Quick Start Guide

This document presents how to use the program of the project Web-server WiFi on RX63N with the Gr-Sakura card and the Redpine WiFi module.

Author : Florent MONTES

Contact : florent.montes@etudiant.univ-bpclermont.fr

RENESAS

Run the program on e2studio

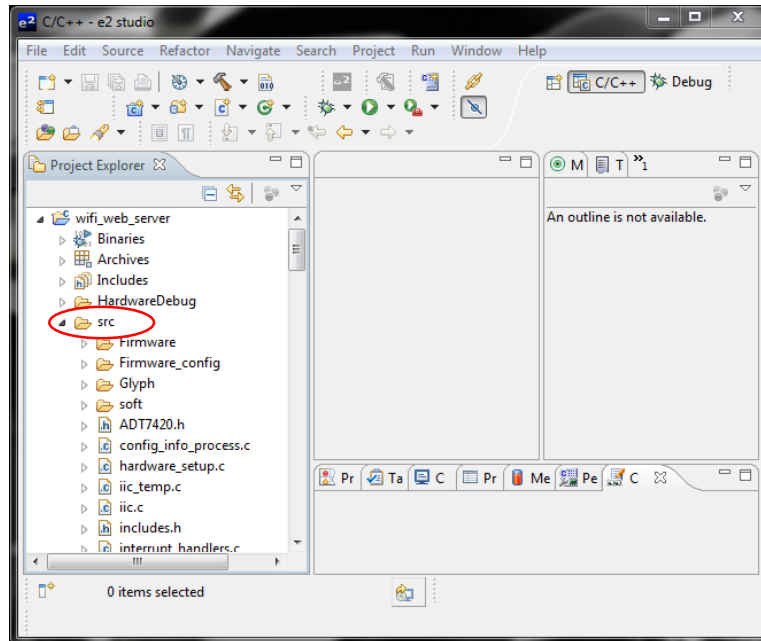Open with e2studio the project wifi_web_server :

Figure 1: open the project

In the src file you will find all the project files (figure 1):

Wifi_web_server.c : main program of the project.

Webserveur.c : this file contains the main program of the Web server.

Webserver_data.c : this file contains the table of the error page 404.

Page_perso.c : this file is in the soft folder. It contains all the pages of the web-server, you can fine more information in the third part of this user guide.

Rsi_config.h : this file is use to configure all the define parameters of the wifi.

You can find the documentation of the rsi_xxxxx file in the documentation folder of the Redpine module.

To run the program you must be in debug mode, use the E1 debugger to connect the Gr-sakura card. Be careful if you use an external alimentation you must change "power target from emulator" in NO (figure 2).
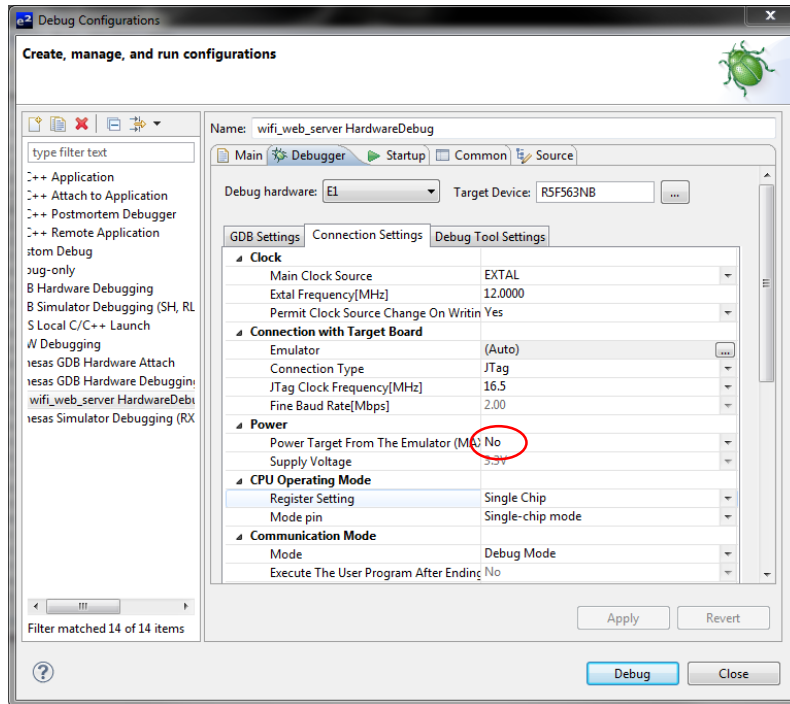
POLYTECH®
CLERMONT-FERRAND

