Release Notes

Release v4.1.31 (10 items)

Command Line (tessycmd)
Enhancement

TES-3872

Log any forced auto-reuse operations carried out for test objects with changed interfaces in headless mode.

Command Line (tessycmd)

TES-3873

Apply attribute 'Function Stub Exclude List' when automatically stubbing new external functions in headless mode and apply 'Variable Exclude List' when automatically defining new variables in headless mode.

Driver

TES-3878

Fixed generating driver for test objects with function local static pointers.

Interface Database (IDB)
Enhancement

TES-3871

Changes in enum values will not require a manual reuse anymore, the new values will be applied automatically.

Report

TES-3847

Fixed memory leak during report generation.

TESSY (General)
Enhancement

TES-3880

Enhanced performance of toolbar and menu item sensitivity handling in graphical user interface.

Test Data Editor (TDE)

TES-3902

Set new vector size when using actual as expected on an advanced stub vector value.

Test Data Editor (TDE)

TES-3910

Fixed opening combo box to enter value for 'throws exception'.

Release v4.1.31 (10 items)

Test Execution
TES-3846

Fixed memory leak during test execution and evaluation.

Variant Management
Enhancement

TES-3079

Show full path name of variants within parent variant selection combo box.

Release v4.1.30 (7 items)

C++
TES-3840

Fixed parser error when using templates with variadic parameter as base class.

Compiler/Target/Microcontroller
TES-3821

Fixed ti ARM IDB Makefiles concerning include paths.

Compiler/Target/Microcontroller
TES-3822

Added missing timer file feature to uVision UVSC communication Makefile.

Compiler/Target/Microcontroller
TES-3823

Fixed IDB Makefile for the Keil compiler.

Defines
TES-3829

Fixed possible missing defines referencing other defines.

Interface Database (IDB)
TES-3826

Possible failure to open large Interface Database after analyze when an antivirus software is running.

Report
TES-3839

Attempt to automatically resolve file name conflicts during report generation, and display an error message if the report file name pattern is configured such that automatic resolution is not possible.

Release v4.1.29 (19 items)

ASAP Conversion
TES-3792

Fixed error executing ASAP Parser, when the database location is APPDATA or USERPROFILE.

Release v4.1.29 (19 items)

ASAP Conversion
TES-3816

Fixed validation problem with TAB_VERB values during reuse operation on interface changes.

C++
TES-3736

Possible parser error if recursive structures without a tag name are used.

C++
TES-3750

Fixed instrumenting constructor preceded by an explicit deleted copy constructor.

Driver
TES-3815

Fixed generating driver if a pointer targets a member inside an array of structs that is itself a struct member (e.g. struct1.struct2[1].target).

Import/Export
TES-3731

Fixed importing dynamic object of pointer in struct array.

Import/Export
TES-3747

Move unused to used functions during import.

Import/Export
TES-3806

Fixed export of vector values for advanced stub variables containing enum or define constants (e.g. "{A,B,C}").

Instrumenter
TES-3193

Added support to test operators "new" and "delete" with instrumentation.

Instrumenter
TES-3777

Fixed instrumentation of constructors.

Interface Assigner (IDA)
TES-3798

Changes of array sizes will not trigger a reuse operation.

Parser
TES-3734

Fixed scanner call for IAR RX.

Parser
TES-3812

Implemented support for 32 bit unsigned enum constants.

Release v4.1.29 (19 items)

Save/Restore Database (TMB Files)

Enhancement

TES-3707

Added time stamp update for modules after save/restore TMB backup files to prevent save request when closing TESSY.

Save/Restore Database (TMB Files)

TES-3733

Include paths were not shown in "Sources" tab after restoring a TMB file.

TESSY (General)

TES-3749

Test objects where missing in module backups of modules that currently failed to analyze, but that were analyzed in the past.

Test Data Editor (TDE)

Enhancement

TES-3748

An error message will now be issued if advanced stub vector values are entered for struct/union members (which is not supported).

Test Database (TDB)

TES-3810

Fixed loss of pointer test data when the target is a multi dimensional array, but given with less dimensions.

Test Evaluation

TES-3758

Fixed evaluating dynamic OUT variables for targets using file communication.

Release v4.1.28 (5 items)

C++

TES-3714

Fixed error in generated driver for function with template parameter.

CTE

TES-3704

Fixed an missing update of the advanced stub call vector size when using vector values (e.g. "{1,2,3}").

CTE

TES-3705

Fixed problem with dynamic objects: Dynamic test data entries were deleted in CTE when not referenced by a pointer in the same CTE node.

Driver

TES-3715

Fixed possible error generating driver if a pointer targets a dynamic object created at another pointer in "Inputs" section of TDE and a normal target in "Outputs" section or vice versa.

Release v4.1.28 (5 items)

Test Execution
TES-3708

Fixed possible error generating report during batch test execution when advanced stubs are used for other test objects called by the test object under test.

Release v4.1.27 (14 items)

ASAP Conversion
TES-3680

Fixed reuse of expressions in modules where ASAP is enabled.

ASAP Conversion
TES-3683

Do not allow to enter expression values for variables with ASAP conversion information.

Defines
TES-3661

Fixed possible access violation in defines parser.

Driver
TES-2790

Fixed erroneously generated test driver for anonymous unions in IAR compiler headers.

Instrumenter
TES-3673

The module attribute "Instrumentation Exclude List" was not working for inline functions.

Parser
TES-3671

Fixed parsing source using _Static_assert with legacy parser.

Requirements
TES-3651

Fixed possible deadlock when creating/editing/deleting attributes for requirement documents and modules or test objects.

Requirements
TES-3652

Fixed possible deadlock for ReqIF import using attributes.

Script Editor
TES-3623

Fixed erroneous test data status (grey test cases) in case of unused dynamic objects still present within script inputs section.

Script Editor
TES-3662

Correctly parse multiline strings with Unix EOL in scripts.

Release v4.1.27 (14 items)

TESSY (General)

Enhancement

TES-3639

Add filter text in Attribute Section in Properties View.

Test Database (TDB)

TES-3627

Fixed missing values of dynamic objects (that have passing OUT only) if a new dynamic object was created after a new test case was added.

Test Database (TDB)

TES-3654

Fixed copying inherited test steps within the test items view. Inherited test data has not been copied to the newly pasted test steps.

Variant Management

TES-3640

Corrected behavior for overwriting inherited test cases.

Release v4.1.26 (23 items)

ASAP Conversion

TES-3552

Fixed missing MIN/MAX values within ASAP properties if the environment variable ASAP_IGNORE_FORMAT_FOR_MIN_MAX was used.

C++

TES-3503

Default constructors for STL classes will not be generated into the test driver application any more.

C++

TES-3576

Fixed parser crash if a call expression is used to initialize an enumeration value.

Release v4.1.26 (23 items)

CTE
New Feature

TES-3602

CTE_530 Fix replacing a string with the empty string is not allowed.

CTE_521 Fix some problems with the find next/previous button in the CTE's find dialog.

CTE_523 Fixed wrong initial path in save to dialog

CTE_172 Now warning decorations will also be attached to dependencies.

CTE_516 The CTE's search result view has now a refresh button.

CTE_467 Now it is also possible to show only relevant or transitive relevant dependencies.

CTE_466 The line from a leaf class to its mark was not correctly aligned for some special cases.

CTE_495 CTE has now a context menu entry to delete all styles of the selected object. Remark: Inherited styles are not affected by this.

CTE_518 Fix that the number of test cases in nested groups is zero.

CTE_377 Fix the mark of a white class between two colored classes is not white but has the color of the left class.

CTE_483 Now leaf class sorting feature based on the node name is available.

CTE_505 Now some more space was added to the table bottom to optimize better context menu handling

CTE_507 The Search Result view allows now to replace the text in the selected or in all rows.

CTE_512 Fix error when migrating legacy CTE files with refinements without content.

CTE_444 The CTE synchronizes selected mark position in hidden refinements. From now on it will select the mark position which is in the same markable as the selected mark but which is in the same column as the mark position selected before. Remark: The CTE will not actively create marks.

CTE_511 Fix error with copy and paste refinements.

Compiler/Target/Microcontroller

TES-3538

Fixed Microchip XC32 Makefile templates regarding linker script option.

Compiler/Target/Microcontroller
Enhancement

TES-3540

Updated GNU ARM TKS file.

Compiler/Target/Microcontroller

TES-3544

Fixed type table file link for Linaro GNU ARM C++.

Compiler/Target/Microcontroller
Enhancement

TES-3546

TEE attribute "Method Stub Exclude List" was set to std::* by default.

Compiler/Target/Microcontroller
Enhancement

TES-3556

Updated GNU Tools for ARM TKS file and Makefile template.

Compiler/Target/Microcontroller

TES-3566

Added backward compatibility for older Keil (X)C166 compilers.

Compiler/Target/Microcontroller
New Feature

TES-3592

Added Makefile template for TASKING ARM and Lauterbach TRACE32 to use the carm compiler instead of ccarm.

Release v4.1.26 (23 items)

Driver
TES-3591

Fixed possible crash when generating the test driver for a component test.

Import/Export
Enhancement

TES-3616

PTU import now supports range based indices for arrays, e.g. ARRAY myArray[0..9], INIT =
{ 0..8 => 5, others => 0}

Interface Database (IDB)
TES-3611

Fixed false negative message that a dynamic object has been removed when auto reusing a test object.

Parser
TES-3528

Updated TKS file for ARM V5.

Parser
TES-3543

If a struct without a tagname is used as recursion pointer target, the parser was unable to find the pointer target type id.

Parser
TES-3617

Fixed detecting pass direction of dereferenced struct pointer components. This changed behavior of the parser can be disabled to keep compatibility with earlier TESSY v4.x minor versions by adding a boolean type attribute "Disable TES-3617" into the TEE configuration of your project with a value of "true".

Script Editor
TES-3545

Fix test steps with unused dynamic objects not being executable after committing the script editor.

TESSY (General)
Enhancement

TES-3505

Toggle check boxes in the test object filter dialog using the space key.

TESSY (General)
TES-3563

Fixed preferences occasionally being reset to their default values when starting TESSY.

TESSY (General)
TES-3614

Fixed missing refresh of compiler includes/defines after updates of TEE environments. The module properties still showed old inherited values and those old values were also written into the control files for module analysis.

Test Data Editor (TDE)
TES-3585

Fixed possible error with advanced stub variables after analyze in test object in called function using const variables.

Release v4.1.26 (23 items)

Test Data Editor (TDE)

TES-3596

Automatically make matching array elements visible when searching for the next/previous passed/failed/
undefined value in the test data editor.

Release v4.1.25 (33 items)

ASAP Conversion

Enhancement

TES-3437

Added option to ignore the format string given within the A2L file for float type variables: Set the environment
variable ASAP_IGNORE_FLOAT_FORMAT=1 to ignore the format, all values will then be formatted as if
entering double type variables.

ASAP Conversion

TES-3487

Fixed parse error for A2L files containing "\\" as string.

ASAP Conversion

Enhancement

TES-3504

Added new attribute "Enable ASAP Test File" (default: true) to enable/disable loading of ASAP test file.

ASAP Conversion

TES-3523

The attribute "Float Eval Epsilon" is not applied any more to physical integer values.

CTE

TES-3459

Fix CTE opens for test objects with incomplete interface.

Compiler/Target/Microcontroller

Enhancement

TES-2047

Enabled CLANG support for IAR STM8 by default.

Compiler/Target/Microcontroller

TES-3389

Fixed duplicate defines header feature, which failed for paths containing spaces.

Compiler/Target/Microcontroller

TES-3421

Fixed HighTec TriCore / UDE Makefile templates.

Compiler/Target/Microcontroller

Enhancement

TES-3423

Added "defines" support for Microchip AVR IDB Makefile.

Release v4.1.25 (33 items)

Compiler/Target/Microcontroller
TES-3428

Fixed Makefile templates for Green Hills/e2studio and HighTec TriCore/TRACE32/winIDEA which contain TASKING_HOME by mistake.

Compiler/Target/Microcontroller   *Enhancement*
TES-3451

Updated IAR RL78 V2 configurations.

Compiler/Target/Microcontroller   *Enhancement*
TES-3458

Updated TKS file for Microchip compilers.

Compiler/Target/Microcontroller   *Enhancement*
TES-3465

New combination of GNU Tools for ARM compiler with iSYSTEM winIDEA debugger.

Compiler/Target/Microcontroller
TES-3481

Fixed timer file feature in communication Makefiles and Makefile templates.

Compiler/Target/Microcontroller
TES-3489

Updated MPLAB X TESSY target handler to support ATSAMD21G17D.

Compiler/Target/Microcontroller   *Enhancement*
TES-3526

IAR ARM was set to obsolete. It was replaced by IAR ARM V5 long ago.

Defines
TES-3486

Fixed possible wrong calculation of 64 bit integer expressions and defines.

Driver   *Enhancement*
TES-3506

Enabled Attribute 'Synthetic Declarations In Source' for CLANG driver.

Import/Export
TES-2034

Fixed importing test data for dynamic objects for
- pointer to pointer
- dynamic structs with struct array component
- dynamic objects from pointer components inside dynamic array of structs

Import/Export
TES-3517

PTU import now converts 'EV==' to *none*.

