



Retrieve AppleCare Expiration for Mac Computers Using Jamf Pro



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Preface

In any modern IT environment, effectively managing a fleet of devices requires precise and accessible data. Among the most critical pieces of information for Mac management is the warranty status, particularly the details of AppleCare coverage. For organizations that do not have access to Apple's Global Service Exchange (GSX) account—a service that automates warranty lookups and device management tasks—tracking this information can be challenging. However, Jamf Pro provides a powerful alternative for storing and reporting on AppleCare warranty information, enabling IT administrators to maintain control over their device lifecycle management.

Storing AppleCare warranty details in Jamf Pro is more than a convenience—it's a strategic necessity for IT teams. Without a GSX account, organizations lack direct integration to pull warranty data automatically. By leveraging Jamf Pro, IT teams can create a streamlined system to gather and maintain this data manually or through alternative automated processes, such as scripts and API-driven workflows. This ensures that even without a Apple's Global Service Exchange (GSX) account, warranty information can still be readily accessible, accurate, and actionable.

This approach requires specific conditions to function effectively. For warranty information to be retrieved and stored, the Mac computer must be signed in using an Apple Account and running macOS Ventura (version 13) or later. These requirements are essential because macOS Ventura introduced enhanced capabilities that allow devices signed in with an Apple Account to display and share warranty information in the system settings. Without these prerequisites, retrieving warranty data via scripts or APIs will not be possible.

This guide provides a practical solution by demonstrating how to utilize Jamf Pro's API roles, scripts, and policies to collect and store warranty data for reporting purposes. With the use of API roles, IT teams can securely import warranty information into Jamf Pro for each device. Custom scripts can automate the retrieval of warranty statuses from external tools or sources, while Jamf Pro policies can be configured to distribute and update this information across managed devices.

For companies without GSX, this approach delivers several advantages:

- **Centralized Tracking:** By consolidating warranty data in Jamf Pro, IT teams can easily monitor device coverage without relying on Apple's Global Service Exchange (GSX).
- **Proactive Planning:** Reports generated in Jamf Pro allow organizations to identify devices nearing the end of their AppleCare coverage, enabling better budget and refresh cycle planning.
- **Streamlined Support:** Having warranty details readily available ensures that covered devices are prioritized for Apple-authorized repairs, reducing costs and downtime.
- **Compliance and Auditing:** Organizations can easily provide warranty coverage during audits to meet internal compliance requirements.

By following this guide, organizations can establish a practical and effective method for managing AppleCare warranty data in Jamf Pro. While this approach addresses the challenges of operating without a Apple Global Service Exchange (GSX) account, it is crucial to ensure that all devices meet the requirements of being signed in with an Apple Account and running macOS Ventura (version 13) or later. These prerequisites are key to leveraging system features for accurate data retrieval and storage, enhancing IT operations and reporting capabilities.

To sign up for Apple Global Service Exchange (GSX), please use the link below:

<https://support.apple.com/self-servicing-account-program>

Requirements for this guide:

- macOS Ventura (version 13) or later
- Mac with a valid AppleCare warranty
- Mac enrolled in Jamf Pro and signed in with an Apple Account



Section 1: Creating an API Client and Role

What You'll Need:

Learn what hardware, software, and information you'll need to complete the tutorials in this section.

Hardware and Software:

Requirements for following along with this section:

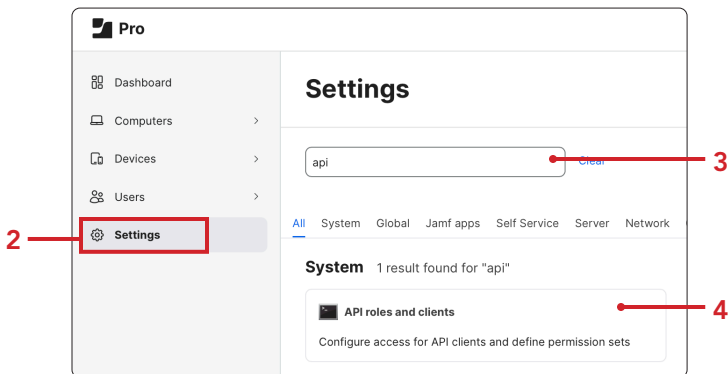
- A Jamf Pro server with administrator privileges

In this section we will configure the Jamf Pro server with an API Role and Client to enhance security when automating tasks.

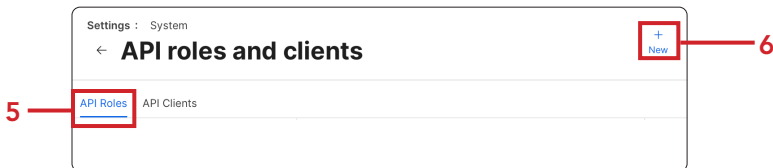
1. Log into your Jamf pro server with administrator privileges.

The image shows the Jamf Pro login interface. It features a 'Pro' logo at the top. Below the logo are two input fields: 'Username' and 'Password'. Both fields are marked as 'Required'. The 'Password' field has a small eye icon to toggle visibility. At the bottom of the form is a blue 'Log in' button.

2. Click Settings.
3. Enter `api` in the search field.
4. Click API roles and clients.



5. Click API Roles.
6. Click New.





7. Configure the following:

- A. Display Name: **Get AppleCare Warranty Expiration Date**
- B. Privileges: **Update Computers and Read Computers**
- C. Click Save.
- D. Click Previous (←)

The screenshot shows the 'New API Role' configuration page. At the top left, a back arrow is highlighted with a red box and labeled 'D'. Below the title, the 'Display name' field contains 'Get AppleCare Warranty Expiration Date' and is highlighted with a red box and labeled 'A'. Under 'Privilege documentation', there are two buttons: 'Jamf Pro API documentation' and 'Classic API documentation'. The 'Privileges' section shows two selected roles: 'Update Computers' and 'Read Computers', highlighted with a red box and labeled 'B'. At the bottom right, a 'Save' button is highlighted with a red box and labeled 'C'.

