Configuration of the ScanLag process for unix

Overview

The ScanLag process in the Unix environment rely on the SANE platform, the Unix UDev mechanism and a driver for the Epson scanners (since they are not supported by SANE).
The main steps of the configuration are:
1) Installing SANE.
2) Install the `epkowa` driver for the Epson scanners.
3) Configure the scanners names using the UDev mechanism.

Step 1 - Installing SANE

You need to download and install the SANE platform from this site.
SANE should recognize the scanners using <sane-find-scanner> but not with <scanimage -L>.

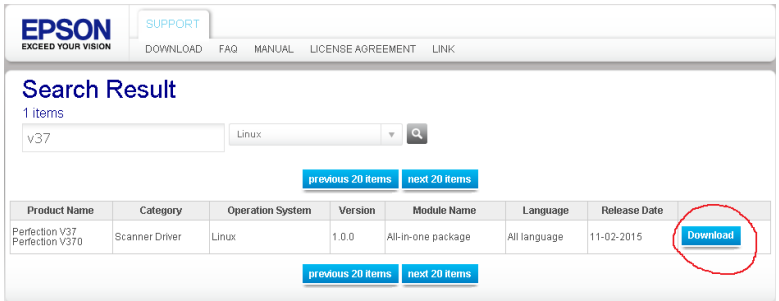
Step 2 - Drivers for the Epson scanners

SANE doesn't support the Epson v37 scanners so a special driver need to be downloaded, installed and configured so SANE will recognize it. The driver can be found in this site.

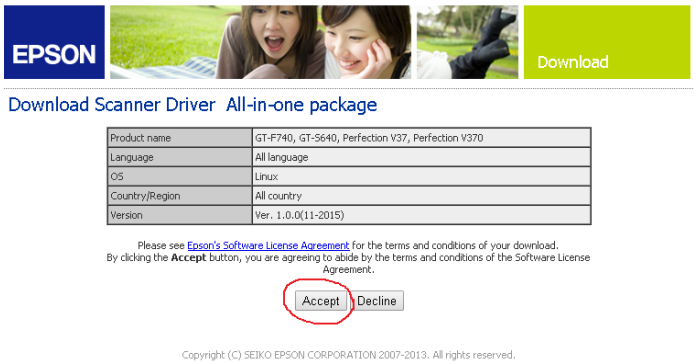
- feel the relevant data, that is "v37" in the product name field and "Linux" in the operating system.

After pressing the search button one result should be returned.

- Press the download button:



- Press "Accept":



- choose "Package Download Page"

- Choose the relevant installation and install the driver.

After installing the driver insert the word "epkowa" to the file `usr/local/etc/sane.d/dll.conf`.

Now the <scanimage -L> command should recognize the epson 37 scanners. In our computer this was not the case. Using the `SANE_DEBUG_DLL=128 scanimage -L` command revealed that the drivers-loader searches the drivers in the `/usr/local/lib/sane` directory, and in they actually where in `usr/lib/sane` (copy-paste/symlink should solve the problem).

Step 3 - Scanners names

We need to create consistent names for the scanners in order to have no changes while an experiment is going on. This is done by using the Unix's Udev mechanism. An explanation about this mechanism can be found here.
We will create a rule file instructing the mechanism to create for eaqch connected scanner a symlink with its usb port number. Our rules are written in the files 10-NQB.rules, 40-saned.rules which are located in the `/etc/udev/rules.d` directory. The purpose of these two groups of rules is to create symlinks with consistent names to the scanners and to relate these symlinks to the group "saned". The current user should be related to these group too, this can be done using the command `usermod -aG groupname username`