# **User Instruction**

Botany Print Service – use the HP printer from a Mac Computer

Prepared by: Botany IT

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# Contents

Pre-Installation	
Pre-check List	3
HP printer location	3
Cost	3
Installation	4
Overview	4
Download and Install PaperCut Client App	4
Add PaperCut client to your Login Items	7
Starting the PaperCut Client with Launchd	
Download and install HP LaserJet M630 driver	
Add HP LaserJet M630 Printer(s) as LPD/LPR printer(s)	
Test the Printer(s)	

# **Pre-Installation**

### **Pre-check List**

#### □ Network Connection:

To print to the HP printer, you need to connect to a UBC network. This includes any UBC building local area network, ubcsecure wireless network and ubcprivate wireless network. If you are connected to a non-UBC network, you can turn on UBC myVPN, and then you will be able to print.

Please check <u>https://it.ubc.ca/services/email-voice-internet/myvpn</u> for more details about UBC myVPN connection.

#### Supported Mac Operating System Versions: Mac OS 10.7 or newer

Due to limitations with the HP Laserjet M630z drivers, currently we can only offer printing support for Mac OS 10.7+. Check your OS version: <u>https://support.apple.com/en-ca/HT201260</u>

#### **CWL** Account registration and speedchart association

To use any of the four Ricoh multi-functional printers, you will need to have your CWL account registered with our PaperCut print/copy management system, and have at least one speedchart associated with your account. To streamline the process, starting on Dec 15, 2017, we will follow the new guideline for managing user accounts and speedcharts.

- 1. Botany IT staff will only accept requests directly from the managing administrator for adding/removing of speedchart(s).
- 2. Botany IT staff will only accept requests directly from the research grant holder (PI) for provision/deprovision of user account accessing a research speedchart.
- 3. Botany IT staff will only accept requests directly from the managing administrator for provision/deprovision of user account accessing a non-research speedchart.

If you need to print/copy using a research grant speedchart, please ask the grant holder to send the request to <u>helpdesk@botany.ubc.ca</u> with your CWL username and the speedchart code. If you need to print/copy using a non-research speedchart (such as a speedchart for a biology course), please ask the managing administrator of the speedchart to send the request to <u>helpdesk@botany.ubc.ca</u> with your CWL username and the speedchart code. If you are not sure who the managing administrator of the speedchart is, please contact both the Botany administrator and the Zoology administrator for your request.

### HP printer location

Biodiversity Research Centre – room 229

### Cost

• 7 cents per page for black and white print out (only black and white is available at this printer)

Reference: <u>http://it.botany.ubc.ca/it-services-and-resources/print-services/</u>

# Installation

### **Overview**

The installation requires you to perform the following operations:

- 1. Download and install PaperCut Client App
- Add PaperCut client to your Login Items (easier, but not reliable) Or

Set the PaperCut client to start with Launchd (more complicated, but reliable)

- 3. Download and install the HP Laserjet M630 driver
- 4. Add the HP printer(s) as LPD/LPR printer(s)
- 5. Test the printer(s).

## Download and Install PaperCut Client App

To download PaperCut PCClient, please follow the steps below: (if you have any issue downloading the PCClient App please contact Botany IT at <u>helpdesk@botany.ubc.ca</u>.

1. On the Finder menu, click **Go > Connect to server** 

				-	5			
Ś	Finder	File	Edit	View	Go	Window	Help	
					Ва	ick		¥[
					Fo	rward		쁐]
					Se	lect Startu	p Disk on Desktop	<b>☆</b> ₩↑
	-					Recents		企業F
TM	Backup				Þ	Document	S	<b>☆業O</b>
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					0	Network		企業K
		-		200	0	iCloud Driv	ve	企業1
					Å	Application	ns	<b>☆</b> ₩A
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				-	Re	cent Folde	rs	•
					6	to Folder		OHC .
-	0 0		t-17-0		Co	onnect to Se	erver	ЖК

- 2. In the Server Address field, enter the following information:
  - smb://bota-sprnp1.ead.ubc.ca

•••	Connect to S	Server
smb://bota-sprnp	1.ead.ubc.ca	
Favorite Servers:		
📠 smb://files.u	bc.ca/team	
+	9	Browse Connect

- Click the + button to add this server address to the list of your favourite servers.
- 3. Click Connect
- 4. Select Guest and click Connect (if your Mac is running macOS Big Sur)

ŤŤŤ	Enter your name and password for the server "bota- sprnp1.ead.ubc.ca".
	Connect As: 🔘 Guest
	Registered User
	Cancel

- 5. Enter the following, then click OK: (if your Mac is running macOS Catalina or lower)
  - Username: EAD\your CWL username
  - Password: your CWL password

<i>î</i> tt	Enter your na "files.ubc.ca"	me and password for the server
•	Connect As:	Guest
		Registered User
	Name:	EAD\username
	Password:	•••••
	Rememb	per this password in my keychain
		Cancel Connect

6. A mounted network drive will appear on the desktop.

	-
Cancel	J
	PCDirectPrintMonitor PCRelease

Select "PCClient" and click OK.

