How to Use Jamf Helper
in Jamf Pro

jamfHelper is a utility included with Jamf Pro that presents interactive windows to a user. It is located in:
/Library/Application Support/JAMF/bin/jamfHelper.app/

The jamfHelper executable is located in:
/Library/Application Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper

To get additional usage for jamfHelper, launch Terminal.app and type the following:

/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper -help

```
Usage: jamfHelper -windowType [-windowPostion] [-title] [-heading] [-description]
  [-icon] [-button1] [-button2] [-defaultButton] [-cancelButton] [-showDelayOptions]
  [-alignDescription] [-alignHeading] [-alignCountdown] [-timeout] [-countdown]
  [-iconSize] [-lockHUD] [-startLaunchd] [-fullScreenIcon] [-kill]


Window Types include: -windowType
hud: creates an Apple "Heads Up Display" style window
utility: creates an Apple "Utility" style window
fs: creates a full screen window the restricts all user input
WARNING: Remote access must be used to unlock machines in this mode

Window Position: -windowPosition [ul | ll | ur | lr]
Positions window in the upper right, upper left, lower right or lower left of the
user's screen
If no input is given, the window defaults to the center of the screen

Title: -title "string"
Sets the window's title to the specified string

Heading: -heading "string"
Sets the heading of the window to the specified string

Description: -description "string"
Sets the main contents of the window to the specified string

Icon Path: -icon path
Sets the windows image filed to the image located at the specified path

Button 1: -button1 "string"
Creates a button with the specified label

Button 2:-button2 "string"
Creates a second button with the specified label

Default Button: -defaultButton [1 | 2]
Sets the default button of the window to the specified button. The Default Button will
respond to "return"

Cancel Button: -cancelButton [1 | 2]
Sets the cancel button of the window to the specified button. The Cancel Button will
respond to "escape"

Show Delay Options: -showDelayOptions "int, int, int,..."
Enables the "Delay Options Mode". The window will display a dropdown with the values
passed through the string

Align Description: -alignDescription [right | left | center | justified | natural]
Aligns the description to the specified alignment

Align Headining: -alignHeading [right | left | center | justified | natural]
Aligns the heading to the specified alignment

Align Countdown: -alignCountdown [right | left | center | justified | natural]
Aligns the countdown to the specified alignment
```

```
Timeout: -timeout int
Causes the window to timeout after the specified amount of seconds
Note: The timeout will cause the default button, button 1 or button 2 to be selected
(in that order)


Countdown: -countdown
Displays a string notifying the user when the window will time out

Icon Size: -iconSize pixels
Changes the image frame to the specified pixel size

Luck HUD: -lockHUD
Removes the ability to exit the HUD by selecting the close button

Start Launchd: -startlaunchd
Starts the JAMF Helper as a launchd process

Kill: -kill
Kills the JAMF Helper when it has been started with launchd

Full Screen Icon: -fullScreenIcon
Scales the "icon" to the full size of the window
Note: Only available in full screen mode

Return Values: The JAMF Helper will print the following return values to stdout...
    0 - Button 1 was clicked
    1 - The Jamf Helper was unable to launch
    2 - Button 2 was clicked
    3 - Process was started as a launchd task
    XX1 - Button 1 was clicked with a value of XX seconds selected in the drop-down
    XX2 - Button 2 was clicked with a value of XX seconds selected in the drop-down
    239 - The exit button was clicked
    243 - The window timed-out with no buttons on the screen
    250 - Bad "-windowType"
    255 - No "-windowType"
```

Sample Utility Window:
(Note: This includes an icon I added in the following path: /Library/Application\ Support/JAMF/HCS.png)

```
/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper
-windowType utility -icon /Library/Application\ Support/JAMF/HCS.png -title "HCS
Technology Group" -heading "My First Jamf Helper Window" -description "This is an
example of my first Jamf Helper Utility Window" -button1 "OK" -button2 "Cancel"
```


Sample Utility Window with Default and Cancel Buttons:
Default and Cancel buttons let the user press the "Return" key or "Escape" key
(Note: This includes an icon I added in the following path: /Library/Application\ Support/JAMF/HCS.png)

```
/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper
-windowType utility -icon /Library/Application\ Support/JAMF/HCS.png -title "HCS
Technology Group" -heading "My First Jamf Helper Window" -description "This is
an example of my first Jamf Helper Utility Window" -button1 "OK" -button2 "Cancel"
-defaultButton 1 -cancelButton 2
```

Sample Heads-Up Display Window:
(Note: This includes an icon I added in the following path: /Library/Application\ Support/JAMF/HCS.png)

```
/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper
-windowType hud -icon /Library/Application\ Support/JAMF/HCS.png -title "HCS
Technology Group" -heading "My First Jamf Helper Window" -description "This is an
example of my first Jamf Helper Utility Window" -button1 "OK" -button2 "Cancel"
```


