

CITIZEN CUPS Driver Guide

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Introduction

CUPS (Common Unix Printing System) becomes standard of printing systems on Linux.

The target reader of this document is expert of Linux. If you do not understand what this document tries to explain, please leave the installation/setting to the experts.

The target OS of this document is the one supporting CUPS and RPM and those function should work properly.

The explanation of this document are tested in the environment of

Fedora14

Kernel Linux2.6.35.6-45.fc14.i686

GNOME 2.32.0

CUPS1.4.4

Firefox 3.6.10

Printer CT-S801 (USB) / CT-S651 (Serial)

If there is environmental difference from above, it is necessary to read this document taking the difference into the consideration.

“DEB” package file converted from RPM file by “alien” is also available.

As the installation steps for the Debian based distribution like Ubuntu are close to the explanation of RPM file.

Please refer to this document for the installation with DEB package file as well.

(Exception: Explanation for command line is added for DEB file.)

If supplied RPM or DEB files are not suitable for your environment, source code of the driver is available at <http://www.citizen-systems.co.jp/support/download/printer/driver/cups/>

It is necessary to compile and install the driver at user side. Simple instruction is available at the site.

1. Steps of CUPS driver installation

CUPS driver installation using RPM package file takes following 2 steps.

Step1: RPM file installation (Explanation in section2)

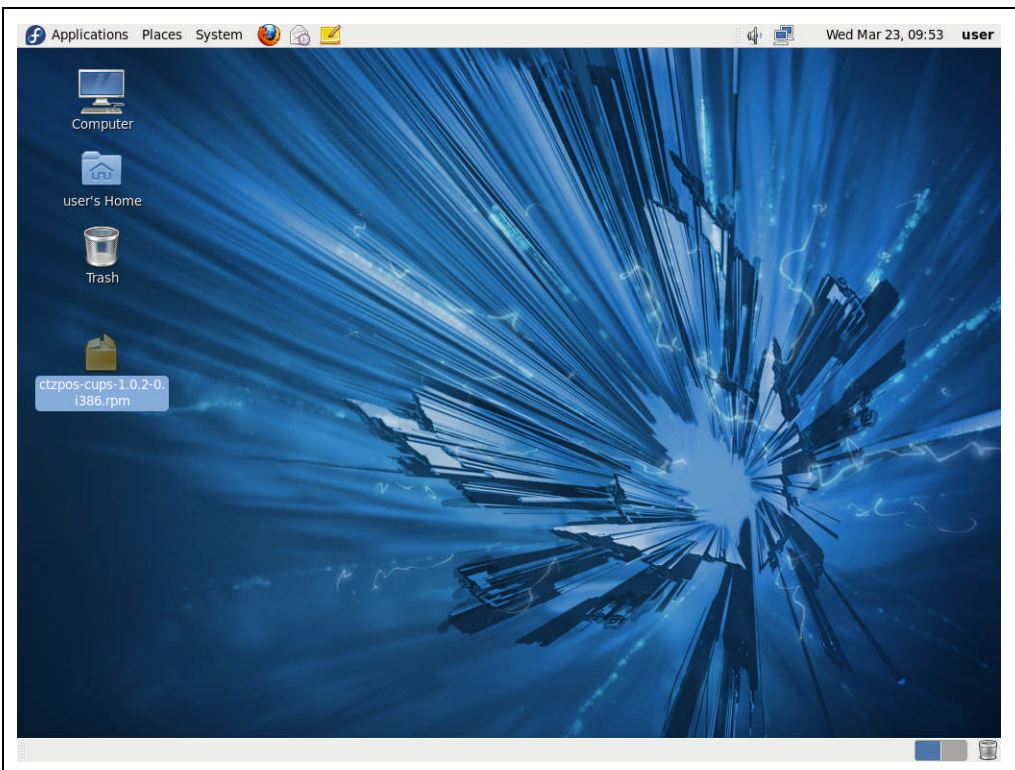
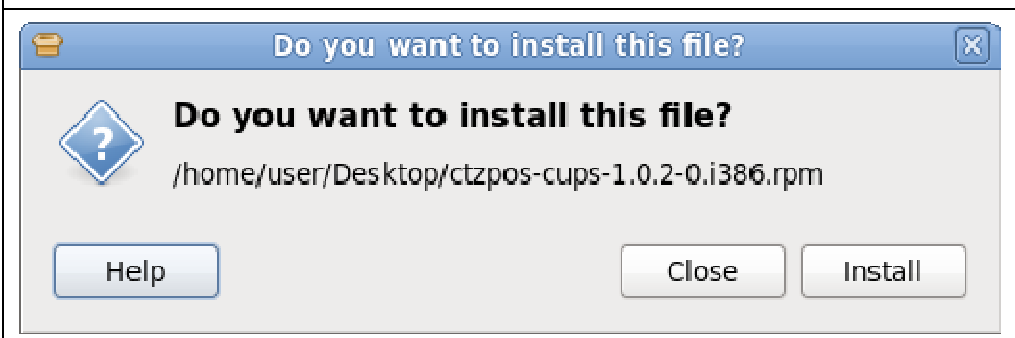
Step2: Adding printer to CUPS (Explanation in section3)


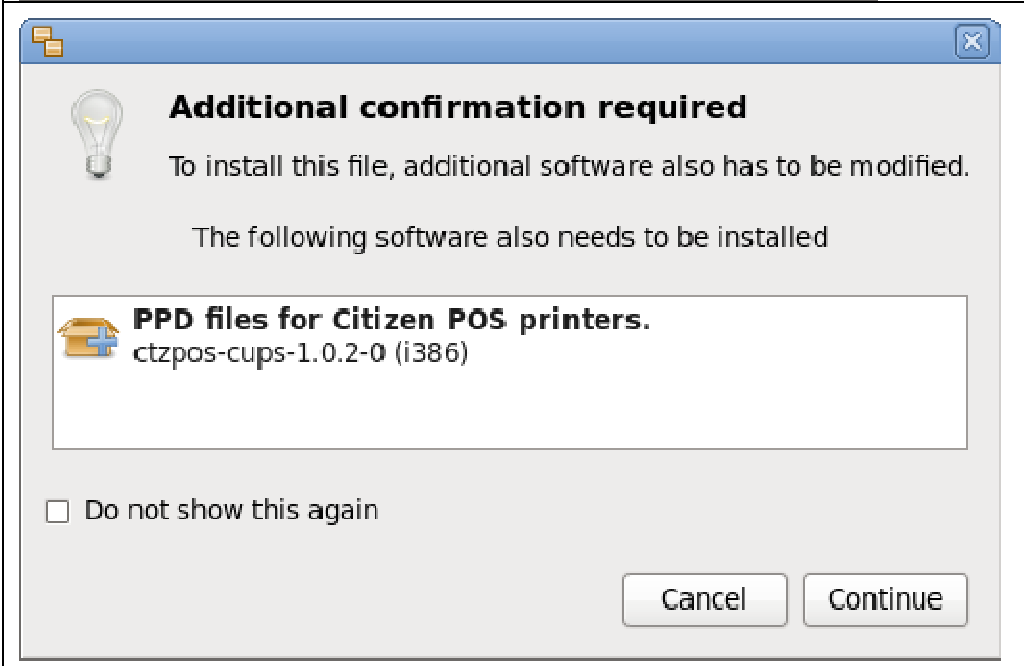
2. RPM file installation

By this installation job, files (PPD=definition file and filter file) in the package are copied and the permission of copied files is changed.

