



## Chrome 97 Enterprise release notes

*For administrators who manage Chrome browser or Chrome devices for a business or school.*

We are in the process of improving the release notes and we would love to hear your feedback. Please fill out [this survey](#) to let us know what you think.

*These release notes were last updated on January 04, 2021.*

See the latest version of these release notes online at <https://g.co/help/ChromeEnterpriseReleaseNotes>

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## Release summary

| Chrome browser updates   | Security | User productivity /Apps | Management |
|--|----------|-------------------------|------------|
| Launch Control Flow Guard for Windows                                | ✓        |                         |            |
| Certificate Transparency enabled on Chrome for Android               | ✓        |                         |            |
| About this site  |          | ✓                       |            |
| Test improvements to the Manage search engines settings              |          |                         | ✓          |
| Chrome 97 removes profiles from memory when their windows are closed |          |                         | ✓          |
| Chrome disables WebSQL in third-party contexts                       | ✓        |                         |            |
| New Manifest V2 extensions not accepted after January 17, 2022       | ✓        | ✓                       |            |
| Improved Chrome Autofill on Desktop                                  |          | ✓                       | ✓          |
| Optimized user experience on iOS                                     |          |                         | ✓          |
| Private Network Access preflights for subresources                   | ✓        |                         |            |
| New and updated policies in Chrome browser                           |          |                         | ✓          |
| Chrome OS updates  |          |                         |            |
| Chrome Management Telemetry API                                      |          | ✓                       | ✓          |
| Revamped user and device reporting controls                          |          |                         | ✓          |
| Chrome Policy API supports Device settings                           |          | ✓                       | ✓          |
| Offline grammar check  |          | ✓                       |            |
| Magnifier continuous panning   |          | ✓                       |            |
| Gallery app supports audio playing and multi window                  |          | ✓                       |            |
| Admin console updates  | Security | User productivity /Apps | Management |

|  |                 |                                |                   |
|--|-----------------|--------------------------------|-------------------|
| Browser list data downloadable in CSV format                 |                 |                                | ✓                 |
| Read-only privilege for managed browsers                     |                 |                                | ✓                 |
| Reports overview page  |                 |                                | ✓                 |
| Insights report: Devices that need attention                 |                 |                                | ✓                 |
| New policies in the Admin console                            |                 |                                | ✓                 |
| <b>Upcoming Chrome browser changes</b>                       | <b>Security</b> | <b>User productivity /Apps</b> | <b>Management</b> |
| Network Service on Windows will be sandboxed                 | ✓               |                                |                   |
| Use of Chrome passwords in other apps on iOS                 |                 | ✓                              |                   |
| Update GREASE brand list generation                          | ✓               |                                | ✓                 |
| Chrome will maintain its own default root store              | ✓               |                                |                   |
| Chrome will disable the U2F API by default                   | ✓               |                                | ✓                 |
| Chrome will no longer allow TLS 1.0 or TLS 1.1               | ✓               |                                |                   |
| Chrome may leverage MiraclePtr to improve security           | ✓               |                                |                   |
| Feature flag to force the Chrome Major Version number to 100 |                 | ✓                              | ✓                 |

# Chrome browser updates

## Launch Control Flow Guard for Windows

Chrome 97 improves security by introducing Control Flow Guard (CFG) for Windows to make memory corruption vulnerabilities more difficult to exploit. This change might cause interoperability issues with software that injects code into Chrome's process space, such as Data Loss Prevention software. Please file a [bug](#) to let us know if you encounter issues.

