



TOPCASED 4.2.0 - Release Note

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Requirements and Installation

TOPCASED is based on Helios Platform (Eclipse 3.6.1), and requires a Java Runtime Environment 1.5 or 1.6 (Java 5 JRE recommended). You can download it as a standalone application or install it directly through the Eclipse installation manager. For more information, please refers to the installation guide: [TOPCASED Installation Guide](#)

TOPCASED 4.2.0

You can download the features described below from the TOPCASED update-site:

<http://topcased-mm.gforge.enseeiht.fr/release/topcased4.2.0/>

TOPCASED Toolkit Features includes:

- **Java Extension For UML Editor:** Java Extension provides Java importer to UML and Java generator from UML.
- **Topcased Core Feature:** Topcased Core Feature is a prerequisite for all others Topcased features.
- **Topcased Document Importer:** Topcased Document Importer enables to import any document format and convert it into a model.
- **Topcased Document Importer for UML:** This feature depends on Topcased Document Importer. It is required in order to use UML Profile mechanism during document import.
- **Topcased Modeler Toolkit:** Topcased Modeler Toolkit is a required feature for all modeling capabilities.
- **Topcased OCL Tools:** Topcased OCL Tools provides OCL features such as model checker, editor and documentation.
- **Topcased Requirement:** Topcased Requirement feature provides capabilities for requirements management.
- **Topcased SAM Editors:** Topcased SAM Editors Feature provides graphical editors for SAM.
- **Topcased SysML Editors:** Topcased SysML Editors Feature provides graphical editors for SysML language.
- **Topcased Templates Tool:** Topcased templates tools provides features to convert a Topcased project or model to a template.
- **Topcased UML2 Editors:** Topcased UML2 Editors Feature provides graphical editors for UML2.

TOPCASED Incubation Features includes:

- **C Extension for UML Editor:** C Extension provides C importer to UML and C generator from UML.
- **Text editors add-ons:** This feature contains minor - but useful - add-ons for eclipse text editors like alphabetical sort of lines.
- **Topcased Abstract User Interface:** Topcased AUI provides Abstract User Interface Editor.
- **Topcased Adele:** Topcased Adele provides AADL editor.
- **Topcased Editor Generator:** Editor Generator enables to generate GEF editors for TOPCASED.
- **Topcased Gendoc:** Gendoc provides documentation generation capabilities for odt and docx format, using acceleo templates.
- **Topcased Gendoc 2:** Gendoc 2 provides documentation generation capabilities for odt and docx format, using acceleo scripts written directly inside the template document.
- **Topcased Gendoc for AUI:** Gendoc for AUI provides documentation generation capabilities with Abstract User Interface management.

- **Topcased Gendoc for Requirements:** Gendoc for Requirements provides documentation generation with requirements management.
- **Topcased Gendoc for UML:** Gendoc for UML provides documentation generation with UML and SysML management.
- **Topcased Gendoc SAM:** Documentation Generation for SAM.
- **Topcased Incubation:** Topcased Incubation contains transverse experimental plug-ins.
- **Topcased Python Generator:** UML2Python translates UML Class diagram to Pyhton language.
- **Topcased Simulation:** Topcased Simulation provides the generic part of the simulation.
- **Topcased Simulation for SAM:** Simulation capabilities for SAM.
- **Topcased Simulation for SysML:** Simulation capabilities for SysML.
- **Topcased Simulation for UML:** Simulation capabilities for UML.
- **Topcased SMUC:** SMUC provides generators for UML State machine diagrams and SAM.
- **Topcased TPG SAM:** Topcased TPG provides test generation for SAM.
- **Topcased Tramway:** Topcased Tramway provides traceability feature.
- **Topcased UML2RTSJ:** UML2RTSJ provides translation from UML diagrams to Real time Java code with RTSJ.

