

1 Jean-Jacques Cabou (#022835)
JCabou@perkinscoie.com
2 Alexis E. Danneman (#030478)
ADanneman@perkinscoie.com
3 Matthew R. Koerner (#035018)
MKoerner@perkinscoie.com
4 **PERKINS COIE LLP**
5 2901 North Central Avenue, Suite 2000
6 Phoenix, Arizona 85012
7 Telephone: 602.351.8000
8 Facsimile: 602.648.7000
DocketPHX@perkinscoie.com

9 Benedict Y. Hur (CA #224018)*
bhur@willkie.com
10 Simona A. Agnolucci (CA #246943)*
sagnolucci@willkie.com
11 Joshua D. Anderson (CA #312836)*
jdanderson@willkie.com
12

WILLKIE FARR & GALLAGHER LLP

13 One Front Street, 34th Floor
14 San Francisco, California 94111
15 Telephone: 415.858.7401
Facsimile: 415.858.7599

16 *Admitted Pro Hac Vice
17 Attorneys for Google LLC

18 ARIZONA SUPERIOR COURT
19 MARICOPA COUNTY

20 STATE OF ARIZONA, *ex rel.* MARK
21 BRNOVICH, Attorney General,

22 Plaintiff,

23 vs.

24 GOOGLE LLC, a Delaware limited liability
company,

25 Defendant.

Case No. CV 2020-006219

**DECLARATION OF JOSHUA
ANDERSON IN SUPPORT OF
GOOGLE LLC'S RESPONSE IN
OPPOSITION TO PLAINTIFF'S
MOTION FOR PARTIAL SUMMARY
JUDGMENT**

(Assigned to the Hon. Timothy Thomason)

1 I, Joshua Anderson, declare as follows:

2 1. I am an attorney duly licensed to practice in the State of California, and am
3 admitted to practice before this Court *pro hac vice*. I am an associate at Willkie Farr &
4 Gallagher LLP, counsel of record for Defendant Google LLC, in support of whose Response
5 in Opposition to Plaintiff's Motion for Partial Summary Judgment this declaration is made. I
6 have personal knowledge of the facts stated herein and could competently testify thereto.

7 2. Attached hereto as **Exhibit H** is a true and correct copy of a Google
8 Technologies page relating to location data. The page was captured by the Internet Archive
9 on July 26, 2018. I obtained this screenshot via the Wayback Machine described in the
10 Declaration of Elizabeth Rosenberg, submitted by the AG as Exhibit 297. I located this page
11 by searching the URL <https://policies.google.com/technologies/location-data>, and selected
12 the result for July 26, 2018, on the resulting page, and saved the webpage as a PDF.

13 3. Attached hereto as **Exhibit I** is a true and correct copy of a Google support
14 page entitled "Manage or delete your Location History." The page was captured by the
15 Internet Archive on July 29, 2018. I obtained this screenshot via the Wayback Machine
16 described in the Declaration of Elizabeth Rosenberg, submitted by the AG as Exhibit 297. I
17 located this page by searching the URL
18 https://support.google.com/accounts/answer/3118687?hl=en&ref_topic=3382296, and
19 selected the result for July 29, 2018, on the resulting page, and saved the webpage as a PDF.

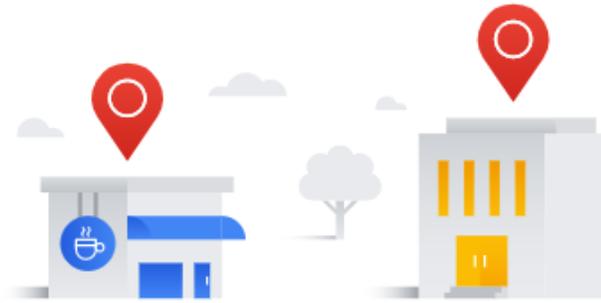
20 4. Attached hereto as **Exhibit J** is a true and correct copy of Google's Privacy
21 Policy, effective December 2017. This page, along with all past versions of Google's Privacy
22 Policies is available at <https://policies.google.com/privacy/archive?hl=en-US>.

23 5. Attached hereto as **Exhibit K** is a true and correct copy of a current Google
24 Privacy Policy. This page is available at <https://policies.google.com/privacy?hl=en-US>.

25 6. Below is a true and correct screenshot taken from Exhibit K, which concerns a
26 user's location history

27
28

1 Your location information



8

9

10 We collect information about your location when you use our services, which helps us offer features like driving directions for your weekend getaway or showtimes for movies playing near you.

11 Your location can be determined with varying degrees of accuracy by:

- 12
- 13
- 14
- 15
- 16
- GPS
 - [IP address](#)
 - [Sensor data from your device](#)
 - [Information about things near your device](#), such as Wi-Fi access points, cell towers, and Bluetooth-enabled devices

17

18 The types of location data we collect depend in part on your device and account settings. For example, you can [turn your Android device's location on or off](#) using the device's settings app. You can also turn on [Location History](#) if you want to create a private map of where you go with your signed-in devices.

19

20

21 I declare under penalty of perjury under the laws of the State of Arizona that the

22 foregoing is true and correct. Executed on November 4, 2020, in San Francisco, California.

23

24 By: 
Joshua Anderson

25

26

27 150037209.2

Exhibit H

<https://policies.google.com/technologies/location-data>

Go

MAY JUL OCT

◀ 26 ▶

2017 2018 2019



38 captures

13 May 2018 - 27 Oct 2020

▼ About this capture

TYPES OF LOCATION DATA USED BY GOOGLE

- [What types of location do you use on Google?](#)
- [What is Location History?](#)
- [How is Location History used across Google?](#)
- [How is Location History used in ads?](#)
- [How do I manage my Location History?](#)
- [How do I know if my Location History is on?](#)

What types of location do you use on Google?

We may collect and use a few types of location information - depending on the products and features you're using - to provide you with a more useful experience on Google.

Implicit location information is information that does not tell us where your device is located, but allows us to infer that you are either interested in the place or that you might be at the place. An example of implicit location information would be a manually typed search query for a particular place. Implicit location information is used in a variety of ways. For example, if you type in "Eiffel Tower", we infer that you may like to see information for places near Paris, and we can then use that to provide recommendations about those local places to you.

When you use or interact with a Google product, your device sends explicit location information to Google to enable us to provide the service. Explicit location information contains information about where you or your device is located, either based on device sensors, GPS, or WiFi. We also use IP address, which is sent as a normal part of internet traffic information. Every device connected to the Internet is assigned a number known as an Internet protocol (IP) address. These numbers are usually assigned in geographic blocks. An IP address can often be used to identify the geographic block from which a device is connecting to the Internet, and do things like provide you with the correct language for search queries. Some products, such as turn-by-turn navigation in Google Maps for mobile require precise location information. For these products, you typically have to choose to turn on device-based location services for your device, which are

<https://policies.google.com/technologies/location-data>

Go

MAY JUL OCT

◀ 26 ▶

2017 2018 2019

**38 captures**

13 May 2018 - 27 Oct 2020

▼ About this capture

What is Location History?

Location History is a Google account-level setting that saves where you go with every device where your account is signed-in to give you personalized maps, recommendations based on places you've visited, help finding your phone, real-time traffic on your commute, and more. Location History is turned off by default for your Google account. You must opt-in to turn on Location History for your Google account and can disable it at any time in your Google account [activity controls](#). You control what's saved in your Location History, and you can delete all or part of your history at any time using Timeline.

Location History will include location information Google receives from Location Reporting, which is a device-level setting that allows your device to send location data back to Google for use in Location History.

If you have multiple devices with a signed-in Google account, you can choose to report location from specific devices, or all devices. If you do not want certain signed-in mobile devices to contribute to Location History, you can disable them from doing so via the Location Reporting settings on your device. [Learn more](#)

How is Location History used across Google?

