

What's New in HCL RTist 11.3

updated for release 2023.04

L7 HCL SOFTWARE

Overview

- ▶ RTist 11.3 is based on Eclipse 2022.06 (4.24)
- ▶ HCL RTist is 100% compatible with IBM RSARTE and all features in these two products are equivalent.



Version: 11.3.0.v20230124_1131

Release: 2023.04

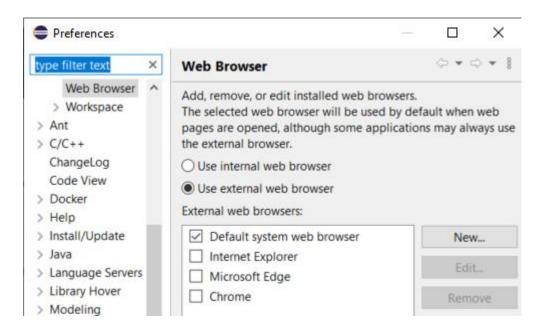
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Visit https://RTist.hcldoc.com/help/topic/com.ibm.xtools.rsarte.webdoc/users-quide/overview.html

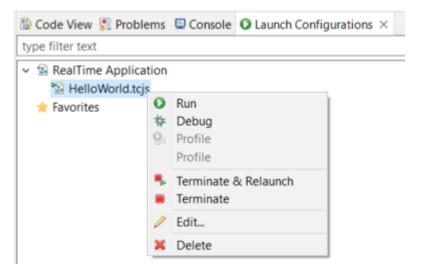


- ▶ Compared to RTist 11.2, RTist 11.3 includes new features and bug fixes from 4 quarterly Eclipse releases:
 - 2021.09 (https://www.eclipse.org/eclipse/news/4.21/platform.php)
 - 2021.12 (https://www.eclipse.org/eclipse/news/4.22/platform.php)
 - 2022.03 (https://www.eclipse.org/eclipse/news/4.23/platform.php)
 - 2022.06 (https://www.eclipse.org/eclipse/news/4.24/platform.php)
- ▶ For full information about all improvements and changes in these Eclipse releases see the links above
 - Some highlights are listed in the next few slides...

- ▶ Eclipse now by default uses the external web browser
 - The internal web browser has limitations and cannot show all web pages correctly
 - Usage of the external web browser is therefore recommended, and having it as the default makes it easier to get started with RTist without having to configure the preferences in General - Web Browser.



- ▶ A new Launch Configuration View makes it easier to, for example, launch model or C++ debug sessions
 - No need to first open the modal Launch Configuration dialog
 - Launch configurations will appear in the view automatically as they are created
 - Commonly useful commands for launching, terminating etc are available in the context menu
 - To start a model debug session, just double-click a "TC launch configuration" in that view



- Multiple text selections
 - You can now have multiple cursors in a text editor and make multiple selections
 - Add a new cursor by Alt+click
 - Multiple cursors can be useful when making the same change in multiple places in a file ("interactive find/replace")

```
Showing code from the file Initial

48 log.log("Getting indices");

49 long int i1 = getIndex1();

50 long int i2 = getIndex2();

51 long int i3 = getIndex3();

52 context()->abort();

53
```

- Several new text editor commands are available for working with multiple text selections
 - For example: Multi selection up/down relative to anchor selection (for creating a multi-selection from a selected word)
 - Note: You need to assign a key binding to these commands to use them!
 Use the preference page General Keys and search for commands with "multi" in their name in the "Text Editing" category.

```
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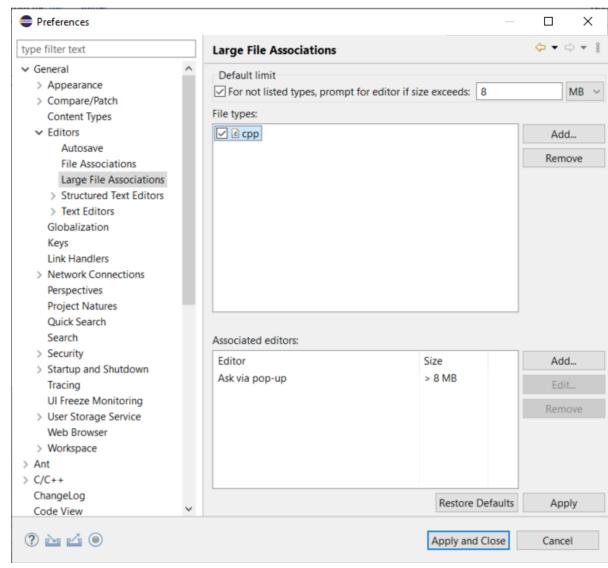
- ▶ Large file associations
 - A new preference page allows to specify special editors to use for large files: General - Editors - Large File
 Associations
 - Can help keeping a good performance in Eclipse even when opening large files
- Project encodings
 - Projects will now automatically get its encoding set to the workspace encoding (by default UTF-8) when they are created
 - For projects created in earlier versions of Eclipse a warning will appear

 © Code View Problems × Console Configurat of errors, 1 warning, 0 others

 A Quick Fix is available for setting the project encoding to the workspace encoding

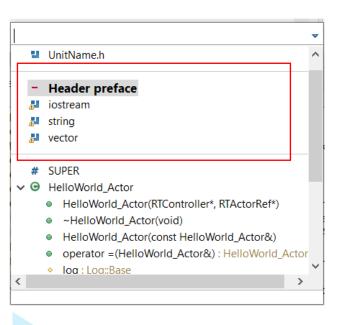
Description 0 errors, 1 warning, 0 others

Project 'ConnexisSample' has no explicit encoding set



CDT 10.7 (included as part of Eclipse 2022.06)

- Separator lines in the Outline view
 - #pragma mark and #pragma region can be used for showing separator lines in the Outline view
 - Can help to more easily see and navigate to user code snippets in a generated C++ file
 - Automatically generating such separator lines for certain code snippets could be a future possibility...



