



TTsuite-IMS_Core

The Test Suite for Conformance Testing of SIP-based Signaling Components in IMS Core Networks

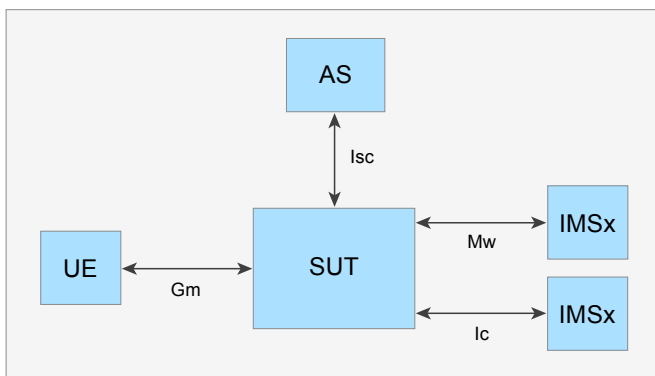
TTsuite-IMS_Core provides an Executable Test Suite (ETS) based on the Abstract Test Suite (ATS), standardized by ETSI for testing IP Multimedia Subsystem (IMS) core network functionality (TS 102 790). The ATS focuses on conformance tests for the standardized external SIP interfaces of the IMS core network defined by the Gm, Mw, Ic, and ISC reference points connecting the P-, I-, E-, S-CSCF, and IBCF signaling components, as defined by ES 283 003.

Features

- 212 full-featured tests for the
 - Gm interface, located between an UE and the IMS core network
 - Mw and Ic interface, located between two different IMS core networks
 - ISC interface, located between an Application Server and the IMS core network
- Tests for valid and invalid protocol behavior
- Exhaustive set of context parameters
 - Flexible adaptation of SIP/IMS core network tests to the IMS implementation under test
- Fully automated test execution
- Platform-independent test execution
- Test tracing on different levels of detail
- Test definition and documentation in the standardized test notation TTCN-3

Benefits

- Standards-based testing according to IMS specifications
- Fast and simple test execution and analysis
- Repeatability of tests and full support of test automation
- Platform independence and rapid integration in existing test environments
- Flexibility through usage of the constantly evolving standardized test notation TTCN-3



Standards

- ETSI TS 102790-1: „Technical Committee for IMS Network Testing (INT); Network Integration Testing; IMS specific use of Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Conformance Testing; Part 1: Protocol Implementation Conformance Statement (PICS)”.
- ETSI TS 102790-2: „Technical Committee for IMS Network Testing (INT); Network Integration Testing; IMS specific use of Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Conformance Testing; Part 2: Test Suite Structure (TSS) and Test Purposes (TP)”.
- ETSI TS 102790-3: „Technical Committee for IMS Network Testing (INT); Network Integration Testing; IMS specific use of Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Conformance Testing; Part 3: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification”.
- ETSI ES 283 003: „Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP) Stage 3”.
- ETSI ES 201 873-1: „Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 1: TTCN-3 Core Language”.

Reference Platforms

- Java 6
- Windows 7 (32bit or 64bit) / Vista / XP / 2000
- Linux Red Hat - v7.1 (x86/GTK)
- Linux SuSE - v9.1 (x86/GTK)

Test Management, Execution and Analysis for IMS_Core