

PoolEdit Embedded XML Parser

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PoolEdit Parser

The Pooledit parser is a program that parses XML files created with the PoolEdit editor (automation.tkk.fi/Farmix/PoolEdit). It is an example program showing how XML could be parsed at run-time, but it can be used to parse pools for predefined virtual terminals (Vts) offline.

Usage

The PoolEdit parser can only read Embedded XML created by PoolEdit. It has two output formats: a binary format and a table format. The binary format is simply the object pool data as defined by the ISO 11783-6. The table format creates a C header file from binary data and adds info about the size and object IDs to it.

Example of generated header-file.

```
unsigned char pool[] = {
    0, 1, 0, 1, 1, 1, 1, 0, 0, 0,
    3, 1, 23, 0, 0, 0, 0, 0,
    2, 1, 11, 61, 0, 20, 0, 0, 3, 1, 1, 255, 255, 0, 7, 0, 84, 101, 115,
116, 105, 110, 103, 0,
    1, 1, 1, 1, 4, 1, 1, 0, 2, 1, 75, 0, 83, 0,
    4, 1, 4, 1, 0, 0,
    5, 1, 23, 0, 0, 0, 0, 0,
    6, 1, 24, 0, 1, 255, 255, 0
};

#define POOL_SIZE 78

#define workingset 256
#define datamask 257
#define softkeymask 260
#define fontattributes6x8 261
#define lineattributes 262
```

The virtual terminal parameters can be changed from command line. The default VT parameter values are:

- mask size of *200x200* pixels
- softkey size of *60x32* pixels
- number of colors is *256*

For example:

Generates binary file from mini_export.xml:

```
Pooleditparser mini_export.xml out.dat
```

Generates header file from xml:

```
Pooleditparser mini_export.xml out.h -table
```

Generates header file from xml with dimensions of 480x480 and 16 colors:

```
Pooleditparser mini_export.xml out.h -table -d=480 -c=16
```

Source code and compiling

The following files are provided:

- *parserdef.h* structure definitions for ISOBUS objects
- *xml.h* functions for reading embedded XML
- *xml.cxx* implementation
- *parser.h* the processing of the embedded XML
- *parser.cxx* implementation

- *pooleditparser.cxx* source code for the PoolEdit parser

To compile the PoolEdit parser, Expat XML Parser library is required. See expat.sourceforge.net.

Windows

The PoolEdit parser is compiled with Dev-C++. After installing Dev-C++ and adding the Expat package, the *pooleditparser.dev* file can be opened, edited and compiled.

Parser should compile also with Microsoft Visual Studio 2005. Link with *libexpat.lib* and configure compiler so that it will find the *expat.h* file.

Linux

To compile parser under Linux, the *parser.cxx* file should be edited so that compiler can find the *expat.h*. After that, the PoolEdit parser can be compiled with g++.

For example:

```
g++ -o pooleditparser pooleditparser.cxx parser.cxx xml.cxx  
      /usr/local/lib/libexpat.a
```