8. Configure the following:

- A. Click API Clients
- B. Click New

The screenshot shows the 'API roles and clients' page. A back arrow is highlighted with a red box and labeled 'A'. In the top right corner, a '+ New' button is highlighted with a red box and labeled 'B'. Below the title, there are two tabs: 'API Roles' and 'API Clients', with 'API Clients' highlighted by a red box.

9. Configure the following:

- A. Display Name: **Get AppleCare Warranty Expiration Date**
- B. API Roles: **Get AppleCare Warranty Expiration Date**
- C. Access token lifetime: **60**
- D. Click Enable API client.
- E. Click Save.

The screenshot shows the 'New API Client' configuration page. The 'Display name' field contains 'Get AppleCare Warranty Expiration Date_' and is highlighted with a red box and labeled 'A'. The 'API roles' section shows one selected role: 'Get AppleCare Warranty Expiration Date', highlighted with a red box and labeled 'B'. The 'Access token lifetime' field contains '60' and is highlighted with a red box and labeled 'C'. At the bottom, the 'Enable/disable API Client' section has a radio button for 'Enable API client' which is highlighted with a red box and labeled 'D'. At the bottom right, a 'Save' button is highlighted with a red box and labeled 'E'.



10. Click Generate client secret.

Settings : System
← **API roles and clients**

Display name Display name for the API Client
Get AppleCare Warranty Expiration Date...

API roles Assign roles to determine privileges for the client. Adding multiple roles combines their privileges.
Get AppleCare Warranty Expiration Date

Access token lifetime
The duration in seconds that a token allows access. Revoking the token or disabling the client does not end the lifetime of an active token.
60

Client ID
0e[redacted]b

Generate client secret

Enable/disable API client
Enabled

Delete Edit

11. Click Create secret.

Generate client credentials

This will generate a client secret for this client. This action cannot be undone.

Cancel **Create secret**

12. Click Copy client credentials to clipboard.

13. Click Close.

Save client secret

This client secret will not be revealed again. Save it somewhere safe.

Client credentials can be redeemed for access tokens using form-urlencoded data at Jamf Pro API OAuth token endpoint. The endpoint is: `/api/oauth/token`

Client ID:
0[redacted]

Client secret:
xe[redacted]

12 **Copy client credentials to clipboard** **13** Close

14. Open TextEdit.app and paste the contents of the clipboard in a new document. Save it to the Desktop and name it API client secret. We will need this information later on in the guide.

```
{
  "client_name": "Get AppleCare Warranty Expiration Date",
  "client_id": "0e[redacted]",
  "client_secret": "xe[redacted]",
  "grant_type": "client_credentials",
  "content_type": "application/x-www-form-urlencoded"
}
```



15. Confirm your settings look similar to what's shown below.

A screenshot of the 'API roles and clients' settings page in Jamf Pro. The page is titled 'Settings : System' and 'API roles and clients'. It contains several sections: 'Display name' with the value 'Display name for the API Client'; 'Get AppleCare Warranty Expiration Date_' with the value 'Get AppleCare Warranty Expiration Date_'; 'API roles' with the value 'Assign roles to determine privileges for the client. Adding multiple roles combines their privileges.' and 'Get AppleCare Warranty Expiration Date'; 'Access token lifetime' with the value '60' and a description: 'The duration in seconds that a token allows access. Revoking the token or disabling the client does not end the lifetime of an active token.'; 'Client ID' with the value '0e'; 'Client secret' with a masked value '*****'; a red 'Rotate client secret' button; and 'Enable/disable API client' with the value 'Enabled'. At the bottom right, there are 'Delete' and 'Edit' icons.

This completes this section. In the next section, we will configure a script in Jamf Pro to get the AppleCare warranty expiration date.



Section 2: Configure a Script to Retrieve AppleCare Warranty Expiration

What You'll Need:

Learn what hardware, software, and information you'll need to complete the tutorials in this section.

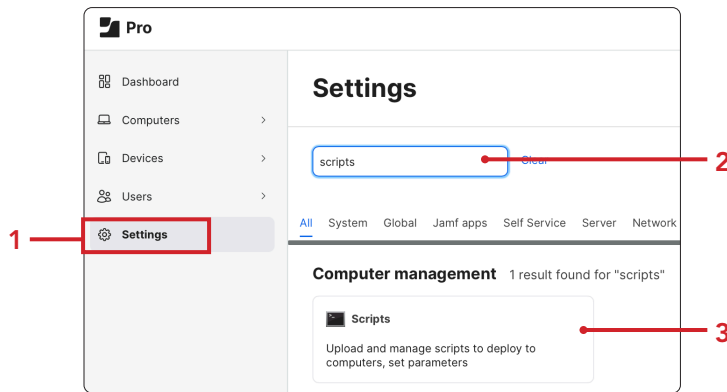
Hardware and Software:

Requirements for following along with this section:

- A Jamf Pro server with administrator privileges
- Download the getAppleCareWarrantyInfo.sh script here:
<https://hconline.com/images/Apps/getAppleCareWarrantyInfo.zip>

In this section we will configure a script in Jamf Pro to get the AppleCare warranty expiration date.