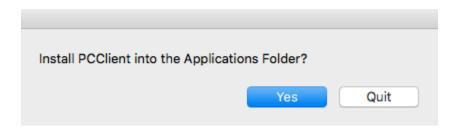
> PCClient		₩ ≎	• 🖞 🖉 •	Q
		6	6	
linux	mac	msvcp120.dll	msvcp140.dll	
6	TRT	6		
msvcr120.dll	README.txt	vcruntime140.dll	win	

Copy the "mac" folder to your mac.

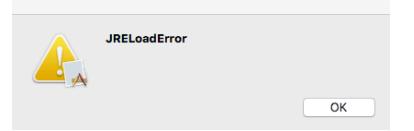
Open the "mac" folder and double-click the <u>"client-local-install"</u> script and this should start the installation process

Name	Date Modified	Size	Kind
🞄 client-local-install	Today at 10:42 AM	81 KB	Application
PCClient	Today at 10:42 AM	119.7 MB	Application

When you see the pop-up window below, click "Yes" to install the **<u>PPClient</u>**. It may take a few seconds for the script to install the PaperCut client app to your Applications folder. Please wait patiently.



You may get a couple of JRE Load Errors, click "OK" to all of them



 Once the script completed the installation, you will notice two things: first, a black "P" icon will show on the Finder Menu bar close to your clock; second, a PaperCut client login window will pop out and ask you to enter your username and password. Please type in your CWL account username and password, and check "Remember my identity", then click "OK" to close the window for now. The PaperCut client app will prompt you to enter CWL credentials again when you print to our Ricoh printers.

	Login	
Login Your login	credentials are required for printer access.	papercut.com
Username:	sing your network username and password to confirm you	ur identity.
Password:	Remember my identity           Cancel	ОК

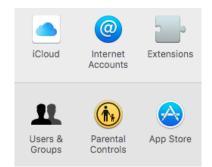
If you see an error of "Invalid username or password", please try to enter your CWL ID and password again. If you keep getting this error, you may not have your CWL account registered with the PaperCut system. Please contact us at <u>helpdesk@botany.ubc.ca</u> to find out.



### Add PaperCut client to your Login Items

Note: for Mac laptop users who keep switching networks at different locations, and do not regularly log off or reboot your laptop, we strongly suggest you to follow steps in the "Starting the PaperCut Client with Launchd" section. Adding Papercut client to your login items cannot guarantee a reliable connection between mobile users and our print server/printers.

1. Open System Preferences, click on Users & Groups.



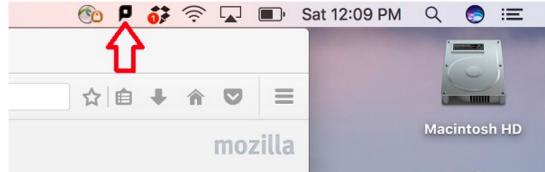
- 2. Select your username, then click on "Login Items" tab.
- 3. and click the "+" at the bottom of the Login Items list

Users &	Groups	Q Search
	Password Login Iter	ms
These items will op	oen automatically when y	ou log in:
Hide Item	Kind	
🗌 🕖 iTunesH	elper Application	
To hide an application column next to the ap	n when you log in, select the oplication.	checkbox in the Hide
+ -		

- 4. Select the PPClient app from your Applications folder, then click "Add".
- 5. You should now see the PPClient in your Login Items list

	Users & Grou	ps	Q Search
	Pas	sword Login Items	
These	items will open au	utomatically when you l	og in:
Hide	Item	Kind	
	🕖 iTunesHelper	Application	
	📁 PCClient	Application	

6. In the end, reboot your Mac computer to verify that the Login Items is functioning as expected. You should see the black PaperCut client icon at the menu bar around the right-upper corner, as shown below. Please note that if this icon changes to grey color, it means the PaperCut client cannot connect to the print server. Please make sure you connect to UBC network (or turn on myVPN connection if connect from outside of UBC), and wait a few minutes for this icon to change back to black color, then you can print.