The RPM file installation can be done either on GUI or command line (terminal).

2.1 RPM file installation on GUI

 A screenshot of a Linux desktop environment. The desktop background is a blue abstract image with light rays. On the left side, there are icons for 'Computer', 'user's Home', 'Trash', and a file named 'ctzpos-cups-1.0.2-0.i386.rpm'. The top panel shows 'Applications', 'Places', 'System', and the date 'Wed Mar 23, 09:53'.	<p>Double-click RPM file. It is not mandatory to put the RPM file on the desktop like left picture.</p>
 A dialog box titled 'Do you want to install this file?'. It contains a question mark icon, the text 'Do you want to install this file?', and the file path '/home/user/Desktop/ctzpos-cups-1.0.2-0.i386.rpm'. At the bottom, there are three buttons: 'Help', 'Close', and 'Install'.	<p>When the message like left picture comes up, press "Install" button.</p>

 <p>The screenshot shows a dialog box titled "Authenticate". It features a key icon and the text: "Authentication is required to install an untrusted package". Below this, it states: "An application is attempting to perform an action that requires privileges. Authentication as the super user is required to perform this action." There is a text input field labeled "Password for root:". At the bottom, there are "Cancel" and "Authenticate" buttons, and a "Details" link with a right-pointing arrow.</p>	<p>When password for root is required, please enter the root password.</p>
 <p>The screenshot shows a dialog box titled "Additional confirmation required". It features a lightbulb icon and the text: "To install this file, additional software also has to be modified." Below this, it states: "The following software also needs to be installed". A list box contains the entry: "PPD files for Citizen POS printers. ctzpos-cups-1.0.2-0 (i386)". At the bottom, there is a checkbox labeled "Do not show this again" and "Cancel" and "Continue" buttons.</p>	<p>When you see the message like left picture, press "Continue" button. This will finish the ROM file installation.</p>

2.2 RPM file installation on command line

Enable the root privileges by "su" command.

Move to the directory where the RPM file is located.

Run "rpm" command with "-i" option and file name.

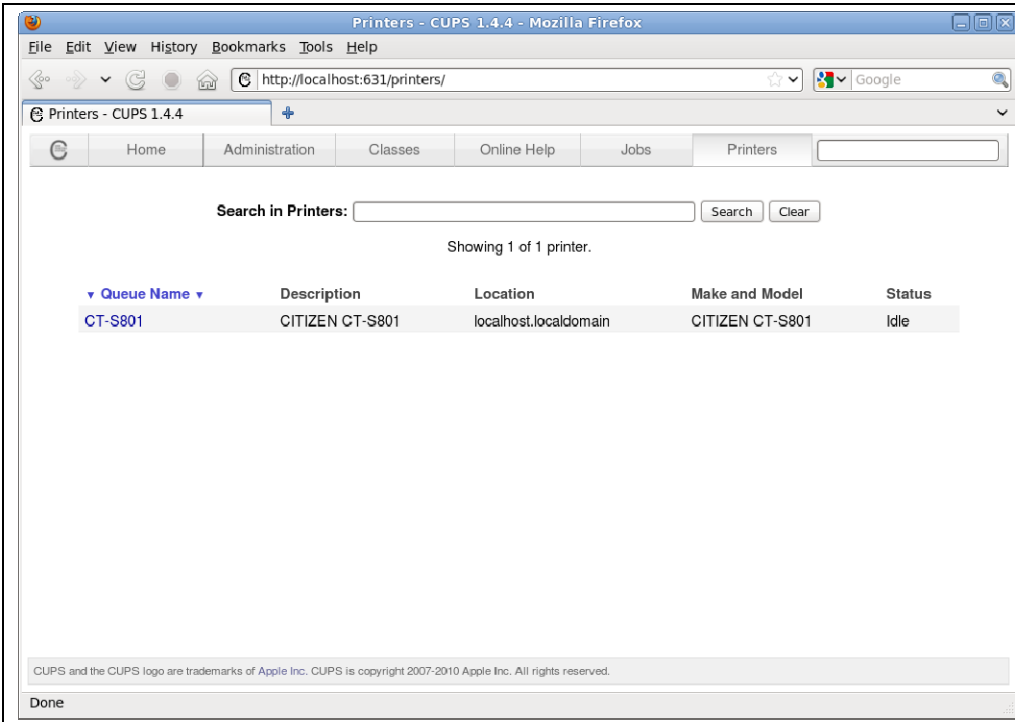
Example: rpm -i ctzpos-cups-1.0.2-0.i386.rpm

(For the DEB package file of Debian based distribution, use the dpkg command with "-i" option and file name.)

3. Adding printer to CUPS

3.1 Automatic installation

After the RPM file installation is done, if the plug & Play function is effective for USB/parallel interface, printer driver is automatically added to CUPS by connecting USB/Parallel interface printer.

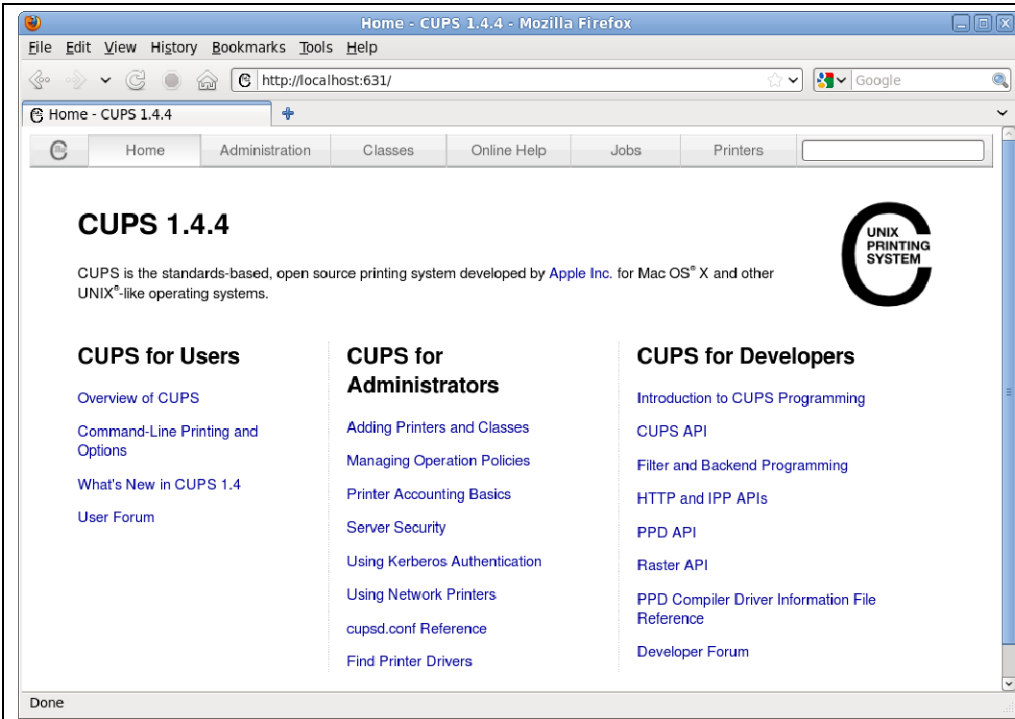


Installed driver can be found on the "Printers" tab.

