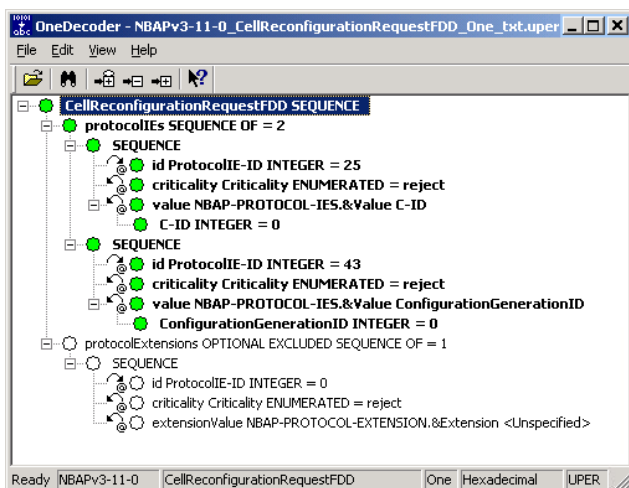




OneDecoder

ASN.1 Message Decoding Made Easy

ASN.1 Message Decoder



Features

- Use any ASN.1 syntax
- Decode messages into an easily readable form
- Export message in human readable form
- No programming required

Challenge

Abstract Syntax Notation One (ASN.1) is used to unambiguously describe complex messages to be exchanged between communicating systems.

Through ASN.1, system designers now have the ability to define message sets with a high degree of flexibility, functionality, and varying size.

The ability to operate and validate these systems is dependant on the facility for converting an encoded message into an human readable form. Messages from several different ASN.1 syntaxes may also be involved. When systems are immature ASN.1 syntax definitions change frequently.

Problem

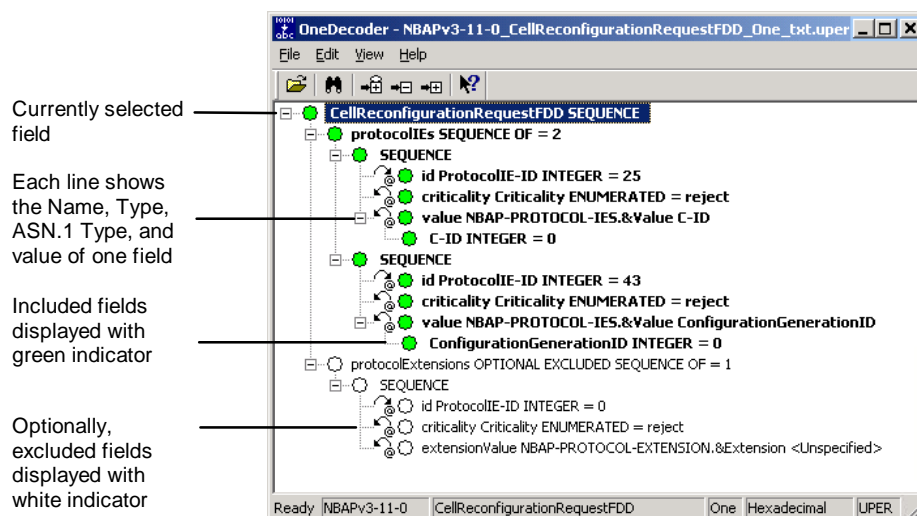
The current approach to resolving this challenge is far from ideal. It involves the purchase of an ASN.1 compiler and the subsequent generation of 'C' source and header files. These files are then included into a user-created program to decode messages. This process is time consuming, complex, prone to error, and requires proficient software-engineering skills. It is a task not to be undertaken lightly. Ultimately these activities defocus the user from the primary task of using or validating the system.

Solution

For a simpler, easier, and lower cost solution, Red Packet Technologies has created OneDecoder. This tool allows you to quickly, and easily, decode messages according to any ASN.1 syntax. In a very short time you can use the graphical user interface to start decoding your messages

While eliminating the need to write programs, OneDecoder does not prevent you from using your own ASN.1 syntax. This is vital given the dynamic nature of some evolving ASN.1 syntaxes. OneDecoder provides an environment that can seamlessly cope with the changes.

In today's time-to-market driven world, every month or week saved in product development can mean the difference between success and failure.



Key Product Features

Easy to use

OneDecoder is operated through familiar Windows® user interface controls. No programming or training is required.

To decode a message simply open the file containing the encoded message. The message structure is then displayed in a tree format with the currently included fields highlighted. Information on each field's name and value are displayed.

Configurable

OneDecoder can operate using any ASN.1 syntax. You can define your own message syntax using ASN.1 and then use OneDecoder to view messages.

Red Packet Technologies will create a custom ASN.1 configuration file based on a valid ASN.1 syntax that you provide.

Input Format

OneDecoder can read messages in either binary or ASCII format. The data is decoded as the message file is opened. The file format used is simple and can easily be produced by other applications. More detailed information is available on request.

OneDecoder supports the BER, CER, DER, PER (aligned and unaligned), XER, and CXER encoding rules.

Export

Decoded messages can be exported to a file in a human readable format for later reference.

Typical Applications

Applications involving ASN.1 include:

- 3GPP Layer 3 Protocols (NBAP, RRC, RANAP, RNSAP)
- Secure Electronic

Transaction Protocol (SET)

- Z39.50 Information Retrieval Protocol and Wide Area Information Server (WAIS)
- H.225.0 Call signaling protocols and media stream packetization for packet-based multimedia communication systems
- ECMA-285 Protocol for Computer Supported Telecommunications Applications (CSTA) Phase III

Applicable Standards

ITU-T X.680 through X.691
ISO/IEC 8824/8825

More Information

For more information, visit the company web site at <http://redpackettech.com> or contact info@redpackettech.com