How to Add a Printer to Munki Using printer-pkginfo

NOTE: These instructions were created on OS X El Capitan 10.11.3. Your mileage may vary on other versions of OS X.

Special thanks to Graham Gilbert for his hard work on the printer-pkginfo script and to Dan Gustafson for his guidance in helping me get this working in my environment.

Step 1. Download "printer-pkginfo-master from Graham Gilbert's github repo here:

https://github.com/grahamgilbert/printer-pkginfo

Step 2. Go to your Downloads folder and drag the "printer-pkginfo-master" folder to your desktop and open the folder.
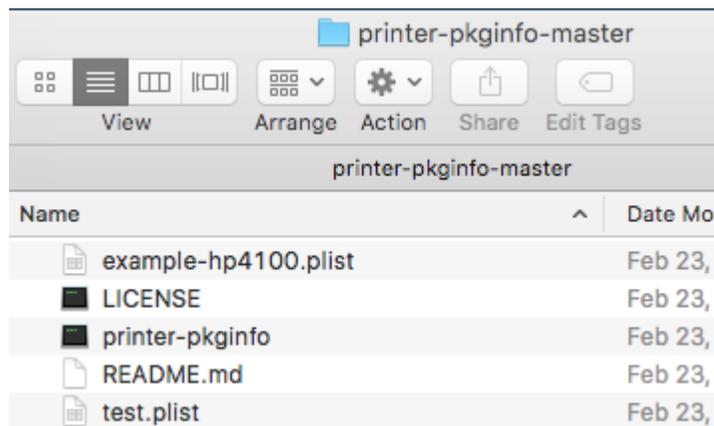
Step 3. Select the "example-hp4100.plist" file, then hold down the Option Key on the keyboard and drag the file to make a copy. Rename it to whatever your printer model is. IE. hp-lj-cp1581ni.plist.
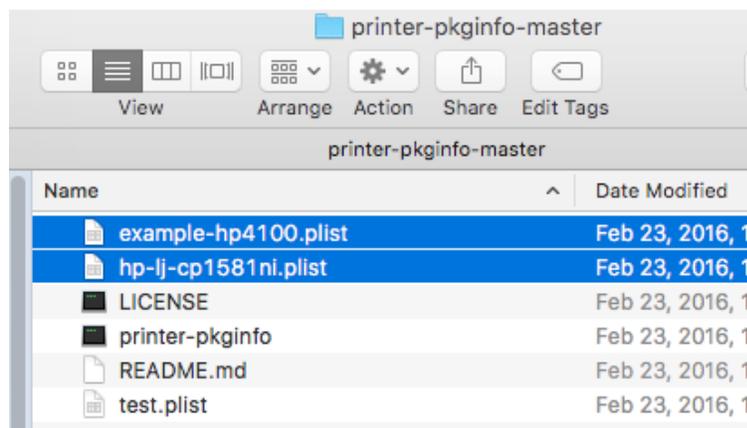
Step 4. Using a plain text editor like TextWrangler or nano in Terminal, Open the newly created printer plist file. In this example, "hp-lj-cp1581ni.plist". We will use this as a starting point for our printer settings.

- Change the setting strings to match your printer settings. When changing the "queue_name" key, be sure to use underscores (_) in the name.

- If you don't care about the "options" just remove them from the plist file as I did in my example below.

- Pay close attention to the "requires" key string. In this example "HewlettPackardPrinterDrivers" is the name of the drivers on my munki server. Since it's a requirement, the printer will not install without the drivers being installed first. It's critical that this name matches your printer driver name on your munki server or the install will fail. If the drivers are not installed on the client, the munki server will install them before installing the printer.

