



Razorcat Development GmbH Witzlebenplatz 4 14057 Berlin Germany

# **Technical Support**

# **Release Notes**

## Release v5.1.8 (66 items)

### C++

TES-4760

Fixed possible instrumenter syntax error if a range-based for loop is used.

### C++

TES-4780

Fixed errors in test driver for dynamic class objects using a constructor with pointer parameters.

### C++

TES-4799

Wrong cast was generated in test driver for static variables of type 'enum class'.

#### C++

TES-4802

Fixed error in test driver when accessing members of a private base class.

### C++

TES-4805

Fixed error in test driver when a constructor parameter is a pointer and the target is a variable defined in the user code definitions.

### C++

TES-4806

Wrong variable name was generated for a pointer class member when this class is a class reference member of another class.

#### C++

TES-4832

Possible instrumentation error fixed if functions or methods with the same name but different signatures exist.



#### C++

TES-4837

Fixed instrumenting code with constructor using curly brackets in initializer list.

#### C++

TES-4848

Superfluous code was generated to C++ driver for global pointer when the test object is not a method (normal function).

#### CTE

TES-4867

Fix missing CTE node mapping files produce unnecessary error messages.

### **Command Line (tessycmd)**

TES-4223

tessycmd list-source-files now prints the absolute path of the source files.

### Command Line (tessycmd)

TES-4581

Fixed tessyd cannot connect to license server if no port is given, even though license server works on default port.

## **Command Line (tessycmd)**

TES-4791

Fixed deadlock when starting tessyd without an actual project.

### Command Line (tessycmd)

TES-4792

Fixed error messages being printed as HTML.

# Compiler/Target/Microcontroller

New Feature

TES-3824

New compiler Frontgrade Gaisler BCC with Frontgrade TSIM simulator.

# Compiler/Target/Microcontroller

**Enhancement** 

TES-4776

Updated Microchip TKS file.

### Compiler/Target/Microcontroller

TES-4798

Fixed Makefile templates that used erroneously ts\_pathname, which is no longer supported.

# Compiler/Target/Microcontroller

**Enhancement** 

TES-4820

Adjusted the Slave Call for the TASKING Script debugger.

# Compiler/Target/Microcontroller

TFS-4821

Fixed IDB IAR ARM file path in configuration.



# Compiler/Target/Microcontroller

**Enhancement** 

TES-4838

Updated the preprocessor call, the IDB Makefile, and the Makefile template for IAR ARM C++ compiler.

# Compiler/Target/Microcontroller

TFS-4830

Fixed several communication Makefiles.

## Compiler/Target/Microcontroller

TES-4845

Fixed attribute "Master Call" for a few debuggers.

# Compiler/Target/Microcontroller

**Enhancement** 

TES-4850

Updated TKS file of GNU Toolchain for PowerPC.

### **Component Test**

TES-4879

Unused dynamic objects in time steps may cause the time steps to be marked as failed although the scenario is actually passed.

### **Coverage Reviews**

TES-4817

Only include valid coverage reviews into test summary report.

### Coverage Reviews

TES-4921

Convert paths when restoring coverage reviews or importing a test summary that were created in a different operating system.

### Coverage Viewer (CV)

TES-4616

Incorrect code highlighting when there is an external "C" declaration that spans multiple lines has been fixed.

### Coverage Viewer (CV)

TES-4813

Number of unreached/reached decisions within the ASCII coverage report was incorrect for test objects containing switch statements with conditions in the selector (The total coverage percentage was calculated correctly).

### Coverage Viewer (CV)

TES-4814

Source in Coverage Viewer was not always colored correctly when a test object was not in the first source of a modules sources.

# **Coverage Viewer (CV)**

TES-4841

Fixed exception when executing a test in the Overview perspective after a scenario has previously been open in the Scenario Editor.



#### Driver

TES-4778

Code incompatible to ISO C was generated when using dynamic objects.

#### Driver

TES-4840

Fixed filtering macros according to the filter given in attribute 'Generate Defines Exclude List' for macros containing parameters.

## **Environment Editor (TEE)**

**Enhancement** 

TFS-4808

Added "Device Family Pack" attribute to Microchip XC8 compiler.

# **Environment Editor (TEE)**

TES-4897

Fixed Language attribute for IAR RISC-V (C++).

### Fault Injection

TES-4899

Fixed building/updating the decision path for control flow graph locations having sub flows within their parent chain path.

### Import/Export

TES-4862

Fixed updating passing directions during test data import.

### Instrumenter

TES-4828

Fixed instrumenter infinite loop if a typedef to a function pointer spans multiple lines and contains preprocessor information.

#### Instrumenter

TES-4833

Incorrect code in the instrumentation of functions that declare an external function inside the body has been fixed.

## Instrumenter

TES-4881

Fixed instrumentation of code with goto label.

