



Chrome 106 Enterprise and Education release notes

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

These release notes were published on September 27, 2022.

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

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Chrome 106 release summary

Chrome browser updates	Security/ Privacy	User productivity /Apps	Management
Accurate screen labels for window placement		✓	
Chrome shows Journeys on the History page on Android		✓	
Incognito lock on Android	✓		
Incognito downloads prompt on Android	✓		
Release of Prerender2 in Desktop		✓	
Chrome allows users to search their history, bookmarks, and tabs directly in the Omnibox		✓	
New lock screen widgets for iOS 16		✓	
Updates to the instructional chip shown for region search		✓	
Persistent quota deprecation launch			✓
Changes to chrome.runtime	✓		
New and updated policies in Chrome browser			✓
ChromeOS updates	Security/ Privacy	User productivity /Apps	Management
Default link capture behavior		✓	
Admin console updates	Security/ Privacy	User productivity /Apps	Management
Networks management in Chrome Policy API			✓
CUPS print servers management in Chrome Policy API			✓

Support for group-based policies for printers in Policy API			✓
New policies in the Admin console			✓
Upcoming Chrome browser changes	Security/ Privacy	User productivity /Apps	Management
Support for Encrypted Client Hello (ECH)	✓		
Link anonymization when entering Incognito	✓	✓	
Device token deletion			✓
MetricsReportingEnabled policy will be available on Android in Chrome			✓
Removal of window.webkitStorageInfo			✓
Removal of master_preferences			✓
User-Agent reduction Phase 5	✓		
Automated password changes on Desktop	✓		
Chrome sends Private Network Access preflights for subresources	✓		
Marshmallow deprecation for Chrome on Android	✓		
BuiltinCertificateVerifierEnabled being removed on Mac			✓
Network Service on Windows will be sandboxed	✓		
Chrome apps no longer supported on Windows, Mac, and Linux		✓	✓
Default to origin-keyed agent clustering in Chrome 109	✓		
Intent to deprecate and remove: Event.path	✓		
Windows 10 version minimum required version in Chrome 110			✓
Web SQL deprecation in non-secure contexts	✓		

Extensions must be updated to leverage Manifest V3	✓		
Upcoming ChromeOS changes	Security/ Privacy	User productivity /Apps	Management
ChromeOS Accessibility settings improvements		✓	
Photos integrations		✓	
Cursive pre-installed for Enterprise and Education accounts		✓	
Long-press diacritics		✓	
Channel labeling on ChromeOS		✓	
Save and recall Desks		✓	
Super Resolution Audio for Bluetooth headset microphones		✓	
Multi-touch virtual keyboard		✓	
Fast Pair		✓	
Passpoint: Seamless, secure connection to Wi-Fi networks	✓	✓	

The enterprise release notes are available in 9 languages. You can read about Chrome's updates in English, German, French, Dutch, Spanish, Portuguese, Korean, Indonesian, and Japanese. Please allow 1 to 2 weeks for translation for some languages.

Current Chrome version release notes

Chrome browser updates

Accurate screen labels for window placement

Chrome 105 launched a feature to display a label that meaningfully describes the screen to a user. For example, you can use this label to request permission to open and place windows on a connected screen.

This feature is a requested enhancement of the Multi-Screen Window Placement API which launched in Chrome 100, and was first rolled out in Chrome 105. You can read more on [our Chrome Platform Status page](#). Enterprise policies are available to control access to the Window Placement API: [WindowPlacementAllowedForUrls](#) and [WindowPlacementBlockedForUrls](#).