Sample Heads-Up Full Screen Window:
(Note: This includes an icon I added in the following path: /Library/Application\ Support/JAMF/HCS.png)

IMPORTANT: Once in Full Screen, it can ONLY be terminated by a remote command, put into the background and killed later or Reboot.

```
/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper
-windowType fs -icon /Library/Application\ Support/JAMF/HCS.png -title "HCS
Technology Group" -heading "My First Jamf Helper Window" -description "This is an
example of my first Jamf Helper Utility Window" -button1 "OK" -button2 "Cancel"
```

Sample Utility Window with a delay options pull-down menu:
(Note: This includes an icon I added in the following path: /Library/Application\ Support/JAMF/HCS.png)

```
/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper
-windowType utility -icon /Library/Application\ Support/JAMF/HCS.png -title "HCS
Technology Group" -heading "Super Important" -description "Please make a selection"
-button1 OK -showDelayOptions "0, 300, 600, 1200"
```
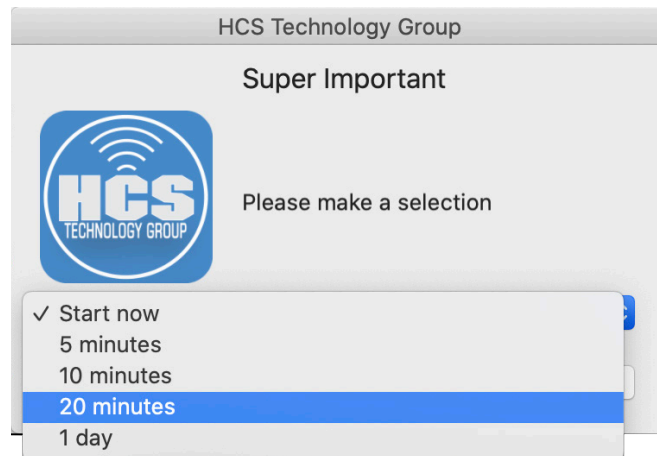

Delay Option	Displayed	Button Pressed	Returned Value
0	Start now	Button 1 (OK)	1
300	5 minutes	Button 1 (OK)	3001
600	10 minutes	Button 1 (OK)	6001
1200	20 minutes	Button 1 (OK)	12001
86400	1 day	Button 1 (OK)	864001

The user interactive Buttons are the method the jamfHelper windows can be best utilized for a script.
Button 1: -button1 will return 0
Button 2: -button2 will return 2 (except when -showDelayOptions is also specified)

Here is a sample script:

```
#!/bin/bash

# This sets the variable for jamfHelper results from which button was clicked

buttonClicked=$(/Library/Application\ Support/JAMF/bin/jamfHelper.app/Contents/MacOS/
jamfHelper -windowType utility -icon /Library/Application\ Support/JAMF/HCS.png -title
"HCS Technology Group" -heading "My First Jamf Helper Window" -description "This is an
example of my first Jamf Helper Utility Window" -button1 "OK" -button2 "Cancel")

if [ $buttonClicked == 0 ]; then

        # Button 1 was Clicked

        echo "OK"

elif [ $buttonClicked == 2 ]; then

        # Button 2 was Clicked

        echo "Cancel"

fi
```