```
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☐ Outline ×

13 Header Preface for HelloWorld::HelloWorld ×
                                                                                                                  # HelloWorld h
 Showing code from the <u>file</u>
                                                                                                                  UnitName.h
 10 #pragma mark - Header preface
 11 #include <iostream>
                                                                                                                  - Header preface
 12 #include <string>
                                                                                                                  iostream
 13 #include <vector>
                                                                                                                  string
 14#pragma mark -
                                                                                                                  vector
# SUPER

→ Θ HelloWorld Actor

 8 #include <UnitName.h>
 9 //{{{USR platform:/resource/HW11 3/HelloWorld.emx# gnMUwGpjEe21tMi8s5FR00|General|headerP

    HelloWorld_Actor(RTController*, RTActorRef*)

 10 #pragma mark - Header preface
                                                                                                                      ~HelloWorld_Actor(void)
 11 #include <iostream>

    HelloWorld Actor(const HelloWorld Actor&)

 12 #include <string>
                                                                                                                      operator =(HelloWorld_Actor&) : HelloWorld_Ac
13 #include <vector>

    log:Log::Base

 14 #pragma mark -

    transition1 Initial(const void*, RTProtocol*): void

 15 //}}}USR
                                                                                                                       chain1 Initial(void) : void
```

CDT 10.7 (included as part of Eclipse 2022.06)

- ▶ Improved code analysis for constexpr expressions
 - A number of GCC/Clang built-in functions can now be used without confusing the Code Analysis feature
- ▶ For more information about CDT improvements see

https://wiki.eclipse.org/CDT/User/NewIn104

https://wiki.eclipse.org/CDT/User/NewIn105

https://wiki.eclipse.org/CDT/User/NewIn106

https://wiki.eclipse.org/CDT/User/NewIn107

Newer EGit Version in the EGit Integration

- ▶ The EGit integration in RTist has upgraded EGit from 5.12 to 6.2
 - This is the recommended and latest version for Eclipse 2022.06
- ▶ This upgrade provides several new features and bug fixes
 - For detailed information about the changes see

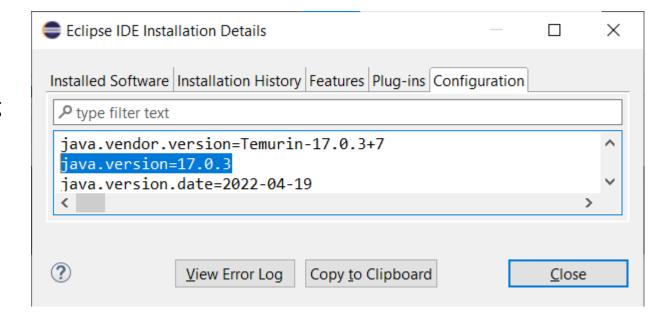
 https://wiki.eclipse.org/EGit/New and Noteworthy/5.13

 https://wiki.eclipse.org/EGit/New and Noteworthy/6.0

 https://wiki.eclipse.org/EGit/New and Noteworthy/6.2

Java 17

- RTist now should be run with a Java 17 JVM.
 - Eclipse 2022.06 includes a Java 17 JVM which can be used. It's hence no longer necessary to update eclipse.ini to specify a different JVM for running RTist.
 - Refer to the System Requirements for more details
- Rebuild your plugins
 - If you have your own Eclipse plugins it's recommended to rebuild them with a Java 17 compiler before running them together with RTist 11.3.



HCL

Relationary

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