Printing on Apple OSX 10.7,10.8 & 10.9

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For Mac OSX 10.7, 10.8 & 10.9 , there is currently no way to make your Macintosh listen to broadcasts ** sent out from our central CUPS printer server, so instead you must manually add printers. There are a two ways to achieve this. Please follow the steps listed below.

- Install the printer drivers.

- Install the printers the "Apple way"

- Optionally you can use the local CUPS admin page (on the Mac) to add print queues for the printers you wish to use.

Install the printer drivers:

In BioQuant we have two main printer models, mono "HP LaserJet 9040" and color "HP Color LaserJet 4700". Download and install the HP printer drivers from http://support.apple.com/downloads. Search for he latest "HP printer drivers" or http://support.apple.com/kb/DL907. Download and install these drivers.

Install the printers the "Apple way":

In brief, the steps are:

1. Bring up the System Preferences tool.
2. Choose Print & Scan.
3. Click on the plus sign to add a printer.
4. In the Print & Scan preferences, unlock and then click the + to add a printer. Once the Add panel pops up, right–button click on the icon bar and click Customize Toolbar …   Now drag the Advanced gear icon up next to the Windows icon.
5. Now click on the Advanced gear icon and under Type: select Internet Printing Protocol (http)
6. For URL: enter the string `http://quantinfra.bioquant.uni-heidelberg.de:631/printers/`**printername** (You will need to replace **printername** with the name of the printer you wish to use.)
7. For Name: type in the **printername**
8. For Location: enter in the room number (this is optional).
9. Change the name to e.g. hp_color_554.
10. click on Use: Choose a Driver… and select the option Select Software.
11. Choose the appropriate printer driver e.g. HP Color LaserJet 4700
12. Click on Add
13. Select the Duplex Unit.
14. Finally click OK.
15. Now under Printers & Scanners you should see your recently added printer(s)

Use the local CUPS Admin page:

Turn on the Mac's web interface for the local CUPS server

This may already be running, but if not you will need to start it manually from the command line in the Terminal window. To begin, open your web-browser.

Go to your local printer configuration webpage http://localhost:631/admin

If the CUPS server doesn't have its web interface enabled, you will get an error message "Server internal error" together with a message telling you to start the web interface, which you should do.

Open the "Terminal" application and paste in the following command.

```
sudo cupsctl WebInterface=yes
```

Revisit the web page http://localhost:631/admin and it should now work correctly. You should now be looking at the Admin page for CUPS on your Mac.

Add print queues for the printers you wish to use

Now click on **Add Printer**.

Your web-browser will prompt for a login. You need to use an account on your OSX computer that can administer the computer.

Click the radio button beside **Internet Printing Protocol (http)**, and then **Continue**.

In the **Connection** edit box, type the URL which corresponds to the printer you wish to use. This will be of the form:

```
http://quantinfra.bioquant.uni-heidelberg.de:631/printers/
printername
```

You will need to replace **printername** with the name of the printer you wish to use. For example, to use the colour printer on the fifth floor i.e **hp_color_554**, use the URL:

```
http://quantinfra.bioquant.uni-heidelberg.de:631/printers/
hp_color_554
```
The full list of available printers can be seen by connecting to the CUPS

server on `http://quantinfra.bioquant.uni-heidelberg.de:631/printers/`. Also displayed on the page are the model location required at the next step.

Once you have entered the URL, click on the **Continue** button. The next page prompts you for a **Name** for the printer (use the same name specified on the URL (e.g. hp_color_554), and then a **Description** and **Location**. You do not need to share the printer, so leave that box unchecked. Once again, click **Continue**

On the next screen you will need to provide details on the make and model of the printer. You can again read these from the field from the printer page. Most of our printers are from HP, so we begin by selecting HP as the **Make**, and then **Continue**. Now carefully choose the **Model**. Once you have selected the correct model, click **Add Printer**.

The final step in this procedure is to set the sensible defaults for the new printer. Almost all of our printers use A4 paper and have duplex units. The **Options installed** is where you tell CUPS about additional features the printer has, such as extra trays, duplex units, additional memory etc. The **General** tab is the place to declare the page size, and that you like to print double-sided, with binding on the long edge. Once these are all okay, click on **Set Default Options** (at the bottom of the page.)

Finally, verify the settings by printing a test page. There is an option for this from the **Maintenance** drop down menu, or print a file from your favourite application.

** Note: The CUPS version shipping with Mountain Lion 10.8 or Mavericks 10.9 no longer supports the `BrowsePoll` command.