- Save the file when done.

```xml
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
    <key>version</key>
    <string>1.0</string>
    <key>name</key>
    <string>HCS HP LJ CP1518ni</string>
    <key>queue_name</key>
    <string>HCS_LJCP1518ni</string>
    <key>display_name</key>
    <string>HCS HP LJ CP1518ni</string>
    <key>ppd</key>
    <string>/Library/Printers/PPDs/Contents/Resources/HP Color LaserJet CP1510 Series.gz</string>
    <key>location</key>
    <string>Staff Office</string>
    <key>address</key>
    <string>192.168.110.173</string>
    <key>default_catalog</key>
    <string>hcs</string>
    <key>requires</key>
    <array>
        <string>HewlettPackardPrinterDrivers</string>
    </array>
</dict>
</plist>
```

Step 5. Launch "Terminal" and navigate to the "printer-pkginfo-master" folder on your desktop. Enter the following command:

```
cd Desktop/printer-pkginfo-master
```

Step 6. Enter the following command to create the printer plist that will be used by Munki. Be sure to change the filenames for your printer solution. What this command will do is read in the new plist that you created with your printer settings and output a file that can be used in Munki. The output file is the second file name listed in the command below.

```
./printer-pkginfo --plist hp-lj-cp1581ni.plist > HCS-HPLJ-
CP1581ni_pkginfo-1.0.plist
```
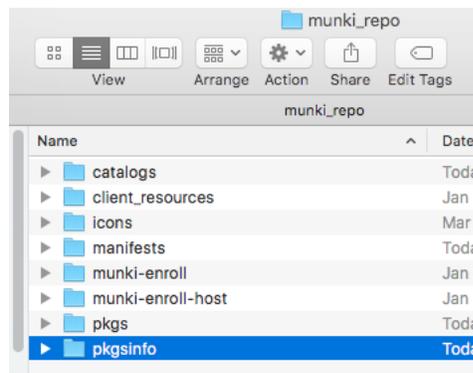
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Step 7. In the Finder, navigate to the "printer-pkginfo-master" folder on your desktop. You will have a new file that was created in step 6. This file needs to be transferred to your munkirepo.
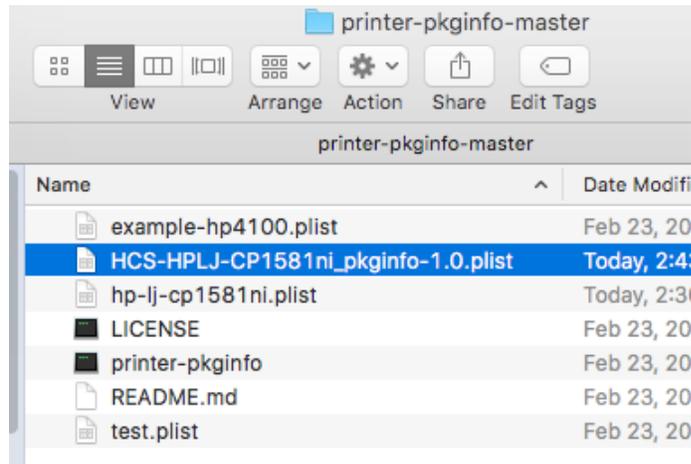
Step 8. Navigate to your munkirepo. Place the newly created plist file from step 7 into the "pkgsinfo" folder located in your mukirepo.

Step 9. Switch back to the Terminal and enter in the following command:

```
/usr/local/munki/makecatalogs
```

This will add the plist to your munkirepo.

Step 10. Now let's make sure the printer drivers and your printer plist are tied to a catalog and manifest. I will use the "Munkiadmin" GUI application for this. If you don't have Munkiadmin, get it here: https://github.com/hjuutilainen/munkiadmin/releases/

Launch MunkiAdmin, If this is your first time launching it, select your munkirepo, then make sure you're in the "Show Catalogs" section. As shown below. It's the middle icon in the view tool bar.
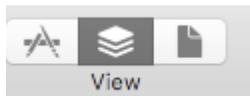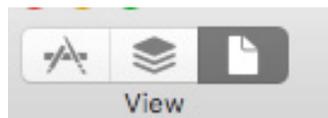

