

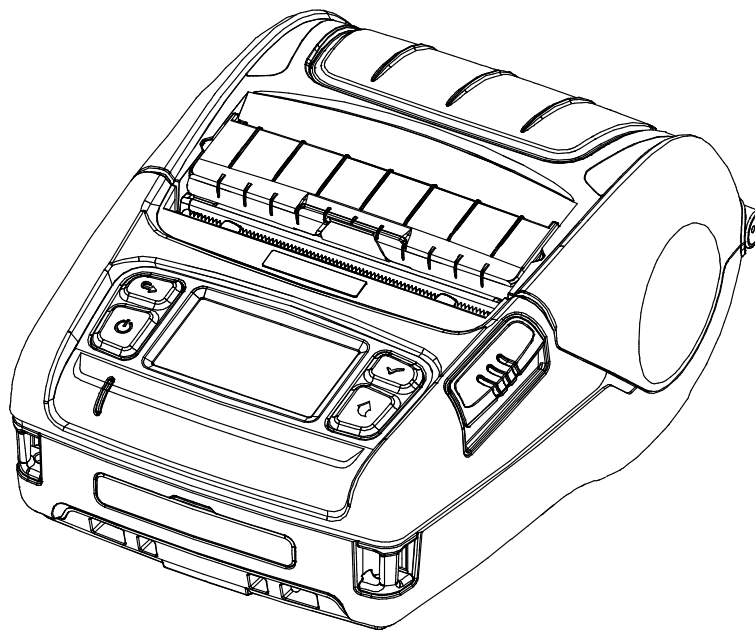


# **Installation Guide**

# **Linux CUPS Driver**

---

**Rev. 1.00**



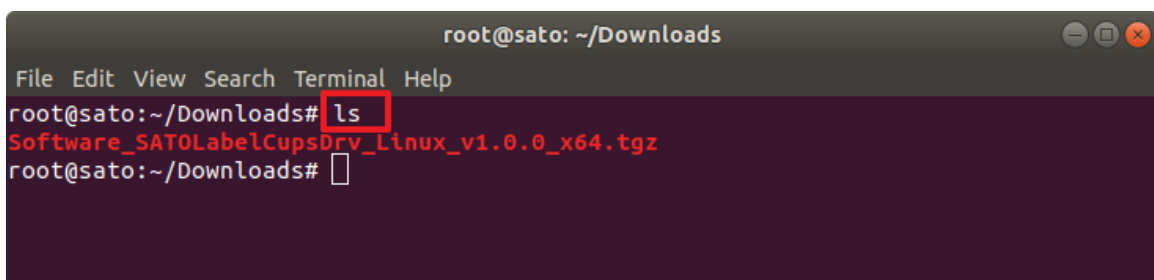
1. Search and execute the terminal program.



2. Download Linux CUPS driver in SATO website.
3. Once driver download is completed, execute the terminal and type “cd Downloads” to move to Downloads folder.



4. Type “ls” and click the Enter button to check driver file downloaded.



5. To extract the driver zip file, type “tar xvf driver name” and click the Enter button.

```
root@sato: ~/Downloads
File Edit View Search Terminal Help
root@sato:~/Downloads# ls
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64.tgz
root@sato:~/Downloads# tar xvf Software_SATOLabelCupsDrv_Linux_v1.0.0_x64.tgz
```

6. Type “ls” after extracting the zip file to check the driver folder.

```
root@sato: ~/Downloads
File Edit View Search Terminal Help
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/uninstaller_v1.0.0.sh
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/rastertoSATOLabel_v1.0.0
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen4.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen2.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen5.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/about.htm
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen3.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen7.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/Install.htm
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen6.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/uninstall.htm
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/ConfigureCups.htm
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/CommandOptionsForCups.htm
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/images/cupsscreen1.jpg
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/SoftwareLicense.txt
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/readme.htm
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/SATO/
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/SATO/PV3_v1.0.0.ppd
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/SATO/PV4_v1.0.0.ppd
root@sato:~/Downloads# ls
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64.tgz
root@sato:~/Downloads#
```

