



# STF 492: TD-LTE Phase 3

## Status Report

# Document History

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- 2015-09-15: Revised for MTS#66
  - long form for TDL Technical Session
  - revised long form for MTS#66
- 2015-09-15: Revised for SG#3
- 2015-07-15: Revised for SG#2
- 2015-06-02: Document submitted for MTS #65
  - long form for TDL Technical Session
  - short form to be submitted for MTS #65

# TPT Status

# TPT: Launch Event

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- Keynote slot 45min
  - Host: Philip (max. 7min intro), mainly moderating the guest speakers
    - summary / introduction providing context for the guest speakers
  - Guest speaker line-up (tentative order, ~5min per speaker):
    - ETSI CTI (MO), CEA (XZ), VTT/MetaCase (TK/JPT), FOKUS (MFW), Elvior (AL), Ericsson (GR)
  - Discussion
    - short Q & A (~5min), invite the audience to join the discussion at the booth\*

\* All speakers and stakeholders should be available for further questions at the booth during the subsequent lunch break after the keynote

# TPT: Launch Event

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- Demos - schedule, titles (and descriptions / screenshots?) TBC
  - STF/CEA (XZ)
    - “Embedding TDL into the UML environment”
  - Conformiq (SS, TBC)
    - TODO: **examples ASAP (on website)**
  - STF/Elvior (MK, TBC)
    - “Visualising generated tests with TDL” (tentative)

# TPT: Launch Event

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- Demos - schedule, titles (and descriptions?) TBC
  - MetaCase/VTT (JPT/TK)
    - “Custom representations and editors for TDL with MetaEdit+” (tentative)
  - STF/UG (PM)
    - “TDL in education - custom editors and visualisation, transformations”
  - UO (NK, TBC)
    - “UCM to TDL - Applying TDL in aerospace domain” (tentative)

# TPT: Launch Event

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- Demos (STF)
  - Reference implementation - viewers (GR), editors? (custom syntax)
  - UML Profile
  - Transformations?
    - basic TTCN-3 skeletons?
    - TO to Word export?

# TPT: Leaflet



## About ETSI

ETSI is one of the world's leading standards development organizations for Information and Communication Technologies (ICT). Founded initially to serve European needs, ETSI has grown rapidly to become highly-respected as a producer of technical standards for worldwide use.

ETSI membership is composed of manufacturers and network operators – all the "big names" and many smaller companies too – plus national administrations, ministries, regulators, universities, research groups, consultancies and user organizations. A powerful and dynamic mix of skills, resources and ambitions, all working together to bring the very best ICT solutions to the global marketplace. Geographically, our membership of over 700 companies and organizations is drawn from more than 60 countries on 5 continents.

ETSI is independent of all other organizations and structures, a key feature for ensuring neutrality and trustworthiness. That brings benefits not only in the acceptance of our standards and other publications, but also in our growing range of ancillary services, such as interoperability testing. And because standardization inevitably draws upon the bright ideas of our members, we have an Intellectual Property Rights (IPR) policy in place that has become the model for many other organizations.

Your company can be part of this dynamic organization. For more information, please visit and contact:

ETSI <http://www.etsi.org>  
 ETSI Technical Committee MTS <http://portal.etsi.org/MTS>

ETSI  
 650 Route des Lucioles, 06921 Sophia Antipolis, France

[info@etsi.org](mailto:info@etsi.org) [www.etsi.org](http://www.etsi.org)

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Test →

← Description

→ Language



## The ETSI Test Description Language

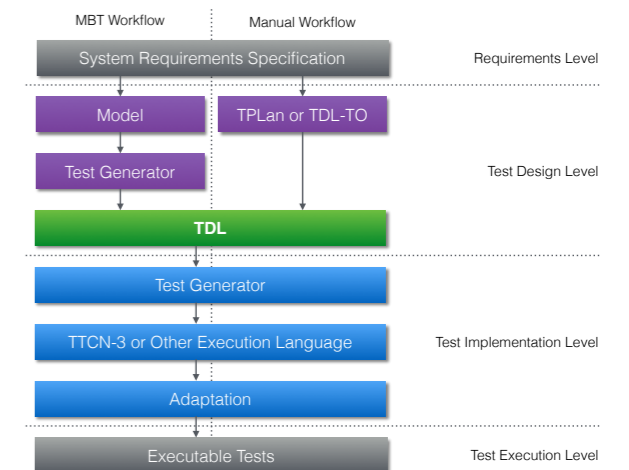
The process of stepwise development of tests from requirement specifications is well established and used in both, standardization and industry. Methods and languages produced by the Technical Committee Methods for Testing and Specification (TC MTS), such as the Testing and Test Control Notation version 3 (TTCN-3) and the Test Purpose Language (TPlan) have been designed to support this process.

The Test Description Language (TDL) is the newest addition to these methods and languages acting as an intermediary between TPlan for the specification of test purposes 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 for conducting functional, conformance and interoperability tests for a wide range of distributed real-time systems such as telecommunications and IoT/M2M systems.

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

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

To accelerate the adoption of TDL, MTS has commissioned a reference implementation of TDL in order to lower the barrier to 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 UML profile for TDL to enable the application of TDL in UML-based working environments.



## List 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

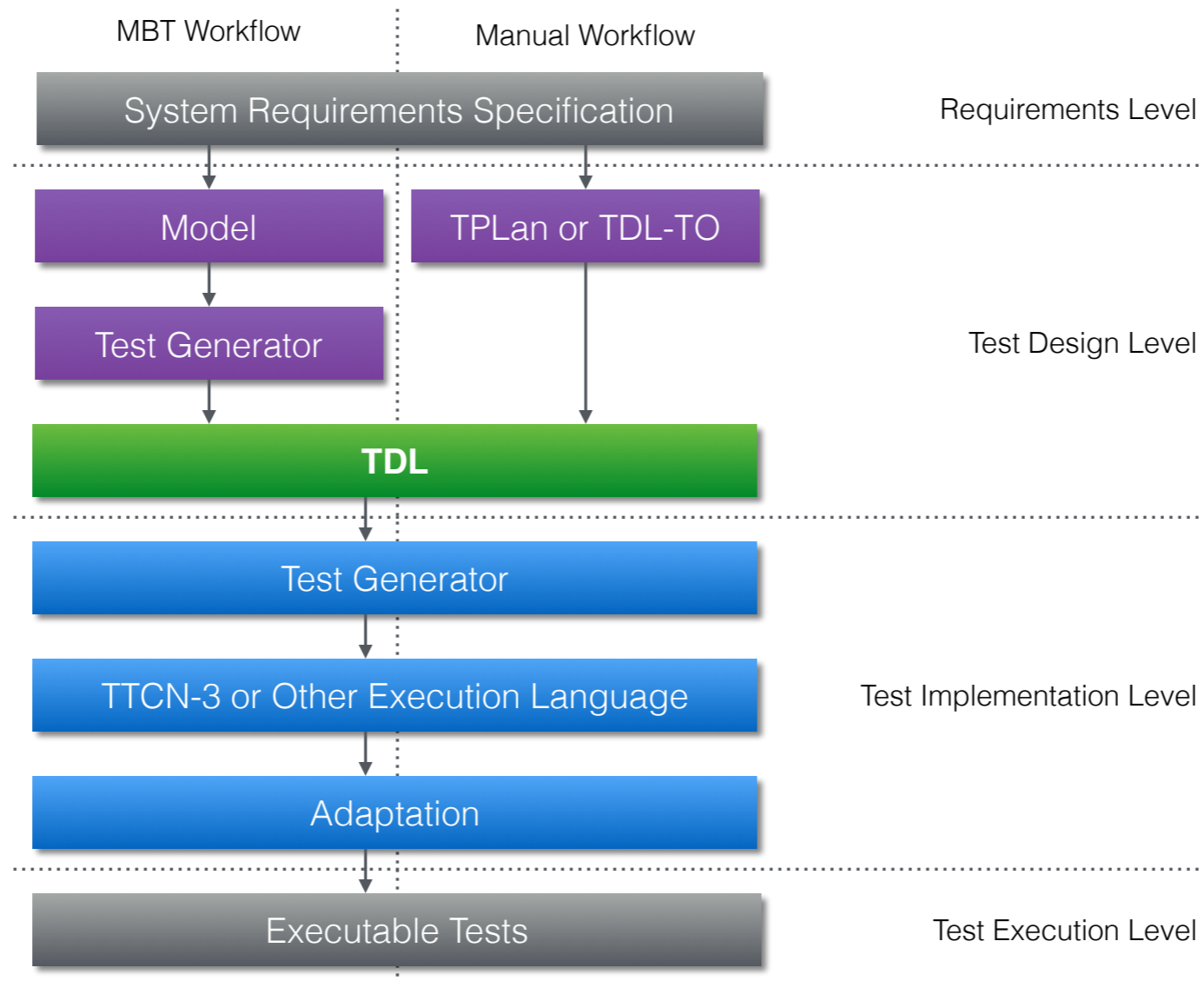
Further information and the change history of the standards are available at:

<http://tdl.etsi.org>

See also updated version on portal



# TPT: Leaflet



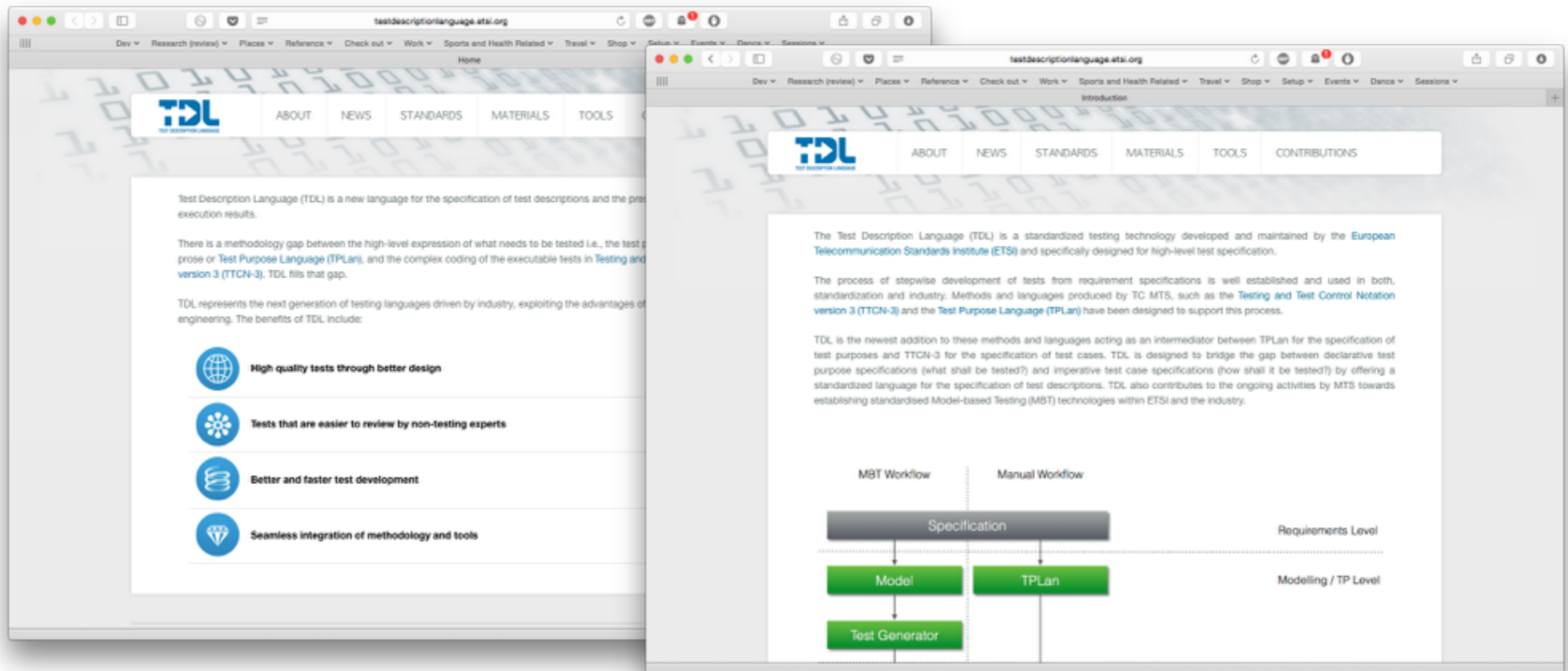
See related e-mails for updates

# TPT: Website

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- about -> flatten?
  - introduction
  - why use TDL?
  - TDL in context (where does TDL fit in, reference architecture)
  - references -> later point or based on endorsement?
  - history
- learn / materials -> flatten?
  - tutorials and presentations
  - bibliography
- downloads -> flatten?
  - standards
  - examples
  - experience package? (or under tools?)
- URL: - <http://tdl.etsi.org>
- Minor updates pending (colours, figures, text, materials, examples)
- tools -> flatten?
  - reference implementation
  - uml profile
  - non-commercial
  - commercial
- development -> maybe later
- community -> flatten?
  - editorial team
  - news
  - events
  - links
  - change requests
  - mailing list

# TPT: Website



- URL: - <http://tdl.etsi.org>
- Minor updates pending (colours, logo, text, materials, examples)

# TPT: Misc

- TDL tutorial at UCAAT 2015
- Posters for UCAAT - **very urgent**
  - generic kakemono, demos information and schedule on screen

- partner logos on screen



- Further materials?

- no pens, mugs, etc.

- TDL logo (see proposal)



- rejected for legal reasons **TEST DESCRIPTION LANGUAGE TEST DESCRIPTION LANGUAGE**

# Status Update

# Task 0: Work Plan

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- Timescale: June 9, 2015 (+4 months) - March 31, 2016 (+2 months)
- 5 sessions planned so far (6 according to ToR)
  - WK24 Jun 09-12 Session 1 @ ETSI (4 days, with MTS#65)
  - WK36 Aug 31-Sep 04 Session 2 @ CEA (5 days)
  - WK41 Oct 06-09 Session 3 @ ETSI (4 days)
  - WK48 Nov 23-27 Session 4 @ ETSI (TBC)
  - WK05 Feb 01-05 Session 5 @ Ericsson (TBC)
- more homework (delay, summer vacations, nature of work involved)

# Task 0: Milestones and Timescale

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- Milestone 1: Jul 24 2015
  - Early Drafts: Part 1, TR, Part 3 (no change)
- Milestone 2: Oct 21 2015 (TDL Launch)
- Milestone 3: Dec 18 2015
  - Stable Drafts: Part 1, Part 3, TR
  - Early Drafts: Part 2, Part 4

# Task 0: Milestones and Timescale

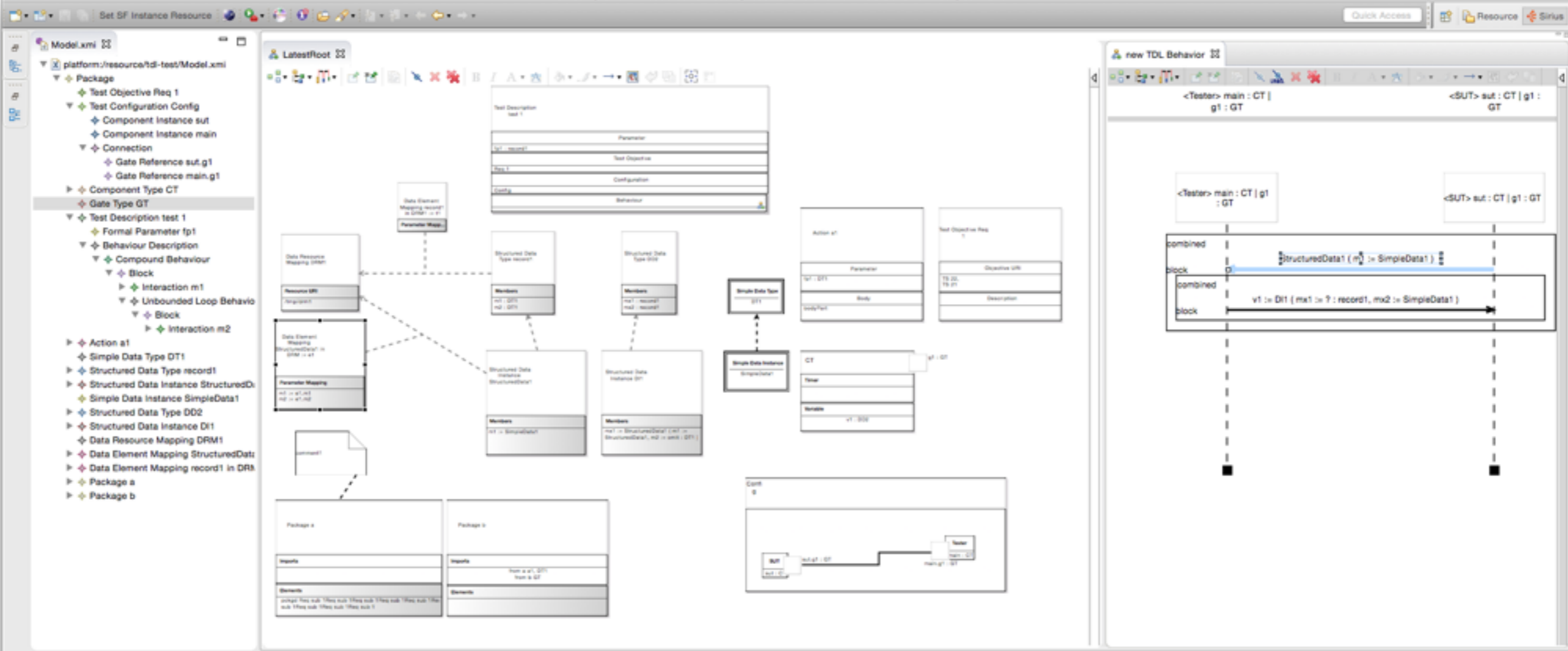
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- Milestone 4: Mar 01 2016
  - Stable Drafts: Part 2, Part 4
- Milestone 5: Mar 31 2016
  - Final Drafts: Part 1, Part 2, Part 3, Part 4, TR



# Task 1

GR Viewer Implementation Tasks (until UCAAT 2015)	Effort (days)	Color Codes
1. Mappings for elements with simple shapes: Comment, AnnotationType, SimpleDataType, Time, SimpleDataInstance, GateType, GateInstance, ComponentInstance, Connection, TestObjective	0.5	Done
2. Composite shapes - rectangles inside rectangles laid out according to custom algorithm specified in GR.	1	Partially Done
2.1. Mappings for elements with composite shapes: Package, Annotation, TestObjective, StructuredDataType, StructuredDataInstance, Action, DataResourceMapping, DataElementMapping, TestConfiguration, ComponentType, TestDescription	0.5	Already provided
3. Sequence diagram	2	Next target
3.1. Viewer specific ViewerMM extensions needed to represent lifelines	0.5	
3.2. Viewer specific ViewerMM extensions needed to represent both begin and end of blocks	0.5	
3.3. Mappings: Interaction	1	
4. Action shapes across all lifelines - by default, actions are placed on a single life-line, but TDL GR specifies that actions should cover all life-lines	1	
4.1. left aligned icons in actions shapes - need custom layout policy	0.5	
4.2. Mappings: Wait, Quiescence, TimerStart, TimeOut, TimerStop, Break, Stop, VerdictAssignment, Assertion, ActionReference, InlineAction, Assignment, TestDescriptionReference	0.5	
5. Block shapes (combined fragments)	1	
5.1. Floating labels in blocks (guard, period)	0.5	
5.2. Mappings: CombinedBehaviour, Block, CompoundBehaviour, BoundedLoopBehaviour, UnboundedLoopBehaviour, AlternativeBehaviour, ConditionalBehaviour, ParallelBehaviour, DefaultBehaviour, InterruptBehaviour, PeriodicBehaviour	0.5	
6. Data expressions in sequence diagram	1	
6.1. Integration with Xtext-based serializer	1	
6.2. Mappings: DataUse and sub-classes	0.5	
7. Automation: diagram creation, image export	2	
8. Mixed font labels	0.5	
8.1. Mappings: Function	1	
9. Nodes attached to lifelines in sequence diagrams	1	
9.1. Mappings: TimeLabel, TimeConstraint	1	
10. Nested block shapes	2	
11. Coincident arrow shapes for multicast interactions	1.5	
12. Floating variable assignment labels for interactions (only required for multicast interactions)	0.5	
13. Layout inside multipart containers	2	
Optimistic total	24	
Pessimistic (+20%)	4.8	
Expected total	28.8	