Release v4.1.25 (33 items)

Instrumenter
TES-3425

Fixed instrumenting methods after an access specifier following a deleted function.

Instrumenter
TES-3469

Insert User Declarations to source file if test runs with fault injection.

Makefile Templates
TES-3391

Fixed include option for TI ARM IDB Makefile.

Parser
TES-3426

Fixed parsing __attribute__((__vector_size__(x))).

Parser
TES-3480

Fixed TKS file for Keil C166 and C51 compilers.

Parser
TES-3482

Fixed problem in idb-arm-gcc.mak that occurred when parsing multiple source files.

Parser   *Enhancement*
TES-3508

Added CLANG support for Synopsys DesignWare and MetaWare compilers.

Parser
TES-3519

Fixed TKS file for IAR concerning va_list.

Requirements   *Enhancement*
TES-1881

Added import/export of link matrix in XML format.

Requirements   *Enhancement*
TES-3492

Added UUID of modules, test objects and test cases into Excel export of link matrix. Also added Excel import function that creates links for the elements available within the link matrix.

Scenario Editor (SCE)
TES-3433

Removed sorting of work tasks when saving a scenario.

Release v4.1.25 (33 items)

Test Evaluation
TES-3530

The "Float Eval Epsilon" attribute will now also be applied for float values when using the eval mode "not equal". A deviation within the epsilon range will be evaluated as failed (e.g. an actual value of 1.009 will be failed for an expected value of !=1.0 if the epsilon is 0.01).

Test Execution
TES-3403

Restricted test execution job concurrency to 64 in order to prevent Windows process creation failures.

Release v4.1.24 (14 items)

Batch Operation   *Enhancement*
TES-2859

Added option to automatically load the last TBS file when defining a batch operation.

Compiler/Target/Microcontroller   *Enhancement*
TES-2367

Added CLANG support for Keil compilers.

Compiler/Target/Microcontroller
TES-3358

Fixed cygwin++ Makefile template.

Compiler/Target/Microcontroller
TES-3359

Updated UDE/Keil/XC166 Makefile template.

Compiler/Target/Microcontroller   *Enhancement*
TES-3365

Updated IAR TKS template to support __section_begin and __section_end.

Coverage Measurement   *Enhancement*
TES-2988

Added attribute 'Instrumentation Exclude List' to specify functions to be excluded from coverage measurement.

Defines
TES-3374

Added attribute "Define Value Collapse Exclude List" to exclude defines from being collapsed.

Driver
TES-3355

Fixed generated code for array with pointers to array with pointers of any type.

Report   *Enhancement*
TES-3227

Enhanced test details report formatting to prevent linked requirement identifier from being truncated.

Release v4.1.24 (14 items)

Script Editor
TES-3093

Correctly handle "**" in stub function signatures within a script.

Script Editor
TES-3344

Fixed call trace entries within time steps of component tests.

Script Editor   *Enhancement*
TES-3384

Enhanced syntax error messages when importing script files.

TESSY (General)   *Enhancement*
TES-2552

Added key bindings: Ctrl+U to save database and Ctrl+T to restore database.

TESSY (General)   *Enhancement*
TES-2718

Add key bindings to close single editor (Ctrl+W, Ctrl+F4) and all editors (Ctrl+Shift+W, Ctrl+Shift+F4).

Release v4.1.23 (35 items)

C++
TES-3310

Fixed generating helper variable names for advanced stub functions if an overloaded operator is used as advanced stub.

CTE
TES-3282

CTE_508 FIX error during batch exports.
CTE_506 FIX error after closing an refinement editor.
CTE_509 Reduce low level parallelization which leads to deadlocks in some cases.
CTE_499 Fixed random sorting of table entries on drag&drop operation
CTE_93 Now a search dialog is available to find strings in tree nodes and table entries.

CTE
TES-3340

Selected union components were not saved to CTE test cases.

Compiler/Target/Microcontroller
TES-2358

Add CLANG support for IAR AVR compiler with C-Spy.

Compiler/Target/Microcontroller   *New Feature*
TES-2939

New NXP Clang compiler with NXP Smart Card Composer's gdbserver as debugger.

Release v4.1.23 (35 items)

Compiler/Target/Microcontroller
Enhancement

TES-3205

Fixed tks file for TASKING TriCore: remove __align from analyzing.

Compiler/Target/Microcontroller

TES-3206

Fix pragma asm problem in Green Hills tks file.

Compiler/Target/Microcontroller
Enhancement

TES-3243

TI TMS 320/C2000: Improved handling of special keywords for the CLANG parser.

Compiler/Target/Microcontroller

TES-3302

Fixed COMM-Makefiles. Generate Builtin Data failed in combination with support callback.

Compiler/Target/Microcontroller
Enhancement

TES-3304

Changed CMSIS-Handling in Makefile templates. The CMSIS path is set via TEE now.

Compiler/Target/Microcontroller
Enhancement

TES-3335

Updated Wind River TriCore / Lauterbach TRACE32 Makefile template to support quotation marks within defines and removed wrenv dependency.

Compiler/Target/Microcontroller

TES-3336

Fixed Renesas SuperH / Lauterbach TRACE32 COMM Makefile.

Compiler/Target/Microcontroller
Enhancement

TES-3341

Optimized handling of arrays within the TESSY-MATLAB interface.

Component Test

TES-3214

Fixed missing test evaluation of component tests when the "Apply to test result" preference option is set for a metric.

Defines

TES-3316

Fixed possible crash in defines parser when defines contain their name in the value (e.g. #define IO_ADDRESS IO_STRUCT.IO_ADDRESS)

Defines

TES-3346

Some define values were possibly not available if a source contains defines without a value.

Release v4.1.23 (35 items)

Driver
Enhancement

TES-1857

Use Module stub code for unused external functions if available.

Driver
Enhancement

TES-3245

Sort compiler includes such that module includes are displayed first (and also used first when compiling the test driver code).

Driver

TES-3296

Fixed duplicate const at pointer to array parameter declaration.

Driver

TES-3350

Fixed generating initializer for enum class types.

Fault Injection

TES-3198

Fault injection could fail, if more than one source file was present in a module.

Instrumenter

TES-3351

Fixed instrumenting test object declared extern "C" inside C++ namespace.

Interface Database (IDB)

TES-3276

If an advanced stub pointer targets a component inside a dynamic struct the value was lost after an interface change.

Interface Database (IDB)

TES-3325

Fixed erroneous display and driver of constructor with a function pointer parameter and following parameter.

Interface Editor (TIE)

TES-3329

Fixed initial passing for advanced stub variables that are pointers to incomplete structs.

Parser

TES-3074

Updated all TKS template files and added a new TKS header for the AD compiler.

Parser
Enhancement

TES-3199

Speed up the preparation of very large files with a huge number of empty lines for analysis.

Parser

TES-3291

Fixed parsing @ address directives for Cosmic compiler with legacy parser.

Release v4.1.23 (35 items)

Parser

TES-3328

Fixed "asm volatile" problem in tks-windriver.tpl.

Plot View

TES-3287

Fixed potential exception in plot view when selecting modules, tasks, folders or test collections during the plot view update.

Report   *Enhancement*

TES-3323

Fixed column width of statistics table within test details report.

Test Data Editor (TDE)

TES-3300

Fixed displaying test data of member variables of class reference parameter.

Test Data Editor (TDE)

TES-3312

Fixed creating dynamic object for triple *** pointer.

Variant Management

TES-3297

Fixed transferring call trace and prolog/epilog to variant module from test cases created with CTE in the base module.

Variant Management

TES-3298

Fixed synchronising test data from CTE. Inherited test data was possibly marked as overwritten.

Release v4.1.22 (37 items)

C++

TES-3202

The "this" object was sometimes not visible in test data editor TDE.

C++

TES-3239

Added new attributes 'Declare Constructors' and 'Deleted Constructors' to handle classes without or explicit deleted default constructor.

CTE

TES-3275

CTE_451 Now it's possible to change the text color.
CTE_54 Now the user can define font styles (type, weight, size) and text color for tree nodes and table entries.

Release v4.1.22 (37 items)

Compiler/Target/Microcontroller

New Feature

TES-3113

New combination for Wind River TriCore compiler with Lauterbach TRACE32 debugger.

Compiler/Target/Microcontroller

TES-3170

Fixed idb-freescale-s12z.mk to support test object defines.

Compiler/Target/Microcontroller

TES-3178

Fixed idb-microchip-xc8.mak file. On some systems analyzing failed due to special preprocessor entries.

Compiler/Target/Microcontroller

TES-3179

Added support for the latest Green Hills V850 linker.

Compiler/Target/Microcontroller

TES-3183

Added support to TESSY's CLANG parser for __int24 and __uint24 data types for Microchip XC8 compiler.

Compiler/Target/Microcontroller

TES-3188

Fixed Makefile template for Cosmic S12Z in combination with winIDEA.

Compiler/Target/Microcontroller

Enhancement

TES-3189

Prepared GNU Tools for ARM+QEMU as well as all Crosscore Makefile template for parallel build.

Compiler/Target/Microcontroller

TES-3196

Added Compiler Dialect variable to Microchip XC8-CC Makefile template.

Compiler/Target/Microcontroller

New Feature

TES-3201

Implemented support for multiple files in TEE attribute 'Duplicated Defines Header'.

Compiler/Target/Microcontroller

New Feature

TES-3256

New combination for GNU Tools for ARM with TI Code Composer Studio 9.x.

Compiler/Target/Microcontroller

Enhancement

TES-3257

Added option -Xlicense-wait to all Wind River Makefile templates.

Compiler/Target/Microcontroller

Enhancement

TES-3259

Activated optional attribute "Wait Timeout" for GNU GCC/CDT test runs.

Release v4.1.22 (37 items)

Compiler/Target/Microcontroller
Enhancement

TES-3264

Updated TASKING script debugger slave call and added "disable-watchdog" command file.

Compiler/Target/Microcontroller

TES-3267

Es fehlt <token name="_Bool" value="TK_BOOL" output="_Bool"/>

Component Test

TES-3182

Fixed component test driver for targets using file communication.

Driver

TES-3218

Fixed error when a pointer member inside a dynamic struct with passing OUT -> OUT is set to a dynamic object in one test case and set to NULL in a second test case.

Environment Editor (TEE)

TES-3169

Fixed TEE attributes with hex format flag.

Import/Export

TES-3211

Fixed errors in PTU import for array type variables.

Instrumenter

TES-3226

Instrumenter failed if a class member was defined "using namespace::class" but not directly inside the namespace.

Instrumenter

TES-3244

The instrumenter could crash if C++14 digit separators are used. [e.g. const double PI = 3.14159'26535'89793; const int MILLION = 1'000'000;]

Instrumenter

TES-3272

Instrumenter failed instrumenting static local variables when multiple variables are defined separated with comma and initialized using curly braces.

Interface Assigner (IDA)

TES-3307

Fixed assignment of members in unassigned structs.

Interface Database (IDB)

TES-3158

Possible failure to rename large Interface Database folders when an antivirus software is running.

Release v4.1.22 (37 items)

Interface Database (IDB)

TES-3197

Enum constants of enums without type name and tagname (enum {A, B, C};) used in test data had different values after automatic reuse.

Interface Database (IDB)

TES-3240

Consider change of bitfield size when comparing interface database.

Makefile Templates

Enhancement

TES-3208

Added support for defines using Atollic's GNU ARM compiler.

Parser

TES-3184

The parser could crash when trying to resolve header files from which static and inline functions should be excluded.

Parser

TES-3191

Fixed problem in ARMv6 TKS template file concerning volatile assembler functions.

Parser

TES-3241

Fixed possibly wrong typedef name for struct used in STL container template class.

Save/Restore Database (TMB Files)

TES-3210

Fixed possible removal of all CTE files during TMB import.

Scenario Editor (SCE)

TES-3223

Fixed possible test data loss in scenario during time-consuming module analysis.

Test Database (TDB)

TES-3203

Fixed saving classification tree with pointers to nested unions.

Usercode Editor (UCE)

TES-2807

Apply attributes "Float Precision" and "Double Precision" to eval macros used in usercode.

Variant Management

TES-3238

Fixed purging obsolete comparison interface database to avoid annoying error message.

Release v4.1.21 (31 items)

C++
TES-3060

For test objects, that are extern "C" contained in a namespace, TESSY failed to open the coverage flow file.

C++
TES-3098

If the attribute "Generate Parameter Proxies" is enabled an erroneous code was generated for template parameter.

C++
TES-3125

For test objects, that are extern "C" functions contained in a namespace, the stub code was missing.

C++
TES-3127

If a method definition, for that another method with the same name exists, is explicitly specified inline, the instrumenter failed to find the method.

C++
TES-3132

Fixed inserting stub code for a function following a struct template specialization.

C++
TES-3134

Fixed inserting stub code for static template method.

C++
TES-3153

Fixed generating parameter proxy class name for templates with reference or pointer template parameter.

C++
TES-3175

Fixed erroneous display of class reference parameter in TDE.

CTE
TES-3147

Fixed showing result at CTE Testcases in CTE perspective.

