# **Building examples applications**

MutekH comes with some examples applications available in hg/examples. This page briefly explains how to build these examples.

## Requirements

Please read the Install page to obtain source code and development tools.

## **Building examples**

Each example comes with its own config file which is used to configure the MutekH kernel build. This file contains application specific configuration to enable kernel features.

Some other configuration options are related to target architecture. Some ready to use configuration sets for specific targets are factored in the hg/examples/common directory. These configuration files are organized in sections that can be enabled from the build command line. Look at the chosen example config file to determine if it contains custom standalone configuration or if it relies on common configuration sets by including files from hg/examples/common.

Please refer to the BuildSystem page for in depth description of the build system.

Some working examples are listed in hg/examples/README file.

You are encouraged to read platform specific tutorials and subscribe to the <u>?mutekh-users</u> mailing list to get help or report issues.

### Using standalone and specific configuration file

First ensure development tools are available from your current PATH.

Here is a make invocation for the hello example using a custom and standalone config file which targets x86 Linux process (see <u>QuickStartUnix</u>):

```
$ cd .../mutekh
$ make CONF=examples/hello/config_emu
```

### **Relying on common configuration files**

Here are make invocations for various target architectures to build examples which are using common configuration files:

• As <u>unix user process</u>, on x86\_64 machine running Linux:

\$ make CONF=examples/hello/config BUILD=emu-linux-x86\_64

• To build a <u>x86 machine (PC)</u> bootable kernel

\$ make CONF=examples/hello/config BUILD=ibmpc-x86

• For <u>SoCLib</u> simulator, Mips32 Little endian, for caba-vgmn-mutekh\_soclib\_tutorial or caba-vgmn-mutekh\_kernel\_tutorial platforms:

\$ make CONF=examples/hello/config BUILD=soclib-mips32el:pf-tutorial