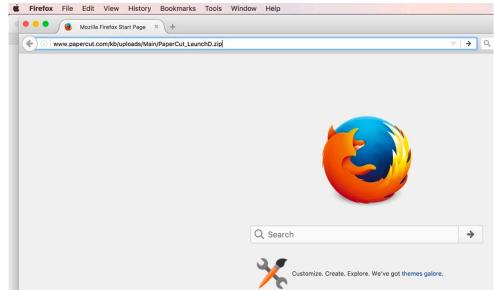
# Starting the PaperCut Client with Launchd

3.

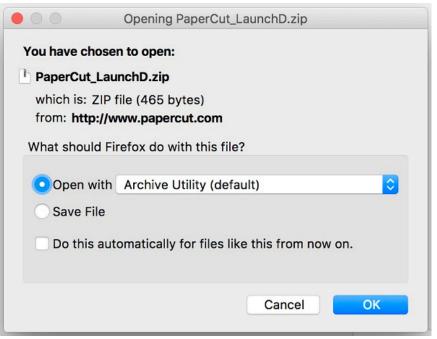
Note: steps in this section can be challenging for some users. Please feel free to contact Botany IT at <u>helpdesk@botany.ubc.ca</u> if you need help.

If you don't turn off or log out of your Mac computer every day, rather than add the PCClient app to the "Login Items", we strongly suggest you to follow the steps below to make sure the PCClient app will run all the time.

- 1. Log in to the Mac computer as a user with Administrator access.
- 2. Open a web browser, type <a href="https://www.papercut.com/kb/uploads/Main/PaperCut\_LaunchD.zip">https://www.papercut.com/kb/uploads/Main/PaperCut\_LaunchD.zip</a> at the address bar then push "Enter".



When the web browser asks you what to do with this ZIP file, you can choose to "Open with archive utility (default)", or "Save File" then go to the "Downloads" folder and double click the file to unzip it.



Either way will give you the "com.papercut.client.plist" file in the "Downloads" folder.

•••	1	Downloads		
$\langle \rangle$			<b>₽</b> ~	Q Search
Favorites Dropbox AirDrop All My Files Cloud Drive Applications Desktop Documents	com.papercut.client.plist	<pre><?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">   <dicts <key="">Label   <string>com.papercut.client.agent</string>   <key>ProgramArguments</key>   <array>   <string>/Applications/PCClient.app/Contents/ MacOS/JavaAppLauncher</string>   <key>KeepAlive</key>   <true></true>   </array></dicts></plist></pre>		
O Downloads		com.pa	apercut.clie	ent.plist
Seansh Devices SEAN's Ma Macintosh Remote Disc Ricoh		Modified	Tuesday, July	- 458 bytes / 29, 2014 at 2:06 PM / 29, 2014 at 2:06 PM / 29, 2014 at 2:06 PM

3. In the next several steps, we will do some command lines with Terminal.app. You can find it in your "Applications/Utilities" folder.

		🔀 Utilities	
< >	** **		Q Search
Favorites	<ul> <li>Microsoft ReDesktop.app</li> <li>Microsoft Silverlight</li> <li>Microsoft Silverlight</li> <li>Mission Control.app</li> <li>Notes.app</li> <li>Numbers.app</li> <li>PCClient.app</li> <li>Photo Booth.app</li> <li>Photos.app</li> <li>Preview.app</li> <li>QuickTime Player.app</li> <li>Reminders.app</li> <li>Safari.app</li> </ul>	<ul> <li>Activity Monitor.app</li> <li>Adobe FlashManager.app</li> <li>AirPort Utility.app</li> <li>Audio MIDI Setup.app</li> <li>Bluetooth Filxchange.app</li> <li>Boot Camp Assistant.app</li> <li>ColorSync Utility.app</li> <li>Console.app</li> <li>Digital Color Meter.app</li> <li>Disk Utility.app</li> <li>Grab.app</li> <li>Grapher.app</li> <li>Keychain Access.app</li> <li>Migration Assistant.app</li> </ul>	<b>P</b> Terminal.app
Devices	<ul> <li>Siri.app</li> <li>Stickies.app</li> <li>System Preferences.app</li> </ul>	Script Editor.app	Application - 10.3 Created Jul 31, 2016, 8:41 PM Modified 2017-03-06
Macintosh Remote Disc Ricoh		VoiceOver Utility.app	Last opened Today, 2:00 PM Version 2.7.1 Add Tags

4. In the Terminal window, copy the com.papercut.client.plist file from the Downloads folder to /Library/LaunchAgents/ folder by type in commands below:

cd Downloads

sudo cp com.papercut.client.plist /Library/LaunchAgents/

Your computer will ask you to type in your password when you run "sudo..." above.