1. Select Settings.
2. Enter **scripts** in the search field.
3. Click Scripts.

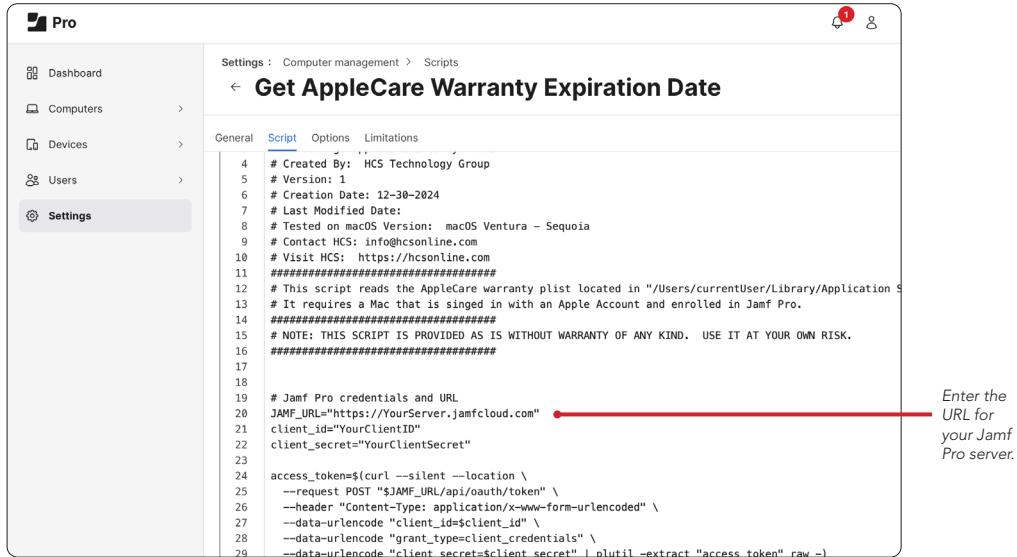


4. Click New.





- Return to Jamf Pro and paste in the script. You will need to update the "Jamf Pro credentials and URL" section with the URL of your Jamf pro server.

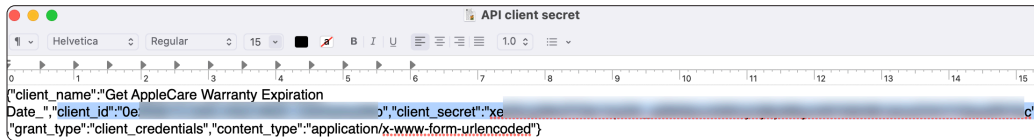


The screenshot shows the Jamf Pro interface for configuring a script. The script is titled "Get AppleCare Warranty Expiration Date". The code includes the following sections:

```
4 # Created By: HCS Technology Group
5 # Version: 1
6 # Creation Date: 12-30-2024
7 # Last Modified Date:
8 # Tested on macOS Version: macOS Ventura - Sequoia
9 # Contact HCS: info@hconline.com
10 # Visit HCS: https://hconline.com
11 #####
12 # This script reads the AppleCare warranty plist located in "/Users/currentUser/Library/Application
13 # It requires a Mac that is signed in with an Apple Account and enrolled in Jamf Pro.
14 #####
15 # NOTE: THIS SCRIPT IS PROVIDED AS IS WITHOUT WARRANTY OF ANY KIND. USE IT AT YOUR OWN RISK.
16 #####
17
18
19 # Jamf Pro credentials and URL
20 JAMF_URL="https://YourServer.jamfcloud.com"
21 client_id="YourClientID"
22 client_secret="YourClientSecret"
23
24 access_token=$(curl --silent --location \
25 --request POST "$JAMF_URL/api/oauth/token" \
26 --header "Content-Type: application/x-www-form-urlencoded" \
27 --data-urlencode "client_id=$client_id" \
28 --data-urlencode "grant_type=client_credentials" \
29 --data-urlencode "client_secret=$client_secret" | plutil --extract "access_token" raw -)
```

A red arrow points to the `JAMF_URL` field in the script code, with a note: "Enter the URL for your Jamf Pro server."

- Open the API client secret document located on your Desktop. Copy the client id and client secret.



The screenshot shows a text document titled "API client secret" with the following JSON snippet:

```
"client_name":"Get AppleCare Warranty Expiration
Date_","client_id":"0e...","client_secret":"xe
"grant_type":"client_credentials","content_type":"application/x-www-form-urlencoded")
```



- Return to the script in Jamf Pro. Paste your client id and client secret into the client_id and client_secret section.
- Click Save.

Settings : Computer management > Scripts

Get AppleCare Warranty Expiration Date

General Script Options Limitations

```
4 # Created By: HCS Technology Group
5 # Version: 1
6 # Creation Date: 12-30-2024
7 # Last Modified Date:
8 # Tested on macOS Version: macOS Ventura - Sequoia
9 # Contact HCS: info@hconline.com
10 # Visit HCS: https://hconline.com
11 #####
12 # This script reads the AppleCare warranty plist located in "/Users/currentUser/Library/Application S
13 # It requires a Mac that is singed in with an Apple Account and enrolled in Jamf Pro.
14 #####
15 # NOTE: THIS SCRIPT IS PROVIDED AS IS WITHOUT WARRANTY OF ANY KIND. USE IT AT YOUR OWN RISK.
16 #####
17
18
19 # Jamf Pro credentials and URL
20 JAMF_URL="https://hcs.jamfcloud.com"
21 client_id="E"
22 client_secret="q"
23
24 access_token=$(curl --silent --location \
25 --request POST "$JAMF_URL/api/oauth/token" \
26 --header "Content-Type: application/x-www-form-urlencoded" \
27 --data-urlencode "client_id=$client_id" \
28 --data-urlencode "grant_type=client_credentials" \
29 --data-urlencode "client_secret=$client_secret" | plutil -extract "access_token" raw -)
30
```

Cancel Save

Copy and paste your client id and client secret in place

10

This completes this section. In the next section, we will configure a policy in Jamf Pro to run the getAppleCareWarrantyInfo.sh script.



