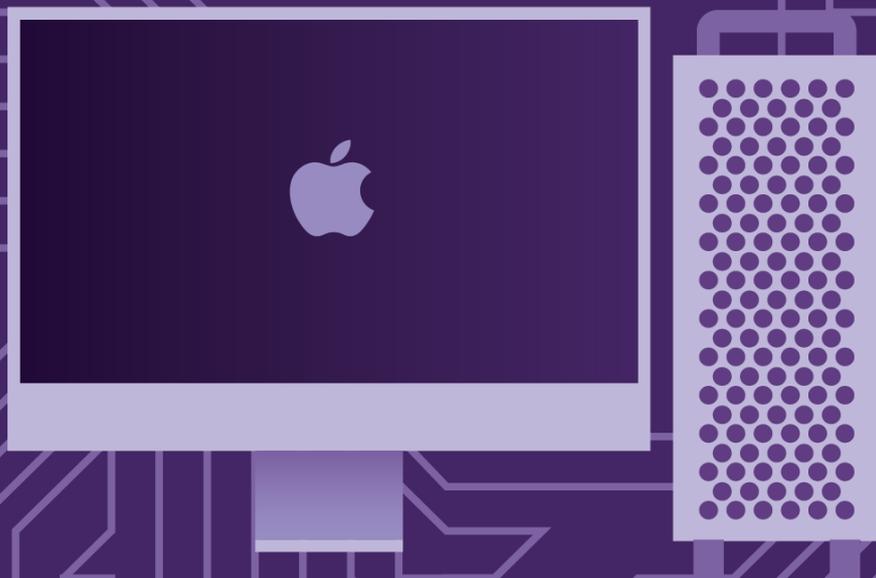




**ENDPOINT
PROTECTOR** | by CoSoSys

JAMF

Deployment Guide



Version 3.0

Date 11.11.2022

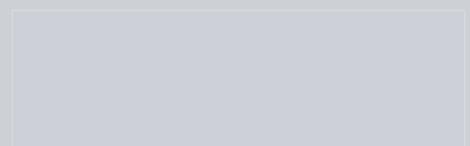


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Document Changelog

Version	Date	Notes
1.0	2019	The document was created.
2.0	16.02.2022	The document was updated.
3.0	11.11.2022	Updated the VPN settings section, added the Document Changelog section and applied the current template.

1. Introduction

Since the release of macOS 11.0 (Big Sur), significant changes have been made regarding system extensions that now allow deploying endpoint security solutions without kernel-level access.

This affects the deployment of the Endpoint Protector Client on all Macs that are using 11.0 operating systems or later. Companies can use third-party deployment tools such as JAMF as well as other alternatives.

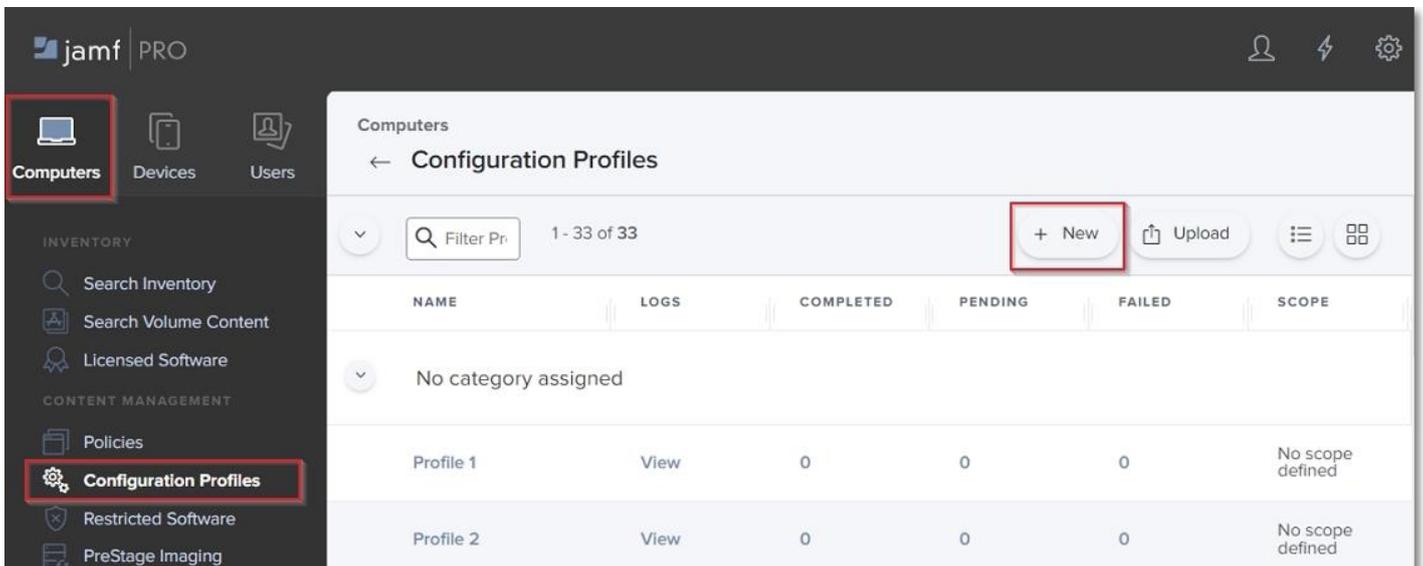
This user manual aims to explain how to use JAMF in order to deploy Endpoint Protector on multiple endpoints.

2. Creating the Configuration Profile

In order to use JAMF, first, you need to create a new configuration profile.

To do so, follow these steps:

1. Open the **JAMF Pro account** and log in using your credentials;
2. In your **JAMF** account, from the main navigation bar click **Computer**, and then from the left sidebar menu, select **Configuration Profiles**;
3. To create a new configuration profile, in the upper right, above the table with available configuration profiles, click **+New**.



On the **New macOS Configuration Profile** section, you can manage profile settings and select the devices and users to which you want to deploy the profile.

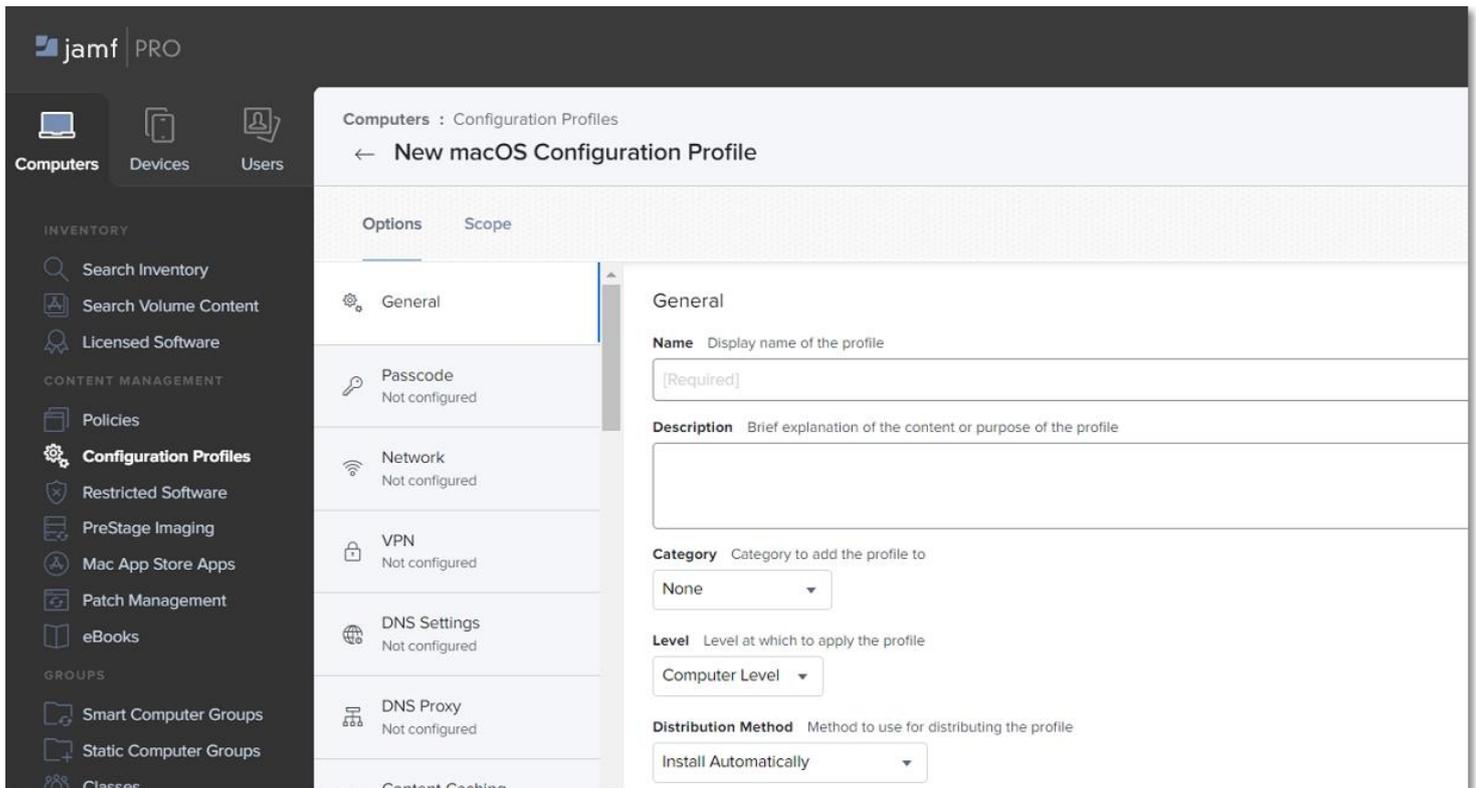
Note: Click **Save** only once you have managed all settings and the profile scope.

