

News in RSA-RTE 10.2

updated for sprint 2017.46

Mattias Mohlin, November 2017

Overview

- **Now based on Eclipse Oxygen.1 (4.7.1)**
- **Contains everything from RSARTE 10.1 and also additional features and bug fixes**
 - See the What's New presentation for RSARTE 10.1 to learn about the new features that are also present in version 10.1



IBM Rational® Software Architect RealTime Edition

Version: 10.2.0.v20171117_1251

Release: 2017.46

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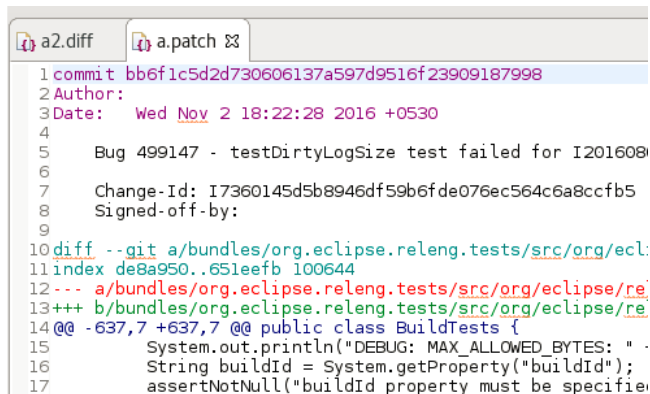
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Eclipse 4.7.1 (Oxygen)

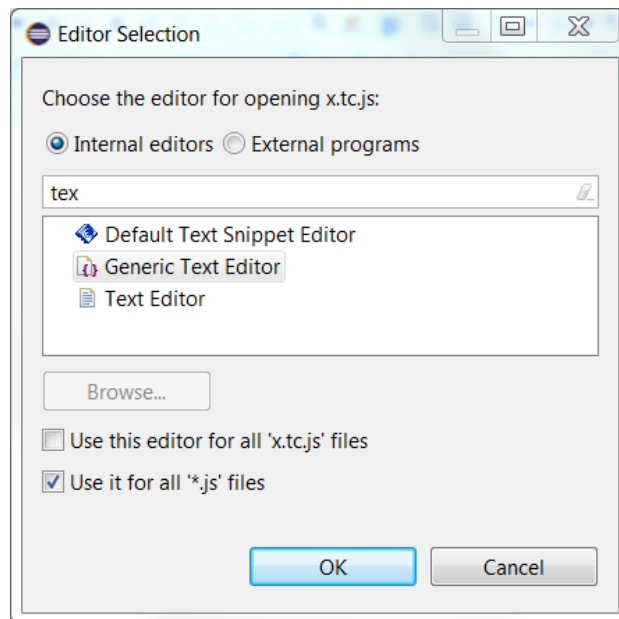
- New text editor ("Generic Text Editor")
 - Has some general improvements, such as support for syntax highlighting of .patch and .diff files



The screenshot shows the Eclipse IDE with two tabs: 'a2.diff' and 'a.patch'. The 'a2.diff' tab is active, displaying a diff file with syntax highlighting. The content includes a commit message, a bug report, and a code change. The code change is highlighted in green, indicating it is a new addition. The diff file content is as follows:

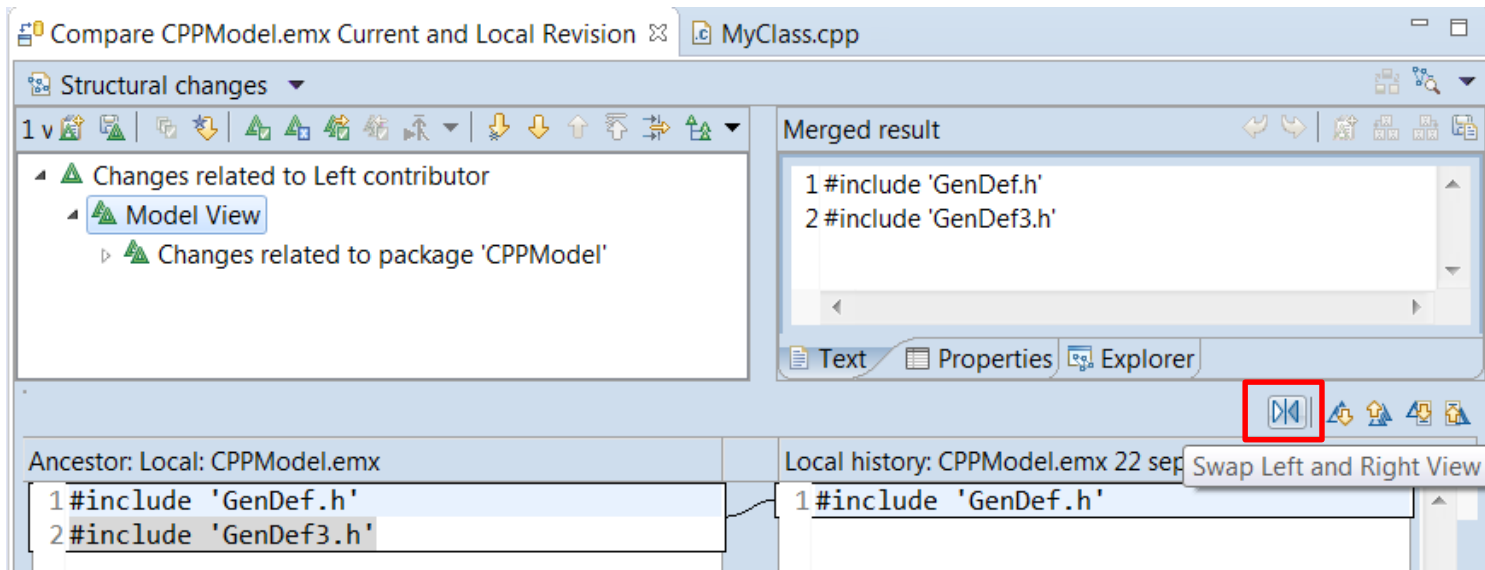
```
1 commit bb6f1c5d2d730606137a597d9516f23909187998
2 Author:
3 Date: Wed Nov 2 18:22:28 2016 +0530
4
5 Bug 499147 - testDirtyLogSize test failed for I201608
6
7 Change-Id: I7360145d5b8946df59b6fde076ec564c6a8ccfb5
8 Signed-off-by:
9
10 diff --git a/bundles/org.eclipse.releng.tests/src/org/ecl
11 index de8a950..651eebf 100644
12 --- a/bundles/org.eclipse.releng.tests/src/org/eclipse/re
13 +++ b/bundles/org.eclipse.releng.tests/src/org/eclipse/re
14 @@ -637,7 +637,7 @@ public class BuildTests {
15     System.out.println("DEBUG: MAX_ALLOWED_BYTES: "
16     String buildId = System.getProperty("buildId");
17     assertNotNull("buildId property must be specifie
```

- Easier to associate files with special extensions to an appropriate editor
 - Select the file and do *Open with – Other...*
 - Specify an internal Eclipse editor, or an external program
 - For example, set .tc.js files to be opened with your favorite text editor



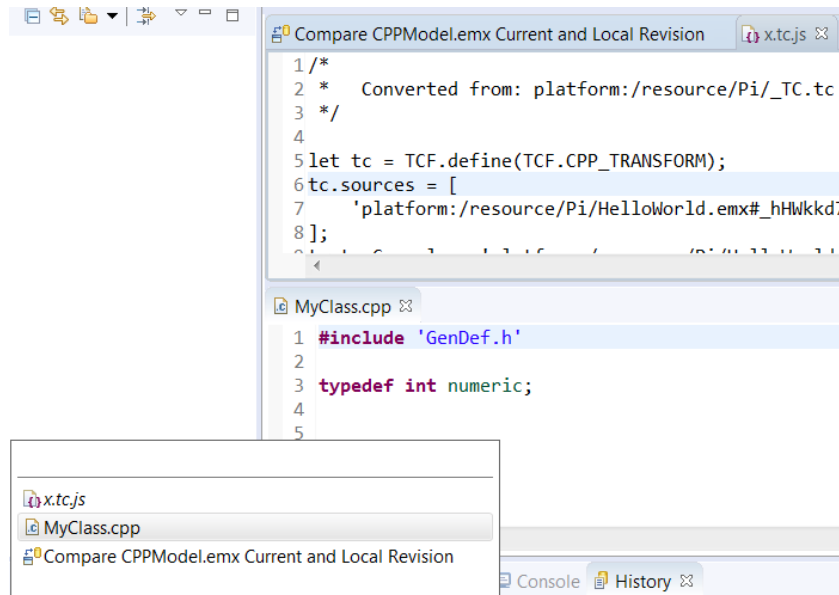
Eclipse 4.7.1 (Oxygen)

