

How to Deploy Printers with Jamf Pro



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Preface

Jamf will remove Jamf Admin in an upcoming release of Jamf Pro. Since one of the workflow that Jamf Admin provides is printer creation, an altenative way of printer creation is provided in this guide. You can use the Jamf Pro web app to create printers for deployment with a policy just as you can with the Jamf Admin app. Deploying printers in this fashion is preferred as all printer options such as duplex functionality and additional trays are captured in the printer description file that is deployed. This guide covers the process. Also, while there are workarounds to allow standard (non-administrative) users to self-deploy printers, deploying through Jamf Pro (automatically or on-demand in the Self Service app) does not require administrative privileges on the Mac.

For more information on the deprecation and removal of the Jamf Admin app from Jamf pro, visit:

https://learn.jamf.com/bundle/jamf-pro-release-notes-current/page/Deprecations_and_Removals.html

Requirements

- A Jamf Pro server, version 11.3
- macOS Sonoma, version 14.3.1
- Knowledge of how to install drivers and create local printers on macOS
- A network printer, connected using Wi-Fi or Ethernet, with a known IP address (static IP preferred)
- The printer driver package from the vendor web site



Section 1: Set up the Printer on your Mac

Before you can capture the PPD and create the Printer in Jamf Pro, you must set up the printer on a Mac computer. In the example, this guide is using a RICOH Aficio SP 4100 NL named Office Printer.

1. Obtain the printer driver package from the vendor's web site, then open the dmg.

•••	< > Downloads		»Q
Favorites AirDrop Creates Applications Desktop Documents Downloads	Ricoh_PS_Printer s_Vol20.0.dng 10.1.M8		
Locations	📓 Macintosh HD > 🛅 Users > 🛅 a	ikarneboge > 🛅 Downloa	ads
C iCloud Drive	1 item, 973.2	9 GB available	-0

2. Install the pkg file. When you are asked whether you want to move the installer to the trash, click Keep. You will need to upload this package to your Jamf Pro distribution point. Those instructions are in Section 2: Upload the Printer Drivers and Configure the Printer in Jamf Pro.



3. Open System Settings, then click Printers & Scanners.





4. In Printers & Scanners, click Add Printer, Scanner, or Fax.

•••	< > Printers & Scanners	
Q Search	Default printer	Last Printer Used 🗘
💽 Siri & Spotlight	Default paper size	US Letter 🗘
🖐 Privacy & Security	No D	
Desktop & Dock	NOP	Inners
🔅 Displays		Add Printer, Scanner, or Fax
🛞 Wallpaper	•	
Screen Saver		
Battery		
Lock Screen		
Touch ID & Password		
半 Users & Groups		
Passwords		
Internet Accounts		
🥵 Game Center		
🔚 Wallet & Apple Pay		
Keyboard		
Trackpad		
Printers & Scanners		

5. In the Add Printer window click IP.

• • •	Ar Default	Id Drinter IP Windows	
Q Sear	ch		
Name		∧ Kind	
HP Color HP Office RICOH At	LaserJet Pro M453-4 [7B92F5] Jet Pro 8720 [0898A4] licio SP 4100NL	Bonjour Bonjour Multifun Bonjour	
Nar Locati U	ne:		\$
?			Add



6. Select Line Printer Daemon - LPD from the pull down menu.

-	Add Printer
	Default IP Windows
Address:	
	AirPrint
Protoco	/ Internet Printing Protocol - IPP
Queu	Line Printer Daemon - LPD
	HF Jetdirect - Socket
Nama	
Name:	
Name: Location:	
Name: Location: Use:	
Name: Location: Use:	
Name: Location: Use:	¢

- 7. Type in the IP address or FQDN (fully qualified domain name) of the printer. Most network printers will automatically discover the driver if it is installed. If it does not, choose Select Software from the "Use" pull-down menu and select the appropriate driver.
- 8. Rename the printer and enter the Location information if desired.
- 9. Click Add.