Release v4.1.21 (31 items)

CTE   *Enhancement*

TES-3163

CTE490 Now the "Find Validation Issues" button is available directly via the Validation Issues View toolbar menu.
CTE12 Now the key bindings CTRL+POS 1 and CTRL+END are enabled in the table when any mark is selected. CTRL+POS 1 selects the top left mark and CTRL+END the bottom right mark in the test table.
CTE492 Now the key bindings POS 1 and END are enabled in the tree. POS 1 selects the first and END the last tree node in the same hierarchy level of a sub tree.
CTE491 Now when creating a new tree node this node is only made visible when also the current selected node still keeps visible. If the visible area is too small to make both visible, the current selected node will be prefered.
CTE487 Now the message in the Validation Issues View for entries with same marks contains an 'is duplicated by <number of entry>' information
CTE484 Changed the default for preference "Pin original layout on import" to true
CTE140 Optimized redraw of CTE while resizing the editor.
CTE486 Now newly created test table entries are visible and selected in all open editors of the same resource.
CTE488 Optimized time needed to close a CTE document.

Command Line (tessycmd)

TES-3086

Fixed potential exception when running batch TBS files containing "generatePlanningCoverageReport" or "generateExecutionCoverageReport" operations on a project without any requirement document.

Compiler/Target/Microcontroller   *Enhancement*

TES-3073

Implemented optional data compression between TESSY's master and slave during file communication. Setting the attribute "Comm File Compression" to true enables this feature.

Compiler/Target/Microcontroller   *Enhancement*

TES-3102

Improved Cosmic STVD/STM8 Makefile template.

Driver

TES-3090

User defines were erroneously visible in slave control file.

Driver

TES-3101

Fixed generating code for complex reference parameter when attribute 'Generate Constructors' is false.

Import/Export

TES-3135

Fixed creating synthetic structs and enums with typedef names on test data import.

Instrumenter

TES-3119

Missing instrumentation if the intialization statement of a "for" loop ends with a function call. [e.g. for (int i = foo();...)]

Instrumenter

TES-3131

Fixed inserting user declarations to file with partly invalid preprocessor file information (in GNU syntax but with missing flag).

Release v4.1.21 (31 items)

Interface Assigner (IDA)
TES-3114

Test specification (CTE File) was deleted when renaming a test object.

Interface Database (IDB)
TES-3099

Possibly erroneous test driver for const class member variables.

Interface Database (IDB)
TES-3117

Fixed changed struct component name for pointer to a dynamic struct component nested in a second dynamic struct.

Interface Editor (TIE)   *Enhancement*
TES-3087

Allow pass direction EXTERN for const variables.

Parser
TES-3091

Fixed storing source number of types when attribute 'Collect All Enums' is true.

Parser
TES-3095

Fixed parsing local static variables of test objects that were declared after a statement block.

Report
TES-3146

Fixed series names of cyclomatic complexity (CC) metric graphics within overview report.

Scenario Editor (SCE)
TES-3097

Added alphabetical sorting of functions within the component functions and called functions view.

TESSY (General)
TES-3108

Fixed potential race condition when starting TESSY which caused the derby daemon to be terminated.

TESSY hardware adapter interface (THAI)
TES-3142

Fixed evaluation of component tests when there are time steps that do not set signals within a scenario.

Test Database (TDB)
TES-3177

Fixed possible loss of generated test steps for generator test cases after automatic reuse operation.

Variant Management
TES-3140

Fixed wrong test data in variant test objects after synchronization if stub vector size has changed.

Release v4.1.21 (31 items)

Variant Management
TES-3144

Fixed an exception during synchronization if a test object that is marked as removed is present.

Release v4.1.20 (65 items)

Application Notes
TES-2875

Updated TASKING VX application note.

C++
TES-2884

When a typedef of a struct declared inside a class is used in a template it's namespace was missing in the interface database.

C++
TES-2995

Class member variables where not evaluated when a class has a copy constructor or the tested method uses its own class as parameter. This could result in tests being shown as passed even though the member variables did not yield the expected result.

C++
TES-2998

Fixed possible error loading the interface database if a typedef inside a class uses a qualified type that is an inherited type of it's base class.

C++   *Enhancement*
TES-3009

Support references to scalar types in advanced stubs.

C++   *Enhancement*
TES-3013

In certain situations, an object used as a parameter for calling the test object can or must be created in the user code.
To be able to bind that object to the parameter used by TESSY for the test object call, for each parameter that is a reference to a structure or class with passing direction EXTERNAL, TESSY creates a template with the name "TESSY_BIND_PARAMETER_<name of parameter>", e.g. "TESSY_BIND_PARAMETER_foo_param".
This template can be used in the prolog to bind the user-generated object to the parameter. [e.g. MyClass & myVariable = MyFactory::createObject; TESSY_BIND_PARAMETER_myParameter(myVariable);]

Creating these templates will be enabled via the "Generate Parameter Proxies" attribute.

C++
TES-3035

Enabled setjmp/longjmp for C++ test objects.

C++
TES-3037

Pass direction of class members can now be set to EXTERN.

Release v4.1.20 (65 items)

CTE   *Enhancement*
TES-3057

CTE152 Now "Select All" (CTRL+A) selects all marks in the same test table column of the currently selected mark.
CTE457 Fixed that the CTE failed to open a refinement.
CTE477 Fixed typo in the layout preference page.
CTE465 Fixes an error with multiary dependency operators (AND, OR, XOR). Improves error messages when dependency inputs are missing.
CTE456 Fix that marks of refined nodes are sometimes shown as conflicting after all conflicts in the sub tree are solved.
CTE448 Fixed an issue where validation error markers at the top of the table moved downwards.
CTE450 Fixed that it was possible to copy and paste the table itself.
CTE476 Fixes that a group could be moved to itsself or to an own subgroup.
CTE439 Now a test case is converted into a test step when dropping it into a test sequence.
CTE453 The synchronisation of the selected table entry sometimes stopped working.
CTE468 Fixes an error where already existing test cases are added again.
CTE460 Fixed that color is not removable with the red cross next to the color chooser.
CTE454 Fixed an error where opening refinements containing only one composition or classification failed.
CTE342 Now an automatic layout of the changed subtree is triggered when the layout mode was changed via properties view. This feature can be enabled/disabled via Preferences > CTE > Layout Settings
CTE381 Now very fast inserted tree nodes will always be placed side by side.
CTE469 Fixed message text in validation issues view for incomplete dependency operations (NOT, AND, OR, XOR).
CTE447 Optimized the insertion point of new children. Pasted nodes won't hide existing children of the current parent anymore.
CTE479 Fix that sometimes the CTE import of legacy '*.cte' files does not insert refinements in the tree structure.

CTE
TES-3066

Fix that a potential stale CTE is not closed after an external change to a test object.

Compiler/Target/Microcontroller   *New Feature*
TES-2897

Added optional file communication for TRACE32 to speed up execution time on target hardware.

Compiler/Target/Microcontroller
TES-2917

Fixed and updated Wind River makefile templates.

Compiler/Target/Microcontroller   *New Feature*
TES-2929

New combination for GNU Tools for ARM with iSYSTEM winIDEA.

Compiler/Target/Microcontroller   *Enhancement*
TES-2942

Added support for MATLAB TargetLink.

Compiler/Target/Microcontroller   *Enhancement*
TES-2944

New combination for Keil ARM compiler version 6 with SEGGER JLink.

Release v4.1.20 (65 items)

Compiler/Target/Microcontroller

TES-2973

Fixed TEE attribute substitution and validation: It was possible that attributes (e.g. "Compiler Install Path") were substituted with attribut values of lower levels (e.g. "Target Install Path"). Also the error/warning icons were shown in some situations for inherited and not overwritten attributes.

Compiler/Target/Microcontroller

TES-2993

Fixed Boolean value in Renesas RX C++ type table.

Compiler/Target/Microcontroller

TES-3007

Fixed type table entries concerning _Bool.

Compiler/Target/Microcontroller

TES-3016

Added missing compiler Ids to tks-iar.tpl.

Compiler/Target/Microcontroller

TES-3023

Fixed tracing for gdb-file master.

Compiler/Target/Microcontroller   *Enhancement*

TES-3033

Microchip compiler XC8 was set to obsolete. Please use Microchip compiler XC8-CC instead or select "Show Obsolete Entries" from the TEE menu.

Compiler/Target/Microcontroller

TES-3071

Fixed race condition in multiple makefile templates, which occurred when attribute "Make Options" was set to compile in parallel, e.g. '-j 20', with multiple source files attached.

Component Test

TES-2980

Fixed possible loss of test data for dynamic objects if a pointer is removed from the interface.

Coverage Viewer (CV)

TES-2545

Generating the flow chart report failed if the 'Logo Image' path within the report preferences was not empty and did not contain an absolute path name.

Defines

TES-3062

Take "Float Precision" and/or "Double Precision" attribute into account when collecting define values.

Driver

TES-2992

Fixed erroneous struct declaration of typedef struct in old test driver when Enable User Includes is enabled.

Release v4.1.20 (65 items)

Driver
TES-2999

Fixed possible communication error when resolving first union component as pointer target.

Driver
TES-3038

Fixed error generating parameter helper variable of a reference to a template with reference template parameter.

Driver
TES-3084

Fixed generating #undef statements for static variable #define prior to all stub functions having a parameter with the same name as the static variable.

Environment Editor (TEE)
TES-3055

Fixed using the internal environment variable TESSY_SOURCE_ROOT instead of SOURCEROOT when collapsing a file or directory path.

Instrumenter   *Enhancement*
TES-2701

Added support for range based "for" loops [e.g. for (int i : array) { ... }].

Instrumenter
TES-2971

The instrumenter failed to match the destructor in a template class if not inlined. Due to that stub code written for the constructor was also inserted into the destructor.

Instrumenter
TES-2982

The instrumenter failed to stub methods inside a class that follows immediately after a function template.

Instrumenter
TES-2984

The instrumenter failed to find function definitions if a preprocessor line is present between name and parameter list.

Instrumenter   *Enhancement*
TES-3047

Allow wildcards in header file names within TEE attribute "Instrumenter Header Exclude List".

Instrumenter
TES-3053

The instrumenter failed to find function definitions if the return type is a pointer or reference to a qualified template, e.g.:
   std::pair<int,int> & function_name (...
   std::pair<int,int> * function_name (...

Interface Assigner (IDA)
TES-2983

Fixed automatic assignment of static global variables.

Release v4.1.20 (65 items)

Interface Assigner (IDA)

TES-3027

Fix changed component names for pointer targeting the component in a dynamic struct,

Interface Database (IDB)

TES-2108

Fixed memory and performance problems when comparing large C++ interface databases.

Interface Database (IDB)

TES-2994

Possible missing stub code after auto reuse for external stub functions, if only the scope of that function has changed.

Interface Database (IDB)

TES-3010

Fixed possible loss of test data during comparison of interfaces with more than 500 functions when using the legacy parser.

Interface Database (IDB)   *Enhancement*

TES-3046

Allowing wildcards in header file names within the TEE attributes "Header File Exclude List" and "Header File Include List".

Interface Database (IDB)

TES-3082

OUT/EXTERN const variables were set to IRRELEVANT after importing TMB files from TESSY v4.0 or prior.

Parser

TES-2922

Fixed parser error if ARMv5 builtins __svc, __svc_indirect or __align are used.

Parser

TES-2991

Parser failed to parse file if an initializer expression was neither int nor float.

Parser

TES-3030

Added __int24, __uint24, and __at() to Microchip TKS and header files.

Parser

TES-3171

Support usage of gcc option -funsigned-char.

Report

TES-2974

Overview report XML: Fixed percentage attribute value for called function coverage (without '%' now).

Release v4.1.20 (65 items)

Report
TES-3004

Fix plots not being rendered in reports in Windows 10 versions newer than 1803.

Requirements
TES-3003

Test case links could get lost in certain situations: Changes of test case links (adding, updating or deleting links) caused all not altered links of all test cases of the respective test object to be lost if TESSY was restarted. As a workaround, when executing such test objects after changing the links, the changes were persisted correctly and no links were lost.

Requirements
TES-3032

Fix display error in VxV matrix view when adjusting column width.

Save/Restore Database (TMB Files)
TES-2510

If a test object is removed, has interface changes, or does not have a valid interface, it will no longer be attempted to save a script file for it during database backup.

Save/Restore Database (TMB Files)
TES-2986

Allow canceling TESSY shutdown when backing up modules or if any jobs are still running.

Script Editor
TES-2854

Committing script editor changes for component tests caused loss of dynamic objects under certain conditions.

Script Editor
TES-3034

Fixed problems when working with the script editor or importing/saving/restoring script files: Special characters within the time unit of component tests and stub functions with array indices within the signature caused problems.

TESSY (General)
Enhancement

TES-2895

Workspace specific preferences can now be provided as customized default values within a "preferences.xml" file located within the "backup\preferences" folder of a TESSY project. For possible contents of such a file refer to the preferences settings stored within the "%USERPROFILE%\.tessy_41_workspace\preferences.xml" file.

TESSY (General)
Enhancement

TES-2990

Enhanced DOXYGEN comment handling: In case of errors while parsing the DOXYGEN output, existing specification entries will be voided. Comments inside the function will not be collected by default.