Properties <> Interpreter Problems Project Explorer Console Error Log

Interaction m1

Semantic	Property	Value
	Interaction m1	
Style	Is Trigger	false
	Name	m1
	Source Gate	Gate Reference sut.g1
	Test Objective	

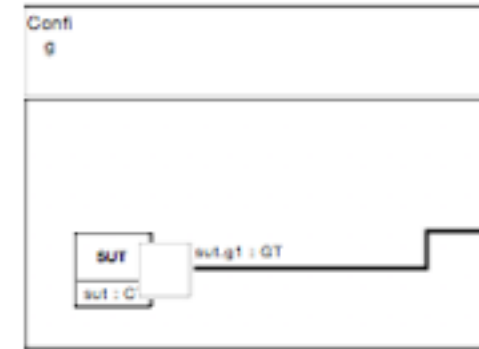
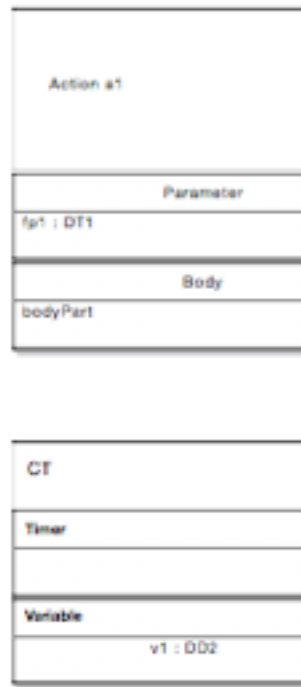
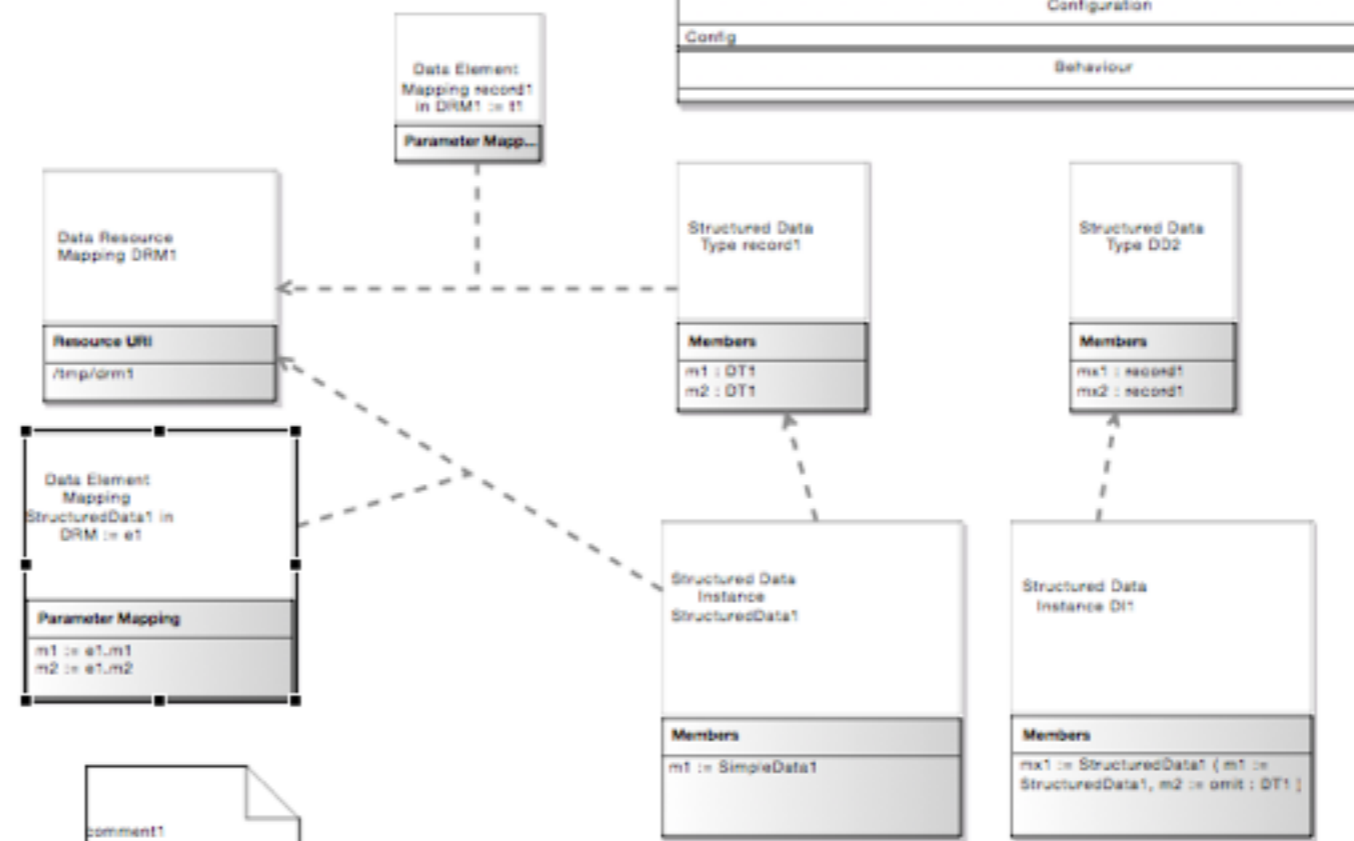
Set SF Instance Resource

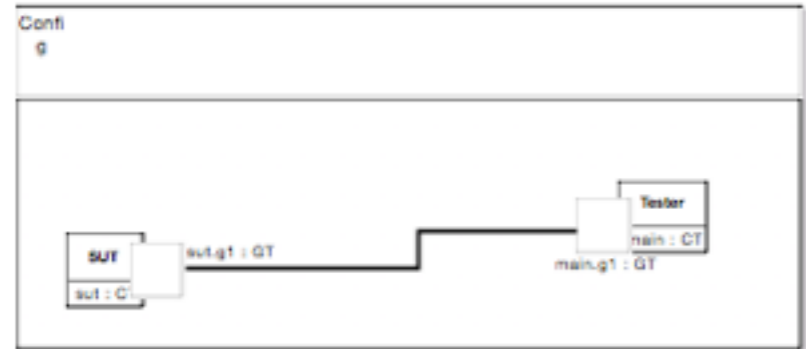
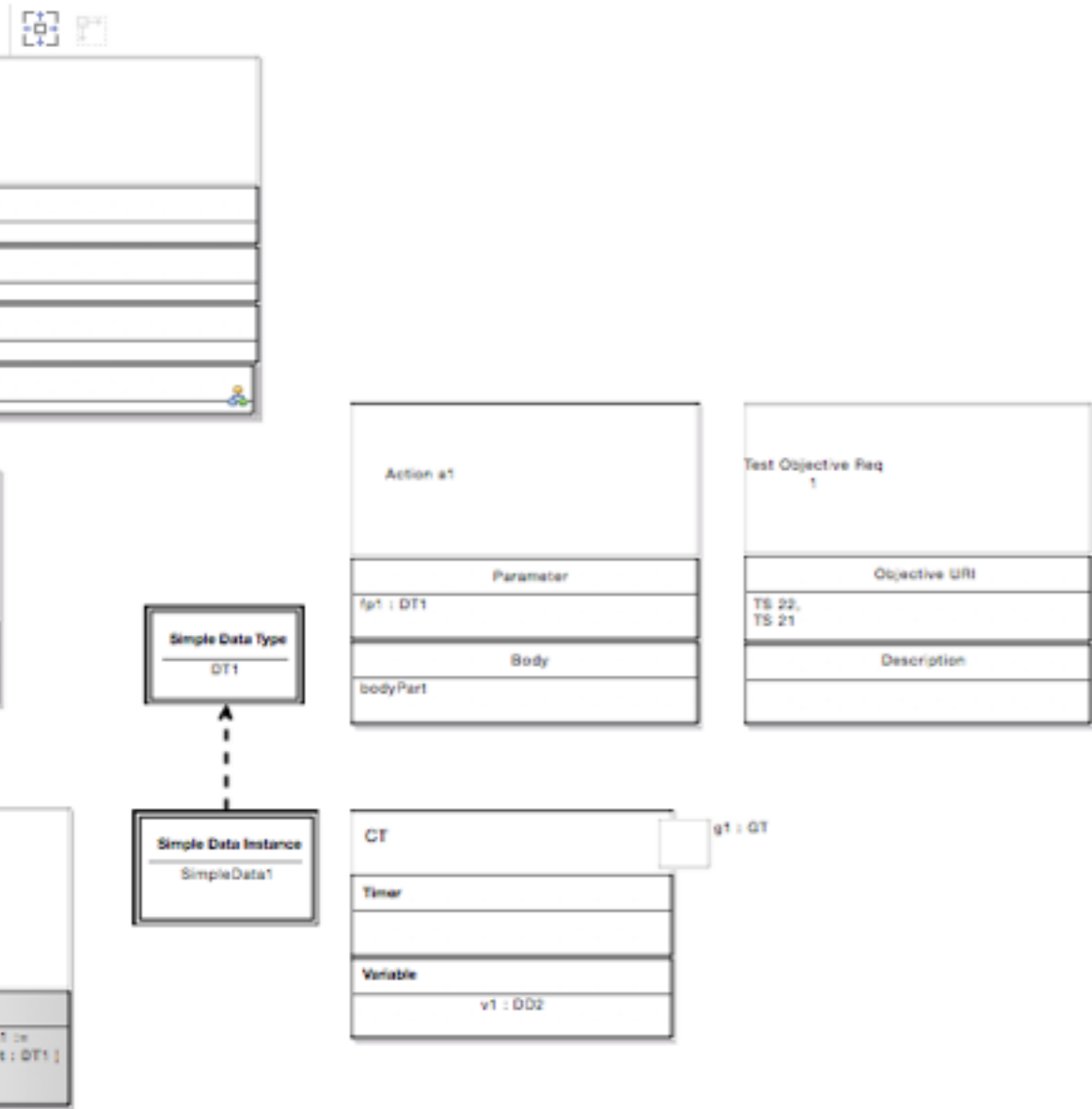
- Model.xml
- platform:/resource/tdl-test/Model.xml
  - Package
    - Test Objective Req 1
    - Test Configuration Config
      - Component Instance sut
      - Component Instance main
    - Connection
      - Gate Reference sut.g1
      - Gate Reference main.g1
  - Component Type CT
  - Gate Type GT
  - Test Description test 1
    - Formal Parameter fp1
    - Behaviour Description
      - Compound Behaviour
        - Block
          - Interaction m1
          - Unbounded Loop Behavior
            - Block
              - Interaction m2
  - Action a1
  - Simple Data Type DT1
  - Structured Data Type record1
  - Structured Data Instance StructuredData1
  - Simple Data Instance SimpleData1
  - Structured Data Type DD2
  - Structured Data Instance DI1
  - Data Resource Mapping DRM1
  - Data Element Mapping StructuredData1 in DRM
  - Data Element Mapping record1 in DRM
  - Package a
  - Package b