	Add Printer		
	Default IP Windows	•	<u> </u>
			-
Address:	10.0.1.17		
	Valid and complete host name or address.		
Protocol:	Line Printer Daemon - LPD	0	
Queue:			
	Leave blank for default queue.		
			•
			<u> </u>
Name:	Office Printer		
Location:	Office		
	And the second		
Use:	RICOH Aficio SP 4100NL PS		
Use:	RICOH Aficio SP 4100NL PS	0	
Use:	RICOH Aficio SP 4100NL PS	0	



- 10.Select any optional modules that the printer has. Like in previous steps, most network printers will auto-discover these options. With the RICOH printer used in this guide, no optional tray or Duplex Unit is installed.
- 11.Click OK.



12.Confirm the printer is now added to the Mac computer. Print a test page of your choice to ensure the printer is working.

•••	< > Printers & Scanners	
Q Search	Default printer	Last Printer Used 💲
💽 Siri & Spotlight	Default paper size	US Letter 💲
🖐 Privacy & Security		
🔳 Desktop & Dock	Printers	
🔅 Displays	Office Printer	>
🛞 Wallpaper	• Idle, Last Used	
Screen Saver		Add Printer, Scanner, or Fax ?
Battery		
Lock Screen		
🎯 Touch ID & Password		
😕 Users & Groups		
Passwords		
Internet Accounts		
🔒 Game Center		
🔄 Wallet & Apple Pay		
Keyboard		
💽 Trackpad		
Printers & Scanners		



Section 2: Upload the Printer Drivers and Configure the Printer in Jamf Pro

In this section, you will upload the printer drivers package to Jamf Pro and configure the printer in the Jamf Pro web app. At that point you will have the assets to create a policy for deployment.

- 1. Log in to Jamf Pro, then click on Settings.
- 2. In Settings, navigate to Computer management.
- 3. Click Packages.

Pro Pro				Q 8
입 Dashboard		Settings		
Computers	>			
Devices	>	Search		Display icons
않 Users	> A	II System Global Jamf apps Self Service	e Server Network Computer management	Device management User management Informatic
Settings	_	14 settings		
		藆 Packages	Scripts	🚔 Printers
		Upload packages, configure settings, and set deployment priority	Upload and manage scripts to deploy to computers, set parameters	Configure printers to deploy to computers
		Nirectory bindings	Disk encryption configurations	Dock items
		Allow Jamf Pro to bind computers to a directory service	Use to manage and enable FileVault on computers	Manage Dock items on computers
		Patch management	inventory collection	Inventory display
		Add external patch sources and set number of times to retry deployment	Configure inventory information to collect for computers	Select the attributes to display in a simple computer search

4. In Packages, click New (+), then choose a category. Categories are optional, but they are good to help you keep your server organized. They also help your users find the items they're looking for in the Self Service app. In this guide, a category of Printers is used.

Pro								Q 8
Dashboard	,	settings : Computer ma ← Package	nagement S					
Devices	>							+ New
& Users	>	NAME	∧ ↓ CATEGORY	PRIORITY	♦ FUT	FEU	INDEXED	de
Ø Settings								



5. Click Choose File.

	¢	ô
settings : Computer management > Packages ← New Package		
General Options Limitations		
Display Name Display name for the package		
[Required]		
Category Category to add the package to Printers		
Filename Elename of the nackage on the distribution point (e.g. "MyPackage.pkg") Choose File		
Information to display to the administrator when the package is deployed or uninstalled		
Notes Odisplay about the package (e.g. who built it and when it was built) Cance	ы	Ca Save

- 6. Navigate to your printer drivers package.
- 7. Select your printer drivers package.
- 8. Click Upload.





9. Change the display name of the package and add any Info or Notes as desired.

10.Click Save. The package will appear in your packages list.

••• • • • • •	i cubswonitalljamfcloud.com ⊘	₫ + ©
Pro		Q 2
입 Dashboard	Settings : Computer management > Packages ← New Package	
Computers	General Options Limitations	
& Users >	Disnlav Name	
Settings	Ricoh_PS_Printers_Vol2_EXP_LIO_Driver.pkg	
	Category Category to add the package to Printers	
	Filename Filename of the package on the distribution point (e.g. "MyPackage.pkg") Choose File Ricoh_PS_Printers_Vol2_EXP_LIO_Driver.pkg	
	Info Information to display to the administrator when the package is deployed or uninstalled	
	Notes Notes to shapley about the peckage (e.g. who built it and when it was built)	⊙ 🛱 Cancel Save

- 11.Click Settings.
- 12.Click Computer management.
- 13.Click Printers.





