



Google Chrome on Apple Hardware

The definitive guide for
deploying and configuring
Chrome on Mac, iPad
and iPhone.



Chrome is the browser made available by Google for desktop and mobile devices with over 2 billion users. As more workers and students rely on devices for work and education, Chrome is increasingly important for users' productivity.

Chrome is used by enterprise and education organizations to connect users with online resources in a safe and secure manner.

Chrome is more than just a browser

Extensions, policy management and a multitude of supported platforms make Chrome more than a standard browser. The flexibility and extensibility offered by Chrome allows for enhanced collaboration and customization that empowers end users to make the internet their own without sacrificing safety or security.



Chrome supports Apple in the enterprise

Installer package type, distribution, update methods and settings management, as well as user privacy controls, are considerations that developers and Mac administrators need to account for when creating and deploying enterprise software. The Google Chrome team has embraced many of the best practices..

Installers

Enterprises want quick access to Mac-friendly installers. Repacking DMGs isn't how any administrator wants to spend their time. The Chrome team prioritized simplicity and now offers PKGs for simple distribution.

Chrome offers the following installers for enterprise:

- Universal PKG Installer (x86 and ARM) for Stable channel and Beta channel (recommended distribution method)
- Universal DMG Installer (x86 and ARM) for Stable channel and Beta channel

[Visit Google Chrome's enterprise installers page to get started.](#)

Configuring Chrome on Mac — Chrome Browser Cloud Management

The importance of a managed browser

As the primary vehicle to access online resources, administrators should consider optimizing the browser experience for users within their organization as well as enforce various information security guidelines. Chrome has hundreds of policies and extension workflows to ensure that administrators keep their data secure and their users productive.

What is Chrome Browser Cloud Management?

- Chrome Browser Cloud Management is Google's approach to modern browser management. It allows an administrator to centrally manage their browser deployment across all platforms in their enterprise. Chrome Browser Cloud Management currently supports macOS, Windows, various Linux distributions, Chrome OS and iOS — with Android support planned for 2021.

Chrome Browser Cloud Management allows an administrator to push various policies, manage bookmarks, and access extension controls from a user-friendly interface. Additionally, an admin can get visibility and insights into their browser posture from its built-in reporting capability.

Learn more or sign up for [Chrome Browser Cloud Management](#)



