



OMG UTP Working Group

2nd UCAAT, 18th September, 2014, Munich Marc-Florian Wendland, Fraunhofer FOKUS





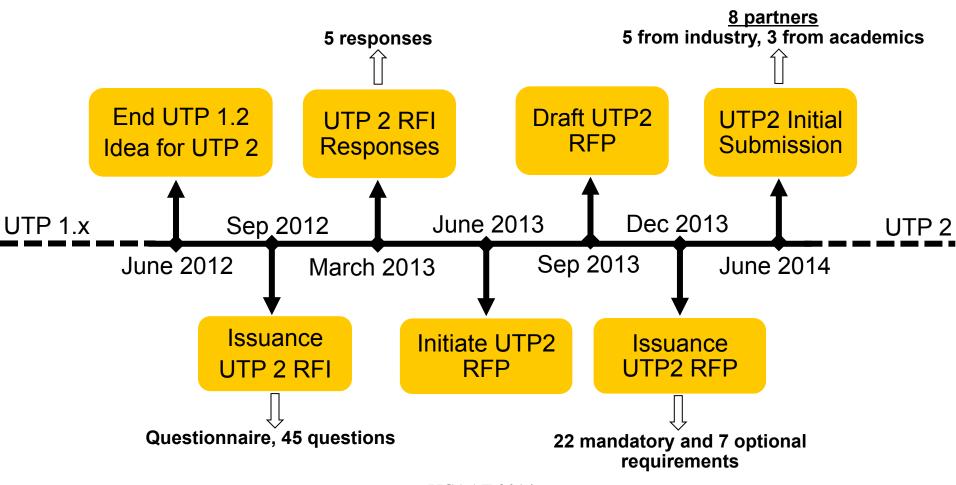
UTP (2) in a nutshell

- First standardized language to support model-based testing released in 2005 (UTP 1)
- Provides means for test design, execution and evaluation activities –
 and management thereof
- Address needs for advanced testing approaches required/suitable for achieving a high degree of test automation
- Methodology- and technology agnostic





From UTP 1.2 to UTP 2



UCAAT 2014





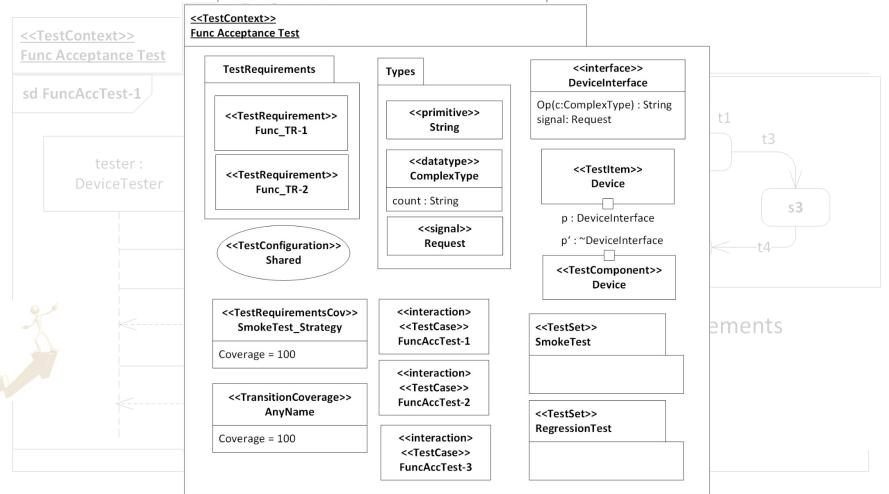
Terminological origins and concept space

| BS 7925-1 & 2 | | JUnit | | _ | | _ | |
|------------------|-------------------------|----------------------|---------------------------------|---------------------------|-----------------|--------------------|--|
| IEEE:829 | | TTCN-3 | | CN-3 | | | |
| ISO 29119 | ISTQB | U | ITP 1 | ES 202 951 | | UML | |
| UTP 2 | | | | | | | |
| Test Planning | Test Analysis & Design | | Test Implementation & Execution | | Test Evaluation | | |
| Test Context | Test Case | | Test Execution Schedule | | Test Log | | |
| Test Set | Test Design St | Test Design Strategy | | Arbitration Specification | | Test Log Structure | |
| Test Objective | Test Design Model | | Test Component | | | Verdict | |
| Test Requirement | Test Configuration | | Test Item | | | | |
| Test Type | Test Data Specification | | | | - | | |
| Test Level | Data Value | Data Values | | Terminological origins | | | |
| | Data Pools | | Concepts | | | | |





A brief example







Towards the revised and final submission

- Initial submission was accepted in June 2014 by OMG Analysis & Design Task Force
- Current work is the revision of the initial submission
- Development of a conformance test specification for UTP 2 tools with UTP 2
- Formal specification for mapping between UTP 1 to UTP 2 (QVT)

| Milestone | Date |
|------------------------------|---------------|
| Prelimary revised submission | December 2014 |
| Final revised submission | March 2015 |
| Final adoption of UTP 2 | December 2015 |

• The entire submission was specified and documents have been generated with the modeling environment KnowEnterprise®



The OMG UTP WG





Background (left-right):

Andrey Sadovyk (Softeam), Markus Schacher (KnowGravity), Tao Yue and Shaukat Ali (Simula Research Lab), Marc-Florian Wendland (FhG FOKUS)

Foreground (left-right):

Andreas Hoffmann (FhG FOKUS), Alessandra Bagnato (Softeam), Zhen Ru Dai (HAW Hamburg), Etienne Brosse (Softeam)

Missing: Jon D. Hagar (Grand Software Testing)





Thank you for your attention.

Questions, please!





References

[EES11] ETSI ES 202 951: Requirements for Modeling Notations. ETSI Standard, Methods for Testing and Specification (MTS); Model-Based Testing (MBT). V1.1.1 (2011-07)