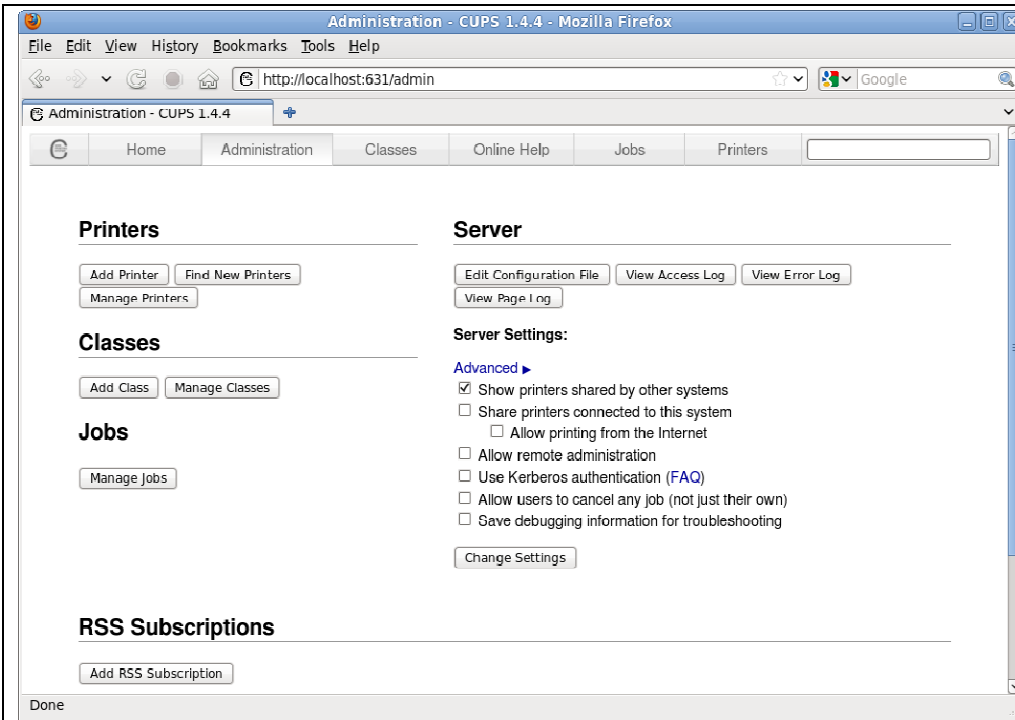
3.2 Manual installation

This example shows the steps to install driver of CT-S651 connected via serial port.

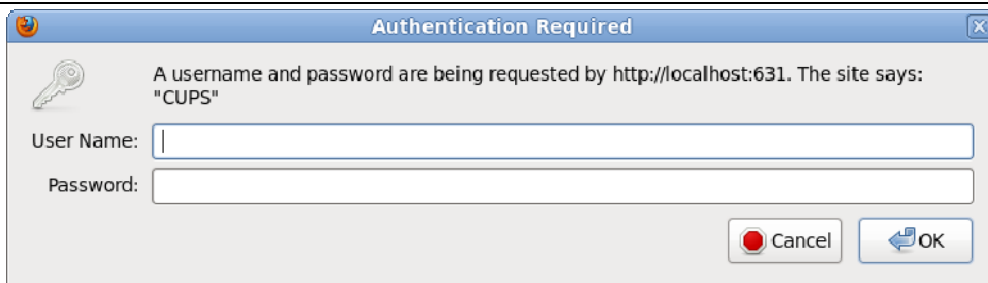
On the browser, navigate to <http://localhost:631>. This is the home page of CUPS.



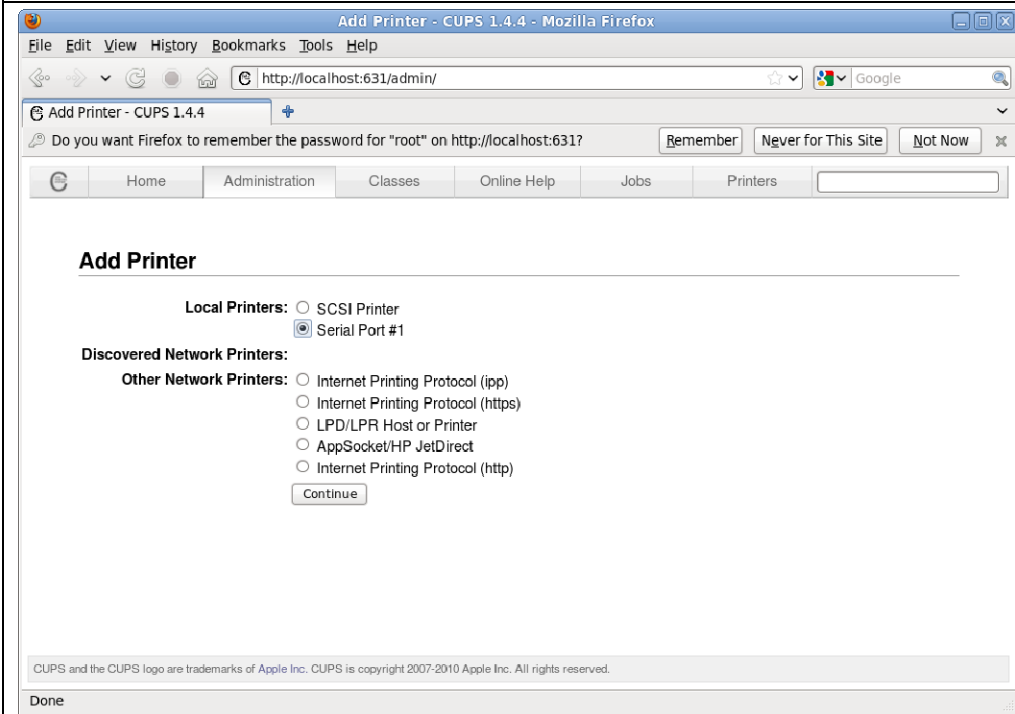
Choose "Administration" tab or click the link of "Adding Printers and Classes"



