

## Jump Start Training

# IBM Rational Rhapsody C++ Training on Raspberry Pi Embedded Software Development with UML

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### Overview

This training offers a special, very effective introduction into the development with UML and Rhapsody®.

From the beginning on, the popular Raspberry Pi is used as target hardware. The concepts are implemented in a practical oriented way directly on the board. The participants will learn hands-on how to work with UML and Rhapsody with a target hardware.

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### Administration

- Duration: 3 days
- Time: 9 am to 5 pm
- English or German (depending on participants)
- Training licenses will be available
- Not more than 8 participants

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### Date / Place

Please have a look online:  
[www.evocean.com/events](http://www.evocean.com/events)

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### Target Audience

Technical leaders / Software engineers & developers / interested persons in Rhapsody

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### Requirements

- Project experience with C++
- Basic know-how of UML is an advantage but not mandatory
- Notebook with Windows 7, 8 or 10 and 3 GB of free hard disc space

A notebook can be rented for EUR 150.00 excl. VAT (service charge).

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### Conditions

Costs incl. hand-outs and hardware.

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### Registration

Either on-line or completed back side of this flyer per e-mail or fax.

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### Content

This training is of interest for you if you can answer one or more of the following questions with a "Yes":

- You are interested in model based development with UML and you would like to experience hands-on how to implement it in your company
- You are already using Rhapsody® and need a very effective and hands-on introduction
- You already have some practical experience with Rhapsody® Software Architect and would like to extent your know-how
- You know other UML tools and you are interested to see what Rhapsody® can offer (more) in comparison
- You would like to get a Raspberry Pi

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### Agenda

You will get an effective introduction in UML and Rhapsody:

- Overview and needs of an UML development infrastructure
- UML basics
- IBM Rational Rhapsody: concepts, functionality & use
- Installation of Rhapsody, Cross-Compiler & Raspberry Pi
- Classes, relationships and communication
- Object instantiation strategies
- Model-code synchronicity: navigation from model to code and back
- Behavioural-, state and flow diagrams
- Graphical debugging of UML models on host & target
- Interactions- and sequence diagrams
- Abstract classes
- Ports and interfaces
- Structure diagrams
- Complex hierarchical and parallel state diagrams
- Container classes
- Integrating and usage of external sources & libraries
- Rhapsody customization and UML profiles
- Active classes / threads; interrupt service routine, timing-diagrams
- Model driven testing – OMG Testing Profile
- Seamless traceability of requirements to code
- Rhapsody Framework (OXF)
- Reverse engineering
- Concepts and „best practise“: Configuration Management

## Registration

	Description	Date	Place	Costs (excl. VAT) per participant
<input type="checkbox"/>	Rhapsody on Raspberry Pi (incl. Raspberry Pi with I <sup>2</sup> C LC-Display, extension board, sensors, actuators, SD Card and Cross-Compiler)			EUR 1'980.00
		refer to www.evocean.com -> Events		
<input type="checkbox"/>	We will need a notebook each	This request needs to be with us latest two weeks prior to training.		EUR 150.00

### We will participate

	Name, First Name	Email	Function	Phone
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

### I can't participate. Please send me the following information:

<input type="checkbox"/>	Systems Engineering	<input type="checkbox"/>	Real-Time Embedded Systems	<input type="checkbox"/>	MBSE
<input type="checkbox"/>	Model Driven Development	<input type="checkbox"/>	Development Processes	<input type="checkbox"/>	SysML, UML
<input type="checkbox"/>	Requirements Management	<input type="checkbox"/>	Product Line Engineering	<input type="checkbox"/>	Testing Solutions
<input type="checkbox"/>	Workshops, Trainings	<input type="checkbox"/>	Consulting Services	<input type="checkbox"/>	Tools
<input type="checkbox"/>	Company Profile	<input type="checkbox"/>	Please contact me		

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**Conditions for cancelling:**

If you cancel your registrations following charges are invoiced (cancellation date prior to start of course): until 10 days 50%, until 5 days 80%.  
Trainings take place with a minimal of 4 attendees. Cancellation latest one week prior to course.

We offer all seminars, trainings and workshops also on-site at customer and also on a customized base. Please ask us for an offer.

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