Location History helps Google provide more personalized features to you across Google products and services. This personalization may take many different forms, depending on what you are doing and what Google product you use. For example, Google Photos can use your Location History to add context to photos that you have taken and make it easier for you to find pictures when you want to show friends and family. Location History also helps Google understand things like your commute and provide suggestions on when to head home for the day.

How is Location History used in ads?

Location History may be used to determine which ads to show you and to measure advertising effectiveness. For example, to make ads more relevant, if you have enabled Location History and regularly

https://policies.google.com/technologies/location-data MAY JUL OCT
◀ 26 ▶
2017 2018 2019

38 captures
13 May 2018 - 27 Oct 2020

ⓘ ? ✕
f t
▼ About this capture

Location History or any other identifying information with advertisers.

How do I manage my Location History?

You can view and manage your Location History information through the [Timeline](#) feature in Google Maps, which is available to both mobile and desktop users. Timeline users can edit specific entries on their Location History, delete information from ranges in time or delete all their Location History entries. [Learn more](#)

You can also pause Location History at any time. When you pause Location History, the places you go are no longer saved to your Google account. This action will apply to all devices associated with your Google account that were previously reporting location to Google.

If you want to export your Location History from Google, you can download your data [here](#). If you want to fully delete your Location History, you can do so by following the steps [here](#).

How do I know if my Location History is on?

Location History is an account level setting that you must opt-in to before the places you go are saved to your Google account. You can always review your settings to determine if you have enabled Location History. [Learn more](#)

Exhibit I

https://support.google.com/accounts/answer/3118687?hl=en&ref_topic=3382296

Go

MAY JUL OCT

◀ 29 ▶

2017 2018 2019



▼ About this capture

48 captures

6 Dec 2016 - 12 Aug 2020

[Visit your Google Account](#) to manage your privacy and security, all in one place

Manage or delete your Location History

Your Location History helps you get better results and recommendations on Google products. For example, you can see recommendations based on places you've visited with signed-in devices, or traffic predictions for your daily commute.

You control what's saved in your Location History, and you can delete your history at any time.

Note: Some of these steps work only on Android 8.0 and up. [Learn how to check your Android version.](#)

Learn what applies [in Android 4.1 through 4.3](#) or [for iPhone and iPad](#).

Turn Location History on or off

You can turn off Location History at any time. With Location History off, the places you go are no longer stored. When you turn off Location History for your Google Account, it's off for all devices associated with that Google Account.

You can also turn off Location services for a device. [Learn how.](#)

Turn Location History on/off using device settings (Android 2.3 & up)

1. On your Android phone or tablet, open your device's Settings app  > **Google** > **Google Account**.
2. At the top, tap **Data & personalization**.
3. Under "Activity controls," tap **Location History**.
4. Turn **Location History** on or off for your account or devices:
 - For your whole account and all devices associated with it, turn **Use Location History** on or off.
 - For a certain device only, turn that device's history on or off.

Turn Location History on/off using a website

1. Go to the [Activity controls](#) section of your Google Account. You might need to sign in.
2. Turn **Location History** on or off.
3. Confirm the change. This setting will change for your Google Account and all devices associated with it.

https://support.google.com/accounts/answer/3118687?hl=en&ref_topic=3382296

Go

MAY JUL OCT

◀ 29 ▶

2017 2018 2019



▼ About this capture

48 captures

6 Dec 2016 - 12 Aug 2020

Delete Location History

You can delete all of your Location History or only parts of it. If you delete your entire history, some apps may not work correctly.

Delete Location History using device settings (Android 2.3 & up)

IMPORTANT: Deleting your Location History in the Settings app is permanent. You can't reverse or undo it. Deleting your Location History may cause problems in some apps.

1. On your Android phone or tablet, open your device's Settings app  > **Google** > **Google Account**.
2. At the top, tap **Data & personalization**.
3. Under "Activity controls," tap **Location History**.
4. At the bottom, tap **Manage Timeline**. Your device will open Google Maps .
5. Tap More  > **Settings**.
6. At the bottom, choose **Delete all Location History** or **Delete Location History range**.

Delete Location History using a website

You can delete individual locations, locations by date, or your whole location history on the Location History website.

1. Go to maps.google.com/locationhistory . You might need to sign in.
2. Pick how to delete your Location History:
 - **By date:**
To the right of the date you want, click Delete .
 - **By individual location:**
Pick a location from the list or map. Click More  > **Remove stop from day** > **Remove**.
 - **Entire history:**
Click **Settings** > **Delete all Location history**.

Note: The Location History website isn't available in South Korea.

Usage & diagnostics for Location History

When you turn on Location History, you also let your device send diagnostic information to Google about what's working and not working for Location History.

All usage and diagnostics information is used in accordance with [Google's privacy policy](#) .

https://support.google.com/accounts/answer/3118687?hl=en&ref_topic=3382296

Go

MAY JUL OCT

◀ 29 ▶

2017 2018 2019



▼ About this capture

[48 captures](#)

6 Dec 2016 - 12 Aug 2020

Your device may send information to Google for improving Location History. For example, your device may send information when Location services aren't working properly.

Sent information could include:

- Quality and length of your connections to mobile networks, GPS, Wi-Fi networks, or Bluetooth
- State of your location settings
- Restarts and crash reports
- Apps used for turning Location History on or off
- Battery levels

How shared information helps Google improve

Usage and diagnostics information can help improve Google apps, products, and Android devices. For example, Google can use information to improve:

- **Battery life:**
Google can use information about what's using the most battery on your device to help reduce battery consumption for commonly used features.
- **Location accuracy:**
Google can use information from location sensors and settings to help improve location estimates for apps and services.

Related articles

- [Turn location on or off for your device](#)
- [View or delete your Google Maps history](#)
- [Find & improve your location's accuracy in Google Maps](#)

Was this article helpful?

https://support.google.com/accounts/answer/3118687?hl=en&ref_topic=3382296

Go

MAY JUL OCT

◀ 29 ▶

2017 2018 2019



▼ About this capture

[48 captures](#)

6 Dec 2016 - 12 Aug 2020

-  [Create a Google Account](#)
-  [Create a strong password](#)
-  [Verify your account](#)
-  [Control what others see about you across Google services](#)
-  [Someone changed your password](#)
-  [Be ready to find a lost Android device](#)
-  [Manage or delete your Location History](#)
-  [Set up a recovery phone number or email address](#)
-  [Enable or disable cookies](#)
-  [Can't sign in to your Google Account](#)



[Watch video tutorials](#)

To get the latest tips, tricks, and how-to's, [subscribe to our YouTube Channel](#).

English ▼

Exhibit J

PRIVACY POLICY

Last modified: December 18, 2017 ([view archived versions](#))

There are many different ways you can use our services – to search for and share information, to communicate with other people or to create new content. When you share information with us, for example by creating a [Google Account](#), we can make those services even better – to show you [more relevant search results](#) and ads, to help you [connect with people](#) or to make [sharing with others quicker and easier](#). As you use our services, we want you to be clear how we're using information and the ways in which you can protect your privacy.

Our Privacy Policy explains:

- What information we collect and why we collect it.
- How we use that information.
- The choices we offer, including how to access and update information.

We've tried to keep it as simple as possible, but if you're not familiar with terms like cookies, IP addresses, pixel tags and browsers, then read about these [key terms](#) first. Your privacy matters to Google so whether you are new to Google or a long-time user, please do take the time to get to know our practices – and if you have any questions [contact us](#).

Information we collect

We collect information to provide better services to all of our users – from figuring out basic stuff like which language you speak, to more complex things like which [ads you'll find most useful](#), [the people who matter most to you online](#), or which YouTube videos you might like.

We collect information in the following ways:

- **Information you give us.** For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for [personal information](#), like your name, email address, telephone

number or [credit card](#) to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible [Google Profile](#), which may include your name and photo.

