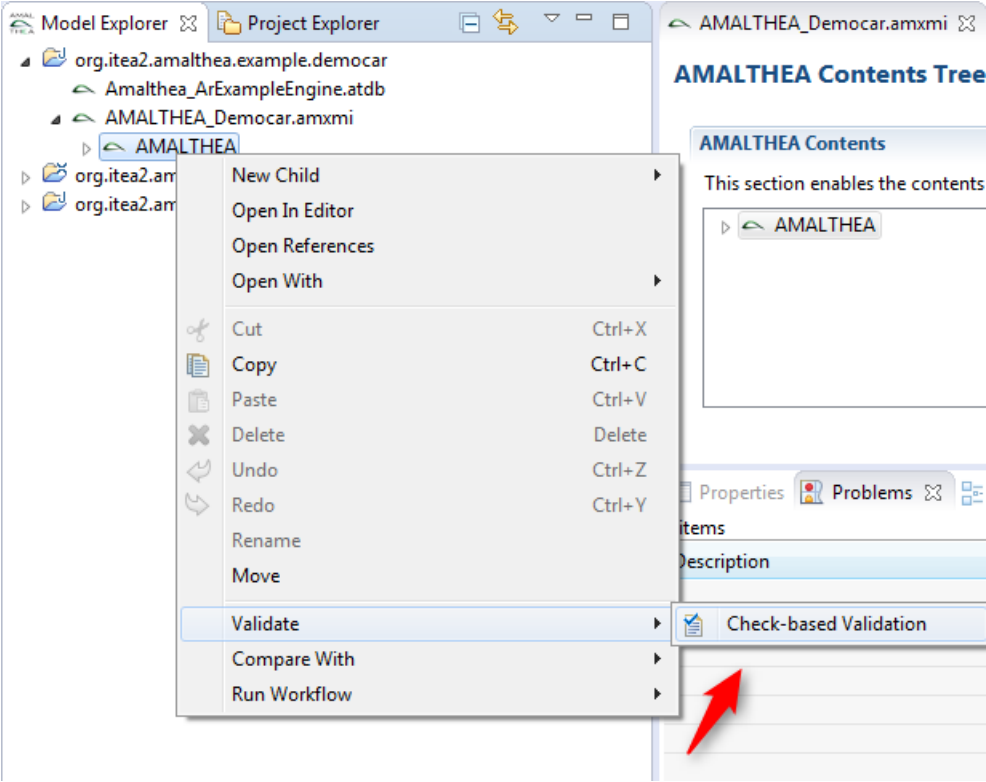
## Project Eclipse APP4MC



# Model Infrastructure

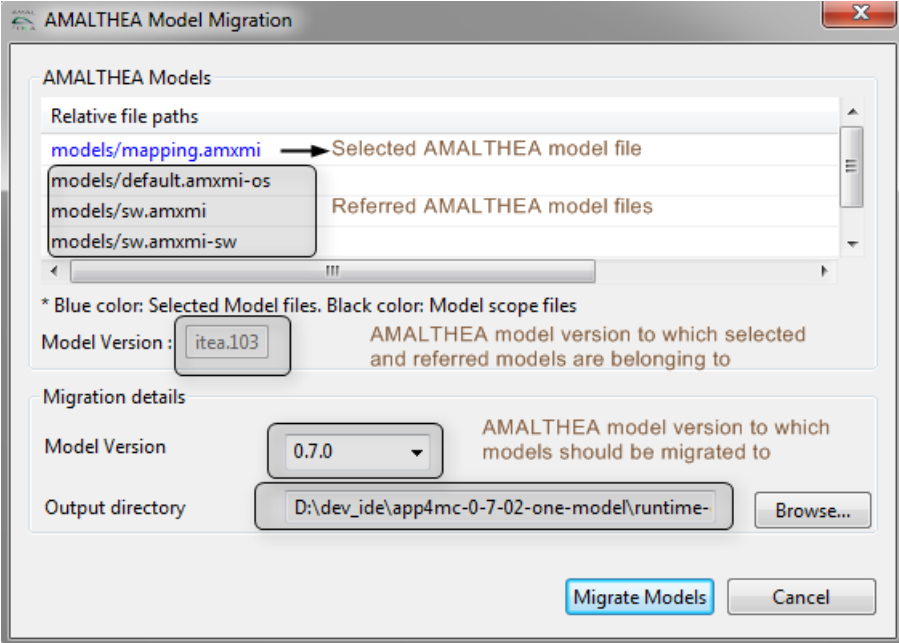
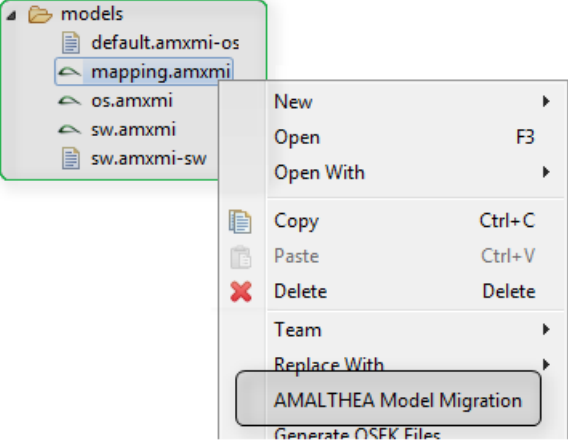
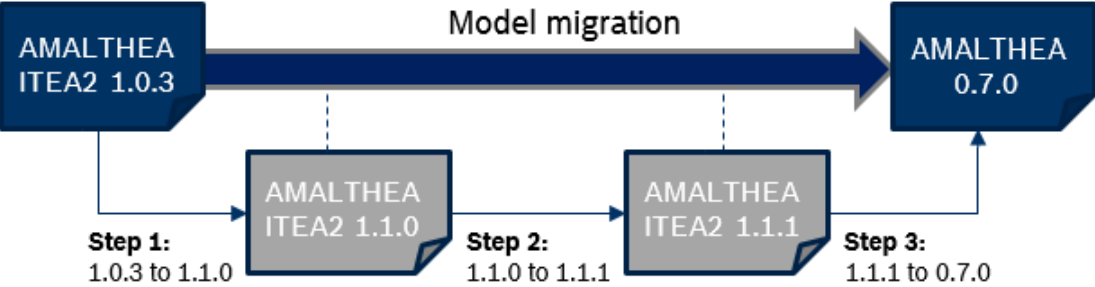
