WHAT IS OPENEMBEDDED?

OpenEmbedded is a tool to build software for embedded devices, covering a broad range from building a single software package up to a complete distribution transferable to your device. OpenEmbedded supports dozens of machines and includes more than 6000 recipes to choose from.

Cross-compiling software has never been so easy!



FEATURE HIGHLIGHTS

MACHINE CONFIGURATIONS define the specifics of a target device or a class of devices. New configurations can easily be derived from existing configurations so you get up and running in no time.

BUILD CLASSES specify commonalities and allow you to concentrate on your software packages rather than having to take care about their buildsystems. We support autotools, qmake, cmake, scons, distutils, setuptools, pkgconfig, and many more.

FLASHABLE IMAGES can be composed out of packages (.ipkg, .opkg, .deb, .rpm, ...) allowing your customers to upgrade the software incrementally. We support common flash file system images such as jffs2, yaffs2, and ubifs, but also a variety of additional convenience formats like ext2fs, and tarballs.

DEPENDENCY TRACKING is automatic and makes sure the generated software packages contain proper dependency information.

FLEXIBILITY TO CUSTOMIZE almost everything from CFLAGS up to shared library naming policies.

QUALITY ASSURANCE is achieved with automated regressions tests at build time and runtime.

COMPATIBILITY CONFIGURATIONS enable package generation for existing distributions such as Maemo, OpenWRT, SharpROM, etc.

PROFESSIONAL SUPPORT is available through dedicated freelancers and companies.

WHAT IS INCLUDED?

Inside the OpenEmbedded metadata repository you'll find recipes to build:

- ★ GCC Toolchains for a variety of target architectures like arm, avr32, mips, ppc, i386, including lots of variants and flavours. Canadian SDKs are supported as well.
- ★ C-libraries: GNU libc, uClibC, eglibc
- ★ The full set of GNU console utilities or all-in-one solutions like busybox, tinylogin, ...
- ★ Wired and wireless networking infrastructure, including Ethernet, USB, WiFi, Bluetooth, ...
- ★ IPC subsystems like dbus, qcop, corba, xmlrpc, ...
- ★ Media streaming frameworks like GStreamer, xine, mplayer, ...
- ★ Display subsystems like DirectFB, X11, SDL, Qtopia, ...
- ★ UI toolkits like EFL, Qt, Gtk+, SWT, ...
- ★ Multiple window managers like Matchbox, XFCE, Enlightenment, ...
- ★ Dozens of tools, productivity and PIM applications
- ★ Programming languages like C, C++, Java, Mono, Perl, Python, Ruby, Vala, ...

WANT TO LEARN MORE?

Point your browser to http://www.openembedded.org. If you need any information or help you can join our IRC channel #oe on irc.freenode.net or one of the mailing lists.

OpenEmbedded is used in many noncommercial and commercial scenarios. Examples include distributions like Ångström, SlugOS, OpenDreambox, Poky, and OpenMoko as well as the award-winning OpenZaurus.