TESSY (General)
Enhancement

TES-3014

All source and header files that are shown in the TESSY Message Console are now displayed as hyperlinks and can be opened with a double-click in the C/C++ perspective.

Release v4.1.20 (65 items)

Test Data Editor (TDE)
TES-3011

Fixed missing child elements for pointer and reference objects in the usercode proposal list.

Test Data Editor (TDE)
TES-3012

Fixed wrong entries in the usercode proposal list for "THIS" if the object class is located inside a namespace.

Test Database (TDB)
TES-3028

The unexpected shutdown of the DBD process after module analysis was fixed. This error occurred if no test objects were available after the analysis due to a filter, but they were available after the filter was corrected.

Variant Management
TES-2981

If an expression is used as expected value for an interface object with passing direction INOUT, this value was set to null during test data verification in variant test objects.

Variant Management
TES-2997

Disable "Create Pointer Target Value" for test objects in variant modules (regardless whether inherited or not).

Variant Management
TES-3018

Define values in the test data of variants created with a TESSY version prior to 4.1 were marked as invalid after module synchronization.

Variant Management
TES-3026

For pointers with passing direction OUT pointing into a dynamic object with passing direction IN, these pointers were marked as failed during test evaluation.

Release v4.1.19 (32 items)

ASAP Conversion
TES-2947

Enhanced error handling and messages, accept module within A2L file without any contents, accept C++ style comments.

ASAP Conversion
TES-2958

Fixed conversion of float/double type variables: The format given within the A2L file was also applied to the internal value which could cause truncation of significant digits.

C++
TES-2940

Fixed erroneous setting or evaluation of member variables when the test object calls a method of its own class.

Release v4.1.19 (32 items)

C++
TES-2941

If the object used in a if/for/while condition [e.g if (object)] has it's own operator!=, the instrumented code fails to compile with ambiguous overload for 'operator!='.

CTE
TES-2904

Fix the test data decoration must be blue if the interface object selected in TDE has data and the data is not inherited.

CTE
TES-2931

Fixed an issue where importing old CTE documents where class or classification refinement nodes have test data attached caused loss of test data.

CTE
TES-2933

Fixed that pasted nodes do not have any marks.

CTE   *New Feature*
TES-2937

CTE430 In Properties View scrollbar speed is increased.
CTE438 Ensure that current selection is visible on focus change from tree to table
CTE437 Fixed layout issue for style in properties view.
CTE434 Reveal newly added items in table.
CTE435 Fixed occassional exception when opening refinements.
CTE418 Column width and test table height can be changed even if read only mode is enabled.
CTE436 Fixed pasting nested test table entries caused duplication of tests.
CTE446 Fixed an error where using "Paste as child" causes removal of marks.

CTE
TES-2954

Fixed import error caused by too long CTE file names.

Command Line (tessycmd)
TES-2885

The export format "yaml" could not be selected using tessycmd export command.

Compiler/Target/Microcontroller   *Enhancement*
TES-2582

Updated idb-iar.mak and IAR makefile templates to support parallel builds and to handle an include path file.

Compiler/Target/Microcontroller
TES-2907

Fixed Wind River TKS preinclude header.

Compiler/Target/Microcontroller   *Enhancement*
TES-2910

Improved TRACE32 execution time slightly.

Release v4.1.19 (32 items)

Compiler/Target/Microcontroller

TES-2915

Fixed "Config Header File" attribute for IAR RL78 V2.

Compiler/Target/Microcontroller

New Feature

TES-2926

Added ctc support for TASKING TriCore with Lauterbach TRACE32.

Compiler/Target/Microcontroller

Enhancement

TES-2968

The data transfer limit was set to zero which means unlimited data transfer. If it is needed to be limited the attribute "Comm Transfer Limit" has to be set to the appropriate value in mega bytes (MB).

Coverage Viewer (CV)

TES-2952

Fixed minor coverage display problems within "Called Functions" view (applicable for component tests only): A called function without decisions was marked in green even though it has not been called if only DC, MD/DC or MCC coverage has been applied. If FC coverage together with only DC, MD/DC or MCC coverage has been applied, the FC coverage value for called functions without decisions were marked with a red cross (i.e. not called) even though they have been called. In any combination with C0 or C1 coverage, all information being displayed was correct.

Driver

TES-2934

Reverted optimization of dynamic object handling because of problems in file communication mode and in situations where multiple dynamic objects of the same type were used. The problem occurred in TESSY v4.1.18 only.

Environment Editor (TEE)

TES-2957

The values for TEE attributes (with the "Makefile Variable" flag set) of type "File" and "Directory" are now written in expanded reverse short path notation to idbmake makefiles.

Fault Injection

TES-2888

If the condition for a fault injection contains a ternary operator, the code to inject was missing. [e.g. if (x || (y ? 1 : 0)) {...}]

Instrumenter

TES-2966

The instrumenter failed to find function definitions if the return type is a qualified template. [e.g. std::pair<int,int> function_name (...]

Interface Database (IDB)

TES-2951

Fixed test objects possibly marked as interface changed after analyse when using constant variables as test data.

Parser

Enhancement

TES-2930

Updated TKS template and added pre-include file for TASKING TriCore VX.

Release v4.1.19 (32 items)

Parser
TES-2963

Fixed parser crash when trying to evaluate init values for const double variables. [e. g. const double PI = 3.14159265359;]

Parser
TES-2967

Fix in legacy parser to parse __asm volatile(...) statement for Tasking Tricore VX.

Report   *New Feature*
TES-2872

Added coverage information of called functions as shown within the coverage viewer (CV) into the test overview report XML file (applicable for component tests only).

Report
TES-2883

Fixed possible exception when creating CTE reports during a batch operation.

Requirements   *Enhancement*
TES-2913

The default test means "Unit" and "Component" will now only be created on startup of TESSY if there are no other test means defined (e.g. if the default ones have been renamed).

TESSY (General)
TES-2802

Fixed missing working directory when running "Check Source" command on newly created modules.

TESSY (General)
TES-2908

Added support for Doxygen 1.8.15 and 1.8.16

TESSY (General)   *New Feature*
TES-2928

Added optional "Doxygen Input Encoding" attribute that specifies the encoding of the source files, default is UTF-8. For other applicable encodings refer to https://www.gnu.org/software/libiconv.

Variant Management
TES-2916

If an invalid inherited value was overwritten in the TDE, then the value remained invalid.

Release v4.1.18 (16 items)

C++
TES-2882

Fixed possible out of memory error with C++ Test.

Release v4.1.18 (16 items)

CTE
TES-2898

CTE 427 Fix an error where after undoing an insert operation the CTE repeatedly fails to save with the error message "nodes of different diagrams are not comparable".

CTE 425 Fixed missing copied marks when pasting a test case to the same diagram

CTE 415 Now a "Paste as Child" menu entry is available in the tree context menu. Paste copied tree items as child of the selected tree node if possible/applicable.

CTE 352 All validation issues found via "Run Validation Checks" are listed now in an own Validation Issues View. The view can be made visible by using "Window" > "Show View..." or by a complete reset of the CTE perspective.

CTE 420 The shortcut "INSERT" does now also work if the selection of the tree node do not change after activating the CTE.

Compiler/Target/Microcontroller
Enhancement

TES-2830

Added type _Bool to DIAB MPC type table file.

Compiler/Target/Microcontroller
Enhancement

TES-2835

Updated Microchip MPLAB / MPLAB X makefile templates.

Defines
TES-2880

Fixed recognition of defines, with trailing comments, for ARM V5 compiler.

Defines
TES-2899

Missing define values in one of the following situations: Trailing whitespaces were present after the value, the right operand of a multiplication operation was a cast expression.

Driver
TES-2661

Added cast to generated default return of enum value in unused external stub functions.

Instrumenter
TES-2879

If the 'Insert External Stub at Declaration' attribute is used and more than one source file includes the header where the function to be stubbed is declared, linking the test driver failed due to duplicate symbols.

Interface Editor (TIE)
TES-2539

Fixed "Set Passing" command in Test Interface Editor.

License Manager
TES-2900

Fixed flsutil configuration path.

Makefile Templates
Enhancement

TES-2706

TASKING TriCore/XC166: Fixed problem with collecting of header files.

Release v4.1.18 (16 items)

Parser

TES-2891

Updated Green Hills TKS file.

Script Editor

TES-2886

Fixed '$' in evaluation macros causing an error when formatting scripts.

Script Editor

TES-2887

Test object specification, description and comment are now handled correctly when committing a script.

Script Editor

TES-2890

Resolved error when generating a script for items whose specification, description or comment starts or ends with double quotation marks.

TESSY (General)   *Enhancement*

TES-2816

Changed generated code and optimized performance in master to send and receive data for dynamic objects for huge amounts of teststeps with many dynamic objects.

Release v4.1.17 (13 items)

Application Notes

TES-2485

Fixed TESSY samples path for CodeWarrior legacy application note.

C++

TES-2815

Fixed parsing template structs with recursion pointers.

C++

TES-2873

The parser generated an invalid interface database if user defined literals were used.

Compiler/Target/Microcontroller   *Enhancement*

TES-2834

Added timer file support for GNU GCC (C++).

Compiler/Target/Microcontroller

TES-2874

Added anonymous unions and structures to IAR TKS template file.

Compiler/Target/Microcontroller

TES-2877

Fixed ARM7 type table files concerning inline.

Release v4.1.17 (13 items)

Environment Editor (TEE)
TES-2760

Compiler TI TMS 570 is obsolete now. Please use TI ARM instead.

Interface Assigner (IDA)
TES-2876

Fixed reuse of interface using struct with enum component.

Interface Database (IDB)   *Enhancement*
TES-2677

Improved performance of defines parser.

Parser
TES-2826

Added missing __int64 data type to Keil ARM V5 type table file.

Parser
TES-2827

Fixed TKS file for IAR compilers concerning asm volatile issue.

TESSY hardware adapter interface (THAI)
TES-2724

Fixed possible duplicate signals after opening module.

TESSY hardware adapter interface (THAI)   *Enhancement*
TES-2789

Fixed THAI for file communication test runs.

Release v4.1.16 (42 items)

CTE   *Enhancement*
TES-2831

CTE 416 Fixed error when reloading (revert) a CTE file which contains a refinement.
CTE 375 In exported diagrams connection lines now appear behind nodes. While editing they are kept in the foreground for more intuitive editing.
CTE 404 Changed default values for preferences 'Horizontal distance between nodes' (10px) and 'Distance between two node levels' (30px).
CTE 372 Fix refresh issue in outline view for newly created comments in a newly created refinement.
CTE 413 Now scrolling in properties view via mouse wheel is possible.
CTE 417 Text fields in the properties view won't grow unlimited in the horizontal direction but wrap automatically to the next line.
CTE 414 Now the CTE synchronizes the test case selection across all refinements.
CTE 420 The shortcut "INSERT" does now also work if the selection of the tree node do not change after activating the CTE.

Release v4.1.16 (42 items)

CTE
New Feature

TES-2870

CTE 424 A selection in the outline view will now also update the properties of the selection in the properties view.

CTE 421 "Automatic check on save" is now activated as default.

Compiler/Target/Microcontroller
New Feature

TES-2684

Added C++ support for GNU Tools for ARM with SEGGER J-Link debugger and Lauterbach TRACE32.

Compiler/Target/Microcontroller

TES-2702

Updated the HighTec TKS template file.

Compiler/Target/Microcontroller
New Feature

TES-2716

New combination for GNU Toolchain for PowerPC in conjunction with PLS UDE.

Compiler/Target/Microcontroller
New Feature

TES-2739

Added C++ support for Green Hills V850 compiler and TRACE32 debugger.

Compiler/Target/Microcontroller
New Feature

TES-2778

Added C++ support for Green Hills MPC compiler in conjunction with Lauterbach TRACE32.

Compiler/Target/Microcontroller

TES-2795

Support keyword __bool for Windriver compiler.

Compiler/Target/Microcontroller

TES-2796

Fixed Debugger Launch Path attribute of TASKING VX.

Compiler/Target/Microcontroller

TES-2808

Fixed TASKING TKS file.

Compiler/Target/Microcontroller

TES-2811

Execute test cases separately was not working for targets using TESSY_TESTAREA as execution directory.

Compiler/Target/Microcontroller
Enhancement

TES-2818

IAR ARM v5 + C-SPY: Using options file for include paths.

Compiler/Target/Microcontroller

TES-2819

Fixed path issue regarding spaces in path name for Microchip MPLAX AVR makefile template.

Release v4.1.16 (42 items)

Compiler/Target/Microcontroller
TES-2822

Fixed comments for ISO C90 standard.

Compiler/Target/Microcontroller
TES-2842

Enhancement

Using options file for Green Hills IDB makefile instead of include paths from command line.

Driver
TES-2800

Generate defines for test object parameter only if passing is not IRRELEVANT.

Driver
TES-2813

Fixed generated code that was not C90 compatible.

Driver
TES-2821

Type modifier was missing in generated declaration of a pointer to an array with pointers.

Driver
TES-2846

Fixed wrong declaration of advanced stub parameter that is class by value.

Driver
TES-2855

Fixed setting members in class reference parameter for test object class constructor.