7. Type “cd driver folder name” and click Enter button to move to driver folder.

```
root@sato: ~/Downloads
File Edit View Search Terminal Help
root@sato:~/Downloads# ls
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64.tgz
root@sato:~/Downloads# cd Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/
```

8. Type “ls” to check the driver.

```
root@sato: ~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64
File Edit View Search Terminal Help
root@sato:~/Downloads# ls
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64
Software_SATOLabelCupsDrv_Linux_v1.0.0_x64.tgz
root@sato:~/Downloads# cd Software_SATOLabelCupsDrv_Linux_v1.0.0_x64/
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64# ls
images          SATO              uninstaller_v1.0.0.sh
rastertoSATOLabel_v1.0.0  setup_v1.0.0.sh
readme.htm      SoftwareLicense.txt
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64#
```

9. Type “sh setup\_vX.X.X.sh” and click Enter button to install the driver.

```
root@sato: ~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64
File Edit View Search Terminal Help
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64# ls
images          readme.htm      setup_v1.0.0.sh  uninstaller_v1.0.0.sh
rastertoSATOLabel_v1.0.0  SATO          SoftwareLicense.txt
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64# sh setup_v1.0.0.sh
```

10. After driver installation, “Install Complete” message will be showed.

```
root@sato: ~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64
File Edit View Search Terminal Help
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64# ls
images          readme.htm      setup_v1.0.0.sh  uninstaller_v1.0.0.sh
rastertoSATOLabel_v1.0.0  SATO          SoftwareLicense.txt
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64# sh setup_v1.0.0.sh
SATO CORPORATION
SATO Label CUPS DRIVER Installer
-----
setup_v1.0.0.sh: 11: [: Illegal number:
Copying rastertoSATOLabel filter...

Creating Symbolic Link....

Copying model ppd files...

Restarting CUPS
[ ok ] Stopping cups (via systemctl): cups.service.
[ ok ] Starting cups (via systemctl): cups.service.

Install Complete
Add printer queue using OS tool, http://localhost:631, or http://127.0.0.1:631
root@sato:~/Downloads/Software_SATOLabelCupsDrv_Linux_v1.0.0_x64#
```

11. Type “cd /usr/lib/cups/filter” and click Enter button to check if driver installation is completed correctly.

```
root@sato: ~/Downloads
File Edit View Search Terminal Help
root@sato:~/Downloads# cd /usr/lib/cups/filter/
```

12. Type “ls -l” and click Enter button.

```
root@sato: /usr/lib/cups/filter
File Edit View Search Terminal Help
root@sato:~/Downloads# cd /usr/lib/cups/filter/
root@sato:/usr/lib/cups/filter# ls -l
```

13. Check if the driver file exists and driver version installed is the same as installation version.

```
root@sato: /usr/lib/cups/filter
File Edit View Search Terminal Help
-rwxr-xr-x 1 root root 14128 3.0 1 2019 rastertopwg
-rwxr-xr-x 1 root root 47736 3.0 7 2019 rastertopqdl
-rwxr-xr-x 1 root root 11964 3.0 11 2019 rasterosag-qdi
lrwxrwxrwx 1 root root 11 3.0 28 2019 rastertoSATOLabel -> /usr/bin/rastertoSATOLabel_v1.0.0
lrwxrwxrwx 1 root root 11 3.0 21 2019 svgtopdf -> vectortopdf
-rwxr-xr-x 1 root root 26728 4.0 6 2019 sys5ippprinter
-rwxr-xr-x 1 root root 3471 4.0 6 2019 textbrftoindexv3
lrwxrwxrwx 1 root root 16 3.0 21 2019 textbrftoindexv4 -> textbrftoindexv3
-rwxr-xr-x 1 root root 4892 4.0 6 2019 texttobrf
-rwxr-xr-x 1 root root 16672 4.0 6 2019 texttopdf
-rwxr-xr-x 1 root root 962 4.0 6 2019 texttops
-rwxr-xr-x 1 root root 27528 4.0 6 2019 texttotext
-rwxr-xr-x 1 root root 2157 4.0 6 2019 vectortobrf
-rwxr-xr-x 1 root root 2177 4.0 6 2019 vectortopdf
lrwxrwxrwx 1 root root 11 3.0 21 2019 vectortoubrl -> vectortobrf
lrwxrwxrwx 1 root root 11 3.0 21 2019 wmfptopdf -> vectortopdf
lrwxrwxrwx 1 root root 11 3.0 21 2019 xfigtopdf -> vectortopdf
root@sato:/usr/lib/cups/filter#
```