- Swapping left and right side when doing textual compare/merge
 - Useful if selecting files so they were compared in the "wrong" order
 - Available for all text files, and also when doing compare/merge on a code snippet within a model



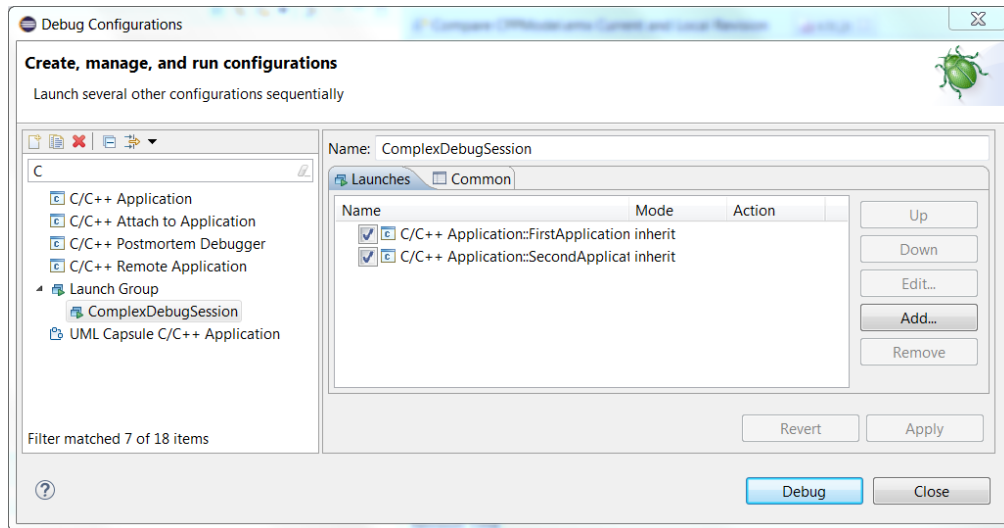
Eclipse 4.7.1 (Oxygen)

- It's now possible to switch between open editors using Ctrl+E even when the editor area has been split to show more than one editor at the same time
 - Especially useful for users with big screens who often show more than one editor at the same time
 - Tooltip with open editors now appear in the middle of the screen to make it easier to notice
 - Navigation to subsequent editors can now be done using Ctrl+E instead of having to use arrow keys or mouse



Eclipse 4.7.1 (Oxygen)

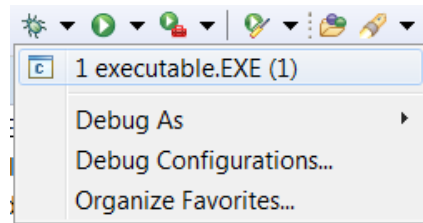
- Support for launch groups
 - A new type of launch configuration that can contain other launch configurations
 - Makes it easier to debug applications that require multiple executables to be launched
 - Possible to customize the rules for when and how the contained launch configurations should be launched
 - N.B. CDT previously provided a similar launch group feature, and it is now deprecated



Eclipse 4.7.1 (Oxygen)

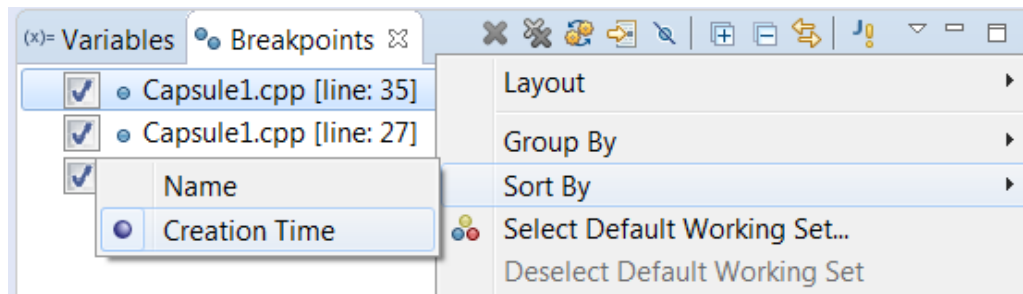
■ Terminate and Relaunch

- The default Eclipse behavior is to always launch a new debug session, when launching from the history in the Debug and Run button menus.
- Now you can press Shift when launching from the history to automatically terminate the previous session before launching a new session
- A new preference *Run/Debug – Launching – Terminate and Relaunch while launching* can be set if you always prefer this behavior (without pressing Shift)



