



What is TDL?

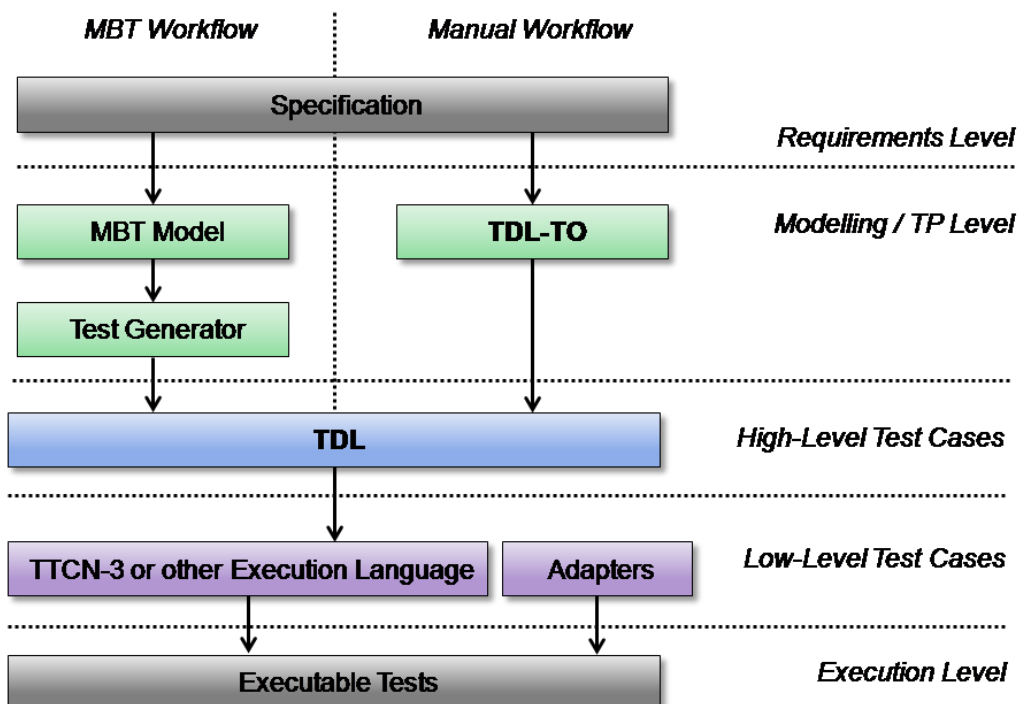


The process of stepwise development of tests from requirements specifications is well established and used in both standardization and industry. The technical committee Methods for Testing and Specification (TC MTS) has produced two languages to support this process: the Test Description Language (TDL) and the Testing and Test Control Notation version 3 (TTCN-3).

The Test Description Language (TDL) is acting as an intermediary between test requirements and TTCN-3 for the specification of test cases. TDL is designed to bridge the gap between declarative test purpose specifications (what shall be tested?) and imperative test case specifications (how shall it be tested?) by offering a standardized language for the specification of test descriptions. TDL also contributes to the ongoing activities by MTS towards establishing standardised Model-based Testing (MBT) technologies within ETSI and the industry.

TDL aims to ease the development of executable tests by enabling:

- Specification of easy-to-understand test descriptions that can be presented in different representation formats suitable for different stakeholders (graphical, textual, user-specific)
- Specification of test objectives and development of tests by testers lacking programming skills
- Independence from execution languages and platforms and hiding of implementation details
- Iterative test development along all product development phases, from requirements clarification, via design, to system and acceptance testing
- Support of automatically generated and manually developed tests by a common platform



ETSI TDL Standards

ES 203 119-1 TDL: Abstract Syntax and Associated Semantics

ES 203 119-2 TDL: Graphical Syntax

ES 203 119-3 TDL: Exchange Format

ES 203 119-4 TDL: Structured Test Objective Specification

ES 203 119-5 TDL: UML profile for TDL

ES 203 119-6 TDL: Mapping to TTCN-3

ES 203 119-7 TDL: Extended Test Configurations

ES 203 119-8 TDL: Textual Syntax

What is TOP?

To accelerate the adoption of TDL, MTS has commissioned a reference implementation of TDL in order to lower the barrier of entry for both users and tool vendors in getting started with using TDL. The reference implementation comprises graphical and textual editors, as well as validation facilities based on semantics refinements, and a test code generation and execution framework for REST API testing. It is made available as the TDL Open Source Project (TOP).

The reference implementation is based on the Eclipse toolset and provides a set of Java libraries and Eclipse plugins to support the development of TDL specifications. Navigate the source at the git repository (<https://labs.etsi.org/rep/top/ide>) and find more information on the project wiki (https://tdl.etsi.org/wiki/index.php/Main_Page).

How to contribute to TDL or TOP?

Are you a test designer, a test developer or a tool vendor? Your contribution is most welcome! Active contributions to the TDL standardization require an ETSI membership.

Discover how to join ETSI at www.etsi.org/membership.

The TOP source base is openly accessible. Its usage is governed by the Eclipse Public License version 1 (EPLv1). A source code contribution to TOP (merge request) requires adhering to EPLv1 and signing a Contributor Agreement between the developer and ETSI TC MTS beforehand. Find out more about TOP governance on the Governance wiki page (<https://tdl.etsi.org/wiki/index.php/Governance>).

Further information on the standards and the open source project is available at:

tdl.etsi.org

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