



TTsuite-M3UA

The Test Suite for Analyzing the M3UA Peers Signaling Gateway and Application Server

Features

- 196 full-featured tests for M3UA peers including
 - ASP State Maintenance
 - ASP Traffic Maintenance
 - Message Transfer
 - Routing Key Management
 - SS7 Signalling Network Management
 - SCTP Connection Management
- Tests for valid, invalid and inopportune M3UA protocol behavior
- Exhaustive set of context parameters for a flexible adaptation of the M3UA tests to a M3UA implementations under tests
- 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 M3UA 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

Applications

- Media Gateway
- Gateway Mobile Switching Center
- TRNC
- Signalling Gateway
- Application Server
- Serving GPRS Support Node (SGSN)



Standards

- RFC 2960 „Stream Control Transmission Protocol“, SCTP: Stream Control Transmission Protocol, 2000-10
- RFC 3309 „Stream Control Transmission Protocol (SCTP) Checksum Change“, update RFC 2960, 2002-09
- RFC 3332 Signaling System 7 (SS7) Message Transfer Part 3 (MTP3) - User Adaptation Layer (M3UA), 2002-09
- Draft RFC 3332 bis, Signaling System 7 (SS7) Message Transfer Part 3 (MTP3) - User Adaptation Layer (M3UA), 2004-09.
- RFC 4666 Signaling System 7 (SS7) Message Transfer Part 3 (MTP3) - User Adaptation Layer (M3UA), 2006-09
- ETSI TS 102 381 V1.1.1, Methods for Testing and Specifications (MTS); SS7 Message Transfer Part 3 - User Adaptation Layer; (IETF RFC 3332); Test Suite Structure and Test Purposes (TSS&TP), 2004-12
- ISO/IEC 9646-1: „Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts“.
- ISO/IEC 9646-2: „Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification“.
- ETSI ES 201 873-1 TTCN-3 Core Language V4.1.1 (2009-06)

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 Execution Management software interface. The main window is titled "TTCN-3 Execution Management - TTsuiteM3UA Professional". It features a "Test Data View" window with a table of test data. Below this, there is a "Test Case" window showing details for a test case named "M3UA_A15". The bottom part of the interface shows a "Sequence Diagram" window with a diagram illustrating the test execution flow, including steps like "receive", "send", and "sendM3UAParam".

User Type	Name	Value	User Type	Name	Value
ASPCovered	ASPCovered		ASPCovered	ASPCovered	
Consequence	Consequence		Consequence	Consequence	
actesting	version	1010	actesting	version	1010
actesting	version	1010	actesting	version	1010
actesting	messageClass	1010	actesting	messageClass	1010
actesting	messageType	1010	actesting	messageType	1010
actesting	messageLength	1	actesting	messageLength	1000000000
ASPCoveredParamet	p	*	ASPCoveredParamet	p	omit
address	address	0	address	address	00000000

Test Management, Execution and Analysis for M3UA