#### Instrumenter

TES-4919

Fixed wrong coverage result if a function pointer in a call expression is guarded with superfluous parentheses. [e.g. (0 == structure ? 0 : (structure->pointer)())]



# Interface Assigner (IDA)

**Enhancement** 

TES-4675

An automatic reuse of a test object with changed interface will now be executed if:

- Variables were only added to or only removed from the interface.
- Parameters were only added to or only removed from the interface.
- The return type was changed from any type to void or vice versa.
- Scope of variables was changed.
- Not stubbed extern function calls were changed.

### Interface Assigner (IDA)

TES-4766

Button to move unused variables/functions to the interface of the target function was missing.

### Interface Assigner (IDA)

TES-4856

CTE tree node data was lost after data assignment between different test objects.

### Interface Assigner (IDA)

TES-4865

Fixed context menu entries in IDA.

Parser Enhancement

TES-3796

All tagged types of local variables will now be collected to be available in Create Variable dialog.

Parser Enhancement

TES-4891

Fixed tks-ti parser file concerning \_\_byte().

### **Parser**

TES-4904

Fixed parsing gcc C++ header files with macro \_\_integer\_pack

Project Handling Enhancement

TES-4906

Renamed button in "Select Project" dialog when no project is open.

### Report

TES-4789

Generating the test overview report within a batch operation failed if creating test details reports was selected as well and any of the test details reports could not be created.

### Report

TES-4829

Fixed missing graphics within HTML formatted test summary report.

### Report

TES-4868

Fixed possible wrong result significance for test objects with only a return value as result.



### Save/Restore Database (TMB Files)

TES-4873

Do not allow '|' in file names.

## Save/Restore Database (TMB Files)

TES-4900

Fixed race condition when importing multiple tasks into the same folder.

TESSY (General) New Feature

TES-4847

Added new tool tessyenv to execute commands with a TESSY environment.

 To run a script within the TESSY bash shell: tessyenv shell -f runQTS.sh

 To get an environment variable provided within the TESSY bash shell: export \$(tessyenv env | grep JAVA\_HOME)

## **TESSY (General)**

TES-4890

Fixed naming of test execution log files. This caused empty or wrong messages being displayed for exceptions within the problems log view/dialog.

Test Cockpit Enhancement

TES-4794

Show summary test objects as being incomplete if there are any not executed test cases for any of their contributing test objects.

### **Test Cockpit**

TES-4801

The instrumentation mode "Test Object and Called Functions" could cause missing coverage being displayed within the Test Cockpit view for changed and retested test objects while an imported test summary was active.

#### Test Cockpit

TES-4803

The setting of the test cockpit preference "Require testing identical test objects for all variations of a source file" was not applied if an imported test summary was active. Imported test summary results were handled as if the preference was not set.

## **Test Cockpit**

TES-4824

Do not attempt to open the interface database for test objects that have been removed or whose interface has changed.

### **Test Cockpit**

TES-4846

Fixed source scanner for comments in defines.

Test Cockpit Enhancement

TES-4861

Ignoring line endings in the SHA1 source code hash calculation to avoid problems when switching between different operating systems.



### **Test Data Editor (TDE)**

TES-4730

Clarified label and icon for functions filter in Calltrace view

## Test Data Editor (TDE)

**Enhancement** 

TES-4797

Fixed entering invalid enum values and enhanced usability of cell editing.

### **Test Database (TDB)**

TES-4882

Fix that INOUT scalar values in dynamic objects are not saved when no IN value is set.

### **Test Execution**

TES-4889

Fixed potential "end before start date" problem when creating test runs.

User Manual Enhancement

TES-4795

Documented the minimal requirements and settings for headless TESSY on Linux systems.

### Release v5.1.7 (21 items)

#### C++

TES-4710

If an advanced stub parameter or return is a class with a base class an erroneous class was created.

### C++

TES-4711

Avoid instrumenting class visibility statements while inside a standard template library namespace.

### C++

TES-4715

Superfluous code was generated to C++ driver for unused methods with pointer or reference to class parameter.

#### C++

TES-4747

Fixed parser error if classes/templates with only tag definitions are used.

CTE New Feature

TES-1751

In CTE there is now a menu action available which allows to select the attached interface element or the attached test data in the TDE view.

#### CTE

TES-4537

Fix 'Update names of nodes with attached interface' not working for return values.



### Release v5.1.7 (21 items)

Instrumenter Enhancement

TES-4709

Fixed infinite loop when a string initializer list start with '('.

#### Instrumenter

TES-4754

Fixed test driver generation issue for CPC coverage if function pointers are used.

Report Enhancement

TES-4736

Added the summary test object status "Incomplete" to the test summary report.

### **TESSY (General)**

TES-4190

Refresh the text filter for attributes when switching to a different element in the Test Project View.