Instrumenter
TES-2794

Fixed instrumenting functions with trailing return type.

Interface Assigner (IDA)
TES-2829

Fixed an error when a module is selected before the switch to IDA perspective.

Interface Assigner (IDA)
TES-2862

Generator test steps were not recomputed if a define value is used in a generator expression and that define has changed.

Interface Database (IDB)
TES-2793

Fixed possible change of pass direction and/or loss of test data of advanced stub struct pointer parameter after analyze.

Interface Database (IDB)
TES-2817

Fixed handling of multi dimensional array parameter used as pointer.

Release v4.1.16 (42 items)

Interface Database (IDB)
TES-2828

Fixed possible exception when analyzing module in headless mode.

Parser
Enhancement

TES-2752

CLANG support for compiler IAR AVR and IAR RX.

Parser
TES-2801

If a const variable was used as an enumeration constant initializer, the parser could chrash.

Parser
TES-2836

Possible incomplete list of called functions when functions are used recursively.

Project Handling
TES-2861

When selecting a configuration file outside of the project root with a file name identical to the existing configuration file's name, the existing file was not overwritten and the project configuration was not updated.

Script Editor
Enhancement

TES-2356

Save scripts separately for each test item when not enough memory is available.

TESSY (General)
Enhancement

TES-2557

New bash script "project-wizard.sh" available to create TESSY project structure from file system directory structure. Start a shell from within TESSY to use this shell script.

TESSY (General)
New Feature

TES-2674

Testing MATLAB models is now possible based on the C code generated for such models. Refer to application note "073 MATLAB Model Testing.pdf" for details.

TESSY (General)
TES-2833

Fixed timer measurement feature. Measurements were not included into the test report XML and though were not listed within the report.

Test Data Editor (TDE)
TES-2839

Failed to save pointer value, if the target object is struct or union array, but no field inside the struct or union has any test data.

Test Execution
Enhancement

TES-2715

Added option to automatically retry execution for aborted test objects.

Release v4.1.16 (42 items)

Variant Management

TES-2689

Lock test objects after resetting a variant module until it is being synchronized with its parent.

Variant Management

Enhancement

TES-2749

Keep new functions in IDA assignment when synchronizing changed variant modules.

Variant Management

TES-2841

Expressions containing changed defines or enum values in a variant module were not recalculated after synchronizing with parent module.

Variant Management

TES-2863

Missing generator test steps after initial variant module creation.

Variant Management

TES-2864

Wrong evaluation mode in inherited generator test steps in variant test objects.

Variant Management

TES-2866

IDA was not opened for assignment when only defines changed while synchronizing variant modules.

Release v4.1.15 (21 items)

CTE

Enhancement

TES-2777

CTE387 - The paste of tree elements did not work if the classifcation tree window had been scrolled.
CTE408 - Automatic test generation is now possible for all selections and works on the virtual classification tree created by the selected nodes and all its descendants.
CTE410 - Fixed that color was not updated after a node's parent had been changed.
CTE412 - Fixed "not contained in Diagram" error which had occured sporadically.

Command Line (tessycmd)

TES-2765

Reset selection of tessycmd if selected objects were deleted.

Compiler/Target/Microcontroller

TES-2705

Fixed "Preprocessor Call" attribute for all compilers that use idb.mak.

Compiler/Target/Microcontroller

New Feature

TES-2755

Legacy parser now also works with Greenhills Tricore.

Release v4.1.15 (21 items)

Compiler/Target/Microcontroller

TES-2768

The "Execute Testcases Separately" option did not work correctly for targets using the TESSY_TESTAREA directory for intermediate communication files.

Driver   *New Feature*

TES-2772

Added new attribute "Generate Constructors". If set to false the user has to create the "this" object that is used to invoke the method under test inside the user code prolog section using the predefined TS_CREATE_THIS function(s). The TS_CREATE_THIS function(s) has/have the same signature as the corresponding constructors of the class under test.

Environment Editor (TEE)

TES-2773

Fixed synchronization problems while reloading the TEE configuration into TESSY when the TEE contents were saved. Also prevent TEE from being closed when test executions are aborted within TESSY.

Import/Export

TES-2761

Fixed file filters within the import dialog for component test scenarios.

Instrumenter

TES-2770

If a test object was prefixed with an _attribute_((...)) and that attribute contains something that matches a function signature, the instrumenter failed to locate that test object.

Interface Assigner (IDA)

TES-2734

Assignment of advanced stub functions with changed name in component tests changed the respective parameter passing to default.

Interface Assigner (IDA)

TES-2746

Fixed automatic assignment of advanced stub parameter for functions with changed name.

Interface Database (IDB)

TES-2733

Possible missing stub code after auto reuse for external stub functions, if only the name of that function has changed.

Interface Database (IDB)

TES-2775

Fixed possible change of OUT const Variable to IRRELEVANT after analysis.

Report   *Enhancement*

TES-2779

Enlarged column width for coverage columns within test details report.

Release v4.1.15 (21 items)

TESSY (General)

Enhancement

TES-2506

Provided a normal text editor for editing of external files like map files, linker files etc.

TESSY (General)

TES-2758

TESSY was not working when more then 1024 processes were running.

Test Data Editor (TDE)

TES-2467

Fixed handling of "Set passing to IRRELEVANT" operation: When switching between TDE and CTE perspective, the "[IRRELEVANT]" status was still displayed at such variables even though the interface change has been discarded on perspective switching.

Test Execution

TES-2638

The test driver was not generated if the "Test Execution Settings" preferences value "Enable parallel execution" was not set and no execution action was selected. This problem was erroneously reported as fixed in v4.1.13.

Variant Management

TES-2738

Fixed missing GUI update when overwriting inherited values twice with different values.

Variant Management

TES-2753

If a variant test object has an assigned CTE file with test data only present in the variant test object, this data was lost after synchronization.

Variant Management

TES-2754

Fixed possible loss of CTE test data after synchronize.

Release v4.1.14 (15 items)

C++

TES-2671

The test driver could fail to load a constructor object.

C++

TES-2695

Possible wrong test driver if anonymous structs or unions inside a class were present.

CTE

TES-806

When setting a new test specification (i.e. a new CTE file) any existing test data assigned to the former test specification was not deleted.

Release v4.1.14 (15 items)

CTE
TES-2700

The "CTEX File" attribute was not set if only the classification tree was edited.

CTE
TES-2708

Changes only made in the classification tree/table did not trigger an update of the test cases within TESSY.

CTE
TES-2709

For some legacy format CTE documents changes to the test data were not synchronized on first save.

CTE
TES-2711

After initial save of a new classification tree the file name within the "CTEX File" attribute was not collapsed with respect to the PROJECTROOT.

Command Line (tessycmd)
TES-2719

Fixed exception in "tessycmd list-compiler-options" when no module is selected.

Compiler/Target/Microcontroller
TES-2681

Fix idb-freescale-s12z.mak for CLANG support.

Compiler/Target/Microcontroller
TES-2699

Added missing attribute IDBMake Makefile for Green Hills V850.

Driver
TES-2717

Possible wrong test driver if a constructor exists with reference or pointer type and default value.

Instrumenter
TES-2670

The instrumenter failed to find the test object to instrument, if the function signature is prefixed with __attribute__((...)). [e.g. __attribute__((noinline)) int Test (void)]

Interface Assigner (IDA)
TES-2698

Fixed reusing pointer targeting an array that is a component in a struct array.

Parser
TES-2710

Possible wrong test driver if template parameters are used in typedef expressions.

TESSY (General)   *Enhancement*
TES-2586

Enhanced handling and feedback when configuring the TESSY floating license manager.

Release v4.1.13 (53 items)

Batch Operation
TES-2626

Fixed endless loop during batch test execution when restoring TMB files containing unknown module environments.

C++
TES-2483

Now const class member variables can be set to OUT and tested.

C++
TES-2605

Fixed generating driver for dynamic object of class containing bitfield with fill bits.

CTE
TES-2283

FIX CTE documents which need a migration cause an error in report generation.

CTE
TES-2527

Now all migration error messages will be displayed in one dialog.

CTE
TES-2569

CTE did not save "ignore value" state for pointers.

CTE   *Enhancement*
TES-2631

Similar to the behavior in Script Perspective the CTE will not show a dialog if the test objects interface has changed.

CTE
TES-2632

Fixed saving the CTE document for test objects with an empty interface.

Release v4.1.13 (53 items)

CTE
Enhancement

TES-2640

CTE 405: FIX copies of tests from old CTEs have the same legacy id as the original test case. This lead to synchronisation problems in TESSY.

CTE 380: Now in test specification a space will be added after colons ':' .

CTE 379: Now the editor tab icon will contain a warning icon if any validation errors occur in the diagram.

CTE 400: Fixed failing creating dependencies in refinements if another CTE is open for the same resource.

CTE 399: Fixed a bug where the change of the test table height in a refinement was not possible due to an internal error.

CTE 391: It was possible to change the test case name column width to such a minimal size that afterwards resizing was impossible. Now this column has a minimal width.

CTE 146: Now an automated test case generation based on the pairwise method is available.

CTE 401: Deleting a refinement without a connection to the tree led to a corrupted CTE file.

CTE 398: Fixed a bug where the deletion of a nested refined node deleted the parent refinement instead of only the selected nested refined node.

CTE 395: Fixed that refinements without parent could not be opened via double click.

CTE 86: Now the type of a tree node and a test step can be changed via context menu entry 'Change Type To'.

CTE 383: On CTRL+A in direct edit mode the whole tree was selected instead of only the text in the selected tree item. This is fixed now for tree and table items.

Compiler/Target/Microcontroller
Enhancement

TES-1109

Added iar-8051 to IAR IDB makefile so as to regard user defined macros.

Compiler/Target/Microcontroller
New Feature

TES-1194

New combination for new version (> 2.0) of Microchip XC8 (xc8-cc.exe) keeping old version as legacy.

Compiler/Target/Microcontroller
New Feature

TES-2574

Updated HighTec PPC combination.

Compiler/Target/Microcontroller

TES-2579

Updated and fixed HighTec TriCore makefile templates.

Compiler/Target/Microcontroller

TES-2580

Fixed build with Comm Checksum feature.

Compiler/Target/Microcontroller

TES-2583

Changed default value of attribute "Make Use One Shell" to false.

Compiler/Target/Microcontroller

TES-2584

HighTec GNU Debugger is obsolete now. Please enable "Show Obsolete Entries" in TEE if you need this adaption.

Release v4.1.13 (53 items)

Compiler/Target/Microcontroller
TES-2591

Updated all Green Hills v850 makefile templates.

Enhancement

Compiler/Target/Microcontroller
TES-2593

TRACE32: Deleting flag files before test run.

Compiler/Target/Microcontroller
TES-2609

Prepared idb.mak and idb++.mak to use an includes file instead of command line includes to support large amounts of include directories.

Enhancement

Compiler/Target/Microcontroller
TES-2614

Fixed STVD Cosmic STM 8 makefile template.

Compiler/Target/Microcontroller
TES-2619

Fixed idb-microchip-xc-gcc.mak in order to gain user defined macros.

Compiler/Target/Microcontroller
TES-2662

Updated configuration to support NI LabWindows/CVI 2017.

Compiler/Target/Microcontroller
TES-2676

Fixed GHS communication Makefiles which failed to run Check Driver Layers tests.

Coverage Viewer (CV)
TES-2564

Enhanced handling of called functions view: It must be available and visible within the CV perspective to show the coverage within the flow chart views properly.

Enhancement

Coverage Viewer (CV)
TES-2597

Fixed erroneous line and column information within CV when a parameter list of a test object contained line breaks.

Driver
TES-2587

Fixed generated code for function local typedefs.

Driver
TES-2600

Fixed generating driver for class with self referencing pointer.

Release v4.1.13 (53 items)

Driver
TES-2615

Fixed problem with pointers targeting struct components that have the same address as the struct itself.

Driver
Enhancement

TES-2617

Fixed missing "void" declaration in empty parameter list of a test driver slave function.

Driver
TES-2646

Fixed evaluating pointer targets inside structs/unions with equal address and different names (e.g. &struct and &struct.first_member).

Driver
TES-2690

Fixed possible error in generated stubs when a test object parameter, a stub function parameter and a struct component have the same name.

Driver
TES-2691

Generate synthetic scalar variables to beginning of source files to make them visible in stubbed inline functions.

Fault Injection
TES-2639

Fixed duplicate fault injection code for case statements.

Instrumenter
TES-2608

Fixed instrumenting source with _Pragma() directive.

Instrumenter
Enhancement

TES-2621

Fixed positioning of TESSY test driver declarations within the generated source file for Wind River compiler.

Instrumenter
New Feature

TES-2644

Fixed problem with unknown variable declarations within stub functions if the source file contains #include directives of header files in between the code (e.g. before or after function definitions). The instrumenter now provides a list of headers to exclude from include position computation for injection of above mentioned variable declarations. Add the base name of such header files into the attribute "Instrumenter Header Exclude List", e.g. "iopt_memmap.h".

Interface Database (IDB)
TES-2588

Fixed adoption of passing directions of advanced stub variables that were changed by the user when the option 'Update passing directions on module analysis' is disabled.