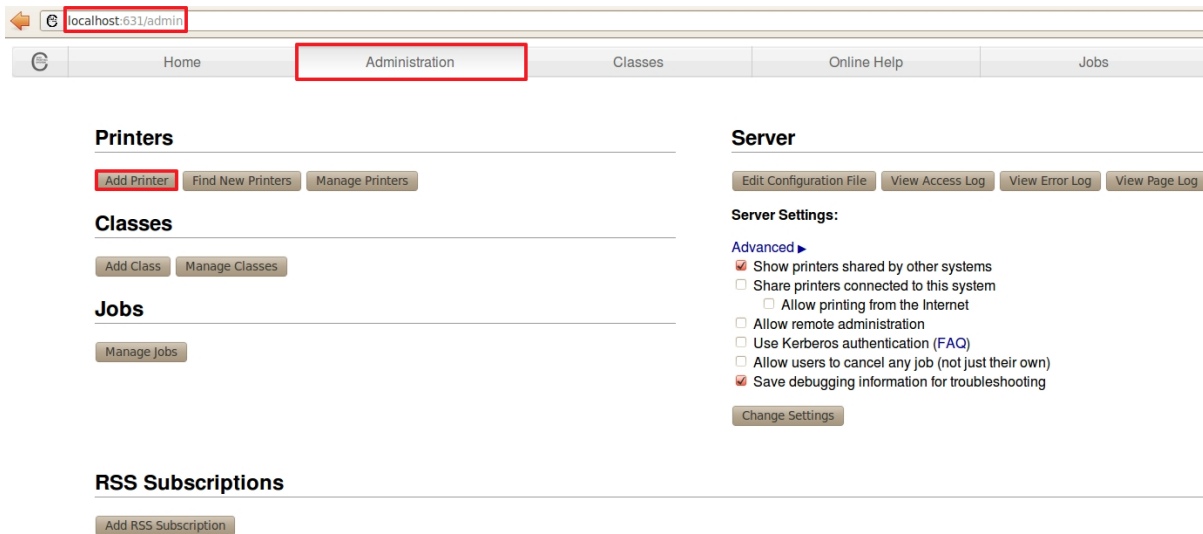
14. Type “cd /usr/share/cups/model” and click Enter button.

```
dwlee@dwlee-TH55B-HD: ~
dwlee@dwlee-TH55B-HD:~$ cd /usr/share/cups/model/
```

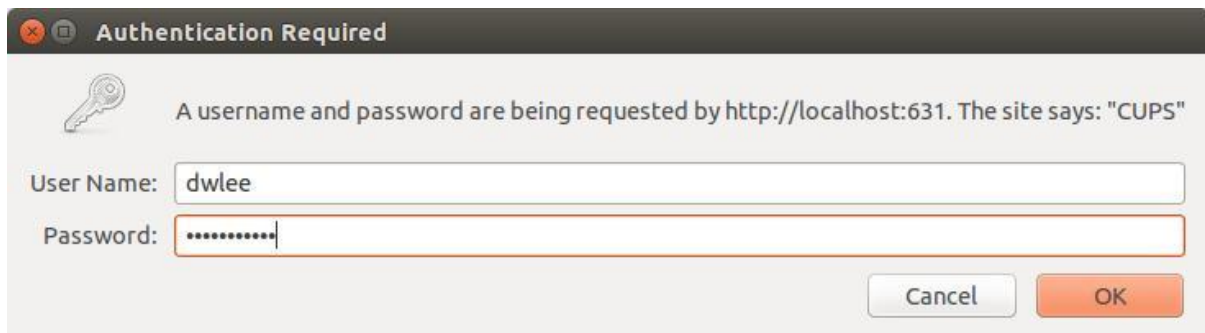
15. Type “ls” to check SATO message below. If SATO message is showed up as below, driver installation will be done correctly.

```
root@sato: /usr/share/cups/model
File Edit View Search Terminal Help
root@sato:/usr/share/cups/model# cd /usr/share/cups/model/
root@sato:/usr/share/cups/model# ls
SATO
root@sato:/usr/share/cups/model#
```

