Welcome to the MutekH project home page

What is MutekH

<u>?MutekH</u> is a portable operating system for embedded platforms. MutekH is a set of libraries built on top of the Hexo exo-kernel. The exo-kernel can be seen as an Hardware Abstration Layer (HAL) used to address platform and processors specific implementations. MutekH is fully configurable to match every application needs.

Hexo currently support these platforms:

- Soclib platform with Arm, Mips and Ppc multi-processors support
- <u>Pc platform</u> with x86 multi-processors support
- <u>Unix processes</u> (kernel and application run as standalone unix process)
- <u>Simple platforms</u> bare CPU with hardware (i.e. microcontrollers)

Several modules are available:

- Standard C library (libc)
- Native Posix threads Support (libpthread)
- TPC/IP stack networking library (libnetwork)
- File system support library (libvfs) along with file system drivers
- <u>?MutekS</u> (libsrl), static OS for <u>?DSX</u>
- Device drivers for various peripherals

The following modules are under developpment:

• Unix kernel implementation library (libunix)

The following library have been ported:

• <u>?Lua</u> scripting library (liblua)

Some successfully ported applications:

- MJPEG and Theora multi-processor video decoder (Soclib platform)
- <u>?Doom</u> video game with network multiplayer support (Pc and SocLib? platforms)

Get the source

Source code can be downloaded from the syn source tree:

svn co -r 766 https://www-asim.lip6.fr/svn/mutekh/trunk/mutekh

Documents

- Posix thread over Hexo implementation overview
- Manual for Hexo API
- MutekH quick start guide for SoCLib platform