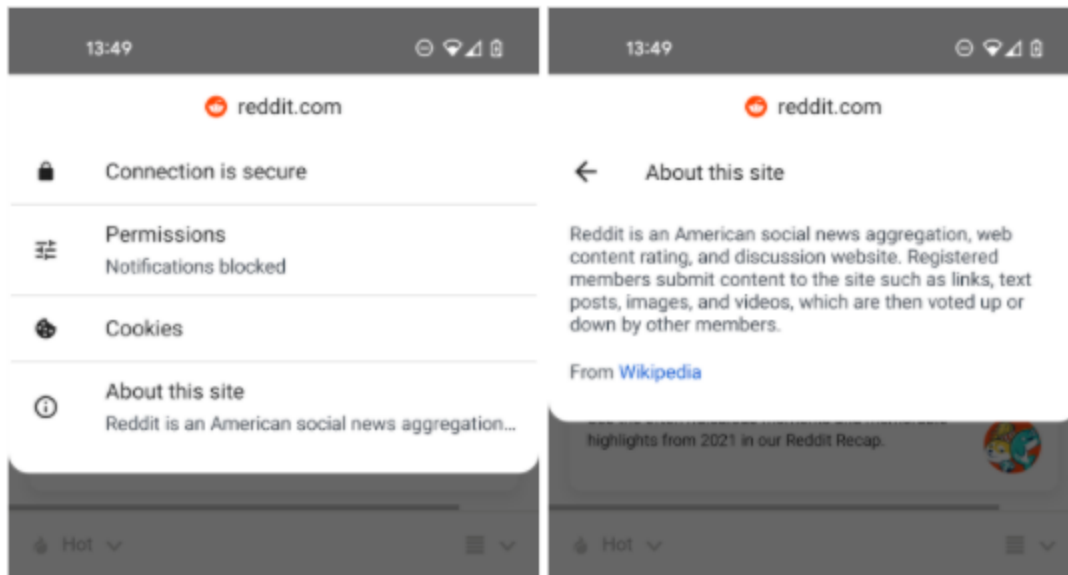
As CFG affects how Chrome is compiled, it is not possible to control it using enterprise policies, but you can test it in the Dev and Beta channels for Chrome 97.

## Certificate Transparency enabled on Chrome for Android

[Certificate Transparency](#) is already enforced on desktop platforms, and is now enforced for some users on Chrome 97 for Android, with a wider release planned for a later version. You can selectively disable Certificate Transparency using the [CertificateTransparencyEnforcementDisabledForCas](#), [CertificateTransparencyEnforcementDisabledForLegacyCas](#), and [CertificateTransparencyEnforcementDisabledForUrls](#) enterprise policies.

## About this site

Some users in Chrome 97 see a short description of a website in the "Site information" UI if the "Make searches and browsing better" setting is enabled.



### Test improvements to the Manage search engines settings

Site search helps users save time by searching through specific sites directly from the address bar on Chrome desktop. We are improving the **Settings>Manage search engines** page to help users have better control over Site search. Chrome 97 tests a number of these improvements:

- To help users better understand Site search, we renamed the page to **Manage search engines and site search** and added explanations to each section of the page.
- Now, when users visit a site that is eligible to work with Site search, that is, compliant with the [OpenSearch spec](#), it will no longer be automatically activated for Site search. To activate a site, users select **Settings>Manage search engines and site search>Inactive shortcuts>Activate**. To prevent user workflows from being disrupted, Site search providers that people have used before in Chrome remain activated.
- The [DefaultSearchProviderEnabled](#) enterprise policy maintains the same behavior.

### Chrome 97 removes profiles from memory when their windows are closed

Previously, when users closed Chrome windows for a profile, the profile object would stay loaded in memory. It would continue using memory and other system resources. It would also run jobs in

the background like Sync and extension background scripts. The only way to unload a profile from memory was to exit Chrome entirely.

Chrome 97 removes profiles from memory when their windows are closed. This can save lots of system resources in multi-profile scenarios. It also lets Chrome clean up ephemeral profile data from disk more efficiently, strengthening its privacy guarantees.

### **Chrome disables WebSQL in third-party contexts**

Chrome 97 disables WebSQL in third-party contexts, such as cross-origin iframes, as a continuation to the deprecation in Chrome 94. This change does not affect WebSQL in first-party contexts, but the eventual goal is to deprecate and remove all WebSQL.

An enterprise policy, [WebSQLInThirdPartyContextEnabled](#), can re-enable WebSQL in third-party contexts until Chrome 101, when support for WebSQL in third-party contexts will be removed entirely.

### **New Manifest V2 extensions not accepted after January 17, 2022**

As part of the gradual deprecation of Manifest V2, the Chrome Web Store will stop accepting submissions of *new* Manifest V2 extensions after January 17, 2022. This applies to all new extension submissions with visibility set to Public or Unlisted.

The change does not affect updates to already published extensions. Also, it does not impact extensions with visibility set to Private. The change is not expected to affect the operation of any existing extensions already deployed in Chrome.

Note that the next phase of deprecation, in June of 2022, is expected to expand this restriction to extensions with Private visibility, which may have a more significant impact on Enterprise extension workflows.

For more details, refer to the [Manifest V2 support timeline](#).