# AMALTHEA4public Advisory Board Meeting

## Model Validations



# AMALTHEA4public Advisory Board Meeting

## Model Migration

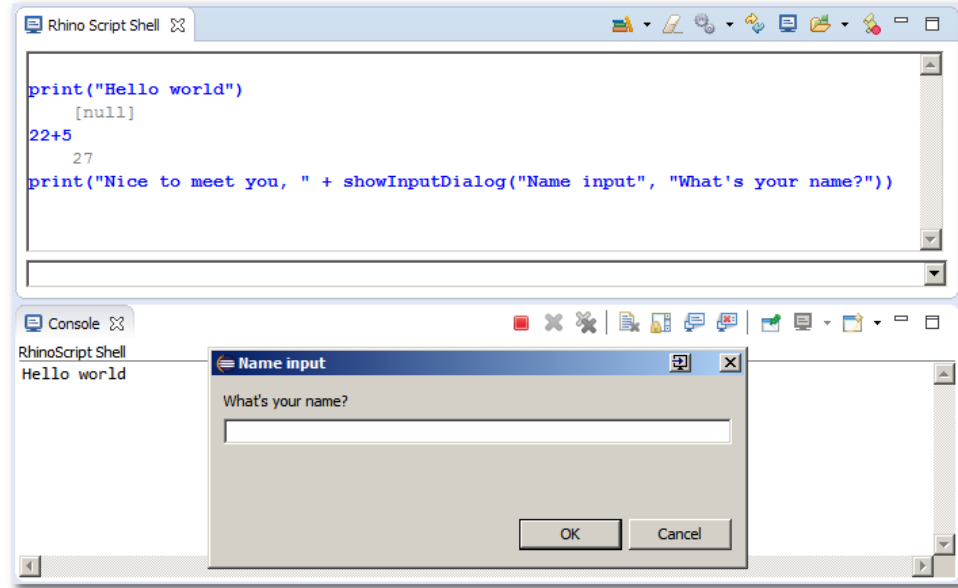
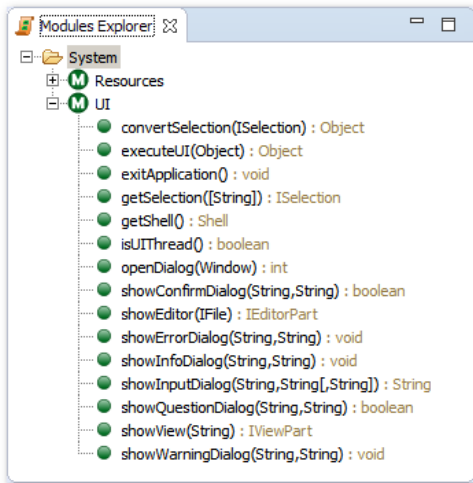


