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Common Protocol module elements for TTCN-3 Toolset with TITAN,

# Abstract

This is the description for the COMMON Protocol module elements. The COMMON Protocol module elements are developed for the TTCN-3 Toolset with Titan. This document should be read together with Product Revision Information [3].

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# Functionality

The COMMON Protocol module elements contains definitions in a formalized way, using the standard specification language TTCN-3. This allows to use these definitions in testports, protocol modules, libraries and applications.

The protocol module uses Titan’s RAW encoding attributes [4] and hence is usable with the Titan test toolset only.

## Implemented protocols

N/A

### Modified and non-implemented Protocol Elements

N/A

### Ericsson-specific changes

N/A

## Backward incompatibilities

None

## System Requirements

Protocol modules are a set of TTCN-3 source code files that can be used as part of TTCN-3 test suites only. Hence, protocol modules alone do not put specific requirements on the system used. However, in order to compile and execute a TTCN-3 test suite using the set of protocol modules the following system requirements must be satisfied:

* Titan TTCN-3 Test Executor version CRL 113 200 R7A (1.7.pl0) or higher installed. For Installation Guide see [2]. Please note: This version of the test port is not compatible with Titan releases earlier than CRL 113 200 R7A.

# Usage

## Installation

The set of protocol modules can be used in developing TTCN-3 test suites using any text editor; however, to make the work more efficient a TTCN‑3‑enabled text editor is recommended (for example nedit, xemacs). Since the GTPv2 PrivateExtensions protocol is used as a part of a TTCN-3 test suite, this requires TTCN-3 Test Executor be installed before the module can be compiled and executed together with other parts of the test suite. For more details on the installation of TTCN-3 Test Executor see the relevant section of [2].

## Configuration

N/A

## Examples

N/A

# Interface description

N/A

# Terminology

## Abbreviations

TTCN-3 Testing and Test Control Notation version 3

# References

1. ETSI ES 201 873-1 v4.5.1 (2013-04)   
   The Testing and Test Control Notation version 3. Part 1: Core Language
2. 1/ 198 17-CRL 113 200/3 Uen   
   User Guide for TITAN TTCN-3 Test Executor
3. 109 21-CNL 113 368-7 Uen  
   Common Protocol module elements for TTCN-3 Toolset with TITAN, Product Revision Information
4. 2/198 17-CRL 113 200/3 Uen  
   Programmer’s Technical Reference for Titan TTCN–3 Test Executor

# Change information

## R7A

‘record of’ and ‘set of’ type definitions have been added to the General\_Types module in order to give type compatibility within TTCN-3 source codes.