

Software Tool Chain Getting Started

1 Install Tool Chain

1.1 Tool Chain: Sourcery CodeBench Lite ARM EABI Release

1.1.1 <http://www.mentor.com/embedded-software/sourcery-tools/sourcery-codebench/editions/lite-edition/>

1.1.2 Configure the environment to add the path of the tool chain

1.1.2.1 After installing tool chain, a new path will be added to Windows Environment i.e. Sourcery_CodeBench_Lite_for_ARM_EABI\bin

1.1.2.2 Restart the computer to make the new environment effective

1.1.3 Test the installation

1.1.3.1 To test if the tool chain is successfully installed, you can type following command under MS-DOS prompt



```
命令提示字元
Microsoft Windows [版本 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Ying>arm-none-eabi-gcc --version
arm-none-eabi-gcc (Sourcery CodeBench Lite 2012.09-63) 4.7.2
Copyright (C) 2012 Free Software Foundation, Inc.
This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
```

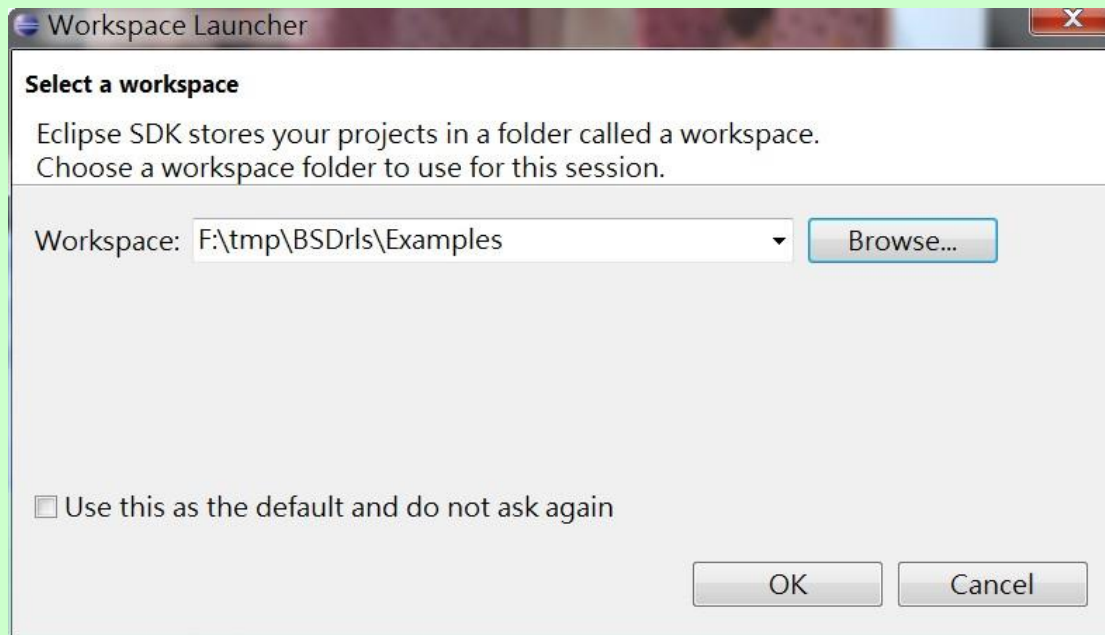
1.2 Install eclipse IDE

1.2.1 The eclipse IDE is available at <http://www.eclipse.org/downloads/>

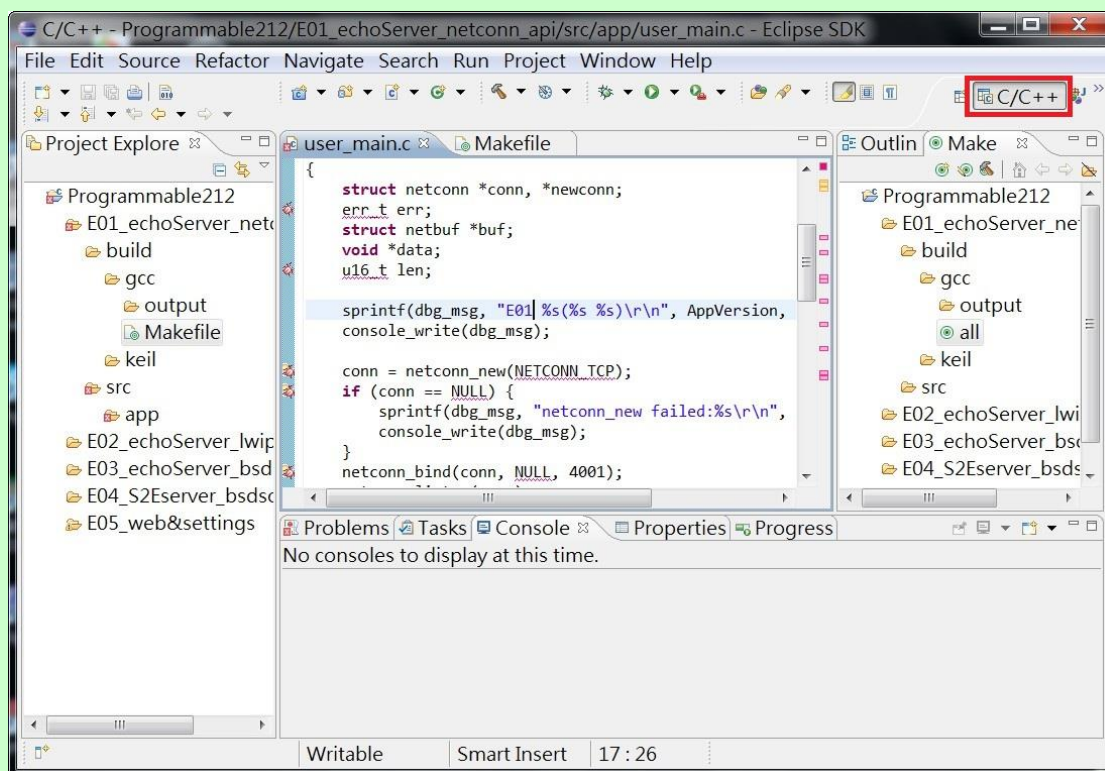
1.2.2 You need to install C/C++ cross compiler

2 Start compiling example program

2.1 Run eclipse and select a workspace: BSDrIs\Examples . You can find the path of the example program at the CD with path: BSDrIs\Examples