# AMALTHEA4public Advisory Board Meeting

## Scripting Support

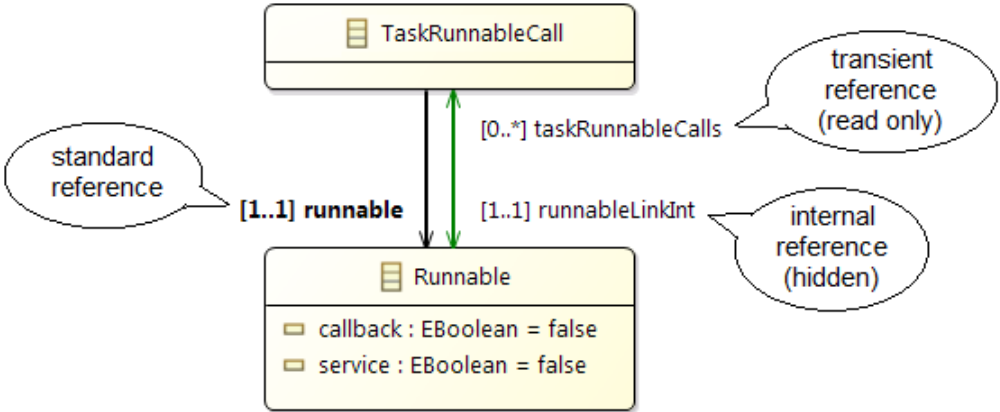
EASE integration for

- ad hoc scripts
- flexible workflows



# AMALTHEA4public Advisory Board Meeting

## Transient Opposite References



The screenshot shows the Properties window for a **Runnable BrakeForceArbiter** object. The table below represents the data shown in the window:

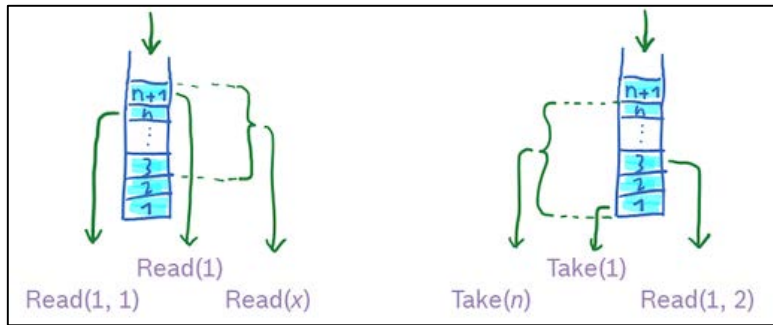
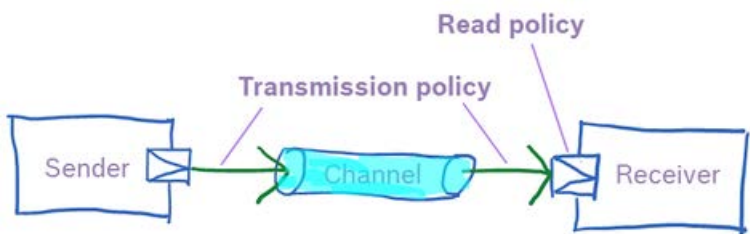
Property	Value
Main	
Name	BrakeForceArbiter
Misc	
Activation	
Callback	false
Service	false
Tags	Tag SwcBrakeForceArbiter
Read only	
Runnable Calls	
Task Runnable Calls	call BrakeForceArbiter
Unique Name	BrakeForceArbiter?type=Runnable