- **Information we get from your use of our services.** We [collect information](#) about the services that you use and how you use them, like when you watch a video on YouTube, visit a website that uses our advertising services, or [view and interact with our ads](#) and content. This information includes:

- **Device information**

We collect [device-specific information](#) (such as your hardware model, operating system version, [unique device identifiers](#), and mobile network information including phone number). Google may associate your [device identifiers](#) or [phone number](#) with your Google Account.

- **Log information**

When you use our services or view content provided by Google, we automatically collect and store certain information in [server logs](#). This includes:

- details of how you used our service, such as your search queries.
 - telephony log information like your phone number, calling-party number, forwarding numbers, time and date of calls, duration of calls, SMS routing information and types of calls.
 - [Internet protocol address](#).
 - device event information such as crashes, system activity, hardware settings, browser type, browser language, the date and time of your request and referral URL.
 - cookies that may uniquely identify your browser or your Google Account.
- **Location information**

When you use Google services, we [may collect and process information about your actual location](#). We use various technologies to determine location, including IP address, GPS, [and other sensors](#) that may, for example, provide Google with information on nearby devices, [Wi-Fi access points and cell towers](#).

- **Unique application numbers**

Certain services include a unique application number. This number and information about your installation (for example, the operating system type and application version number) may be sent to Google when you install or uninstall that service or when that service periodically contacts our servers, such as for automatic updates.

- **Local storage**

We may collect and store information (including personal information) locally on your device using mechanisms such as [browser web storage](#) (including HTML 5) and [application data caches](#).

- **Cookies and similar technologies**

We [and our partners](#) use various technologies to collect and store information when you visit a Google service, and this may include using [cookies or similar technologies](#) to identify your browser or device. We also use these technologies to collect and store information when you interact with services we offer to our partners, such as [advertising services](#) or Google features that may appear on other sites. Our Google Analytics product helps businesses and site owners analyze the traffic to their websites and apps. When used in conjunction with our advertising services, such as those using the DoubleClick cookie, Google Analytics information is [linked, by the Google Analytics customer or by Google, using Google technology, with information about visits to multiple sites](#).

Information we collect when you are signed in to Google, in addition to information we obtain about you from partners, may be associated with your Google Account. When information is associated with your Google Account, we treat it as personal information. For more information about how you can access,

manage or delete information that is associated with your Google Account, visit the [Transparency and choice](#) section of this policy.

How we use information we collect

We use the information we collect from all of our services to [provide, maintain, protect](#) and improve them, to [develop new ones](#), and to [protect Google and our users](#). We also use this information to offer you tailored content – like giving you more relevant search results and ads.

We may use the name you provide for your Google Profile across all of the services we offer that require a Google Account. In addition, we may replace past names associated with your Google Account so that you are represented consistently across all our services. If other users already have your email, or other information that identifies you, we may show them your publicly visible Google Profile information, such as your name and photo.

If you have a Google Account, we may display your Profile name, Profile photo, and actions you take on Google or on third-party applications connected to your Google Account (such as +1's, reviews you write and comments you post) in our services, including displaying in ads and other commercial contexts. We will respect the choices you make to [limit sharing or visibility settings](#) in your Google Account.

When you contact Google, we keep a record of your communication to help solve any issues you might be facing. We may use your email address to inform you about our services, such as letting you know about upcoming changes or improvements.

We use information collected from cookies and other technologies, like [pixel tags](#), to [improve your user experience](#) and the overall quality of our services. One of the products we use to do this on our own services is Google Analytics. For example, by saving your language preferences, we'll be able to have our services appear in the language you prefer. When showing you tailored ads, we will not associate an identifier from cookies or similar technologies with [sensitive categories](#), such as those based on race, religion, sexual orientation or health.

Our automated systems analyze your content (including emails) to provide you personally relevant product features, such as customized search results, tailored advertising, and spam and malware detection.

We may [combine personal information from one service with information, including personal information, from other Google services](#) – for example [to make it easier to share things with people you know](#).

Depending on [your account settings](#), [your activity on other sites and apps](#) may be associated with your personal information in order to improve Google's services and the ads delivered by Google.

We will ask for your consent before using information for a purpose other than those that are set out in this Privacy Policy.

Google processes personal information on our servers in many countries around the world. We may process your personal information on a server located outside the country where you live.

Transparency and choice

People have different privacy concerns. Our goal is to be clear about what information we collect, so that you can make meaningful choices about how it is used. For example, you can:

- [Review and update your Google activity controls](#) to decide what types of data, such as videos you've watched on YouTube or past searches, you would like saved with your account when you use Google services. You can also visit these [controls](#) to manage whether certain activity is stored in a cookie or similar technology on your device when you use our services while signed-out of your account.
- [Review and control](#) certain types of information tied to your Google Account by using Google Dashboard.
- [View and edit](#) your preferences about the Google ads shown to you on Google and across the web, such as which categories might interest you, using Ads Settings. You can also visit that page to opt out of certain Google advertising services.
- [Adjust](#) how the Profile associated with your Google Account appears to others.
- [Control](#) who you share information with through your Google Account.
- [Take information](#) associated with your Google Account out of many of our services.
- [Choose](#) whether your Profile name and Profile photo appear in shared endorsements that appear in ads.

You may also set your browser to block all cookies, including cookies associated with our services, or to indicate when a cookie is being set by us. However, it's important to remember that many of our services

[may not function properly](#) if your cookies are disabled. For example, we may not remember your language preferences.

Information you share

Many of our services let you share information with others. Remember that when you share information publicly, it may be indexable by search engines, including Google. Our services provide you with different options on [sharing](#) and [removing your content](#).

Accessing and updating your personal information

Whenever you use our services, we aim to provide you with [access to your personal information](#). If that information is wrong, we strive to give you ways to update it quickly or to delete it – unless we have to keep that information for legitimate business or legal purposes.

We aim to maintain our services in a manner that protects information from accidental or malicious destruction. Because of this, after you delete information from our services, we may not immediately delete residual copies from our active servers and may not remove information from our backup systems.

Information we share

We do not share personal information with companies, organizations and individuals outside of Google unless one of the following circumstances applies:

- **With your consent**

We will share personal information with companies, organizations or individuals outside of Google when we have your consent to do so. We require opt-in consent for the sharing of any [sensitive personal information](#).

- **With domain administrators**

If your Google Account is managed for you by a [domain administrator](#) (for example, for G Suite users) then your domain administrator and resellers who provide user support to your organization will have access to your Google Account information (including your email and other data). Your domain administrator may be able to:

- view statistics regarding your account, like statistics regarding applications you install.
- change your account password.
- suspend or terminate your account access.
- access or retain information stored as part of your account.
- receive your account information in order to satisfy applicable law, regulation, [legal process or enforceable governmental request](#).
- restrict your ability to delete or edit information or privacy settings.

Please refer to your domain administrator's privacy policy for more information.

- **For external processing**

We provide personal information to our [affiliates](#) or other trusted businesses or persons to process it for us, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures.

- **For legal reasons**

We will share personal information with companies, organizations or individuals outside of Google if we have a good-faith belief that access, use, preservation or disclosure of the information is reasonably necessary to:

- meet any applicable law, regulation, [legal process or enforceable governmental request](#).

- enforce applicable Terms of Service, including investigation of potential violations.
- detect, prevent, or otherwise address fraud, security or technical issues.
- protect against harm to the rights, property or safety of Google, our users or the public as required or permitted by law.

We may share [non-personally identifiable information](#) publicly and with our partners – like publishers, advertisers or connected sites. For example, we may share information publicly [to show trends](#) about the general use of our services.

If Google is involved in a merger, acquisition or asset sale, we will continue to ensure the confidentiality of any personal information and give affected users notice before personal information is transferred or becomes subject to a different privacy policy.

Information security

We work hard to protect Google and our users from unauthorized access to or unauthorized alteration, disclosure or destruction of information we hold. In particular:

- We encrypt many of our services [using SSL](#).
- We offer you [two step verification](#) when you access your Google Account, and a [Safe Browsing feature](#) in Google Chrome.
- We review our information collection, storage and processing practices, including physical security measures, to guard against unauthorized access to systems.
- We restrict access to personal information to Google employees, contractors and agents who need to know that information in order to process it for us, and who are subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.