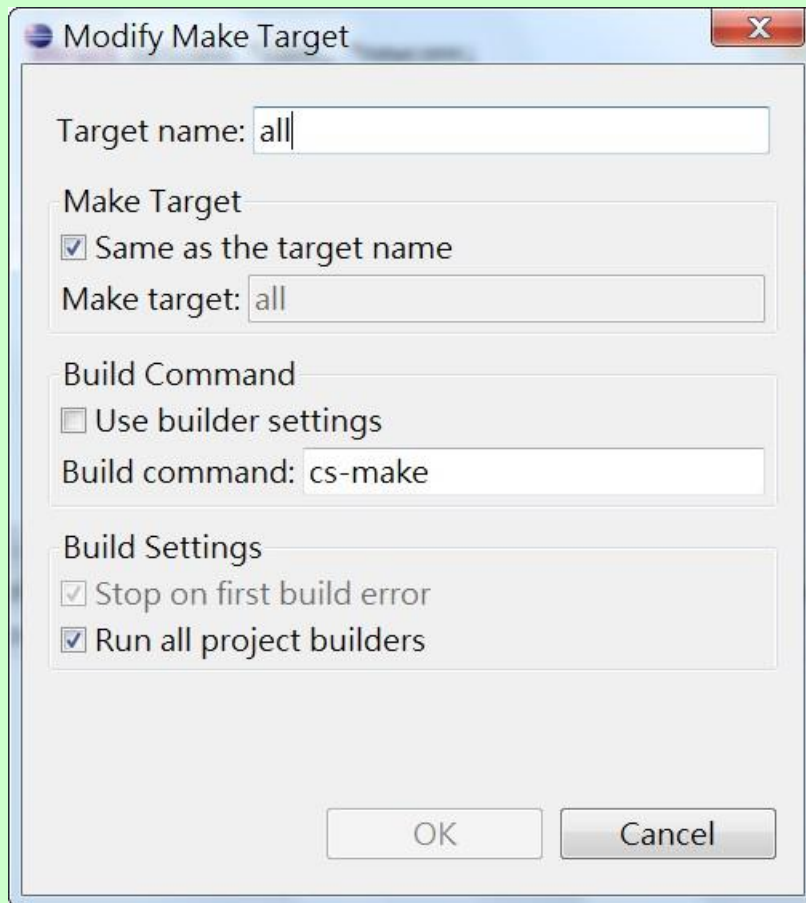
2.2 Workbench



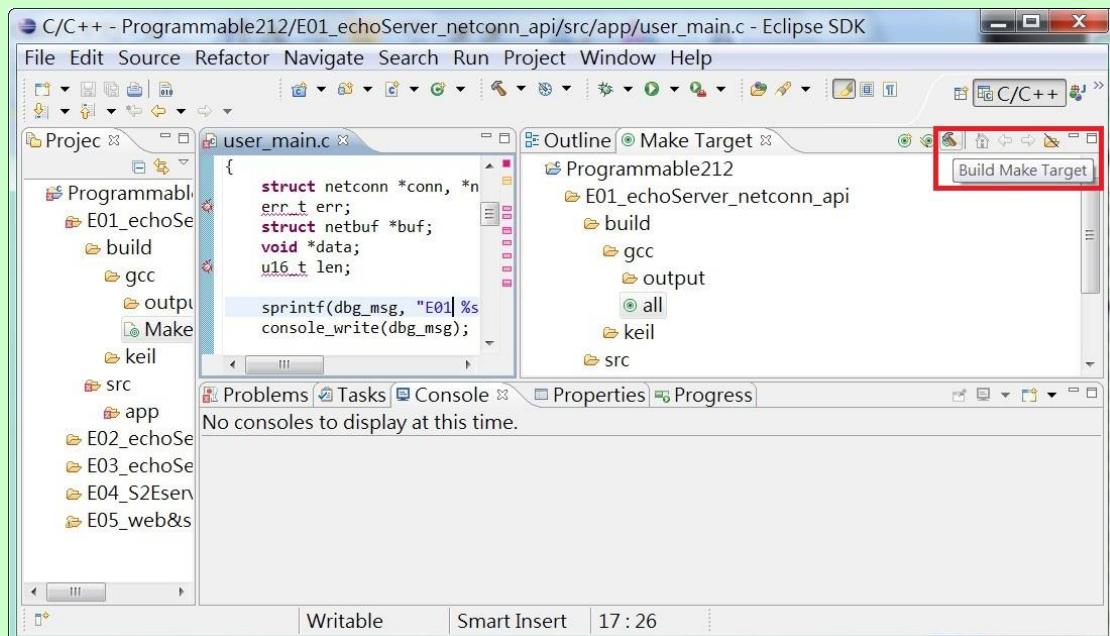
2.2.1 C/C++ will show at the upper right corner