## Improved Chrome Autofill on Desktop

A shifted Autofill position enables users to preview autofilling more clearly within form fields. The addition of visual icons is a first step to clarifying what fields are expected to be filled. For example, a profile icon means Autofill fills any form fields related to address and contact info saved in Autofill.

### Address

First Name Last Name

Address 1 Alex 345 Spear Street

Address 2 Alexandra 1600 Amphitheater Pkwy

Country Manage addresses...

## Optimized user experience on iOS

Chrome on iOS optimizes user experience by fetching page load metadata from a Google service, based on the pages that users navigate to. All requests to Google are anonymous, and you can control this behavior with the [UrlKeyedAnonymizedDataCollectionEnabled](#) enterprise policy.

## Private Network Access preflights for subresources

Sends a CORS preflight request ahead of any private network requests for subresources, asking for explicit permission from the target server. This request carries a new `Access-Control-Request-Private-Network: true` header, and the response must carry a matching `Access-Control-Allow-Private-Network: true` header.

A private network request is any request from a public website to a private IP address or localhost, or from a private website, for example, intranet, to localhost. Sending a preflight

request mitigates the risk of cross-site request forgery attacks against private network devices such as routers, which are often not prepared to defend against this threat.

You can control this behavior using enterprise policies

[InsecurePrivateNetworkRequestsAllowed](#) and

[InsecurePrivateNetworkRequestsAllowedForUrls](#).

### New and updated policies in Chrome browser

| Policy   | Description   |
|--|---|
| <a href="#">HistoryClustersVisible</a>   | Controls the visibility of history clusters on the Chrome history page                                    |
| <a href="#">RemoteAccessHostClipboardSizeBytes</a>                             | The maximum size, in bytes, that can be transferred between client and host via clipboard synchronization |
| <a href="#">RemoteAccessHostAllowRemoteSupportConnections</a>                  | Allow remote support connections to this machine  |
| <a href="#">PolicyListMultipleSourceMergeList</a><br>(New on Android)          | Allow merging list policies from different sources  |
| <a href="#">CloudUserPolicyMerge</a><br>(New on Android)                       | Enables merging of user cloud policies into machine-level policies  |
| <a href="#">BrowserSignin</a><br>(Force sign in new on iOS)                    | Force users to sign-in to use the browser   |
| <a href="#">CloudPolicyOverridesPlatformPolicy</a><br>(new on Android)         | Google Chrome cloud policy overrides platform policy  |
| <a href="#">CloudUserPolicyOverridesCloudMachinePolicy</a><br>(new on Android) | Allow user cloud policies to override Chrome Browser Cloud Management policies.                           |
| <a href="#">CORSTNonWildcardRequestHeadersSupport</a>                          | CORS non-wildcard request headers support   |



# Chrome OS updates

## **Chrome Management Telemetry API**

This is a new API that provides telemetry information from managed Chrome OS devices. The initial set of telemetry data focuses on hardware performance—CPU, memory, storage, and graphics. You can see the full documentation [here](#).

## **Revamped user and device reporting controls**

There are now additional controls for reporting within device settings. You can view all available data for features that require reporting, such as the device details, insight reports, or the Telemetry API. Please see the [support article](#) for additional information.

## **Chrome Policy API supports Device settings**

The Chrome Policy API is a suite of services that allows Chrome administrators to view, manage, and get insights about the usage of Chrome OS and Chrome browsers in their organization. The API was launched in March 2021 with support for User and printer settings. Subsequently, support for Apps and Extensions settings was added. Now in Chrome 97, the API includes support for Device Settings.

## **Offline grammar check**

Grammar check is now available on Chrome OS devices with or without the internet. It's enabled by default, so just click on the suggested text to accept it. It works on text fields across the web so you can write notes, send calendar invites, build docs, and more.

### **Magnifier continuous panning**

Chrome OS Magnification now allows you to choose to move the portion of the screen that is magnified continuously as you move the mouse. This is in addition to the previous existing options that allow you to move the magnified area when your mouse touches the edge of the screen or the option that keeps the mouse in the center of the screen. To access this feature, go to **Chrome OS Settings > Advanced > Accessibility > Manage accessibility features > Enable fullscreen magnifier**.

### **Gallery app supports audio playing and multi window**

Audio playing experience on Chrome OS gets a brand new look under the Gallery app. Additionally, Gallery now supports multiple windows. This means users can view and edit multiple media files simultaneously.

## **Admin console updates**

### **Browser list data downloadable in CSV format**

Chrome introduces an optional CSV format to download the browser list data from the Admin console.

