



ASN.1

Abstract Syntax Notation One

ASN.1 is a formal language for abstractly describing messages to be exchanged among an extensive range of applications involving the Internet, intelligent networks, cellular phones, multimedia services, Voice over IP and others.

ASN.1 is associated with several standardized encoding rules such as the BER (basic encoding rules), or more recently the PER (packed encoding rules). Nearly every ASN.1 language file can be easily integrated into TTCN-3 using the ASN.1 plugin of TTworkbench. It transforms the ASN.1 notation into a TTCN-3 type system by supporting the complete mapping found in the TTCN-3 Standard Part 7: Using ASN.1 with TTCN-3.

TTaci - ASN.1 Codec Integration

TTaci is a codec adapter that provides ASN.1 BER/DER/PER encoding and decoding to a TTCN-3 test system, using the ASN.1 Java Tools libraries from OSS. In order to use this codec adaptor you need a license of the OSS package for the computer the TTCN-3 test system will run on. Feel free to ask Testing Technologies for assistance upon this issue.

Highlights/Features

- Automatic generation of TTCN-3 representation from ASN.1 notation
- BER codec built in
- Other required codecs like PER, DER etc. available via separate generator -> TTaci
- X.681 / X.682 support for type systems
- Constraints validator included in compilation process
- Multiple modules per file
- Named numbers (constants for specific integer types)
- Named bits (constants for specific bit string types)
- Freely combinable with additional test access (TTplugins)