Chrome shows Journeys on the History page on Android

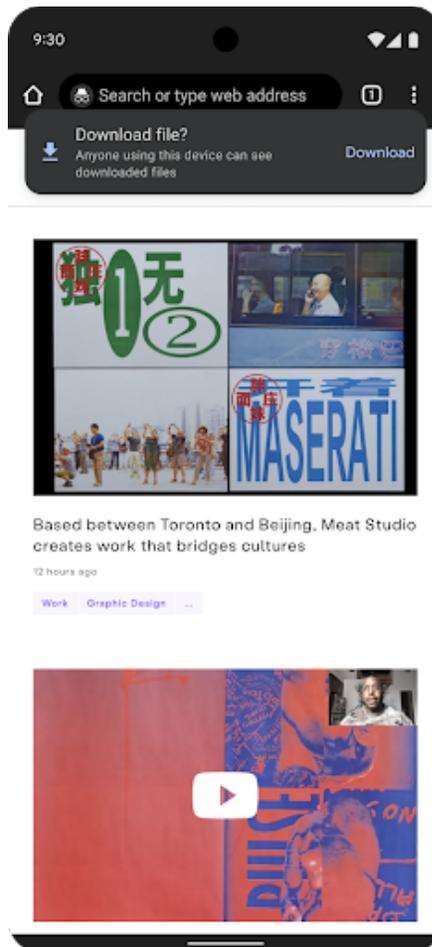
Chrome 96 started clustering local browsing activity on the History page into Journeys. This makes it easier to find prior activity and to resume related search suggestions. This feature rolls out to some users on Android starting in Chrome 106. For keywords typed into the Omnibox that match a cluster, an action chip displays for seamless access to the Journeys view. Users can delete clusters and disable Journeys, if desired. Additionally, admins can disable this feature using the [HistoryClustersVisible](#) policy.

Incognito lock on Android

Chrome 106 on Android 11 and later requires authentication when resuming an Incognito session. The feature is disabled by default. It can be enabled using the new **Lock Incognito tabs when you leave Chrome** toggle under **Settings > Privacy and security**. This feature is not available on managed devices where the [IncognitoModeAvailability](#) enterprise policy is set to *Disabled*.

Incognito downloads prompt on Android

When a user initiates a download while browsing on an Incognito tab, they now see a new prompt. Users can dismiss the prompt or tap **Download** to save the file. Files downloaded on Incognito continue to be accessible through the download manager.