### **Read-only privilege for managed browsers**

Chrome introduces a read-only privilege for managed browsers. Admins can easily create custom admin roles with read-only access to managed browsers in the Admin console.

### **Reports overview page**

A new reports overview page provides a summary of all the reports available. The new page is available under the **Device > Chrome > Reports** menu.

### **Insights report: Devices that need attention**

A new report highlights categories of devices that require attention. The new report is available under the **Device > Chrome > Reports > Insights** menu.

The categories are:

- Devices that have not synched policies in 28 days
- Devices that have not seen user activity in 28 days
- Devices that are pending OS updates
- Devices that are not compliant with the OS version that was set by policy
  - For example, if a device policy requires Chrome 94 running on devices, but several devices are on Chrome 90
- Devices that are unable to apply a policy due to an OS mismatch
  - For example, if a set policy due to be applied has a minimum supported Chrome OS version of Chrome 96, but devices are on Chrome 90

Clicking on the category takes you to the device list page with filters applied according to the category. For more details, see this [Help Center article](#)

## New policies in the Admin console

| Policy Name   | Pages   | Supported on                   | Category/Field   |
|---|---|--------------------------------|--|
| <a href="#">RelaunchWindow</a>  | User & Browser Settings                                     | Chrome<br>Chrome OS            | Chrome Updates ><br>Relaunch Notification ><br>Relaunch window duration              |
| <a href="#">TermsOfServiceURL</a><br>(support docs)                             | New to User & Browser<br>Settings; Managed Guest<br>Session | Chrome OS                      | General > Custom terms of<br>service   |
| <a href="#">DeviceDebugPacketC<br/>aptureAllowed</a>                            | Device Settings   | Chrome OS                      | Other settings > Allow debug<br>network packet captures                              |
| <a href="#">AdditionalDnsQueryTy<br/>pesEnabled</a>                             | User & Browser Settings;<br>Managed Guest Session           | Chrome<br>Chrome OS<br>Android | Network > DNS queries for<br>additional DNS record types                             |
| <a href="#">LockIconInAddressBar<br/>Enabled</a>                                | User & Browser Settings;<br>Managed Guest Session           | Chrome<br>Chrome OS<br>Android | User experience > Lock icon<br>in the omnibox for secure<br>connections              |
| <a href="#">PrintPreviewUseSyste<br/>mDefaultPrinter</a>                        | User & Browser Settings                                     | Chrome                         | Printing > System Default<br>Printer   |
| <a href="#">DeviceLoginScreenPro<br/>mptOnMultipleMatchin<br/>gCertificates</a> | Device Settings   | Chrome OS                      | Other settings > Prompt<br>when multiple certificates<br>match on the sign-in screen |
| <a href="#">PromptOnMultipleMatc<br/>hingCertificates</a>                       | User & Browser Settings                                     | Chrome<br>Chrome OS            | Other settings > Prompt<br>when multiple certificates<br>match                       |

# Coming soon

**Note:** The items listed below are experimental or planned updates. They might change, be delayed, or canceled before launching to the Stable channel.

## Upcoming Chrome browser changes

### Network Service on Windows will be sandboxed

As early as Chrome 98, to improve security and reliability, the network service, already running in its own process, will be sandboxed on Windows. As part of this, third-party code that is currently able to tamper with the network service may be prevented from doing so. This might cause interoperability issues with software that injects code into Chrome's process space, such as Data Loss Prevention software. The [NetworkServiceSandboxEnabled](#) policy has been added to allow early testing of the new sandbox, and to disable the sandbox if incompatibilities are discovered. You can test the sandbox in your environment using [these instructions](#) and report any issues you encounter.

### Use of Chrome passwords in other apps on iOS

From Chrome 98, iOS users will be informed that they can use their saved passwords in other apps on their device.

The **Chrome > Settings > Passwords** screen will show a new option for **Passwords in Other Apps**, which will guide users to turn on this feature in iOS autofill settings.