# Model Extensions

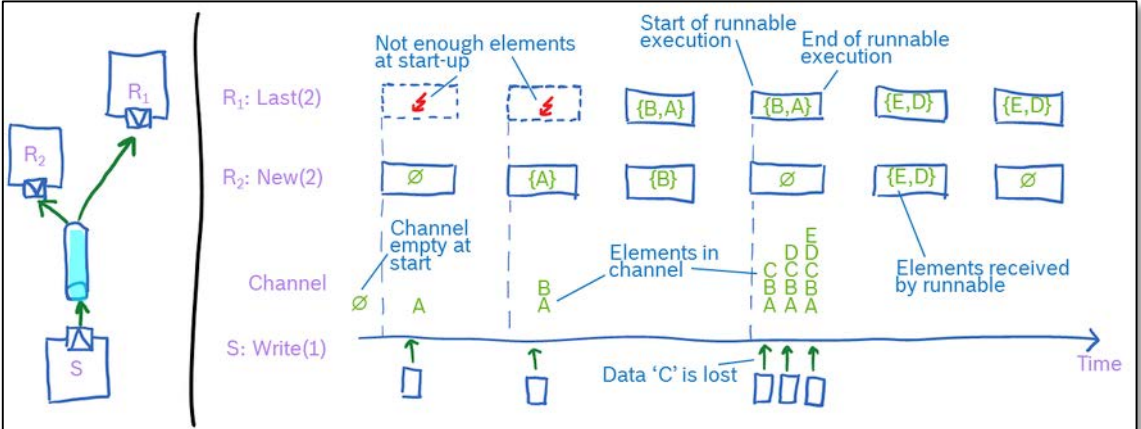


# AMALTHEA4public Advisory Board Meeting

## Communication via Channels



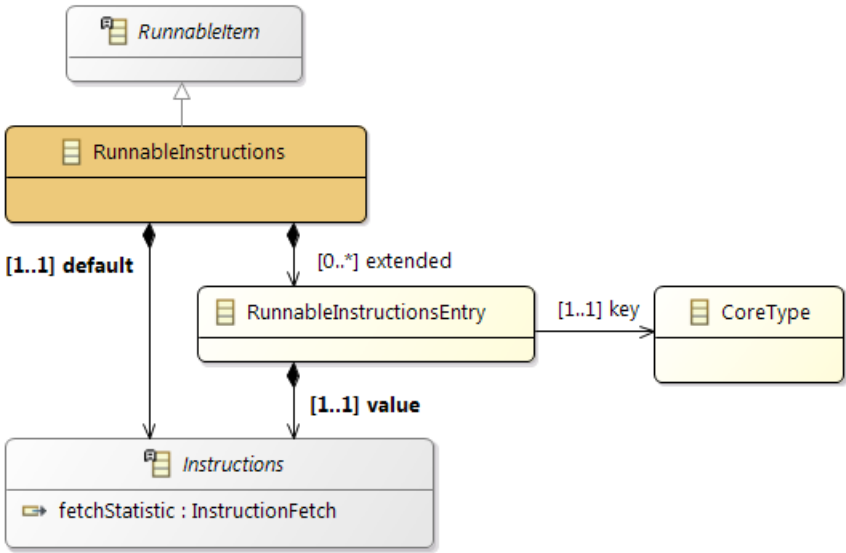
Read policy	Port Type	Operation	lower bound	must be new
<b>Last(x)</b>	LIFO	Read(x,0)	x	false
<b>New(x)</b>	LIFO	Read(x,0)	0	true
<b>AllNew</b>	FIFO	Take(sizeOfChannel,0)	0	true



# AMALTHEA4public Advisory Board Meeting

## Core-specific Instructions

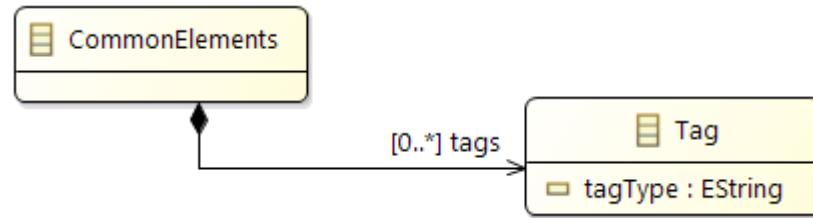
- ▶ New core-specific runtimes (instructions) for runnables



