Omf MultiOberon/OFront Quick-Start

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Omf is the instance of MultiOberon compiler with OFront backend. Based on Josef Templ's OFront.
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How to Start from Command Line.

1   Installation

1. Preconditions.
    Omf doesn't use any other services. Process all the commands below from the Mob-master root dir.

2   Compiling examples

```
Bfwe\OmfSh co OmtestHelloWorld:
```
A new symbol file is created first, then OmtestHelloWorld.mod is compiled to Omtest/Cfwe/HelloWorld.c. The last : symbol means that the example is compiled to main program? Jtherwise the .h files are generated too.

```
Bfwe\OmfSh co –odc OmtestHelloWorld: OmtestFormats: OmtestDateTime:
OmtestMkTraps: OmtestHeap:
```
Option –odc takes BlackBox OmtestHelloWorld.odc file instead of mod. The command above compiles all the examples listed

3   Example set
Preconditions.
    In order to compile and link to binary executives the C-development environment is needed. I provide no Visual Studio or MinGW or CMake tools. Please, use external tools or modify scripts. I use the following:
- gcc, ar – for fwe,
- clang – for fwr.

```
fwe_tomake
```
Makes all the executives of 32-bit example set
```
fwe_toclean
```
Cleans all the executives of 32-bit example set
```
fwr_tomake
```
Makes all the executives of 64-bit example set
```
fwr_toclean
```
Cleans all the executives of 64-bit example set

4   Running executives
Preconditions.
    I suppose that executives are compiled successfully from .c and .h sources.
The executives for 32-bit are located in Cfwe.
The executives for 64-bit are located in Cfwr.

4.1.The simplest Hello, World example (32-bit)
```
Omtest\Cfwe\OmtestHelloWorld.exe
```

Logging with char, int and real formats
```
Omtest\Cfwe\OmtestFormats.exe
```

4.2 Shows date, time and delay
```
Omtest\Cfwe\OmtestDateTime
```

4.3 Traps handling abilities of runtime
Simple Assert
`Omtest\Cfwe\OmtestMkTraps –trap a`
Simple Halt
`Omtest\Cfwe\OmtestMkTraps –trap h`
Zero divide
`Omtest\Cfwe\OmtestMkTraps –trap z`
Nil pointer dereference
`Omtest\Cfwe\OmtestMkTraps –trap p`

4.4 Dynamic memory and garbage collector
`Omtest\Cfwe\OmtestHeap`

How to Start from Black Box

1   Installation
1. Preconditions.

     Omf doesn't use any other services. StartupBlackBox from the Mob-master root dir must be edited to set exact pathname of BlackBox component builder.

2. Compile the following modules:
```
^Q DevCompiler.CompileThis OmcTarget OmcCRuntime OmcHooks OmcDialog OmcOPM
OmcOPT OmcOPU OmcOPB OmcOPS OmcOPP OmcDump OmcParams OmcOdcSource OmcTxtSource
OmcRuntimeStd OmcDialogStd OmcDialogConsole OmcCompiler OmcHostDialog OmcConsole
OmcShell OmfOPG OmfOPC OmfOPV OmfBackEnd OmfCompiler OmfSh
```

2   Compiling Examples
2.1. Compiling examples for 32-bit
```
^Q OmfCompiler.CompileThis +HostConLog OmtestHelloWorld: OmtestFormats:
OmtestDateTime: OmtestMkTraps: OmtestHeap:
```
Expected result in ~/Omtest/Cfwe/ directory: OmtestHelloWorld.c OmtestFormats.c OmtestDateTime.c
OmtestMkTraps.c OmtestHeap.c

2.2. Compiling examples for 64-bit
```
^Q OmfCompiler.CompileThis -bits 64 +HostConLog OmtestHelloWorld: OmtestFormats:
OmtestDateTime: OmtestMkTraps: OmtestHeap:
```
Expected result in ~/Omtest/Cfwr/ directory: OmtestHelloWorld.c OmtestFormats.c OmtestDateTime.c
OmtestMkTraps.c OmtestHeap.c

3   Preparing Shell Executive
Creating Omf Shell executive.
OmfSh is created by the standard BlackBox DevCompiler.
Further self-compiling shell is planned.

```
^Q DevLinker.LinkExe dos "Bfwe/OmfSh.exe" :=
Kernel$+ Files Log Math Strings OStrings OLog Dates Dialog Stores Sequencers
Models Services Fonts Meta Converters Ports Views Controllers Properties
Mechanisms Containers Printers Printing HostFiles OmcHostDialog Documents
TextModels TextRulers TextSetters TextViews HostConLog Runner Cfgfile OmcTarget
OmcCRuntime OmcHooks OmcDialog OmcOPM OmcOPT OmcOPB OmcOPU OmcOPS OmcOPP OmcDump
OmcParams OmcOdcSource OmcRuntimeStd OmcDialogConsole OmcConsole OmcShell OmfOPG
OmfOPC OmfOPV OmfBackEnd OmfSh
```

4   Unloading Omf Compiler Up

```
^Q DevDebug.UnloadThis OmfCompiler OmfBackEnd OmfOPV OmfOPC OmfOPG OmcCompiler
OmcDialogStd OmcRuntimeStd OmcLogStd OmcOdcSource OmcParams OmcDump OmcOPP
OmcOPS OmcOPU OmcOPB OmcOPT OmcOPM OmcDialog OmcHooks OmcCRuntime OmcTarget
```

5   Change log Up

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Use it and enjoy! - ŬЪsalos y disfrъtalos! - Bonne utilisation - Приятного использования - Powodzenia - Viel SpaЯ

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