When this Privacy Policy applies

Our Privacy Policy applies to all of the services offered by Google LLC and its affiliates, including YouTube, services Google provides on Android devices, and services offered on other sites (such as our advertising

services), but excludes services that have separate privacy policies that do not incorporate this Privacy Policy.

Our Privacy Policy does not apply to services offered by other companies or individuals, including products or sites that may be displayed to you in search results, sites that may include Google services, or other sites linked from our services. Our Privacy Policy does not cover the information practices of other companies and organizations who advertise our services, and who may use cookies, pixel tags and other technologies to serve and offer relevant ads.

Compliance and cooperation with regulatory authorities

We regularly review our compliance with our Privacy Policy. We also adhere to several [self regulatory frameworks](#), including the EU-US and Swiss-US Privacy Shield Frameworks. When we receive formal written complaints, we will contact the person who made the complaint to follow up. We work with the appropriate regulatory authorities, including local data protection authorities, to resolve any complaints regarding the transfer of personal data that we cannot resolve with our users directly.

Changes

Our Privacy Policy may change from time to time. We will not reduce your rights under this Privacy Policy without your explicit consent. We will post any privacy policy changes on this page and, if the changes are significant, we will provide a more prominent notice (including, for certain services, email notification of privacy policy changes). We will also keep prior versions of this Privacy Policy in an archive for your review.

Specific product practices

The following notices explain specific privacy practices with respect to certain Google products and services that you may use:

- [Chrome and Chrome OS](#)
- [Play Books](#)

- [Payments](#)
- [Fiber](#)
- [Project Fi](#)
- [G Suite for Education](#)
- [YouTube Kids](#)
- [Google Accounts Managed with Family Link](#)

For more information about some of our most popular services, you can visit the [Google Product Privacy Guide](#).

Other useful privacy and security related materials

Further useful privacy and security related materials can be found through Google's [policies and principles pages](#), including:

- Information about our [technologies and principles](#), which includes, among other things, more information on
 - [how Google uses cookies](#).
 - technologies we use for [advertising](#).
 - how we [recognize patterns like faces](#).
- A [page](#) that explains what data is shared with Google when you visit websites that use our advertising, analytics and social products.
- The [Privacy Checkup](#) tool, which makes it easy to review your key privacy settings.
- Google's [safety center](#), which provides information on how to stay safe and secure online.

Exhibit K

GOOGLE PRIVACY POLICY

When you use our services, you're trusting us with your information. We understand this is a big responsibility and work hard to protect your information and put you in control.

This Privacy Policy is meant to help you understand what information we collect, why we collect it, and how you can update, manage, export, and delete your information.



Privacy Checkup

Looking to change your privacy settings?

[Take the Privacy Checkup](#)

Effective September 30, 2020

[Archived versions](#)

We build a range of services that help millions of people daily to explore and interact with the world in new ways. Our services include:

- Google apps, sites, and devices, like Search, YouTube, and Google Home
- Platforms like the Chrome browser and Android operating system
- Products that are integrated into third-party apps and sites, like ads and embedded Google Maps

You can use our services in a variety of ways to manage your privacy. For example, you can sign up for a Google Account if you want to create and manage content like emails and photos, or see more relevant search results. And you can use many Google services when you're signed out or without creating an account at all, like searching on Google or watching YouTube videos. You can also choose to browse the web privately using Chrome in Incognito mode. And across our services, you can adjust your privacy settings to control what we collect and how your information is used.



To help explain things as clearly as possible, we've added examples, explanatory videos, and definitions for [key terms](#). And if you have any questions about this Privacy Policy, you can [contact us](#).

INFORMATION GOOGLE COLLECTS

We want you to understand the types of information we collect as you use our services

We collect information to provide better services to all our users – from figuring out basic stuff like which language you speak, to more complex things like [which ads you'll find most useful](#), [the people who matter most to you online](#), or which YouTube videos you might like. The information Google collects, and how that information is used, depends on how you use our services and how you manage your privacy controls.

When you're not signed in to a Google Account, we store the information we collect with [unique identifiers](#) tied to the browser, application, or [device](#) you're using. This helps us do things like maintain your language preferences across browsing sessions.

When you're signed in, we also collect information that we store with your Google Account, which we treat as [personal information](#).

Things you create or provide to us

When you create a Google Account, you provide us with [personal information](#) that includes your name and a password. You can also choose to add a [phone number](#) or [payment information](#) to your account. Even if you aren't signed in to a Google Account, you might choose to provide us with information – like an email address to receive updates about our services.

We also collect the content you create, upload, or receive from others when using our services. This includes things like email you write and receive, photos and videos you save, docs and spreadsheets you create, and comments you make on YouTube videos.



Information we collect as you use our services

Your apps, browsers & devices

We collect information about the apps, browsers, and devices you use to access Google services, which helps us provide features like automatic product updates and dimming your screen if your battery runs low.

The information we collect includes unique identifiers, browser type and settings, device type and settings, operating system, mobile network information including carrier name and phone number, and application version number. We also collect information about the interaction of your apps, browsers, and devices with our services, including IP address, crash reports, system activity, and the date, time, and referrer URL of your request.

We collect this information when a Google service on your device contacts our servers – for example, when you install an app from the Play Store or when a service checks for automatic updates. If you're using an Android device with Google apps, your device periodically contacts Google servers to provide information about your device and connection to our services. This information includes things like your device type, carrier name, crash reports, and which apps you've installed.

Your activity

We collect information about your activity in our services, which we use to do things like recommend a YouTube video you might like. The activity information we collect may include:

- Terms you search for
- Videos you watch
- Views and interactions with content and ads
- Voice and audio information when you use audio features
- Purchase activity
- People with whom you communicate or share content



- Activity on third-party sites and apps that use our services
- Chrome browsing history you've [synced with your Google Account](#)

If you use our [services to make and receive calls or send and receive messages](#), we may collect telephony log information like your phone number, calling-party number, receiving-party number, forwarding numbers, time and date of calls and messages, duration of calls, routing information, and types of calls.

You can visit your Google Account to find and manage activity information that's saved in your account.



[Go to Google Account](#)

Your location information

We collect information about your location when you use our services, which helps us offer features like driving directions for your weekend getaway or showtimes for movies playing near you.

Your location can be determined with varying degrees of accuracy by:

- GPS
- [IP address](#)
- [Sensor data from your device](#)
- [Information about things near your device](#), such as Wi-Fi access points, cell towers, and Bluetooth-enabled devices

The types of location data we collect depend in part on your device and account settings. For example, you can [turn your Android device's location on or off](#) using the device's settings app. You can also turn on [Location History](#) if you want to create a private map of where you go with your signed-in devices.



In some circumstances, Google also collects information about you from [publicly accessible sources](#). For example, if your name appears in your local newspaper, Google's Search engine may index that article and display it to other people if they search for your name. We may also collect information about you from trusted partners, including marketing partners who provide us with information about potential customers of our business services, and security partners who provide us with information to [protect against abuse](#). We also receive information from advertisers to provide [advertising and research services on their behalf](#).

We use various technologies to collect and store information, including [cookies](#), [pixel tags](#), local storage, such as [browser web storage](#) or [application data caches](#), databases, and [server logs](#).

WHY GOOGLE COLLECTS DATA

We use data to build better services

We use the information we collect from all our services for the following purposes:

Provide our services

We use your information to [deliver our services](#), like processing the terms you search for in order to return results or helping you share content by suggesting recipients from your contacts.

Maintain & improve our services

We also use your information to [ensure our services are working as intended](#), such as tracking outages or troubleshooting issues that you report to us. And we use your information to [make improvements](#) to our services – for example, understanding which search terms are most frequently misspelled helps us improve spell-check features used across our services.

