



# Spirent TTworkbench 23

## 2016-11-29 Release Notes

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We are happy to announce the immediate availability of TTworkbench 23.

This release comes with brand new TTCN-3 refactoring functions to improve your working efficiency and increase code maintainability. It brings an improved license management to make license handling more convenient for you.

TTworkbench 23 is based on the stable Eclipse Mars 4.5.2 platform and requires Java 8 to be installed on your machine.

### **Please mind the new registration process!**

- To download the latest version of TTworkbench, you need to register yourself in the Spirent Support Center at <https://support.spirent.com>. The support team will check your data and notify you about your approval.
- Afterwards, please log in and use the download app tab on the left side. Select the product line TTworkbench and filter for categories and operating system.
- TTworkbench 23 compatible TTplugins are available in the Customer Support Center too, so please do not forget to update them respectively.
- In case of any issues, please contact us directly at [tworkbench-support@spirent.com](mailto:tworkbench-support@spirent.com).

### **General**

- TTworkbench 23 is based on Eclipse Mars 4.5.2 and requires Java version 8
- License management improvements
  - ✓ Automatic license configuration: connect to a license server by just providing hostname or IP address (connection to C1/C50 is also possible)
  - ✓ Support and maintenance contracts will be displayed more precisely

### **TTCN-3 Core Language Editor (CL Editor)**

- New TTCN-3 refactoring to extract functions
- New external functions `getComponentVariable` and `getComponentTemplateVariable` in `TTlibrary_Storage`
- Refactored editor source context menu

### **TTCN-3 Compiler (TTthree)**

- Improvements for advanced parameterization: when referencing a generic type, the type/value actual parameter lists can be skipped (individually) in case all formal parameters have a default

- Unused imports generate a hint
- Improved error reporting for type mismatches and union/anytype variant mismatches
- Improved type analysis in case of name-clash between enumerated value and local variable in untyped context
- Generated codec plugins will be generated in the project of their respective source modules

## Test Execution (TTman)

- New nanosecond precision option available in logging view and test report
- Time zone information is also saved in the log file (TLZ)
- Default of system property `te.union.getVariant.changes.value` changed to false to be more compliant to the TTCN-3 standard
- TE output redirect can now use eclipse variables, string substitution and global environment variables
- Improved error reporting for failed value checks
- Performance improvements for `int2bit`, `int2oct`, `int2hex` functions (only relevant for huge integers)
- Improvements of TTmanServer configuration
- Native C/C# support improvements
  - ✓ Support of TRI port filters in C and C#
  - ✓ Harmonized C# `toString` of tri objects with Java `toString` output
  - ✓ New parameter for C# plugins: "ProviderClass" the fully qualified name of the provider class for the given plugin
  - ✓ IMPORTANT: TriParameter usage change
    - OLD: the aux field was completely ignored
    - NOW: aux field contains the parameter name, if previous code did not initialize aux to NULL then it may crash

## Codec Generator

- Support of absolute output folder is back again
- Performance improvements when decoding messages

## TTlibrary

- New functions for accessing component variables
- Functions for converting a template into value with omit fields instead of matching operations
- Implementation of the function `searchFiles()` has changed to be in-sync with the (implied) semantics of the API. The parameter `p_nameFilter` accepts any TTCN-3 universal charstring that can be interpreted as a TTCN-3 pattern. This change is backward-incompatible, as the former implementation was inconsistent with the API.

## TTplugin ASN.1

- New option `--asn-map-nested-to-flat-types` (both in GUI and command-line, default off) to keep old code using internal type-names able to compile

## TTplugin CSN.1

- New support of CSN.1 codecs of the TCI-light type system



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## TTplugin WSDL

- Non-xsd type generation: use fully qualified names when referencing WSDL built-in types to avoid name clashes

## TTplugin XSD

- Improved codec generation for substitution groups/subtyping

## Solved Issues

The following list shows bug IDs of all issues solved within TWorkbench 23. You might check your conversation with our support team for references.

2905, 3275, 3337, 3588, 4605, 4953, 5014, 6039, 6101, 6299, 6311, 6364, 6449, 6460, 6518, 6530, 6538, 6539, 6555, 6612, 6663, 6729, 6752, 6753, 6767, 6796, 6831, 6858, 6868, 6896, 6904, 6912, 6917, 6962, 6963, 6997, 7000, 7006, 7009, 7024, 7030, 7039, 7069, 7071, 7072, 7074, 7077, 7081, 7082, 7085, 7087, 7099, 7104, 7107, 7108, 7116, 7127, 7129, 7134, 7140, 7141, 7142, 7143, 7144, 7146, 7149, 7155, 7156, 7158, 7161, 7163, 7165, 7168, 7170, 7173, 7174, 7181, 7182, 7183, 7185, 7189, 7191, 7195, 7196, 7198, 7199, 7208, 7211, 7217, 7218, 7224, 7226, 7230, 7233, 7234, 7235, 7237, 7238, 7239, 7240, 7241, 7246, 7253, 7255, 7256, 7257, 7258, 7259, 7262, 7263, 7264, 7272, 7273, 7274, 7275, 7277, 7286, 7287, 7288, 7289, 7291, 7292, 7298, 7299, 7301, 7305, 7306, 7308, 7314, 7315, 7318, 7319, 7320, 7321, 7323, 7324, 7339, 7341, 7366, 7368, 7376, 7381

## Update of TWorkbench Express/Basic/Professional

To download the latest version of TWorkbench, you need to register yourself in the Spirent Support Center at <https://support.spirent.com>.

It is Spirent's intention to provide our customers with the highest level of customer service. Please direct all questions and inquiries to our support team at [tworkbench-support@spirent.com](mailto:tworkbench-support@spirent.com) or call our customer care department at +49 30 726 19 19 0.

Thank you for your continued interest!

## Notes

This document is subject to change without notice.

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