

ac6 System Workbench for Linux

Build easily your Embedded Linux systems

- A complete graphical, user friendly, Eclipse-based environment**
- Port and install Linux kernel, drivers, modules and bootloader**
- Define your target platform from a predefined set of elements**
- Develop and debug your applications with team support**
- Generate ready-to-deploy images, including your applications**



www.ac6-tools.com

ac6
tools

An intuitive, User-friendly Interface

Include your applications

Build your platform from validated components

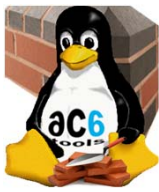
Create your root filesystem

Track build process

The screenshot shows the Eclipse IDE interface for a minimal-platform project. The Project Explorer on the left lists various components like 'all-images', 'busybox', and 'dropbear'. The Packages Tree Editor in the center shows a dependency tree with 'Hello' as the root package, and 'all-images' as a sub-package containing 'busybox', 'dropbear', 'zlib', 'eudev', 'gperf', 'expat', 'file-native', 'file', 'gdb', 'gettext', and 'gmp'. The task list on the right shows the build process progress, with 'make depend' highlighted in orange. The console at the bottom shows the build steps for the minimal-platform_0.0.11.

Package Name	Version	Lang	Type	Source location
Hello	0.1	C	CDT Executa	/home/demo/SW4L/Demo/Hello
all-images				
busybox	1.24.1	C	Makefile	http://www.busybox.net/downloads/busybox
dropbear	2016.74	C	Autotools	http://matt.ucc.asn.au/dropbear/releases/d
zlib	1.2.8	C	Makefile	http://downloads.sourceforge.net/libpng/z
eudev	3.2	C	Autotools	https://github.com/gentoo/eudev/archive/
gperf	3.1	C	Autotools	http://ftp.gnu.org/pub/gnu/gperf/gperf-3.1
expat	2.2.0	C	Autotools	http://downloads.sourceforge.net/expat/e
file-native	5.28	C	Autotools	ftp://ftp.astron.com/pub/file/file-5.28.tar.g
file	5.28	C	Autotools	ftp://ftp.astron.com/pub/file/file-5.28.tar.g
gdb	7.11.1	C	Autotools	http://ftp.gnu.org/gnu/gdb/gdb-7.11.1.tar.
gettext	0.19.8.1	C	Autotools	http://ftp.gnu.org/gnu/gettext/gettext-0.1
gmp	6.1.1	C	Autotools	https://gmplib.org/download/gmp/gmp-6.1

Task	Status
gmp	Already
make depend	Already
libusb1	Already
platform-toolset	Already
eudev	Already
zlib	Already
openssl	Already
tslib	Already
qt	Executi
Fetch	Already
Import	Already
Copy Resources	Already
Apply Patches	Already
Configure	Done
Compile	Executi
Install	
Split	
Populate sysroot	
Build	