14.Click New (+).

Pro					Q 8
쭶 Dashboard		Settings : Computer	management S		
Computers	>				
📮 Devices	>				+ New
& Users	,	NAME	へ 中 MODEL	I DEVICE URI	-de-
Settings		No Printers			

15. Enter a display name for the printer and select a Category as desired.

16.Click Definition.

•••	🔒 cubswonitall.jamfcloud.com ⊘	Ů + ©	
Pro Pro		Q 8	
80 Dashboard	Settings : Computer management > Printers ← New Printer		
Computers	General Definition Limitations		
웒 Users → ④ Settings	Display Name Display name for the printer Office Printer Category to add the printer to Printers Set as Default Set as Default Information Information		15
	Information to display to the administrator when the printer is mapped or unmapped Notes Notes about the printer (e.g. who created it and when it was built)	⊙ 🛱 Cancel Save	



- 17.Enter the CUPS Name, and optionally the Model and Location for the printer. The CUPS name is typically the same as the display name, but they do not need to match. The CUPS name will be the name of the printer when deployed to the Mac computer endpoints.
- 18.Enter the Device URI in the form of lpd://<ip_address> where IP address is your four-octet IP address. In this guide, the printer is at the IP address of 10.0.1.17, thus the device URI is lpd://10.0.1.17.

NOTE: Ensure that your computer and web browser does not change the spelling of lpd.

••• • • •	🔒 cubswonitall.jamfcloud.com	₫ + ©
Pro Pro		Ф 8
00 Dashboard	Settings : Computer management > Printers ← New Printer	
Computers >		
Devices >	General Definition Limitations	
Se Users →	CUPS Name	
(b) Settings	Ousee name of the printer Office Printer Office Printer	
	Model Model of the printer	
	RICOH Aficio SP 4100NL PS	
	Location Location of the printer	
	Office	
	Device URI Device URI of the printer (e.g. "ipp://10.1.20.120/")	
	[pd://10.0.1.17]	
	Use generic PPD file Use the generic PPD file that is built into macOS	I Cancel Save
		Calical Save

19.Disable "Use generic PPD file."

20.Click Upload PPD.

	••• • • •	cubswonitall.jamfcloud.com	<u>1</u> + C
	Pro Pro		Q 8
	 Dashboard Computers Devices Users Settings 	Settings : Computer management > Printers C New Printer General Definition Limitations Cocation / Location / Location of the printer Office Device UR if of the printer (e.g. "pp://10.120.120/") [pd://10.0.17	
19—		Jse generic PPD file Ise the generic PPD file that is built into macOS	
20—		Path To PPD File	



21.In the PPD dialog, click Choose File.

	חסס		
	FFD		
"ipp://10.1.20.120/")			
	Choose File No File Chosen		
			_
ile			
file that is built into macOS		Cancel Upload	

22.Press Shift-Command-G to open the "Go to Folder: dialog.

D Favorites	Choose Files to Uplo	bad
DropboxRecents	< > () (Downloads	C Search
🙏 Applicati	Yesterday	
Documents	Add Printers to Jamf Pro.zip	
Desktop		
 Downloads 	Previous 7 Days	
😭 rgoon	Miller's-Ale-He-ecard-i.pdf	
ir 🛅 OneDrive	PKCS12_Crednline.com.pfx	
🗎 HCS Doc	PKCS12_Credonline.com.zip	
🗎 HCS-Ana	Retrospect Client	
iPadOS 17	welcome to Avice Portal.put	
🔁 Sonoma	Previous 30 Davs	
🗎 Getting S	20230131-sta_nts-5912- ndf	
🗀 Creative		Cancel
iCloud		
		Cancel Upload



23.In the Go to Folder dialog, enter /etc/cups/ppd, then press return.

