Encodix

Encodix - Demo

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1 Introduction

This document explains how to run the Encodix demonstrative project. Please, refer to Encodix manual for more details about Encodix.

1.1 What is Encodix?

Encodix is a mean to describe telecommunication message formats. Encodix provides a formal language which resembles informal 3GPP documents; this allows a very natural way of describing messages formats. These descriptions are written in a file named *message description file*.

Therefore, Encodix **is not a message library**; for example, to be able to encode/decode messages described in 3GPP TS 24.008 it is necessary to write a *message description file* using Encodix's syntax.

These *message description files* can be written by the users themselves our bought by third parties (Dafocus has some available for 24.008, 44.018, 44.060, etc.).

1.2 Archive contents

The archive contains the following demonstrations:
* Encodix interfaced to C

1.3 Installation

Encodix is distributed as a .ZIP file. This file must be extracted inside an empty directory; **be careful to maintain the directory sub-tree**.

The Encodix tool works under Windows 32bit (2000, XP, Vista, etc.) or a recent Linux distribution. The generated code works wherever an ANSI C compiler is available.

From now on, we shall call Encodix root directory `<Encodix_root>`.

1.4 Demo version limits

Demo version of Encodix allows usage of all features but it limits message description files. The tool accepts only the included demo files and it allows to change a few lines of them. In this way, users can try all the features one at the time by editing the original demo files.

Messages exploited in this demo *message description files* are *realistic* although not *real*: such messages are often a subset of real messages and they **might not work in real environments**.

2 C demo

In this demo, we describe a few 3GPP TS 24.008 messages and we try to encode and decode by using plain C.

2.1 Running the demo

Messages are described in a file named `<Encodix_root>\demo\demo-c.src`.

Generate the code
First step is generation of code, done by running Encodix. Encodix can be executed through a batch file:
* open a command prompt;
* change current directory to `<Encodix_root>\demo`;
* run `regen.bat`

Compile the C source files
We provide a Microsoft Visual C++ 6.0 project file under `<Encodix_root>\demo\c\msvc6` and a generic GNU C project under `<Encodix_root>\demo\c\gcc`.

Read the comments inside `<Encodix_root>\demo\c\main.c` to know more on how the demo works.