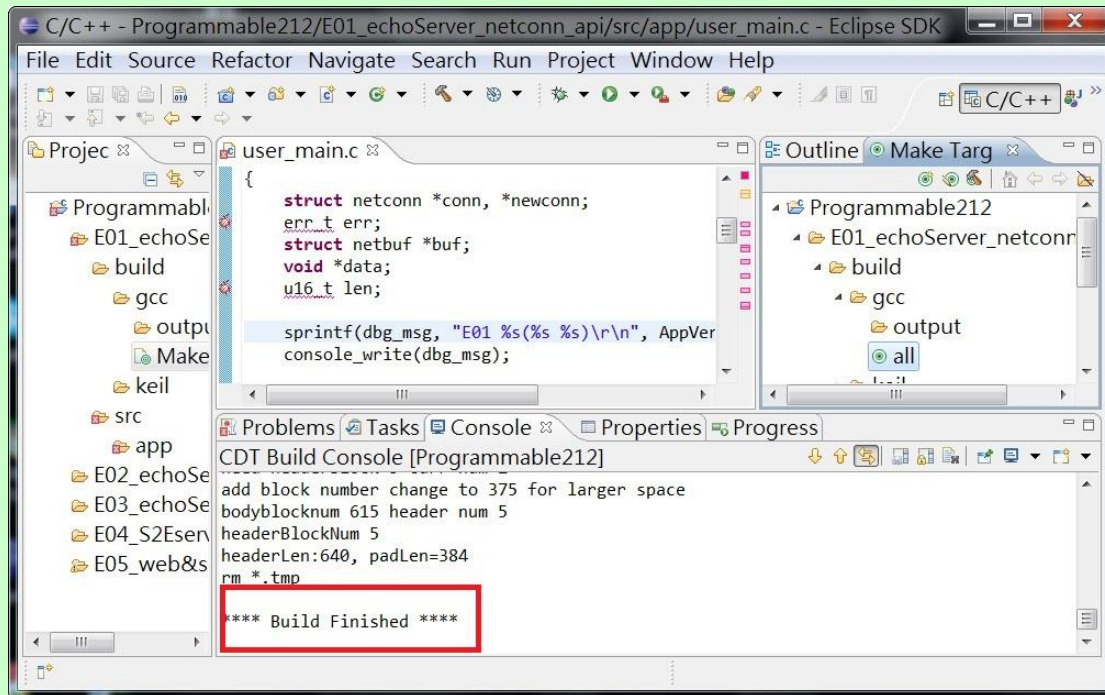
2.2.2 All the example program comes with Makefile. You can use the Makefile to compile these programs

2.2.2.1 Use Modify Make Target to edit the



2.2.3 Build Make Target means eclipse will use Makefile setting to compile the program to target

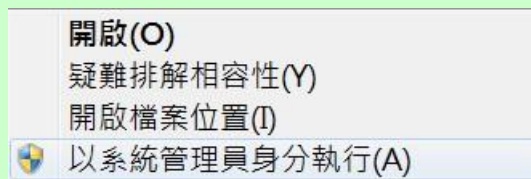




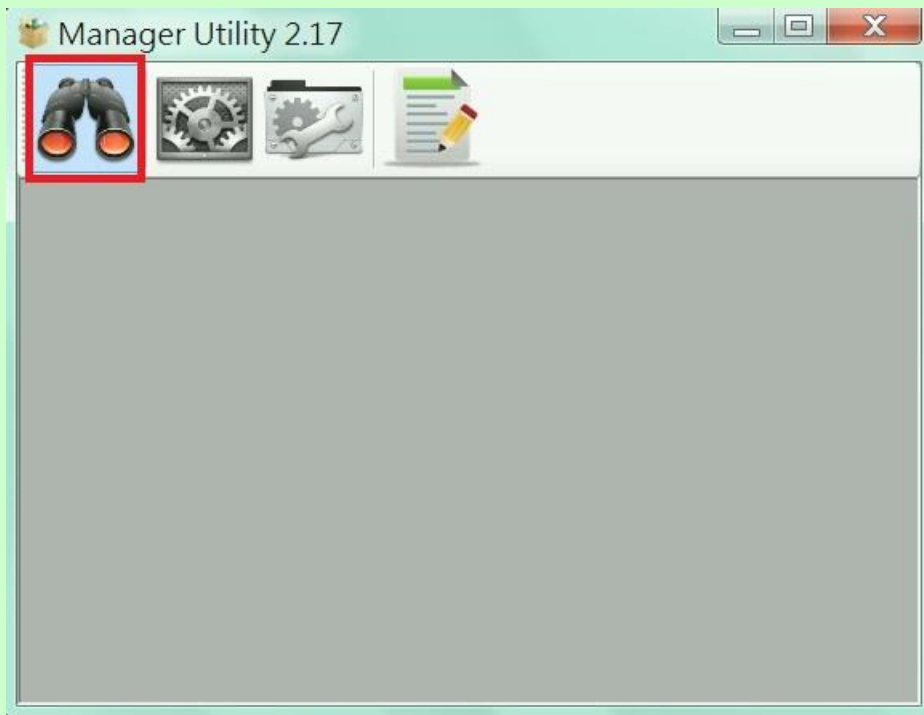
2.2.4 Once Build Finished, you will find target execution file ***user_main.aff*** is generated and available at `E01_echoServer_netconn_api\build\gcc\output`