Section 3: Creating a policy to run the AppleCare Warranty Expiration Script

What You'll Need:

Learn what hardware, software, and information you'll need to complete the tutorials in this section.

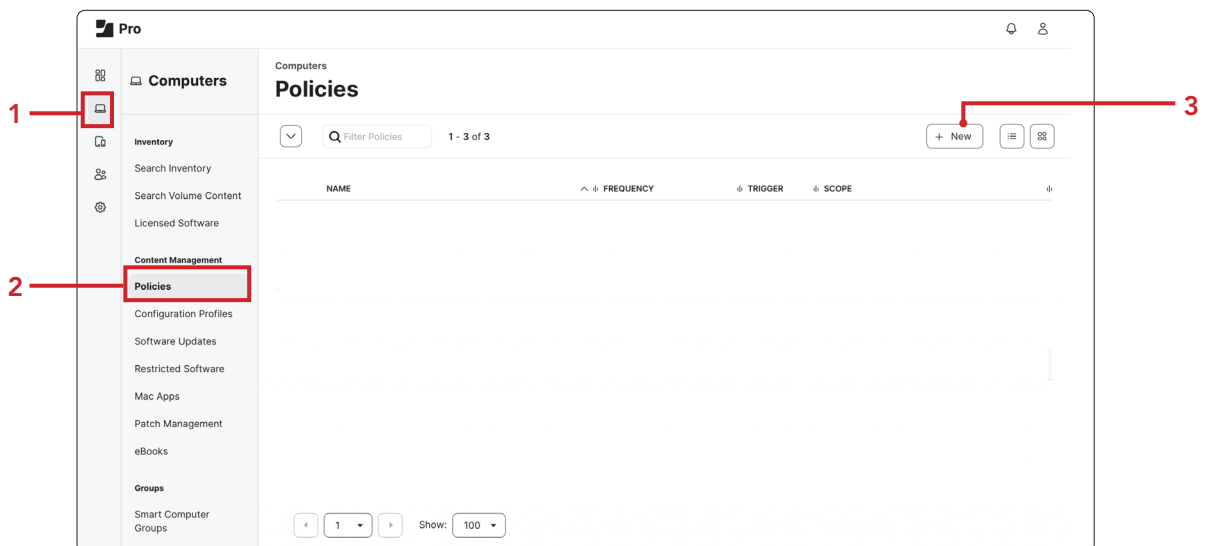
Hardware and Software:

Requirements for following along with this section:

- A Jamf Pro server with administrator privileges

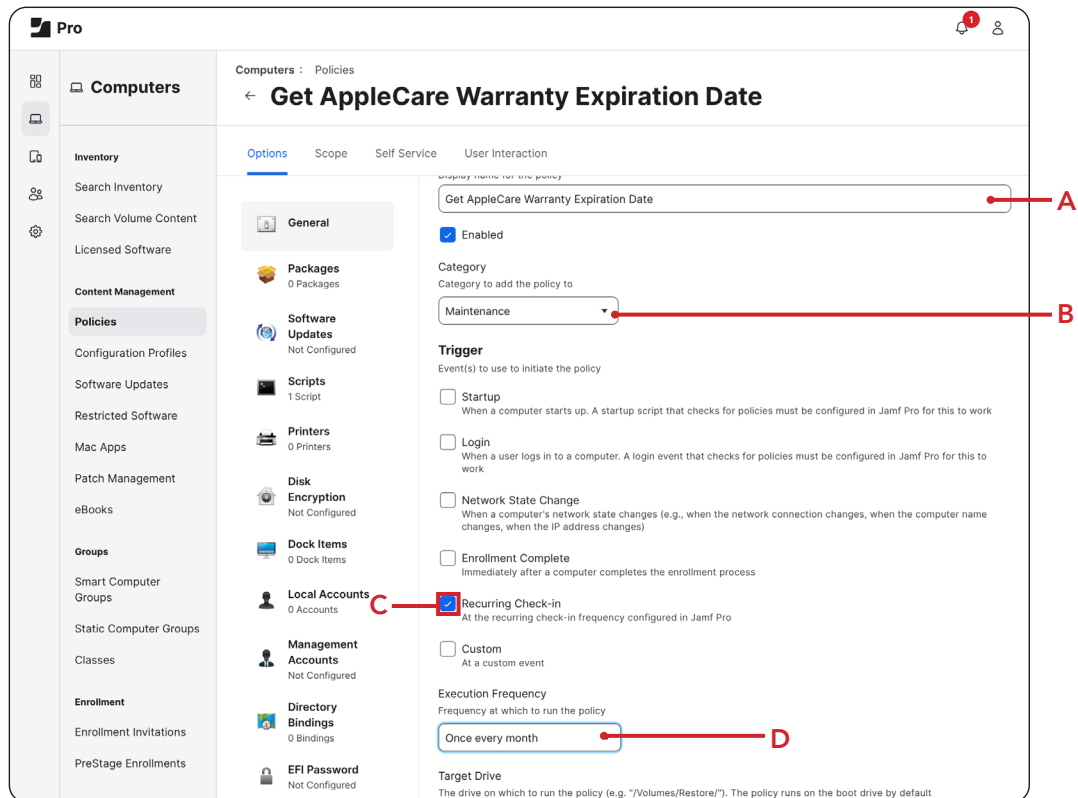
In this section we will configure a policy in Jamf Pro to run the AppleCare warranty expiration script.