2.1. General settings

On the default **General** section, enter the following information:

- **Name** – enter a name to use for this configuration profile
- **Description** (optional) – add a description that details the purpose of the configuration profile

You can continue with the default settings for the **category**, **level**, and **distribution method** fields.



The screenshot displays the Jamf Pro web interface for creating a new macOS Configuration Profile. The left sidebar shows the navigation menu with 'Configuration Profiles' selected. The main content area is titled 'Computers : Configuration Profiles' and 'New macOS Configuration Profile'. The 'Options' tab is active, showing a list of configuration categories: General, Passcode, Network, VPN, DNS Settings, DNS Proxy, and Content Caching. The 'General' category is expanded, showing the following fields:

- Name**: Display name of the profile. Input field: [Required]
- Description**: Brief explanation of the content or purpose of the profile. Input field: [Empty]
- Category**: Category to add the profile to. Dropdown menu: None
- Level**: Level at which to apply the profile. Dropdown menu: Computer Level
- Distribution Method**: Method to use for distributing the profile. Dropdown menu: Install Automatically

2.2. Certificate settings

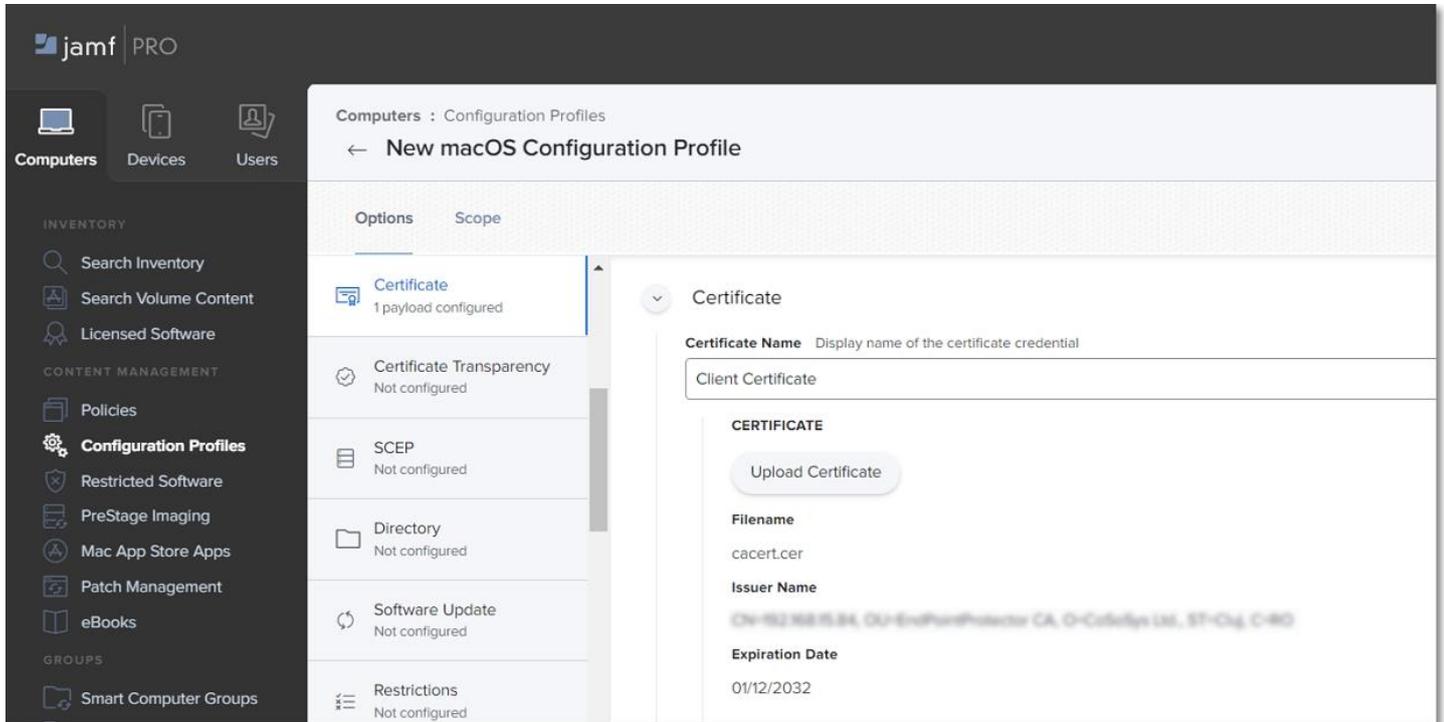
You will add the Client CA Certificate in .cer format on the Certificate settings section.

Note: This step is not required if you are not using Deep Package Inspection. To continue the process, go to the [Privacy Preferences Policy Control](#) section.

1. Log in to **Endpoint Protector Server**, go to the **System Configuration** section, and then select **System Settings**;
2. On the **Default System Settings** section, enable **Deep Packet Inspection Certificate** and then download **Client CA Certificate** – the downloaded .zip file contains the .cer and .crt client certifications.

The screenshot displays the Endpoint Protector web interface. The top navigation bar includes the logo, search, notification, and user profile icons. The left sidebar lists various system configuration options, with 'System Configuration' selected. The main content area shows the 'Default System Settings' page. The 'Deep Packet Inspection Certificate' section is highlighted with a red box, indicating the 'Deep Packet Inspection Certificate download' toggle is turned 'On' and the 'Download Client CA Certificate' button is visible. Other sections visible include 'Log Settings', 'Content Aware Protection - Report all sensitive information', 'Virtual Desktop Clones', 'Server Certificate Stack', 'Single Sign On', and 'Active Directory Authentication'.

3. Go to JAMF, the **Certificate** section, and click **Configure**;
4. Enter a **Certificate name** and then select and upload the downloaded **Client CA Certificate** in **.cer** format.