Step 11. Select your Catalog then select your printer and drivers from the list. In this example, I will select the "HCS HP LJ CP1518ni" and the "HewlettPackardPrinterDrivers" packages.
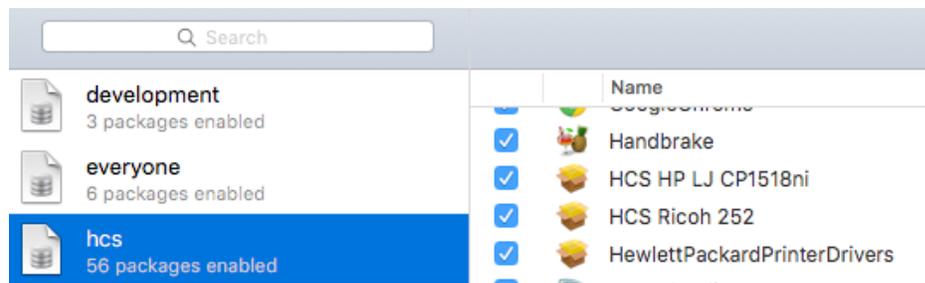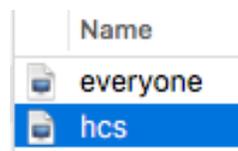

Step 12. Click the "Save" button in the toolbar.
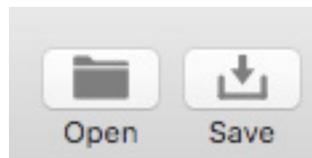
Step 13. Select the "Show Manifest" section. As shown below. It's the last icon in the view tool bar.
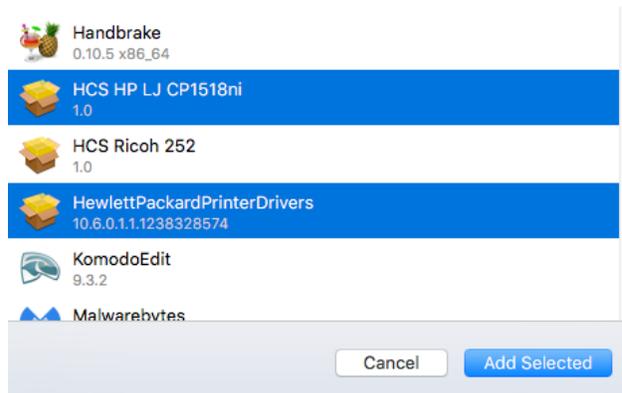

Step 14. Double click on your manifest to edit it.

Step 15. Select "Optional Installs" then click the plus button to add the printer and driver software.
NOTE: In this example, I'm putting the printer and drivers in the "Optional Installs" section.
Feel free to add it to whatever section you desire.
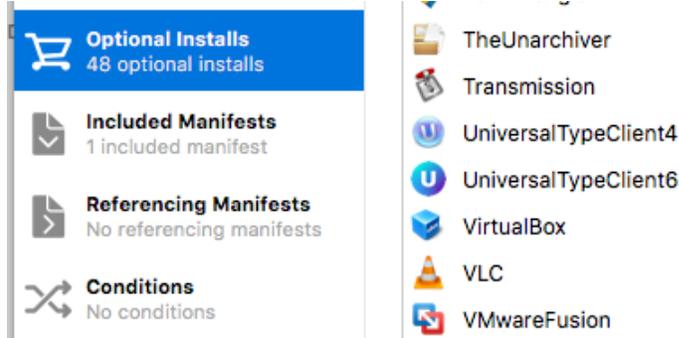
Step 16. Select your printer and driver software, then click "Add Selected".