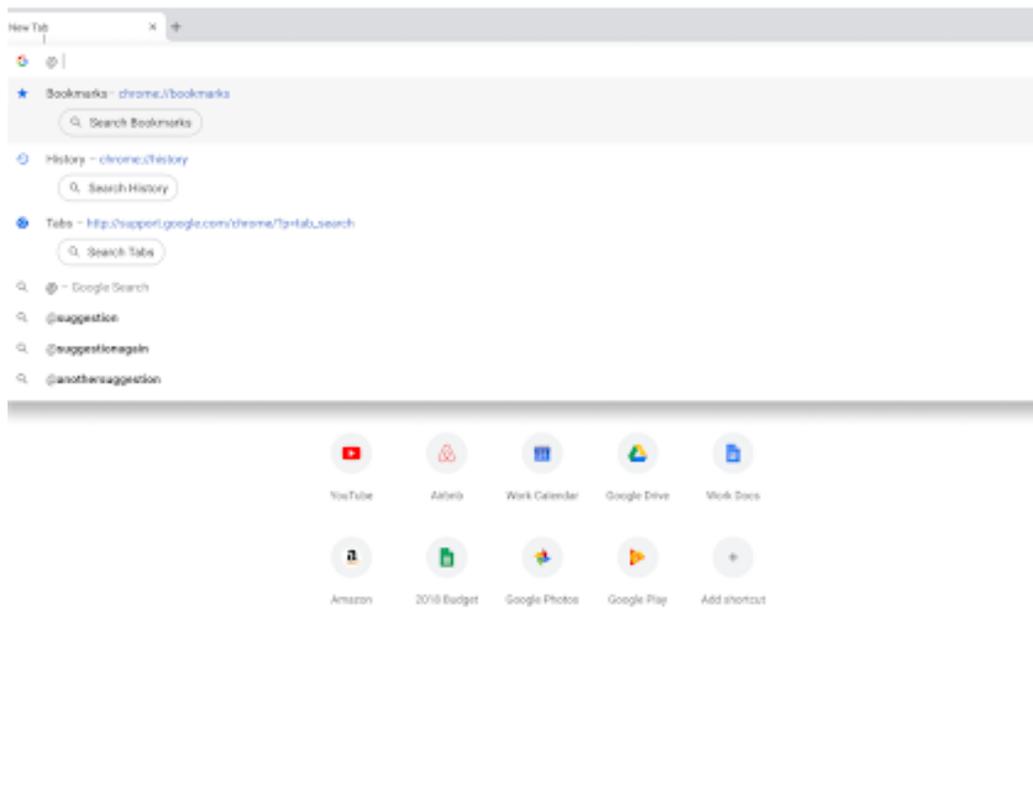
Release of Prerender2 in Desktop

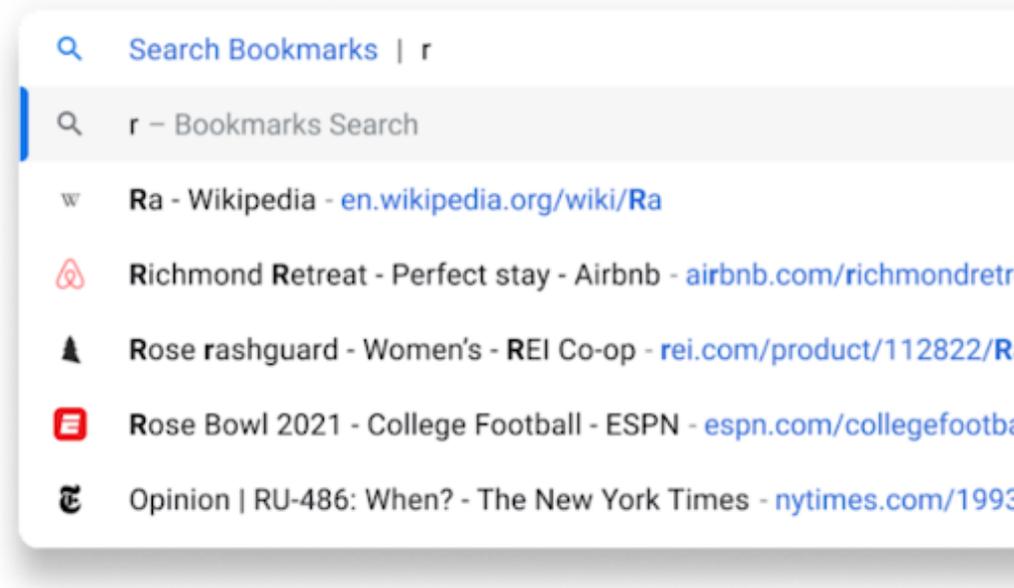
Expanding our prerender efforts released on Chrome 101 for Android, we shipped Prerender2 for Desktop in Chrome 105 which allows Chrome to pre-render pages that the user may highly-likely navigate next, aiming to produce an instant navigation. An enterprise policy, [NetworkPredictionOptions](#), is available to block the usage of all prerendering activities which

results in Chrome ignoring any hints or triggers to prerender a page. See our [article](#) for more information.

Chrome allows users to search their history, bookmarks, and tabs directly in the Omnibox

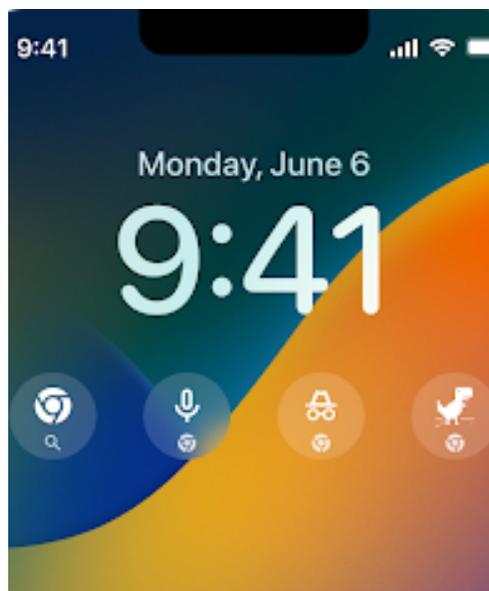
Chrome 106 helps users to quickly find what they are looking for by enabling them to search their history, bookmarks, or tabs directly in the Omnibox. Using one of the prepopulated shortcuts—@history, @bookmarks, or @tabs—users can choose to conduct a focused search limited to the area selected. You can change or deactivate these shortcuts in **Settings -> Search Engine > Manage search engine and site search > Site search**.





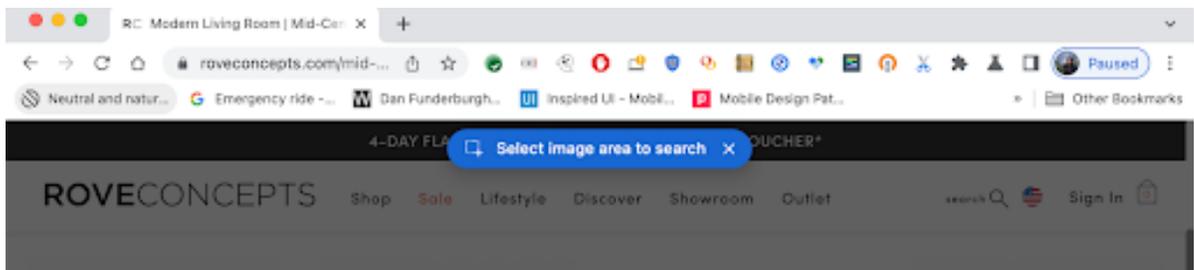
New lock screen widgets for iOS 16

On iOS16 devices and up, Chrome enables four new lock screen widgets. These widgets allow users to search in Chrome, or search with voice, or in Incognito mode, or quickly start the dino game.