5. In the Terminal window, change folder to "/Library/LaunchAgents", then change the owner/group and permission of the com.papercut.client.plist file, by type in commands below:

cd /Library/LaunchAgents/

sudo chown root:wheel com.papercut.client.plist

sudo chmod 644 com.papercut.client.plist

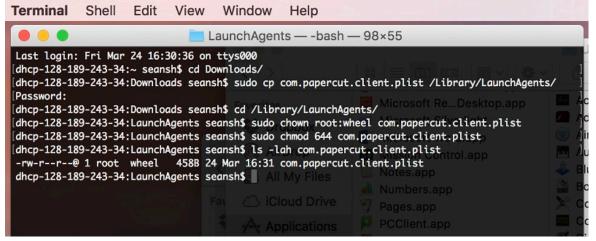
6. Next we'll verify that the permissions for the file are correct by typping in the command:

Is -lah com.papercut.client.plist

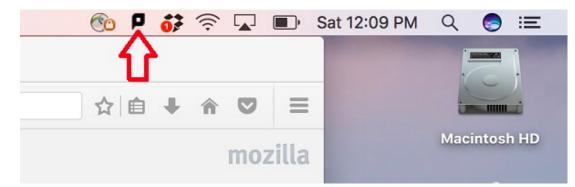
The output should look like:

-rw-r--r-@ 1 root wheel 458B Jul 29 2014 com.papercut.client.plist

7. A screen shot of all commands a shown below.



In the end, reboot the Mac to verify that the launchd job is functioning as expected. After the reboot, you should see the black PaperCut client icon at the menu bar around the right-upper corner, as shown below.
 Please note that if this icon changes to grey color, it means the PaperCut client cannot connect to the print server. Please make sure you connect to UBC network (or turn on myVPN connection of connect from outside of UBC), and wait a few minutes for this icon to change back to black color, then you can print.



### Download and install HP LaserJet M630 driver

- 1. Open a web browser of your choice, such as Safari, FireFox, or Chrome.
- 2. Go to https://it.botany.ubc.ca/it-services-and-resources/print-service/ and scroll to the bottom of the page where it says "Download Links"
- 3. Click on the third link (<u>http://download.botany.ubc.ca/print\_service/HP-LaserJet-Enterprise-Flow-MFP-M630\_v12.38.0.zip</u>), this should start the download
- 4. Open the downloaded dmg file then double click the "HP LaserJet Enterprise Flow MFP M630.pkg" file from the pop out window, and follow the instructions to install the printer driver.

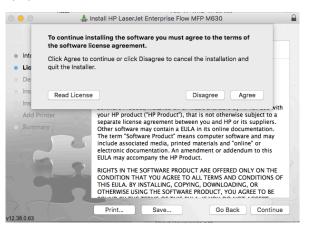
HP LaserJet Enterprise Flow MFP M630

w MEP M630 pl

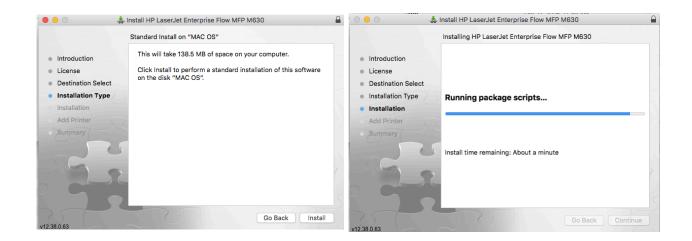
5. Click "Continue" in the pop out windows as shown below.



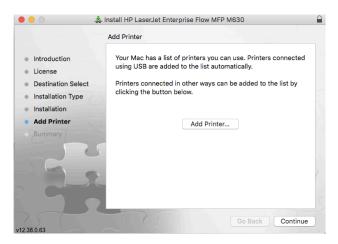
6. Click on "Agree" in the pop out windows as shown below.



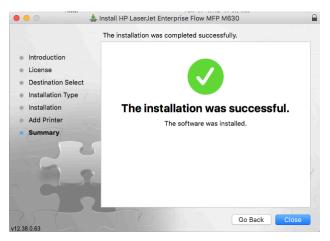
7. Click on "Install" in the pop out windows as shown below.