# AMALTHEA4public Advisory Board Meeting

## Harmonized Model API

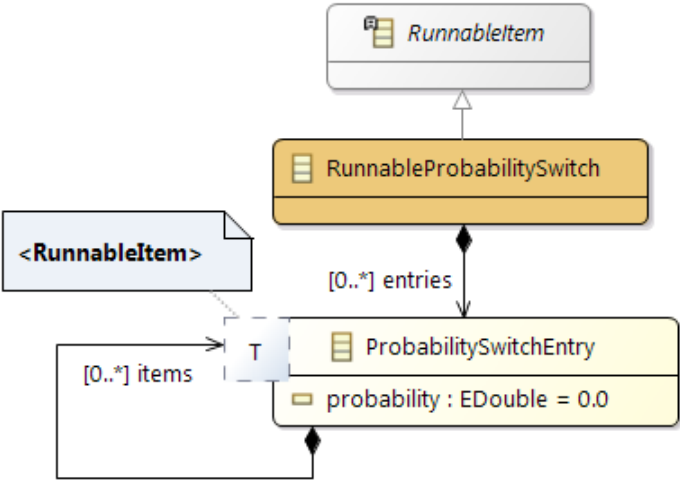
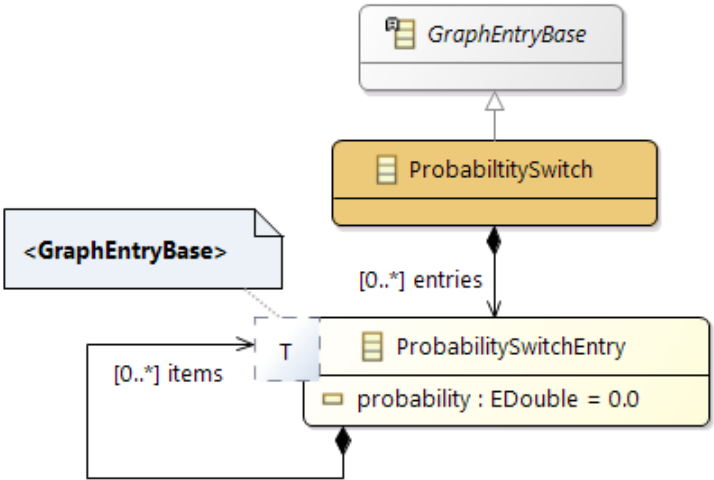
- ▶ Storage of common elements (e.g. tags) in one central location



# AMALTHEA4public Advisory Board Meeting

## Harmonized Model API

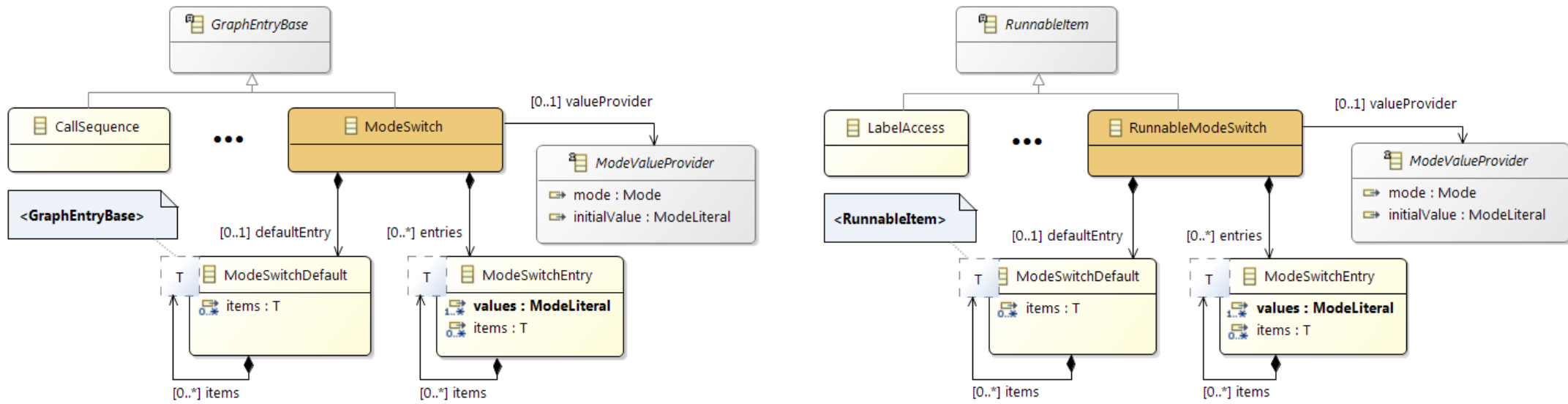
► Harmonized model elements to describe probability