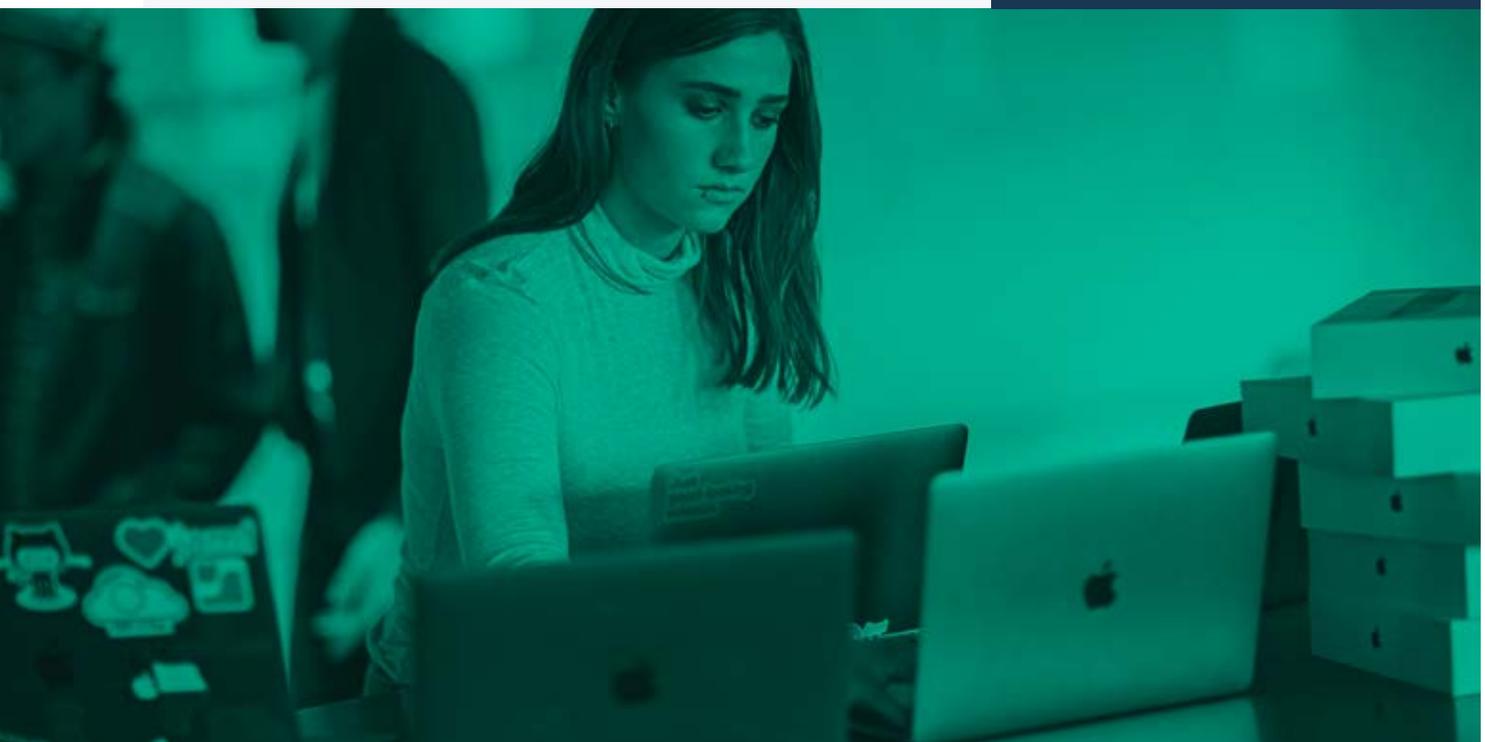
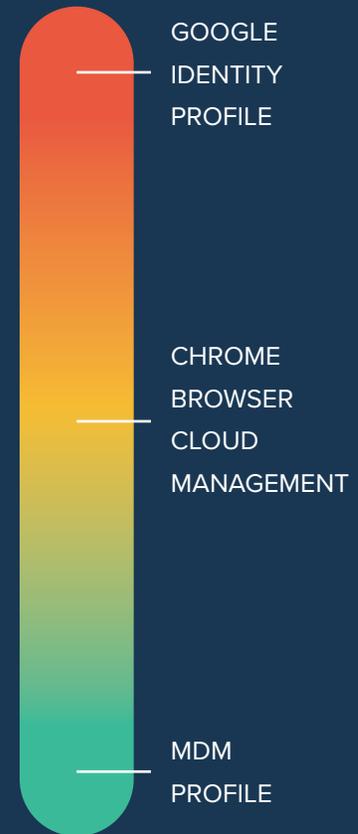
What are enrollment tokens and organization units?

- An enrollment token is used to enroll the browsers into the cloud management solution. These can be brought into Jamf Pro to simplify the enrollment of Chrome on Mac or mobile. The token allows an administrator to segment devices based on an organization unit which could be geography or use-case focused. The organization unit allows the administrator to filter down various reports that are available in the admin console. The token is the same for all machines that enroll at a specific organization unit.

