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ITEA 3 is a EUREKA strategic ICT cluster programme

Exploitable Results by Third Parties

Project MERgE / Label #11011

Multi-Concerns Interactions System Engineering

Project details

Project leader:	Charles R. Robinson
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Website:	http://www.merge-project.eu

Name: Safety Architect		
Input(s):	Main feature(s)	Output(s):
▪ Models	▪ Safety ▪ Security ▪ Co Engineering	▪ Safety trees ▪ Securirty trees ▪ Safety & Security trees ▪ FMECA Reports

Unique Selling Proposition(s):	▪ License property of the tool provider ▪ Key license applicable by machine or as floating license on a network
Integration constraint(s):	▪ Eclipse RCP ▪ EMF ▪ NatTable ▪ Sirius ▪ Birt
Intended user(s):	▪ Safety Engineer, Security Engineer
Provider:	▪ All4Tec
Contact point:	▪ Frédérique VALLEE: ALL4TEC CTO E-mail: frederique.vallee@all4tec.net Tél : + 33 (0)6 81 68 92 92 ▪ Anne-Catherine VIE: Product owner E-mail: anne-cathrine.vie@all4tec.net Tél : + 33 (0)1 80 75 07 50 ▪ Pierre MARTINETTI: Sales Manager E-mail: pierre.martinetti@all4tec.net Tél : + 33 (0)6 08 21 12 03
Condition(s) for reuse:	▪ License property of the tool provider (ALL4TEC) ▪ Key license applicable by machine or as floating license on a network

Latest update: 22 Feb 2016

Name: Pattern Technology		
Input(s):	Main feature(s)	Output(s):
▪ Domain expertise ▪ MBSE expertise ▪ System/software models	▪ Storage of patterns in catalogs and their reuse throughout models. ▪ Pattern/model synchronization mechanism supporting the update and lifecycle management of patterns. ▪ Ability to validate that a model still conforms to patterns and to visualize pattern violations. ▪ Navigation and overview facilities for understanding the usage of patterns in complex models. ▪ Mechanisms for the semi-automatic application and creation of patterns based on OCL queries. ▪ Definition of pattern families for the semi-automatic creation of patterns.	▪ Catalogs of reusable patterns ▪ Enhanced system/software models with pattern instances and pattern-based traceability.

Unique Selling Proposition(s):	▪ The Pattern technology enables MBSE practitioners to define patterns declaratively with diagrams and wizards, without programming, with enough expressive power to deal with classical Architecture or Design Patterns.
Integration constraint(s):	▪ Eclipse Modeling 3.8, customisations for Capella and UML Designer
Intended user(s):	Domain experts and system/software architects and designers in mature MBSE contexts
Provider:	▪ Thales Global Services
Contact point:	▪ Forum accessible from website: http://wiki.eclipse.org/EMF_DiffMerge/Patterns
Condition(s) for reuse:	▪ EPL (Eclipse Public License)

Latest update: 18 Feb 2016

Name: UML/SysML Designer		
Input(s):	Main feature(s)	Output(s):
▪ EMF UML2 models & profiles ▪ User input	▪ Supported diagrams : Package Hierarchy, Class Diagam, Component Diagram, Composite Structure Diagram, Deployment Diagram, Use Case Diagram, Activity Diagram, State Machine, Sequence Diagram, Profile Diagram ▪ Extentions through profiles ▪ Based on Sirius, extensible and customizable ▪	▪ EMF UML2 models ▪ Diagram images ▪ Possibility to generate code, java for instance

Unique Selling Proposition(s):	▪ UML Designer provides a set of common diagrams to work with UML 2.5 models. The intent is to provide an easy way to make the transition from UML to domain specific modeling. This way users can continue to manipulate legacy UML models and start working with DSL. Users can even re-use the provided representations and work in a total transparence on both UML and DSL models at the same time.
Integration constraint(s):	▪ Eclipse, EMF, Sirius
Intended user(s):	System and Software designers who a using UML or SysML
Provider:	▪ Obeo
Contact point:	▪ http://www.umldesigner.org/support/
Condition(s) for reuse:	▪ EPL (Eclipse Public License)

Latest update: 18 Feb 2016

Name: Eclipse Sirius		
Input(s):	Main feature(s)	Output(s):
▪ Ecore meta-models ▪ User input	▪ see https://www.eclipse.org/sirius/features.html	▪ EMF models ▪ Diagram images
Unique Selling Proposition(s):	▪ Eclipse Sirius is an enabling technology for creating domain-specific modeling workbenches with advanced graphical edition features ▪ Eclipse Sirius has become a de-facto standard within the eclipse modeling users for designing graphical modeling workbenches.	
Integration constraint(s):	▪ Eclipse, EMF, Sirius	
Intended user(s):	Sirius targets modeling designer who are seeking to develop and provide graphical modeling environments.Final users are using the designed modeling environment, using Sirius runtime.	
Provider:	▪ Obeo	
Contact point:	▪ http://www.obeodesigner.com/contact	
Condition(s) for reuse:	▪ EPL (Eclipse Public License)	
	Latest update: 18 Feb 2016	