# AMALTHEA4public Advisory Board Meeting

## Harmonized Model API

► Harmonized model elements to describe mode-specific behavior

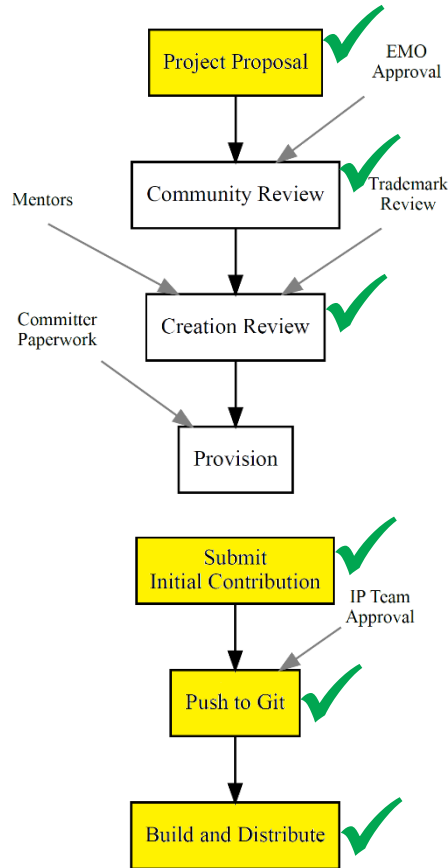


# AMALTHEA4public Advisory Board Meeting



# AMALTHEA4public Advisory Board Meeting

## Project Creation



2015-07-28 – trademark approved

2015-08-12 – creation review successful

2016-03-31 – initial contribution

2016-04-20 – source code cleared for checkin

2016-07-07 – code moved to Eclipse repository

2016-07-28 – Milestone 0.7.0 published

2016-09-19 – full IP review for APP4MC Platform completed

# AMALTHEA4public Advisory Board Meeting

## Project Work

Committer Hackathon in Leipzig (itemis)  
11-12 Jan 2016

Modeling Workshop in Renningen (Bosch)  
16-17 Mar 2016


✓ IP Clearance  
(committer actions)