### TESSY (General)

TES-4678

Update last modified timestamp when the description, specification or comment of an element is modified, an attribute is modified, or a requirement link is updated.

TESSY (General) Enhancement

TES-4706

Implemented Show-Overwritten-feature in TESSY's Property view.

#### TESSY (General)

TES-4717

Removed Test Results View from the default perspective layout in the Overview and TDE perspectives.

### TESSY (General)

TES-4718

Fixed toggle button state for attributes in the Overview perspective not being persistent after restart.

### **Test Cockpit**

TES-4703

Fixed source file analysis: Handling of paranthesis within strings corrected.

### Test Cockpit

TES-4704

Fixed potential race condition when unit test and one or more component tests are contributing to the same source file within the test summary.

# **Test Cockpit**

TES-4707

Fixed refresh of test summary: When source files were changed for a module, the respective source files were showing a warning decorator erroneously indicating that there were no modules for this source file.



### Release v5.1.7 (21 items)

Test Cockpit New Feature

TES-4727

Added command in Test Cockpit to reset the test summary and all test results.

### **Test Cockpit**

TES-4739

Correctly display summary test objects with incomplete results in the Test Cockpit.

### **Test Cockpit**

TES-4740

Do not apply "Skip test objects with valid result" to summary test objects with incomplete imported results.

### **Test Cockpit**

TES-4741

Analyze all relevant modules before execution when the "Skip test objects with valid results" option is enabled while the Test Cockpit contains imported results.

### Release v5.1.6 (20 items)

#### CTE

TES-4465

Activate the feature preference "Update names of nodes with attached interface elements" by default.

CTE Enhancement

TES-4584

CTE-179 Meta information can be seen and manipulated in the Properties view. The default text of comments shows variable usage to show this information in comments.

CTE-568 The type of a mark can be changed in "circle", "square" and "triangle". There is no special handling behind types. Their purpose is for documentation and user defined workflows.

CTE-582 Newly created CTE nodes will be in quick edit mode for the name.

#### CTE

TES-4653

Added a timeout to unblock TESSY runs. The timeout can be set up via the properties "com.razorcat.cte.export.timeout" the default value is 10 meaning 10 seconds. Furthermore the number of retries after a timeout is controlled via "com.razorcat.cte.export.timeout.retry" the default value is 1.

# **Coverage Measurement**

New Feature

TES-4198

Added new source code line based coverage measurements: Code Access (CA) and Hyper Coverage (HC) which will be calculated based on the standard coverage measurements (C0, C1, DC, MC/DC, MCC, CPC).

# Coverage Measurement

New Feature

TES-4642

Enhanced functionality to create lcov coverage.info file along with the test summary report. This enables users to seamlessly generate lcov HTML coverage reports using TESSY coverage data.



### Release v5.1.6 (20 items)

Metrics Enhancement

TES-3906

Added the ability to modify the default hours per day in preference metrics.

The Actual time and Estimated time will be automatically updated to reflect the changes.

Metrics Enhancement

TES-4643

Improved representation of Estimated/Actual Time metrics. Minutes will now be retained at the test object level, but omitted at the module, folder and test collection levels when weeks or days are present.

#### **Parser**

TES-3674

The legacy parser (non-CLANG) has been removed. Projects using the legacy parser need to be migrated to the CLANG parser.

## Scenario Editor (SCE)

New Feature

TES-4491

All functions can now be checked as called functions in component tests.

Script Editor New Feature

TES-3608

Update CTE test data and requirement links when committing a script.

Script Editor New Feature

TES-3947

Support default array values in scripts.

Script Editor Enhancement

TES-4062

Create missing synthetic variables when committing a script.

TESSY (General) New Feature

TES-4311

Add coverage reviews to provide a reason why code lines have not been reached during test execution and count them when determining the reached coverage for a source file.

TESSY (General) New Feature

TES-4323

Now TESSY is prepared to scale images on high-DPI monitors automatically.

TESSY (General) Enhancement

TES-4325

Now all icons used in menus, toolbars, labels and other widgets are replaced by redesigned icon versions.

### TESSY (General)

TES-4495

Enable module analysis for any selection containing one or more test objects and/or modules in the Test Project View.



# Release v5.1.6 (20 items)

## **TESSY (General)**

TES-4496

Add "Force Analyze Modules" command in the Test Project View.

TESSY (General) Enhancement

TES-4516

New option available to use shorter paths for temporary files generated for modules and test objects.

Test Cockpit New Feature

TES-4310

The new Test Cockpit view provides information about test progress and overall test and coverage results. It shows source files with each of their variations being tested and their related tests. The new "Code Access" (CA) and "Hyper Coverage" (HC) measurements are available within this view.

# Test Data Editor (TDE)

**Enhancement** 

TES-4681

It is now possible to attach a test interface element to multiple selected nodes at once, this is intended to ease linking array elements.