3 Upload Binary File to Device

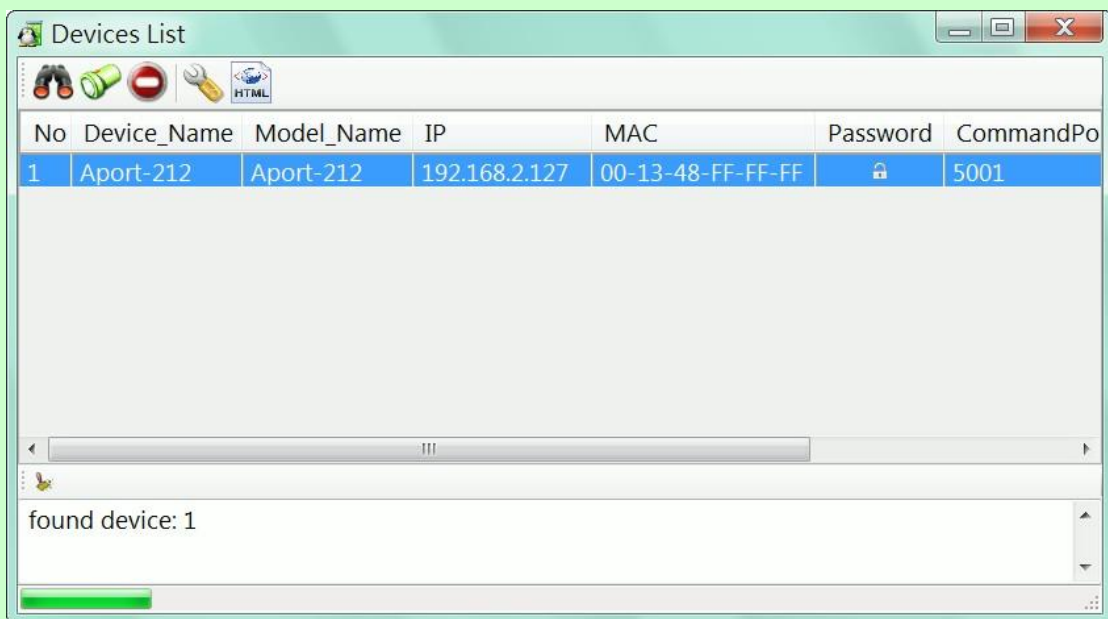
3.1 Change to Administrator login before running ManagerUtility