Management levels

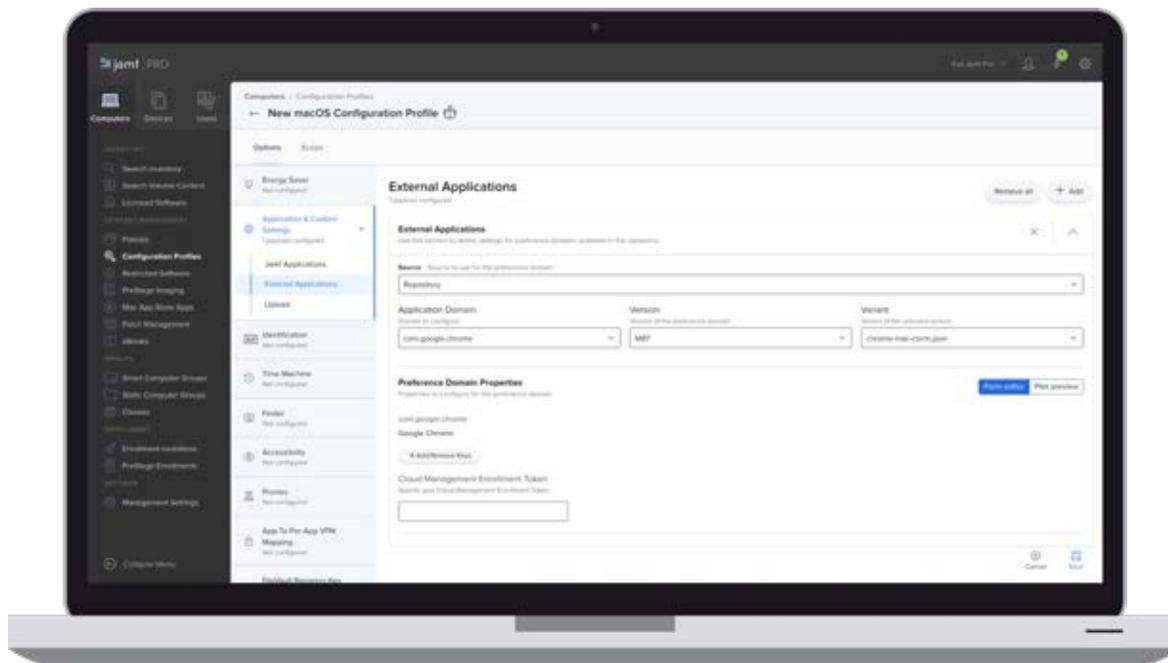
- Chrome is extremely flexible in the way it can be managed. By default, on-premises management will take precedence over cloud management and the admin has the capability to reverse the preference order.
- Machine policies will always take precedence over user policies and are applied based on the Google Identity that the user signs into the browser profile. This allows the administrator to [enforce a common policy experience](#) on all Chrome instances. Regardless of who is signed into the Chrome profile, Chrome augments the experience with various policies that are set at the user level.

MANAGEMENT PRIORITY



How to enroll Chrome in Chrome Browser Cloud Management with Jamf Pro

Once again, Jamf makes it extremely easy for the administrators to configure the enrollment token. To do this, the administrator [selects Chrome from the custom application repository](#) in a Jamf configuration profile, pastes the respective enrollment token and assigns it to various devices or groups.



Policies

[Chrome Policies](#) allow administrators to configure various functions and behavior of the browser. They range in functionality from setting preferences, to enforcing security practices. Some of the most popular policies deployed are:

- Homepage
- RelaunchNotification
- Google Sync behavior
- Cookie and History retention
- Corporate managed bookmarks
- Disable Incognito mode
- Proxy configuration
- Pop-up blocking enforcement

Extensions

[Extensions](#) allow an administrator or user to augment the functionality of the browser. Chrome Browser Cloud Management offers a rich suite of extension controls for the administrator.

Extension Management for Education:

- For an education use case, Chrome Browser Cloud Management offers an administrator the capability to restrict extension installation based on the permissions that they request out of the browser. The admin can also block extensions that are installed from sources other than the Chrome Web Store. For example, the admin can disable extensions from installing/running if they attempt to provide VPN or proxy capability.