	Choose Files to U	Upload	
	< > IIII • IIII • Townloads	≎ Q Search	
Epson XP-200			
	Yesterday		
odel of the printe	Add Printers to Jamf Pro.zip		
Incon VD-200	/etc/cups/ppd	• • • • • • • • • • • • • • • • • • • •	
.p301174=200	Go to:		
ocation	private > etc > cups		
cation of the prir	private > etc > cups > ppd		
Smithtown			
evice URI of the r			
nov //100 160 05			
pp.//192.100.23	Providus so bays 20230131-sta_nts-5912-ndf		
		Capad	
		Cancer Opioad	
Use the ge	s built into macOS	Cancel Upload	

24. Select the ppd file for your printer, then click Upload, then Upload again.

PPD	
Choose File Office_Printer.ppd	
	Cancel Upload



25. This guide uses a printer named Office Printer. You see the printer PPD in the Jamf Pro web app.

26.Click Save.

••• • • < >	Lie cubswonitall jamfcloud.com ৫	9 Å + ħ
Pro		Q 8
00 Dashboard	Settings : Computer management > Printers	
Computers		
Devices	General Definition Limitations	
🖧 Users 💠	Location Location of the printer	
Settings	Office	
	Device URI	
	Device URI of the printer (e.g. "pp://10.1.20.12U/")	
	1 ····	
	Use generic PPD file Use the generic PPD file that is built into mscOS	
	Path To PPD File	
	/Library/Printers/PPDs/Contents/Resources/Office_Printer.ppd	•
	Office_Printer.ppd	
	Upload PPD	
		Cancel Save

27.Click Previous (\leftarrow).

••• • • < >		Cubswonitall.jamfcloud.com	Ś		⊕ ⊥ + ⊡
Pro					Q 8
없 Dashboard	Settings : Computer management ← Printers	ent			
Devices >					+ New
& Users >	NAME	∧ I MODEL		I DEVICE URI	di.
Settings	Office Printer	RICOH Aficio SP 4100NL PS		lpd://10.01.17	

The printer is now configured in Jamf Pro and ready for deployment.



Section 3: Create a policy in Jamf Pro to deploy the printer through Self Service

In this section, you will create a policy that deploys the printer and its associated driver package in the Self Service app.

- 1. Log into Jamf Pro.
- 2. Click Computers.
- 3. Click Policies.
- 4. Click New (+).

		Pro		\$ S
	88	Computers	Computers Policies	
2 —		Inventory Search Inventory	Q Filter Policies	(+ New) (≔ 88)
	\$	Search Volume Content Licensed Software	NAME ∧ IF FREQUENCY III TRIGGER ✓ No category assigned	ili SCOPE ili
3—		Content Management	Update Inventory Once every week Check-in	All computers
-		Configuration Profiles Software Updates		
		Restricted Software Mac Apps		
		Patch Management eBooks		
		Groups Smart Computer Groups		
		Static Computer Groups	 <!--</td--><td></td>	



5. Enter a display name for the policy and select a Category as desired.

2	Pro		¢	8
::	Computers	computers : Policies ← New Policy		
G	Inventory	Options Scope Self Service User Interaction		
8 6	Search Inventory Search Volume	General General		
\$	Licensed Software	Packages Display Name 0 Packages Office Printer		
	Content Management	Software Vupdates Vupdat		
	Policies Configuration Profiles	Scripts Category to add the policy to		
	Software Updates	Printers Vinters Vinte		
	Mac Apps	Disk Event(s) to use to initiate the policy		
	Patch Management	Not Contigured When a computer starts up. A startup script that checks for policies must be configured in Jamf Pro for this to work		
	eBooks	C Dock Items Use a user logs in to a computer. A login event that checks for policies must be configured in Jamf Pro for this to	work	6
	Groups	Local Accounts Network State Change Cancel When a computer a network state changes (e.g., when the network connection changes, when the computer name	5	save

6. Set the Execution Frequency to Ongoing. As this policy will be deployed through Self Service, no additional triggers are necessary.