1. Click Computers.
2. Click Policies.
3. Click New.

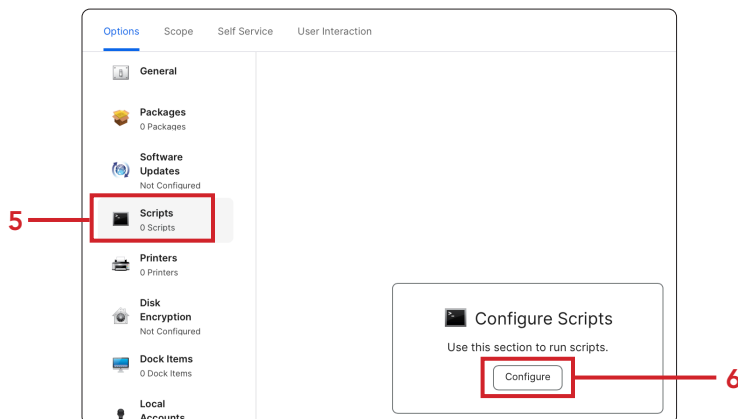




4. Select General and configure the following:
 - A. Display Name: **Get AppleCare Warranty Expiration Date**
 - B. Category: Select a category of your choosing. This guide will use Maintenance.
 - C. Trigger: Enable Recurring Check-in
 - D. Execution Frequency: Once every month



5. Click Scripts.
6. Click Configure.





7. Click Add for the Get AppleCare Warranty Expiration Date script.

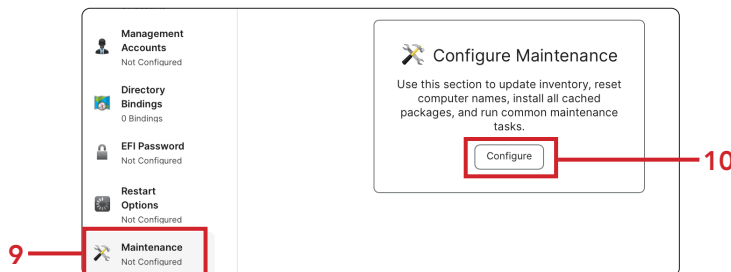


8. Confirm the Priority is set to After.

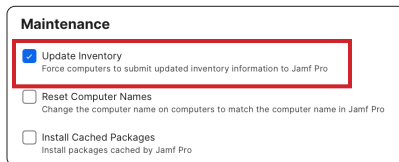


9. On the side bar, scroll down. Click Maintenance.

10. Click Configure.

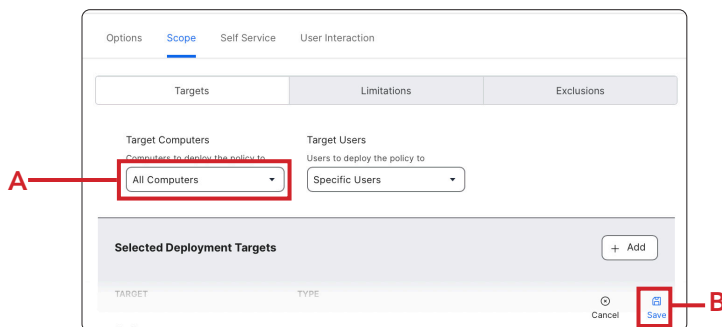


11. Confirm Update Inventory is enabled.



12. Click Scope and configure the following:

- A. Target Computers: Scope to your needs. This guide will select All Computers.
- B. Click Save.



This completes this section. In the next section, we will run the policy on a non production Mac computer for testing.



Section 4: Testing the Get AppleCare Warranty Expiration Date Policy

What You'll Need:

Learn what hardware, software, and information you'll need to complete the tutorials in this section.

Hardware and Software:

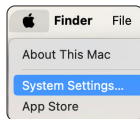
Requirements for following along with this section:

- A Jamf Pro server with administrator privileges.
- A test Mac enrolled in your Jamf Pro server running macOS Ventura 13 or later with administrator privileges.
- An Apple Account. This can be any Apple Account and does not need to be tied to AppleCare.

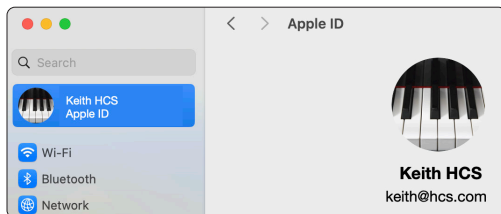
NOTE: The test Mac MUST be signed into an Apple Account.

In this section we will test the Get AppleCare Warranty Expiration Date Policy.

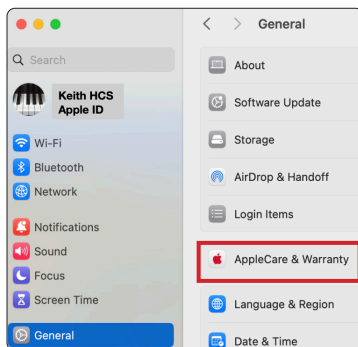
1. On your Mac Computer, Go to the Apple Logo and select System Settings.



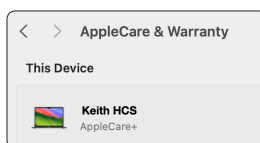
2. Confirm your Mac is signed in with your Apple Account. You cannot proceed with this guide without being signed into your Apple Account.



3. Select General > AppleCare & Warranty.

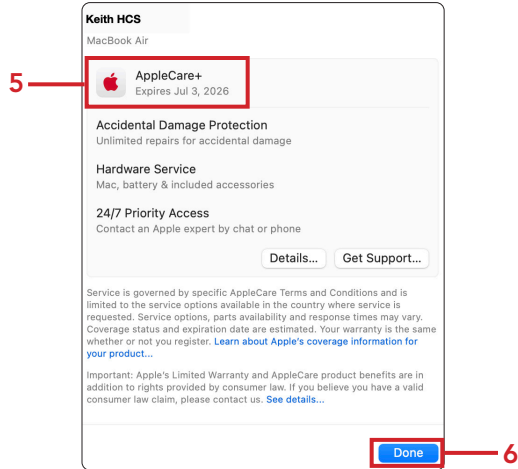


4. In the "This Device" section, select your Mac.



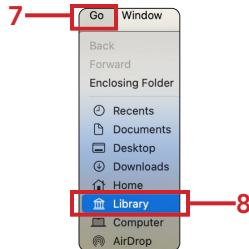


- Note your AppleCare expiration date.
- Click Done.