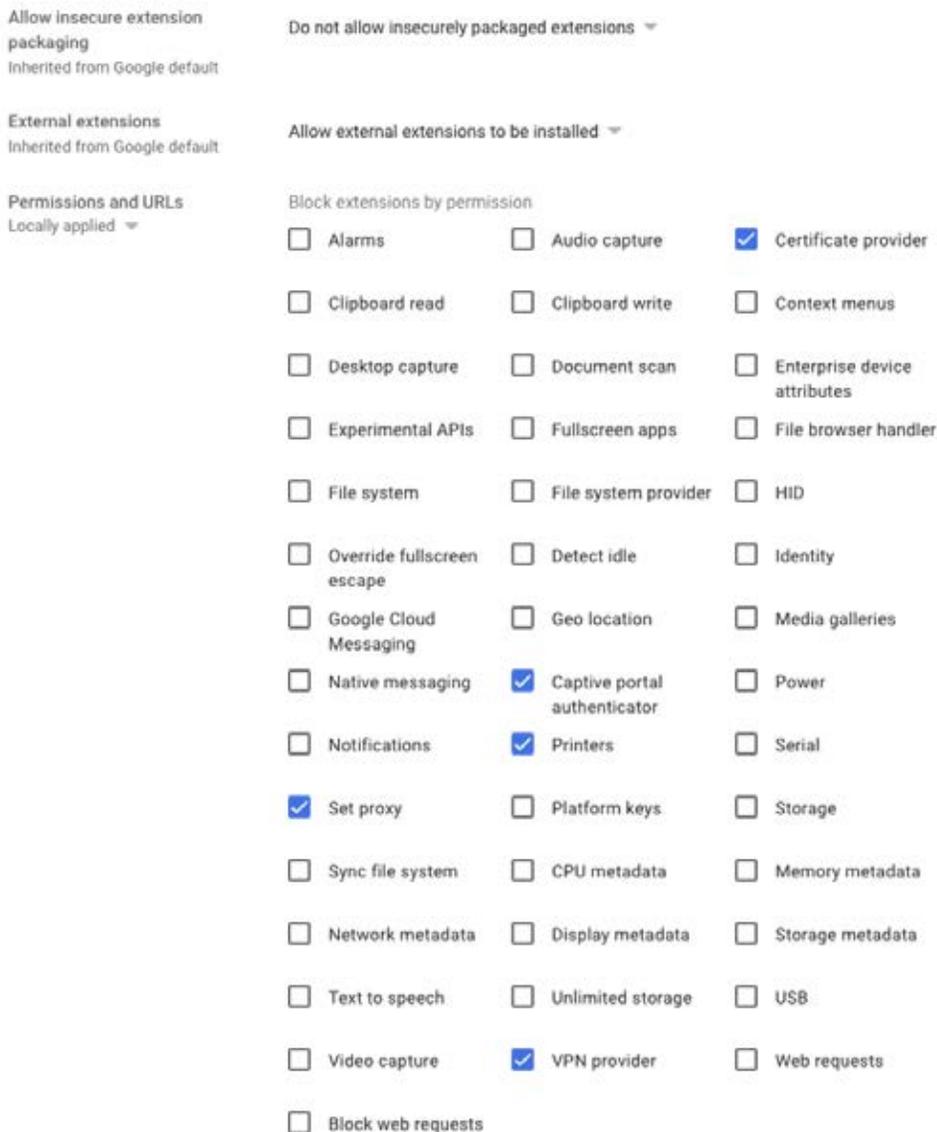
Conditional Access powered by BeyondCorp Enterprise, Jamf Pro and Chrome

General availability with Jamf coming soon.

BeyondCorp Enterprise, Google Cloud's zero trust offering allows admins to build a compliance and security framework using contextual attributes such as identity and device information rather than a network perimeter. By sharing management status from Jamf Pro into access policies, BeyondCorp Enterprise determines if users are authorized to access corporate resources and SaaS applications. This integration is powered in part by Chrome Extensions, and it's recommended that administrators implementing this zero trust framework use extension management for policy enforcement.

Learn more about [BeyondCorp Enterprise Conditional Access on the Jamf Marketplace](#).

Extension management by permission



The image shows a screenshot of the Chrome extension management interface. It is divided into several sections:

- Allow insecure extension packaging:** Inherited from Google default.
- External extensions:** Inherited from Google default.
- Permissions and URLs:** Locally applied.
- Do not allow insecurely packaged extensions:** A dropdown menu.
- Allow external extensions to be installed:** A dropdown menu.
- Block extensions by permission:** A list of permissions with checkboxes. The checked permissions are: Certificate provider, Captive portal authenticator, Printers, and VPN provider.