LatestRoot

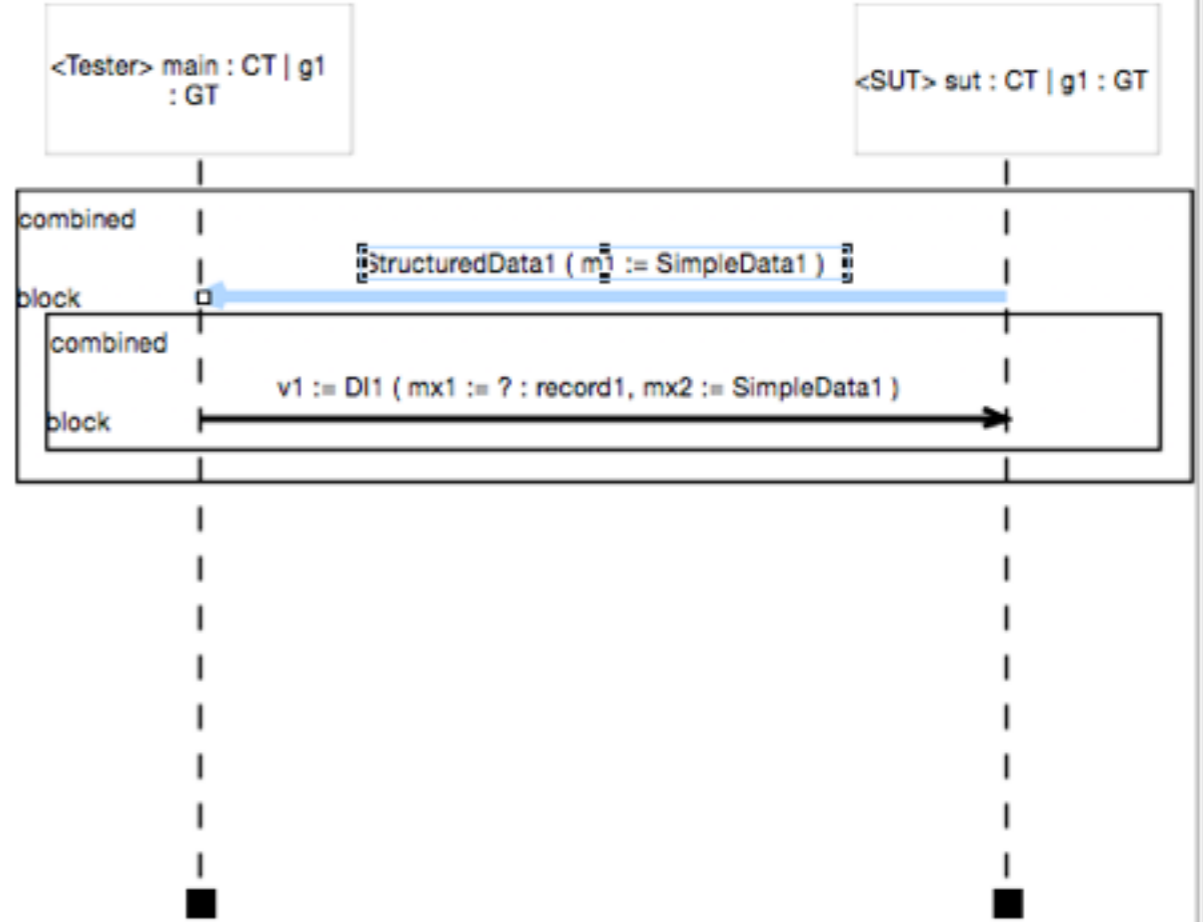
Navigation icons: back, forward, search, etc.

Text formatting icons: Bold (B), Italic (I), Underline (U), Text color (A), Background color (A), etc.