••	• • • •		🔒 cubswonitall.jamfcloud.com		Û	+	G
2	Pro				Ç	ç	8
88		Computers : Policies					
G	Inventory	Options Scope Self Service	User Interaction				
8	Search Inventory Search Volume Content Licensed Software Centent Management Policies Configuration Profilies	General	Trigger Event(s) to use to initiate the policy				
٢		Packages 0 Packages	Startup When a computer starts up. A startup script that checks for policies must be configured in Jamf Pro for this to work I same				
		Software Updates Not Configured	Login When a user logs in to a computer. A login event that checks for policies must be configured in Jamf Pro for this to work Nature: State Change				
		Coripts	When a computer's network state changes (e.g., when the network connection changes, when the computer name changes, whe changes)	en the IP a	ddress		
		Printers 0 Printers	Enrollment Complete Immediately after a computer completes the enrollment process				
	Restricted Software	Disk Encryption Not Configured	Recurring Check-in At the recurring check-in frequency configured in Jemf Pro				
	Mac Apps Patch Management	Dock Items 0 Dock Items	Custom At a custom event Execution Frequency				
	eBooks	Local Accounts 0 Accounts	Ongoing •				
	Groups Smart Computer Groups	Management Accounts Not Configured	Make Available Offline Cache the policy to ensure it runs when Jamf Pro is unavailable				
	Static Computer Groups	Directory Bindings O Bindings	Target Drive The show an which the participation of "Allowed Besteror". The analyze outre on the best drive by default		⊙ Cancel	Sav	



- 7. In the payload sidebar select Packages.
- 8. Click Configure.

	Pro		Ф 8
88 L	Computers	computers : Policies ← New Policy	
) Inventory	Options Scope Self Service User Interaction	
õ	Search Inventory	General General	
¢	Search Volume Content	Packages 0 Packages	
	Content Management	(a) Software Updates	
	Policies	Not Configured	
	Configuration Profiles	Scripts Scripts Configure Packages	
	Software Updates	Printers Use this section to install, cache, and uninstall packages. Also, use this section to install a single	
	Restricted Software	© Printers packages. Also use this section to install a single cached package.	
	Mac Apps	Disk Encryption Not Configured	
	Patch Management	Dock Items	
	eBooks	0 Dock Items	
	Groups	Local Accounts 0 Accounts	
	Smart Computer Groups	Management A Accounts	
	Static Computer Groups	Not Configured	
	Classes	Directory Bindings	Cancel Save

9. Locate your printer drivers package, then click Add. Leave the Distribution Point set to Each computer's default distribution point and the Action set to Install.

•••	• • < >		🔒 cubswonitall.jamfcloud.com 👌	⊕ Å + ©	
Serve Pro					
:::	Computers	computers : Policies ← New Policy			
G	Inventory	Options Scope Self	Service User Interaction		
å	Search Inventory	[a] General	Packages	💩 Packages Settings	
٢	Content	Packages 0 Packages	NAME	CATEGORY	
	Licensed Software	Softwara	hp-printer-essentials-UniPS-6_1_0_1.pkg	Printers Add	
	Content Management	() Updates	Install_macOS_Ventura13.2.pkg	macOS Upgrades Add	
	Policies	Not Configured	JamfHelper-BrandedLogo.pkg	macOS Upgrades Add	
	Configuration Profiles	0 Scripts	Ricoh_PS_Printers_Vol2_EXP_LIO_Driver.pkg	Printers Add	
	Software Updates	Printers	Sentinel-Release-22-4-1-6538_macos_v22_4_1_6538.pkg	Security Add	
	Restricted Software	0 Printers		Cancel	
	Mac Apps	Disk Encryption			
	Patch Management	Not Configured			
	eBooks	Dock Items			
	Groups	Local Accounts		ⓒ 1월 Cancel Save	



10.In the payload sidebar select Printers.

11.Click Configure.

	Pro Computers : Policies		Ą.	8		
	88 Q	Computers	computers : Policies ← New Policy			
10	2 6 8 8 8	Inventory Search Inventory Search Volume Content Licensed Software Content Management Policies Configuration Profiles Software Updates Restricted Software Mac Apps Patch Management eBooks Groups Smart Computer	Options Scope Self Service User Interaction Image: Configure Printers Packages Image: Configure Printers Image: Printers Denters User this section to map and unmap printers. Image: Dick Encryption Configure Printers Image: Dick Inters Configure Image: Dick Encryption Configure Image: Dick Inters Configure <th></th> <th></th> <th>-11</th>			-11
		Groups Static Computer Groups Classes	Accounts Not Configured O Directory Bindings Ocano	el Sav) ve	

12.Locate your printer, then click Add. Leave the Action set to Map.