Updates to the instructional chip shown when using region search

When using Google Lens, some users see a new look on their instructional chip, which includes a helpful icon and updated text. This ensures users have all the information they need to search visual elements on their screen. You can control this feature with the [LensRegionSearchEnabled](#) enterprise policy.



Persistent quota deprecation launch

In Chrome 106, the [window.PERSISTENT](#) quota type in `webkitRequestFileSystem` is no longer supported. `webkitRequestFileSystem` still accepts a `type` parameter and use of the `PERSISTENT` and `TEMPORARY` types creates file systems with separate roots, but the `PERSISTENT` type no longer grants access to a persistent file system.

Legacy quota API `navigator.webkitPersistentStorage` is an alias to `navigator.webkitTemporaryStorage`. The deprecated quota, API `webkitStorageInfo`, ignores the `storageType` parameter for its methods.

Changes to `chrome.runtime`

In Chrome 106, [chrome.runtime](#) is no longer defined unconditionally on all sites. In contexts where there is no connectable extension, websites should never expect `chrome.runtime` to be defined.

Over the past couple of months, we have taken steps to remove Chrome's legacy U2F security API. This API was implemented in an internal Chrome extension called CryptoToken, which by design was externally connectable from all URLs. The presence of this extension meant that `chrome.runtime` was effectively always defined on any web origin, because there was always at least one extension to connect to, even if the user installed no other connectable extensions. As part of the U2F removal process, Chrome 106 stops loading CryptoToken by default, which means that `chrome.runtime` is now undefined in contexts where there is no other connectable extension.

Websites should never assume that `chrome.runtime` is defined unconditionally. As a temporary workaround, the effects of this change can be reversed by enabling the `chrome://flags/#load-cryptotoken-extension` flag or by using the enterprise policy named [LoadCryptoTokenExtension](#).

New and updated policies in Chrome browser

Policy	Description
LoadCryptoTokenExtension	Load the CryptoToken component extension at startup.
OnPrintEnterpriseConnector	Configuration policy for the OnPrint Google Enterprise Connector.
EnterpriseProfileCreationKeepBrowsingData	Keep browsing data by default when creating enterprise profile.
PersistentQuotaEnabled	Enable or disable persistent quota.
PrefixedStorageInfoEnabled	Re-enable the deprecated <code>window.webkitStorageInfo</code> API.

ChromeOS updates

Default link capture behavior

Newly installed apps no longer handle links clicked in the browser by default. Links clicked in the browser are always opened in the browser, unless the **Open supported links** setting is enabled from the **Settings** app.

Admin console updates

Networks management in Chrome Policy API

We have added support for network management in the Chrome Policy API. This allows admins to use the API to create, delete, and configure WiFi, ethernet, and VPN networks, and certificates. For more details, see [Policy schema names](#).

CUPS print servers management in Chrome Policy API

Admins can now create, delete, and manage print server configurations within their ecosystem using the Chrome Policy API. For more details, see the [Chrome Printer Management API guide](#) and [Policy schema names](#).

Support for group-based policies for printers in Policy API

Adding to existing support for printer management on an OU-by-OU basis, admins can now modify printer settings for particular Google groups within their organization using the Policy API. For more details, see [Group policy](#).

New policies in the Admin console

Policy Name	Pages	Supported on	Category/Field
WebUsbAllowDevicesForUrls	User & Browser Settings; Managed Guest Session	Chrome ChromeOS Android	Hardware > WebUSB API allowed devices
ApplicationLocaleValue	User & Browser Settings	Windows	User experience > Browser locale
RestoreOnStartup	User & Browser Settings; Managed Guest Session	Chrome ChromeOS	Startup > Pages to load on startup

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

Support for Encrypted Client Hello (ECH)

As early as Chrome 107, Chrome will start rolling out support for [ECH](#) on sites that opt-in, as a continuation of our network related efforts to improve our users' privacy and safety on the web, for example, [Secure DNS](#).