2.3. Privacy Preferences Policy Control settings

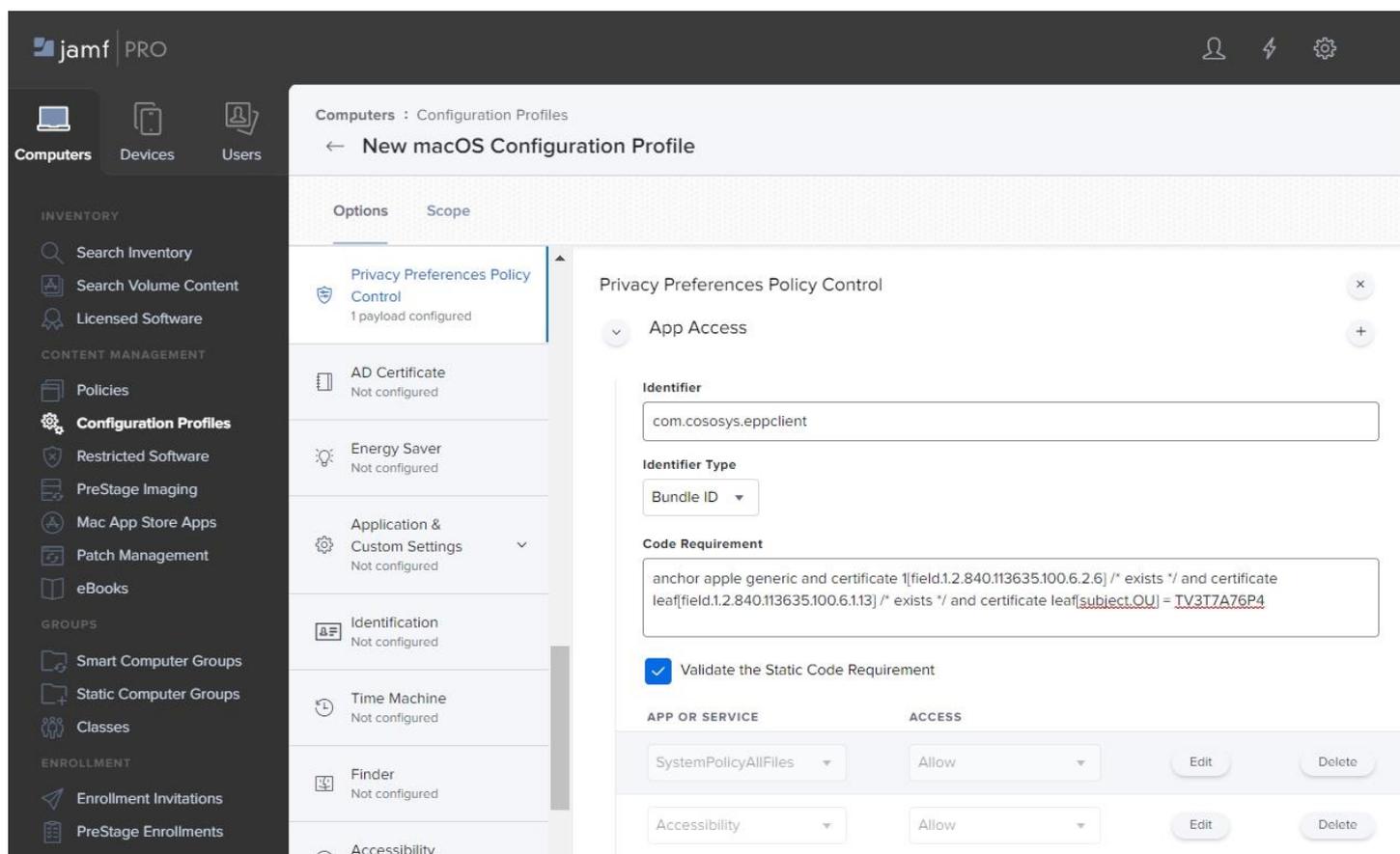
On the **Privacy Preferences Policy Control** section, click **Configure** and then enter the following information:

- **Identifier** - `com.cososys.eppclient`
- **Identifier Type** – go with the default **Bundle ID** type
- **Code Requirement**

```
anchor apple generic and certificate 1[field.1.2.840.113635.100.6.2.6] /* exists */  
and certificate leaf[field.1.2.840.113635.100.6.1.13] /* exists */ and certificate  
leaf[subject.OU] = TV3T7A76P4
```

Note: Use the **Terminal Editor** to verify there are no formatting alterations before executing this command line.

- Select the **Validate the Static Code Requirement** checkbox
- Click **Add** and **Save** to allow access to **SystemPolicyAllFiles** and **Accessibility** services.



2.4. Allow EppNotifier settings

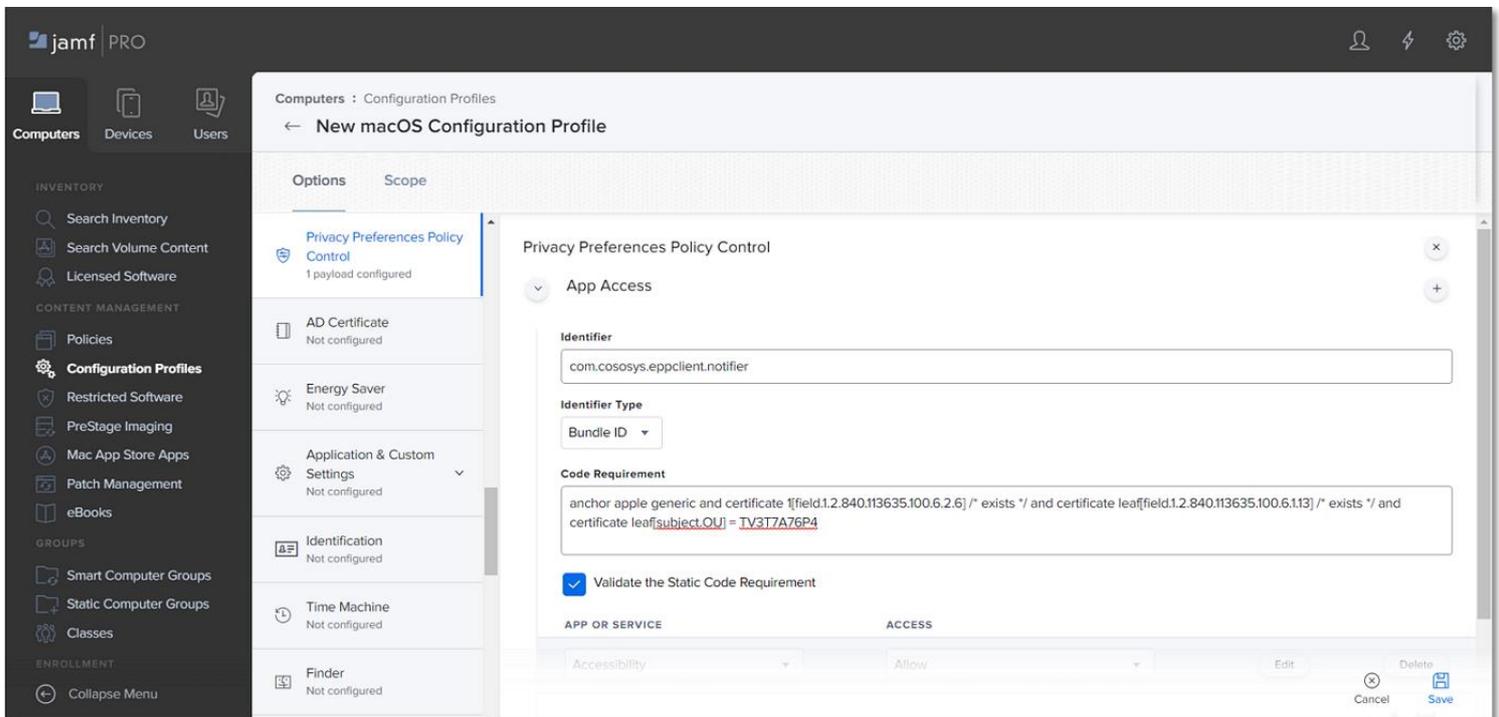
On the **Privacy Preferences Policy Control** section, click the **+** icon to add a new policy and then enter the following information:

- **Identifier** - `com.cososys.eppclient.notifier`
- **Identifier Type** – go with the default **Bundle ID** type
- **Code Requirement**

```
anchor apple generic and certificate 1[field.1.2.840.113635.100.6.2.6] /* exists */ and certificate leaf[field.1.2.840.113635.100.6.1.13] /* exists */ and certificate leaf[subject.OU] = TV3T7A76P4
```

Note: Use the **Terminal Editor** to verify there are no formatting alterations before executing this command line.

- Select the **Validate the Static Code Requirement** checkbox
- Click **Add** and then **Save** to allow access to **Accessibility** services.