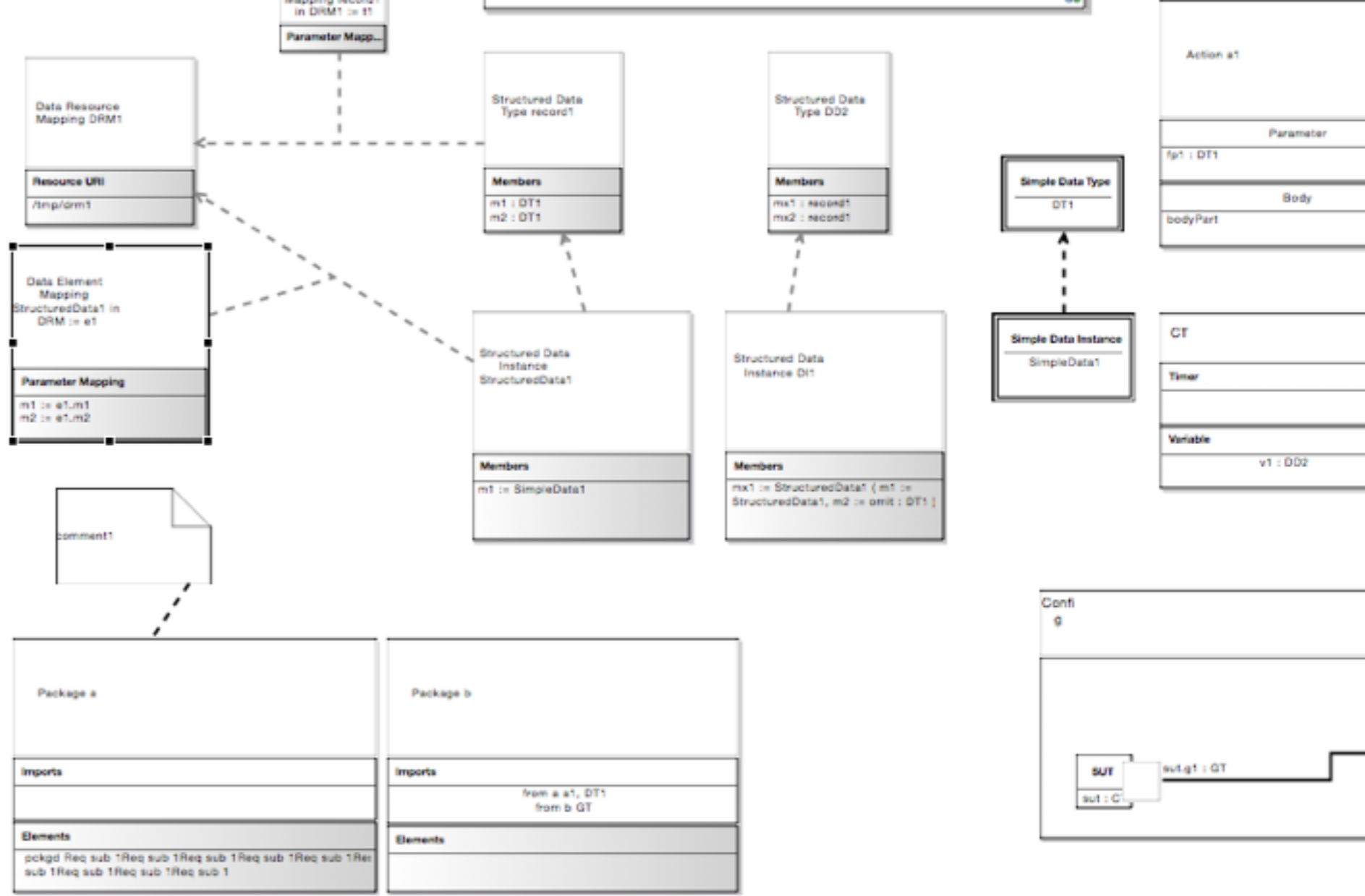




new TDL Behavior



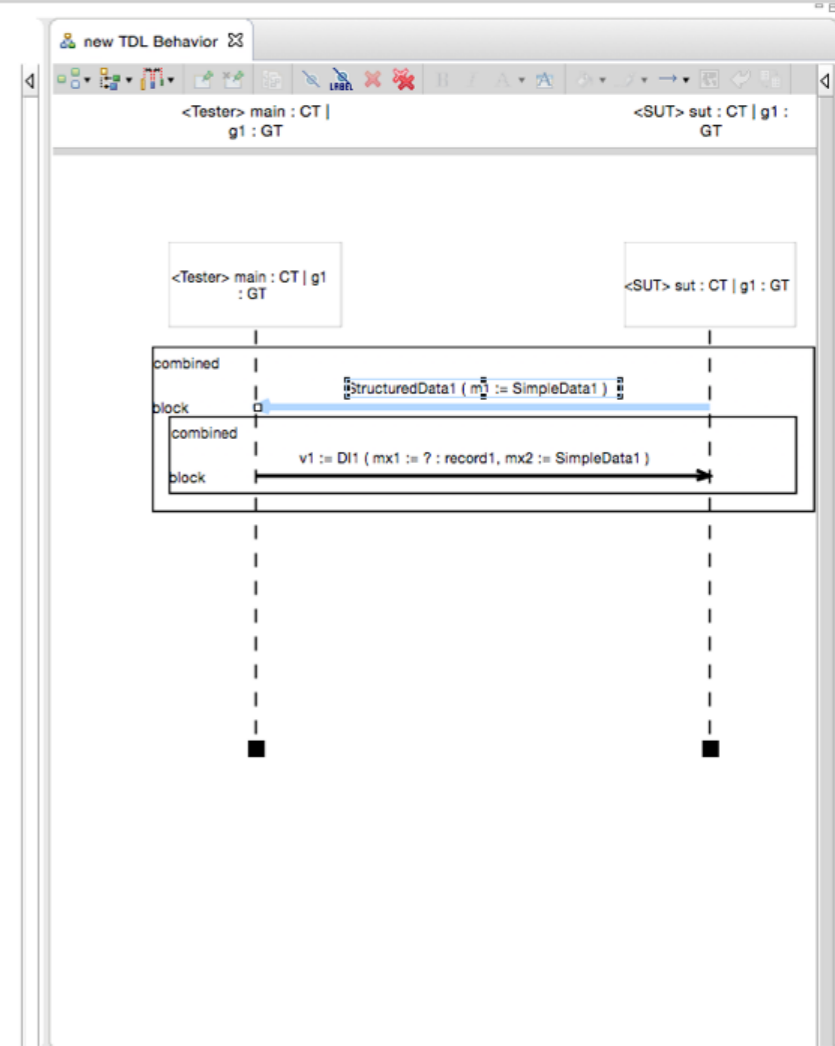
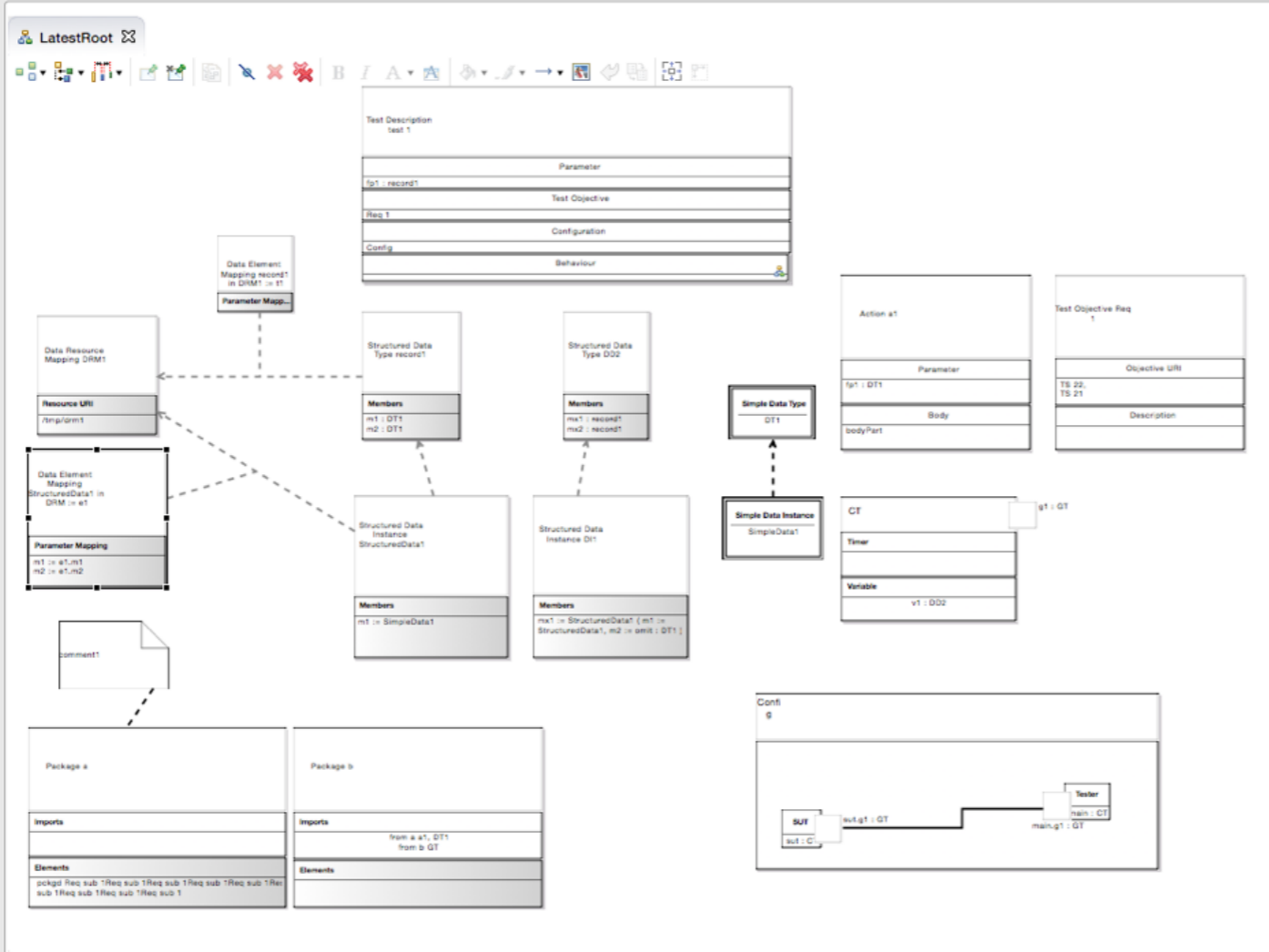
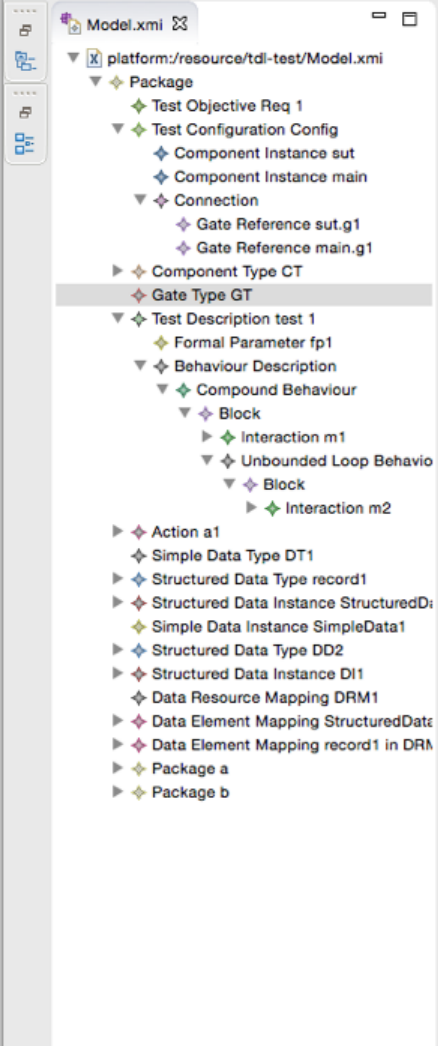
- Test Description test 1
  - Formal Parameter fp1
  - Behaviour Description
    - Compound Behaviour
      - Block
        - Interaction m1
          - Unbounded Loop Behavior
            - Block
              - Interaction m2
- Action a1
  - Simple Data Type DT1
  - Structured Data Type record1
  - Structured Data Instance StructuredD:
  - Simple Data Instance SimpleData1
  - Structured Data Type DD2
  - Structured Data Instance DI1
  - Data Resource Mapping DRM1
  - Data Element Mapping StructuredData
  - Data Element Mapping record1 in DRM
  - Package a
  - Package b



Properties ⌘ < > Interpreter 🔍 Problems 📁 Project Explorer 📄 Console 🚫 Error Log

Interaction m1

	Property	Value
<div style="background-color: #f0f0f0; padding: 2px;">Semantic</div> <div style="background-color: #f0f0f0; padding: 2px;">Style</div>	Interaction m1	
	Is Trigger	false
	Name	m1
	Source Gate	Gate Reference sut.g1
	Test Objective	



Interaction m1		Value
Semantic	Property	
	Interaction m1	
Style	Is Trigger	false
	Name	m1
	Source Gate	Gate Reference sut.g1
	Test Objective	