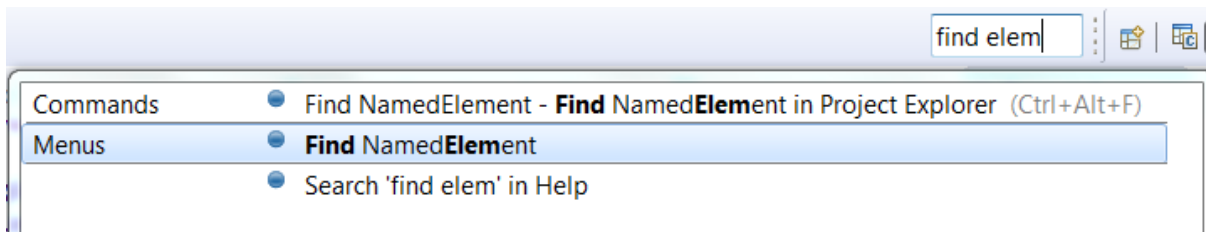
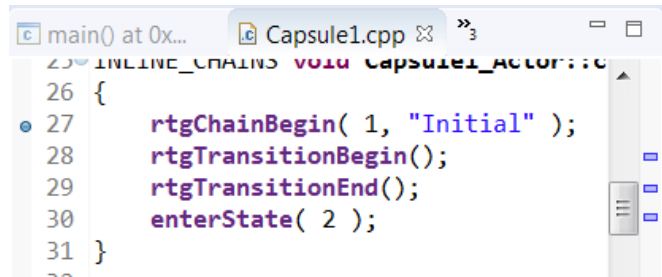
■ Sorting breakpoints by creation date

- Useful when there are many breakpoints and you want to see the newest one on top

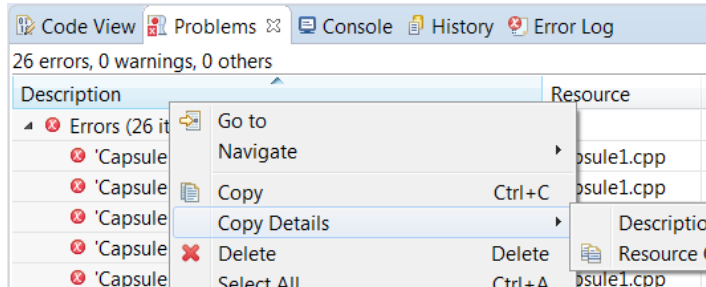


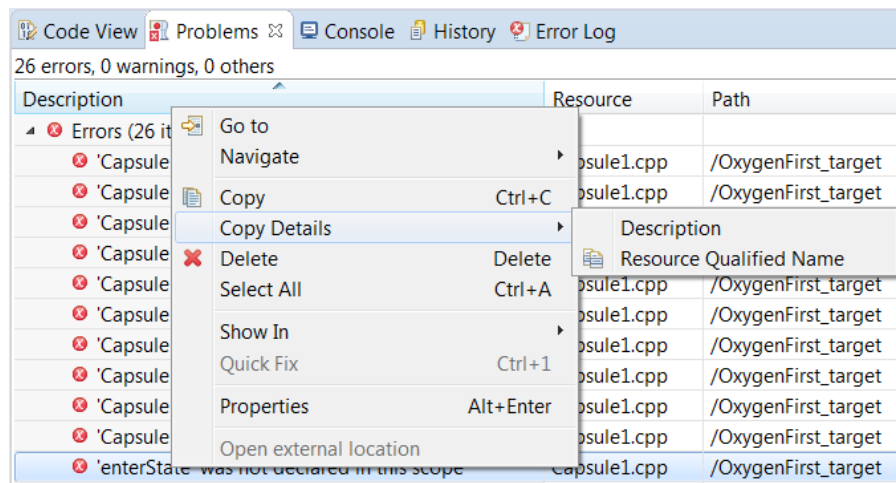
Eclipse 4.7.1 (Oxygen)

- Breakpoints now visible in the overview ruler
 - Helps finding the breakpoints in large files
- Smarter Quick Access search
 - Now supports space separated strings
 - Useful if you don't remember the command name exactly
 - Wildcards (* and ?) can also be used
 - Also possible now to use Quick Access for searching in the Help documentation
 - Other minor improvements (e.g. showing command icons) also make this feature more user-friendly



