STF 476: TDL Phase 2

Status Report

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Document History

- 2014-09-29: Document submitted for MTS #63
  - long form for SG #5 / Technical Session
  - short form for MTS #63
- 2014-05-10: Document submitted for MTS #62
  - long form for SG #3 / Technical Session
  - short form for MTS #62
- 2014-03-19: Document submitted for SG #2

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Session and Milestone Planning

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Session Overview

- WK09 Feb 24-28 - Session 1 @ETSI
- WK15 Apr 07-11 - Session 2 @ETSI
- WK23 Jun 02-06 - Session 3 @FOKUS
- WK36 Sep 01-05 - Session 4 @ETSI
- WK42 Oct 13-17 - Session 5 @Siemens
- WK49 Dec 01-05 - Session 6 @ETSI

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Milestone 1 Timeline

- WK09 Feb 24-28 - Session 1 @ETSI
    - 4 experts, 16 days, define roadmaps, prepare early drafts
- WK15 Apr 07-11 - Session 2 @ETSI
    - 4 experts, 16 days, finalise early drafts, analysis report, ToR if applicable
    - deadline for requests to move sessions, contracts extension
- WK18 Apr 28-May 01 - Deliverables submitted
- WK20 May 14-15 - MTS #62 @Siemens

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Milestone 2 Timeline

- WK23 Jun 02-06 - Session 3 @FOKUS
  - 5 experts, 25 days, review feedback, define roadmaps, prep. stable drafts
- WK36 Sep 01-05 - Session 4 @ETSI
  - 5 experts, 25 days, finalise stable drafts
  - feature freeze, new features added only if absolutely critical
- WK37 Sep 08-12 - Deliverables submitted
- WK39 Oct 01-02 - MTS #63 @TestingTech

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Milestone 3 Timeline

- WK42 Oct 13-17 - Session 5 @Siemens
  - 5 experts, 25 days, define roadmaps, prepare final drafts
- WK49 Dec 01-05 - Session 6 @ETSI
  - 5 experts, 25 days, finalise final drafts
- WK50 Dec 15-19 - Deliverables ready
- WKXX Jan/Feb 2015 - MTS #64 TBD

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Milestone Resources

- ~15 days/expert per milestone
  - assuming roughly equal resource allocation per expert
  - 2x4 days sessions, ~7 days homework

- Milestone 1: ~60 days planned, 44.5 used (4 experts)
- Milestone 2: ~75 days planned, 73/77.5 used* (5 experts)
- Milestone 3: ~75 days planned, 90.5/106 available** (5 experts)

* 4.5 from extension for Part 4
** 15.5 from extension for Part 4, 50 already days allocated for two working sessions

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Session Summaries

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Session 3 Summary

- Goals
  - review feedback from Milestone 1
  - define roadmaps for Milestone 2
  - have technical discussions on data concepts and graphical syntax
  - lay down foundations for exchange format
- Notes
  - technical issues with the mailing list interfered with the organisation

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Session 4 Summary

- Goals
  - Part 1: thorough technical review and improvement
  - Part 2: review and formalisation, notational conventions update
  - Part 3: discussion of related input, draft preparation
  - Part 4: discussion with CTI, draft preparation
  - discussion of tutorial preparation for UCAAT
  - discussion of ideas and proposals for Phase 3

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Document Status Summaries

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Part 1 Status

- M2
  - data concepts update
  - time and time labels update (including predefined functions)
  - move gate instances and variables to component types
  - assertions and setting verdicts

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Part 1 Status

- M3
  - adaptations to behaviour
  - integrating feedback, validation, proof-reading, finalisation, polish
  - annex update (examples, BNF) ?
  - no further features unless absolutely critical

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Part 2 Summary

- M2
  - shape updates to match current state of meta-model (no arg. spec. yet)
  - formalisation - constraints and label derivation rules
  - updates to notational conventions and document structure
- M3
  - add missing shapes and descriptions, harmonisation with meta-model
  - integrate feedback, validation, proof-reading, finalisation, polish