If your organization's infrastructure relies on the ability to inspect SNI, for example, filtering, logging, and so on, you should test it with Chrome 106. You can enable the new behavior by navigating to `chrome://flags` and enabling the `#encrypted-client-hello` flag. On Windows and Linux, you also need to enable Secure DNS for the flag to have an effect.

If you encounter any incompatibilities, you will be able to use the [EncryptedClientHelloEnabled](#) enterprise policy to disable support for ECH.

Link anonymization when entering Incognito

As early as Chrome 107, Chrome will remove some URL parameters when a user selects **Open link in incognito window** from the context menu. You can control this behavior with the [UrlParamFilterEnabled](#) enterprise policy.

Device token deletion

As early as Chrome 107, when deleting a browser from the managed browsers list in the Admin console, a new policy will allow you to automatically delete the device token on the end-point devices. The default value will remain to invalidate the device token.

MetricsReportingEnabled policy will be available on Android in Chrome

As early as Chrome 107, Chrome on Android will slightly modify the first run experience to support the [MetricsReportingEnabled](#) policy. If the admin disables metrics reporting, there will be no change to the first run experience. If the admin enables metrics, users will still be able to change the setting in Chrome settings. When enabled, the [MetricsReportingEnabled](#) policy allows anonymous reporting of usage and crash-related data about Chrome to Google.

Removal of window.webkitStorageInfo

As early as Chrome 107, [window.webkitStorageInfo API](#) will be removed. This legacy quota API has been deprecated since 2013, and has been replaced by the now standardized [StorageManager API](#).

Removal of master_preferences

master_preferences and [initial_preferences](#) are ways of setting default preferences for a Chrome install. The historical name of the file is *master_preferences*, but it was renamed to *initial_preferences* in Chrome 91. To make the transition easy for IT admins, from Chrome 91 to Chrome 107, naming the file either *initial_preferences* or *master_preferences* has the same effect. In Chrome 108, if you name the file *master_preferences*, it will not work by default. You should rename the file *initial_preferences*.

Alternatively, you will be able to use the **CompatibleInitialPreferences** enterprise policy to extend support for the *master_preferences* naming. This policy is not currently available.

User-Agent reduction Phase 5

Beginning in Chrome 107, some portions of the User-Agent string will be reduced on desktop devices. As previously detailed in the [Chromium blog](#), we intend to proceed with Phase 5 of the User-Agent reduction plan. The `<platform>` and `<oscpu>` tokens, parts of the User-Agent string, are reduced to the relevant `<unifiedPlatform>` token values, and will no longer be updated. Additionally, the values for `navigator.platform` are frozen on desktop platforms. For more details, see this [Chromium update](#).

The [UserAgentReduction](#) policy will allow for opting out of these changes.

Automated password changes on Desktop

Chrome 107 will allow users to change their passwords automatically using Google Assistant on Desktop. If their passwords have been compromised, for example, this feature makes it easier to change passwords, and ultimately will help keep users safer. A policy will be available to enable or disable automated password changes in Google Assistant.

Chrome sends Private Network Access preflights for subresources

Chrome 104 started sending 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. In this initial phase, this request is sent, but no response is required from network devices. If no response is received, or it does not carry a matching `Access-Control-Allow-Private-Network: true` header, a warning is shown in DevTools. For more details, see this [blog post](#).

In Chrome 107 at the earliest, the warnings will turn into errors and affected requests will fail. You can disable Private Network Access checks using the [InsecurePrivateNetworkRequestsAllowed](#) and [InsecurePrivateNetworkRequestsAllowedForUrls](#) enterprise policies.

If you want to test this feature in advance, you can enable warnings using `chrome://flags/#private-network-access-send-preflights`. If you want to test how it behaves once warnings turn into errors, you can enable `chrome://flags/#private-network-access-respect-preflight-results`.

Chrome is making this change to protect users from [cross-site request forgery \(CSRF\) attacks](#) targeting routers and other devices on private networks. To learn more about mitigating this change proactively, see details on [what to do if your site is affected](#). Read the [whole blog post](#) for a more general discussion and latest updates about Private Network Access preflights.

Marshmallow deprecation for Chrome on Android

Chrome 106 is the last version that supports Android 6.0 Marshmallow. From Chrome 107 and onwards, the minimum version supported is Android 7.0 Nougat.