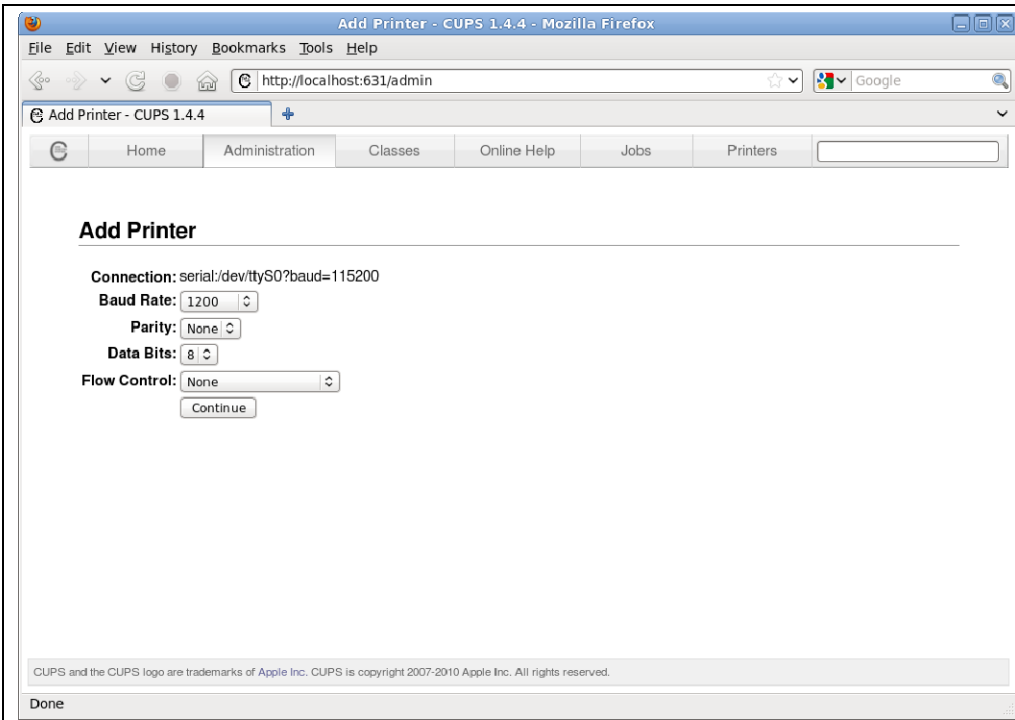
Press "Add Printer" button.



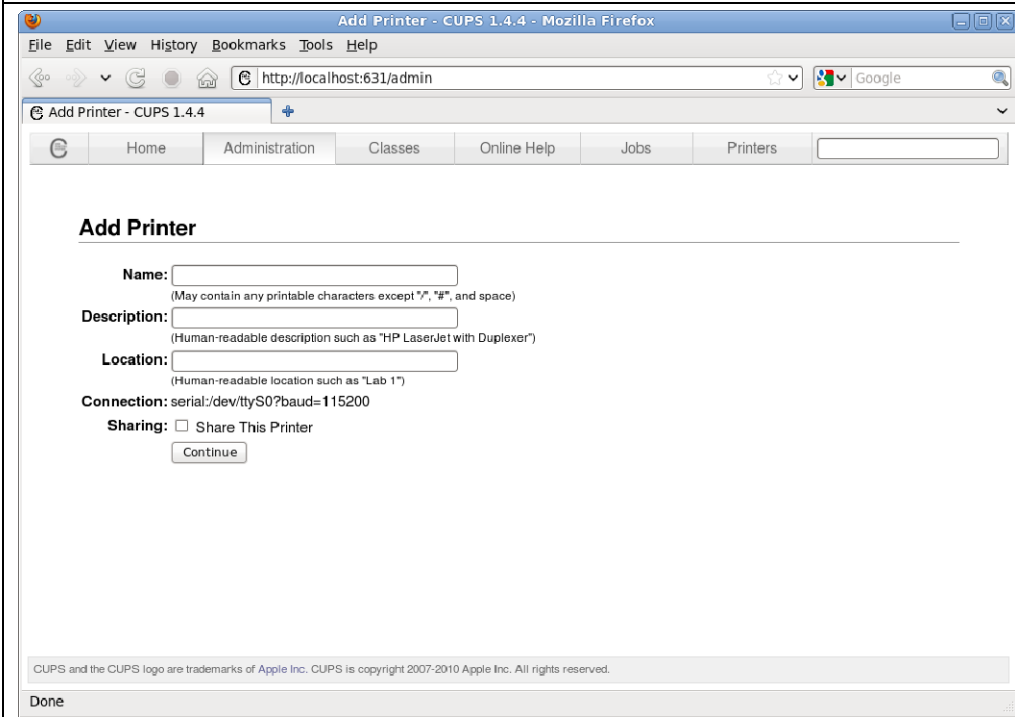
If user name & password is required, please enter the user name and password of the administrator.



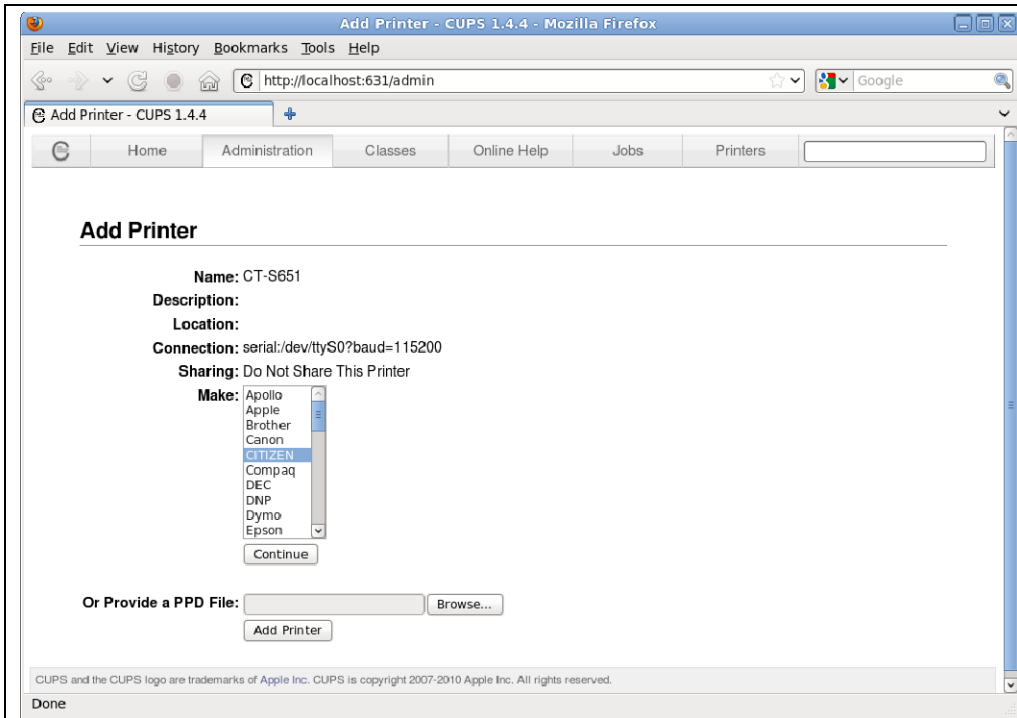
If the serial port to connect the printer is shown in the port list, choose the port (Ex. Serial Port #1) and press "Continue".