Modeling Workshop in Regensburg (TA)  
14 July 2016

✓ Eclipse namespace  
✓ Restructured code  
✓ Unified data model

✓ Setup Git repositories  
✓ Setup Hudson builds

✓ Setup and use of  
Eclipse Bugzilla



● Initial contribution  
2016-03-31

● Code cleared for checkin  
2016-04-20

● Code moved to Eclipse  
2016-07-07

● Milestone 0.7.0 published  
2016-07-28

● Full IP review completed  
2016-09-19



# AMALTHEA4public Advisory Board Meeting

## IP Clearance

ID	State	Pri	OS	Assignee	Status	Resolution	Summary
<a href="#">11157</a>	approved	P3	new	emo-ip-...	RESO	FIXE	org.xerial.sqlite Version: 3.7.2 (PB CQ9001)
<a href="#">11160</a>	approved	P3	new	emo-ip-...	RESO	FIXE	xalan 2.7.1 top level jar Version: 2.7.1 (PB Orbit CQ2213)
<a href="#">11161</a>	approved	P3	new	emo-ip-...	RESO	FIXE	Xerces Version: 2.9.0 (PB Orbit CQ2095)
<a href="#">11312</a>	approved	P2	new	emo-ip-...	RESO	FIXE	resolver.jar Version: 1.2 (PB Orbit CQ2136)
<a href="#">11313</a>	approved	P2	new	emo-ip-...	RESO	FIXE	serializer.jar Version: 2.7.1 (PB Orbit CQ2134)
<a href="#">11314</a>	approved	P2	new	emo-ip-...	RESO	FIXE	xml-apis.jar Version: 1.3.04 (PB Orbit CQ2166)
<a href="#">11315</a>	approved	P2	new	emo-ip-...	RESO	FIXE	java_cup runtime Version: 10k (PB Orbit CQ1950)
<a href="#">11316</a>	approved	P2	new	emo-ip-...	RESO	FIXE	BCEL.Jar Version: 5.2 (PB Orbit CQ1933)
<a href="#">11518</a>	approved	P2	new	emo-ip-...	RESO	FIXE	Google Guava Version: 15.0.0 (PB Orbit CQ7768)
<a href="#">11520</a>	approved	P2	new	emo-ip-...	RESO	FIXE	Apache Commons Lang Version: 2.6 (PB Orbit CQ6450)
<a href="#">11522</a>	approved	P2	new	emo-ip-...	RESO	FIXE	JUnit Version: 4.12 (PB Orbit CQ9298)
<a href="#">11521</a>	approved	P2	new	emo-ip-...	RESO	FIXE	log4j Version: 1.2.15 (Subset - see all comments) (PB Orbit CQ3560)
<a href="#">11554</a>	approved	P3	awai	emo-ip-...	RESO	FIXE	javassist Version: 3.19.0-GA (PB CQ9727)
<a href="#">11553</a>	approved	P3	new	emo-ip-...	RESO	FIXE	easymock Version: 3.3.1
<a href="#">11158</a>	approved	P3	awai	emo-ip-...	RESO	FIXE	jdom Version: 2.0.6 (Subset, Custom)
<a href="#">11603</a>	approved	P3	new	emo-ip-...	RESO	FIXE	PlantUML EPL Version: 8000 (PB CQ8178)
<a href="#">11214</a>	approved	P3	awai	emo-ip-...	RESO	FIXE	jgrapht Version: 0.9.0 *Custom*
<a href="#">11162</a>	approved	P3	awai	emo-ip-...	RESO	FIXE	ojalgo Version: 39.0
<a href="#">11159</a>	approved	P3	awai	emo-ip-...	RESO	FIXE	jaxen Version: 1.1.6
<a href="#">11213</a>	awaiting_analysis	P3	awai	emo-ip-...	NEW		genetics Version: 3.0.1
<a href="#">11156</a>	approved	P2	unde	sharon....	RESO	FIXE	APP4MC Platform

Third-Party  
Libraries

Source Code

# AMALTHEA4public Advisory Board Meeting

## Project Eclipse APP4MC

### Repositories

Age	Commit message (Expand)	Author	Files	Lines
19 hours	500498 updated examples + RCPTT contexts based on the latest metamodel	Zakir Meer	13	-4171/+4183
19 hours	500498 added model migration	Zakir Meer	2	-0/+151
22 hours	added model migration docu for 0.7.1 to 0.7.2	Zakir Meer	1	-1/+73
22 hours	508510 added model migration + test case for "Removed TargetProcess and Targe...	Zakir Meer	3	-1/+64
22 hours	[508743] Added ISR category	Harald Mackamul	11	-68/+637
24 hours	[500498] Updated icons and label providers	Harald Mackamul	8	-8/+74
25 hours	[500498] Replaced OsBuffering with OsDataConsistency	Harald Mackamul	43	-2108/+5191
44 hours	508523 added model migration + test cases for SamplingType	Zakir Meer	4	-14/+204
48 hours	[508574] Added Counter attribute to InterProcess and EventStimulus.	Daniel Kunz	13	-6/+493
48 hours	[508573] Added new EventStimulus element.	Daniel Kunz	28	-1222/+2283
5 days	Added a new oomph setup optimized by Ed Merks	Lothar Wendehals	1	-0/+1107

[git.eclipse.org/c/app4mc](https://git.eclipse.org/c/app4mc)

