

# Omb MultiOberon/BlackBox Quick-Start

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Omb is the instance of MultiOberon compiler with BlackBox backend. Based on Omnic CP DevCompiler.  
Version 0.8 24-May-2019

## How to Start from Command Line.

### 1 Installation

#### 1. Preconditions.

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

### 2 Compiling examples

```
Bbwe\OmbSh co OmtestHelloWorld
```

A new symbol file is created first, then OmtestHelloWorld.mod is compiled to Omtest/Code/HelloWorld.ocf. A list of files can be compiled.

```
Bbwe\OmbSh ru OmtestHelloWorld
```

Run OmtestHelloWorld.ocf with Omb Shell as dynamically loaded module.

```
Bbwe\OmbSh ex OmtestHelloWorld
```

Execute means both compile and run OmtestHelloWorld.mod with Omb Shell.

```
Bbwe\OmbSh ex -odc OmtestHelloWorld
```

Option `-odc` takes BlackBox OmtestHelloWorld.odc file instead of mod, valid for `co` and `ru` commands.

```
Bbwe\OmbSh co -odc OmtestHelloWorld OmtestFormats OmtestDateTime OmtestMkTraps  
OmtestHeap
```

The command above compiles all the examples listed

### 3 Linking modules

```
Bbwe\OmbSh li Kernel+ Log Math Strings OStrings OLog HostConLog Runner  
OmtestHelloWorld -dos -o Omtest/Code/OmtestHelloWorld
```

Links to executive OmtestHelloWorld

### 4 Example set

```
bwe_tomake
```

Makes all the executives of example set

```
bwe_toclean
```

Cleans all the executives of example set

## How to Start from Black Box

### 1 Installation

#### 1. Preconditions.

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
OmbOPE OmbOPH OmbOPL486 OmbOPC486 OmbOPV486 OmbBackEnd OmbCompiler
OmbLinkProcessor OmbLinker
```

## 3 Compiling the examples

### Compile the following modules:

```
^Q OmbCompiler.CompileThis OmtestHelloWorld OmtestFormats OmtestDateTime
OmtestMkTraps OmtestHeap
```

### Link executives to call them from console

```
^Q OmbLinker.LinkExe dos "Omtest/Code/OmtestHelloWorld.exe" :=
Kernel$+ Log Math Strings OStrings OLog HostConLog Runner OmtestHelloWorld
^Q OmbLinker.LinkExe dos "Omtest/Code/OmtestFormats.exe" :=
Kernel$+ Log Math Strings OStrings OLog HostConLog Runner OmtestFormats
^Q OmbLinker.LinkExe dos "Omtest/Code/OmtestDateTime.exe" :=
Kernel$+ Log Math Strings OStrings OLog Times HostConLog HostTimes Runner
OmtestDateTime
^Q OmbLinker.LinkExe dos "Omtest/Code/OmtestMkTraps.exe" :=
Kernel$+ Log Math Strings OStrings OLog HostConLog Runner OmtestMkTraps
^Q OmbLinker.LinkExe dos "Omtest/Code/OmtestHeap.exe" :=
Kernel$+ Log Math Strings OStrings OLog HostConLog Runner OmtestHeap
```

## 4 Running the examples

### 4.1. The simplest Hello, World example

```
^Q OmtestHelloWorld.Run
```

### Logging with char, int and real formats

```
^Q OmtestFormats.Run
```

### 4.2 Shows date, time and delay

```
^Q OmtestDateTime.Run
```

### 4.3 Traps handling abilities of runtime

#### Simple Assert

```
^Q "OmtestMkTraps.RunOpt('a')"
```

#### Simple Halt

```
^Q "OmtestMkTraps.RunOpt('h')"
```

#### Zero divide

```
^Q "OmtestMkTraps.RunOpt('z')"
```

#### Nil pointer dereference

```
^Q "OmtestMkTraps.RunOpt('p')"
```

### 4.4 Dynamic memory and garbage collector

```
^Q OmtestHeap.Run
```

## 5 Self-Compiling Omb Shell

### Self-Compile console Oberon Shell.

```
^Q OmbCompiler.CompileThis OmcTarget OmcCRuntime OmcHooks OmcDialog OmcOPM
OmcOPT OmcOPU OmcOPB OmcOPS OmcOPP OmcDump OmcParams OmcOdcSource OmcTxtSource
OmcRuntimeStd OmcDialogStd OmcDialogConsole OmcCompiler OmcHostDialog OmcConsole
OmcShell OmbOPE OmbOPH OmbOPL486 OmbOPC486 OmbOPV486 OmbBackEnd OmbCompiler
OmbLinkProcessor OmbLinker OmbLinkConsole OmbLoader OmbSh
```

### Self-Link console Oberon Shell.

```
^Q OmbLinker.LinkExe dos "Bbwe/OmbSh.exe" :=
Kernel$+ Log Math Strings OStrings OLog HostConLog Runner Files HostFiles
Cfgfile Dates Dialog Stores Sequencers Models Services Fonts Meta Converters
Ports Views Controllers Properties Mechanisms Containers Printers Printing
OmcHostDialog Documents TextModels TextRulers TextSetters TextViews OmcTarget
OmcCRuntime OmcDialog OmcHooks OmcOPM OmcOPT OmcOPB OmcOPU OmcOPS OmcOPP
OmcParams OmcOdcSource OmcDialogConsole OmcRuntimeStd OmcConsole OmcShell OmbOPE
OmbOPH OmbOPL486 OmbOPC486 OmbOPV486 OmbBackEnd OmbLoader OmbLinkProcessor OmbSh
```

## 6 Unloading Omb Compiler

```
^Q DevDebug.UnloadThis OmbLinker OmbLinkProcessor OmbCompiler OmbBackEnd
OmbOPV486 OmbOPC486 OmbOPL486 OmbOPH OmbOPE OmcCompiler OmcDialogStd
OmcRuntimeStd OmcOdcSource OmcParams OmcDump OmcOPP OmcOPS OmcOPU OmcOPB OmcOPT
OmcOPM OmcDialog OmcHooks OmcCRuntime OmcTarget
```

## 7 Change Log

may 2019 original MultiOberon pre-version 0.8 released

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

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