Name: Architecture Evaluation		
Input(s):	Main feature(s)	Output(s):
▪ Expert decision model ▪ Evaluated architecture variants meaningful attributes for the evaluation	▪ Capture experts decision strategies. ▪ Evaluate architecture variants using a rational method based on experts decision strategies. ▪ Compare variants by pair thanks to the experts decision strategies. ▪ Recommend improvements. ▪ Produce an argumentation report for supporting experts in their decision documentation.	▪ Evaluation and comparison interactive report

Unique Selling Proposition(s):	▪ Method for eliciting criteria weights and thresholds. ▪ Commensurability of the metrics by the use of utility functions. ▪ Simulation of real-life decision strategies (veto, compensation, substitution,...). ▪ Decision model composition/reuse. ▪ Propagation of evaluation uncertainties for unavailable metrics. ▪ Production of a decision argumentation report.
Integration constraint(s):	▪ Eclipse, EMF, Sirius
Intended user(s):	System/software engineers, engineering teams managers
Provider:	▪ Thales Research and Technology
Contact point:	▪ sebastien.madelenat@thalesgroup.com, christophe.labreuche@thalesgroup.com
Condition(s) for reuse:	▪ Not decided yet but exploitation licenses can be granted on demand.

Latest update: 18 Feb 2016

Name: Defensics		
Input(s):	Main feature(s)	Output(s):
▪ 270+ standard protocols can be fuzz tested	▪ Model based fuzz testing ▪ Actionable reporting ▪ Remediation	▪ Reports ▪ Remediation packages
Unique Selling Proposition(s):	▪ Easy to use fuzz tester for over 270+ standard protocols with the reporting and remediation support.	
Integration constraint(s):	▪ A dedicated test computer with a free USB port is recommended for Wi--Fi testing ▪ Root privileges in this computer ▪ Kernel Revision 3.5 at minimum ▪ Fedora Core 20 (or newer) or Ubuntu 14.04 (or newer).	
Intended user(s):	Security analysts	
Provider:	▪ Codenomicon	
Contact point:	▪ Antti.Kiiveri@synopsys.com	
Condition(s) for reuse:	▪ Commercial	
	Latest update: 18.2.2016	

Name: AppCheck		
Input(s):	Main feature(s)	Output(s):
▪ Software as a binary format	▪ Detects used open source libraries from the binary application and provides the known vulnerability data to the detected components	▪ Report of the used components and related known vulnerabilities

Unique Selling Proposition(s):	▪ Continuous Always-On Monitoring and Reporting ▪ Risk Mitigation Through Vulnerability Identification ▪ Optimize Standards for Verification and Validation
Integration constraint(s):	▪ Operating Systems: • Microsoft Windows 95/98/ME/XP/Vista/7/8 32bit and 64bit binaries (Intel) • Linux binaries 32bit and 64bit binaries (Intel, PowerPC, ARM) • Apple Mac OS X 32bit and 64bit binaries (Intel, PowerPC) • FreeBSD, NetBSD and OpenBSD 32bit and 64bit binaries (Intel, PowerPC, ARM, SPARC, HP-PA-RISC) • Solaris 32bit and 64bit binaries (Intel, Sparc) • vxWorks, QNX, NucleusOS, ThreadX and several other RTOSes • Embedded system firmares based on Intel, ARM, PowerPC, MIPS, PA-RISC, SPARC, and AVR32 architectures • Unencrypted Android, iOS, Blackberry ▪ Compression Formats: • Windows .msi and .exe installers • Mac OS X .dmg • RPM, dpkg, tar.gz etc. Linux / *BSD packages • Java .jar packages • Compression formats such as .zip, .gz/bz2/xz, .rar, .lzh
Intended user(s):	Security analysts
Provider:	▪ Codenomicon
Contact point:	▪ Antti.Kiiveri@synopsys.com
Condition(s) for reuse:	▪ Commercial

Latest update: 18.2.2016

Name: KCVL		
Input(s):	Main feature(s)	Output(s):
▪ Model of the system.	▪ Product line design, analysis and derivation	▪ Variabiliy model
Unique Selling Proposition(s):	▪ KCVL is an implementation of the OMG CVL used to model the variability of a system. It provides an operational implementation to let designer create a product line and automatically generate dashboard to resolve variation point. When the configuration is full, it can automatically derive a product.	
Integration constraint(s):	▪ Java 1.7 and Eclipse Modelling Framework	
Intended user(s):	System Engineer	
Provider:	▪ INRIA	
Contact point:	▪ barais@irisa.fr	
Condition(s) for reuse:	▪ EPL	
	Latest update: 18.2.2016	