When serial port setting menu is shown, choose the setting to match the serial port of the connected printer. (Serial port setting of the printer can be checked by self printing.) Press "Continue" button.

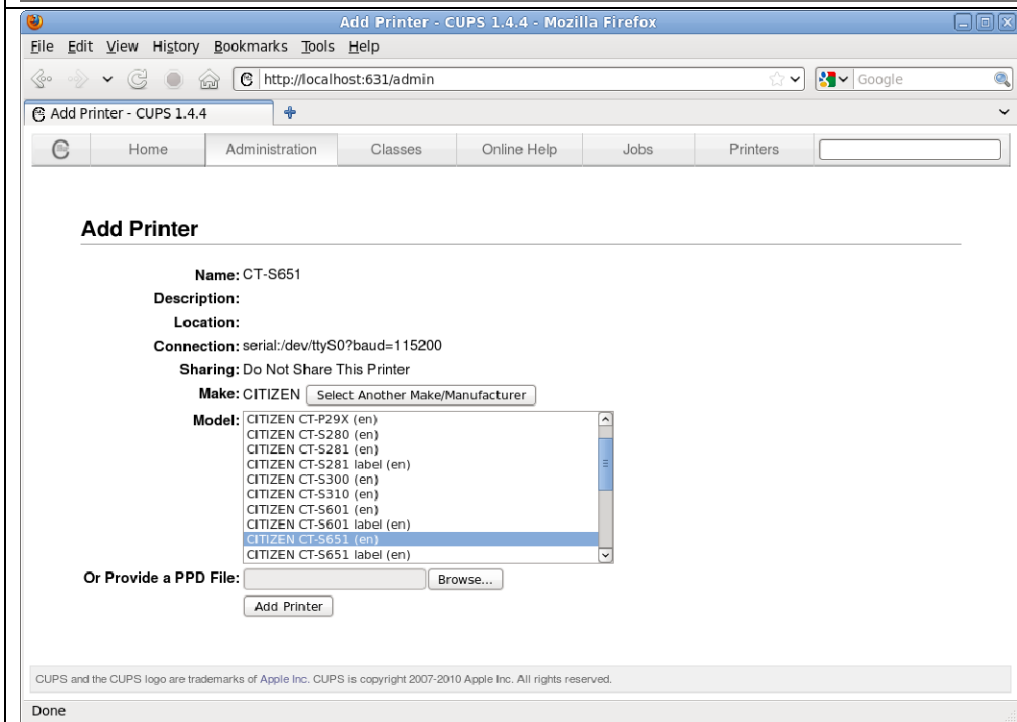


If you like, enter any name to "Name", "Description" and "Location". In this example, "CT-S651" is set to "Name". If you want to share the driver, put the check mark in "Share This Printer".



This is to choose the PPD file which is copied from RPM file.

Choose "CITIZEN" from "Maker" list and press "Continue" button.



Choose the model to install in the "Model" list and press "Add Printer" button. This will end the printer driver installation and move to "Set Default Options" menu.

If you continue setting for "Set Default Options", please move to section 4.2.

Printers - CUPS 1.4.4 - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:631/printers/

Printers - CUPS 1.4.4

Home Administration Classes Online Help Jobs Printers

Search in Printers: Search Clear

Showing 2 of 2 printers.

Queue Name	Description	Location	Make and Model	Status
CT-S651	CT-S651		CITIZEN CT-S651	Idle
CT-S801	CITIZEN CT-S801	localhost.localdomain	CITIZEN CT-S801	Paused - "Unplugged or turned off"

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Done

Added printer driver
CT-S651 can be found on
the "Printers" tab.

4. Driver function and settings

4.1 Steps up to the "Set Default Options" menu

Choose "Printers" tab.

Queue Name	Description	Location	Make and Model	Status
CT-S651	CT-S651		CITIZEN CT-S651	Idle
CT-S801	CITIZEN CT-S801	localhost.localdomain	CITIZEN CT-S801	Paused - "Unplugged or turned off"

Installed drivers are shown. Choose the link of the driver for function setting.

CT-S801 (Idle, Accepting Jobs, Not Shared, Server Default)

Maintenance Administration

Description: CITIZEN CT-S801
Location: localhost.localdomain
Driver: CITIZEN CT-S801 (grayscale, 2-sided printing)
Connection: usb://CITIZEN/CT-S801
Defaults: job-sheets=none, none media=om_x72-mmy130-mm_71.96x129.82mm sides=one-sided