BuiltinCertificateVerifierEnabled being removed on Mac

The [BuiltinCertificateVerifierEnabled](#) policy will be removed in Chrome 107 on Mac. This policy was used to control the use of the built-in certificate verifier while using the platform provided root store. Starting in Chrome 105, a new implementation is available that uses the built-in certificate verifier with the Chrome Root Store. The new implementation may be controlled by the [ChromeRootStoreEnabled](#) policy.

Network Service on Windows will be sandboxed

As early as Chrome 108, 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 allows you 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.

Chrome apps no longer supported on Windows, Mac, and Linux

As [previously announced](#), Chrome apps are being phased out in favor of Progressive Web Apps (PWAs) and web-standard technologies. The deprecation schedule was adjusted to provide enterprises who used Chrome apps additional time to transition to other technologies, and Chrome apps will now stop functioning in Chrome 109 or later on Windows, Mac, and Linux. If you need additional time to adjust, a policy [ChromeAppsEnabled](#) will be available to extend the lifetime of Chrome Apps an additional 2 milestones.

Starting in Chrome 105, if you're force-installing any Chrome apps, users are shown a message stating that the app is no longer supported. The installed Chrome Apps are still launchable.

Starting with Chrome 109, Chrome Apps on Windows, Mac and Linux will no longer work. To fix this, remove the extension ID from the [force-install extension list](#), and if necessary, add the corresponding **install_url** to the [web app force install list](#). For common Google apps, the *install_urls* are listed below:

Property	Extension ID (Chrome App)	install_url (PWA / Web App)
Gmail	pjkljhegncpnkpnbcohdijeoejaedia	https://mail.google.com/mail/installwebapp?usp=admin
Docs	aohghmighlieiainnegkijnfilokake	https://docs.google.com/document/installwebapp?usp=admin
Drive	apdfllckaahabafndbhieahigkjlhalf	https://drive.google.com/drive/installwebapp?usp=admin
Sheets	felcaaldnbdncclmgdcncolpebgiejap	https://docs.google.com/spreadsheets/installwebapp?usp=admin
Slides	aapocclcgogkmnckokdopfmhonfmgoek	https://docs.google.com/presentation/installwebapp?usp=admin
Youtube	blpcfgokakmgnkcojhhkbfldkacnbeo	https://www.youtube.com/s/notifications/manifest/cr_install.html

Default to origin-keyed agent clustering in Chrome 109

As early as Chrome 109, websites will be unable to set `document.domain`. Websites will need to use alternative approaches such as `postMessage()` or Channel Messaging API to communicate cross-origin. If a website relies on same-origin policy relaxation via `document.domain` to function correctly, it will need to send an `Origin-Agent-Cluster: ?0` header along with all documents that require that behavior.

Note: `document.domain` has no effect if only one document sets it.

The [OriginAgentClusterDefaultEnabled](#) enterprise policy will allow you to extend the current behavior.

Intent to deprecate and remove: `Event.path`

To improve web compatibility, we will stop supporting the non-standard API `Event.path` as early as Chrome 109. Websites should migrate to `Event.composedPath()`, which is a standard API that returns the same result. If you need additional time to adjust, a policy [EventPathEnabled](#), available on Windows, Mac, Linux, ChromeOS, Android and WebView will allow you to extend the lifetime of `Event.path` by an additional 6 milestones.

Windows 10 as minimum required version in Chrome 110

Microsoft ends support for Windows 7 [ESU](#) and Windows 8.1 extended support on January 10, 2023. Chrome 110, tentatively scheduled for release on February 7, is the first version of Chrome which will have a minimum Windows version of Windows 10.

Web SQL deprecation in non-secure contexts

The non-standard Web SQL API is rarely used and requires frequent security fixes. At this point, only Chromium-based browsers support it. Web developers have been discouraged from using it for years. We are engaging in a careful process to seek out and warn partners who may still be using Web SQL, with the goal of removing it from Chrome entirely in 2023. Meanwhile, we're working on a replacement using WebAssembly.

We've already disabled Web SQL in third-party contexts. The next step is to remove support in non-secure contexts. In Chrome 105, we introduced a deprecation warning in DevTools. In early 2023, we plan to remove support in third-party contexts.