2.5. EasyLock Enforced Encryption settings

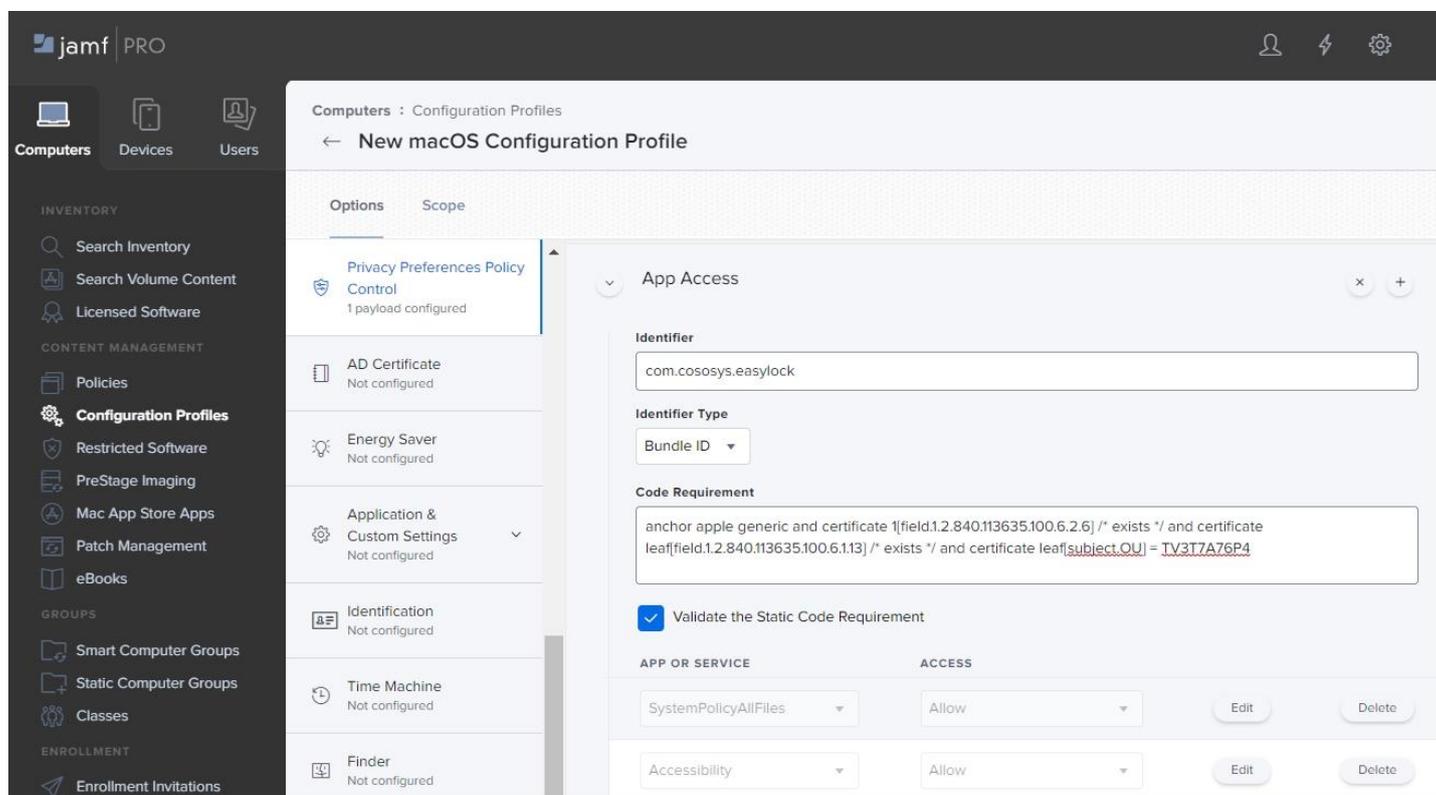
On the **Privacy Preferences Policy Control** section, click the **+** icon to add a new policy and then enter the following information:

- **Identifier** – `com.cososys.easylock`
- **Identifier Type** – go with the default **Bundle ID** type
- **Code Requirement**

```
anchor apple generic and certificate 1[field.1.2.840.113635.100.6.2.6] /* exists */  
and certificate leaf[field.1.2.840.113635.100.6.1.13] /* exists */ and certificate  
leaf[subject.OU] = TV3T7A76P4
```

Note: Use the **Terminal Editor** to verify there are no formatting alterations before executing this command line.

- Select the **Validate the Static Code Requirement** checkbox
- Click **Add** and then **Save** to allow access to **SystemPolicyAllFiles** and **Accessibility** services

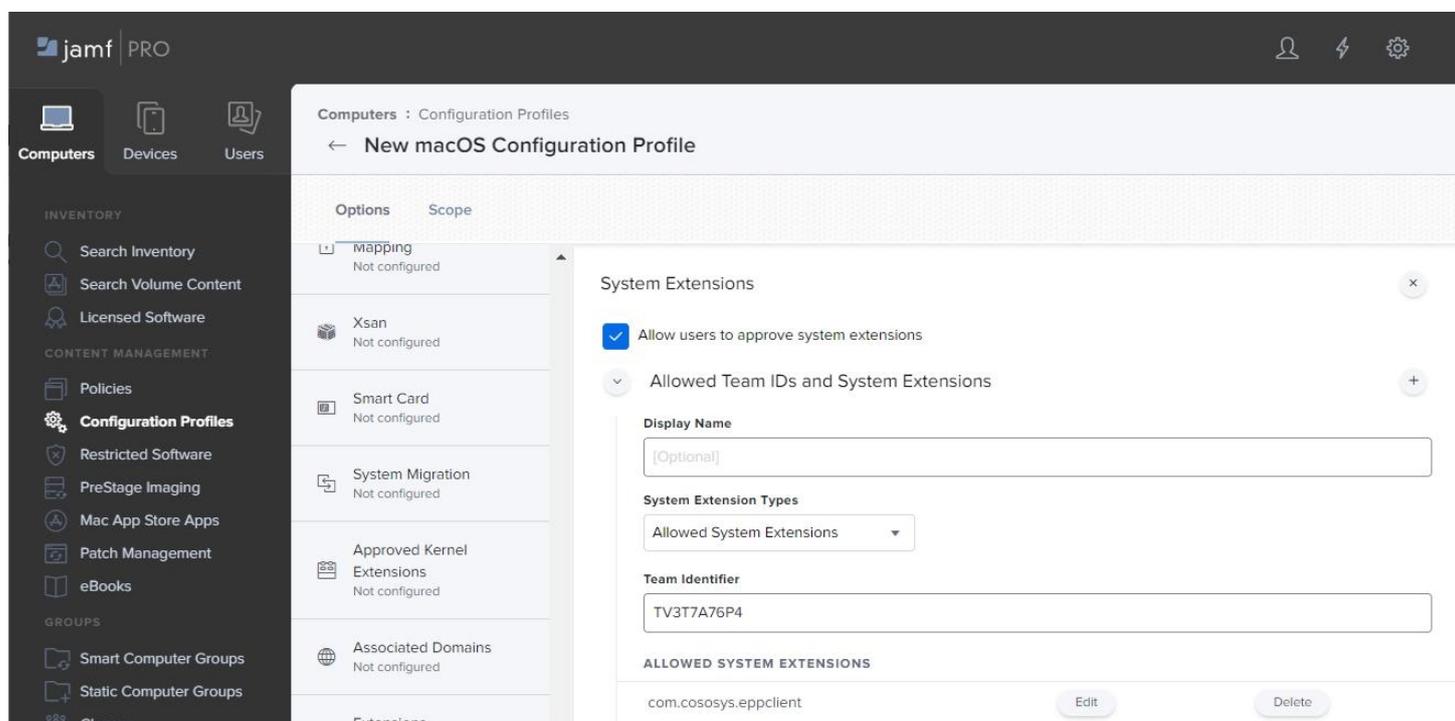


2.6. System Extension settings

2.6.1. Allow System Extension

On the **System Extension** section, click **Configure** and then enter the following information:

- **Display Name** (optional) - enter a name to use for this configuration
- **System Extension Type** - select **Allow System Extension** type
- **Team Identifier** - TV3T7A76P4
- **Allowed System Extensions** – click **Add**, enter `com.cososys.eppclient`, and then **Save** the changes



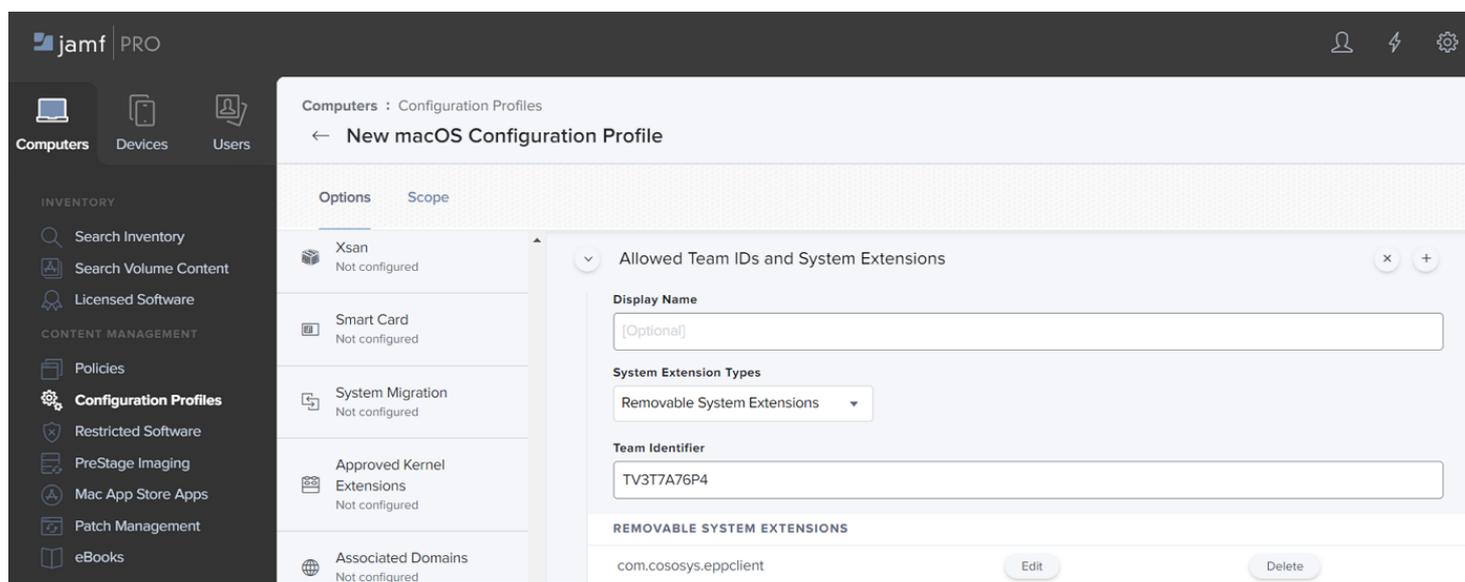
Note: For operating systems lower than macOS 11 (Big Sur), manage settings from the **Approved Kernel Extensions** section instead of System Extensions. Define the **Team ID** (enter `TV3T7A76P4`) and proceed to the next step.