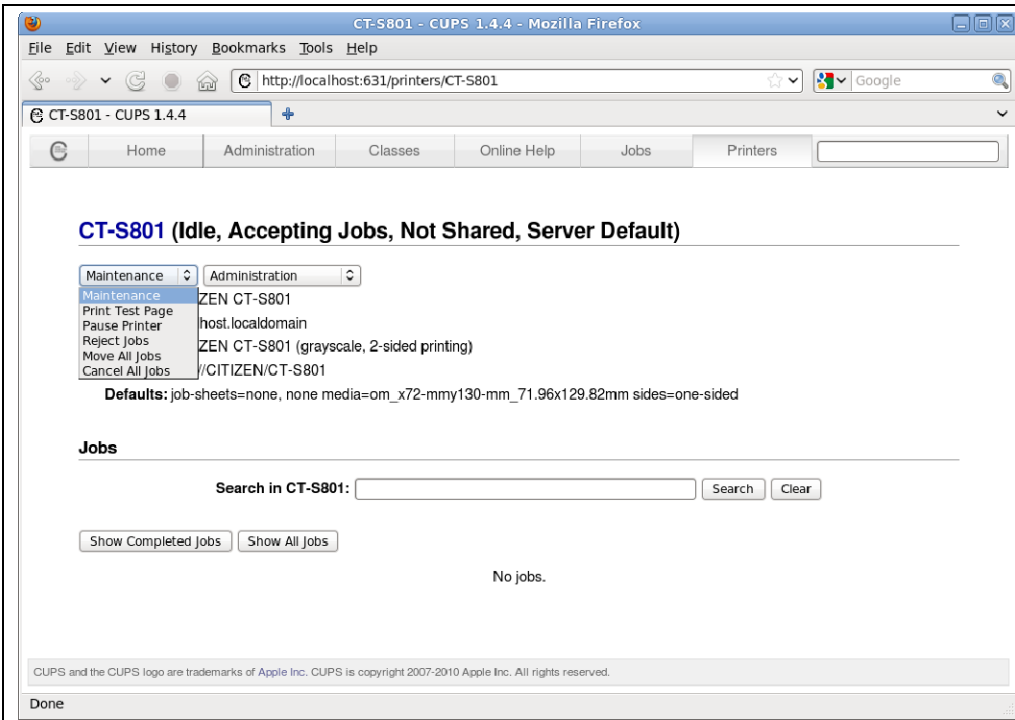
Jobs

Search in CT-S801: [] Search Clear

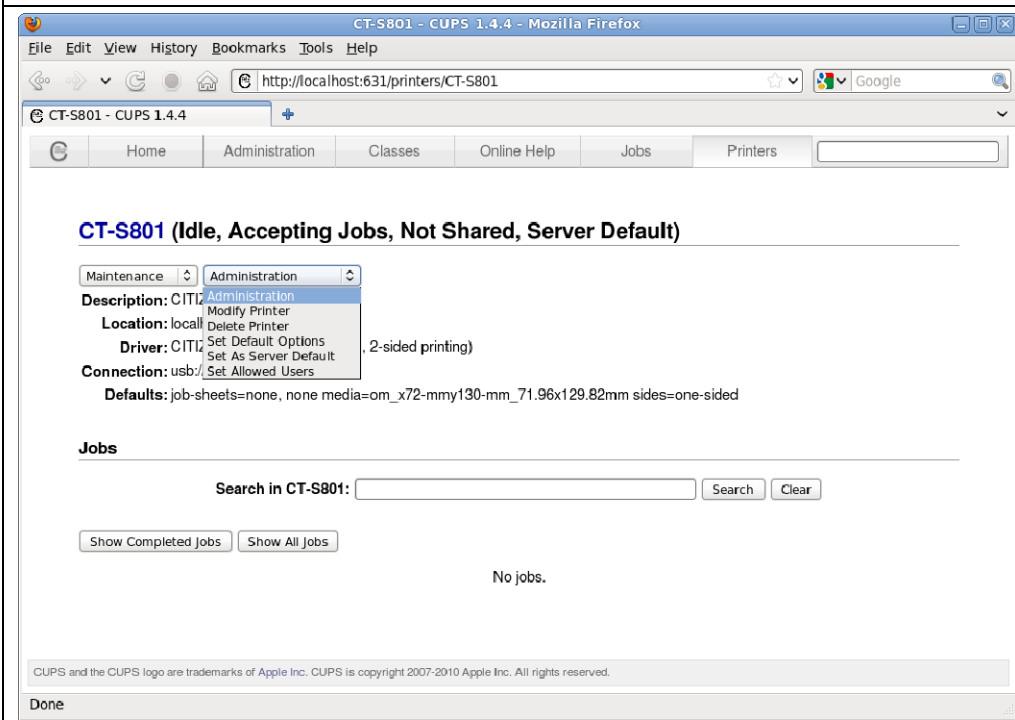
Show Completed Jobs Show All Jobs

No jobs.

"Maintenance" and "Administration" menu can be found.



In the "Maintenance" menu, choose "Print Test" for test printing.



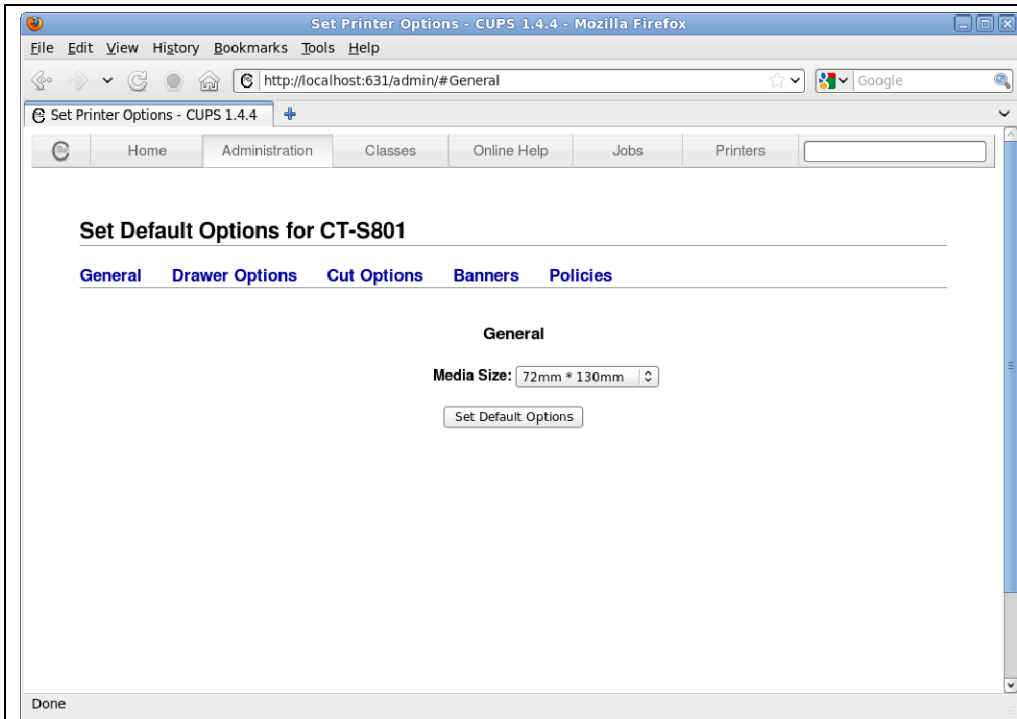
In the "Administration" menu, choose "Set Default Options" for driver option (function) setting.

4.2 "Set Default Options" menu

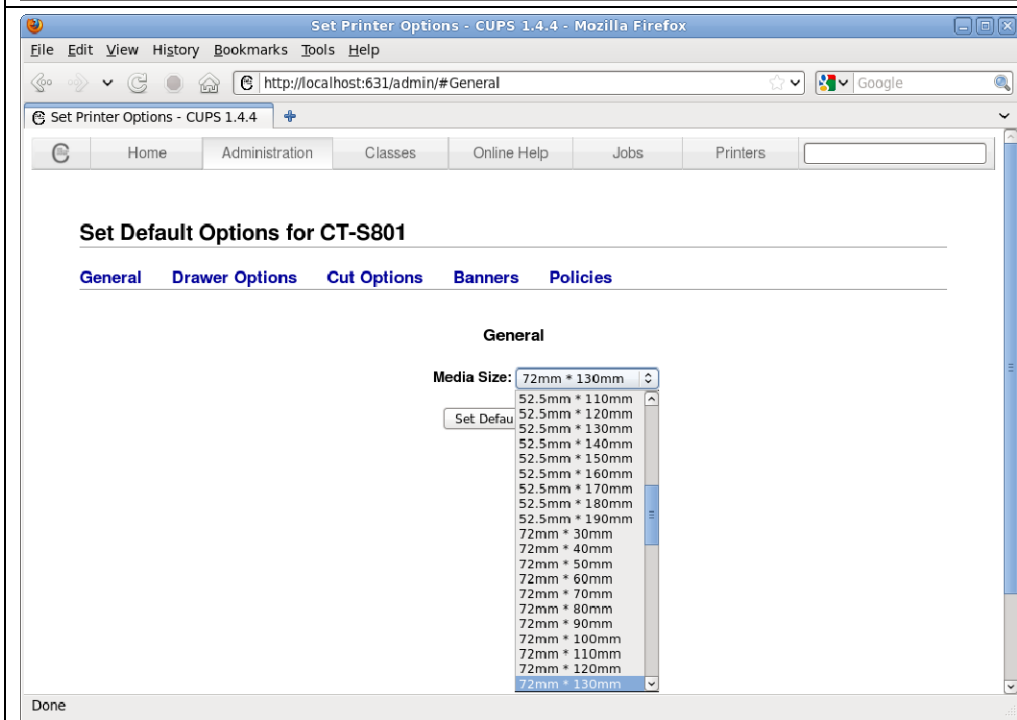
In this menu, "General", "Drawer Options" and "Cut Options" are available unique options our CUPS driver. (Depending on the model, those options are not available or not effective.)