| Permission | Status |
|------------------------------|-------------------------------------|
| Alarms | <input type="checkbox"/> |
| Audio capture | <input type="checkbox"/> |
| Certificate provider | <input checked="" type="checkbox"/> |
| Clipboard read | <input type="checkbox"/> |
| Clipboard write | <input type="checkbox"/> |
| Context menus | <input type="checkbox"/> |
| Desktop capture | <input type="checkbox"/> |
| Document scan | <input type="checkbox"/> |
| Enterprise device attributes | <input type="checkbox"/> |
| Experimental APIs | <input type="checkbox"/> |
| Fullscreen apps | <input type="checkbox"/> |
| File browser handler | <input type="checkbox"/> |
| File system | <input type="checkbox"/> |
| File system provider | <input type="checkbox"/> |
| HID | <input type="checkbox"/> |
| Override fullscreen escape | <input type="checkbox"/> |
| Detect idle | <input type="checkbox"/> |
| Identity | <input type="checkbox"/> |
| Google Cloud Messaging | <input type="checkbox"/> |
| Geo location | <input type="checkbox"/> |
| Media galleries | <input type="checkbox"/> |
| Native messaging | <input type="checkbox"/> |
| Captive portal authenticator | <input checked="" type="checkbox"/> |
| Power | <input type="checkbox"/> |
| Notifications | <input type="checkbox"/> |
| Printers | <input checked="" type="checkbox"/> |
| Serial | <input type="checkbox"/> |
| Set proxy | <input checked="" type="checkbox"/> |
| Platform keys | <input type="checkbox"/> |
| Storage | <input type="checkbox"/> |
| Sync file system | <input type="checkbox"/> |
| CPU metadata | <input type="checkbox"/> |
| Memory metadata | <input type="checkbox"/> |
| Network metadata | <input type="checkbox"/> |
| Display metadata | <input type="checkbox"/> |
| Storage metadata | <input type="checkbox"/> |
| Text to speech | <input type="checkbox"/> |
| Unlimited storage | <input type="checkbox"/> |
| USB | <input type="checkbox"/> |
| Video capture | <input type="checkbox"/> |
| VPN provider | <input checked="" type="checkbox"/> |
| Web requests | <input type="checkbox"/> |
| Block web requests | <input type="checkbox"/> |

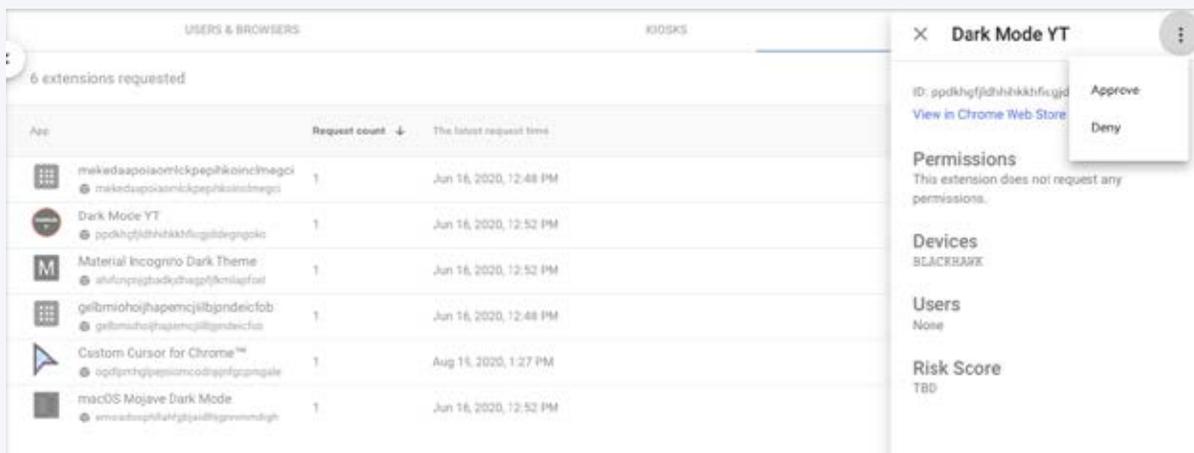
Extension via Chrome Browser Cloud Management Beta

With Chrome Browser Cloud Management, administrators have the ability to configure an extension request workflow. When browsing the Chrome Web Store, the user is presented with a “Request” button instead of the ability to install the extension. The administrator is notified of the request and can then take action to allow or deny the extension installation. When an extension request is first approved, all users in the same Organization Unit granted permission to install the specified extension.

