

Safety Architect - Releases

V3.0.0 - 02/02/2018

Evolutions

- General
 - Migration to Eclipse Oxygen 4.7.2
 - Add a kind (black box, white box and actor) for the blocks
 - Removal of the container concept which is now a block with the white box kind
 - Add a type (untyped, physical, logical, functional) for the blocks and for the data links
 - Add a new in/out type for a port
 - Add a data library in the model to specify the data exchanged by the data link
 - Add allocation links to create allocation between two blocks or two data links
- OSGi services
 - Integration by default of the OSGi services feature
- Coherence control
 - Add a controller to detect invalid blocks
 - Add a controller to detect untyped block
 - Add a controller to detect invalid allocation links
- Dashboard
 - Display of the failure modes of all the port types
 - Add a dashboard for the barriers
- Modeler
 - The block representation has a specific background according to the block type
 - Add decorators to show the local analysis state

V2.12.0 - 08/09/2017

Evolutions

- General
 - Migration to Eclipse Neon 4.6.2
 - Add the gates NAND, NOR and K/N
 - Add the type of event concept
 - Add an automatic spread of the modifications done on a specific failure mode, to corresponding failure modes on linked ports
 - Define the feared event only on the system output (preference+coherence control)
- Export
 - Export FaultTree+ (ReliabilityWorkbench)
- Propagation
 - Use preferences to allow the customisation of the propagation rules
- Dashboard
 - Add a dashboard for the local and system events
 - Add a dashboard for the logical gates

V2.11.0 - 18/11/2016

Evolutions

- Generic parameters
 - Management of generic parameters which can be used as probability parameters
- OSGi services
 - Export to an SA project from an elementary function (or a feared event) in Capella

- Generate a failure tree in SA from a feared event in Capella
- Generate a critical functional chain in Capella from an existing failure tree in SA
- Open a relevant local analysis diagram in SA from an elementary function in Capella
- Open a relevant architecture diagram in SA from a composite function in Capella
- Merge with existing projects in SA from an elementary function (or a feared event) in Capella

V2.10.0 - 08/07/2016

Evolutions

- General
 - Migration to Eclipse Neon 4.6.0
 - Add the read-only nature for projects
 - Adding a possibility to open a project in the read-only mode
 - Move the "Scope" property of Block from "Advanced properties" to "General properties"
 - Move the "Probability" property from "Advanced properties" to "General properties"
- OSGi services
 - Add OSGi service interfaces, which define the interactions with Capella2SA
 - Implement the "Import Project" OSGi service, which allows to import an exported project and to open its .aird representation from Capella2SA
- Report
 - Manage the system's inputs and outputs, insert a new column "Failure mode" and verify name of links in the Critical Flows report
- Import/Export
 - Unique category for the import and export menus
 - Merge the general import and the legacy import into a unique SA import
 - Add the possibility to import many projects in one time
 - Add a new feature to import/export System Architect NAF model and reorganise the menu import "System Architect"
- Propagation
 - Set the "Factorising engine" as the default propagation engine
 - Add a transfers deployment option during the propagation process
 - Factorising common sub-trees in the generated fault tree during the propagation process
- Report
 - Factorise local equations in the Safety & Security report
 - Update the Generate Report button to remember of the last action one
- Preference
 - Adding a preference page to select editor types (single-line or multiple-line) of the column "Name"
- Modeler
 - Add the possibility to layout automatically all diagrams when importing a project
 - The input ports and the output ports can only be respectively to the left and to right of a block in the local analysis

V2.9.0 - 14/04/2016

Evolutions

- General
 - Add the rename function for the SA editor and the Feared Events editor
 - Add the repair function in the context menu for the representation .aird
 - Add a button to generate reports in the general toolbar
 - Add a button to run the KodKod export in the general toolbar
 - Enable the "Refresh on access" preference by default



- Remove the fields "Feared events list" and "Feared events families list" for the failure modes of input ports or barriers
- Tools
 - Repair
 - The model cleaning action deletes links with null source or null target
- Dashboard
 - Add the rename function for the Blocks page view and the Failure Modes page view
 - Blocks and failure modes name are editable
- Import/Export
 - Update the import and export of RSA SART Logical/Physical models
- Export
 - Open exported files in OpenPSA format directly in "Arbre Analyste"

V2.8.0 - 03/03/2016

Evolutions

- General
 - Add the notion of a Safety viewpoint and a Security viewpoint
 - Add a malicious failure mode for the Security viewpoint
 - Set a new icon for the barrier
 - Add a viewpoint property for the feared events and the feared events families
 - The block's analysis status specifies for which viewpoint the analysis is closed
 - Include the Modeler Sirius by default in the Product
 - Improve the properties dialog for the editor ".fearedevents"
- Import
 - Improve the legacy import by correctly managing the older versions (from the version 2.0.0)
- Export
 - Improvement of the OpenPSA export by allowing the multiple selection of propagation trees
 - Adding the possibility to export an SA model to a KodKod model:
 - Transform an SA model into a KodKod model in the memory
 - Verify formally the transformed KodKod model using KodKod API
 - Show the verification results to users
- Coherence Control
 - Improve the coherence control by selecting the viewpoint which must be used
- Propagation
 - Improve the propagation for all viewpoints Safety, Security, and "Safety & Security"
- Report
 - Remove the critical path report
 - Add a new report for the critical blocks
 - Add a new report for the critical flows
 - Add a new graphical report for the "Safety & Security" view
 - Improve the HTML reports according to the viewpoints
 - Update the icons of the propagation reports
 - Remove the new line character in the propagation tree report
- Modeler
 - Migration to Sirius 3.1.1
 - New colors for the Security viewpoint
 - The blocks have now a default size according to the number of ports
 - The contents of containers (sub-blocks and sub-containers) could be reordered
 - The elements of failure trees could be reordered
 - Improve the local analysis diagram:
 - Size of blocks is increased
 - Name of ports is placed in the right position
 - Failure modes are placed in the right position
 - The synthesis view of models is improved by using the graphical contents:
 - The new layout with two layers: ports and links