Interface Editor (TIE)
Enhancement

TES-2420

Enable OUT as passing for const variables.

Release v4.1.13 (53 items)

Interface Editor (TIE)
TES-2589

Fixed displaying module interface, when attribute 'Use Alias Names' is true.

Interface Editor (TIE)
TES-2592

It was possible to change passing of fillbits to other than IRRELEVANT with CLANG enabled.

Parser
TES-2658

Added typename __int 64 for NI Labwindows CVI.

Parser
TES-2685

Passdirection of IRRELEVANT array parameter used as pointer was set to IN.

Report
TES-2627

Fixed problem with report generation (premature end of file error caused by corrupted XML report file) that caused the execution in batch mode being terminated with error.

Requirements
TES-2613

Fixed exception when importing validation matrix.

Save/Restore Database (TMB Files)   *Enhancement*
TES-2624

New option "Use default coverage selection for all modules" added to coverage preference page in order to overwrite coverage selections stored within TMB files being imported.

TESSY (General)
TES-2237

Fixed erroneous merging of tessy.conf files from newer TESSY v4.1 and v4.0 versions.

Test Data Editor (TDE)
TES-1692

Fixed saving pointer to an array element without value.

Test Data Editor (TDE)
TES-2590

Array parameters with the legacy setting 'Use as pointer' were not shown within TDE after migration to CLANG parser.

Test Data Editor (TDE)
TES-2601

Fixed using special *min*/*max* values as input range values for generator test cases.

Release v4.1.13 (53 items)

Test Evaluation
TES-2675

Wrong test result (i.e. passed instead of failed) was displayed for variant test objects, if only the inherited call trace was failed. The respective test step and test case were correctly displayed as failed, but the test object itself was displayed as passed within the test project view.

Test Execution
TES-2637

Fixed missing fault injection code if the test execution setting "Enable parallel execution" was not set.

Variant Management   *Enhancement*
TES-1986

The CTE may now also be used for inherited test objects. The classification tree will be shown in read-only mode, but the inherited test data can be overwritten.

Variant Management
TES-2693

Dynamic array results in variant test objects were possibly shown as unknown.

Release v4.1.12 (43 items)

C++
TES-2531

Fixed error analyzing a source file containing a class with inner union implementing a constructor.

C++
TES-2560

Missing name for enums declared inside a structure.

CTE
TES-2435

Interface variables within the test data view were not updated for open CTE editors.

CTE
TES-2523

Fixed discarding of CTE documents with multiple open refinements.

Release v4.1.12 (43 items)

CTE

New Feature

TES-2525

CTE–330 Now comments are listed in the outline view: A separate comments list contains all comments visible in the currently focused editor (e.g. the main diagram or an refinement). Additionally the comments are shown in the diagram tree on root node and refinement level.

CTE–346 Fixed error in arrow layout where subtrees overlap each other.

CTE–350 In the previous version the mark guideline was not highlighted on mark mouse hover.

CTE–353 Now test case marks will only be copied between diagram views of the same resource.

CTE–366 Now a description property field for tree items is available in the properties view. Description data from legacy CTE files is imported.

CTE–367 Now a description field for test sequence and test group items is available in the properties view.

CTE–368 Now a revert of changes behaves as expected. After a revert all changes are resetted and the open editors are not marked as dirty.

CTE–369 Import now removes illegal XML characters from name and description.

CTE–370 In previous CTE versions the import used generically extended names although no name collision was present.

Compiler/Target/Microcontroller

New Feature

TES-1735

New combination for Green Hills RH 850 compiler and Renesas e2studio.

Compiler/Target/Microcontroller

New Feature

TES-2224

New AVR GCC compiler from Microchip in conjunction with MPLAB X.

Compiler/Target/Microcontroller

New Feature

TES-2261

Added C++ support for TI ARM and TI Cl2000.

Compiler/Target/Microcontroller

Enhancement

TES-2475

Improved low level target communication tests.

Compiler/Target/Microcontroller

TES-2522

Adapted FreeScale Metrowerks S12Z for use with CLANG parser.

Compiler/Target/Microcontroller

TES-2524

Added data type long long to IAR M16C compiler.

Compiler/Target/Microcontroller

TES-2538

Updated and fixed Code Warrior HC08 makefile templates.

Compiler/Target/Microcontroller

TES-2548

Added __bank0/1/2/3 to Microchip XC8 type table.

Release v4.1.12 (43 items)

Compiler/Target/Microcontroller
TES-2573

Fixed Green Hills / PLS UDE makefile template.

Compiler/Target/Microcontroller

Enhancement

TES-2577

Added TEE attribute Make Use One Shell to configuration.default.xml.

Driver
TES-2445

Fixed generating code for arrays of structs/unions declared inside structs.

Driver
TES-2509

Fixed evaluating addresses inside structs for pointers to different targets with same address (e.g. first component of a substruct and substruct).

Driver
TES-2542

Fixed generated stub dummy return type for struct/enum when 'Enable User Includes' is true.

Driver
TES-2565

Erroneous casts were generated for TASKING XC166 VX compiler for some memory modifiers.

Instrumenter
TES-2520

Fixed instrumenting return statement with preceding _Pragma directive.

Instrumenter
TES-2544

Fixed wrong instrumentation if a function to stub is used inside an initializer list.

Interface Database (IDB)
TES-2516

Fixed show/hide static and inline functions in module.

Interface Database (IDB)
TES-2526

Fixed possible error in interface database for pointer to pointer after analyze/reuse.

Interface Database (IDB)
TES-2533

Single changes of variable data types (without any other changes of the interface) now also require a reuse within IDA.

Interface Database (IDB)
TES-2546

Fixed comparing IDB with array parameter used as pointer and UNKNOWN interface objects.

Release v4.1.12 (43 items)

Interface Database (IDB)
TES-2566

Fixed adoption of passing directions that were changed by the user when the option 'Update passing directions on module analysis' is disabled.

Makefile Templates   *Enhancement*
TES-2536

Regarding defines for IAR AVR/IAR AVR32 during module analysis.

Notes View   *Enhancement*
TES-2563

Notes assigned to modules, test objects or test cases will now display the full path (test collection/folder/module/test object) within the test project as source object name within the notes view and overview reports.

Parser
TES-2400

Fixed parsing pragma directives when CLANG is disabled.

Parser   *Enhancement*
TES-2496

Updated TKS file for ARM V5.

Parser
TES-2562

Added __asm support for GNU ARM tks file.

Parser
TES-2570

Fixed possibly missing interface variables if a GCC assembler function is present.

Report
TES-2521

Inherited prolog/epilog was missing in details report of variant test objects.

Report
TES-2554

Hide the "Merge Details Reports Into One Document" report option when it is not applicable: Merging the reports is only possible for PDF format and when both the overview report and the details reports are generated within the same batch operation.

Report
TES-2558

Generating the test details report failed for not executed test objects with attribute "Timer Enabled" set to "true".

Save/Restore Database (TMB Files)
TES-2530

Fixed saving script files for testobjects where the name exceeded 255 characters.

Release v4.1.12 (43 items)

TESSY (General)

Enhancement

TES-461

Added two attributes 'Header File Include List' and 'Header File Exclude List' that controls whether inline functions from the specified header files will be listed as test objects for a module. Refer to the TEE application note 043 for further details.

TESSY (General)

Enhancement

TES-2535

Now the support file dialog has a test field for the file location.

TESSY (General)

Enhancement

TES-2556

Use text ("x") instead of images for link marks when exporting link matrix and validation matrix contents to XLS.

Test Data Editor (TDE)

TES-2380

Fixed setting pointer to array and creating dynamic object for pointer to array.

Test Data Editor (TDE)

TES-2512

Fixd evaluating expressions when data format 'hexadecimal' or 'binary' is selected.

Test Data Editor (TDE)

TES-2529

Fixed evaluating expressions resulting in negative values.

Test Data Editor (TDE)

TES-2534

Ignore case when evaluating hexadecimal values.

Release v4.1.11 (48 items)

C++

TES-2426

Possible missing stub function if qualified template fields were present.

C++

TES-2453

For method parameters of type "class", the name printed within the test report was always "*this*" and member variables of constructor parameters were not listed within the test report.

C++

TES-2463

Fixed declaration of extern stub functions with class by value parameter.

C++

TES-2472

Initialize reference member in generated default constructor.

Release v4.1.11 (48 items)

C++
TES-2478

If a template class has multiple overloaded operators starting with '<' (e.g. operator <) stubbing of the operator method could fail.

C++
TES-2480

Fixed generating declaration of synthetic variable if the variables type is a struct declared inside a class.

C++
TES-2487

Fixed problem with test classes that have a method parameter of class type with a referenced base class and member variables of the test class also of the base class type.

C++
TES-2488

Fixed possible error when generating the test driver for class without member variable, or method that did not access any member.

C++
TES-2492

Fixed generating test driver for test using class with const member.

C++
TES-2497

Fixed generating test driver when methods of a typedef struct are stubbed.

C++
TES-2502

Fixed generating get/set function prototypes for classes in different source files.

CTE   *Enhancement*
TES-2440

Implemented rollback mechanism for CTE test data to avoid data loss in case of errors while saving.

CTE
TES-2444

Fixed error opening CTE perspective when the interface contains a union that has passing IN/OUT with all components IRRELEVANT.

CTE
TES-2473

Fixed exception when removing CTE test cases that were showing execution result markers (passed/failed).

Release v4.1.11 (48 items)

CTE
New Feature

TES-2507

CTE–233 Now the CTE supports comment nodes within the tree.

CTE–341 Now the mark selection behaviour can be switched (via preferences) between "mark should be enclosed" and "mark should be touched" to be part of the selection

CTE–343 Now older CTE files with empty refinements can be imported without error

CTE–340 New option to pin the layout of the imported diagram. Means that on import the root nodes of the diagram and all refinements will be pinned and the layout will not be altered by automatic layout as long as the pins are not removed by yourself.

CTE–173 Optimized the layout of dependencies in the diagram

CTE–332 The layout button now has an additional menu entry which triggers a layout of the entire document, i.e. all open and closed refinements of the document will be layouted.

CTE–339 Now a change of the first test table column width only moves the tree without relayouting all

CTE–323 Now we show an error symbol at the top of the test table column when any test case has a conflicting mark for the corresponding leaf node.

CTE–338 Numbers of test table items are not editable by the user anymore.

CTE–337 Tree nodes or test table items are selected after pasting them.

Command Line (tessycmd)

TES-2417

tessycmd disconnect could fail and return an error code in rare cases.

Command Line (tessycmd)

TES-2425

The command line operations "import" and "export" failed with an exception in situations where no "exec-test" operation has been performed on command line before.

Command Line (tessycmd)

TES-2501

TESSYD does not consider --ignore-configuration-errors option.

Compiler/Target/Microcontroller
Enhancement

TES-1430

Improved winIDEA adaption so that (optionally) one instance of the IDE can be used for all tests.

Compiler/Target/Microcontroller
Enhancement

TES-1974

Implemented a modifiable communication transfer limit per test object test run.

Compiler/Target/Microcontroller
New Feature

TES-2382

New combination for TASKING ARM C compiler and PLS UDE debugger.

Compiler/Target/Microcontroller

TES-2447

Fixed accidentally deleted entry in Wind River PPC type table.

Compiler/Target/Microcontroller
Enhancement

TES-2482

TASKING TriCore IDB make file: defines and includes are read from options file now to shorten compiler command line.

Release v4.1.11 (48 items)

Component Test
TES-1771

Generate master code without compiler warnings for component test using dynamic objects.

Driver   *Enhancement*
TES-2350

Return a valid value in unused external stub functions to avoid compiler warnings.

Driver
TES-2399

Generate a declaration to otherwise empty C driver files, since some compilers treat empty files as error.

Driver
TES-2431

Delete files with endings specified in attributes "ObjFiles Extension" and "ExeFile Extension" before compiling test driver.

Fault Injection
TES-2477

Possible erroneous fault injection if known functions were stubbed.

Import/Export
TES-2469

Fixed import of return value of C++ functions with multiple parameters.

Interface Database (IDB)
TES-2451

When a struct type modifier changed it was not always applied after analyzing the module.

Interface Database (IDB)
TES-2454

Fixed error loading test data after reuse if a pointer pointer passing was set manually from IN->IRRELEVANT to IN->IN.

Interface Editor (TIE)   *Enhancement*
TES-2422

Display typedefs for structs/unions within the type list of the "Create Variable" dialog within TIE.

License Manager
TES-2493

If the log file size reached 80% of max size, any further log message contained garbage characters.

Parser   *Enhancement*
TES-2094

Added CLANG support for the Cosmic STM8 compiler.

Parser
TES-2412

Fixed parsing typedefs with integrated memory modifiers (e.g. typedef near struct str NEAR_STR;)

Release v4.1.11 (48 items)

Parser
TES-2491

Fixed issue with _Bool in TASKING VX XC166 type table file.

Report   *Enhancement*
TES-2401

Fixed short path names in coverage reports.

Scenario Editor (SCE)   *Enhancement*
TES-2352

Component test scenarios may now already be created and edited without a work task assignment.

Script Editor
TES-2498

Support C++ syntax for call trace in script editor.