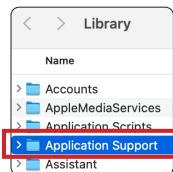


The script that checks the warranty expiration date requires a warranty plist file located in the user's local Library folder. Let's verify that the warranty plist exists.

- Hold down the Option (⌥) key on the keyboard, and click the Go menu.
- Select Library.



- Open the Application Support folder.



- Navigate to the com.apple.NewDeviceOutreach folder. This folder contains the Warranty.plist file that the script will extract the expiration date from.

NOTE: If you don't see this folder, your Mac is either not signed in with an Apple Account or the AppleCare warranty is expired. The script will add a default Warranty Expiration date of January 1, 2000. There may be multiple Warranty.plist files in that folder as well. The script has logic to select the correct Warranty.plist file.



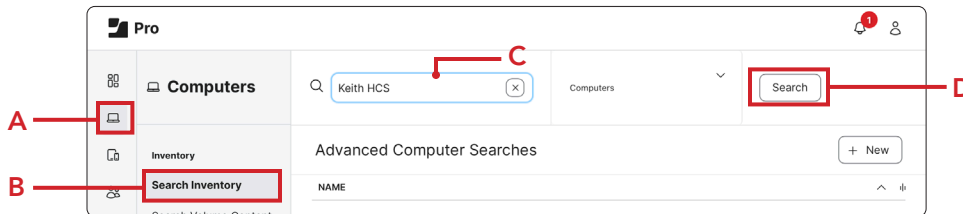


11. Log in to your Jamf Pro server.

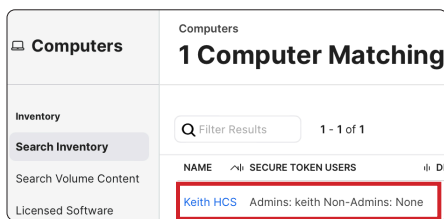
The login form for Jamf Pro, titled "Pro". It contains two input fields: "Username" and "Password", both marked as "Required". Below the fields is a blue "Log in" button.

12. Perform the following:

- A. Click Computers
- B. Click Search Inventory
- C. Enter the name of your test machine in the search field
- D. Click Search

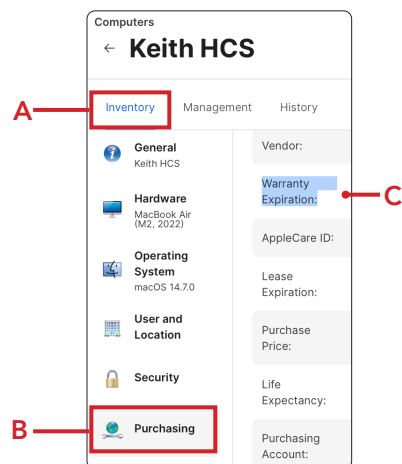


13. Select your Mac.



14. Perform the following:

- A. Click Inventory
- B. Click Purchasing
- C. Locate Warranty Expiration. It should be blank.





15. Open Terminal located in /Applications/Utilities.



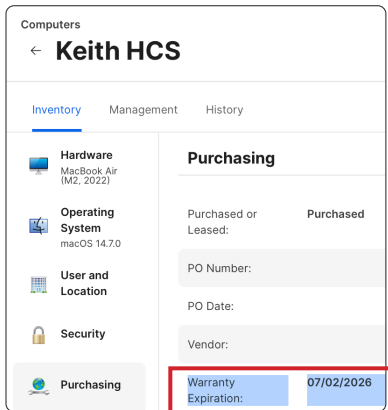
Terminal

16. Run the following command.

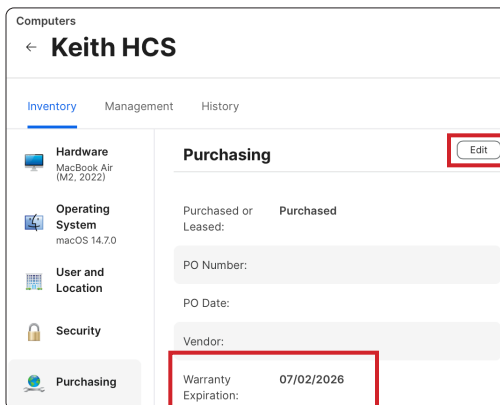
```
sudo jamf policy
```



17. Return to your Jamf Pro server and re check Inventory>Purchasing>Warranty Expiration. You should see the expiration date.



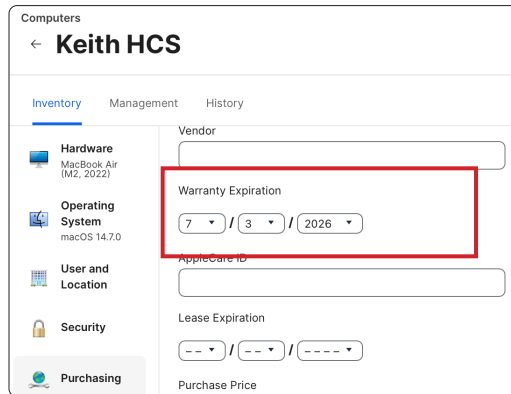
18. One thing to note is the Jamf Pro server will display the expiration date one day earlier than the actual expiration date. In step 5, you will notice the expiration date was shown as July 3, 2026. However, if you click the Edit button, the correct expiration will be shown. In our testing, this can happen due to the location of your Jamf Pro cloud hosted server and UTC time.



