kconfig-frontends

A packaging of the kconfig parser and frontends

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Kconfig language overview

➢ Configuration description language

➢ Simple syntax & grammar

➢ Limited number of types
  ➢ booleans, tristates
  ➢ strings, integers

➢ Dependency tracking
  ➢ reverse and direct

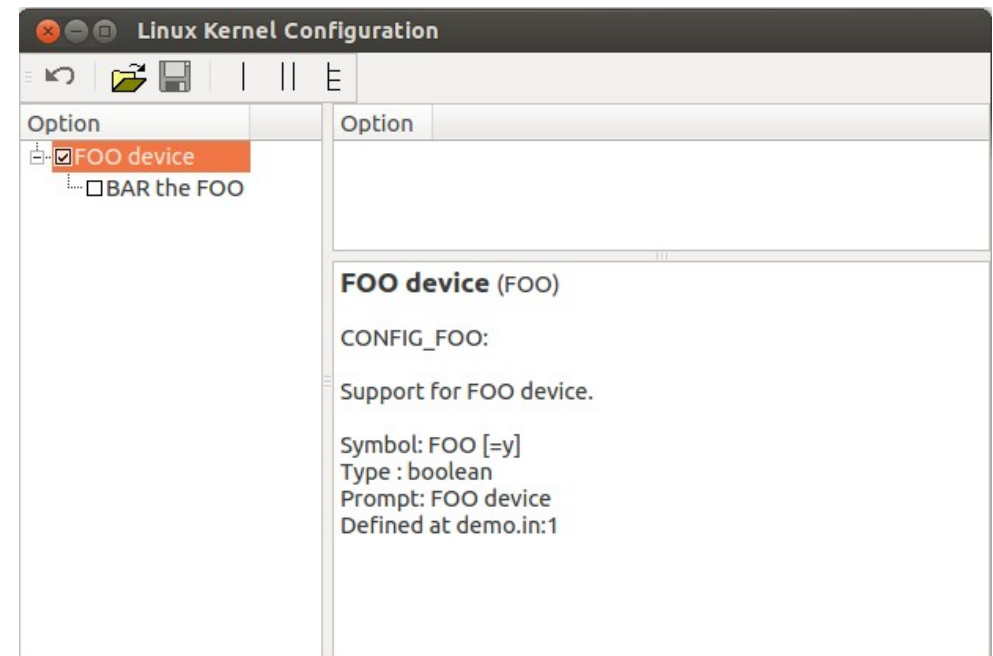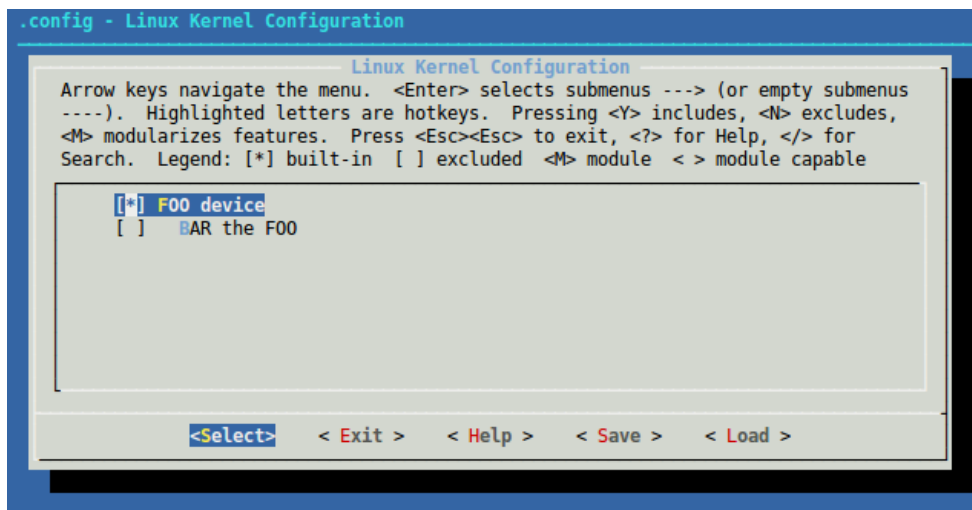➢ i18n ready (mostly)

Kconfig language overview

```
config FOO
     bool
     prompt "FOO device"
     help
        Support for FOO device.

config FOO_BAR
     bool "Use BAR of the FOO"
     depends on FOO
     select GENERIC_BAR
     help
        Support BAR in FOO device.

config GENERIC_BAR
     bool
```

Kconfig frontends

➢ line-oriented '`conf`'

➢ curses-based '`mconf`' and '`nconf`'

➢ Qt-based '`qconf`'

➢ GTK-based '`gconf`'

Kconfig-frontends

➢ Kconfig widely used outside the Linux kernel
  ➢ busybox, uClibc
  ➢ buildroot, PTXdist, openWRT, crosstool-NG
  ➢ QEMU (pending)

➢ make it easy for other projects to re-use Kconfig with minimal maintenance burden

➢ help them converge to a common set of features

Kconfig-frontends

➢ packaged using autotools

➢ generates a library with the parser
  ➢ shared by default
  ➢ static optionally

➢ builds all five frontends
  ➢ `conf`, `mconf`, `nconf`, `qconf`, `gconf`
  ➢ linked to the parser library

➢ builds utilities
  ➢ `diff`, `merge`, `tweak`, `gettext`

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Kconfig-frontends

➢ each frontend optional

➢ utils may be ommitted

➢ frontends and utils prefixed with `kconfig-`

➢ set default behaviour
  - ➢ default options prefix instead of `CONFIG_`
  - ➢ default root menu

➢ builds on Linux, Cygwin, *BSD

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Thank you!

Questions?

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