- The routing styles of links will be automatically set to "Avoid obstructions", which allows to have a clearer layout
 - With the unpinned ports: the input ones are in the left side and the output ones are in the right side of blocks/containers
 - Open an existing representation or create a new one based on the default viewpoint when users double click on the blocks
 - In the creation of the .aird file, select by default the viewpoint chosen by users in the preferences
- Preferences
 - Add a new category Viewpoint in the preferences
 - Create a new category Import/Export in the preferences
- Tools
 - Generate Equations
 - Update the generation of equations by viewpoint

V2.7.0 - 22/10/2015

Evolutions

- Framework
 - Migration to Eclipse Mars
- Import
 - Improvement of Rhapsody import to enable or disable filters
 - Improvement of legacy import to manage all the project content, including graphical representation and existing results
 - New MagicDraw import, from UML file
- Export
 - Adding the possibility to export a propagation tree in an OpenPSA format:
 - Management of two formats: standard and for ArboreAnalyste
 - Management of probabilities
 - Creation of minimal cut sets propagation tree
 - Management of preferences to select the default export format and an external tool to launch after the export
- Coherence Control
 - Improvement of the duplicated links check
 - Improvement of the coherence control to stop the propagation if an error is detected
- Propagation
 - Improvement of the internal failures display to include their full path in reports and propagation trees
 - Improve the propagation engine and wizard to be able to propagate on failure modes directly, not only on feared events
- Report
 - Improvement of the FMECA report by allowing to sort, filter and group the table content
- Dashboards
 - Improvement of blocks and failure modes dashboards to be able to display more properties columns
 - Management of dashboard default columns, with their order, by preferences
- Workspace
 - Creation of a default workspace by version of Safety Architect
- Requirements
 - Creation of a new optional feature to manage requirements, based on the standard ProR editor:
 - Custom requirements editor based on ProR
 - Possibility to link Safety Architect elements to the requirements
- Modeler
 - Avoid the creation of wrong propagation links
 - Default positioning for ports according to their direction

V2.6.0 - 18/03/2015

Evolutions

- General
 - Migration to the Eclipse 4.4.1 Platform (Luna SR1 release)
- Import
 - Import Scade System 15.2
 - Import Rhapsody 8.1
 - Improvement of Papyrus and Scade System imports to allow a scope selection
- Global analysis
 - Improvement of the internal propagation engines to manage data loops and propagation loops
- Graphical modeller
 - Migration to Sirius 2.0.0
- Reports
 - General enhancement to save the reports directly into the project content
 - Improvement of the FMECA report

V2.5.0 - 18/07/2014

Evolutions

- General
 - Migration to the Eclipse 4 Platform (Luna release)
 - New example project included; Circuit breaker
- Global analysis
 - Loop handling in the internal propagation engine, with a new propagation algorithm
- Graphical modeller
 - Migration to Sirius, an open source modeller
 - Extraction of the modeller feature as an additional component (not included by default)
- Reports
 - New propagation tree report
 - Reports general enhancement

V2.4.0 - 27/03/2014

Evolutions

- General
 - Migration to the Eclipse 4 Platform (Kepler release)

V2.3.0 - 14/03/2014

Evolutions

- General
 - Feared events libraries integration
 - General editor improvements
 - General takeover of the user manual
 - General takeover of the installer
- Global and local analysis
 - Adding a 'No effect' failure mode
 - Adding a type notion on failure modes
 - Adding probabilities on failure modes and system/local events
 - Adding RRF and causes on failure modes and system/local events



- Adding mode notion on model and failures modes
 - Adding detection of duplicated links in coherence control
- Import / Export / Reimport
 - General modification of the import/export mechanism for the integration of the feared event library

V2.2.0 - 22/11/2013

Evolutions

- General
 - License mechanism and installer integration
 - Adding of workspace facilities
 - Example integration
 - Metamodel takeover (ports, etc)
- Import / Export / Reimport
 - Legacy project conversion
 - Import / Export / Reimport RSA DoDAF
 - Import / Export / Reimport RSA SART Logical
 - Import / Export / Reimport RSA SART Physical
 - Import Papyrus UML
 - Import Esterel Scade System
- Graphical modeller
 - Double click navigation
 - Safety and System points of view fusion in a new one called Composite
- Advanced functions
 - Adding a models fusion tool
 - Adding an equations generation tools

V2.1.0 - 23/05/2013

Evolutions

- General
 - Handling of copy/paste
 - Adding the producers/consumers notions on ports
 - Info.log view integration
 - Dashboard view integration
 - Failure modes view integration
 - Coherence control integration
- Global analysis
 - Creation of an history for the models propagated (.arch files)
 - Hipops engine integration
 - A4T engine integration
- Import / Export / Reimport
 - RSA SART Logical
 - RSA Dodaf
 - Automatic diagram creation during the import phase
- Modeller
 - Enhancement of tools for the failure modes
 - Color management for block following their analysis status
 - Connection/disconnection facilities for data and propagation links
 - Limitation to only one diagram by block
 - Obeo evaluation license integration
- Reports
 - Propagation report
 - General model report