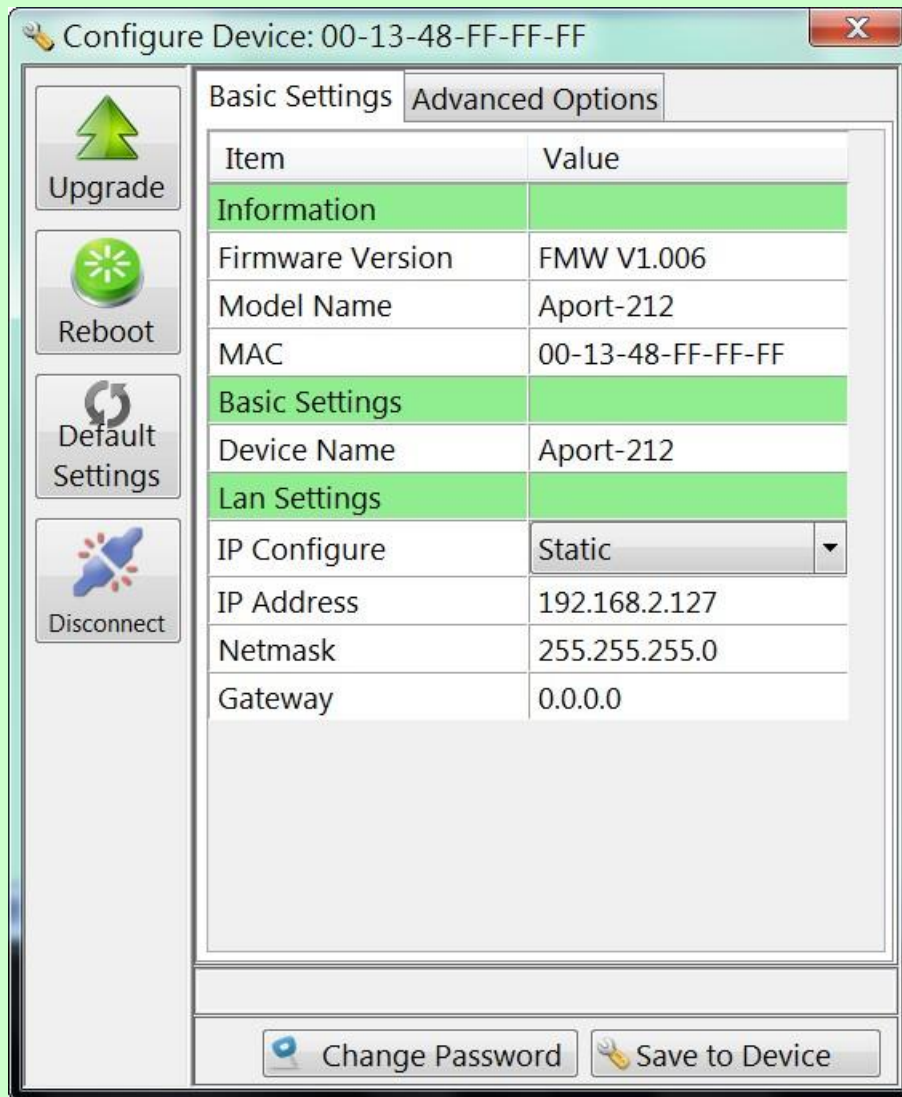
3.2 Search device



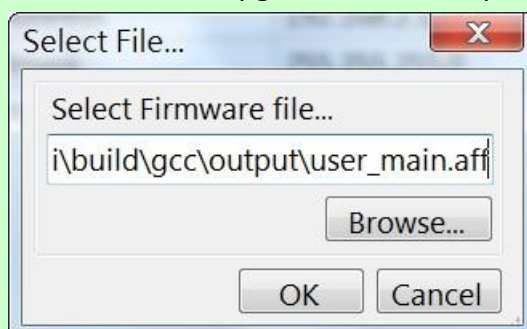
3.3 Click the search icon to discover the devices



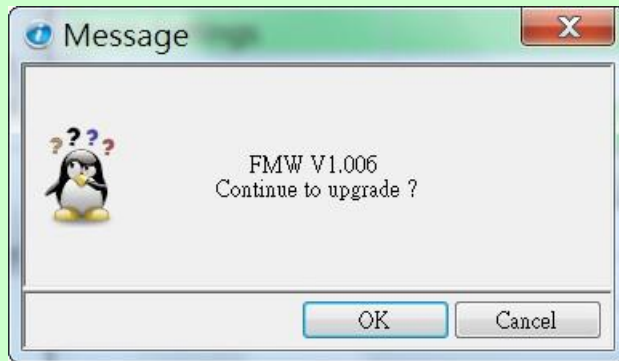
3.4 Click the device to configure its settings



3.5 Click Upgrade button to upload the binary file *user_main.aff*



3.6 Before upload, A double check window will appear to ensure the kernel version is the right one to upload



3.7 Once completed, the device will reboot



3.8 Connecting the Serial Console

3.8.1 Serial console settings is 115200, N81, ANSI(Terminal type)

3.8.2 The serial console shows system and debug message

3.8.3 User can show the debug message by using *console_write* function