2	⊈ Pro ♀ &						
88	Computers	computers : Policies ← New Policy					
G	Inventory	Options Scope Self S	ervice User Interaction				
8	Search Inventory Search Volume Content Licensed Software	Packages 1 Package	Printers		Printers Settings		
0		Software	NAME	CATEGORY			
		Not Configured	Office Printer	Printers	Add		
	Content Management	Scripts 0 Scripts	1		Cancel		
	Policies Configuration Profiles	Printers 0 Printers					
	Software Updates Restricted Software	Disk Encryption Not Configured					
	Mac Apps	Dock Items					
	eBooks	Local Accounts					
	Groups	Management Accounts			⊙ 🛱 Cancel Save		



13.Click Scope.

	Pro Q						
	::: 	Computers	computers: Policies ← New Policy				
13 —		INVENTOR	Scope Self Service User Interaction				
10	60	Search Inventory					
	ø	Search Volume Content	Targets Limitations Exclusions				
		Licensed Software	Target Computers Target Users				
14 —		Content Management	All Computers Users to deploy the policy to Specific Users				
		Configuration Profiles Software Updates	Selected Deployment Targets	+ Add			
		Restricted Software	TARGET TYPE				
		Mac Apps	No Targets		- 1		
		Patch Management					
		eBooks			- 1		
		Groups	c	Cancel S	Save		

14.Set Target Computers to All Computers or your desired Scope.

15.Click Self Service.

16. Select the checkbox for Make the policy available in Self Service.

2	2 Pro					
88	Computers	Computers : Policies				
6 8 9	Inventory Search Inventory Search Volume Content Licensed Software	Options Scope Self Service User Interaction I self Service User Interaction I f Self Service Display Name Display Self Service Display Name Display Self Service Display Name Display Self Service Display Name				
	Content Management	Office Printer				
	Policies Configuration Profiles Software Updates Restricted Software Mac Apps Patch Management	Button Name Before Initiation Name for the button that users click to Initiate the policy Install Button Name After Initiation Name for the button that users click to reinitiate the policy Reinstall				
	eBooks Groups	Description Description to display for the policy in Self Service Type your description here. Co	⊗ ancel	E Save		



17.If desired, add an icon for the printer as well as categorize the printer. Selecting a category will enable your users to locate the policy with ease.

18.Click Save.

2	Pro		Ģ	8
89 11	Computers	computers : Policies ← New Policy		
G	Inventory	Options Scope Self Service User Interaction		
8	Search Inventory	Notification		
\odot	Search Volume Content	Display notifications for the policy		
	Licensed Software			
	Content Management	Icon Icon to display for the policy. It is recommended that you use a file with the GIF or PNG format. The recommended size is 512×512 pixels.		
	Policies	and the second s		
	Configuration Profiles			
	Software Updates	ricoh.png		
	Restricted Software	Upload Icon		
	Mac Apps	Select Existing Icon		
	Patch Management			
	eBooks	Categories	. г	
	Groups	Categories in which to display or feature the policy in Self Service Include the policy in the Featured category	⊗ Cancel	Cal Save

19.Inspect your policy on the main Policies page to ensure you have a payload, Scope, Trigger, and Execution Frequency.

2	Pro Q						
	Computers	computers ← Policies					
ت %	Inventory Search Inventory Search Volume Content Licensed Software	> No category assigned					
٢		Printers Office Printer Ongoing Self Service All computers					
	Content Management Policies	 Critect Initial Install Ricoh_PS_Printers_Vol2_EXP_LIO_Driver.pkg 					
	Configuration Profiles Software Updates	2 🗮 install Office Printer					
	Restricted Software	> Security					
	Patch Management	> Security and Restrictions					
	eBooks Groups	 I ▼ Show: 100 ▼ 					



20.Open Self Service. The policy to install the printer and its associated driver package is visible in the category that this guide selected called Printers.

Self Service	Browse Printers	AZ 😮
Q Search		
Home Browse All macOS Upgrades Printers	Office Printer	
A Notifications	Install	
④ History		
🛆 Log In		

This completes this guide.