MutekH project home

What is MutekH

?MutekH 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 multiprocessor support
- Pc platform with x86 multiprocessor support
- Unix processes (kernel and application run as standalone unix process)
- Simple platforms bare CPU with hardware (i.e. microcontrollers)

Several modules are available:

- Native modules
  - 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 (FAT, NFS)
  - ELF binary file format (libelf)
  - ?MutekS (libsrl), static OS for ?DSX
  - Device drivers for various peripherals

- The following library have been ported:
  - ?Lua scripting library (liblua)
  - ?Fdlibm standard math library
  - ?LibTermUI terminal driver and getline library

- The following modules are planed:
  - Unix kernel implementation library (libunix)

Some successfully ported applications:

- H264 video decoder (multi-processors)
- MJPEG and Theora multi-processor video decoder (multi-processors)
- ?Doom video game with network multiplayer support

Documentation

- MutekH quick start guide for SoCLib platform
- ?MutekH API reference manual
- Using the BuildSystem
- Adding a driver, or adding a new driver class
- Porting your application
- Using MutekH on a AT91SAM7?
- Usage of IntegerTypes in MutekH

Get the source

Source code can be downloaded from the svn source tree:

```
svn co -r 1204 https://www-asim.lip6.fr/svn/mutekh/trunk/mutekh
```