Eclipse 4.7.1 (Oxygen)

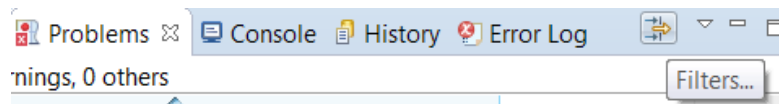
- Possible to hide the status bar
 - A new command *Window – Appearance – Hide (Show) Status Bar* can be used
 - (Linux only) Left/Right arrow keys for collapsing/expanding current tree node
 - Same behavior as on Windows
 - Works on GTK+ 3.6 and later
 - Easier to copy parts of an entry in the Problems or Tasks view
 - Copy Details in the context menu can be used for copying either only the description text or the resource name
- 
- The screenshot shows the Qt Creator application window. The 'Problems' tab is active, displaying a list of errors. A context menu is open over the first error entry, which has the description "'Capsule ...'" and the resource name 'capsule1.cpp'. The menu options include 'Go to Navigate', 'Copy' (with a keyboard shortcut 'Ctrl+C'), 'Copy Details', 'Delete', and 'Select All' (with a keyboard shortcut 'Ctrl+A'). The 'Copy Details' option is currently selected, and a sub-menu is visible to its right, showing 'Description' and 'Resource' as options for what to copy.



Eclipse 4.7.1 (Oxygen)

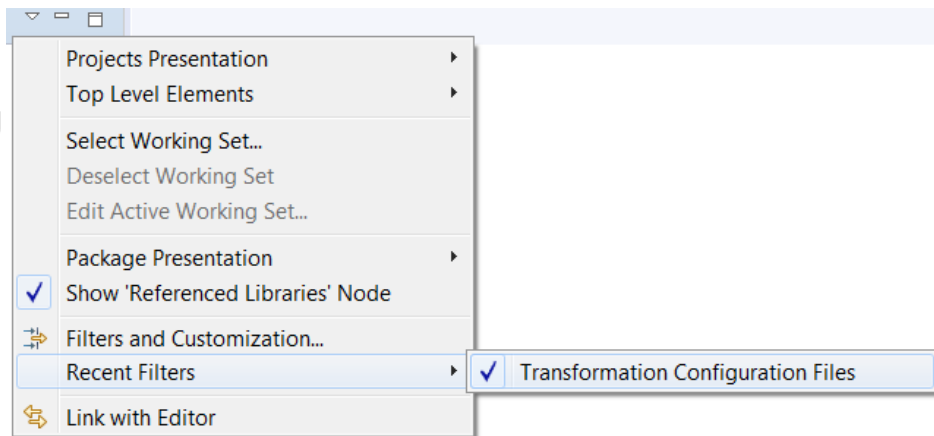
- Easier to filter the Problems and Tasks views

- Filters can be applied using a toolbar button
- The Filters dialog itself has also been simplified



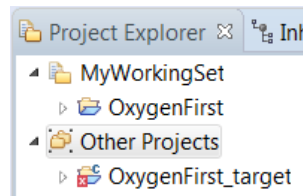
- Easier to filter the Project Explorer

- A new context submenu for setting/unsetting recent filters
- Note: The command "Customize view" is now called "Filters and Customization"



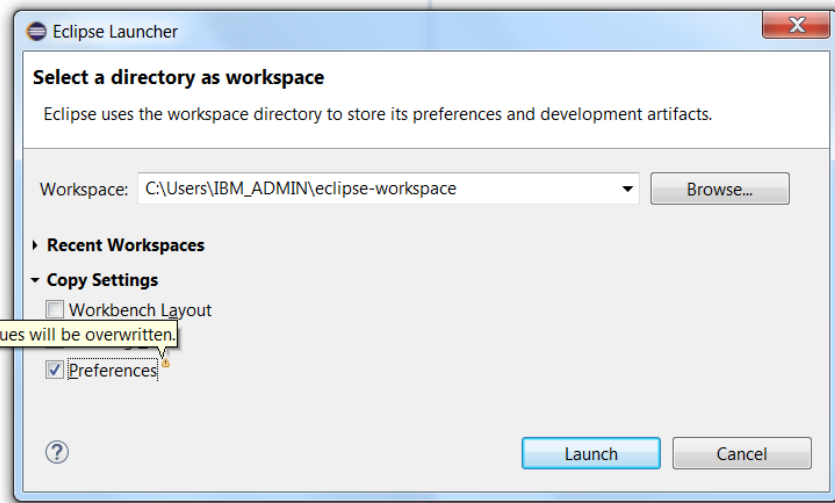
- Showing projects not in the currently active working sets