Develop new services



We use the information we collect in existing services to help us develop new ones. For example, understanding how people organized their photos in Picasa, Google’s first photos app, helped us design and launch Google Photos.

Provide personalized services, including content and ads

We use the information we collect to customize our services for you, including providing recommendations, personalized content, and [customized search results](#). For example, [Security Checkup](#) provides security tips adapted to how you use Google products. And Google Play uses information like apps you’ve already installed and videos you’ve watched on YouTube to suggest new apps you might like.

Depending on your settings, we may also show you [personalized ads](#) based on your interests. For example, if you search for “mountain bikes,” you may see an ad for sports equipment when you’re browsing a site that shows ads served by Google. You can control what information we use to show you ads by visiting your ad settings.

- We don’t show you personalized ads based on [sensitive categories](#), such as race, religion, sexual orientation, or health.
- We don’t share information that personally identifies you with advertisers, such as your name or email, unless you ask us to. For example, if you see an ad for a nearby flower shop and select the “tap to call” button, we’ll connect your call and may share your phone number with the flower shop.



[Go to Ad Settings](#)

Measure performance

We use data for analytics and measurement to understand how our services are used. For example, we analyze data about your visits to our sites to do things like optimize product design. And we also use data about the ads you interact with to help advertisers understand the performance of their ad campaigns. We use a variety of tools to do this, including Google Analytics. When you visit sites that use Google Analytics, Google and a Google Analytics customer [may link information](#) about your activity from that site with information from other sites that use our ad services.



Communicate with you

We use information we collect, like your email address, to interact with you directly. For example, we may send you a notification if we detect suspicious activity, like an attempt to sign in to your Google Account from an unusual location. Or we may let you know about upcoming changes or improvements to our services. And if you contact Google, we'll keep a record of your request in order to help solve any issues you might be facing.

Protect Google, our users, and the public

We use information to help improve the safety and reliability of our services. This includes detecting, preventing, and responding to fraud, abuse, security risks, and technical issues that could harm Google, our users, or the public.

We use different technologies to process your information for these purposes. We use automated systems that analyze your content to provide you with things like customized search results, personalized ads, or other features tailored to how you use our services. And we analyze your content to help us detect abuse such as spam, malware, and illegal content. We also use algorithms to recognize patterns in data. For example, Google Translate helps people communicate across languages by detecting common language patterns in phrases you ask it to translate.

We may combine the information we collect among our services and across your devices for the purposes described above. For example, if you watch videos of guitar players on YouTube, you might see an ad for guitar lessons on a site that uses our ad products. Depending on your account settings, your activity on other sites and apps may be associated with your personal information in order to improve Google's services and the ads delivered by Google.

If other users already have your email address or other information that identifies you, we may show them your publicly visible Google Account information, such as your name and photo. This helps people identify an email coming from you, for example.

We'll ask for your consent before using your information for a purpose that isn't covered in this Privacy Policy.



YOUR PRIVACY CONTROLS

You have choices regarding the information we collect and how it's used

This section describes key controls for managing your privacy across our services. You can also visit the [Privacy Checkup](#), which provides an opportunity to review and adjust important privacy settings. In addition to these tools, we also offer specific privacy settings in our products – you can learn more in our [Product Privacy Guide](#).



[Go to Privacy Checkup](#)

Managing, reviewing, and updating your information

When you're signed in, you can always review and update information by visiting the services you use. For example, Photos and Drive are both designed to help you manage specific types of content you've saved with Google.

We also built a place for you to review and control information saved in your Google Account. Your [Google Account](#) includes:

Privacy controls



Activity Controls

Decide what types of activity you'd like saved in your account. For example, you can turn on Location History if you want traffic predictions for your daily commute, or you can save your YouTube Watch History to get better video suggestions.

[Go to Activity Controls](#)





Ad settings

Manage your preferences about the ads shown to you on Google and on sites and apps that partner with [Google](#) to show ads. You can modify your interests, choose whether your personal information is used to make ads more relevant to you, and turn on or off certain advertising services.

[Go to Ad Settings](#)



About you

Control what others see about you across Google services.

[Go to About You](#)



Shared endorsements

Choose whether your name and photo appear next to your activity, like reviews and recommendations, that appear in ads.

[Go to Shared Endorsements](#)

Ways to review & update your information



My Activity

My Activity allows you to review and control data that's created when you use Google services, like searches you've done or your visits to Google Play. You can browse by date and by topic, and delete part or all of your activity.

[Go to My Activity](#)



Google Dashboard

Google Dashboard allows you to manage information associated with specific products.

[Go to Dashboard](#)



Your personal information



Manage your contact information, such as your name, email, and phone number.

[Go to Personal Info](#)

When you're signed out, you can manage information associated with your browser or device, including:

- Signed-out search personalization: [Choose](#) whether your search activity is used to offer you more relevant results and recommendations.
- YouTube settings: Pause and delete your [YouTube Search History](#) and your [YouTube Watch History](#).
- Ad Settings: [Manage](#) your preferences about the ads shown to you on Google and on sites and apps that partner with Google to show ads.

Exporting, removing & deleting your information

You can export a copy of content in your Google Account if you want to back it up or use it with a service outside of Google.



[Export your data](#)

You can also [request to remove content](#) from specific Google services based on applicable law.

To delete your information, you can:

- Delete your content from [specific Google services](#)
- Search for and then delete specific items from your account using [My Activity](#)
- [Delete specific Google products](#), including your information associated with those products
- [Delete your entire Google Account](#)





Delete your information

And finally, [Inactive Account Manager](#) allows you to give someone else access to parts of your Google Account in case you're unexpectedly unable to use your account.

There are other ways to control the information Google collects whether or not you're signed in to a Google Account, including:

- **Browser settings:** For example, you can configure your browser to indicate when Google has set a [cookie](#) in your browser. You can also configure your browser to block all cookies from a specific domain or all domains. But remember that our services [rely on cookies to function properly](#), for things like remembering your language preferences.
 - **Device-level settings:** Your device may have controls that determine what information we collect. For example, you can [modify location settings](#) on your Android device.
-

SHARING YOUR INFORMATION

When you share your information

Many of our services let you share information with other people, and you have control over how you share. For example, you can share videos on YouTube publicly or you can decide to keep your videos private. Remember, when you share information publicly, your content may become accessible through search engines, including Google Search.

When you're signed in and interact with some Google services, like leaving comments on a YouTube video or reviewing an app in Play, your name and photo appear next to your activity. We may also display this information in [ads depending on your Shared endorsements setting](#).

When Google shares your information



We do not share your personal information with companies, organizations, or individuals outside of Google except in the following cases:

With your consent

We'll share personal information outside of Google when we have your consent. For example, if you [use Google Home to make a reservation](#) through a booking service, we'll get your permission before sharing your name or phone number with the restaurant. We'll ask for your explicit consent to share any [sensitive personal information](#).

With domain administrators

If you're a student or work for an organization that uses Google services, your [domain administrator](#) and resellers who manage your account will have access to your Google Account. They may be able to:

- Access and retain information stored in your account, like your email
- View statistics regarding your account, like how many apps you install
- Change your account password
- Suspend or terminate your account access
- Receive your account information in order to satisfy applicable law, regulation, legal process, or enforceable governmental request
- Restrict your ability to delete or edit your information or your privacy settings

For external processing

We provide personal information to our [affiliates](#) and other trusted businesses or persons to process it for us, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures. For example, we use service providers to help us with customer support.



For legal reasons

We will share personal information outside of Google if we have a good-faith belief that access, use, preservation, or disclosure of the information is reasonably necessary to:

- Meet any applicable law, regulation, [legal process, or enforceable governmental request](#). We share information about the number and type of requests we receive from governments in our [Transparency Report](#).
- Enforce applicable Terms of Service, including investigation of potential violations.
- Detect, prevent, or otherwise address fraud, security, or technical issues.
- Protect against harm to the rights, property or safety of Google, our users, or the public as required or permitted by law.

