MacEditor User Guide

Introduction

MacEditor, MAC address editor, is a powerful tool used to change ethernet address in the firmware on a PLX/Oxford NAS board. To differ from other competitors' tools, MacEditor changes MAC addresses through ethernet without any other devices such as RS232 interfered. It is very useful especially in manufacturing

Further Reference

- Python – http://www.python.org
- wxPython – http://www.wxpython.org

Building MacEditor

Running MacEditor

MacEditor is written in Python which means it is a portable program and can be run on Windows, MacOS, and Linux platforms. Generally, MacEditor can be run directly on a shell by using

> *# python MacEditor.py*   *(Linux/MacOS)*

And

> *C:\Python2.X\python.exe MacEditor.py*   *(Windows)*

MacEditor calls wxPython library to present its user interface, which means Python and wxPython should be installed on the system before running MacEditor. Most Linux distributions and MacOS contain Python and wxPython as built-in development tools. However, it takes extra installation effort of Python and wxPython running on Windows platforms.

Packing Python version of MacEditor to executables

To build MacEditor as a Linux executable is very easy as shown as the following steps:
1. Edit "build.conf" in the "*src*" directory of PLX/Oxford SDK.
2. Make sure "MacEditor" in the list of "OXAPPS"
3. Build SDK

Or

Go to the directory of MacEditor in "*src/oxford/maceditor*" and type "*make; make install*". The Linux executable will be copied to the "*output*" directory of SDK.

To build MacEditor as Windows and MacOS executables are also easy. Just copy the source of MacEditor to a Windows or MacOS machine. Be sure that all the tools has been installed in the building machine.

For MacOS, run

> *BuildMacApp.sh*

For Windows, run

> *BuildWinExe.bat C:\PythonXX\python.exe*

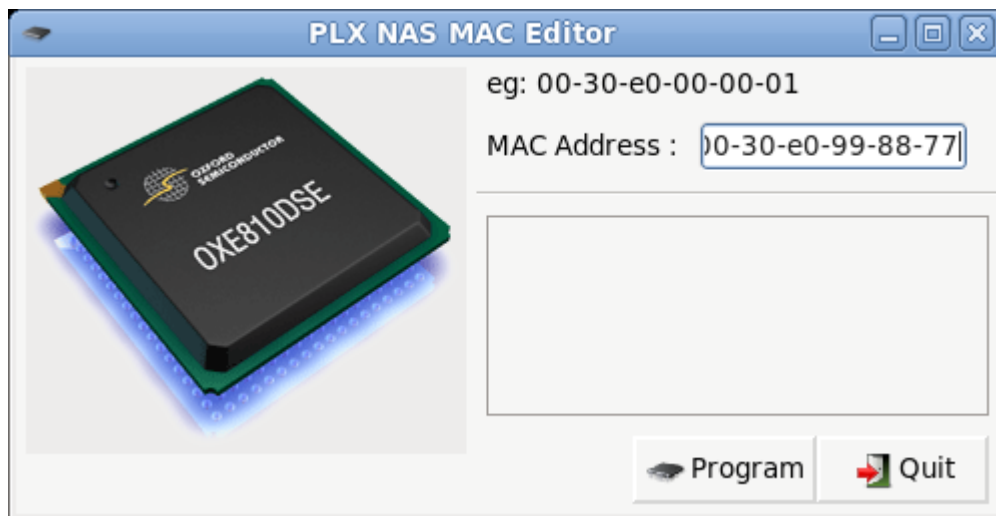, where PythonXX is the directory of the python installed in your building machine.

To build executables running on MacOS, "*py2app*" should be installed in advance. Similarly, "*py2exe*" should be installed in advance for Windows. For further information, please visit:

> py2app: http://svn.pythonmac.org/py2app/py2app/trunk/doc/index.html
> py2exe: http://www.py2exe.org/

Using MacEditor

Screen Shot

To use MacEditor, make sure that you have connected the machine running on MacEditor to the PLX/Oxford NAS board. Turn on the power with PROG button pressed until the PROG LED is lit. Type MAC address you want to program with in the input area and press "Program". MacEditor will then show the result in the bottom message area.

PROG Button: Can be configured in build.conf with default value "32" (GPIO-32)
PROG LED: GPIO-34

MacEditor communicats with PLX/Oxford NAS board via broadcast. This is why it can be used easily without configuration. However, some of operating systems may have firewall turned on by

default which may block broadcast packets. Check the firewall settings before using MacEditor to change MAC addresses.