Let's create a script and a Policy using Variables and Parameters

```
#!/bin/bash

# This script will call the jamfHelper to prompt a user to restart their computer.
The Parameters will be set in the Policy.

#Set Parameter 4 to "Window Type" Note: Your choices include utility, hud or fs
windowType="$4"

#Set Parameter 5 to "Logo". Note: This can be BASE64, a Local File or a URL. If a
URL the file needs to curl down prior to jamfHelper
icon="$5"

#Set Parameter 6 to "Window Title"
title="$6"

#Set Parameter 7 to "Window Heading"
heading="$7"

#Set Parameter 8 to "Window Message"
description="$8"

#Set Parameter 9 to "Button1"
button1="$9"

#Set Parameter 10 to "Button2"
#Note: Double digit Parameters should be enclosed with {}
button2="${10}"

#Set the default button. Your choices are 1 or 2. Note: Default and Cancel buttons
let the user press the "Return" key or "Escape" key
#Note: Double digit Parameters should be enclosed with {}
defaultButton="${11}"

# This will set a variable for the jamfHelper

jamfHelper="/Library/Application Support/JAMF/bin/jamfHelper.app/Contents/MacOS/
jamfHelper"

#This will set a variable for jamfHelper to do an action...

userChoice=$("$jamfHelper" -windowType "$windowType" -icon "$icon" -title "$title"
-heading "$heading" -description "$description" -button1 "$button1" -button2
"$button2" -defaultButton 1 -cancelButton 2)

if [[ "$userChoice" == "0" ]]; then

#PUT YOUR ACTION HERE - THIS IS JUST AN EXAMPLE
jamf recon
else
#PUT YOUR ACTION HERE - THIS IS JUST AN EXAMPLE
jamf manage
fi


exit 0
```
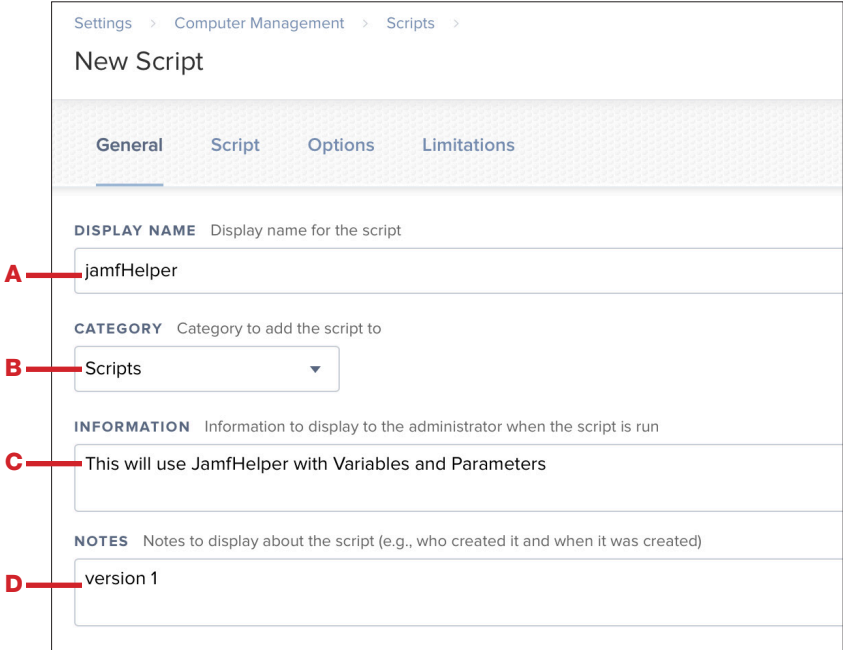
Add the script to Jamf Pro

1. In Jamf Pro, go to All Settings > Computer Management > Scripts

2. Click New

Settings > Computer Management >

Scripts

+ New

3. In General tab:
   A. Add a Display Name: jamfHelper
   B. Choose a Category
   C. Add Information
   D. Add Notes

Settings > Computer Management > Scripts >

New Script

General   Script   Options   Limitations

DISPLAY NAME Display name for the script

A ——— jamfHelper

CATEGORY Category to add the script to

B ——— Scripts

INFORMATION Information to display to the administrator when the script is run

C ——— This will use JamfHelper with Variables and Parameters

NOTES Notes to display about the script (e.g., who created it and when it was created)

D ——— version 1

4. In Script tab copy and paste your script. Remember to add/edit the desired actions of the script.

Settings > Computer Management > Scripts >
jamfHelper

General   **Script**   Options   Limitations

SCRIPT CONTENTS

Default Mode ▼   Default Theme ▼   -T T+ ⌄ Commands

```
 1  #!/bin/bash
 2
 3
 4  # This script will call the jamfHelper to prompt a user to restart their computer. The Parameters will be set in the Policy.
 5
 6  #Set Parameter 4 to "Window Type" Note: Your choices include utility, hud or fs
 7  windowType="$4"
 8
 9  #Set Parameter 5 to "Logo". Note: This can be BASE64, a Local File or a URL. If a URL the file needs to curl down prior to jamfHelper
10  icon="$5"
11
12  #Set Parameter 6 to "Window Title"
13  title="$6"
14
15  #Set Parameter 7 to "Window Heading"
16  heading="$7"
17
18  #Set Parameter 8 to "Window Message"
19  description="$8"
20
21  #Set Parameter 9 to "Button1"
22  button1="$9"
23
24  #Set Parameter 10 to "Button2"
25  #Note: Double digit Paramters should be enclosed with {}
26  button2="${10}"
27
28  #Set the default button. Your choices are 1 or 2. Note: Default and Cancel buttons let the user press the "Return" key or "Escape" key
29  #Note: Double digit Paramters should be enclosed with {}
30  defaultButton="${11}"
31
32
33  # This will set a variable for the jamfHelper
34  jamfHelper="/Library/Application Support/JAMF/bin/jamfHelper.app/Contents/MacOS/jamfHelper"
35
36
37  #This will set a variable for jamfHelper to do an action...
38  userChoice=$("$jamfHelper" —windowType "$windowType" —icon "$icon" —title "$title" —heading "$heading" —description "$description" —button1 '
39  if [[ "$userChoice" == "0" ]]; then
40  #PUT YOUR ACTION HERE — THIS IS JUST AN EXAMPLE
41  jamf recon
42  else
43  #PUT YOUR ACTION HERE — THIS IS JUST AN EXAMPLE
44  jamf manage
45  fi
46
47  exit 0
```