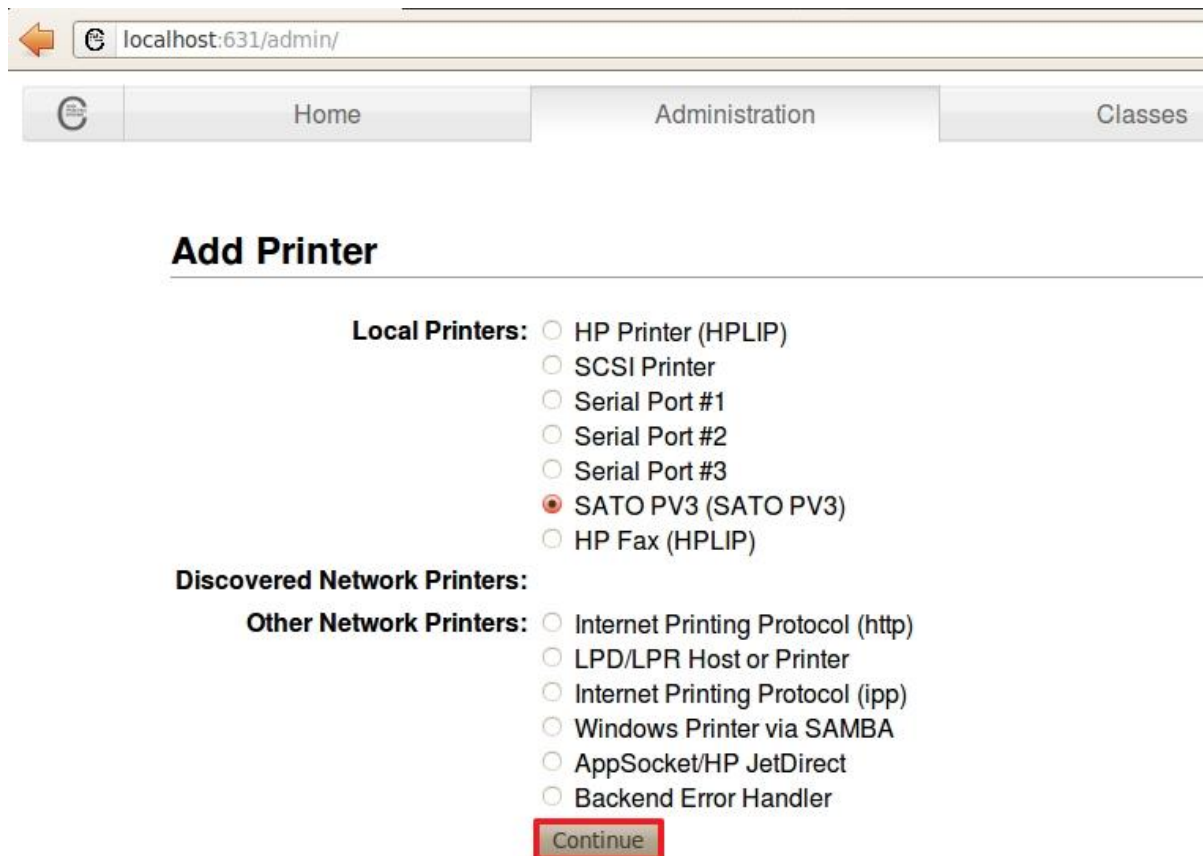
16. Once printer driver is installed correctly, open the browser and type localhost:631. Then Go to Administration and Add Printer.



17. When below message pops up, enter the 'User Name' and 'Password'.



18. Printer can be found in Local Printers. Select the printer and click 'Continue' button.  
In case of Ethernet Interface, please refer to CUPS Ethernet Setting manual.