2.6.2. Removable System Extensions

On the **System Extension** section, click the **+** icon to add a new policy that will allow removing system extensions without a pop-up, and then enter the following information:

- **Display Name** (optional) - enter a name to use for this configuration
- **System Extension Type** - select **Removable System Extensions** type
- **Team Identifier** - TV3T7A76P4
- **Allowed System Extensions** – click **Add**, enter `com.cososys.epclient`, and then **Save** the changes

Note: This setting will be applied starting with MacOS 12 version (Monterey).



2.7. VPN settings

Note: This step is not required if you are not using **VPN** services. To continue the process, go to the [Scope](#) section.

On the **VPN** section, click **Configure** and then enter the following information:

- **Connection Name** – enter a connection name that will be displayed on the device
- **VPN Type** – select **Per-App VPN** type
- **Per-App VPN Connection Type** – select **Custom SSL** connection type
- **Identifier** – `com.cososys.eppclient.daemon`
- **Server** – `localhost`
- **Provider Bundle Identifier** – `com.cososys.eppclient.daemon`
- **Provider Type** – select **App-proxy** type
- Select the **Include All Networks** checkbox
- **Provider Designated Requirement**

```
anchor apple generic and certificate 1[field.1.2.840.113635.100.6.2.6] /* exists */ and
certificate leaf[field.1.2.840.113635.100.6.1.13] /* exists */ and certificate
leaf[subject.OU] = TV3T7A76P4
```

Note: Use the **Terminal Editor** to verify there are no formatting alterations before executing this command line.

- Select the **Prohibit users from disabling on-demand VPN settings** checkbox

The screenshot shows the 'New macOS Configuration Profile' configuration page in JAMF PRO. The left sidebar contains navigation options: Computers, Devices, and Users. Below this is a menu with categories: INVENTORY (Search Inventory, Search Volume Content, Licensed Software), CONTENT MANAGEMENT (Policies, Configuration Profiles, Restricted Software, PreStage Imaging, Mac App Store Apps, Patch Management, eBooks), GROUPS (Smart Computer Groups, Static Computer Groups, Classes), and ENROLLMENT (Enrollment Invitations). The main content area is titled 'Computers : Configuration Profiles' and 'New macOS Configuration Profile'. It features two tabs: 'Options' and 'Scope'. Under 'Options', a list of settings is shown: VPN (1 payload configured), DNS Settings (Not configured), DNS Proxy (Not configured), Content Caching (Not configured), Certificate (1 payload configured), Certificate Transparency (Not configured), SCEP (Not configured), and Directory. The 'Options' tab is active, displaying the following configuration fields:

- Connection Name:** Display name of the connection (displayed on the device). Value: VPN Connection.
- VPN Type:** The type of VPN connection to configure. Value: Per-App VPN.
- Per-App VPN Connection Type:** The type of connection enabled by this policy. L2TP and PPTP are not supported. Value: Custom SSL.
- Identifier:** Identifier for the custom SSL VPN. Value: com.cososys.eppclient.daemon.
- Server:** Hostname or IP address for server. Value: localhost.
- Account:** User account for authenticating the connection. (Empty field)
- Provider Bundle Identifier:** Bundle identifier for the selected VPN provider. Value: com.cososys.eppclient.daemon.

The screenshot shows the 'New macOS Configuration Profile' configuration page in JAMF PRO, similar to the first image but with different settings. The left sidebar and navigation are identical. The main content area shows the 'Options' tab with the same list of settings as the first image. The configuration fields are:

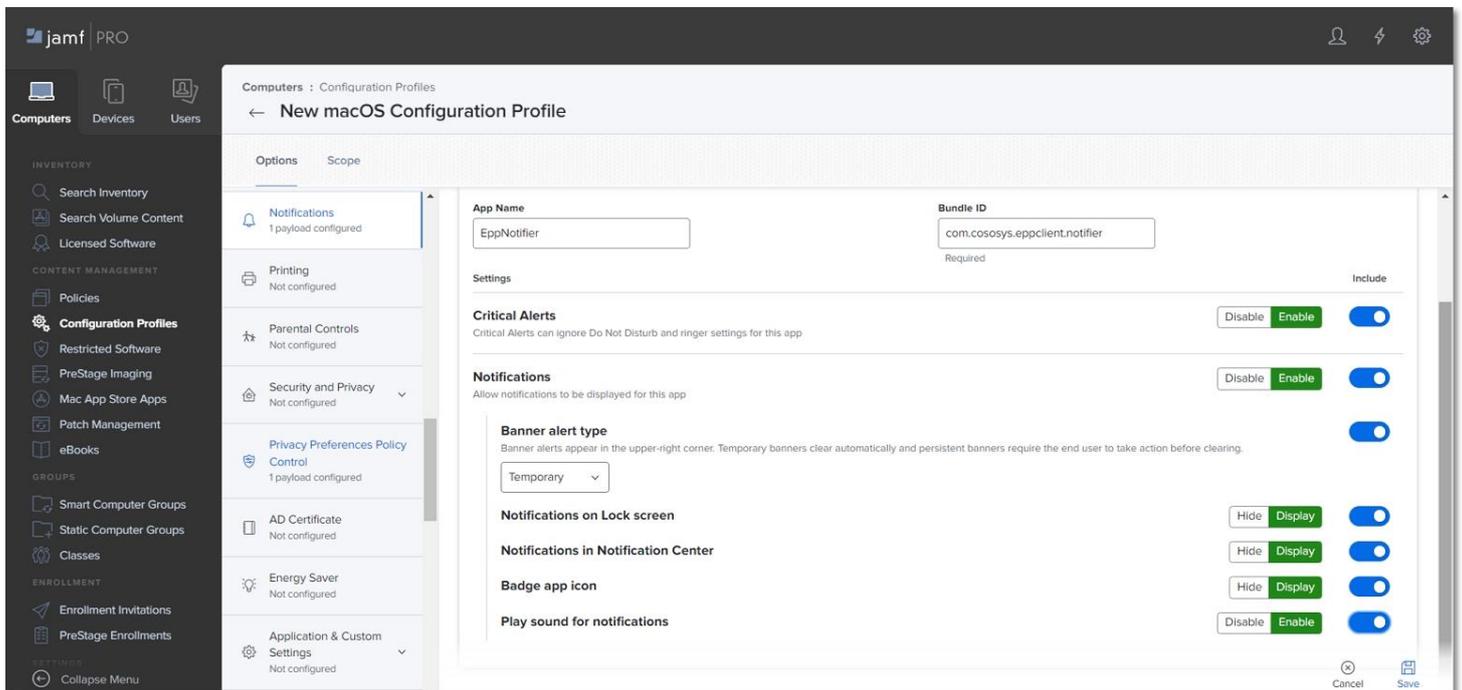
- Provider Type:** Type of tunnel for network traffic. Value: App-proxy.
- Include All Networks:** Routes all traffic through the VPN.
- Exclude Local Networks:** Routes all local network traffic outside the VPN.
- Provider Designated Requirement:** Value: anchor apple generic and certificate !field.1.2.840.113635.100.6.2.6 /* exists /* and certificate leaf[field.1.2.840.113635.100.6.2.6]
- Enable VPN on Demand:** Domain and host names that will establish a VPN.
- Prohibit users from disabling on-demand VPN settings:**

2.8. Notifications settings

Note: This step is optional. To continue the process, go to the [Scope](#) section.