Sirius - tdl-test/Model.xml - Eclipse Platform

Model.xml

```

1 <?xml version="1.0" encoding="UTF-8" ?>
2 <tdl:Package
3   xmlns:xmi="http://www.omg.org/spec/TDL/2.0/"
4   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
5   xmlns:tdl="http://www.etsi.org/spec/TDL/2.0/"
6   xmi:id="_e1hUyF19EeW1xI10e"
7   <packagedElement
8     xsi:type="tdl:TestObject"
9     xmi:id="_e1kXDF19EeW1xI11"
10    name="Req 1">
11    <objectiveURI>TS 22</objectiveURI>
12    <objectiveURI>TS 21</objectiveURI>
13  </packagedElement>
14  <packagedElement
15    xsi:type="tdl:TestConfig"
16    xmi:id="_e1k4F19EeW1xI12"
17    name="Config">
18    <componentInstance
19      xmi:id="_e1mNAF19EeW1xI13"
20      name="sut">
21      type="_e1m0E119EeW1xI14"
22    </componentInstance>
23    <componentInstance
24      xmi:id="_e1mNAV19EeW1xI15"
25      name="main">
26      type="_e1m0E119EeW1xI14"
27      role="Tester"/>
28  </packagedElement>
29  <connection
30    xmi:id="_e1mNA119EeW1xI16"
31    <endPoint
32      xmi:id="_e1m0F119EeW1xI17"
33      name="sut.g1"
34      component="_e1mNAF19EeW1xI13"
35      gate="_e1nbIF19EeW1xI18"
36    </endPoint>
37    <endPoint
38      xmi:id="_e1m0E119EeW1xI19"
39      name="main.g1"
40      component="_e1mNAV19EeW1xI15"
41      gate="_e1nbIF19EeW1xI18"
42    </endPoint>
43  </connection>
44  </packagedElement>
45  <packagedElement
46    xsi:type="tdl:Component"
47    xmi:id="_e1m0E119EeW1xI14"
48    name="CT">
49    <gateInstance
50      xmi:id="_e1m0E119EeW1xI14"
51      name="g1"
52      type="g1"
53    </gateInstance>
54  </packagedElement>
55  </tdl:Package>

```

Latestfloat

new TDL Behavior

```

<Tester> main : CT | g1
  g1 : GT
  <SUT> sut : CT | g1 : GT

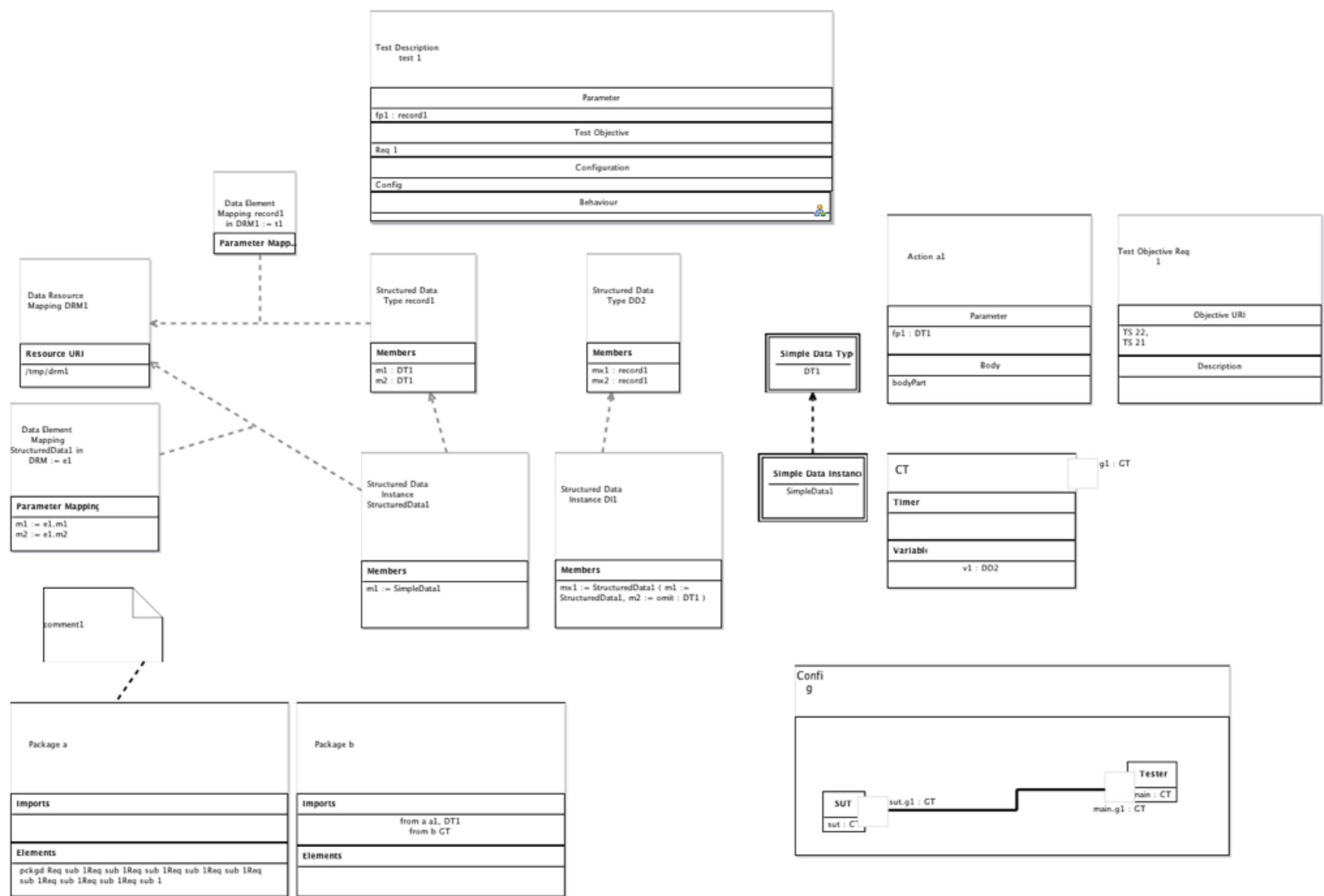
```

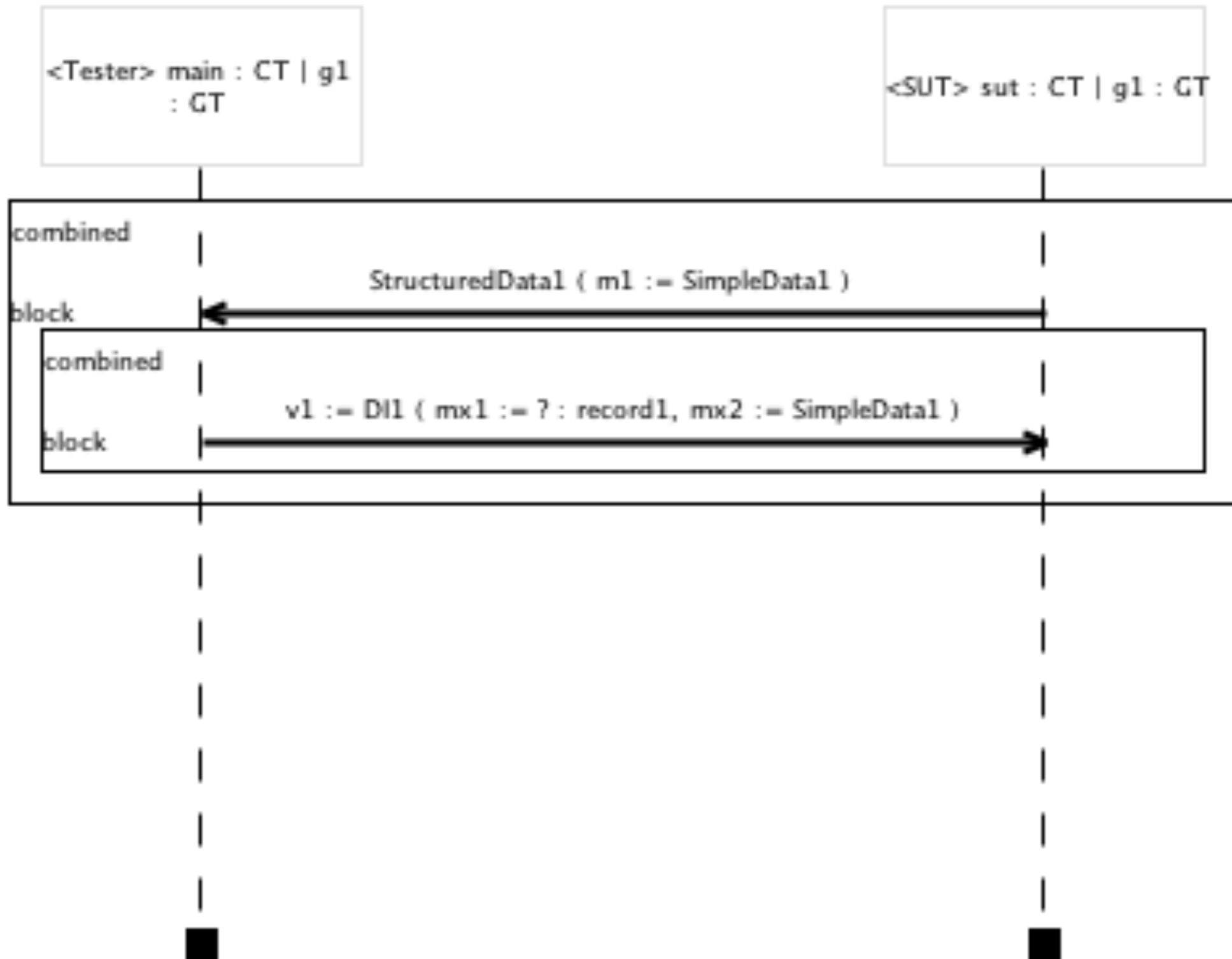
Properties

Property	Value

Writable Smart Insert 1:1 [0]







# Task 1: Status

---

- Most shapes mapped
  - still rough around the edges - borders, labels, overall look needs tuning
- Basic layout feasible for UCAAT
  - manual layout still needed (benefit of using Sirius)

# Task 2

# Task 2: Status

---

- Profile implementation
  - in progress: binding between lifelines and gate-references
  - still missing: time concepts
  - minor changes to ComponentInstanceBinding and GateReference
- Profile documentation
  - Annex C of Part 1, pending updates according to latest changes
  - Profile as a separate document? Distribution of profile?
    - Only after finalised, separate document TBD beyond the STF

MFW to get an updated document for review at the end of next week.