www.ac6-tools.com

ac6
tools



User-Friendly Flexibility

Define dependencies

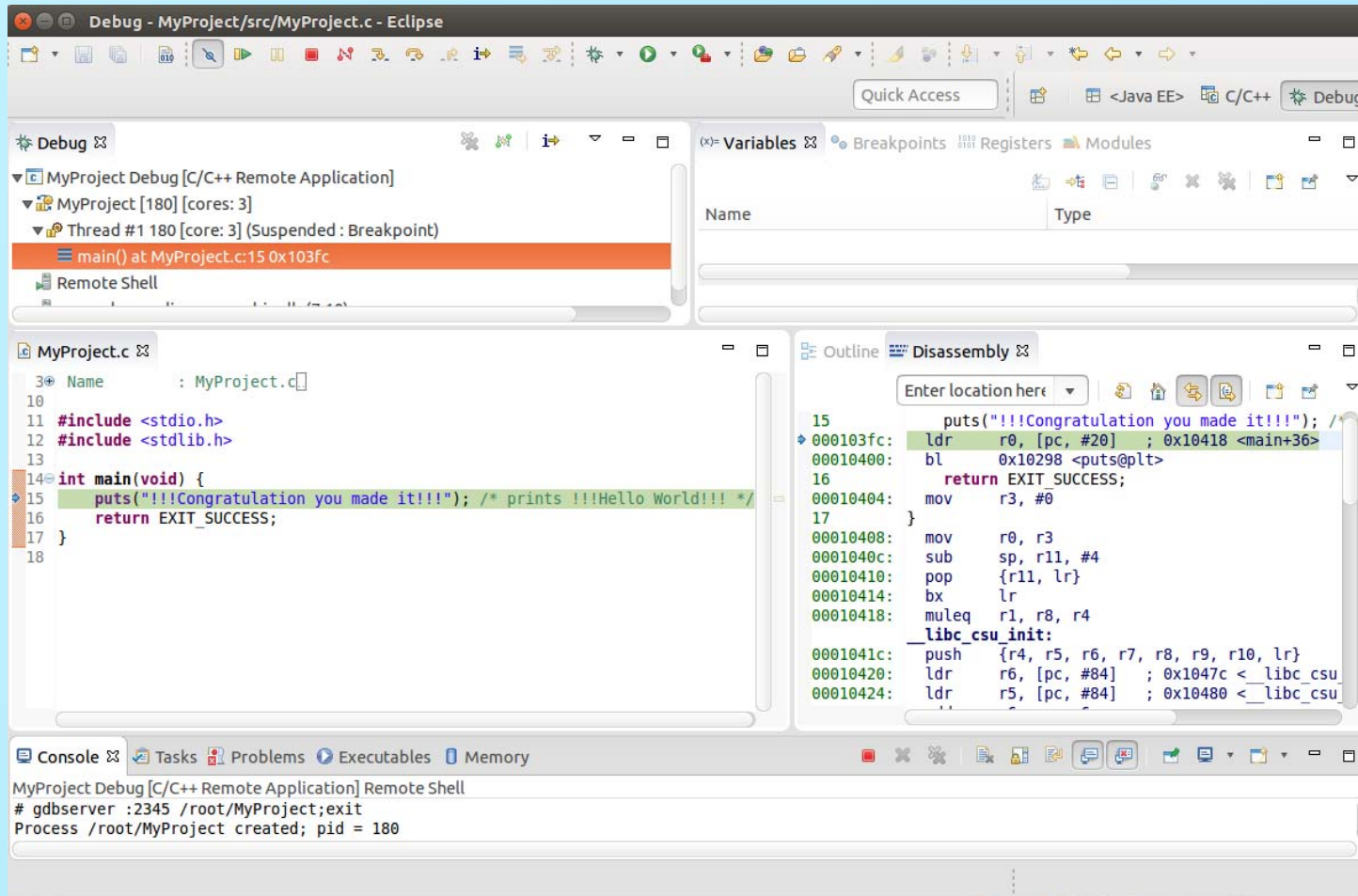
Control build

Define configuration settings

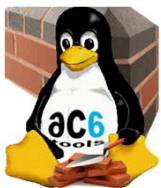
The screenshot shows the 'Properties for strace' dialog box with the 'Build Steps' tab selected. The left sidebar contains a tree view of build tasks. The main area displays a table of tasks with columns for 'Task name' and 'Last date'. An 'Edit task' dialog is open, allowing configuration of the 'Shell' task. The dialog includes fields for 'Name' and 'Description', and checkboxes for 'Always run (even if done before)' and 'Disable parallele build'. Buttons for 'Cancel' and 'OK' are at the bottom of the dialog.



Develop applications with the same tool



The screenshot shows the Eclipse IDE interface for debugging a C application. The main editor displays the source code of `MyProject.c`, which includes `<stdio.h>` and `<stdlib.h>`, and contains a `main` function that prints a congratulatory message and "Hello World". The `main` function is currently suspended at a breakpoint on line 15. The `Disassembly` view on the right shows the assembly instructions for the current line, including `ldr r0, [pc, #20]` and `bl 0x10298 <puts@plt>`. The `Console` view at the bottom shows the output of the program: `MyProject Debug [C/C++ Remote Application] Remote Shell`, `# gdbserver :2345 /root/MyProject;exit`, and `Process /root/MyProject created; pid = 180`.

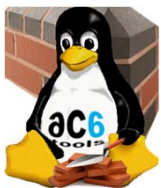


www.ac6-tools.com

ac6
tools

Build reproducibility

- All configuration information is centralized
 - In the Platform project for package configuration
 - In the Rootfs project for image content
- All project can be managed under SCMS
 - Eclipse supports all major SCMS (git, svn, mercurial, ...)
- You can always reproduce a previous build
 - For maintenance
 - For back-porting evolutions



www.ac6-tools.com

ac6
tools

A complete service and product offer

- **ac6** is renowned tool developer
 - Development tools for STM32 Microcontrollers
 - System Workbench for Linux with System Workbench for STM32 provides full support of the STM32MP1 SoC
 - Expertise and support for Yocto, Android...
- **ac6**-training provides trainings on
 - Processors (ARM cores and SoCs)
 - Busses and communications (PCIe, USB-3.0...)
 - Linux (embedded Linux, Yocto, drivers...)
 - Android (Industrial use, Internals, Programming...)
 - RTOSes (FreeRTOS, RTX...)



www.ac6-tools.com

ac6
tools