An enterprise policy, [WebSQLNonSecureContextEnabled](#), is available when support ends, to allow Web SQL API to function in non-secure contexts if needed. The policy will expire in alignment with the API's non-secure context removal schedule, currently planned for Chrome 110.

Extensions must be updated to leverage Manifest V3

Chrome extensions are transitioning to a new manifest version, Manifest V3. This will bring improved privacy for your users—for example, by moving to a model where extensions modify requests declaratively, without the ability to see individual requests. This also improves extension security, as remotely hosted code will be disallowed on Manifest V3.

All new extensions submitted to the Chrome Web Store already must implement Manifest V3, but existing Manifest V2 extensions can still be updated, and still run in Chrome.

In 2023, extensions using Manifest V2 will cease running in Chrome. If your organization is running extensions that use Manifest V2, you must update them to leverage Manifest V3. If you need additional time to adjust to the Manifest V3 transition, you'll be able to extend Manifest V2 support in Chrome using an enterprise policy until at least June 2023.

You can see which manifest version is being used by all Chrome extensions running on your fleet using the Apps & extensions usage page in [Chrome Browser Cloud Management](#).

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

Upcoming ChromeOS changes

ChromeOS Accessibility settings improvements

As early as ChromeOS 107, we will include new improvements to our accessibility settings, including improved search results, easier to understand feature descriptions, and improved layout for better discoverability of accessibility features.

Photos integrations

As early as Oct 3rd, Chromebook users will get access to enhanced video editing features from Google Photos. The experience is optimized for a larger screen, and will seamlessly integrate with the built-in Gallery app and your Chromebook files – so you can use local

images and clips recorded on your Chromebook camera or stored in your Files app to build your movie.

While movie editing typically comes with a steep learning curve, the revamped movie creation tools in Google Photos help you make high-quality movies with just a few taps using your video clips and photos. Starting in Q4 2022, you'll be able to create beautiful movies from suggested themes, or put yourself in the director's seat and start from scratch, right on your Chromebook.

Cursive pre-installed for Enterprise and Education accounts

As early as ChromeOS 107, [Cursive](#) is a stylus-first notes app for Chromebooks. In an upcoming release, it will be pre-installed for all Enterprise and Education accounts on stylus-enabled Chromebooks.

Long-press diacritics

In the virtual keyboard, users can hold a key to type an accented version or variant of that letter. Now users with a hardware keyboard can also hold a letter key to choose an accent or a letter variant. For example, hold the **e** key to see a list of accents, such as **è** in *caffè* or **é** in *déjà vu*.

Channel labeling on ChromeOS

Trying out the latest version of ChromeOS? For users on non-stable channels (Beta, Dev, Canary), you will see which channel you are on next to the battery icon in the bottom right. Selecting the time to open quick settings will have a new UI with the device build as well as a button directly to submit feedback.

Save and recall Desks

Starting in 107, you will be able to save and close an entire virtual desk, including all its app windows and their layout – perfect for when you want to switch gears or focus on a different task. When you're ready to get back to it, you can open your saved desk and all its windows and tabs with a click.

Super Resolution Audio for Bluetooth headset microphones

Starting in 107, your ChromeOS device will help you sound more natural in calls and conferences by reconstructing the high-frequency audio components that are not transmitted from Bluetooth headsets.

Multi-touch virtual keyboard

The virtual keyboard will go through some under-the-hood improvements that better handle multiple fingers simultaneously tapping keys. It will soon be faster to type on, especially for touch typists.

Fast Pair

Fast Pair makes Bluetooth pairing easier on ChromeOS devices and Android phones. When you turn on your Fast Pair-enabled accessory, it automatically detects and pairs with your ChromeOS device or Android phone in a single tap. Fast Pair also associates your Bluetooth accessory with your Google account, making it incredibly simple to move between devices without missing a beat. This feature will be available as early as ChromeOS 108.

Passpoint: Seamless, secure connection to Wi-Fi networks

Starting as early as ChromeOS 108, Passpoint will streamline Wi-Fi access and eliminate the need for users to find and authenticate a network each time they visit. Once a user accesses

the Wi-Fi network offered at a location, the Passpoint-enabled client device will automatically connect upon subsequent visits.

Previous release notes

Chrome version & targeted Stable channel release date	PDF
Chrome 105: August 30, 2022	PDF
Chrome 104: August 2, 2022	PDF
Chrome 103: June 21, 2022	PDF
Chrome 102: May 26, 2022	PDF
Archived release notes	

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](#).

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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