Click Edit to view the correct expiration date.

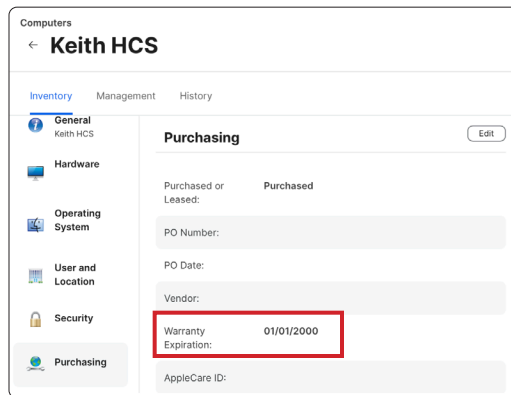


19. Notice the Warranty Expiration is displayed correctly here. This may be caused by the UTC time difference between the hosted jamf cloud server and the time zone of your Mac computer.



20. If your AppleCare warranty is expired or your Mac was not logged in with an Apple Account, the Warranty Expiration date will show as January 1, 2000. This can be helpful if you want to report on all Macs that have an expired AppleCare warranty however it can provide a false positive result if the Mac does have a valid AppleCare warranty and was not signed in with an Apple Account.

NOTE: Depending on the location of your Jamf Pro server, the expiration date may default to December 31, 1999. In our testing, this can happen due to the location of your Jamf Pro cloud hosted server and UTC time. Use this with caution when reporting.



This completes this section. In the next section, we will configure an advanced computer search to send email reports on any Mac that has an AppleCare warranty that will expire in less than 30 days.



Section 5: Creating an Advanced Computer Search

What You'll Need:

Learn what hardware, software, and information you'll need to complete the tutorials in this section.

Hardware and Software:

Requirements for following along with this section:

- A Jamf Pro server with administrative privileges and SMTP configured for email.
- Access to an Email account.

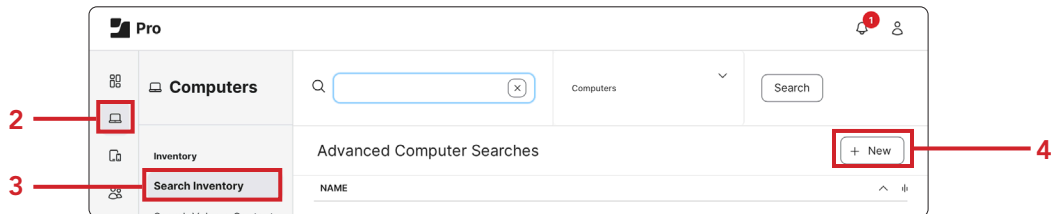
NOTE: We will not cover configuring SMTP on the Jamf Pro server.

In this section, we will set up an Advanced Computer Search in Jamf Pro to generate a report of Macs with AppleCare warranties expiring within the next 30 days. The search will be configured to run on a monthly schedule and automatically send an email with an attached report listing all relevant Macs.

1. If necessary, log into your Jamf Pro server with administrative privileges.

A screenshot of the Jamf Pro login page. It features a 'Pro' logo at the top. Below it are two input fields: 'Username' and 'Password', both marked as 'Required'. A blue 'Log in' button is positioned at the bottom of the form.

2. Select Computers
3. Click Search Inventory.
4. Click New.



5. Select the checkbox for Save this search.

A screenshot of the 'New Advanced Computer Search' form in Jamf Pro. The breadcrumb trail shows 'Computers > Advanced Computer Search'. The page title is 'New Advanced Computer Search'. Below the title are tabs for 'Search', 'Criteria', 'Display', and 'Reports'. At the bottom of the form, there is a checkbox labeled 'Save this search' which is highlighted with a red box.



6. Configure the following:
 - A. Select the Search tab.
 - B. Display Name: AppleCare Warranty Expiration - Less Than 30 Days.

Computers : Advanced Computer Search

← **New Advanced Computer Search**

Search Criteria Display Reports

Display Name
Display name for the advanced computer search

AppleCare Warranty Expiration - Less Than 30 Days

Site
Site to add the advanced computer search to

None

Save this search

7. Configure the following:
 - A. Click Criteria.
 - B. Click Add.

Computers : Advanced Computer Search

← **New Advanced Computer Search**

Search Criteria Display Reports

AND/OR	CRITERIA	OPERATOR	VALUE
--------	----------	----------	-------

+ Add

8. Click Show Advanced Criteria button

Computers : Advanced Computer Search

← **New Advanced Computer Search**

Search Criteria Display Reports

NEW CRITERIA

Show Advanced Criteria

Building Choose

Computer Group Choose

9. Scroll down to Warranty Expiration and click Choose.

Warranty Expiration Choose



10. Configure the following:
- A. Operator: In less than x days
 - B. Value: 30

The screenshot shows the 'New Advanced Computer Search' interface. The 'Criteria' tab is active. A table with columns 'AND/OR', 'CRITERIA', 'OPERATOR', and 'VALUE' is visible. The 'OPERATOR' column contains a dropdown menu with 'in less than x days' selected, highlighted by a red box labeled 'A'. The 'VALUE' column contains a text input field with '30' entered, highlighted by a red box labeled 'B'. There is also an '+ Add' button at the bottom right.

11. Configure the following:
- A. Click Display.
 - B. Click Computer
 - C. Select the items you want to report on to your needs. This guide will select only Computer Name.