Cancel   **Save**

5. In the Options tab set the Parameter Labels.
   Note: these are NOT the Parameters to be used as Variables but Labels we will see when we create a Policy

Settings > Computer Management > Scripts >

New Script

| General | Script | **Options** | Limitations |

PRIORITY   Priority to use for running the script in relation to other actions during imaging

After ▾

Parameter Labels   Labels to use for script parameters. Parameters 1 through 3 are predefined as mount point, computer name, and username

PARAMETER 4

Window Type - Note: Your choices include utility, hud or fs

PARAMETER 5

Logo - Note: This can be BASE64, a Local File or a URL. If a URL the file needs to curl down prior to jamfHelper

PARAMETER 6

Window Title

PARAMETER 7

Window Heading

PARAMETER 8

Window Message

PARAMETER 9

Button 1

PARAMETER 10

Button 2

PARAMETER 11

Default Button

Create a Policy in Jamf Pro

1. In Jamf Pro, go to Computers > Policies

2. Click New

3. In the Options tab > General Payload, set a Display Name, Trigger and Frequency.
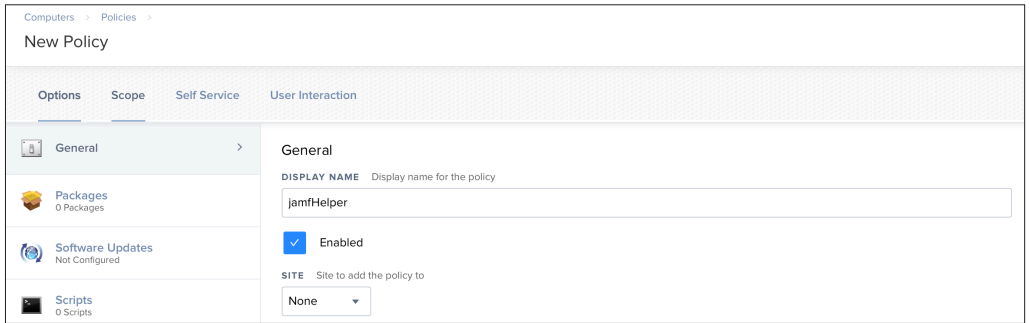
4. In the Options tab > Scripts Payload, click Configure.
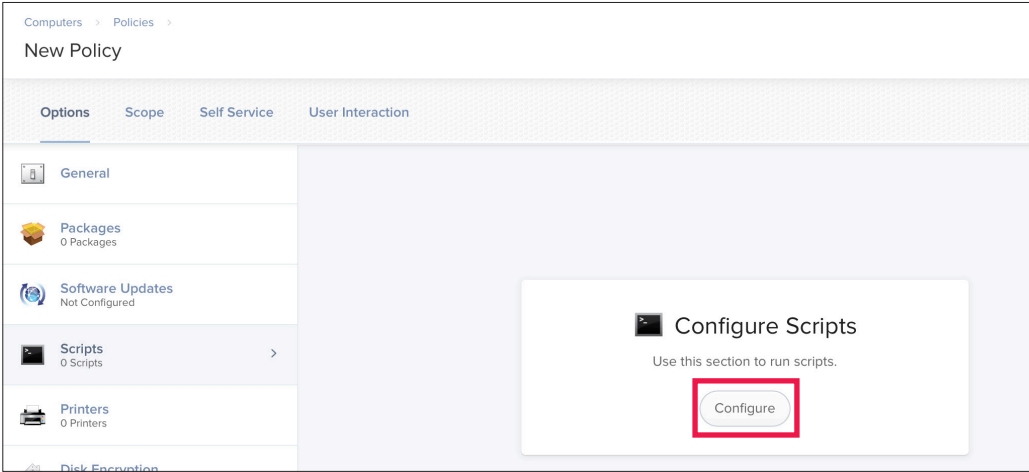
5. Add the jamfHelper script

6. Set the desired Parameter Values.
(Note: This includes an icon I added in the following path: /Library/Application\ Support/ JAMF/HCS.png)

7. In the Scope tab > Set the scope.

8. Click Save.

9. Test Your Policy.