Name: Familiar		
Input(s):	Main feature(s)	Output(s):
▪ CVL Model	▪ Variability analysis and composition	▪ Report
Unique Selling Proposition(s):	▪ FAMILIAR (for FeAture Model scrIpt Language for manIpulation and Automatic Reasoning) is a language for importing, exporting, composing, decomposing, editing, configuring, computing "diffs", refactoring, reverse engineering, testing, and reasoning about (multiple) feature models. All these operations can be combined to realize complex variability management tasks.	
Integration constraint(s):	▪ N/A	
Intended user(s):	System Engineer	
Provider:	▪ INRIA	
Contact point:	▪ mathieu.acher@irisa.fr	
Condition(s) for reuse:	▪ GPL	
	Latest update: 18.2.2016	

Name: ATO		
Input(s):	Main feature(s)	Output(s):
▪ UML model files ▪ UML profile	▪ UML import ▪ UML export ▪ Calculation of metrics ▪ Schedulability calculation ▪ Variations ▪ Profile editing with full OCL support	▪ UML model files ▪ Metrics
Unique Selling Proposition(s):	▪ Fully customisable to development process by an external user thanks to the ATO profile editor ▪ Interoperable with other tools thanks to support of open standards	
Integration constraint(s):	▪ System designer, Software designer, Process designer	
Intended user(s):	System Engineer	
Provider:	▪ Cuarta (new name of E2S)	
Contact point:	▪ Johan Galle, Cuarta CEO, +32 9 2210383, johan.galle@cuarta.be	
Condition(s) for reuse:	▪ License property of the tool provider (CUARTA/E2S) ▪ License per machine ▪ R&D exploitation license can be granted on demand	
	Latest update: 18.2.2016	

Name: PRODAN		
Input(s):	Main feature(s)	Output(s):
▪ Process specifications	▪ Models the process according the provided specifications. ▪ Supports process enactment and user guidance for the execution sequence of activities. ▪ Detects process deviations, in case the user does not follow the specified process. ▪ Proposes recovery guidelines in the form of sequence of activities to bring user back to compliance with specifications.	▪ Models the process according the provided specifications. ▪ Supports process enactment and user guidance for the execution sequence of activities. ▪ Detects process deviations, in case the user does not follow the specified process. ▪ Proposes recovery guidelines in the form of sequence of activities to bring user back to compliance with specifications.
Unique Selling Proposition(s):	▪ Models the process according the provided specifications. ▪ Supports process enactment and user guidance for the execution sequence of activities. ▪ Detects process deviations, in case the user does not follow the specified process. ▪ Proposes recovery guidelines in the form of sequence of activities to bring user back to compliance with specifications.	
Integration constraint(s):	▪ Eclipse Modeling Framework, Java 1.7, Sirius	
Intended user(s):	▪ Process designers for modeling the processes ▪ Project managers for monitoring the processes and detecting the deviations	
Provider:	▪ UPMC / LIP6	
Contact point:	▪ reda.bendraou@lip6.fr	
Condition(s) for reuse:	▪ EPL (Eclipse Public License)	
	Latest update: 23 Feb 2016	

Name: KCVL		
Input(s):	Main feature(s)	Output(s):
▪ Process model in UML ▪ Generator Functions + Process rules + Tolerence level/rule	▪ Deviation detection ▪ Risk assessment and recovery plans	▪ Deviation report

Unique Selling Proposition(s):	▪ Continuous monitoring of process enactment. ▪ Risk mitigation through process deviation detection. ▪ Process recovery guidance in case of non-compliance to specifications.
Integration constraint(s):	▪ Eclipse Modeling Framework, Java 1.7, Sirius
Intended user(s):	▪ Process designers for modeling the processes ▪ Project managers for monitoring the processes and detecting the deviations
Provider:	▪ UPMC /LIP6
Contact point:	▪ reda.bendraou@lip6.fr
Condition(s) for reuse:	▪ EPL (Eclipse Public License)

Latest update: 23 Feb 2016

Name: Merge Platform Configurator		
Input(s):	Main feature(s)	Output(s):
▪ List of software	▪ Automatic platform building based on a user selection of software components	▪ zip file
Unique Selling Proposition(s):	▪ The MERgE platform configurator is an online configuration tool to assist and help new user of the MERgE platform to create its own dedicated platform	
Integration constraint(s):	▪ Eclipse and selected tools dependancies	
Intended user(s):	This tool target IT persons who are looking to build a software platform	
Provider:	▪ Obeo	
Contact point:	▪ jerome.pequery@obeo.fr	
Condition(s) for reuse:	▪ TBD	
	Latest update: 18 Feb 2016	