Remote Commands Beta

Chrome Browser Cloud Management provides admins the ability to perform various remote commands on a managed browser. Currently, admins are able to remotely clear cache and/or cookies on a specific browser profile, which allows for streamlined user support at the first point of troubleshooting. Additional remote commands will continue to be released and rolled out to admins, including forced browser restart.

Please [contact Google](#) to be added to test this functionality.



The screenshot displays the 'USERS & BROWSERS' section of the Chrome Browser Cloud Management console. It shows a table of extension requests and a detailed view for the 'Dark Mode YT' extension.

| App | Request count | The latest request time |
|--|---------------|-------------------------|
| mikedasapoiacomickpepikoinclmegci mikedasapoiacomickpepikoinclmegci | 1 | Jun 16, 2020, 12:48 PM |
| Dark Mode YT ppdkhgfjldhkhkksfsgjd | 1 | Jun 16, 2020, 12:52 PM |
| Material Incognito Dark Theme ahfncpjtbdydhggfjknlayfal | 1 | Jun 16, 2020, 12:52 PM |
| grlbrmiohojhapemcjljbndeicfob grlbrmiohojhapemcjljbndeicfob | 1 | Jun 16, 2020, 12:48 PM |
| Custom Cursor for Chrome™ ogdfrnhgjejsomcodjgpfgrzngale | 1 | Aug 15, 2020, 1:27 PM |
| macOS Mojave Dark Mode amvadsopkflahjgpaillgrrmmdigh | 1 | Jun 16, 2020, 12:52 PM |

The details panel for 'Dark Mode YT' shows the following information:

- ID: ppdkhgfjldhkhkksfsgjd
- View in Chrome Web Store
- Permissions: This extension does not request any permissions.
- Devices: BLACKBANE
- Users: None
- Risk Score: TBD

