

µCross Certificate

Version 3.0 Demo

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µCross 3.0 Demo – Usage Instructions

About

µCross provides components to create a customized file system for your target device as well as cross development tools to compile and debug software for the same environment. In order to speed up development µCross provides as much as possible as a binary to reduce the need to compile to an absolute minimum.

There are three important components:

1. The filesystem image builder (µTIB): The GUI application to build and assemble and customize your file system.
2. The package feeds: These contain pre-built software for your target device. There is no need to install these since they are provided online.
3. The cross toolchain: It enables you to compile software for your target device.

Apart from these the OEM distribution and the download section (see below) offers additional documentation, examples as well as the sources of all binary packages provided.

Requirements

For installing µCross µTIB and cross toolchain you need a PC running Linux. A virtual machine can be used as well.

µTIB was tested with the following Linux distributions:

- Ubuntu 14.04 (Trusty)
- Debian 8.4 (Jessy)

There are several derivatives of these distributions (e.g. Kubuntu, LMDE, Knoppix, Mint, Xubuntu) which are supposed to work as well but are not tested on a regular base.

You can use both 32 bit (i686) or 64 bit (AMD64) distributions. The latter require to have mutiarch-support installed in order to use the toolchains.

For using this demo release an Internet connection is required. It is possible to download all components for offline use but it is recommended to use the package feeds on the server. You need about 10GB of free disk space at least.

Installation

You can either use the provided install media or download the required files from <http://www.mucross.com/releases/mucross-3.0-demo> using login credentials on the first page of this document. The files on the server get updated with latest changes and bugfixes from time to time.

There are two important components to install: The filesystem building tool µTIB and the cross toolchain.

µTIB Installation

Get the correct package matching the Linux installation of your PC (i386 or amd64) from the *utib* directory (both on the server or install media). The package is installed like this (as root):

```
# apt-get update
# apt-get install bash wget sed fakeroot fakechroot mtd-utils libgtk-3-0 genext2fs
# dpkg -i /path/to/utib/mucross-utib3_3.x_i386.deb
```

Toolchain Installation

The correct toolchain package to use depends on the instruction set of the target device and the desired features of the toolchain. There are several toolchains available supporting multiple different environments (such as Qt4, Qt5 and GTK+). It is possible to install multiple toolchains if required. From the subdirectories choose the correct toolchain architecture:

generic_armv5te: Toolchain for ARMv5TE devices (e.g. ARM9 and ARM11 cores, NXP i.MX2x, Xscale)

generic_armv7a: Toolchain for ARMv7A devices (e.g. TI OMAP 3 and later, TI Sitara, i.MX5 and later).

Below these you can find the installable toolchains in the *sdk* sub directory. These files are self-extracting. In order to run them it might be required to make them executable (`chmod +x <file>`).

Run the toolchain file and follow the instructions of the installer tool.

More Information

For full instructions about installation and usage please check the µCross Manual.

µCross Website: <http://www.mucross.com>

µCross Downloads: <http://mucross.com/releases/mucross-3.0-demo/>

µCross Documentation: <http://mucross.com/releases/mucross-3.0-demo/doc/>

kernel concepts offers various services for supporting your project – just contact us at info@mucross.com or call us at +49 (0) 271 – 77109110.