

TTsuite-Presence

The Conformance and Interoperability Test Suite for Testing Presence Service in IMS Networks

The Presence Service provides the ability for the home network to manage presence information of a user's device, service or service media, even while roaming. A user's presence information may be obtained through input from the user, information supplied by network entities or information supplied by elements external to the home network. Consumers of presence information, watchers, may be internal or external to the home network. TTsuite-Presence focuses on protocol conformance of the interaction of Presence Servers with other presence entities in the IMS, based on SIP and XCAP.

Features

- 287 full-featured tests for
 - Presence Clients (Watcher and Presentity)
 - Presence Server
 - Resource List Server
 - XCAP Client, XCAP Server
- Tests of valid and invalid Presence protocol behavior and syntax variations in Presence messages
- Exhaustive set of context parameters for flexible adaptation of SIP tests to the Presence implementation under test
- Fully automated test execution
- Platform-independent test execution
- Test tracing on different levels of detail
- Summary of test results
- Test definition and documentation in the standardized test notation TTCN-3
- Full control of presence information
- SIP, HTTP and XML framework
- XML data validation
- Detailed analysis of the involved protocols

Benefits

- Standards-based testing according to IMS specifications by IETF, 3GPP, OMA
- 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

IETF

- RFC 3265, 3856, 3863, 3903, 4479, 4480, 4483, 4662, 4745, 4825, 4826, 5025
- draft-ietf-sipping-config-framework-15
- draft-ietf-sip-xcap-config-00.txt
- draft-ietf-simple-common-policy-caps-01
- draft-ietf-simple-pres-policy-caps-01
- draft-ietf-simple-xcap-diff-08
- draft-rosenberg-simple-xcap-change-log-00

3GPP

- TS 22.141; Presence service; Stage 1
- TS 23.141; Presence service; Architecture and functional description; Stage 2
- TS 24.141; Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3

ETSI

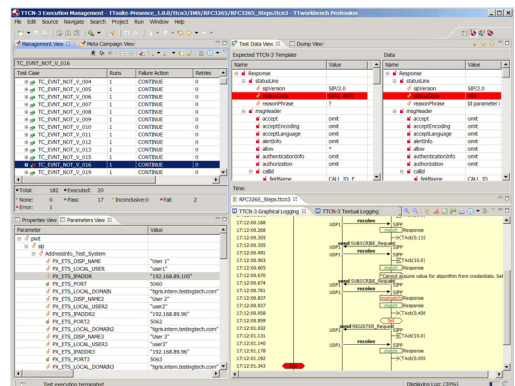
- TS 122 141 Universal Mobile Teleco System (UMTS)
 - Presence service; Stage 1
 - Presence service; Architecture and functional description; Stage 2
 - Digital cellular telecommunications system (Phase 2+); Presence service using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3
- ES 201 873-1 Methods for Testing and Specification (MTS); The Testing and Test Control Notation version 3; Part 1: TTCN-3 Core Language

OMA

- OMA-TS-Presence-SIMPLE-V1_0-20060725-A

Reference Platforms

- Java 5.0 (Sun, IBM or Oracle)
- Microsoft Windows XP, x86-32
- Red Hat Enterprise Linux 5.0, x86-32 and 4.0 update 2, x86-64, GTK
- Fedora 7, x86-32 and x86-64, GTK
- SUSE Linux Enterprise Server 10, x86-32, GTK



Test Management, Execution and Analysis for Presence