The screenshot shows the CUPS web interface in a browser window. The address bar displays 'localhost:631/admin/'. The navigation bar includes 'Home', 'Administration', and 'Classes' tabs. The main heading is 'Add Printer'. Under 'Local Printers:', there is a list of options with radio buttons: 'HP Printer (HPLIP)', 'SCSI Printer', 'Serial Port #1', 'Serial Port #2', 'Serial Port #3', 'SATO PV3 (SATO PV3)' (which is selected), and 'HP Fax (HPLIP)'. Under 'Discovered Network Printers:', there is a section for 'Other Network Printers:' with radio buttons for: 'Internet Printing Protocol (http)', 'LPD/LPR Host or Printer', 'Internet Printing Protocol (ipp)', 'Windows Printer via SAMBA', 'AppSocket/HP JetDirect', and 'Backend Error Handler'. At the bottom of the list is a 'Continue' button, which is highlighted with a red rectangle.

localhost:631/admin/

Home Administration Classes

### Add Printer

**Local Printers:**

- ☐ HP Printer (HPLIP)
- ☐ SCSI Printer
- ☐ Serial Port #1
- ☐ Serial Port #2
- ☐ Serial Port #3
- ☒ SATO PV3 (SATO PV3)
- ☐ HP Fax (HPLIP)

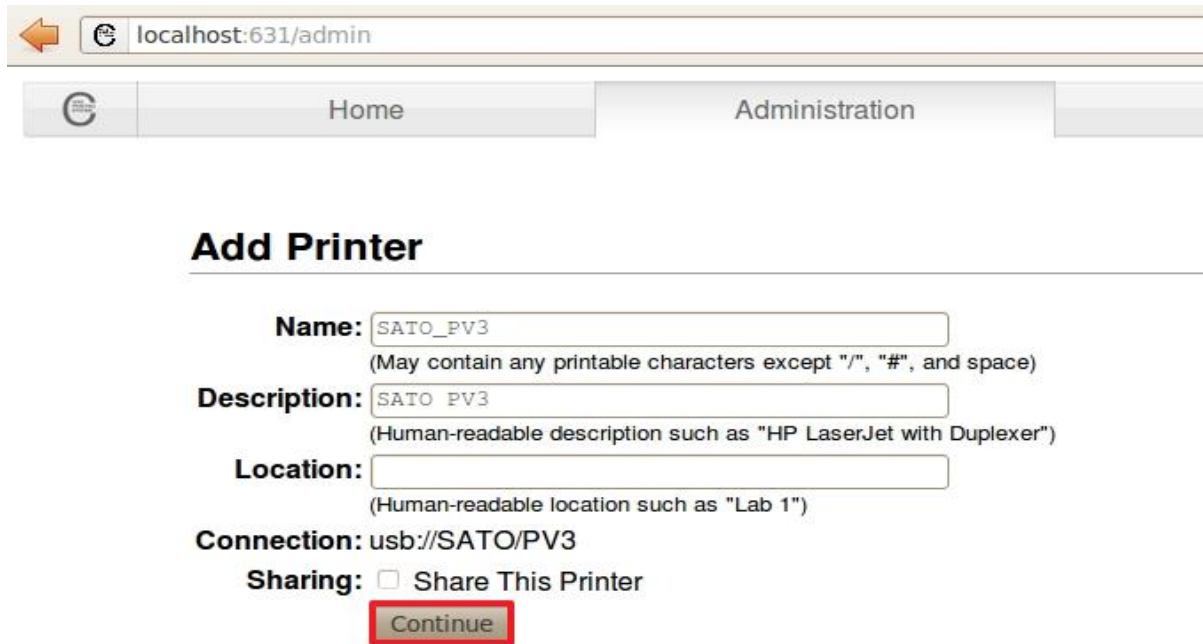
**Discovered Network Printers:**

**Other Network Printers:**

- ☐ Internet Printing Protocol (http)
- ☐ LPD/LPR Host or Printer
- ☐ Internet Printing Protocol (ipp)
- ☐ Windows Printer via SAMBA
- ☐ AppSocket/HP JetDirect
- ☐ Backend Error Handler