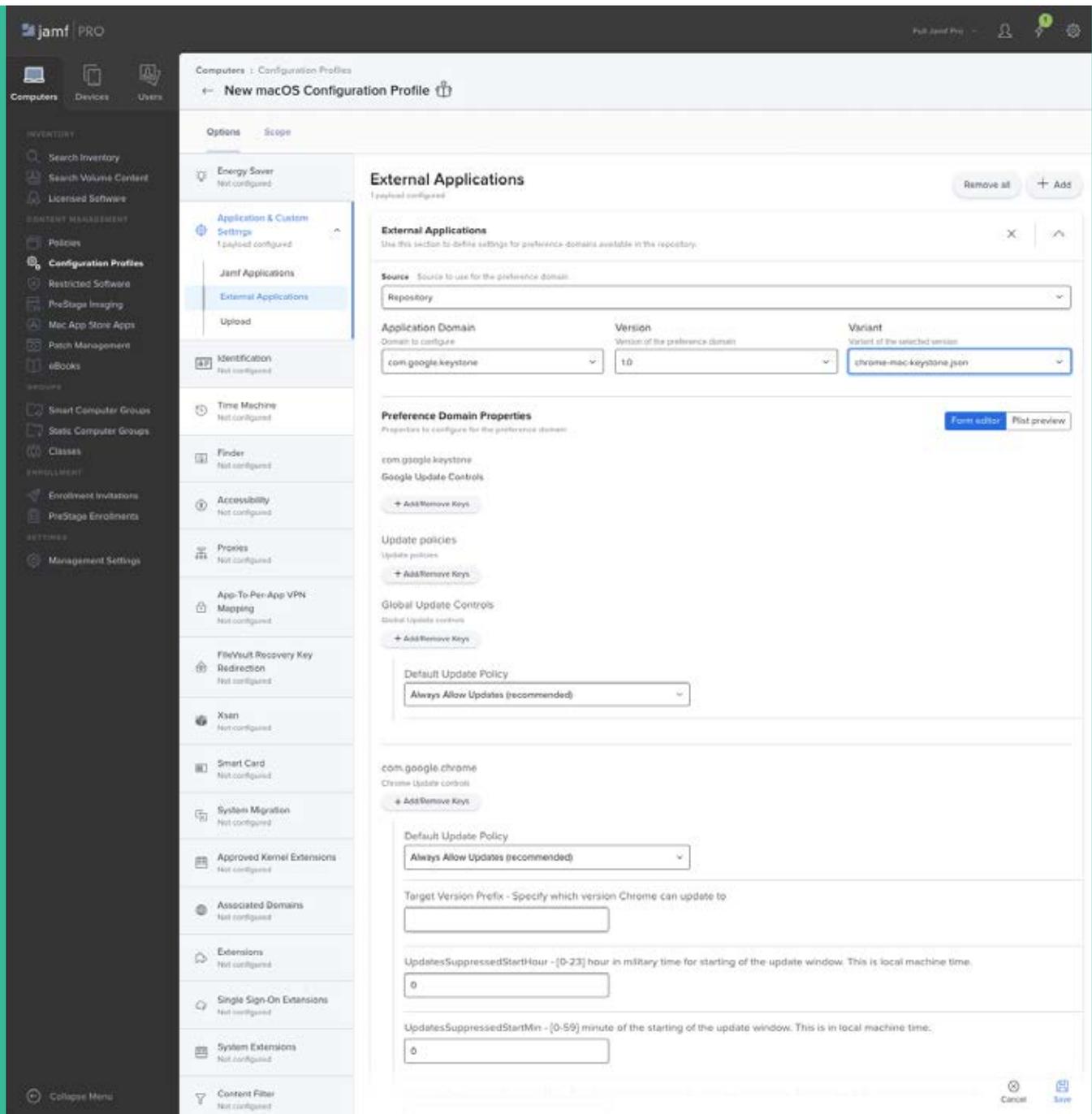
There are 'Approve' and 'Deny' buttons visible in the top right corner of the details panel.

Configuring updates

Managing update policies for users is the best way to ensure devices are running the latest versions of Chrome. There are multiple ways to handle version control for your users, and many have found Keystone to be a reliable tool that works well for Google products.

Keystone configuration

What is Keystone? Keystone is the helper application bundled with Google Chrome that keeps Google products up to date. How can you work with Keystone? You can use [Jamf's flexible and powerful Custom Settings](#) repository to easily configure Keystone policies related to Google Chrome update controls. The Jamf team has made it user-friendly for an admin to deploy these policies in just a few clicks by offering all available controls in a simple interface.



Configuring Chrome on iPad and iPhone

Chrome is available everywhere browsing happens, including on mobile Apple devices. This provides a consistent and unified browsing experience across macOS and iOS/iPadOS devices.

A recent update to Chrome for mobile includes Cloud Browser Cloud Management enrollment via AppConfig. The managed experience users have with Mac is now mirrored on mobile.

Chrome Browser Cloud Management via AppConfig

- Admins can deploy settings and configurations alongside apps through AppConfig. Chrome leverages this feature to enroll the browser into Chrome Browser Cloud Management on iOS and iPadOS.
- Future enhancements will allow more policies to be defined by AppConfig.

User-driven defaults management

- iOS 14 introduced the ability to set default applications for browser and email. This user-driven preference allows an organization to push the Chrome browser to the device and allow the user to opt-in to a new default. This option can be found in *Settings* → *Chrome* → *Default Browser App*.

Please [contact Google](#) to be added to test this functionality.

Chrome on Apple, made possible by Jamf

Chrome and the additional customizations that make it a great enterprise fit are easy to deploy with Jamf. As a platform, Chrome serves as the jumping off point for extensions and web apps that bring productivity and personalizations to the web experience.

Deploy, enroll and manage Google Chrome with Jamf Pro to support your Apple enterprise fleet.

Start your free trial of Jamf Pro today or learn more about

[Google integrations with Jamf.](#)

[Start Trial](#)

Or contact your preferred reseller of Apple hardware to get started.