# Task 2: Status

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- Profile overview
  - Foundation - no stereotypes for most concepts, rely on UML Foundation
  - TestConfiguration - follow suggestions by MFW, use CompositeStructure
- Test Description
  - CombinedBehaviour -> UML::CombinedFragment
  - Interaction -> UML::Message
  - ActionReference -> UML::BehaviourExecutionSpecification
  - AtomicBehaviour -> UML::OccurrenceSpecification

# Task 2: Status

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- Profile overview
  - Data - stereotypes for DataMapping, Function (handling return type)
  - DataUse - extend UML::Expression, UML::InstanceValue (DataInstance)
  - Time - follow suggestions from MFW, not implemented yet

# Task 2: Status

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- Papyrus-Based Editor for the UML Profile for TDL
  - Basic semantic Element types for the creation of TDL concepts
  - Initial palette for the TestConfiguration Diagram in progress
  - Priority for UCAAT : Shape implementation



# Task 2: Status

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- Profile application example
  - show the applicability of the profile
  - based on example from collaboration with Sherpa Engineering
  - demonstrating interest in TDL from Sherpa
    - test specification in hybrid system modelling tool (PhiSystem)
    - focus on benefits from DataUse
    - exceptional and periodic behaviour not yet in the example

# Task 2: Status

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- Profile application example structure
  - Composite Diagram for the TestConfiguration representation
    - TestConfiguration, ComponentType, ComponentInstance, Variable, GateType, GateInstance
  - Class Diagram for the Data representation
    - DataType, DataInstance, Function, FormalParameter
  - Sequence Diagram for the TestDescription representation
    - TestDescription, Assignment, Interaction, CompoundBehaviour, UnboundedLoopBehaviour, ConditionalBehaviour, VerdictAssignment, Target

# Task 3

# Task 3: Status

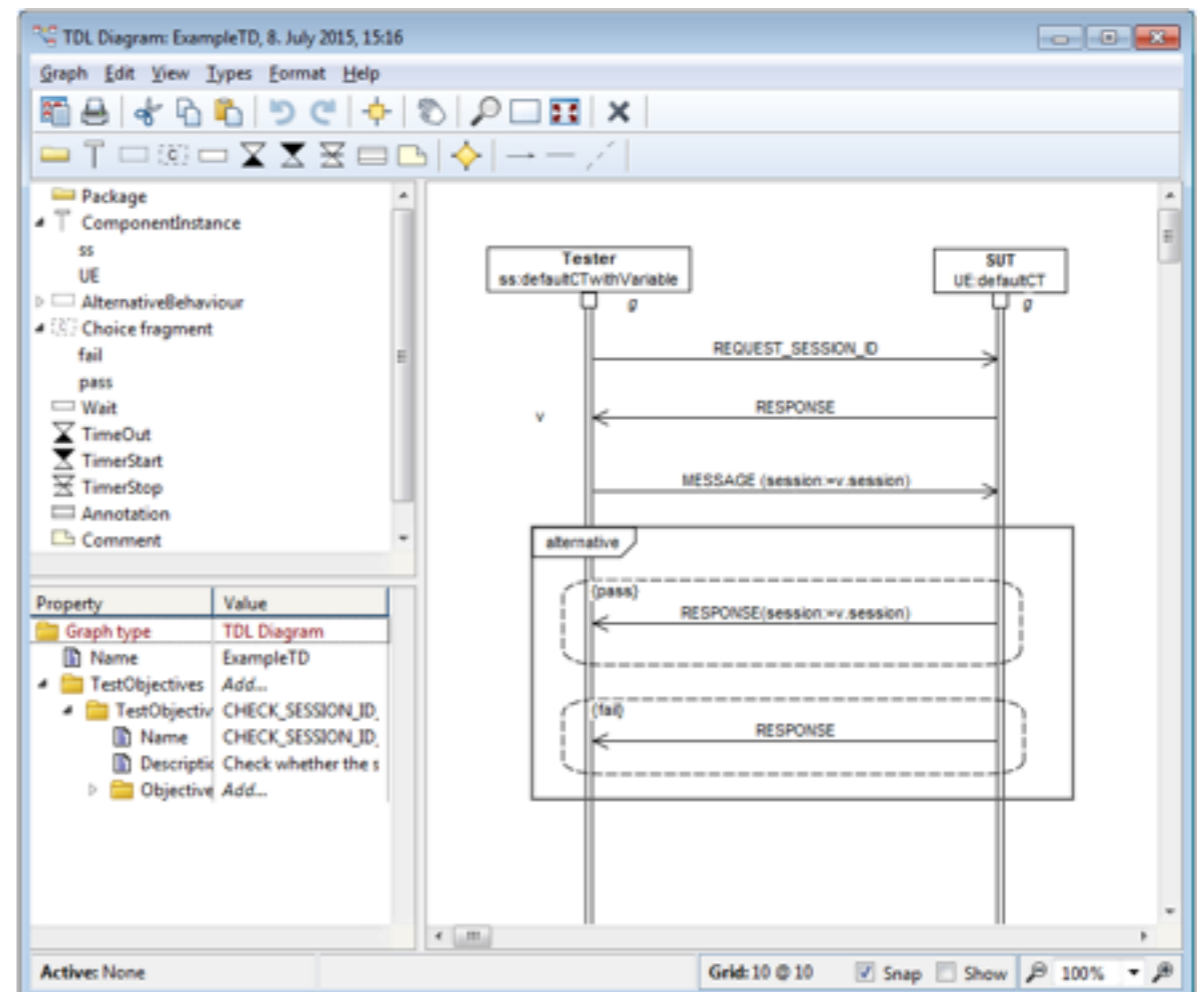
---

<b>Clause</b>	<b># constraints</b>	<b># constraints done</b>
Foundation	8	8
Data	19	17
(Data definition)	7	7
(Data use)	12	10
Time	9	7
Test Configuration	6	6
Test Behaviour	35	26
(Test Description)	0	0
(Combined Behaviour)	14	9
(Atomic Behaviour)	21	17
<b>Total # constraints</b>	<b>77</b>	<b>64</b>

Further OCL constraints and validation pending

# Task 3: Status

- Feedback received from MetaCase
  - related to standard as a whole, not just Part 1
    - will be transferred to Mantis
- additional CR raised in Mantis
- work on editor under way



# Task 3: Status

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- Raised several minor CRs
  - move and refine constraint for StaticDataUse to DataInstanceUse
  - add usage restriction to AnyValueOrOmit (similar to Omit)
    - affected: MemberAssignment, ParameterBinding
  - change dataType multiplicity for SpecialValueUse

# Task 3: Status

---

- Add usage restriction to AnyValueOrOmit (similar to Omit)

## Constraints

### MemberAssignment

- **'Member' of the 'StructuredDataType'**  
The 'Member' shall be referenced in the 'StructuredDataType' that the 'StructuredDataInstance', which contains this 'MemberAssignment', refers to.
- **Type of a 'memberSpec' and 'Member' shall coincide**  
The 'DataType' of the 'StaticDataUse' of 'memberSpec' shall coincide with the 'DataType' of the 'Member' of the 'MemberAssignment'.
- **Restricted use of 'OmitValue' for optional 'Member's only**  
A non-optional 'Member' shall have a 'StaticDataUse' specification assigned to it that is different from 'OmitValue'. and AnyValueOrOmit.

## Constraints

### ParameterBinding

- **Matching data type**  
The provided 'DataUse' shall match the 'DataType' of the referenced 'Parameter'.
- **Use of a 'StructuredDataInstance' with non-optional 'Member's**  
A non-optional 'Member' of a 'StructuredDataType' shall have a 'DataUse' specification assigned to it that is different from 'OmitValue'. and AnyValueOrOmit.

This may not apply since AnyValueOrOmit in parameter binding for a non-optional member is equivalent to AnyValue. The use of the parameter however may be subject to the restriction.

# Task 3: Status

---

- Move and refine constraint for StaticDataUse to DataInstanceUse

## 6.3.3 StaticDataUse

### Semantics

A 'StaticDataUse' specification denotes an expression that evaluates to a symbolic value that does not change during runtime, in other words, a constant.