Step 17. Let's double check to make sure our requirements for our printer install is correct. Select the "Show Packages" section. As shown below. It's the first icon in the view tool bar.
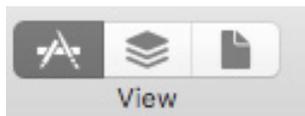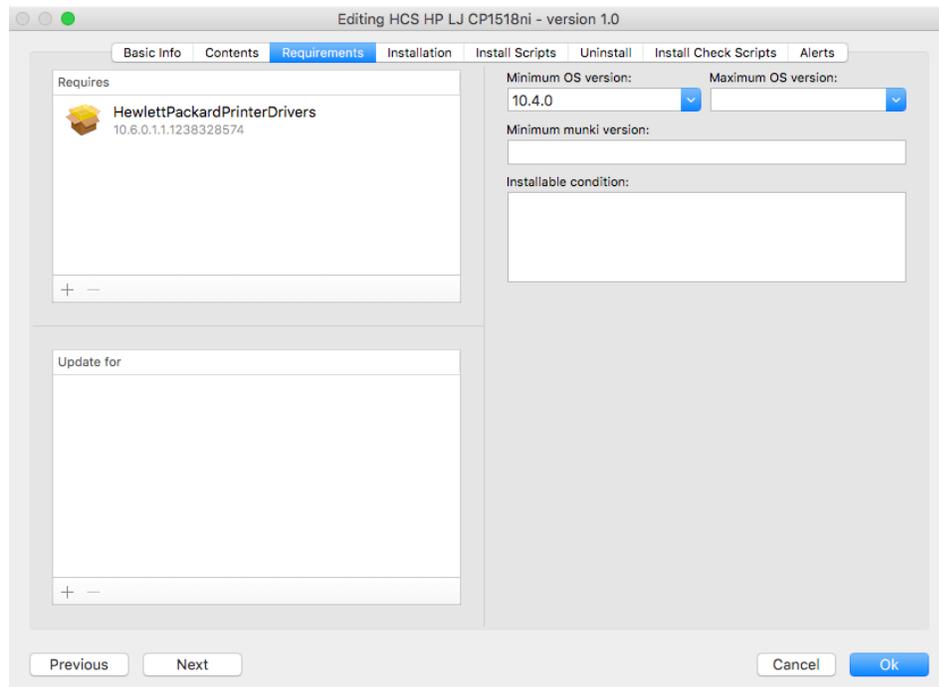

Step 18. Select your printer installer. NOT the printer drivers, then double click it to bring up it's properties.
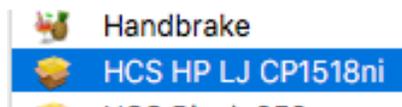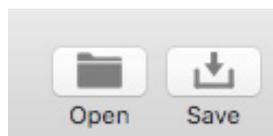
Step 19. Select the "Reqirements" tab and make sure the required drivers for your printer show up here and is spelled correctly. Click "OK" when done.

Step 20. Click the "Save" button in the toolbar, then Quit the Munki Admin application.

Step 21. From a client Mac, Launch "Managed Software Center" from the Applications folder. In my example below, the client did not have the required drivers so Munki will install them for me. Click the "Update All" button.
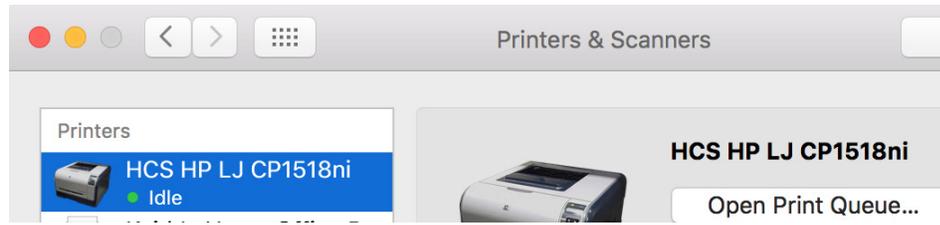
Step 22. Quit "Managed Software Center" when the installs are done then on your Client Mac, launch System Preferences, and select "Printers & Scanners". The printer will show up and is ready for use.

I hope this guide will be helpful to others. Enjoy.