On the **Notifications** section, click **Configure** and then enter the following information:

- **App Name** - EppNotifier
- **Bundle ID** - com.cososys.eppclient.notifier
- Toggle the switch to include the settings type and then disable/enable to manage each notification option

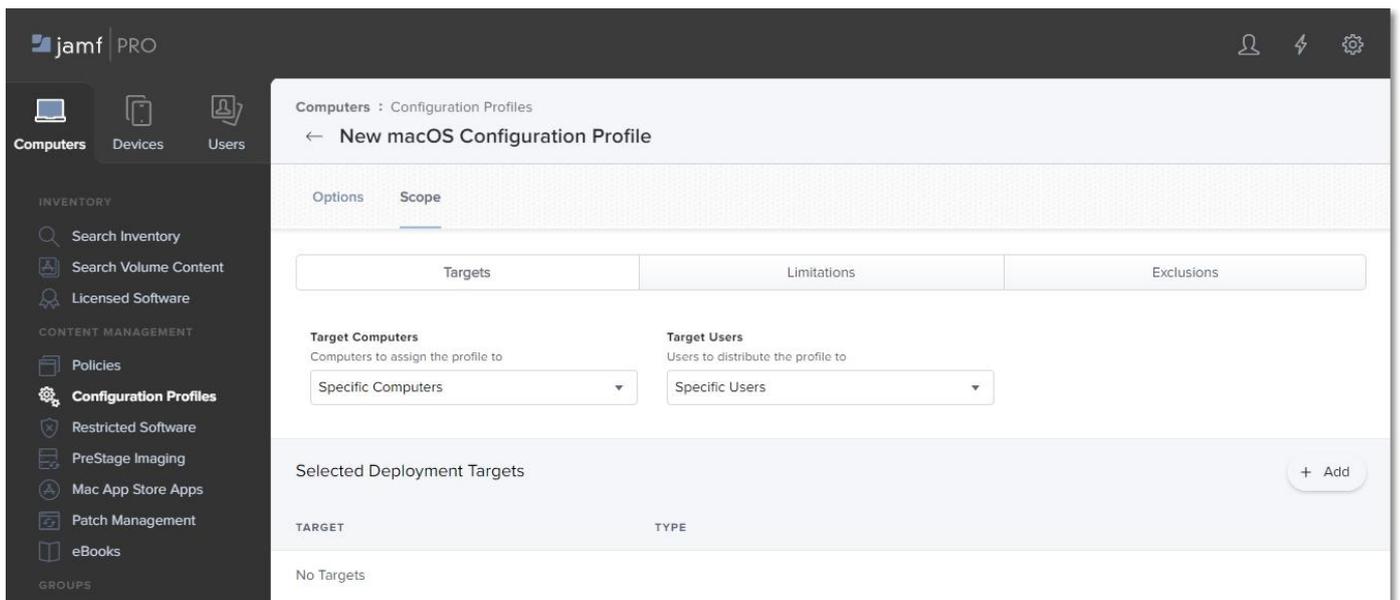


2.9. Scope

Once you manage all settings, go to the Scope tab and select the devices and users to deploy the new profile.

Click **Save** to apply all settings to the new configuration profile.

Note: To confirm that the new configuration profile is saved successfully, reboot your computer at this point.



3. Uploading the Script and Package

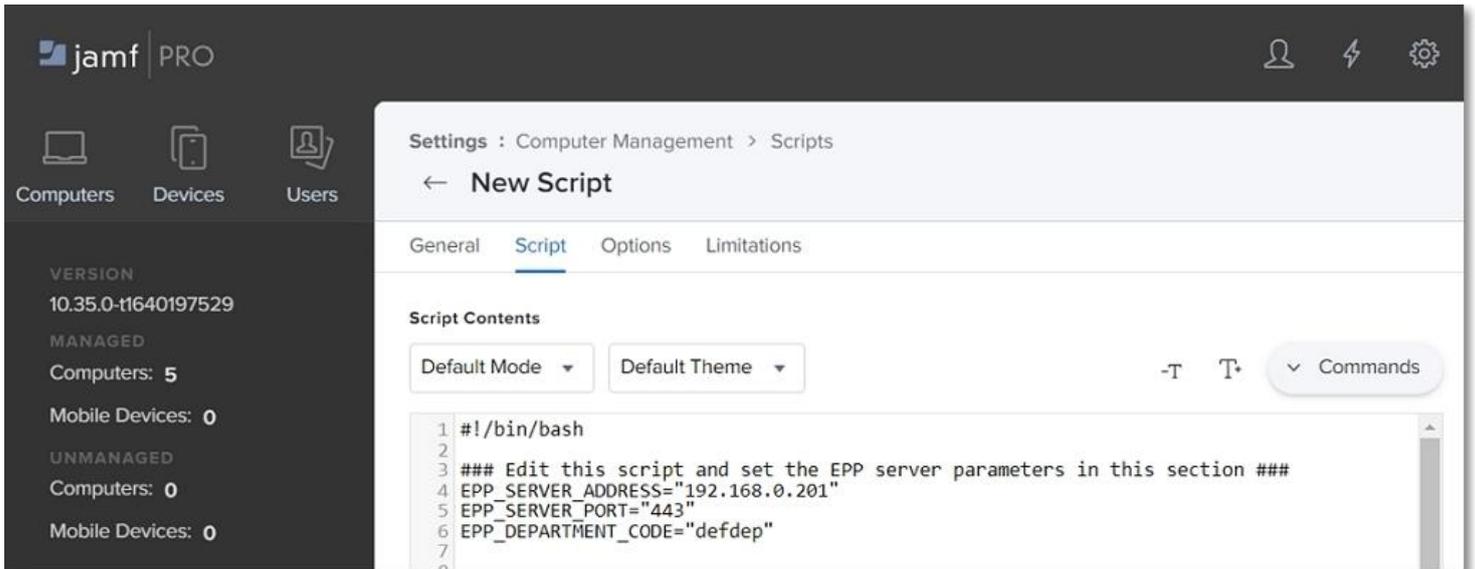
To deploy the Endpoint Protector Client, you need to upload the **EndpointProtector.pkg** package and **epp_change_ip.sh** script.

Important: You need to request the script at support@endpointprotector.com.

To upload the script and package, follow these steps:

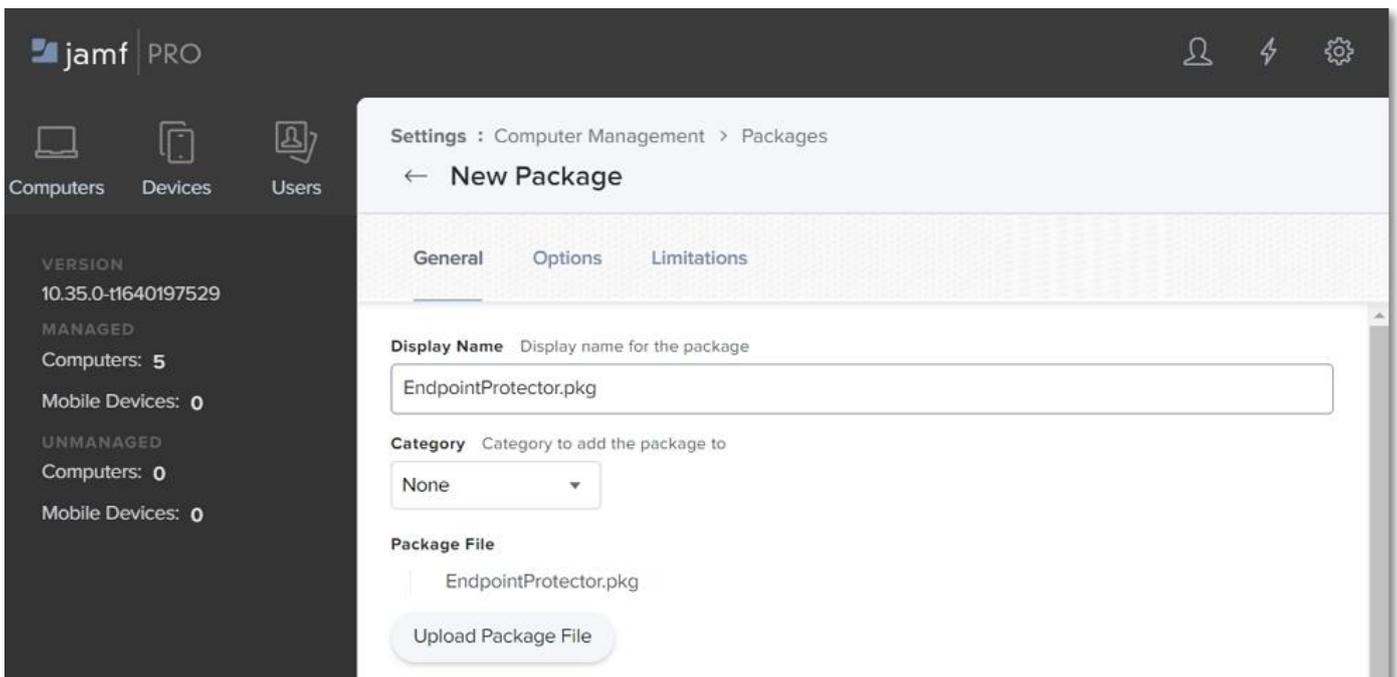
1. In your **JAMF** account, from the main navigation bar, click **Computer**, and then from the left sidebar menu, select **Management Settings**;
2. From the **Computer Management** section, select **Scripts** and then, in the upper right, click **+ New**;
3. On the **General** section, add a name for the profile, and then select the **Script** tab and add the **epp_change_ip.sh** script;
4. Add your **Server IP** to the **EPP_SERVER_ADDRESS** field;

Note: You can edit the **EPP_DEPARTMET CODE** and **EPP_SERVER_PORT** fields to deploy the Endpoint Protector Client on specific departments or custom ports.