- An "Other Projects" group can be used for showing such projects when working sets are the top level elements



Eclipse 4.7.1 (Oxygen)

- Copying workspace preferences
 - Can now be done when switching to a new or existing workspace
- Always run in background
 - The preference *General – Always run in background* is now enabled by default. Disable it if you prefer the old behavior of seeing a progress dialog for long-running operations.
- More external web browsers supported on Linux
 - Now support for Firefox, Chrome, Chromium, Epiphany/Gnome Web, Konqueror
- For more information about Eclipse improvements see
 - News in Eclipse 4.7 (Oxygen) <http://www.eclipse.org/eclipse/news/4.7/platform.php>



CDT 9.3 (included as part of Eclipse Oxygen.1)

- Open Declaration

- This command has been improved for several navigation scenarios. For example, it's now possible to navigate from a class template to its forward declaration.

- Content Assist

- Recognition of the pattern **&ClassName::** to include also non-static member functions as proposals
- Now supports the case when include files do not have traditional file extensions (.h or .hpp)
- More information is now printed in the hint tooltip for function parameters (full function signature)

- Comment Folding

- Documentation comments (///) are now better supported w.r.t folding in the CDT editor

- Performance Improvements

- Build Console is now up to 25 times faster when performing large number of printouts to the console
- UI responsiveness has improved by reducing the number of threads used
- Now the build time when using CDT is comparable to when building from command-line



CDT 9.3

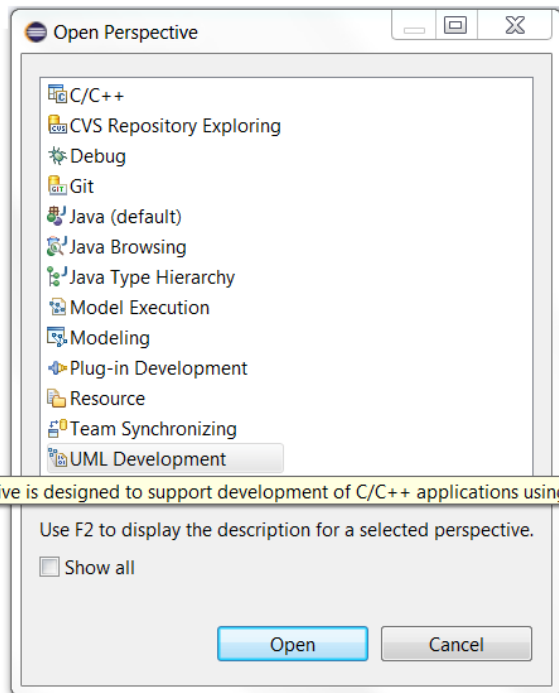
- Source Not Found Editor
 - A new preference in C/C++ - Debug allows to control when this editor appears
- Quick Fixes
 - More Quick Fixes are now available for many build errors generated by gcc

*For more information about news in CDT 9.3
see <https://wiki.eclipse.org/CDT/User/NewsIn93>*



Perspective Improvements

- Eclipse Oxygen now supports showing perspective descriptions in the Open Perspective dialog



- The perspective description is shown by pressing F2
- Helps in particular new RSARTE users in learning the tool
- All perspectives provided by RSARTE now have a description
- **Note:** The perspective "Classic Modeling" has been removed as it was considered confusing to have two different perspectives for the purpose of modeling. The "Classic Modeling" perspective was intended for users used to RSARTE versions earlier than 8.0 and didn't provide any real value for users used to more modern versions of RSARTE. If needed, it is always possible to create a customized version of the Modeling perspective.



Read-Only Installation

- It's now possible to install RSARTE into a read-only Eclipse installation
 - RSARTE specific tools need no longer be present in an **rsa_rt** folder in the installation
- Note that the TargetRTS and Connexis features still cannot be installed into a read-only Eclipse installation
 - The workaround is to install those features in a different (writable) Eclipse installation and then copy the folders **rsa_rt/C++** and/or **rsa_rt/Connexis** to some share folder **rsa_rt** and use it from the read-only RSARTE installation.



THANK YOU!