8. Select "Continue" in the pop out windows as shown below.



9. When you see "Installation was successful", click "Close" to close the installation window



### Add HP LaserJet M630 Printer(s) as LPD/LPR printer(s)

1. Open System Preferences, then click on Printers & Scanners.



2. Click on the "+" at the bottom of the Printers list to add a new printer

Printers		wc6400	
wc6400 Idle, Last Used			
		Open Print Que	ue
		Options & Supp	lies
	Location: Hallway o	utside of Room 2231 (I	Biological Sciences Build
	Kind:	Xerox WorkCentre 64	00X, 3.90.0
	Status:	Idle	
	Share this printe	er on the network	Sharing Preferences
-)-			
	Default printer:	Last Printer Used	
	Default paper size:	US Letter	

3. Since we suggest Mac users to install the HP printer as LPD/LPR printer, you need to use the "Advanced" button to add this printer, which is not listed by default. To add the "Advanced" button, right Click (two fingers tap your trackpad, or hold down the "control" key when you left click) at the area between the "Windows" printer icon and the search bar. You will see a pop out menu as shown below. Click on the "Customize Toolbar…"

ault IP Windows	✓ Icon and Text Icon Only Text Only	Search Search		
Name	Use Small Size	∧ Kind		
	Customize Toolbar	11.012 5. 20		
	ing and a start of the			
Name:				
Name: Location:				
		\$		
Location:		C Add		

4. When you see the pop out window for extra toolbar items, drag and drop the "Advanced" gear icon onto the empty space between the Windows printer icon and the search bar, then click "Done".

	Add	
- 🔒 🍈 듴 👘	Q Search	
Default IP Windows	Search	orites
Drag your favorite item; into	the toolbar	
Windows Advanced		e
or drag the default set into	Q Search	
Default IP Windows	Search	
Show Icon and Text	Use small size Done	
Use:	0	he ne
	Add	Prin

5. Now you can click the Advanced icon, set the following settings for this new printer as shown below:

•					Add
4	2	۲	-	-Q-	Q Search
Det	fault	IP	Windows	Advanced	Search
		Type:	LPD/LP	R Host or F	Printer
	D	evice:	Anothe	r Device	€
		URL:	lpd://pri	nt.botany.u	ubc.ca
			_		
		Name	e: HP La	serJet M63	30 in Biodiversity229
	Lo	catio	nr		
			Auto	Select	
		Use		ric PostScr	· · · · · · · · · · · · · · · · · · ·
				ric PCL Print t Software.	
			Selec	at Sontware.	
			Other	r	

- a. Type: LPD/LPR Host or Printer
- b. Device: Another Device
- c. URL: lpd://print.botany.ubc.ca/biodiversity229 for the HP printer at Biodiversity 229. Or lpd://print.botany.ubc.ca/biodiv-holdrelease for the hold/release virtual printer.
- d. Use: Select Software ...

6. Once you choose "Select Software" from the last step, you will see the "Printer Software" pop out window, scroll down until you see "HP LaserJet Flow MFP M630", select it and click OK

🕘 🔵 🛛 Printer	Software	
	Q 630	0
Brother MFC-630CD CUPS		
Canon MP630 series		
HP LaserJet Flow MFP M630		
HP Officejet 6300 series		
HP Officejet 6300 Series - Fax		
HP Photosmart A530/A630		
HP Photosmart C6300 series		
Lexmark T630		
Lexmark T630 Fax		
Samsung ML-1630 Series		
Samsung ML-1630W Series		
	Cancel	ОК

7. Now you are back at the "Add" window. Verify your settings and click "Add". This should add your chosen HP printer to your list of printers.

•						Add					
-	2 (		-	202				Q Sea	rch		
Def	fault I	IP	Windows	Advanced				Sea	rch		
	Ту	pe:	LPD/LP	R Host or	Printer						0
	Devi	ice:	Anothe	r Device							0
	U	RL:	lpd://pri	nt.botany.	ubc.ca						
	N	ame	HP La	serJet M6	30 in B	iodiver	sitv229				
							,				_
	Loca	ation	Biodiv	ersity229							
		Use	HP O	fficejet 63	00 seri	es					0
										A	dd

# Test the Printer(s)

- 1. Open any document or web page.
- 2. Choose to print like you would normally do.
- 3. Select one of the HP printers (biodiversity229 or the biodiv-holdrelease virtual printer)