Because "Banners", "Policies" are common function of CUPS, explanation is omitted.

4.2.1 General

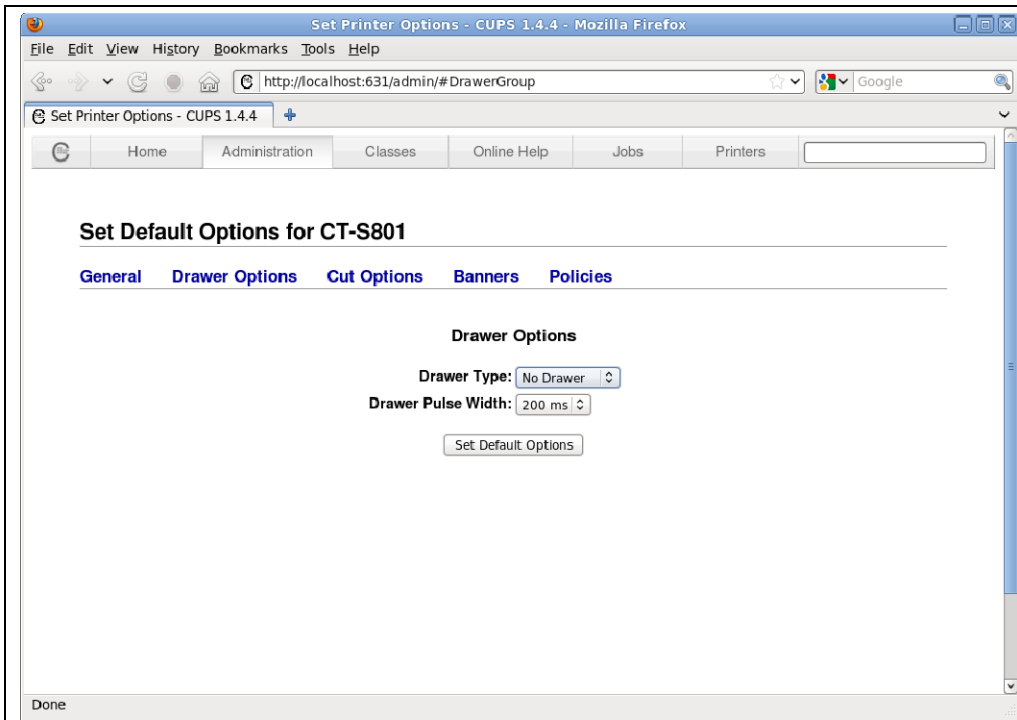


"General" is the option to choose the paper size.

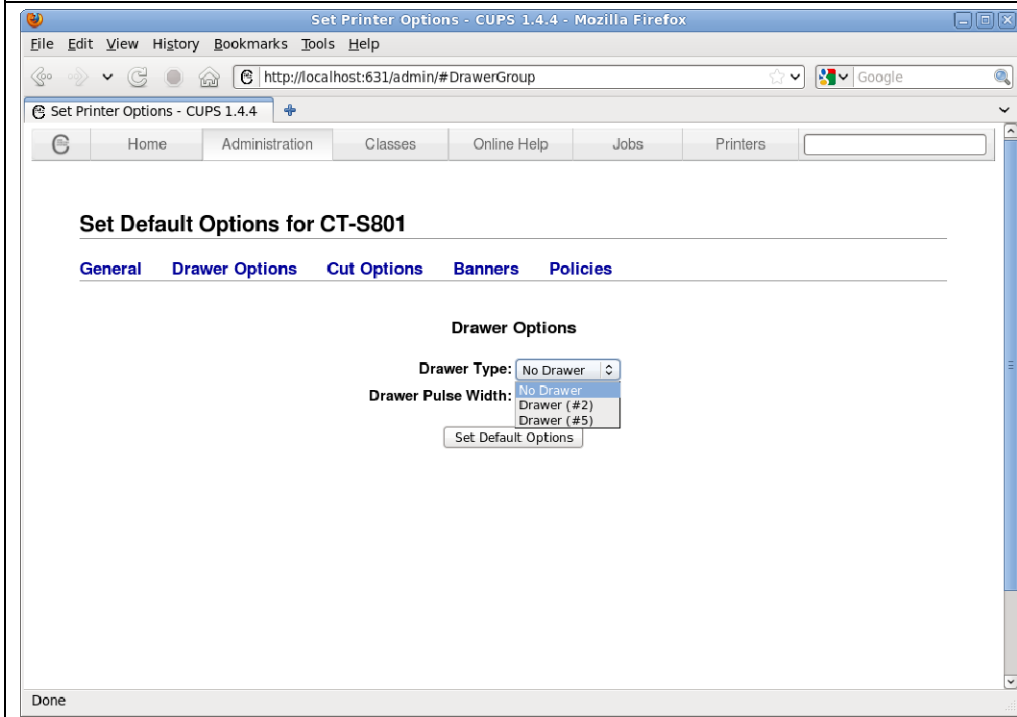


Choose the combination of maximum print area width and print area length. Length is fixed length. Even there is no data print, printer feed paper without any printing.