TOPCASED External Tools:

- **gPM**, our generic changes manager, is available here:
http://gforge.enseeiht.fr/frs/?group_id=63
- If you plan to use subversion, we suggest using **Subversive**: Update Site is a part of Helios Update Site. Look at Help > Install New Software... > select Helios -
<http://download.eclipse.org/releases/helios> > Collaboration Tools

Community

You can find more information [on the official TOPCASED website](#).

A new section "Indicators" was been created to show statistics on some components.

•Users support

Help is available through the 'Help > Help Contents' menu of TOPCASED.

However if you have any questions, you can get support through the TOPCASED Users mailing list: topcased-users@lists.gforge.enseeih.fr

To be able to use the mailing-list, don't forget [to subscribe to it](#), first.

•Developers support

You may find information on the [dedicated developers page of the TOPCASED official website](#).

If you have any questions, you can also use the [TOPCASED developers mailing list](#) and sending your questions to: topcased-devel@lists.gforge.enseeih.fr

•Report a bug:

To report a bug against TOPCASED, create a new entry [on our bug tracker](#).

You need to be logged on the site to be able to create an entry.

•Ask for a new feature

To ask for a new feature on TOPCASED, create a new entry [on our feature tracker](#).

You need to be logged on the site to be able to create an entry.

•TOPCASED Contact

TOPCASED is a collaborative project: if you are interested in helping in some aspects of our technical roadmap (or in extending it), you may contact us at topcased-contact@list.gforge.enseeih.fr. Your participation is welcome.

Known issues

UML/SysML Editors

- When you try to validate your model, there is a validation error due to a particular new EMF validation rule. This is a known issue opened in Eclipse bugzilla:
https://bugs.eclipse.org/bugs/show_bug.cgi?id=320318

Error message:

The opposite features 'namespace' or 'ownedMember' of X and Y do not refer to each other. Unknown EMF Problem

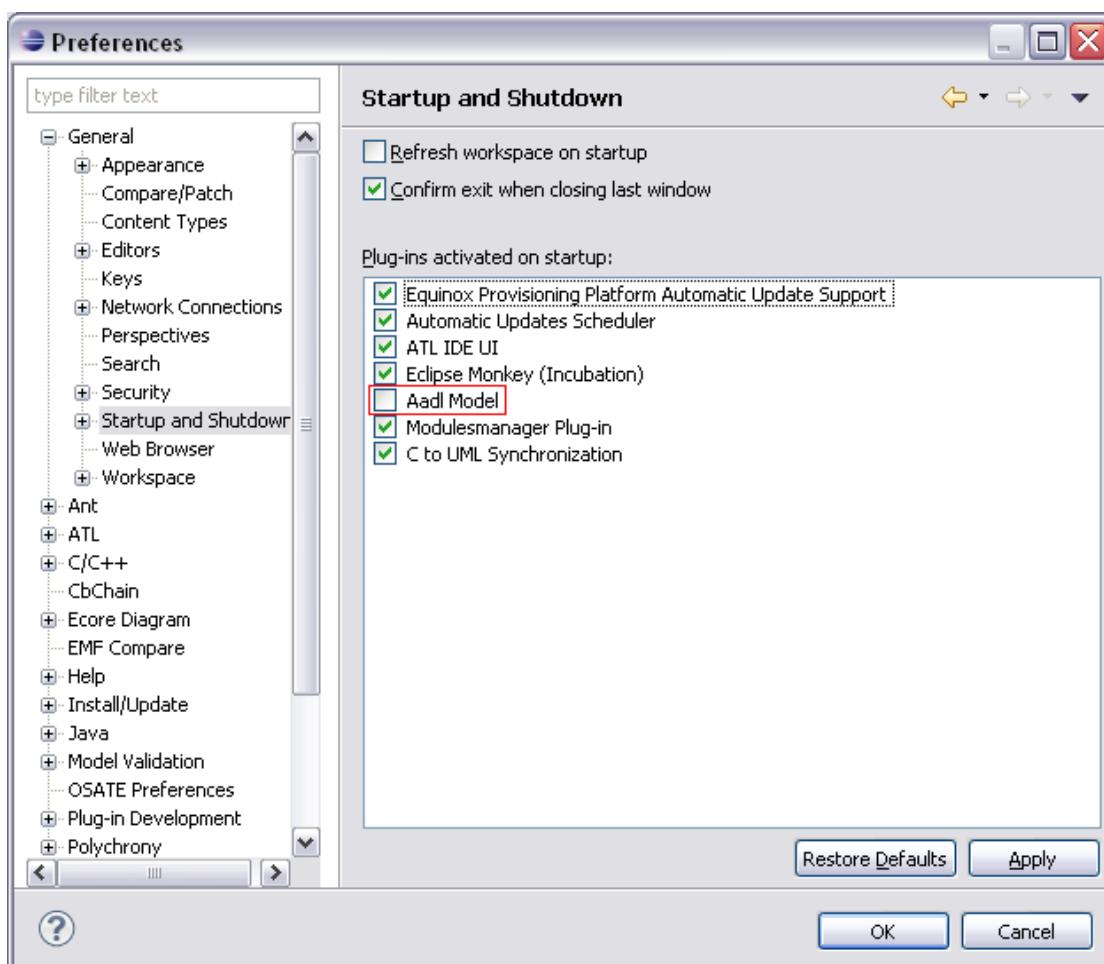
Batch modes (Document generators, Model simulation, TPG)

