



# TTsuite-IMS\_SS

## The Test Suite for Testing PSTN/ISDN Simulation Services in IMS Networks

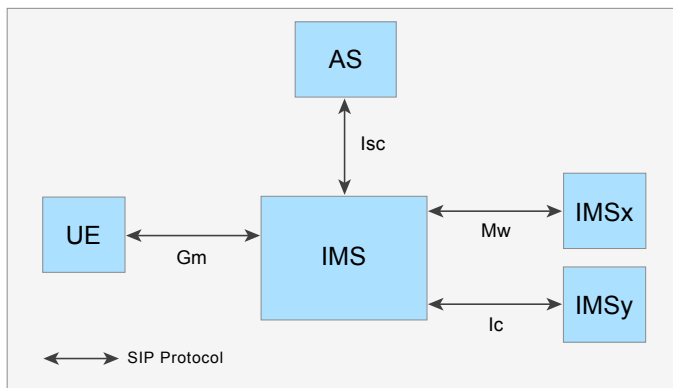
TTsuite-IMS\_SS provides an Executable Test Suite (ETS), based on the Abstract Test Suite (ATS) standardized by ETSI for testing PSTN/ISDN Simulation Services (corresponding to PSTN/ISDN Supplementary Services) in IMS networks.

### Features

- 122 full-featured tests for
  - Terminating Identification Presentation (TIP) & Terminating Identification Restriction (TIR)
  - Closed User Group (CUG)
  - Anonymous Communication Rejection (ACR) and Communication Barring (CB)
  - Malicious Communication Identification (MCID)
- Exhaustive set of context parameters
  - Flexible adaptation of SIP/IMS tests to the IMS core network and Application Server 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 186005-3: „Technical Committee for IMS Network Testing (INT); Terminating Identification Presentation (TIP) and Terminating Identification Restriction (TIR) Conformance Testing; Part 3: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification“.
- ETSI TS 186016-3: „Technical Committee for IMS Network Testing (INT); Closed User Group (CUG); Conformance Testing; Part 3: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification“.
- ETSI TS 186017-3: „Technical Committee for IMS Network Testing (INT); Anonymous Communication Rejection (ACR) and Communication Barring (CB) conformance testing; Part 3: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification“.
- ETSI TS 186018-3: „Technical Committee for IMS Network Testing (INT); Malicious Communication Identification (MCID) Conformance Testing; Part 3: Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification“.
- 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)

The screenshot displays the TTsuite-IMS\_SS Execution Management interface. The top window shows the 'Test Data View' with a table of test results:

Name	Value	Name	Value
Response		Response	
statusLine		statusLine	
sipVersion	SIP/2.0	sipVersion	SIP/2.0
statusCode	401	statusCode	401
reasonPhrase	?	reasonPhrase	Unauthorized - Chall
msgHeader		msgHeader	

The bottom window shows 'TTCN-3 Graphical Logging' with a sequence diagram illustrating the interaction between the UE1 and the SIPP (SIP Proxy) components. The diagram shows the following sequence of events:

- 12:50:38.274: pass
- 12:50:38.316: f\_serverSyncClientsTimed: sync server now starting PREAMBLE synchronization ...
- 12:50:38.317: tc\_sync(120.0)
- 12:50:38.461: syncPort
- 12:50:38.463: send SyncCmd
- 12:50:38.482: syncPort
- 12:50:38.506: m\_send: SyncCmd: m\_syncClientReady
- 12:50:38.652: UE1 send REGISTER\_Request SIPP
- 12:50:38.665: tc\_resp(15.0)
- 12:50:38.690: UE1 send REGISTER\_Request SIPP
- 12:50:38.695: tc\_resp(15.0)
- 12:50:39.087: UE1 receive SIPP
- 12:50:39.093: UE1 receive SIPP
- 12:50:39.428: m\_send: Response: mw\_Response\_Base

Test Management, Execution and Analysis for IMS\_SS