Deploy Federated Event

Rodin Developer Tutorial

Programme

Monday 27th February

Time	
08:30 – 09:00	***Coffee***
	Session 1: *Using the Rodin Theory Plug-in* - Issam Maamria (1h) *Using the Rodin prover API to connect external provers* *SMT Solver Integration* - Systerel (30 min) *Isabelle/HOL integration* - Matthias Schmalz (30 min)
11:00 – 11:15	***Break***
	Session 2: *Creating and using custom/parameterized proof tactics* - Nicolas Beauger, Jean-Raymond Abrial (30 min) *Integrating plug-ins with ProB* - Jens Bendisposto (30 min)
12:15 – 14:00	***Lunch***
	Master Class session 1 (1h30) in 4 Rooms: Room A : *Developping Theories* - Issam Maamria Room B : *Using custom/parameterized proof tactics* - Jean-Raymond Abrial, Nicolas Beauger, Thomas Muller Room C *: Parameterizing Isabelle with theories* - Matthias Schmalz Room D *: Developing for ProB* - Jens Bendisposto
15:30 – 16:00	***Coffee***
	Master Class session 2 (1h30) in 4 Rooms: Room A : *Developping Theories* - Issam Maamria Room B : *Using custom/parameterized proof tactics* - Jean-Raymond Abrial, Nicolas Beauger, Thomas Muller Room C *: Parameterizing Isabelle with theories* - Matthias Schmalz Room D *: Developing for ProB* - Jens Bendisposto

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Rodin User & Developer Workshop Programme

Tuesday 28th February

Day One

Time	
08.30 – 09.00	***Coffee***
09.00 – 10.30	***Session 1:*** Welcome *SafeCap Modelling Environment* - Alexei Iliasov *Verification of a Railway Interlocking UML Model Translation to UML-B* - Gintautas Sulskus & Colin Snook *Component Reification in System Modelling* - Jens Bendisposto & Stefan Hallerstede
10.30 – 11.00	***Break:***
11.00 – 12.30	***Session 2:*** *Code Generation Update* – Andrew Edmunds C.J.Lovell, R. Silva, I.Maamria & M.Butler *Ensuring Extensibility with Code Generation* – Chris Lovell, A. Edmunds, R.Silva, I. Maamria & M. Butler *Towards a Certifying Code Generator for Rodin* – Alexei Iliasov *Generating Executable Simulations from Event-B Specifications* – Faquing Yan, Jean-Pierre Jacquot, and Jeanine Souquières
12.30 – 13.30	***Lunch:***
13.30 – 15.30	***Session 3:*** *Fault Tolerance Views* – Ilya Lopatkin, Alexei Iliasov, Alexander Romanovsky *Use of Rodin in FDIR Architechture for Autonomous Systems* – Jean-Charles Chaudemar *Pattern for Modelling Fault Tolerant in Event-B* – Michael Poppleton & Gintautas Sulskus *Extending Event-B & Rodin with Discrete Timing Properties* – Reza Sarshogh & Michael Butler
15.30 – 16.00	***Coffee:***
16.00 – 17.30	***Session 4:*** *A Framework for Diagrammatic Modelling Extensions in Rodin* – Vitaly Savicks & Colin Snook *Systematic Development for Embedded Systems Design using RRM Diagrams and UML-B* – Manoranjan Satpathy, Colin Snook, Silky Arora *CODA: A formal Event-B based Refinement Framework for High Integrity Embedded System Development* – John

	Colley, Michael Butler, Colin Snook, Neil Evans, Neil Grant & Helen Marshall *ADVANCE: Advanced Design & Verification Environment for Cyber-Physical Systems Engineering – The Multi-Simulation Framework* – John Colley & Michael Butler

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Rodin User & Developer Workshop Programme

Wednesday 29th February
Day Two

Time	
08.30 – 09.00	***Coffee***
09.00 – 10.30	***Session 5:*** *Proving Consensus* - Jeremy Bryans & Alexei Iliasov *Verification and validation of BPEL processes - A proof and animation based approach* - Idir Ait-Sadoune, Yamin Ait-Ameur & Mickael Baron *Formal Specification of a Mobile Diabetes Management Application Using the Rodin Platform and Event-B* - Daniel Brown, Ian Bayley, Rachel Harrison, Clare Martin *Synthesis of Processor Instruction Sets from High-Level ISA Specifications* - Andrey Mokhov, Alexei Iliasov Danil Sokolov, Maxim Rykunov, Alex Yakovlev, Alexander Romanovsky
10.30 – 11.00	***Break:***
11.00 – 12.30	***Session 6:*** *An Event-B Plug-in for Creating Deadlock-Freeness Theorems* - Faquing Yang & Jean-Pierre Jacquot *The Theory plug-in and its Applications* - Issam Maamria & Michael Butler *Can rippling discover the missing lemmas for invariant proofs?* - Gudmund Grov, Yuhui Lin & Alan Bundy *Proof Hints for Event-B Models - Extended Abstract* - Thai Son Hoang
12.30 – 13.30	***Lunch:***
13.30 – 15.30	***Session 7:*** *Requirements Traceability between Textual Requirements and Event-B Using ProR* - Michael Jastram, Lukas Ladenberger & Michael Leuschel *Towards Relating Sub-Problems of a Control System to Sub-Models in Event-B* - Sanaz Yeganefard & Michael Butler *Lessons from Deployment* - Manuel Mazzara, Cliff Jones & Alexei Iliasov *Assessment of the Evolution of the RODIN Open Source platform* - Christophe Ponsard, Jean Christophe Deprez, Jacques Flamand
15.30 – 16.00	***Coffee:***

16.00 – 17.30	***Session 8:*** *A Rodin Plugin for automata learning and test generation for Event-B* – Ionut Dinca, Florentin Iplate, Laurentiu Mierla & Alin Stefanescu *VTG - Vulnerability Test cases Generator, a Plug-in for Rodin* - Aymerick Savary, Jean-Louis Lanet Marc Frappier & Tiana Razafindralambo *Visualisation of LTL Counterexamples with ProB* – Andriy Tolstoy, Daniel Plagge & Michael Leuschel.