- Batch mode is not working if the shell current directory is the same than the source model.

Intrusive Plugin_Resources project

- A project named Plugin/Resources is automatically created in your fresh new workspace. This project comes from OSATE and is only used for AADL modeling. We plan to solve that problem in the next release (see bug 3396).

There is a workaround to avoid this behavior. You can disable AADL startup in preferences. Then you can delete the Plugin/Resources project, it will not appear anymore.



News and Noteworthy

TOPCASED integration platform has been updated for this release. TOPCASED is now built on Hudson and Buckminster. This platform enables to be compliant with p2 site format, improve continuous integration and will help us to provide update-site integration soon.

• General

- **Implemented Features Request:** no feature request implemented
- **Fixed Bugs:**

3285 [NPE when opening a Makefile](#)

• Packaging

- **Implemented Features Request:**

3442 [\[Packaging\] org.topcased.modeler.DI should be independant from OCL](#)

3445 [\[Packaging\] RichText plug-ins in Topcased should be renamed to org.topcased.richtext.*](#)

3446 [\[Packaging\] Refactor some high level features](#)

- **Fixed Bugs:**

2322 [\[Packaging\] Too long file names](#)

3368 [\[Packaging\] High level features should not directly include features ou plug-ins](#)

3373 [\[Packaging\] Topcased zip files should be replaced by repository archives](#)

• All Editors

- **Implemented Features Request:**

3454 [Topcased should provide a script to fix anchors in the diagram model](#)

3467 [\[Preference\] It should be possible to set preference for the 'Note' element](#)

- **Fixed Bugs:**

2788 [\[All Editors\] TOPCASED can not be compiled on MacOS X 10.6](#)

3215 [Mode read only for the load ressource](#)

3414 [\[All editors\] Duplicate subtree action do not duplicate all elements](#)

3416 [Outline search does not analyse multi line string attributes](#)

3452 [\[All diagrams\] Two Usage edges appear before being drawn \(mouse not yet released\)](#)

• UML Editor:

- **Implemented feature requests:**

3286 [\[Activity diagram\] Show the name of a control node \(DecisionNode,](#)

[MergeNode](#), [InitialNode](#), [ForkNode](#) etc...)