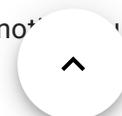
We may share [non-personally identifiable information](#) publicly and with our partners – like publishers, advertisers, developers, or rights holders. For example, we share information publicly to [show trends](#) about the general use of our services. We also allow [specific partners](#) to collect information from your browser or device for advertising and measurement purposes using their own cookies or similar technologies.

If Google is involved in a merger, acquisition, or sale of assets, we'll continue to ensure the confidentiality of your personal information and give affected users notice before personal information is transferred or becomes subject to a different privacy policy.

KEEPING YOUR INFORMATION SECURE

We build security into our services to protect your information

All Google products are built with strong security features that continuously protect your information. The insights we gain from maintaining our services help us detect and automatically block security threats from ever reaching you. And if we do detect something risky that we think you should know about, we'll notify you and help guide you through steps to stay better protected.



We work hard to protect you and Google from unauthorized access, alteration, disclosure, or destruction of information we hold, including:

- We use encryption to keep your data private while in transit
- We offer a range of security features, like [Safe Browsing](#), Security Checkup, and [2 Step Verification](#) to help you protect your account
- We review our information collection, storage, and processing practices, including physical security measures, to prevent unauthorized access to our systems
- We restrict access to personal information to Google employees, contractors, and agents who need that information in order to process it. Anyone with this access is subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.

EXPORTING & DELETING YOUR INFORMATION

You can export a copy of your information or delete it from your Google Account at any time

You can export a copy of content in your Google Account if you want to back it up or use it with a service outside of Google.



[Export your data](#)

To delete your information, you can:

- Delete your content from [specific Google services](#)
- Search for and then delete specific items from your account using [My Activity](#)
- [Delete specific Google products](#), including your information associated with those products
- [Delete your entire Google Account](#)





Delete your information

RETAINING YOUR INFORMATION

We retain the data we collect for different periods of time depending on what it is, how we use it, and how you configure your settings:

- Some data you can delete whenever you like, such as the content you create or upload. You can also delete [activity information](#) saved in your account, or [choose to have it deleted automatically](#) after a set period of time.
- Other data is deleted or anonymized automatically after a set period of time, such as [advertising data](#) in server logs.
- We keep some data until you delete your Google Account, such as information about how often you use our services.
- And some data we retain for longer periods of time when necessary for legitimate business or legal purposes, such as security, fraud and abuse prevention, or financial record-keeping.

When you delete data, we follow a deletion process to make sure that your data is safely and completely removed from our servers or retained only in anonymized form. We try to ensure that our services protect information from accidental or malicious deletion. Because of this, there may be delays between when you delete something and when copies are deleted from our active and backup systems.

You can read more about Google's [data retention periods](#), including how long it takes us to delete your information.

COMPLIANCE & COOPERATION WITH REGULATORS

We regularly review this Privacy Policy and make sure that we process your information in ways that comply with it.



Data transfers

We maintain [servers around the world](#) and your information may be processed on servers located outside of the country where you live. Data protection laws vary among countries, with some providing more protection than others. Regardless of where your information is processed, we apply the same protections described in this policy. We also comply with certain [legal frameworks](#) relating to the transfer of data.

When we receive formal written complaints, we respond by contacting the person who made the complaint. We work with the appropriate regulatory authorities, including local data protection authorities, to resolve any complaints regarding the transfer of your data that we cannot resolve with you directly.

California requirements

The California Consumer Privacy Act (CCPA) requires specific disclosures for California residents.

This Privacy Policy is designed to help you understand how Google handles your information:

- We explain the categories of information Google collects and the sources of that information in [Information Google collects](#).
- We explain how Google uses information in [Why Google collects data](#).
- We explain when Google may share information in [Sharing your information](#). Google does not sell your personal information.

The CCPA also provides the right to request information about how Google collects, uses, and discloses your personal information. And it gives you the right to access your information and request that Google delete that information. Finally, the CCPA provides the right to not be discriminated against for exercising your privacy rights.

We describe the choices you have to manage your privacy and data across Google's services in [Your privacy controls](#). You can exercise your rights by using these controls, which allow you to access, review, update, and delete your information, as well as [export and download](#) a copy of it. When you use them, we'll validate



request by verifying that you're signed in to your Google Account. If you have questions or requests related to your rights under the CCPA, you (or your authorized agent) can also [contact Google](#).

The CCPA requires a description of data practices using specific categories. This table uses these categories to organize the information in this Privacy Policy.

Categories of personal information we collect

Identifiers such as your [name](#), [phone number](#), and address, as well as [unique identifiers](#) tied to the browser, application, or device you're using.

Demographic information, such as your [age](#), [gender](#) and [language](#).

Commercial information such as your [payment information](#) and a history of [purchases](#) you make on Google's services.

Biometric information if you choose to provide it, such as fingerprints in Google's product development studies.

Internet, network, and other activity information such as your search terms; views and interactions with content and ads; Chrome browsing history you've synced with your Google Account; information about the interaction of your apps, browsers, and devices with our services (like IP address, crash reports, and system activity); and activity on third-party sites and apps that use our services. You can review and control activity data stored in your Google Account in [My Activity](#).

Geolocation data, such as may be determined by GPS, IP address, and other data from sensors on or around your device, depending in part on your device and account settings. Learn more about [Google's use of location information](#).

Audio, electronic, visual and similar information, such as [voice and audio information](#) when you use audio features.

Professional, employment, and education information, such as information [you provide](#) or that is maintained through a G Suite account by an organization at which you study or work.

Other information you create or provide, such as the content you create, upload, or receive (like photos and



videos or emails, docs and spreadsheets). [Google Dashboard](#) allows you to manage information associated with specific products.

Inferences drawn from the above, like your [ads interest categories](#).

Business purposes for which information may be used or disclosed

Protecting against security threats, abuse, and illegal activity: Google uses and may disclose information to detect, prevent and respond to security incidents, and for protecting against other malicious, deceptive, fraudulent, or illegal activity. For example, to protect our services, Google may receive or disclose information about IP addresses that malicious actors have compromised.

Auditing and measurement: Google uses information for analytics and measurement to understand how our services are used, as well as to fulfill obligations to our partners like publishers, advertisers, developers, or rights holders. We may disclose non-personally identifiable information publicly and with these partners, including for auditing purposes.

Maintaining our services: Google uses information to ensure our services are working as intended, such as tracking outages or troubleshooting bugs and other issues that you report to us.

Research and development: Google uses information to improve our services and to develop new products, features and technologies that benefit our users and the public. For example, we use publicly available information to help train Google's language models and build features like Google Translate.

Use of service providers: Google shares information with service providers to perform services on our behalf, in compliance with our Privacy Policy and other appropriate confidentiality and security measures. For example, we may rely on service providers to help provide customer support.

Advertising: Google processes information, including online identifiers and information about your interactions with advertisements, to provide advertising. This keeps Google's services and many of the websites and services you use free of charge. You can control what information we use to show you ads by visiting your [ad settings](#).

Legal reasons: Google also uses information to satisfy applicable laws or regulations, and discloses information in response to legal process or enforceable government requests, including to law enforcement.



We provide information about the number and type of requests we receive from governments in our [Transparency Report](#).

Parties with whom information may be shared

Other people with whom you choose to share your information, like docs or photos, and videos or comments on YouTube.

Third parties to whom you consent to sharing your information, such as services that integrate with Google's services. You can [review and manage third party apps and sites](#) with access to data in your Google Account.

Service providers, trusted businesses or persons that process information on Google's behalf, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures.

Domain administrators, if you work or study at an organization that uses Google services like G Suite.

Law enforcement or other third parties, for the legal reasons described in [Sharing your information](#).

ABOUT THIS POLICY

When this policy applies

This Privacy Policy applies to all of the services offered by Google LLC and its [affiliates](#), including YouTube, Android, and services offered on third-party sites, such as advertising services. This Privacy Policy doesn't apply to services that have separate privacy policies that do not incorporate this Privacy Policy.

