MARBEN ASN.1 Value Editor

FAST AND USER FRIENDLY ASN.1 VISUAL TOOL

Illuminate your ASN.1 data

THE ASN.1 VALUE EDITOR SPEEDS UP YOUR DEBUGGING, INTEGRATION AND VALIDATION PROCESSES INCLUDING PER, UPER, BER, DER, OER, COER, XER AND CXER ENCODING RULES.

VISUAL INTERFACE – VISUALIZE ANY ASN.1 DATA IN FEW CLICKS

USER-FRIENDLY

- Comfortable tree view.
- Immediate feedback and encoding after modification.

VARIOUS EDITING CAPABILITIES

- Create, edit, find/replace and filter any ASN.1 values.
- Copy/paste of data in XML or hexadecimal format.
- Powerful processing of open types.

POWERFUL ASN.1 FEATURES – CONFORMS TO ASN.1 STANDARDS

DECODE/ENCODE ANY ASN.1 DATA

- PER, UPER, BER, DER, OER, COER, XER and CXER.
- Permissive decoding to resume from errors.
- Embedded ASN.1 Compiler to support any ASN.1 syntax.
- Large files support for CDRs and TAP3 roaming files.
- Manages block size , padding and message headers

EXPORT TO XML AND CSV

- Configure output to satisfy your needs.
- TBCD or ASCII conversion during export.

SAVE TIME – IMPROVE DEBUGGING, INTEGRATION AND VALIDATION

USAGE FACILITIES

- ASN.1 debugger for easy fixing of ASN.1 syntaxes.
- Included ASN.1 syntaxes for 3GPP 6G, 5G, 4G/LTE, UMTS, CDR, Security...
- Multiple input and output formats: bin, hex, txt.

AUTOMATIC VALUE CREATION AND ASSISTANCE

- Mass generation for a quick creation of several values in a short time.
- Quick starting with key functions.
- Easy learning with user friendly samples.

TARGET APPLICATIONS

BTS, gNB, NodeB, eNodeB, Femtocell, 3GPP RRC, S1AP, X2AP, NxAP, E1AP, E2AP, NRPPa, 6G, 5G, 4G/LTE Mobile phone applications, Roaming, TAP3, CDR parser, Billing WiMax, Finance, Automotive - Cooperative ITS, V2X…

About Marben

A leading provider of key software solutions for next generation service-driven networks.

More than 30 years of experience

Delivers interoperable, robust and efficient signaling, routing and AAA solutions to accelerate the delivery of network services.

Marben Customers

Airbus, Be-Mobile, Bosch, Ciena, Cisco, Continental, CSG, Ericsson, ESA, Fujitsu, GMV, HP, Nokia, NEC, Oracle, Siemens, Sprint, Telstra, Valeo, Verizon, Volvo …

MARBEN ASN.1 Value Editor

TECHNICAL OVERVIEW

MARBEN ASN.1 Value Editor encompasses an ASN.1 compiler, encoding/decoding runtime engines and ASN.1 to XML translator. Support all encoding rules: **PER** (aligned and unaligned), **BER**, **DER, OER** (basic and canonical) and **XER** (basic and canonical).

USER-FRIENDLY DISPLAY

ASN.1 values are displayed in a comfortable tree view. New fields and values can be added to an existing value or file. Various information about types and values are displayed: constraints, optionality, BER tags, encoding length and bit offsets. Open types can easily be defined. Live encoding result after modification.

IMMEDIATE ERROR DETECTION

The ASN.1 Value Editor provides an immediate validation of any modification with regards to the ASN.1 type and associated constraints. Fixing errors is easy with the provided information.

ASN.1 DECODE/ENCODE

To decode values just choose the ASN.1 syntax and the encoding rules that you want to use. The decoded values are then displayed in the main panel using a tree representation. Errors during decoding are skipped.

To encode a value, you just choose the ASN.1 syntax and the encoding rules that you want to use. The encoding result is then stored in a file and displayed in the "Encoded Value" panel at the bottom of the screen.

Select the type of the message that you want to create by browsing a list of all possible messages of the ASN.1 syntax.

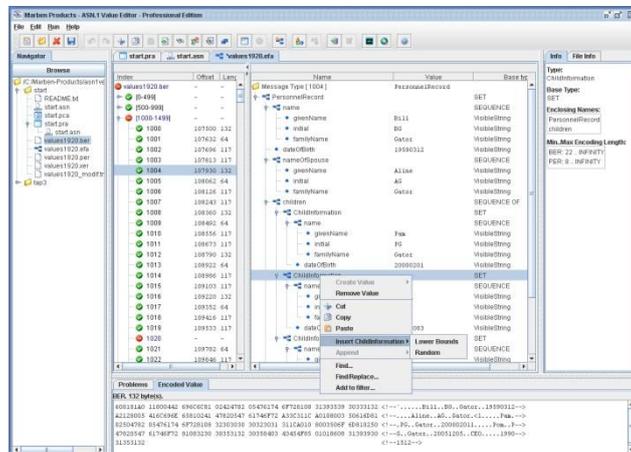### CDR DECODING AND CONVERSION TO XML OR CSV

The ASN.1 Value Editor efficiently decodes CDR data. It processes files and messages headers, supports block structures in files and skips padding bytes. The decoded CDRs can easily be exported to XML or CSV. The output format can be customized and fields can be converted using TBCD or ASCII.

ASN.1 COMPILER AND PRE-COMPILED SYNTAXES INCLUDED

The ASN.1 Value Editor includes precompiled/ready-to-use ASN.1 descriptions coming from various standardization organizations such as 3GPP, ETSI, ITU-T, GSMA, ECMA, IETF and SAE for V2X. It also includes an ASN.1 Compiler that checks the syntax and the semantic of your ASN.1 description and provides a user-friendly mechanism for error location.

EASY ASN.1 VALUE CREATION

All mandatory fields are automatically initialized during value creation. In addition, optional fields and extensions can automatically be created and the number of elements in a SEQUENCE OF or SET OF type can be specified.

CONTACTS

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CONFORMANCE

ITU-T Recommandations **X.680, X.681, X.682, X.683, X.690, X.691, X.693, X.696**.

W3C Recommendations, XML schema (part 1 & 2),

Extensible Markup Language XML 1.0 Second edition.

Extensible Style sheet Language (XSL) version 1.0.

RELATED OFFERS

MARBEN CDR Converter a powerful and easy tool allowing rapid decoding of CDRs and generation of CSV (Coma Separated Values) and XML text files.

Our ASN.1 experts deliver you the best of Consulting, Training and Custom services.

SYSTEM REQUIREMENTS

Windows and Linux

Java Runtime Environment (Oracle or OpenJDK)