

VOTER

EUROCONTROL VoIP in ATM Test Suite

VOTER is the EUROCONTROL VoIP in ATM Test Suite designed to test conformance and performance of the main components of a VoIP Air Traffic Management (ATM) system according to the EUROCAE ED137 standard.

Features

- 832 full-featured tests for
 - SIP Ground Radio User Agents within a Radio or Radio Gateway
 - SIP Ground Radio User Agents within a VCS
 - SIP Ground Telephone User Agents within a VCS or VCS Gateway
 - SIP Recorder User Agents within a Recorder
- Tests for valid, invalid and inopportune behavior
- Conformance tests for basic ATS services as well as for ATS supplementary services (e.g. Conference, Intrusion, Position Monitoring, IA or Override Calls, Presence Information, Linked Session Management, Real Time Session Supervision, Signal Quality Information, CLIMAX-Time Delay, Radio Remote Control, etc.)
- Performance tests that target the VCS and GRS devices or the transport network
- Voice Quality tests using E-Model and PESQ (optional)
- Exhaustive set of context parameters for flexible adaptation of the tests to different implementations under test
- Fully automated test execution
- Test tracing on different levels of detail
- Summary of test results
- Test definition and documentation in the standardized test notation TTCN-3

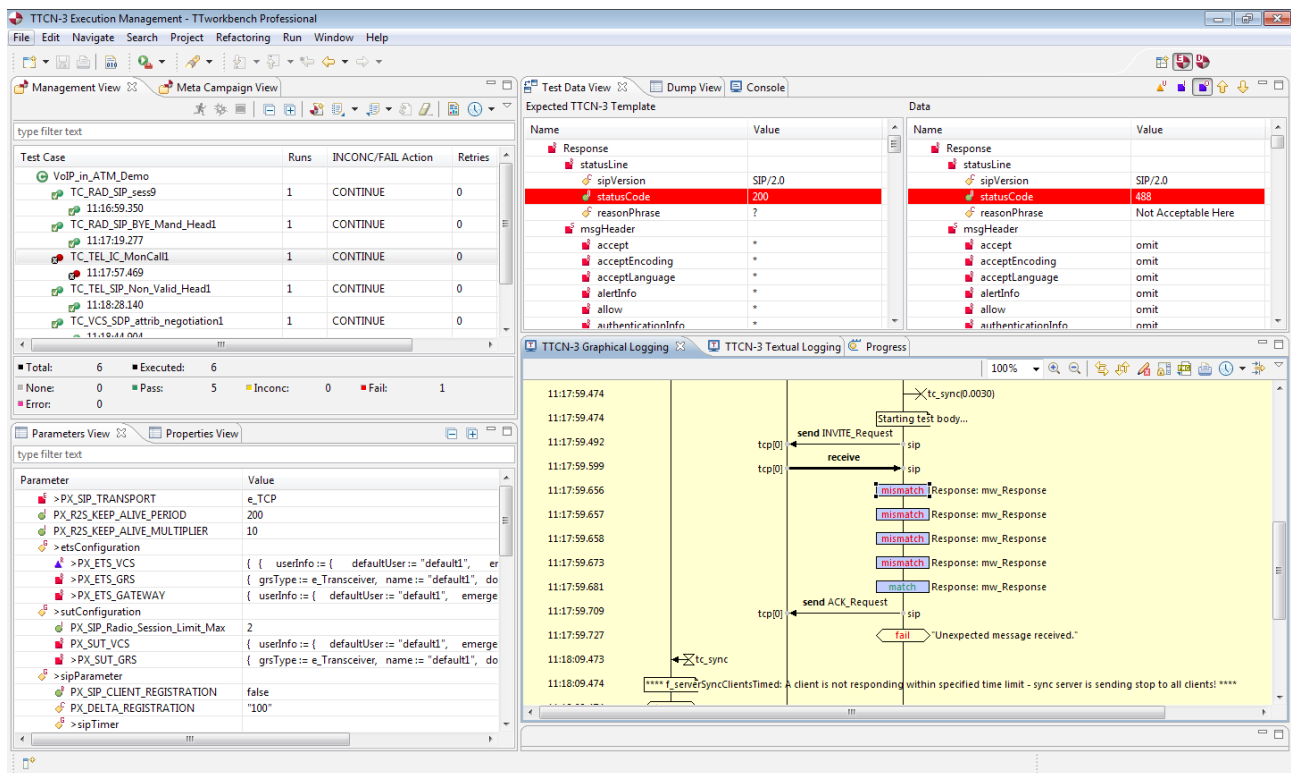


Benefits

- Standards-based testing according to EUROCAE and EUROCONTROL specifications
- Fast and simple test execution and analysis
- Repeatability of tests and full support of test automation
- Flexibility through usage of the constantly evolving standardized test notation TTCN-3

Potential Users

- Air Navigation Service Providers (ANSPs) in support of implementation and transition activities towards VoIP in ATM
- Voice Communication Systems (VCS) suppliers to perform testing on the SIP Telephone User Agents and SIP Radio User Agents within a Voice Communication System or a Gateway
- Ground Radio Stations (GRS) suppliers to perform testing on the SIP Radio User Agents within a Radio or Radio Gateway
- Recorder suppliers to perform testing on the SIP Recorder User Agents within a Recorder



The screenshot displays the TTCN-3 Execution Management - TTworkbench Professional interface. The main window is divided into several panes:

- Management View:** Shows a list of test cases with columns for Test Case, Runs, INCONC/FAIL Action, and Retries. The test case 'VoIP_in_ATM_Demo' is selected.
- Parameters View:** Shows a list of parameters and their values, such as 'PX_SIP_TRANSPORT' (e_TCP) and 'PX_R2S_KEEP_ALIVE_PERIOD' (200).
- Test Data View:** Compares the 'Expected TTCN-3 Template' with the 'Data' received. The 'statusLine' is '200' in the template and '488' in the data. The 'reasonPhrase' is '?' in the template and 'Not Acceptable Here' in the data.
- TTCN-3 Graphical Logging:** Shows a sequence diagram of the test execution. It includes messages like 'send INVITE_Request', 'receive sip', 'mismatch Response: mw_Response', 'match Response: mw_Response', and 'send ACK_Request'. A 'fail' message is also shown: 'Unexpected message received.'

Requirements

- Standard PC
- OS: Windows, Linux
- Java 6
- TTworkbench VOTER bundle: TTworkbench Professional + TTsuite-VOTER