TESSY (General)   *Enhancement*
TES-2371

Use .ONESHELL target within makefile template to speed up make.

TESSY (General)
TES-2423

Fixed potential exception when using the filter within the test project view.

TESSY (General)
TES-2486

Fixed problem with disabled buttons within the attributes tab of the properties view.

Test Data Editor (TDE)
TES-2446

Fixed calculating expressions for unsigned long long (64 bit) integers.

Test Data Editor (TDE)   *Enhancement*
TES-2448

New test interface setting in preferences: 'Enable expression overflow checking'. Uncheck to disable checking for value overflow when entering/importing expressions as test data.

Test Data Editor (TDE)
TES-2459

Fixed handling of character literals like 'a' within TDE test data and script editor.

Test Data Editor (TDE)
TES-2466

Fixed evaluation of expressions containing the "~" operator (e.g. ~6).

Test Data Editor (TDE)
TES-2481

If there are no parameter names in the signature of a constructor and a dynamic object was created for the class, no test data could be saved for these parameters.

Release v4.1.11 (48 items)

Test Evaluation
TES-2470

Fixed evaluation of very long advanced stub vector values.

Release v4.1.10 (69 items)

ASAP Conversion
TES-2321

Invalid A2L files (e.g. with missing COEFFS entry for COMPU_METHOD entries) could cause TESSY to be terminated whenever the conversion was invoked (e.g. when importing or entering test data for ASAP variables).

ASAP Conversion
TES-2390

Conversion methods of type RAT_FUNC with coefficients containing relevant digits after the decimal marker (e.g. "1.234") could cause the decimal places being ignored and though incorrect physical values being imported or input as test data within TDE. If the numeric locale of the computer uses another decimal marker than "." then this error could occur (e.g. with german language settings).

Also the ASAP options have been renamed as follows to be able to provide them as environment variables to the TESSY process:
- ASAP_NO_FLOAT_CONVERSION (Skip the conversion for float type variables)
- ASAP_TRACE_CONVERSION (Emit trace outputs for conversions)
- ASAP_ROUND_VALUES (round converted values instead of truncating the decimal places)

C++
TES-2233

Fixed generated code for dynamic structures from a pointer declared in a different source than a pointer targeting an address inside the structure.

C++
TES-2289

Fixed possible error calculating coverage for classes containing template methods.

C++
TES-2328

Fixed erroneous test driver for pointer members in class references.

C++
TES-2342

Fixed generated code for constructor with a class reference parameter of a class also having a constructor with class reference parameter.

C++
TES-2414

Fixed generating test driver if a class is derived from a struct typedef.

C++
TES-2415

Fixed invalid interface database if a superfluous typedef is used.

Release v4.1.10 (69 items)

CTE
New Feature

TES-2181

Display the execution results of test cases within the CTE editor test table.

CTE
Enhancement

TES-2284

CTE–321 Decorations for Refinements are closer to its coresponding nodes.

CTE–320 Now conflicting marks are drawn in red with a white inner dot, such that a difference to other non-conflicting marks is also visible for color blind users.

CTE–313 The Delete button in TESSY operates in CTE documents.

CTE–312 Now on change of first column width in the test table the tree will be relayouted. To keep an individual layout it's recommended to pin the tree nodes in the tree before changing the test table column width.

CTE–307 The title of the CTE will be updated when the root node changes its name.

CTE–302 Now "Undo" for "Define Parent" is available

CTE–280 Now a layout defined on a specific tree node is inherited by the sub tree. The inherited layout can be overwritten or resetted to the inherited parent layout.

CTE–273 In new refinements Dependencies are now layouted.

CTE–161 Add preferences for "Vertical distance between leaf class nodes" and "Horizontal node shift" in Space Saving layout.

CTE

TES-2306

Fixed an error when test data for multiple variables was initialised at once.

CTE

TES-2316

Fixed error that saving a CTE documents deletes a call trace.

CTE
Enhancement

TES-2387

CTE–88 Now preferences for validation checks are available.

CTE–57 Validation check warnings will be displayed on tree and table items.

CTE–327 Add toolbar button to validate the current CTE document.

CTE–160 Optimized layout algorithm for some corner cases.

CTE–139 Now a new layout "ARROW_LAYOUT" mix of normal and space saving layout is available.

CTE–324 Refinements are again called "Refinement" and all occurrences of the concept "View" are replaced. Moreover the icons releated to Refinements are adapted to visualize the concept of refining an aspect.

CTE

TES-2391

CTE–326 Fixed the indentation of nested compositions in test specifications.

CTE
New Feature

TES-2392

TESSY now uses an optional "project.css" file in its configuration folder for all CTE documents in the current TESSY project.

Command Line (tessycmd)
Enhancement

TES-589

Relative path names can now be passed as arguments to tessycmd.

Release v4.1.10 (69 items)

Command Line (tessycmd)

TES-2386

The 'save-db' command was erroneously disabled internally and did nothing.

Command Line (tessycmd)

TES-2404

Fixed "set-environment" command: The environment was always applied to all modules of the current project regardless of the current selection within tessycmd.

Compiler/Target/Microcontroller   *New Feature*

TES-946

New combination for TI ARM compiler with iSYSTEM winIDEA debugger.

Compiler/Target/Microcontroller   *Enhancement*

TES-1197

Added CLANG support for TASKING XC166 VX.

Compiler/Target/Microcontroller   *New Feature*

TES-1566

New combination for Green Hills MPC compiler with PLS UDE debugger.

Compiler/Target/Microcontroller   *New Feature*

TES-2257

Added C++ support for Microchip XC32 with MPLAB X.

Compiler/Target/Microcontroller

TES-2280

Fixed 64-bit issue concerning original binary test with winIDEA.

Compiler/Target/Microcontroller   *New Feature*

TES-2285

New combination for Green Hills TriCore compiler with PLS UDE debugger.

Compiler/Target/Microcontroller

TES-2295

Fixed 66 makefile templates to comply with new make version.

Compiler/Target/Microcontroller

TES-2303

Fixed communication makefile of GHS v850 / TRACE32.

Compiler/Target/Microcontroller

TES-2307

Updated winIDEA / Green Hills MPC makefile template.

Compiler/Target/Microcontroller

TES-2315

Added board files section for Tasking VX XC166 / Lauterbach TRACE32 makefile template.

Release v4.1.10 (69 items)

Compiler/Target/Microcontroller

Enhancement

TES-2318

Added CLANG Support for Atollic ARM compiler.

Compiler/Target/Microcontroller

New Feature

TES-2343

New combination for TASKING ARM C/C++ compiler and TASKING VX debugger.

Compiler/Target/Microcontroller

Enhancement

TES-2411

Improved CLANG support for WindRiver compiler.

Driver

TES-2394

Synthetic variable declarations were missing in stubs of extern functions with multiple source files and test object and called extern function in different source files.

Environment Editor (TEE)

TES-2331

Fixed wrong type of "Type Include List" and "Type Exclude List" attributes which prevented these attributes to be applied correctly.

Environment Editor (TEE)

TES-2366

Removed erroneous "--win32" entries within some environment configurations.

Import/Export

TES-2376

The following PTU file entries had problems when importing:

ARRAY abc[0..7][0..3], INIT= [[1,2,3,4],[5,6,7,8]]
ARRAY abc[0..7][0..3], INIT= 42

The first case was completely skipped while in the second case not all combinations of array indices were assigned.

Instrumenter

TES-2338

Fixed instrumentation problem with assignment statements containing logical expressions.

Interface Assigner (IDA)

TES-2304

Fixed an exception that occurred when analyzing a module with still open assign views within the IDA perspective.

Interface Assigner (IDA)

TES-2312

Fixed automatic assignment of enum constants in typedefs when switching to CLANG parser.

Release v4.1.10 (69 items)

Interface Assigner (IDA)

TES-2347

Fixed automatic assignment of global variables in module reuse.

Interface Database (IDB)

TES-2319

Fixed loss of "use array parameter as pointer" information during automatic reuse.

Interface Database (IDB)

TES-2326

Fixed setting const variables IRRELEVANT within migrated interface databases of TESSY versions before v4.1.7.

Interface Editor (TIE)

TES-2314

Fixed possible Null Pointer Exception when moving a variable or function from unused to used section.

Interface Editor (TIE)

TES-2410

Fixed validation in "Create Variable" dialog in test interface editor TIE.

Parser

TES-866

Added __inline to Green Hills type table file.

Parser

TES-2310

Extern variables were missing in interface if declared inside a function body.

Parser

TES-2311

Added parser option -write-init-collector to collect external variables that are used to initialize a global variable which is not used by any test object.

Parser

TES-2324

Fixed erroneous type modifier at return type for Cosmic compiler.

Parser

TES-2330

Fixed possible invalid characters in IDB files, when a second file contains a function template spezialization.

Parser

TES-2360

Parameter accessed only in a void cast statement are considered IRRELEVANT.

Parser

TES-2363

Fixed parsing asm output constraint '=@ccc'.

Release v4.1.10 (69 items)

Parser
TES-2405

The parser error 'passing ... changes address space of pointer' was fixed. This error occurred if a function in the parameter list had an address space modifier [e.g. void callee (void near *p);], but the current parameter in the call did not.

Requirements
TES-2317

Bugfix for ReqIF import and export. Handling of document title options, structure import and document matching improved.

Requirements
TES-2416

Bugfix for ValidationException during requirement document export.

TESSY (General)   *New Feature*
TES-932

Doxygen comments within the source files can now be analyzed and imported as test specification for test objects. This feature can be activated using the module attribute "Enable Doxygen". Refer to the respective application note for details.

TESSY (General)
TES-2190

Fixed problem with icon rendering on computers with >100% windows font scaling. This fix was erroneously already reported for version v4.0.23 and v4.1.7 of TESSY.

TESSY (General)
TES-2301

Fixed startup problem of TESSY v4.0 (missing "fls.conf" file) when installed on a computer with already installed TESSY v4.1.

TESSY (General)
TES-2322

Fixed possible TESSY startup error on computers with low performance.

TESSY (General)
TES-2359

Fixed painting artefacts when resizing coverage columns within test project view and result columns within test item view.

TESSY (General)
TES-2362

The default setting in "/etc/nsswitch.conf" caused the startup of MSYS2 processes to take a very long time if the computer is a member of a poorly configured domain with AD. The default "db" entries within this configuration file will now be removed when installing TESSY.

TESSY (General)
TES-2374

Creating support files could fail due to blocking of "CoFreeUnusedLibraries" native method.
In TESSY.ini set -Dorg.eclipse.swt.internal.ole.win32.FreeUnusedLibraries=false to prevent the method call if TESSY freezes when creating a aupport file.

Release v4.1.10 (69 items)

Test Data Editor (TDE)

Enhancement

TES-2221

Added validation of test data expressions regarding minimum and maximum values of the respective variable data type (formerly only numeric values were checked). This enhanced checking will now be applied when entering test data within TDE, importing test data or during a reuse operation where the data type of a variable may have changed. Invalid test data will be rejected or marked as invalid.

Test Data Editor (TDE)

TES-2308

Fixed missing Constructors after selecting another test object of the same class.

Test Data Editor (TDE)

TES-2332

Fixed using defines in generator test case range expression.

Test Data Editor (TDE)

TES-2333

Fixed potential problems with defines or enum constants used within test data expression values. If such defines or enum constants were removed from the source code and a reuse operation was performed, such expressions were marked as invalid. Subsequent changes of usercode or other test data values in combination with further source code changes and another reuse operation without intermediate execution of the tests could lead to unintended automatic changes and revalidation of the invalid expressions.

Test Data Editor (TDE)

Enhancement

TES-2335

The "Next/Previous Undefined Value" buttons within TDE will now also find any invalid test data.

Test Execution

TES-2327

Test objects might be not executed in batch test due to a race condition when reading CVS information from source files.

Test Execution

TES-2345

When a test with Wind River WindISS was aborted, the affected test object was not executable anymore.

Usercode Editor (UCE)

TES-2369

Usercode (stub code and prolog/epilog) could be corrupted after a reuse operation and subsequent changes of usercode. This could happen in the following cases:
- If constants of enum types were used in usercode which are only available within the signature of external called functions.
- If variables, enum constants or defines used within usercode were renamed and not properly assigned within IDA during the reuse operation.

Variant Management

TES-1847

Fixed problems with inherited values being overwritten with values with changed evaluation modes.
If only the evaluation mode and not the value of a variable was changed within a variant module, the respective variable value being show within TDE was still the inherited value. Also, if evaluation mode and value was changed, the inherited value being shown within the tooltip showed the wrong evaluation mode.

Release v4.1.9 (12 items)

C++
TES-2255

If a class has a function template and a method with the same name, the intrumenter was not able to instrument that method.

C++
TES-2294

Fixed generating driver for pointer pointer to class.

C++
TES-2297

Fixed displaying names of dynamic classes within TDE.

C++
TES-2298

Fixed showing constructor selection box within TDE.

C++
TES-2302

Editing test data for members of dynamic classes with pass direction INOUT was impossible.

Compiler/Target/Microcontroller
TES-2282

Fixed makefile template for GNU Tools for ARM.

Driver
TES-2278

Fixed DS-5 master makefile.