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Part 3 Summary

- M2
  - current XSD and derivation rules
  - raised concerns regarding the usefulness of XSD and its limitations
  - XMI derivation, examples
- M3
  - updates related to changes in the meta-model, additional examples
  - integrate feedback, validation, proof-reading, finalisation, polish

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Part 4 Summary

- M2
  - meta-model extensions (near complete, time constraints to be added)
  - concrete-syntax proposal
- M3
  - validation, decision on “inline” data, examples, 3GPP applicability
  - integrate feedback, proof-reading, finalisation, polish

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Phase 3 Proposals Summary

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Phase 3

- Focus on
  - harmonisation with UML: TDL profile for UML in addition to standalone
  - test generation and test management capabilities
  - expand support of ETSI syntax for 3GPP and other TBs
- Continue working on
  - maintenance, stabilisation, and consolidation, addressing open issues
- Reference implementation, mapping to TTCN-3 (lower priority)

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Further Activities

Specialist Tasks Forces
Procedures
Open Call for Experts

Active STFs (summary information)
STF full list
STF Term of Reference

STF statistics
STF doclist

Specialist Task Force 476:
TDL Phase 2: Adaptation to Users

Who we are:

Team Leader: Philip Makedonski, makedonski@informatik.uni-goettingen.de
Team Members: Gusztav Adamis
Mertli Käärik
Andreas Ulrich
MarcoFlorian Wendland

What we do:

TC MTS laid the foundation of the Test Description Language (TDL) with STF 454 in 2013 in terms of the basic concepts and their semantics. Phase 2 of the TDL development builds upon the work of STF 454, by adding the necessary language functionality to integrate TDL test descriptions into test automation frameworks. It will also elaborate a standardised concrete graphical syntax for end-users and a TDL exchange format to be used by tools to foster tool interoperability.

For more details, see our Terms of Reference

Why we do it:

TDL bridges the gap between declarative test purpose specifications (what shall be tested?) and imperative test case specifications (how shall it be tested?) by offering a standardised language for the specification of test descriptions. TDL also contributes to the ongoing activities in MTS to establish model based testing (MBT) technologies within ETSI.

It is expected that test descriptions in a standardised language will ease the development of executable tests as well as make test specifications easier to review by non-testing experts, thus improving the general productivity and quality of test development in industry as well as in the standardisation process by relieving test engineers from working on details of test implementations. An extension to TDL is planned to address advanced test objective specification based on TPLan to bring test purpose specifications and test descriptions even closer and streamline the test specification process even further, especially in the standardisation processes at ETSI.

How we do it:

The activities of the STF are coordinated on a regular basis with a dedicated steering group assembled by TC MTS to ensure that the work of the STF is aligned with expectations and requirements from the different stakeholders. The steering group is also supporting the work of the STF by providing technical guidance on key technical issues.

The STF will host a tutorial session on TDL at the UCAAT 2014 to showcase ongoing work on TDL and different application scenarios in a hands-on manner. During an associated special session on MTS activities, a brief introduction to TDL is also planned. Ongoing dissemination activities from STF members from research institutions include raising awareness and promoting TDL on their respective websites and within teaching and research activities. A dedicated project has been created on the online issue reporting portal for ETSI ("ETSI's Bug Tracker") where change requests for TDL can be submitted and managed in an open and transparent manner.

Deliverables:

The deliverables for the STF comprise an update to ES 203 119, as well as two new parts, encompassing:

ES 203 119-1 V1.2.1 - Part 1: An extension of the current TDL meta-model covering the design of new features to support automation of the generation of concrete (e.g. TTCN-3) tests;

ES 203 119-2 V1.1.1 - Part 2: The description of a graphical TDL default syntax that provides full coverage of the extended meta-model, i.e. it describes a concrete syntax for all elements of the meta-model;

ES 203 119-3 V1.1.1 - Part 3: The description of a TDL exchange format that represents a TDL specification in an unambiguous format used to exchange specifications between tools.