This Privacy Policy doesn't apply to:

- The information practices of other companies and organizations that advertise our services
- Services offered by other companies or individuals, including products or sites that may include our services, be displayed to you in search results, or be linked from our services



Changes to this policy

We change this Privacy Policy from time to time. We will not reduce your rights under this Privacy Policy without your explicit consent. We always indicate the date the last changes were published and we offer access to [archived versions](#) for your review. If changes are significant, we'll provide a more prominent notice (including, for certain services, email notification of Privacy Policy changes).

RELATED PRIVACY PRACTICES

Specific Google services

The following privacy notices provide additional information about some Google services:

- [Chrome & the Chrome Operating System](#)
- [Payments](#)
- [Fiber](#)
- [Google Fi](#)
- [G Suite for Education](#)
- [Read Along](#)
- [YouTube Kids](#)
- [Google Accounts Managed with Family Link, for Children under 13 \(or applicable age in your country\)](#)
- [Voice and Audio Collection from Children's Features on the Google Assistant](#)

Other useful resources

The following links highlight useful resources for you to learn more about our practices and privacy settings.



- [Your Google Account](#) is home to many of the settings you can use to manage your account
 - [Privacy Checkup](#) guides you through key privacy settings for your Google Account
 - [Google's safety center](#) helps you learn more about our built-in security, privacy controls, and tools to help set digital ground rules for your family online
 - [Privacy & Terms](#) provides more context regarding this Privacy Policy and our Terms of Service
 - [Technologies](#) includes more information about:
 - [How Google uses cookies](#)
 - Technologies used for [Advertising](#)
 - [How Google uses pattern recognition](#) to recognize things like faces in photos
 - [How Google uses information from sites or apps that use our services](#)
-

Key terms

Affiliates

An affiliate is an entity that belongs to the Google group of companies, including the following companies that provide consumer services in the EU: Google Ireland Limited, Google Commerce Ltd, Google Payment Corp, and Google Dialer Inc. Learn more about the [companies providing business services in the EU](#).

Algorithm

A process or set of rules followed by a computer in performing problem-solving operations.

Application data cache



An application data cache is a data repository on a device. It can, for example, enable a web application to run without an internet connection and improve the performance of the application by enabling faster loading of content.

Browser web storage

Browser web storage enables websites to store data in a browser on a device. When used in "local storage" mode, it enables data to be stored across sessions. This makes data retrievable even after a browser has been closed and reopened. One technology that facilitates web storage is HTML 5.

Cookies

A cookie is a small file containing a string of characters that is sent to your computer when you visit a website. When you visit the site again, the cookie allows that site to recognize your browser. Cookies may store user preferences and other information. You can configure your browser to refuse all cookies or to indicate when a cookie is being sent. However, some website features or services may not function properly without cookies. Learn more about [how Google uses cookies](#) and how Google uses data, including cookies, [when you use our partners' sites or apps](#).

Device

A device is a computer that can be used to access Google services. For example, desktop computers, tablets, smart speakers, and smartphones are all considered devices.

Google Account

You may access some of our services by signing up for a [Google Account](#) and providing us with some personal information (typically your name, email address, and a password). This account information is used to authenticate you when you access Google services and protect your account from unauthorized access by others. You can edit or delete your account at any time through your Google Account settings.

IP address



Every device connected to the Internet is assigned a number known as an Internet protocol (IP) address. These numbers are usually assigned in geographic blocks. An IP address can often be used to identify the location from which a device is connecting to the Internet.

Non-personally identifiable information

This is information that is recorded about users so that it no longer reflects or references an individually-identifiable user.

Personal information

This is information that you provide to us which personally identifies you, such as your name, email address, or billing information, or other data that can be reasonably linked to such information by Google, such as information we associate with your Google Account.

Pixel tag

A pixel tag is a type of technology placed on a website or within the body of an email for the purpose of tracking certain activity, such as views of a website or when an email is opened. Pixel tags are often used in combination with cookies.

Referrer URL

A Referrer URL (Uniform Resource Locator) is information transmitted to a destination webpage by a web browser, typically when you click a link to that page. The Referrer URL contains the URL of the last webpage the browser visited.

Sensitive personal information

This is a particular category of personal information relating to topics such as confidential medical fa
racial or ethnic origins, political or religious beliefs, or sexuality.



Server logs

Like most websites, our servers automatically record the page requests made when you visit our sites. These “server logs” typically include your web request, Internet Protocol address, browser type, browser language, the date and time of your request, and one or more cookies that may uniquely identify your browser.

A typical log entry for a search for “cars” looks like this:

```
123.45.67.89 - 25/Mar/2003 10:15:32 -  
http://www.google.com/search?q=cars -  
Firefox 1.0.7; Windows NT 5.1 -  
740674ce2123e969
```

- `123.45.67.89` is the Internet Protocol address assigned to the user by the user’s ISP. Depending on the user’s service, a different address may be assigned to the user by their service provider each time they connect to the Internet.
- `25/Mar/2003 10:15:32` is the date and time of the query.
- `http://www.google.com/search?q=cars` is the requested URL, including the search query.
- `Firefox 1.0.7; Windows NT 5.1` is the browser and operating system being used.
- `740674ce2123a969` is the unique cookie ID assigned to this particular computer the first time it visited Google. (Cookies can be deleted by users. If the user has deleted the cookie from the computer since the last time they’ve visited Google, then it will be the unique cookie ID assigned to their device the next time they visit Google from that particular device).

Unique identifiers

A unique identifier is a string of characters that can be used to uniquely identify a browser, app, or device. Different identifiers vary in how permanent they are, whether they can be reset by users, and how they can be accessed.

Unique identifiers can be used for various purposes, including security and fraud detection, syncing services such as your email inbox, remembering your preferences, and providing personalized advertising. For example, unique identifiers stored in cookies help sites display content in your browser in your preferred



language. You can configure your browser to refuse all cookies or to indicate when a cookie is being sent. Learn more about [how Google uses cookies](#).

On other platforms besides browsers, unique identifiers are used to recognize a specific device or app on that device. For example, a unique identifier such as the Advertising ID is used to provide relevant advertising on Android devices, and can be [managed](#) in your device's settings. Unique identifiers may also be incorporated into a device by its manufacturer (sometimes called a universally unique ID or UUID), such as the IMEI-number of a mobile phone. For example, a device's unique identifier can be used to customize our service to your device or analyze device issues related to our services.

Additional Context

ads you'll find most useful

For example, if you watch videos about baking on YouTube, you may see more ads that relate to baking as you browse the web. We also may use your IP address to determine your approximate location, so that we can serve you ads for a nearby pizza delivery service if you search for "pizza." Learn more [about Google ads](#) and [why you may see particular ads](#).

advertising and research services on their behalf

For example, advertisers may upload data from their loyalty-card programs so that they can better understand the performance of their ad campaigns. We only provide aggregated reports to advertisers that don't reveal information about individual people.