Interface Assigner (IDA)   *Enhancement*
TES-2296

New enum constants shall not display a warning within the new interface of a test object.

Interface Database (IDB)
TES-2290

Fixed possible loss of test data for advanced stub variables during automatic reuse.

Report
TES-2254

A scheme file (XSD) for the test overview report is now available within the bin\plugins \com.razorcat.tessy.reporting.templates_4.1.9\schemafiles folder of the TESSY installation.

Report
TES-2320

Errors during report generation could be caused by too long file names being generated for C++ test objects: The C++ test object name contains the full name space qualification plus the signature which result in very long file names for the report files. The $(TESTOBJECT) token for the report file names now contains only the simple method name plus the internal ID of the test object. Another $(TESTOBJECT_FULL) token is available which contains the full name as before.

Release v4.1.9 (12 items)

TESSY (General)
TES-2288

Fixed exception when creating support files.

Release v4.1.8 (47 items)

ASAP Conversion
Enhancement

TES-2226

Provide ASAP information and conversion from A2L file also for synthetic variables.

ASAP Conversion
TES-2238

Fixed potential crashes of ASAP parser causing the module analysis to fail.

C++
TES-2265

Fixed problem with recursive classes causing the test driver master to crash.

C++
TES-2273

Generate possibly needed destructor to union containing dynamic objects.

CTE
Enhancement

TES-1890

CTE preferences are now saved in the TESSY project.

CTE
TES-2154

The test data decoration in CTE documents is now visible instantly after a value was entered (i.e. the inline editor has been closed) in the test data view.

CTE
Enhancement

TES-2274

- Reset layout preferences to default is available now.
- Now the test item column width and test table height can be saved to/for each CTEX file.
- The performance of moving subtrees between refinements was optimized.

Command Line (tessycmd)
Enhancement

TES-2104

Enabled CSV export format for command line export.

Compiler/Target/Microcontroller
TES-2054

Fix CLANG parser error concerning Green Hills V850 compiler.

Compiler/Target/Microcontroller
New Feature

TES-2251

New combination for ARM V6 with TRACE32.

Release v4.1.8 (47 items)

Coverage Viewer (CV)

Enhancement

TES-1702

Show names of test cases and test steps within the C0/C1 coverage test item lists within the CV perspective.

Defines

TES-2264

Defines that are using values from other defines could be missing after module analysis.

Driver

TES-2211

Fixed problem with stubbing of external functions that are wrapped with certain pragma directives. If the compilation fails due to differing pragma directives, setting the module attribute "Insert External Stub At Declaration" changes the location of the generated stub code which will result in using the pragmas valid at the declaration location of the external function being stubbed.

Driver

TES-2232

Fixed missing send/receive function prototypes for structures in case of multiple source files within a module.

Driver

TES-2234

Fixed wrongly generated test driver if test object parameter names conflicted with structure component names.

Driver

TES-2236

If a define was used in the user code for which the parser could not calculate a value, then the test driver failed to compile.

Import/Export

TES-2281

Fixed import of anonymous struct/union components

Instrumenter

TES-2246

Fixed instrumenting methods returning a struct pointer.

Interface Assigner (IDA)

TES-2247

Fixed problems with test objects containing CTE test specifications:
- Reuse of renamed test objects failed.
- An exception occurred when assigning a test object to another test object.

Interface Assigner (IDA)

TES-2258

Fixed reuse of synthetic variables.

Interface Assigner (IDA)

TES-2275

Fixed error reusing a test object from old parser containing an array parameter used as pointer when analyzed with new CLANG parser.

Release v4.1.8 (47 items)

Interface Database (IDB)

TES-2271

Fixed potential exception when comparing test objects with array types as parameters during module analysis.

Interface Database (IDB)

TES-2286

Fixed possible loss of test data for advanced stub variables during reuse.

Interface Editor (TIE)

TES-2248

Fixed potential exception within TIE for testobjects calling functions with array references as parameters that are used as advanced stubs and the attribute value of "Enable CLANG" set to false.

Interface Editor (TIE)

TES-2276

Set const array pass direction not editable when CLANG is disabled.

Interface Editor (TIE)

TES-2277

Fixed error displaying array parameter used as pointer.

Parser

TES-2173

Fixed __in64 parser error for ARMv5 using CLANG parser.

Parser   *Enhancement*

TES-2219

Added support for global anonymous unions.

Parser

TES-2266

Fixed internal parser problem causing the message "/usr/bin/bash: line 0: [: too many arguments" appearing during module analysis if the project root contains blanks.

Parser

TES-2272

Functions that are called without a prototype were missing within the interface database.

Project Handling

TES-1801

Changing the SOURCEROOT of a project from a directory inside the PROJECTROOT to a directory outside the PROJECTROOT was not persisted within the PDBX file.

Report   *Enhancement*

TES-2156

Optimized parsing of CVS infos from source and header files.

Release v4.1.8 (47 items)

Report
TES-2230

Fixed possible race condition when creating test reports causing the report generation to fail.

Report
TES-2260

Fixed problems with merging PDF files of test details reports into the overview report in case of single test details reports could not be generated. Also an existing "fileList.xml" index file within the report output directory caused any listed and existing PDF files being unintentionally merged into the currently generated overview report.

Save/Restore Database (TMB Files)   *Enhancement*
TES-976

Save and restore of static analysis preferences added.

Save/Restore Database (TMB Files)
TES-2268

Fixed missing user code when importing v2.9 TMB module archives.

Scenario Editor (SCE)   *Enhancement*
TES-2241

Refresh work task view after interface changes (e.g. after creating a synthetic variable).

TESSY (General)   *Enhancement*
TES-1264

Validate compiler and target install paths before analyzing modules.

TESSY (General)
TES-2222

Prevent to create attributes on test collection or folder level because such attributes will not be persisted when backing up the project.

TESSY (General)
TES-2231

TESSY failed to expand $(ProgramFilesx86) environment variable.

TESSY hardware adapter interface (THAI)
TES-2245

Fixed problems reading interface databases with THAI signal definitions.

Test Data Editor (TDE)
TES-1048

Fixed random test data initialization with given ranges for unsigned long variables: Allow up to maximum unsigned long value.

Test Data Editor (TDE)
TES-1873

Fixed conversion of data format to "String" for integer arrays. The data format for all array elements will now correctly be "Character".

Release v4.1.8 (47 items)

Test Data Editor (TDE)
Enhancement

TES-2244

Fixed missing updates of user code views (especially call trace view) on creation of views and on certain subsequent selections within test project, test item and test data views.

Test Data Editor (TDE)

TES-2263

Functions that were called directly by the test object were not visible in the available functions list of the call trace view if they were also called by stubbed functions.

Variant Management

TES-2174

Fixed an issue where CTE diagrams in detail reports weren't current after a module variant had been synchronized. This issue was erroneously already reported as fixed in version v4.1.7.

Variant Management

TES-2225

Copy fault injections from the parent module when synchronizing variant modules for the first time.

Release v4.1.7 (20 items)

C++

TES-2201

The generated functions of the test driver application contained invalid characters for test objects with arrays of templates.

C++

TES-2205

An invalid test driver was generated for templates using the bool type.

CTE

TES-2188

Fixed an issue where the CTE showed test data indicators of component test data on random nodes in tree.

CTE
New Feature

TES-2214

Multi selection of test item marks via selection tool and mouse drag is possible now.

CTE

TES-2215

Fixed display of invalid test item marks after restructuring the tree.

CTE
New Feature

TES-2216

It is now possible to move tree nodes from the outline into a refinement view.

Release v4.1.7 (20 items)

CTE
Enhancement

TES-2217

The width of the first column in the test table is now adapted when zooming. All connection lines between leaf nodes and marks will be painted correctly now.

Command Line (tessycmd)

TES-814

Improved handling of license problems in TESSY headless mode.

Compiler/Target/Microcontroller
New Feature

TES-2145

New TASKING C/C++ compiler for ARM adapted in conjunction with Lauterbach TRACE32.

Defines

TES-2204

Missing values for defines, if there is a comment behind the define. [e.g. #define One 1 /* this is one */]

Driver

TES-2196

Testing memset with instrumentation was not possible.

Fault Injection

TES-2218

Fixed discard of changes when editing fault injections and switching to another perspective.

Interface Database (IDB)
Enhancement

TES-606

Optimized compare/merge operations when analyzing modules.

Interface Database (IDB)

TES-2192

The tag name was missing at recursive structs.

Parser

TES-2252

Fixed computing array size if sizeof struct is used as array size.

TESSY (General)
Enhancement

TES-1139

Dynamically choose a port for communication with the DERBYD database demon process to avoid port conflicts when running different TESSY versions concurrently.

Test Data Editor (TDE)

TES-2186

Fixed setting actual as expected value for expressions.

Variant Management
Enhancement

TES-1763

Test details report now optionally contains variant information.

Release v4.1.7 (20 items)

Variant Management
TES-2202

Correctly initialize the inherited call trace for variant test steps when the attribute "Default Call Trace Evaluation" is overwritten in the environment editor TEE.

Variant Management
TES-2209

Fixed an issue where CTE test cases were removed from variant test objects when synchronizing.

Release v4.1.6 (22 items)

CTE
New Feature

TES-1210

The new implementation of CTE is a full featured eclipse-based editor integrated into TESSY which enhances the design of test cases and assignment of test data to tree nodes.

Legacy CTE trees will be updated and converted to the new CTEX file format automatically when they are opened for editing.

Command Line (tessycmd)
Enhancement

TES-697

TESSY comand line tool now supports export and import of test data in YAML format.

Command Line (tessycmd)
Enhancement

TES-2009

Optimizations for command line mode:
1.) tessycmd select-project is not necessary any more if the project has been provided as argument to tessyd.exe or if a project is already open within the GUI.
2.) tessycmd connect doesn't return an error if it is already connected.
3.) tessycmd exec-test with new option -output denoting a directory where generated report XML result files (overview and details reports) will also be copied to.

Coverage Measurement
Enhancement

TES-1757

The cumulated coverage results of modules, folders and test collections are now calculated based on the unreached coverage totals of all not executed test objects plus the achieved coverage of executed test objects. The hitherto behavior of summarizing the coverage of all EXECUTED test objects can be activated by disabling the coverage totals metrics within the metrics preference page.

Coverage Viewer (CV)
New Feature

TES-940

The flow chart of a test object is now already available before test execution.

Environment Editor (TEE)
TES-2167

Improve the transfer of settings from the environment.

Release v4.1.6 (22 items)

Fault Injection

New Feature

TES-1461

Fault injection feature provides means to inject code in order to execute normally unreachable code branches.

Interface Editor (TIE)

New Feature

TES-1642

Support selecting and editing multiple objects in TIE.

Metrics

New Feature

TES-308

Static analysis added: Calculation of cyclomatic complexity (McCabe) and derived metrics are now available for each test object. They are optionally shown within the test project view and documented within the test reports.

Report

Enhancement

TES-1829

TESSY will now always create CTE diagrams with the new JAVA based CTE.

Report

TES-1999

A scheme file (XSD) for the test details report is now available within the bin\plugins \com.razorcat.tessy.reporting.templates_4.1.6\schemafiles folder of the TESSY installation.

Report

Enhancement

TES-2078

Write variable type and type modifier to test details report XML file.

Save/Restore Database (TMB Files)

Enhancement

TES-1711

Added preference option to automatically create module backups when closing TESSY.

Save/Restore Database (TMB Files)

New Feature

TES-1941

The new test scripting language provides the means to store the test contents for each test object as ASCII file beside the binary module archive (TMB file). This allows easy versioning of tests and comparison of arbitrary versions using a version control system. For reviews of tests, changes can easily be found using standard ASCII diff tools.

Scenario Editor (SCE)

TES-2045

Fixed problems within SCE when editing and displaying scenario specific work task configurations.

Script Editor

New Feature

TES-1448

The new script perspective allows to edit tests within an ASCII editor using a dedicated test scripting language. All test data can be converted from the script format to the TESSY internal format and vice versa. The ASCII format can also be used as complementary backup format besides the hitherto TMB file format.

The script editor provides syntax highlighting, auto completion, formatting, validation and an outline view.

Release v4.1.6 (22 items)

TESSY (General)

TES-1778

Store project specific preferences in their own file within the project location.

TESSY (General)

Enhancement

TES-2090

Timing measurement configuration prepared for GNU/GCC and updated documentation with necessary steps to adapt the C166 based measuring procedure for other microcontrollers.

TESSY hardware adapter interface (THAI)

New Feature

TES-32

In order to enable hardware I/O stimulation and measurement during unit testing, TESSY provides a hardware adapter interface allowing control of external measurement hardware.

Test Data Editor (TDE)

New Feature

TES-320

The TDE allows to enter arithmetic expressions as test data values. The resulting value of an expression will be calculated and updated on code changes. The following operators are supported: Addition, subtraction, multiplication, division, modulo, shift, binary or/and/not. The operands can be numbers, defines and enum constants.

Test Data Editor (TDE)

Enhancement

TES-934

Allow assignment of enum constants to integer type variables within TDE.

Variant Management

TES-2033

Save and restore timestamps for modules to prevent variant modules from always being out of date after they have been restored.