Time plan:

The work of the STF is organised around three intermediate milestones, due for approval on May 2014, September 2014, and January 2015, respectively, in conjunction with MTS plenary sessions. The final drafts the three deliverables will be submitted for approval to the 64th MTS plenary.

How to contact us:

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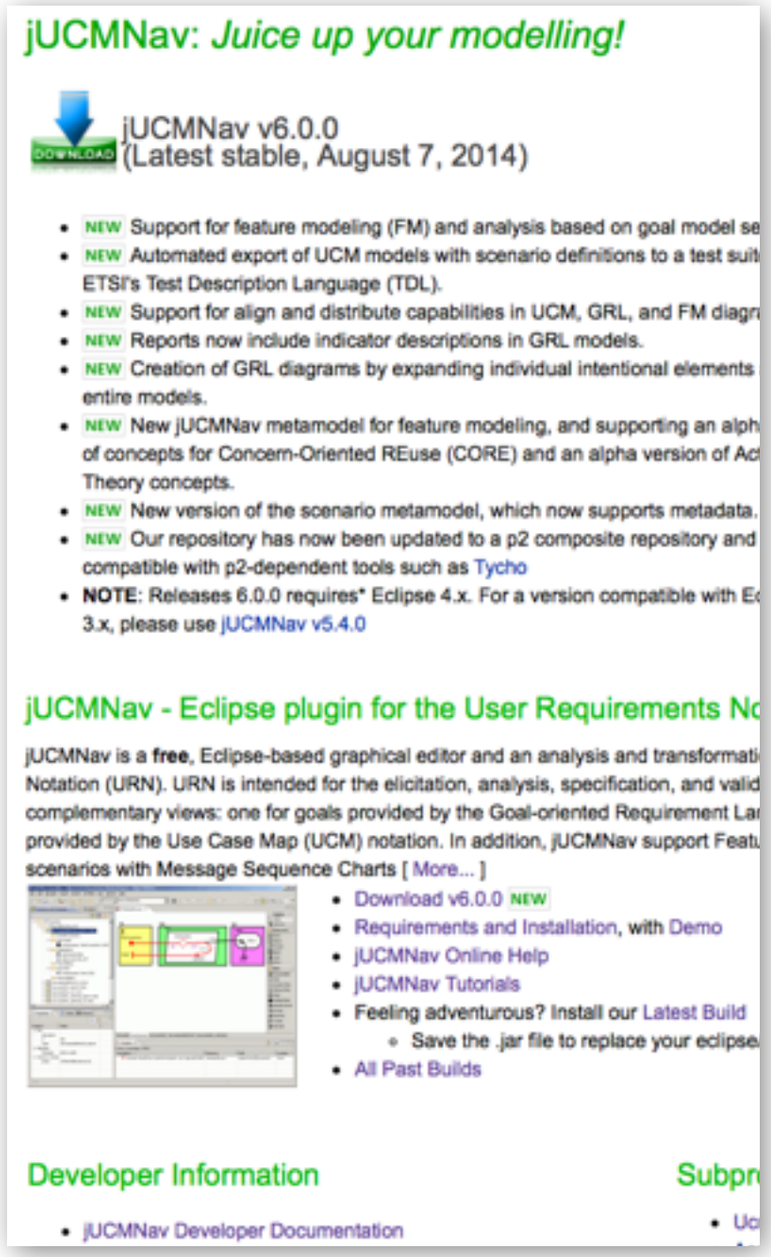
This information is based upon STF working assumptions.
The views expressed do not necessarily represent the position of ETSI in this context.
Last updated: 2014-07-16 14:29:15



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- NEW Support for align and distribute capabilities in UCM, GRL, and FM diagr
- NEW Reports now include indicator descriptions in GRL models.
- NEW Creation of GRL diagrams by expanding individual intentional elements entire models.
- NEW New jUCMNav metamodel for feature modeling, and supporting an alph of concepts for Concern-Oriented REuse (CORE) and an alpha version of Act Theory concepts.
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- jUCMNav Developer Documentation

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