4. Here you are able to change and/or save your Printing settings.

		U 🖨 🔻	Docume	ent2	Q- Search in Document	© •
Home In	sert Design	Layout R	eferences Maili	ngs Review	View	🛓 + Share \land
Paste 🔏	Calibri (Body) B I U					Styles Styles Pane
			Pri	int		
		Quality: Norn Color: ColorS Color Model:	Default Settings     Printer Features     Sets: Paper Automatic nal     Smart/sRGB Color     countic	1630 in Biodiversi C		
	?	PDF 🗸			Cancel Print	
Page 1 of 1	0 Words	Q⊻ English (	US)			+ 100%

5. If using Chrome or Adobe, we recommend using the "Print using system dialog" feature to view all of the available copier features, as shown below.

Print Total: 1 sheet of paper Cancel Print	18242017	New Tak	Gmail Images	
Destination HP LaserJet M630 in HP Officejet 6300 series Change	Search Google or type U	Google RL		
Pages (e) All (c) (e.g. 1-5, 8, 11-13	Welcome to Google	Chrome Web Blore		
Copies 1 Layout Portrait •				
+ More settings	Tre	ek to Quttinirpaaq National Park, the top of the world		
Print using system dialog (¥36P) Open PDF in Preview	developed			

6. Once print options are chosen, you may print your document. After clicking "Print", you will see a dialog pop-up within a few seconds, depending on the network speed and age of your computer.

👂 Login	<u> </u>
F Login Your	papercut.com
Username: Password:	your cwl
Remember:	Until I logout 👻
	OK Cancel

This is the login window for PaperCut to authenticate and identify who you are. Enter your CWL username in the username field and your CWL password in the password field. Also you can choose the option for how long the system shall remember your CWL credentials. Select the option in the "Remember" field by clicking the drop down arrow.

7. Successful authentication will bring up a Print Job Notification pop-up. It shows the document name you are printing, which printer the print job is sent to, the number of pages of the document and the cost of the print job. Please select the account/speedchart you wish to use for the print job by clicking the drop down arrow at the "Account" field. Then click "Print".

If you print to the HP printer, you can now walk over to it and pick up your printouts.

👂 Print Job N	×			
F Prin	nt Job Notification	papercut.com		
🚩 с	onfirm the print and select the print a	ction		
Print job details				
Document name	Microsoft Word - HP_Mac_Print_Quickstart	_Guide_Oct17_2017		
Printer	Printer bota-sprnp1\biodiversity229			
Pages	21 (Grayscale)	Cost \$1.47		
Print job actions	5			
Charge to	shared account			
4	Account Botany\CMOC - Botany IT	~		
Apply to all o	documents in queue (Jobs: 1)	Print Cancel		

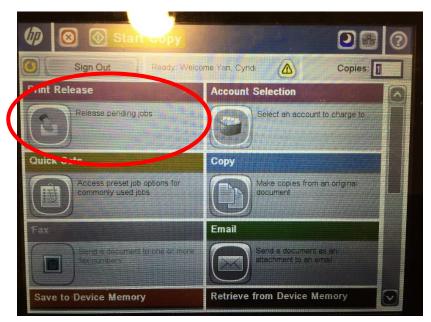
Note: steps below are only applicable if you print to the holdrelease virtual printer.

 If you print to the holdrelease virtual printer, an ATTENTION window will pop-up, as shown below. You need to walk over to the HP printer, login by tapping your UBC Card/entering your employee ID/entering your CWL ID & password, then release your print job.

	PaperCut MF - Message
p	ATTENTION
	Your document has been held in a queue. Before the document will be printed, you will need to log into the web interface provided or a release station and release your document.
	ок

Note: All print jobs to the holdrelease virtual printer will be held for 24 hours then cleared from the system. If you forgot to release your print job at the HP printer within 24 hours, you will have to print your document again. For details about how to login to our HP printer, please read the <u>HP Copy/Scan Quick Start Guide</u>.

9. Once you login to the HP printer, you will see the first screen as shown below. Please click on the "Print Release" button.



10. If you touch the "Print release" button in step above, you will see the second screen with a list of print jobs held under your account. You need touch the check box in front of the job to select it (circle 1), then you can either print the selected job(s) (circle 2), or delete the selected job(s) (circle 3).

Ready: Welcome Yan,	Cyndi	1	
Microsoft Wo 10:16 \$0.77	ord - HP Copy Scan 11 pages	0	Selected
			1 job selected
			2 3 Print Delete

11. At the end, please pickup your printouts, then touch the "Sign out" button.