Testing Technologies

# TTplugin 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.

The ASN.1 language includes several standardized encoding rules such as the BER (basic encoding rules), or more recently the PER (packed encoding rules).

Every ASN.1 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.

## **Highlights/Features**

- Automatic generation of TTCN-3 representation from ASN.1 notation
- BER codec built in
- Support of cyclic ASN.1 imports
- 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)

### **Optional Extension: ASN.1 Codec Factory**

The ASN.1 Codec Factory enables the usage of various ASN.1 based codecs provided by Testing Technologies, like the LTE RRC/S1/X2 codecs (www.testingtech.com/products/ ttplugins).

In addition the ASN.1 Codec Factory provides a link to the ASN.1 Java Tools libraries from OSS. Licensed users of the OSS package can use created ASN.1 codecs for BER/DER/PER and other supported codecs from within TTworkbench. Feel free to ask Testing Technologies for assistance upon this issue.

### **Special Offer**

Users of the ASN.1 Codec Factory can benefit from Testing Technologies' Codec Creation Service (CCS). Submit your ASN.1 files your are seeking codec support for to sales@testingtech.com in order to receive an individual quote for this service.

For more information on TTplugin ASN.1 and ASN.1 Codec Factory options please contact sales@testingtech.com.