

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, otherwise 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. In scripts use the following:

- gcc, ar – for fwe (oFront-Windows-32bit),
- clang – for fwr (oFront-Windows-64bit).

```
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

```
^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

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Use it and enjoy! - Ўъsalos y disfrъtalos! - Bonne utilisation - Приятного использования - Powodzenia - Viel Spaß

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