Android device with Google apps

Android devices with Google apps include devices sold by Google or one of our partners and include phones, cameras, vehicles, wearables, and televisions. These devices use Google Play Services and other pre-installed apps that include services like Gmail, Maps, your phone's camera and phone dialer, text-to-speech conversion, keyboard input, and security features.

combine the information we collect



Some examples of how we combine the information we collect include:

- When you're signed in to your Google Account and search on Google, you can see search results from the public web, along with relevant information from the content you have in other Google products, like Gmail or Google Calendar. This can include things like the status of your upcoming flights, restaurant, and hotel reservations, or your photos. [Learn more](#)
- If you have communicated with someone via Gmail and want to add them to a Google Doc or an event in Google Calendar, Google makes it easy to do so by autocompleting their email address when you start to type in their name. This feature makes it easier to share things with people you know. [Learn more](#)
- The Google app can use data that you have stored in other Google products to show you personalized content, depending on your settings. For example, if you have searches stored in your Web & App Activity, the Google app can show you news articles and other information about your interests, like sports scores, based your activity. [Learn more](#)
- If you link your Google Account to your Google Home, you can manage your information and get things done through the Google Assistant. For example, you can add events to your Google Calendar or get your schedule for the day, ask for status updates on your upcoming flight, or send information like driving directions to your phone. [Learn more](#)

customized search results

For example, when you're signed in to your Google Account and have the Web & App Activity control enabled, you can get more relevant search results that are based on your previous searches and activity from other Google services. You can [learn more here](#). You may also get customized search results even when you're signed out. If you don't want this level of search customization, you can [search and browse privately](#) or turn off [signed-out search personalization](#).

deliver our services

Examples of how we use your information to deliver our services include:

- We use the IP address assigned to your device to send you the data you requested, such as load YouTube video



- We use unique identifiers stored in cookies on your device to help us authenticate you as the person who should have access to your Google Account
- Photos and videos you upload to Google Photos are used to help you create albums, animations, and other creations that you can share. [Learn more](#)
- A flight confirmation email you receive may be used to create a “check-in” button that appears in your Gmail
- When you purchase services or physical goods from us, you may provide us information like your shipping address or delivery instructions. We use this information for things like processing, fulfilling, and delivering your order, and to provide support in connection with the product or service you purchase.

detect abuse

When we detect spam, malware, illegal content, and other forms of abuse on our systems in violation of our policies, we may disable your account or take other appropriate action. In certain circumstances, we may also report the violation to appropriate authorities.

devices

For example, we can use information from your devices to help you decide which device you'd like to use to install an app or view a movie you buy from Google Play. We also use this information to help protect your account.

ensure and improve

For example, we analyze how people interact with advertising to improve the performance of our ads.

ensure our services are working as intended

For example, we continuously monitor our systems to look for problems. And if we find something wrong with a specific feature, reviewing activity information collected before the problem started allows us to



things more quickly.

Information about things near your device

If you use Google's Location services on Android, we can improve the performance of apps that rely on your location, like Google Maps. If you use Google's Location services, your device sends information to Google about its location, sensors (like accelerometer), and nearby cell towers and Wi-Fi access points (like MAC address and signal strength). All these things help to determine your location. You can use your device settings to enable Google Location services. [Learn more](#)

legal process, or enforceable governmental request

Like other technology and communications companies, Google regularly receives requests from governments and courts around the world to disclose user data. Respect for the privacy and security of data you store with Google underpins our approach to complying with these legal requests. Our legal team reviews each and every request, regardless of type, and we frequently push back when a request appears to be overly broad or doesn't follow the correct process. Learn more in our [Transparency Report](#).

make improvements

For example, we use cookies to analyze how people interact with our services. And that analysis can help us build better products. For example, it may help us discover that it's taking people too long to complete a certain task or that they have trouble finishing steps at all. We can then redesign that feature and improve the product for everyone.

may link information

Google Analytics relies on first-party cookies, which means the cookies are set by the Google Analytics customer. Using our systems, data generated through Google Analytics can be linked by the Google Analytics customer and by Google to third-party cookies that are related to visits to other websites. For example, an advertiser may want to use its Google Analytics data to create more relevant ads, or to further analyze its traffic. [Learn more](#)



partner with Google

There are over 2 million non-Google websites and apps that partner with Google to show ads. [Learn more](#)

payment information

For example, if you add a credit card or other payment method to your Google Account, you can use it to buy things across our services, like apps in the Play Store. We may also ask for other information, like a business tax ID, to help process your payment. In some cases, we may also need to verify your identity and may ask you for information to do this.

We may also use payment information to verify that you meet age requirements, if, for example, you enter an incorrect birthday indicating you're not old enough to have a Google Account. [Learn more](#)

personalized ads

You may also see personalized ads based on information from the advertiser. If you shopped on an advertiser's website, for example, they can use that visit information to show you ads. [Learn more](#)

phone number

If you add your phone number to your account, it can be used for different purposes across Google services, depending on your settings. For example, your phone number can be used to help you access your account if you forget your password, help people find and connect with you, and make the ads you see more relevant to you. [Learn more](#)

protect against abuse

For example, information about security threats can help us notify you if we think your account has been compromised (at which point we can help you take steps to protect your account).



publicly accessible sources

For example, we may collect information that's publicly available online or from other public sources to help train Google's language models and build features like Google Translate.

rely on cookies to function properly

For example, we use a cookie called 'lbc's' that makes it possible for you to open many Google Docs in one browser. Blocking this cookie would prevent Google Docs from working as expected. [Learn more](#)

safety and reliability

Some examples of how we use your information to help keep our services safe and reliable include:

- Collecting and analyzing IP addresses and cookie data to protect against automated abuse. This abuse takes many forms, such as sending spam to Gmail users, stealing money from advertisers by fraudulently clicking on ads, or censoring content by launching a Distributed Denial of Service (DDoS) attack.
- The "last account activity" feature in Gmail can help you find out if and when someone accessed your email without your knowledge. This feature shows you information about recent activity in Gmail, such as the IP addresses that accessed your mail, the associated location, and the date and time of access. [Learn more](#)

sensitive categories

When showing you personalized ads, we use topics that we think might be of interest to you based on your activity. For example, you may see ads for things like "Cooking and Recipes" or "Air Travel." We don't use topics or show personalized ads based on sensitive categories like race, religion, sexual orientation, or health. And we [require the same from advertisers](#) that use our services.

Sensor data from your device



Your device may have sensors that can be used to better understand your location and movement. For example, an accelerometer can be used to determine your speed and a gyroscope to figure out your direction of travel.

servers around the world

For example, we operate data centers located [around the world](#) to help keep our products continuously available for users.

services to make and receive calls or send and receive messages

Examples of these services include:

- Google Hangouts, for making domestic and international calls
- Google Voice, for making calls, sending text messages, and managing voicemail
- Google Fi, for a phone plan

show trends

When lots of people start searching for something, it can provide useful information about particular trends at that time. Google Trends samples Google web searches to estimate the popularity of searches over a certain period of time and shares those results publicly in aggregated terms. [Learn more](#)

specific Google services

For example, you can delete [your blog](#) from Blogger or [a Google Site you own](#) from Google Sites. You can also delete [reviews](#) you've left on apps, games, and other content in the Play Store.

specific partners



For example, we allow YouTube creators and advertisers to work with measurement companies to learn about the audience of their YouTube videos or ads, using cookies or similar technologies. Another example is merchants on our shopping pages, who use cookies to understand how many different people see their product listings. [Learn more](#) about these partners and how they use your information.

synced with your Google Account

Your Chrome browsing history is only saved to your account if you've enabled Chrome synchronization with your Google Account. [Learn more](#)

the people who matter most to you online

For example, when you type an address in the To, Cc, or Bcc field of an email you're composing, Gmail will suggest addresses based on the people you [contact most frequently](#).

third parties

For example, we process your information to report use statistics to rights holders about how their content was used in our services. We may also process your information if people search for your name and we display search results for sites containing publicly available information about you.

Views and interactions with content and ads

For example, we collect information about views and interactions with ads so we can provide aggregated reports to advertisers, like telling them whether we served their ad on a page and whether the ad was likely seen by a viewer. We may also measure other interactions, such as how you move your mouse over an ad or if you interact with the page on which the ad appears.

your activity on other sites and apps

This activity might come from your use of Google services, like from syncing your account with Chrome, or from your visits to sites and apps that partner with Google. Many websites and apps partner with Google to



improve their content and services. For example, a website might use our advertising services (like AdSense) or analytics tools (like Google Analytics), or it might embed other content (such as videos from YouTube). These services may share information about your activity with Google and, depending on your [account settings](#) and the products in use (for instance, when a partner uses Google Analytics in conjunction with our advertising services), this data may be associated with your personal information.

[Learn more](#) about how Google uses data when you use our partners' sites or apps.