### Update GREASE brand list generation

User-Agent [GREASE](#) aims to prevent bad or exclusionary assumptions from being built on top of User-Agent strings. This change aligns our implementation of GREASE in User-Agent Client Hints with the current spec, which includes additional GREASE characters beyond the current semicolon and space, and which recommends varying the arbitrary version. While we will roll out this change gradually and watch for negative impacts, admins can opt out via the

**UserAgentClientHintsGREASEUpdateEnabled** enterprise policy escape hatch (available in Chrome 98).

### **Chrome will maintain its own default root store**

As early as Chrome 98, to improve user security, and provide a consistent experience across different platforms, Chrome intends to maintain its own default root store. If you are an enterprise admin managing your own Certificate Authority (CA), you should not have to manage multiple root stores. We do not anticipate any changes will be required for how enterprises currently manage their fleet and trusted enterprise CAs, such as through group policy, macOS Keychain Access, or system management tools like Puppet.

### **Chrome will disable the U2F API by default**

The U2F API is Chrome's legacy API for interacting with USB security keys. It has been superseded by the W3C Web Authentication API (WebAuthn). In Chrome 98, Chrome will disable the U2F API by default. With Chrome 104, the U2F API will be removed from Chrome.

Sites can continue to use the U2F API beyond Chrome 98 if they enroll in an [Origin Trial](#). Using the Origin Trial also suppresses the deprecation prompt on the enrolled pages. The Origin Trial will end on July 26, 2022, shortly before the release of Chrome 104.

Enterprises can suppress deprecation related changes, and keep the U2F enabled, by using the [U2fSecurityKeyApiEnabled](#) enterprise policy. This enterprise policy will be removed from Chrome, together with the U2F API, in Chrome 104.

If you run a website that still uses this API, please refer to the [deprecation announcement](#) and [blog post](#) for more details.

## **Chrome will no longer allow TLS 1.0 or TLS 1.1**

The [SSLVersionMin](#) policy no longer allows setting a minimum version of TLS 1.0 or 1.1. This means the policy can no longer be used to suppress Chrome's [interstitial warnings](#) for TLS 1.0 and 1.1. Administrators must upgrade any remaining TLS 1.0 and 1.1 servers to TLS 1.2. In Chrome 91 we announced that the policy no longer works, but users could still bypass the interstitial. In Chrome 98, it will no longer be possible to bypass the interstitial.

## **Chrome may leverage MiraclePtr to improve security**

As early as Chrome 99, Chrome will leverage MiraclePtr to reduce the risk of security vulnerabilities relating to memory safety. The Chrome team gathered data on the performance cost of MiraclePtr in Chrome 91, but domain-joined enterprises on the stable channel were excluded from MiraclePtr builds during that phase. A full release of MiraclePtr in Chrome is planned as early as Chrome 101.

## **Feature flag to force the Chrome Major Version number to 100**

Users and site owners can experiment with the upcoming three-digit (Chrome 100) major release version number in the User-Agent string by turning on the *ForceMajorVersion100InUserAgent* flag. This forces the browser to send 100 as the major version number. When browsers went from version 9 to 10, the increase in the number of digits in the major version number uncovered many issues in User-Agent string parsing libraries. With this feature flag, we can uncover and address these issues before Chrome 100 rolls out. We encourage admins to submit any issues encountered [here](#).

## Previous release notes

| Chrome version & targeted Stable channel release date | PDF                 |
|---|---------------------|
| <a href="#">Chrome 96: November 16, 2021</a>          | <a href="#">PDF</a> |
| <a href="#">Chrome 95: October 19, 2021</a>           | <a href="#">PDF</a> |
| <a href="#">Chrome 94 OS: October 14, 2021</a>        | <a href="#">PDF</a> |
| <a href="#">Chrome 94: September, 2021</a>            | <a href="#">PDF</a> |
| <a href="#">Archived release notes</a>                |                     |

## Additional resources

- For emails about future releases, [sign up here](#).
- To try out new features before they're released, sign up for the [trusted tester program](#).
- Connect with other Chrome Enterprise IT admins through the [Chrome Enterprise Customer Forum](#).
- How Chrome releases work—[Chrome Release Cycle](#)
- Chrome Browser downloads and Chrome Enterprise product overviews—[Chrome Browser for enterprise](#)
- Chrome version status and timelines—[Chrome Platform Status](#) | [Google Update Server Viewer](#)
- Announcements: [Chrome Releases Blog](#) | [Chromium Blog](#)
- Developers: Learn about [changes to the web platform](#) and features [planned for upcoming releases](#).



## Still need help?

- Google Workspace, Cloud Identity customers (authorized access only)—[Contact support](#)
- Chrome Browser Enterprise Support—Sign up to [contact a specialist](#)
- [Chrome Administrators Forum](#)
- [Chrome Enterprise Help Center](#)

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