The screenshot shows the 'New Advanced Computer Search' interface with the 'Display' tab active. A table with columns 'Computer', 'Hardware', 'Operating System', and 'Security' is visible. The 'Computer' column is highlighted by a red box labeled 'B'. Below the table, there is a section titled 'Export Only' with a list of checkboxes. The 'Computer Name' checkbox is checked and highlighted by a red box labeled 'C'. The 'Display' tab is highlighted by a red box labeled 'A'.



12. Configure the following:
- A. Click Purchasing
 - B. Select Warranty Expiration

Computers : Advanced Computer Search

← **New Advanced Computer Search**

Search Criteria **Display** Reports

User and Location **Purchasing** Storage Extension Attributes

Export Only

AppleCare ID

Lease Expiration

Life Expectancy

PO Date

PO Number

Purchase Price

Purchased or Leased

Purchasing Account

Purchasing Contact

Vendor

Warranty Expiration

13. Configure the following:
- A. Click Reports
 - B. File Format: Comma-Separated Values (.csv)
 - C. Inventory Item: Computers
 - D. Click Configure Email Reports

Computers : Advanced Computer Search

← **New Advanced Computer Search**

Search Criteria Display **Reports**

File Format
File format to export the report

Comma-Separated Values (.csv)

Inventory Item
Choose the inventory item on which to base your results

Computers

Download Report

Email Reporting

Configure Email Reports



14. Configure the following:

- A. Email Recipients: Configure to your needs. This guide will use an email distribution list so multiple people can get the email.
- B. Subject: AppleCare Warranty Expiration - Less Than 30 Days
- C. Body: AppleCare Warranty Expiration - Less Than 30 Days
- D. Select the checkbox for Schedule automatic email reports
- E. Frequency: 1st day of every month
- F. Set the time to your needs. This guide will use 9 am

The screenshot shows the 'New Advanced Computer Search' configuration page for 'Email Reporting'. The page is divided into several sections:

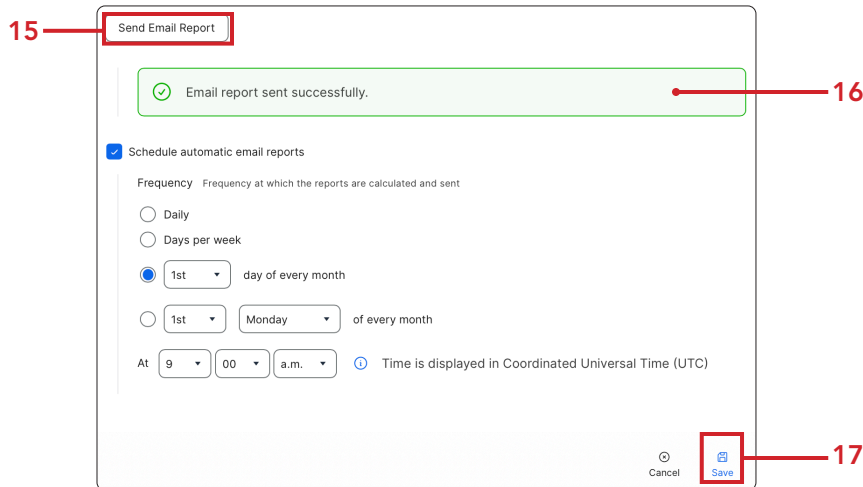
- Email Recipients:** A text input field containing 'jamfalerts@hcsonline.com'. A red line labeled 'A' points to this field.
- Subject:** A text input field containing 'AppleCare Warranty Expiration - Less Than 30 Days'. A red line labeled 'B' points to this field.
- Body:** A text input field containing 'AppleCare Warranty Expiration - Less Than 30 Days'. A red line labeled 'C' points to this field.
- Scheduling:** A section with a 'Send Email Report' button and a 'Schedule automatic email reports' checkbox. A red box labeled 'D' highlights the checked checkbox.
- Frequency:** A section with radio buttons for 'Daily' and 'Days per week', and a dropdown menu for '1st' and 'day of every month'. A red box labeled 'E' highlights the '1st' and 'day of every month' options.
- Time:** A section with a dropdown for 'At', a time input field showing '9:00 a.m.', and a 'Time is displayed in Coordinated Universal Time (UTC)' note. A red box labeled 'F' highlights the '9:00 a.m.' time input.



15. Click Send Email Report.

16. Confirm a message appears: Email report sent successfully.

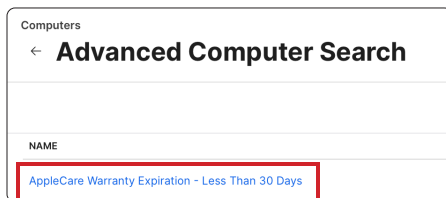
17. Click Save.



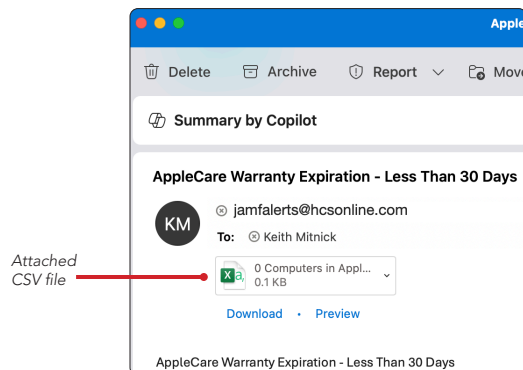
18. Click Previous (←) next to AppleCare Warranty Expiration - Less Than 30 Days.



19. Confirm the AppleCare Warranty Expiration - Less Than 30 Days shows in the list.



20. Check your Email to see if you got the test alert. The email will have a .CSV file attachment that lists all of the Macs with an expired AppleCare warranty.



This completes the guide.