Figure 2: debug configurations

Connect the Gr-Sakura card on an open WiFi network

After the configuration you can compile the program and start in debug mode. If an open wireless network is available, Gr-Sakura card will automatically connect to this network. When the connection is done the green led of the adaptation card is on. Now you can fine the Ip address in the variable **ipadrs** (figure 3). Now you can connect to the web server by the IP address of it in your web browser.
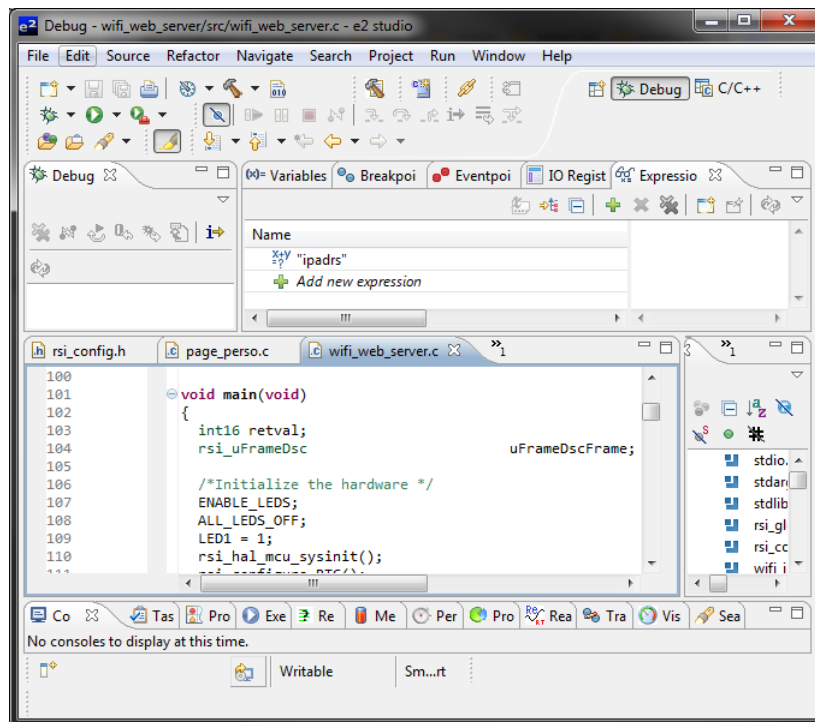

Figure 3: Ip address

POLYTECH
CLERMONT-FERRAND

Change the Web page of the server

The web page of the web-server are in the **page_perso.c** file. This file is an automatically generated file. To change or modify this file you must use the **http_convert.exe** program in the soft folder (figure 4).
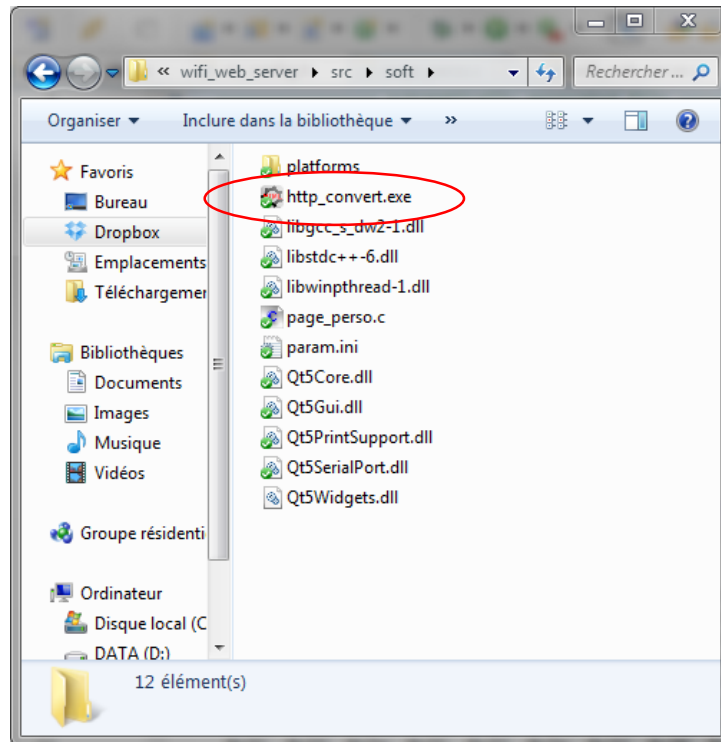

Figure 4: http_convert.exe

To import your own pages open **http_convert.exe**, select your page folder and click on generate. Be careful, the software convert all files in the folder (figure5).

After generation of **page_perso.c** return on e2studio and compile the program again. Careful the total weight of your pages should not exceed 500 kb, you may encounter problems with the memory space of the microcontroller if the size exceeds.

Note about web page:

CSS should be included in the header of your web pages, because the currently web server does not support CSS separate files.
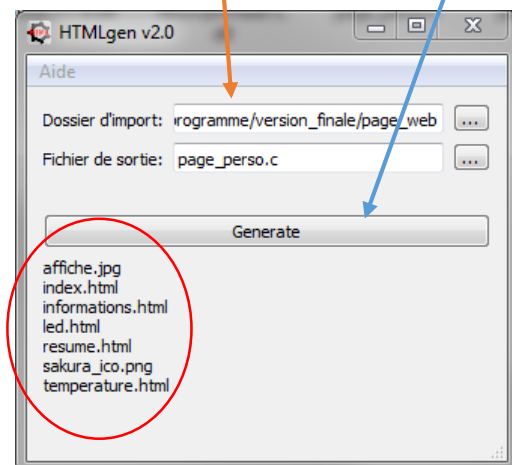

Figure 5:generate page_perso.c

POLYTECH
CLERMONT-FERRAND