3213 [Element should be created under classifier referencing current diagram](#)

3444 [\[State Machine\] Navigate to State children behaviors' diagrams](#)

3453 [\[Class Diagram\] Add a specification tab to the property view to edit ValueSpecification](#)

3460 [\[Property View\] Provide a user-friendly way to enter a symbol value for Expression.](#)

3463 [UML/SysML, provide todo recognition for comments](#)

◦ **Fixed Bugs:**

2475 [\[Class Diagram\] Stereotype of an enumeration litteral is not displayed in diagram](#)

2559 [Ghost elements after package deletion.](#)

2910 [State Machine Diagram](#)

3359 [\[activity\] "target" pin created automatically during synchronization with operation parameters should have an upper bound.](#)

3332 [\[patch\] ClassCastException in AbstractAggregationSection](#)

3458 [\[Class Diagram\] UML modeler prevents to create reflexive dependency relationships](#)

3459 [\[Class Diagram\] InterfaceRealization are restored twice](#)

3466 [\[Properties\] Font property is not well refreshed](#)

2505 [It's impossible to modify attribute that a stereotype get by inheritance \(profile sysldi\)](#)

• **SysML Editor**

As Sysml editor inherits from UML editor, you should also have a look at the UML Editor for enhancements.

◦ **Implemented feature requests:**

3474 [\[IBD\] It should be possible to reconnect a connector.](#)

◦ **Fixed Bugs:**

2590 [SysML value types and DataTypes in stereotypes](#)

2595 [Parts and references should be deduced from composite aggregation](#)

3118 [Topcased prevents to define a connector if its connectorsEnds have the same role.](#)

3196 [\[IBD\] Management deletions for part and connector](#)

3407 [SysML activity extension resource should be referenced using absolute path](#)

3412 [\[Properties\] Text is not wrapped when editing a stereotype attribute](#)

3443 [\[IBD\] Wrong PropertyPath when creating a connector](#)

• **Sam Editor**

SAM Requirements now uses generic Topcased requirement module (see [Topcased requirement section](#)).

- **Implemented feature requests:** no feature request implemented.
- **Fixed Bugs:**
 - 1906 [\[SAM\] Undo operation on a model content redraw two ports.](#)
 - 3331 [\[SAM\] Compositions/Decompositions of a Data FlowGroup should be consistent](#)
 - 3401 [\[SAM\] Checker OCL don't see ports inside multiports of automata](#)
 - 3264 [\[REQ+SAM\] Incomplete behavior when a Flow is deleted from the model.](#)

- **AUI Editor**

- **Implemented feature requests:** no feature request implemented.
- **Fixed Bugs:** no bug fixed

- **OCL Tools**

- **Implemented Feature Requests:** no feature request implemented
- **Fixed Bugs:** no bug fixed

- **Java to UML**

Several fixes/enhancements on Java Extension For UML Editor:

- types management refactoring : types are resolved at their location avoiding local and multiple data type creations,
- interfaces implementations enhancement : interface realization type resolution,
- classifiers imports : package/element import from Java imports,
- "usage" dependencies at package level : usage dependencies between packages deduced from classifiers imports,
- port, part and reception reverse : port, part and reception recognition from Java annotation
- partial reverse improvement : merge enhancement of reversed model into the target one,
- method code reverse : method creation for each reversed operation. Body of method reversed as opaque behavior.

- **Documentation Generator**

- **Implemented Feature Requests:**
 - 3402 [have a predefined key for location](#)
- **Fixed Bugs:** no bug fixed

- **TOPCASED requirement**

- **Implemented Feature Requests:**
 - 3415 [Reveal many elements selected in the current requirement view in the editor](#)
 - 3447 [Provide decorators for Elements with Current Requirement linked to it](#)

- **Fixed Bugs:**

3411 [\[Requirements\] Problem with requirements naming on a project with Regex Algorithm](#)

- **Test Plan Generator**

- **Implemented Feature Requests:** no feature request implemented
- **Fixed Bugs:** no bug fixed

- **HTML Export**

- **Implemented Feature Requests:** no feature request implemented
- **Fixed Bugs:** no bug fixed
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- **Scripting**

- **Implemented Feature Requests:** no feature request implemented
- **Fixed Bugs:** no bug fixed