

SUA Protocol Modules for TTCN-3 Toolset with TITAN, Function Specification

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How to Read This Document

This is the Function Specification for the set of SUA protocol modules. SUA protocol modules are developed for the TTCN-3 Toolset with TITAN.

Scope

The purpose of this document is to specify the content of the SUA protocol modules.

General

Protocol modules implement the message structures of the related protocol in a formalized way, using the standard specification language TTCN-3. This allows definition of test data (templates) in TTCN-3 language [2] and correct encoding/decoding of messages when executing test suites using the Titan TTCN-3 test environment.

Protocol modules are using Titan's RAW encoding attributes [3] and hence are usable with the Titan test toolset only.

Functional Specification

Protocol Version Implemented

This set of protocol modules implements protocol messages and constants of the SUA protocol (see [1]).

Modifications/Deviations Related to the Protocol Specification

Implemented Messages

All SUA message types of message classes 0, 2, 3, 4, 7, 8 and 9 as listed in chapter 3.1.2 of [1] will be implemented.

Protocol Modifications/Deviations

None.

Encoding/Decoding and Other Related Functions

This product also contains encoding/decoding functions that assure correct encoding of messages when sent from Titan and correct decoding of messages when received by Titan. Implemented encoding/decoding functions:

Name	Type of formal parameters	Type of return value
<code>f_enc_PDU_SUA</code>	PDU_SUA	octetstring
<code>f_dec_PDU_SUA</code>	octetstring	PDU_SUA

Terminology

TITAN TTCN-3 Test Executor (see [3]).

Abbreviations

PDU

Protocol Data Unit

SUA

Signalling Connection Control Part User Adaptation Layer

TTCN-3

Testing and Test Control Notation version 3

References

[1] <https://tools.ietf.org/html/rfc3868>

Signaling Connection Control Part User Adaptation Layer (SUA)

[2] ETSI ES 201 873-1 v.3.1.1 (06/2005)

The Testing and Test Control Notation version 3. Part 1: Core Language

[3] User Documentation for the TITAN TTCN-3 Test Executor