### Generalization

- DataUse

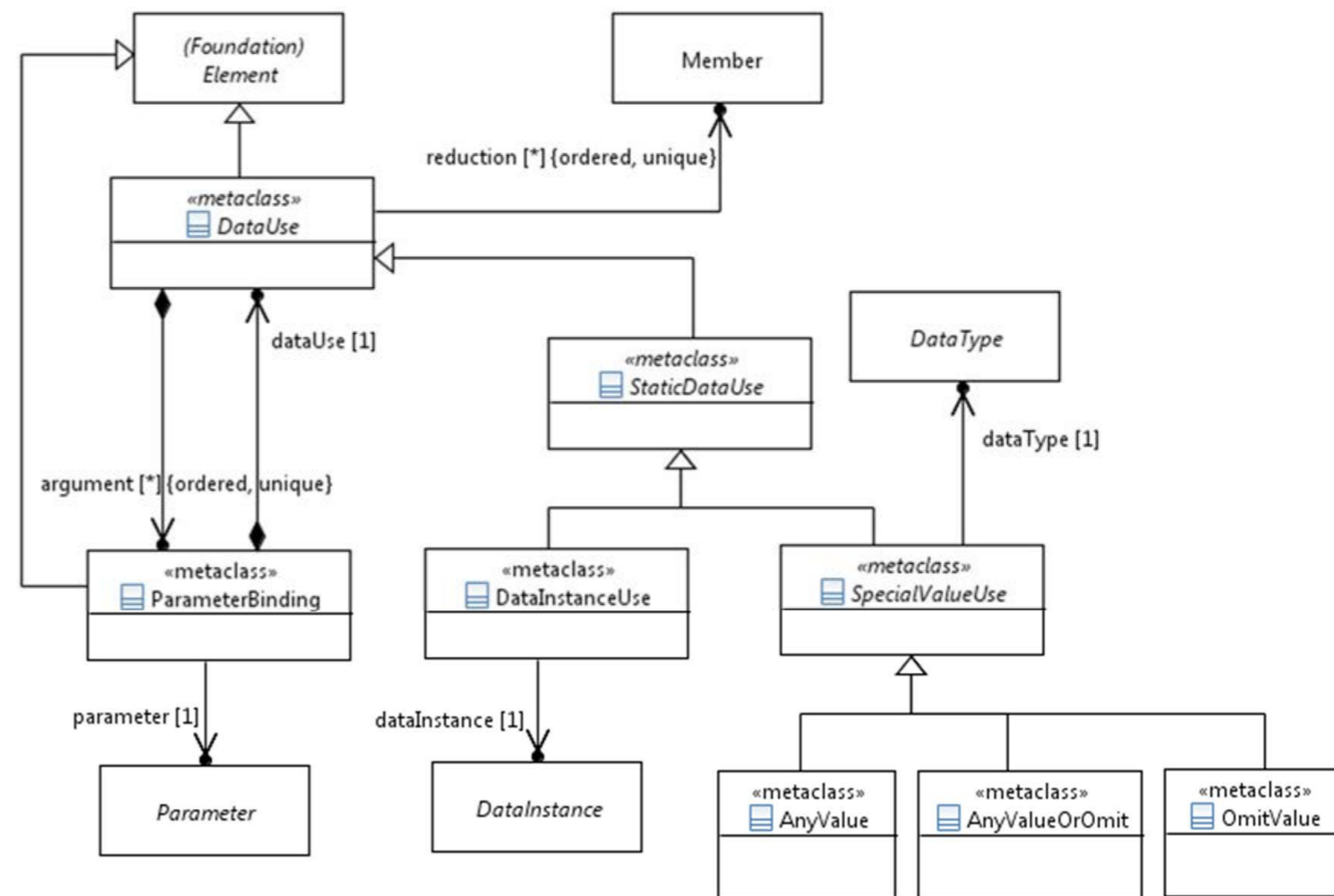
### Properties

There are no properties specified.

### Constraints

- **Static data use in structured data**  
If the 'DataInstance' refers to a 'StructuredDataInstance', all its members shall obtain 'ParameterBinding's that refer to 'StaticDataUse'.





### 6.3.3 StaticDataUse

#### Semantics

A 'StaticDataUse' specification denotes an expression that evaluates to a symbolic value that does not change during runtime, in other words, a constant.

#### Generalization

- DataUse

#### Properties

There are no properties specified.

#### Constraints

- **Static data use in structured data**  
If the 'DataInstance' refers to a 'StructuredDataInstance', all its members shall obtain 'ParameterBinding's that refer to 'StaticDataUse'.

# Task 4

# Task 4: Status

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- Additional discussion with CTI in September
  - final format for OneM2M to be determined
    - potential changes to syntax with different options
  - PlugTests as further target for adoption of TDL
    - use TDs rather than TPs, update of TDL in addition to TO
    - target timeframe early/mid 2016
- Some progress on new features for TO
  - multiple arguments, iterative and periodic behaviour, event patterns

# Task 4: Status

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- Raised several minor CRs for GR
  - typo in DataElementMapping
  - support specifying optional data type in AnyValue
  - alternative syntax for “lifelines” - one lifeline per gate instance
- Raised several minor CRs for TO
  - fix errors with examples and BNF
- Word export based on user-supplied templates

# Task 4: Status

- Decision on layout and compliance levels
  - MM extensions mandatory, labels mandatory for concrete syntax
  - Layout recommended (two different layouts already in the standard)

<b>TP Id</b>	TESTOBJECTIVENAMELABEL
<b>Test Objective</b>	DESCRIPTIONLABEL
<b>Reference</b>	URIOFOBJECTIVELABEL
<b>PICS Selection</b>	<PICSSelectionLABEL>
<b>Initial Conditions</b>	
INITIALCONDITIONSLABEL	
<b>Expected Behaviour</b>	
EXPECTEDBEHAVIOURLABEL	
<b>Final Conditions</b>	
FINALCONDITIONSLABEL	

<b>Test Purpose</b> TESTOBJECTIVENAMELABEL
<b>Test Objective</b> DESCRIPTIONLABEL
<b>Reference</b> URIOFOBJECTIVELABEL
<b>PICS Selection</b> <PICSSelectionLABEL>
<b>Initial Conditions</b> INITIALCONDITIONSLABEL
<b>Expected Behaviour</b> EXPECTEDBEHAVIOURLABEL
<b>Final Conditions</b> FINALCONDITIONSLABEL

# Task 4: Status

- Decision on layout and compliance levels
  - MM extensions mandatory, labels mandatory for concrete syntax
- Layout recommended

<b>TP Id</b>	TP/GEONW/FDV/BAH/BV/01
<b>Test Objective</b>	Check defined values of default <code>Gn</code> parameters in the basic header
<b>Reference</b>	
<b>PICS Selection</b>	PICS_F1
<b>Initial Conditions</b>	
<pre>with {   the IUT entity being in the initial state }</pre>	
<b>Expected Behaviour</b>	
<pre>ensure that{   when {     the IUT entity is requested to send a "GUC packet"   }   then {     the IUT entity sends a "GUC packet" containing       BasicHeader containing         "version field" indicating value "itsGnProtocolVersion MIB parameter" ,         "RHL field" indicating value "itsGnDefaultHopLimit MIB parameter"       ;     ;   } }</pre>	
<b>Final Conditions</b>	

# Task 4: Status

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- Decision on layout and compliance levels
  - MM extensions mandatory, labels mandatory for concrete syntax
  - Layout recommended - OneM2M template slightly different

<b>TP Id</b>		
<b>Test objective</b>		
<b>Reference</b>		
<b>Config Id</b>		
<b>PICS Selection</b>		
<b>Initial conditions</b>		
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	when { }	IUT ← AE
	then { }	IUT → AE

# Task 4: Status

Example layout added as informative note, concrete layouts may vary, labels shall be mandatory / normative

- Decision on layout and compliance levels
  - MM extensions mandatory, labels mandatory for concrete syntax
  - Layout recommended

<b>TP Id</b>	TP/GEONW/FDV/BAH/BV/01
<b>Test Objective</b>	Check defined values of default Gn parameters in the basic header
<b>Reference</b>	
<b>PICS Selection</b>	PICS_F1
<b>Initial Conditions</b>	
with { the IUT entity being in the initial state }	
<b>Expected Behaviour</b>	
<pre>ensure that{   when {     the IUT entity is requested to send a "GUC packet"   }   then {     the IUT entity sends a "GUC packet" containing       BasicHeader containing         "version field" indicating value "itsGnProtocolVersion MIB parameter" ,         "RHL field" indicating value "itsGnDefaultHopLimit MIB parameter"       ;   } }</pre>	
<b>Final Conditions</b>	

<b>TP Id</b>	TP/oneM2M/CSE/REG/BV/001	
<b>Test objective</b>	Check that the IUT accepts an AE registration (allowed App-ID, C-AE-ID-STEM not provided by AE)	
<b>Reference</b>	TS-0001 10.1.1.2.2 - case C, 9.6.19	
<b>Config Id</b>	CF01	
<b>PICS Selection</b>	PICS_CSE	
<b>Initial conditions</b>	with { the IUT being in the "initial state" and the IUT having a CSEBase resource containing a ServiceSubscribedProfile resource containing a ServiceSubscribedNode resource containing RuleLinks attribute pointing to a ServiceSubscribedAppRule resource containing applicableCredIDs attribute set to None and allowedApp-IDs attribute indicating APP-ID and allowedAEs attribute indicating C-AE-ID-STEM }	
<b>Expected behaviour</b>	<b>Test events</b>	<b>Direction</b>
	when { the IUT receives a valid CREATE request from AE containing Resource-Type set to 2 (AE) and From set to empty and Content <AE> containing App-ID attribute set to APP-ID }	IUT ← AE
	then { the IUT sends a Response message containing Response Status Code set to 2001 (CREATED) }	IUT → AE



# The Future of TDL

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- Target second allocation for 2016 if needed (May/June)
- Pursue a multiphase second stage from the start
  - 3-phase concept again?
- Initial ideas, more comprehensive vision by MTS#67, sample ToR
  - AU: Provide concrete ideas towards test generation by MTS#67
  - GR: Standardised mapping/relation to TTCN-3, UML PSM for TTCN-3?
  - AU: Focus on methodology and guidelines, application case studies in different domains and processes, best practices (ETSI guide, industry guide, agile guide, etc.); developing teaching materials/online training

# The Future of TDL

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- Next steps
  - involve other potentially interested parties in the discussion
    - OGF, NFV, 3GPP, OneM2M, PlugTests, SmartM2M, ...
  - collect ideas during UCAAT
    - ask attendees what they need to get started in TDL, reflect on overall response
    - prepare a short questionnaire to gather input on general interest and requirements
  - collect and circulate ideas in between
    - an **online SG meeting in November**, focus on what is needed to push TDL forward in the respective organisations (potential users, potential clients for tool vendors)

Questionnaire - Best effort, see MBT questionnaire (check also article for ideas - from SS), should be short 3-5 questions, could also be used for discussion with interested parties rather than distributed on paper or online (or in addition to).

# Any Other Business?

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