Continue

19. After configuration of printer name and other information, click 'Continue' button.

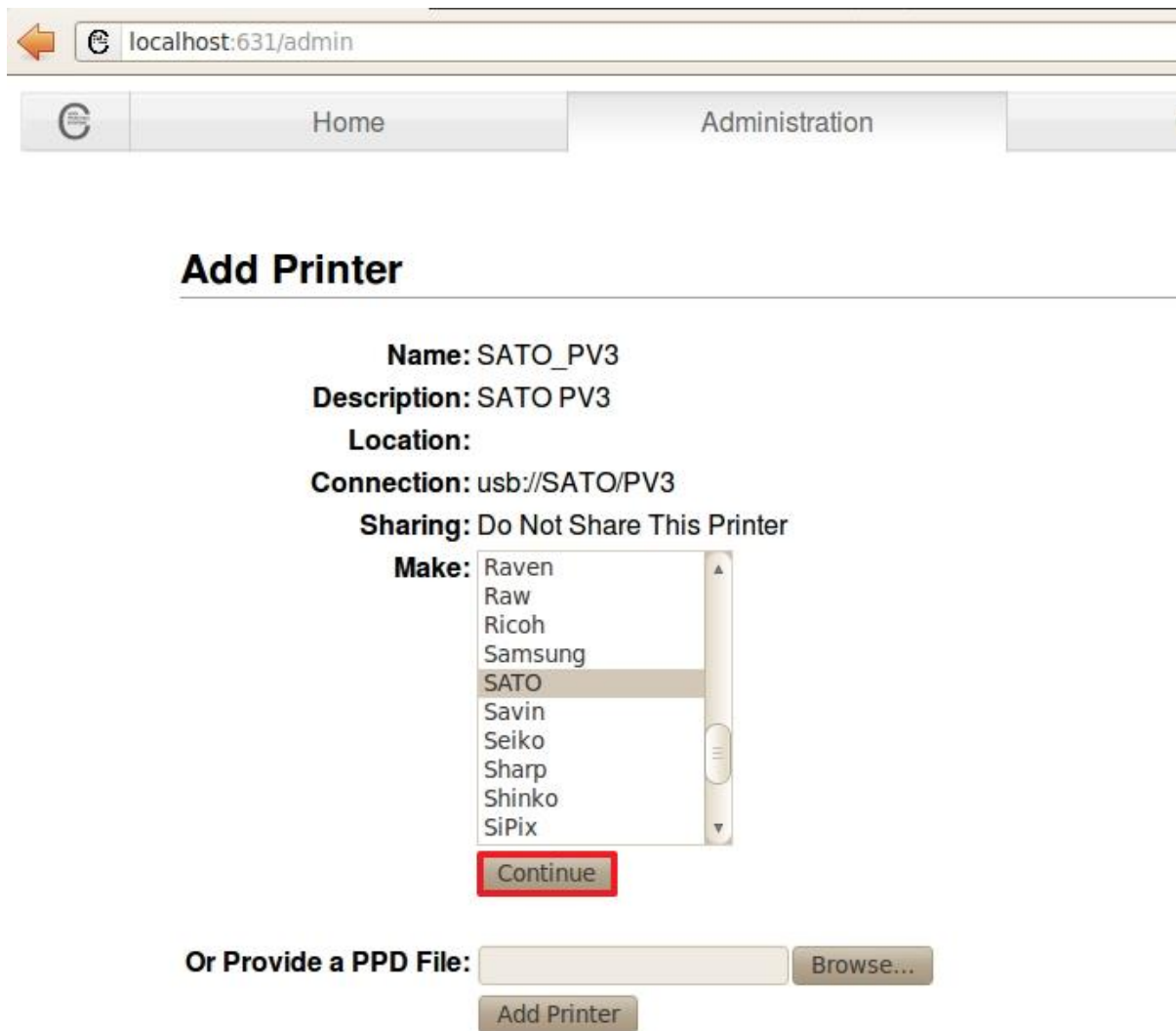


The screenshot shows the CUPS Administration web interface in a browser window. The address bar displays 'localhost:631/admin'. The navigation bar includes 'Home' and 'Administration' tabs. The main heading is 'Add Printer'. The form contains the following fields and options:

- Name:** SATO\_PV3  
(May contain any printable characters except "/", "#", and space)
- Description:** SATO PV3  
(Human-readable description such as "HP LaserJet with Duplexer")
- Location:** [Empty field]  
(Human-readable location such as "Lab 1")
- Connection:** usb://SATO/PV3
- Sharing:** ☐ Share This Printer
- Continue** button (highlighted with a red box)



20. After selecting SATO in Make option below, click the 'Continue' button  
It depends on CUPS version, this page will be skipped.