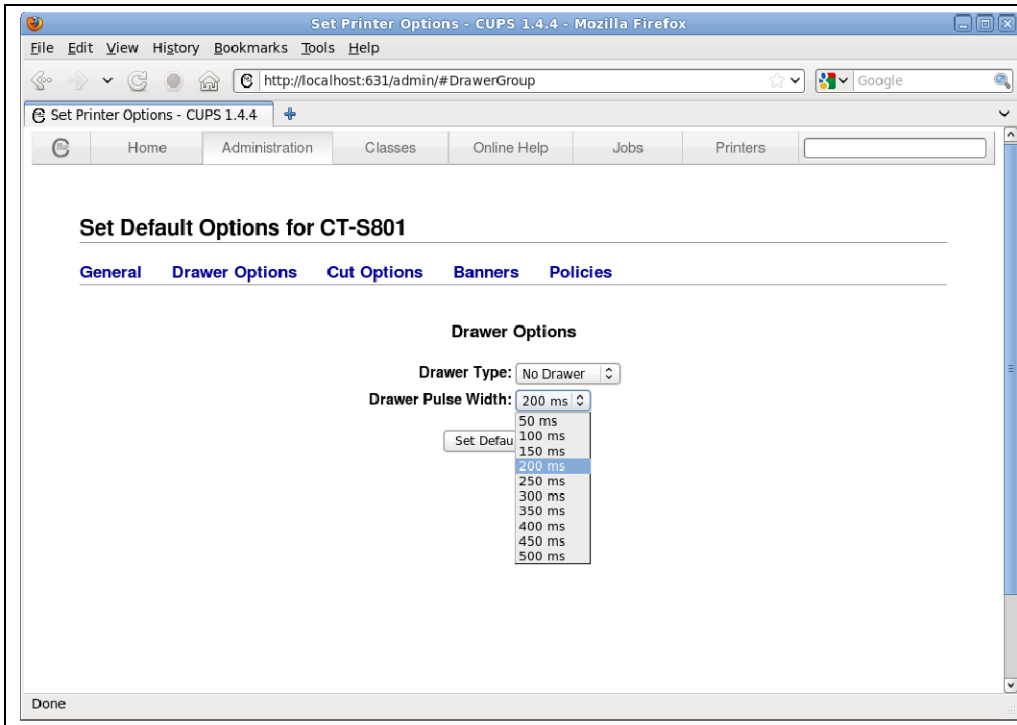
4.2.2 Drawer Options



“Drawer Options” is to set cash drawer type and pulse length to send to the cash drawer.

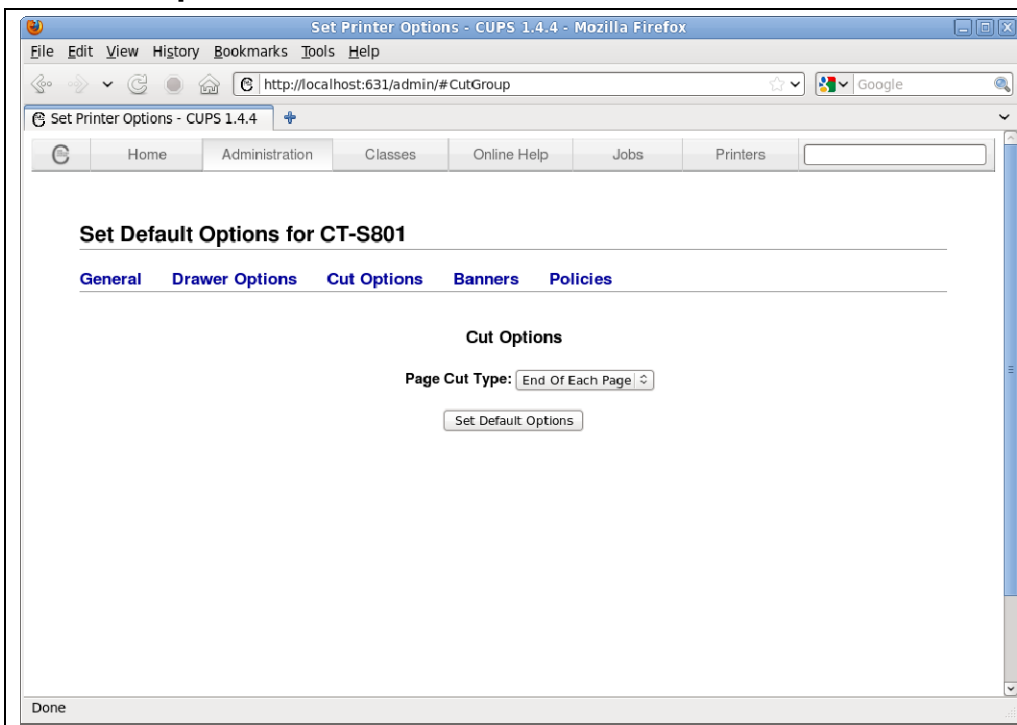


Choose #2 for cash drawer1 and choose #5 for cash drawer2.

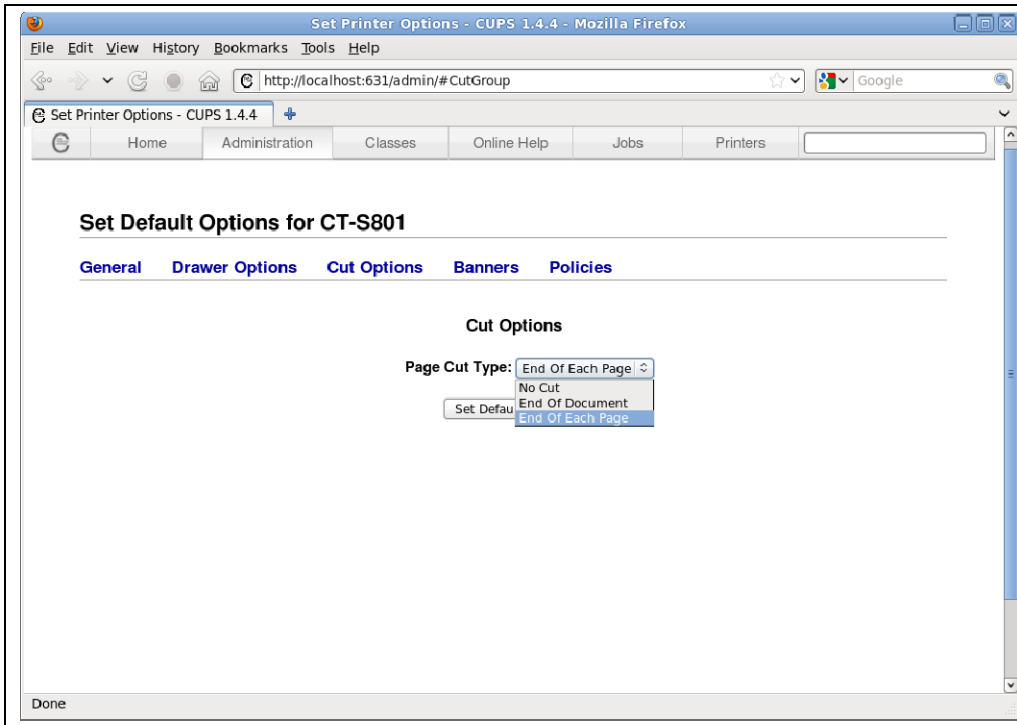


Usually, it is not necessary to adjust the pulse to send to cash drawer but when necessary, change the value.

4.2.3 Cut Options



Cut option is to set cutting enabled/disable at the end of printing or to set cutting enabled/disabled at the end of middle pages for multiple page printing.



“No Cut” does not cut the paper in any case.

“End of Document” does not cut the paper at the end of middle pages for multiple page printing. Only at the end of last page is cut.

“End of Each Page” cut the end of each page even for the multiple page printing.

5. CUPS driver uninstallation

5.1 Deleting driver from CUPS

From Administration menu explained in section 4.1, choose “Delete Printer”.

5.2 RPM file uninstallation on GUI

If the software to manage the package is available, uninstall the RPM file.

5.3 RPM file uninstallation on command line

Enable the root privileges by “su” command.

Run the “rpm” command with “-e “ option and file name(no file extension).

Example: `rpm -e ctzpos-cups-1.0.2-0.i386`

(For the DEB package file of Debian based distribution, use the dpkg command with “-r” option and file name.)