### Issue Tracking & Release Planning

ID	Product	Comp	Assignee	Status	Resolution	Summary	Changed
<a href="#">508802</a>	App4mc	Models	harald.m	NEW	---	<a href="#">Add transmission policy to communication (e.g. label accesses)</a>	01:44:43
<a href="#">500498</a>	App4mc	Models	andreas.	RESO	FIXE	<a href="#">Rework Data Consistency need handling</a>	Tue 09:34
<a href="#">508573</a>	App4mc	Models	daniel.ku	RESO	FIXE	<a href="#">Event based Stimulus</a>	Mon 07:55
<a href="#">508574</a>	App4mc	Models	daniel.ku	RESO	FIXE	<a href="#">Add Counter to InterProcessActivation and EventStimulus</a>	Mon 07:55
<a href="#">507648</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">Remove OSExecutionInstructions</a>	2016-11-28
<a href="#">508165</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">Introduce core-specific runtimes (instructions) for runnables</a>	2016-11-28
<a href="#">508307</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">back references : Memory object should return list of Mapping objects</a>	2016-11-28
<a href="#">508309</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">back references : Scheduler object should return list of CoreAllocation objects</a>	2016-12-01
<a href="#">508510</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">RunnableConstraint: remove TargetProcess and TargetCallSequence</a>	2016-12-01
<a href="#">508523</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">SamplingType should only be available for Boundaries</a>	Tue 09:33
<a href="#">508743</a>	App4mc	Models	harald.m	RESO	FIXE	<a href="#">ISRs should have an attribute to specify the category</a>	Tue 09:33
<a href="#">507478</a>	App4mc	Models	zakirhus:	RESO	FIXE	<a href="#">Model Migration from 0.7.0 to 0.7.1 : CallGraph content inside ISR is not migrated</a>	2016-11-22
<a href="#">500484</a>	App4mc	Models	andreas.	CLOS	FIXE	<a href="#">Add osckTaskGroup attribute to tasks</a>	2016-11-03
<a href="#">500489</a>	App4mc	Models	andreas.	CLOS	FIXE	<a href="#">Add new stimuli type "Synthetic"</a>	2016-11-03
<a href="#">500490</a>	App4mc	Models	andreas.	CLOS	FIXE	<a href="#">Add new distribution: Beta distribution</a>	2016-11-03
<a href="#">500491</a>	App4mc	Models	andreas.	CLOS	FIXE	<a href="#">Add new attribute "SamplingType" to Deviation</a>	2016-11-03

[bugs.eclipse.org/bugs/buglist.cgi?product=app4mc](https://bugs.eclipse.org/bugs/buglist.cgi?product=app4mc)

Official Eclipse Project → Open Source development and planning in public !

# AMALTHEA4public Advisory Board Meeting

## Project Eclipse APP4MC

Repositories

app4mc.web



app4mc



Build & Test Automation



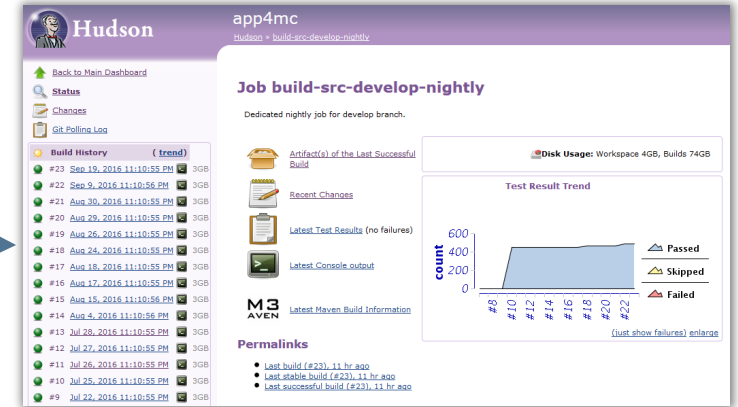
build and publish website



provide downloads



build and test products

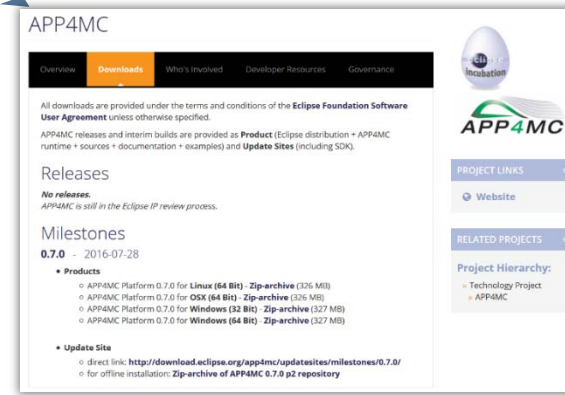


[hudson.eclipse.org/app4mc](http://hudson.eclipse.org/app4mc)

Websites



[www.eclipse.org/app4mc](http://www.eclipse.org/app4mc)



[projects.eclipse.org/projects/technology.app4mc](http://projects.eclipse.org/projects/technology.app4mc)

Official Eclipse Project → Infrastructure and Visibility (provided by Eclipse)

THANK  
YOU