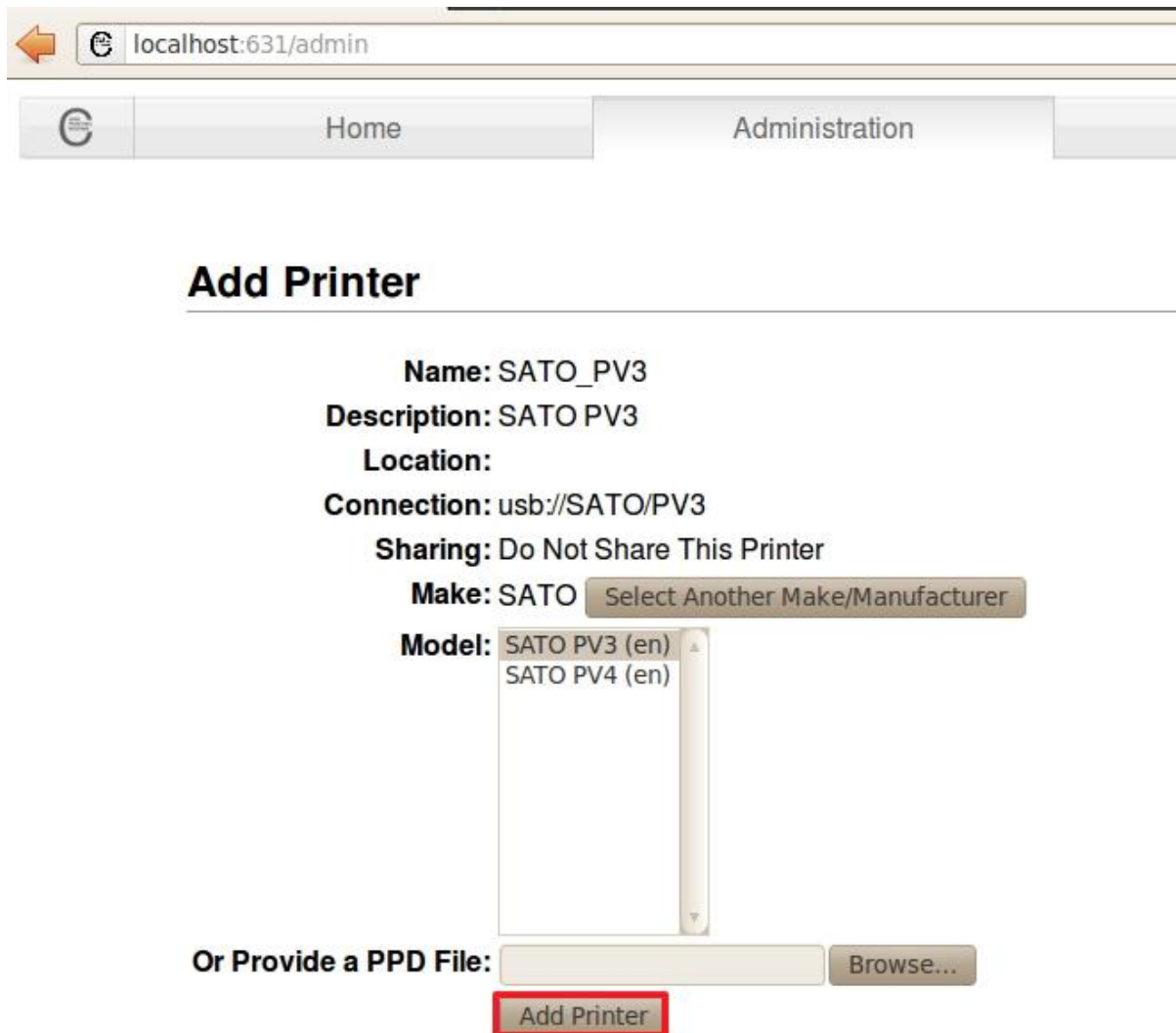


The screenshot shows the CUPS web interface at `localhost:631/admin`. The navigation bar includes 'Home' and 'Administration' tabs. The main heading is 'Add Printer'. The form fields are as follows:

- Name:** SATO\_PV3
- Description:** SATO PV3
- Location:**
- Connection:** usb://SATO/PV3
- Sharing:** Do Not Share This Printer
- Make:** A list box containing the following manufacturers: Raven, Raw, Ricoh, Samsung, SATO (highlighted), Savin, Seiko, Sharp, Shinko, and SiPix.
- Continue:** A button highlighted with a red rectangle.

Below the 'Make' list, there is a section 'Or Provide a PPD File:' with a text input field, a 'Browse...' button, and an 'Add Printer' button.

21. Select the printer model and click the 'Add Printer' button.



The screenshot shows the CUPS web interface in a browser window. The address bar displays 'localhost:631/admin'. The navigation bar includes 'Home' and 'Administration' tabs. The main heading is 'Add Printer'. The form contains the following fields and options:

- Name:** SATO\_PV3
- Description:** SATO PV3
- Location:**
- Connection:** usb://SATO/PV3
- Sharing:** Do Not Share This Printer
- Make:** SATO (with a button 'Select Another Make/Manufacturer')
- Model:** A dropdown menu showing 'SATO PV3 (en)' and 'SATO PV4 (en)'. 'SATO PV3 (en)' is selected.
- Or Provide a PPD File:** A text input field with a 'Browse...' button next to it.
- Add Printer:** A button at the bottom, highlighted with a red rectangle.

22. Configure printer paper size, page type, cut options, etc and click 'Set Default Options' button.

The screenshot shows the CUPS administration web interface in a browser window at localhost:631/admin. The navigation bar includes Home, Administration, Classes, Online Help, and Jobs. The main heading is "Set Default Options for SATO\_PV3". Below this are tabs for General, Printer Setting, Banners, and Policies. The "General" tab is active, displaying settings for Media Size (3.0" x 3.0"), Output Resolution (203 DPI), Sensor Type (Gap), Media Type (Direct Thermal), Rotation Angle (No Rotation), and NO. Of Copies (1). A red box highlights the "Set Default Options" button at the bottom.

23. Try to test page print by 'Print Test Page' option in 'Maintenance'.

The screenshot shows the CUPS administration web interface at localhost:631/printers/SATO\_PV3. The navigation bar is the same. The main heading is "SATO\_PV3 (Idle, Accepting Jobs, Not Shared)". Below this are tabs for Maintenance and Administration. The "Maintenance" tab is active and highlighted with a red box. It displays printer details: Description: SATO PV3, Location: Driver: SATO PV3 (grayscale), Connection: usb://SATO/PV3, and Defaults: job-sheets=none, none media=adobe\_30X76D2MMY76D2MM\_3x3in. Below the details is a "Jobs" section with a search bar labeled "Search in SATO\_PV3:" and buttons for "Search" and "Clear". There are also buttons for "Show Completed Jobs" and "Show All Jobs". The status "No jobs." is displayed at the bottom.

## Copyright

© SATO CORPORATION. All rights reserved.

This user manual and all property of the product are protected under copyright law. It is strictly prohibited to copy, store, and transmit the whole or any part of the manual and any property of the product without the prior written approval of SATO CORPORATION.

The information contained herein is designed only for use with this SATO product. SATO is not responsible for any direct or indirect damages, arising from or related to use of this information.

- The SATO logo is the registered trademark of SATO CORPORATION.
- All other brand or product names are trademarks of their respective companies or organizations.

SATO maintains ongoing efforts to enhance and upgrade the functions and quality of all our products.

In the following, product specifications and/or user manual content may be changed without prior notice.

## Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer "OFF".

## Revision history

[illegible]