5. From the **Computer Management** section, select **Package** and then, in the upper right, click **+ New**;

6. On the **General** tab, add a name and then upload the package **EndpointProtector.pkg**.

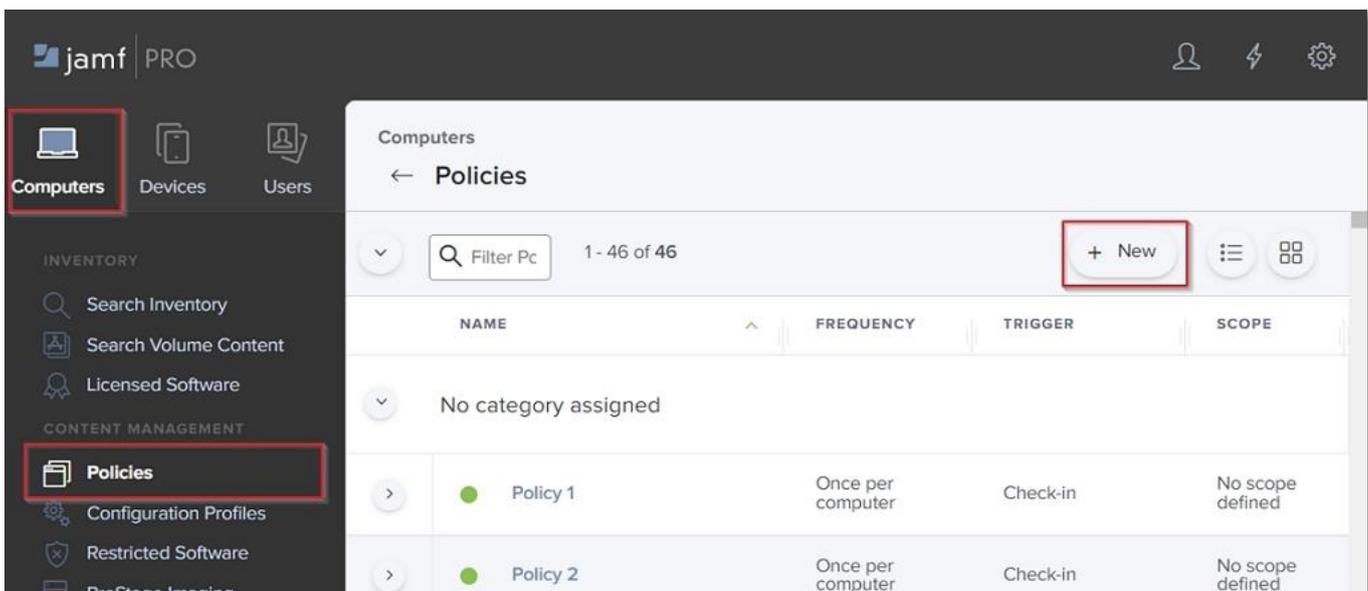


4. Creating the Policy

Once the script and package are successfully uploaded, you need to create a new JAMF policy.

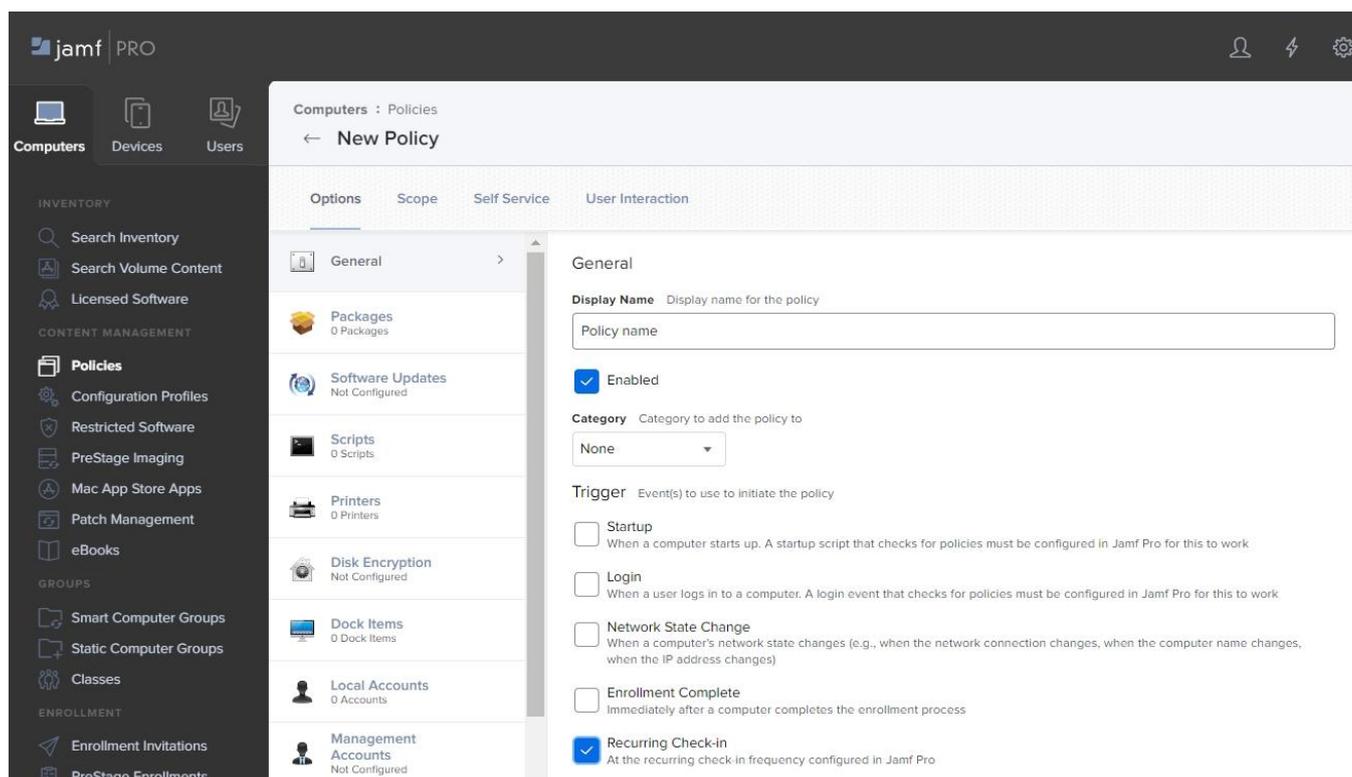
To create the new policy, follow these steps:

1. In your **JAMF** account, from the main navigation bar, click **Computer**, from the left sidebar menu, select **Policies**, and then click **+ New**;



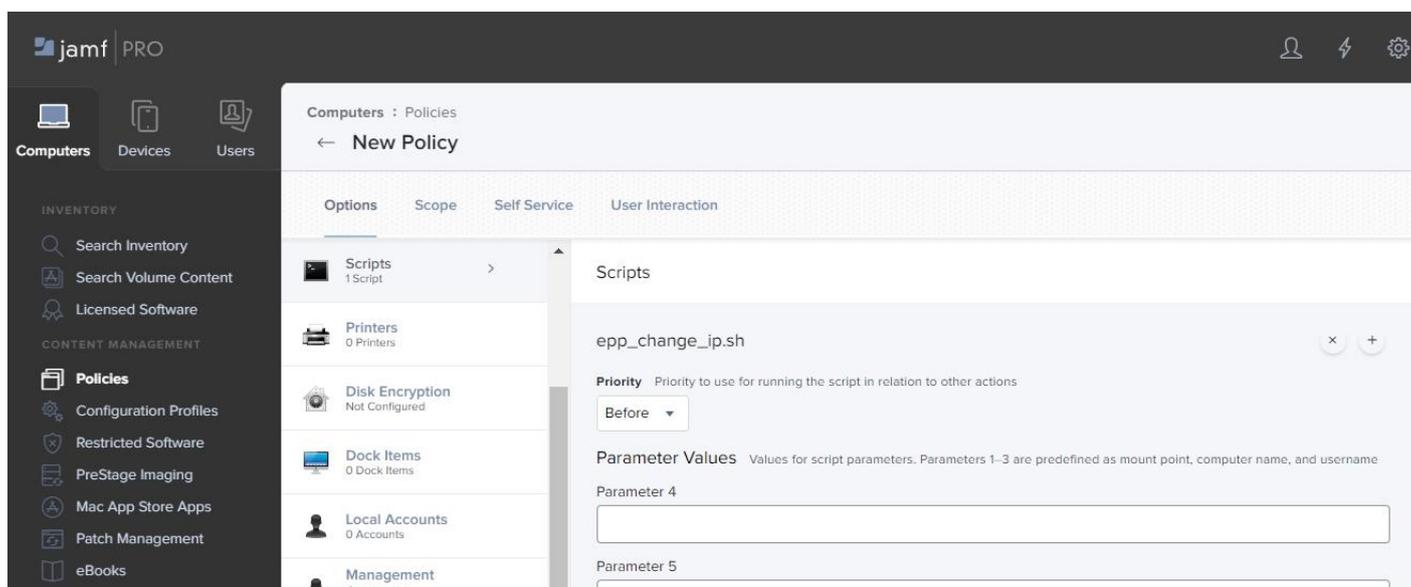
2. On the default **General** section, enter the following information:

- **Display Name** – enter the name to use for this policy
- Select the **Recurring Check-in** checkbox

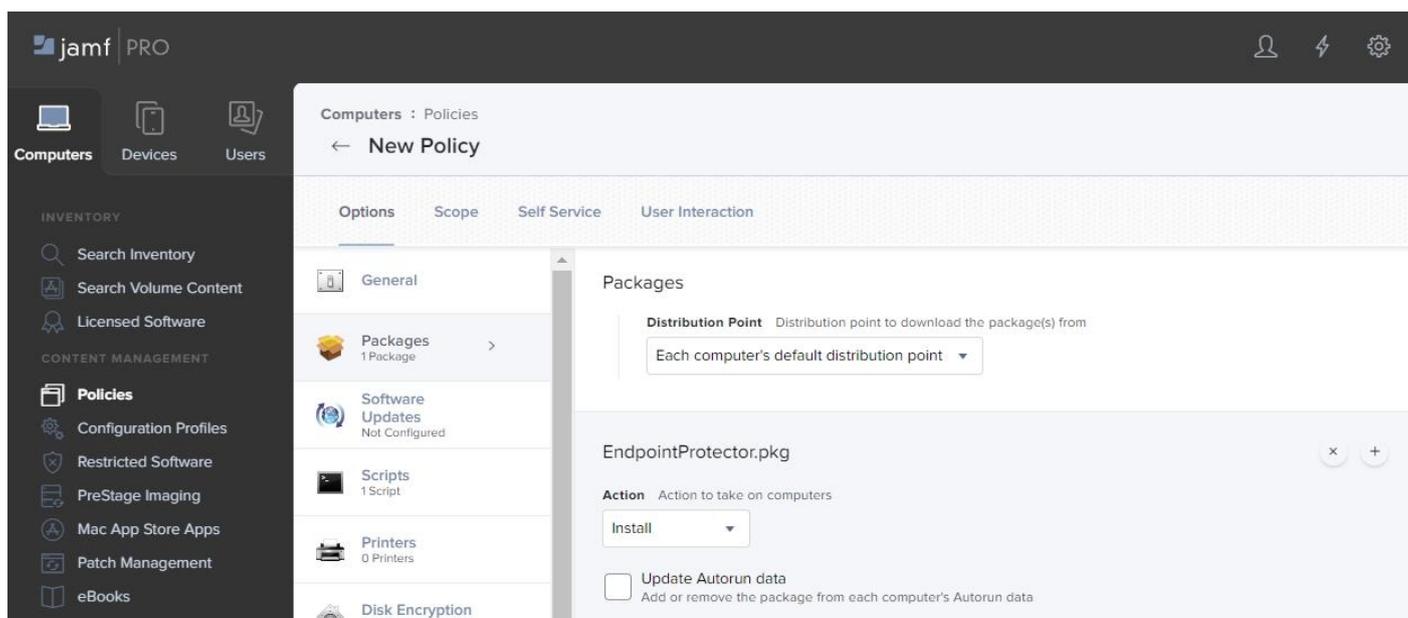


3. On the **Scripts** section, click **Configure** and then enter the following information:

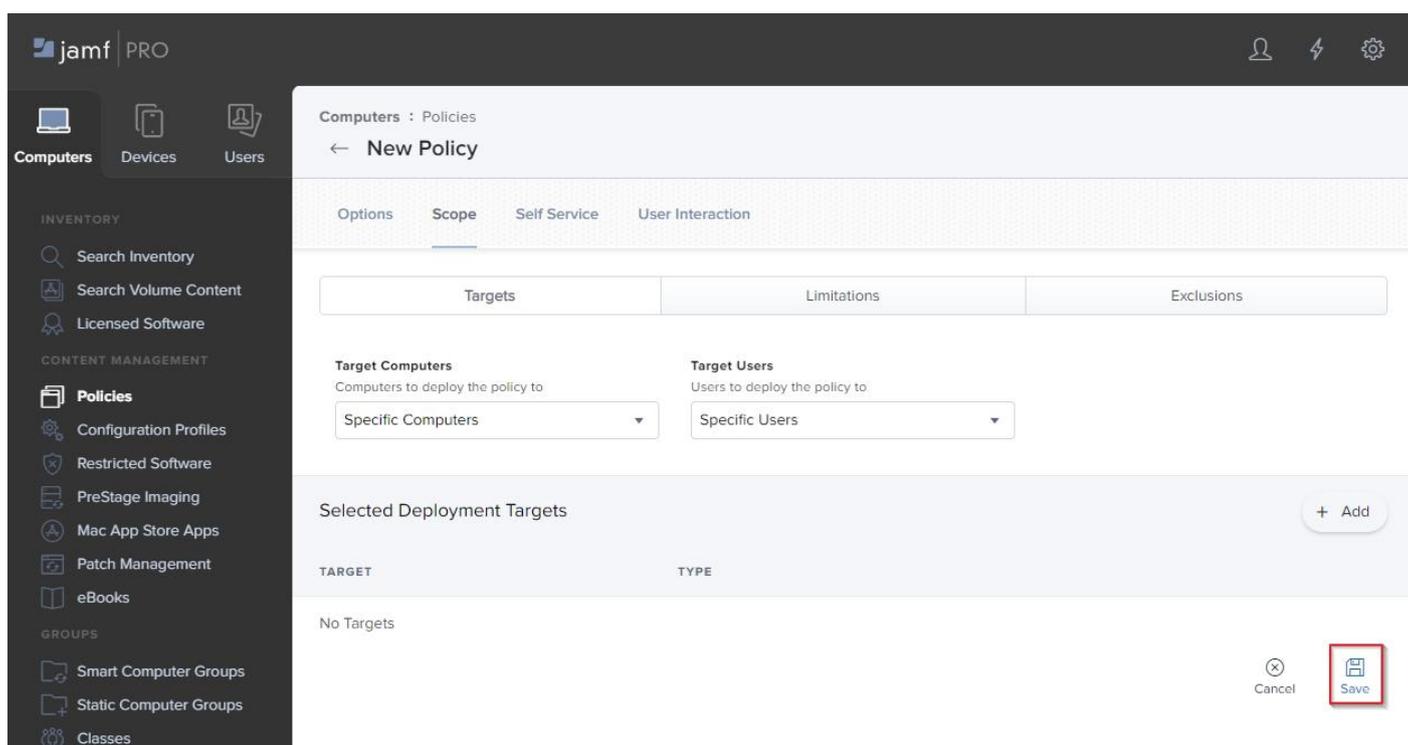
- Add the **epp_change_ip.sh** script
- **Priority** – set priority to **Before**, as the script needs to be installed before the next step



4. On the **Packages** section, click **Configure** and then add the package **EndpointProtector.pkg**;



5. Go to the **Scope** tab and add the devices and users to apply the new policy;
6. Click **Save** to apply all settings to the new policy.



To confirm that the Endpoint Protector Client has been successfully deployed and the Server-Client communication and policies work as expected, you can view the endpoint in the **List of Computers** from the Endpoint Protector UI, and the Endpoint Protector Client is displayed in the menu bar.

5. Disclaimer

These instructions are provided on an “AS IS” basis. To the maximum extent permitted by law, CoSoSys disclaims all liability, as well as any and all representations and warranties, whether express or implied, as to the fitness for a particular purpose, title, non-infringement, merchantability, interoperability, and performance in relation with these instructions. Furthermore, CoSoSys makes no warranty and disclaims any and all liability with regards to third-party software, which the Customer uses at its own risk and expense.

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