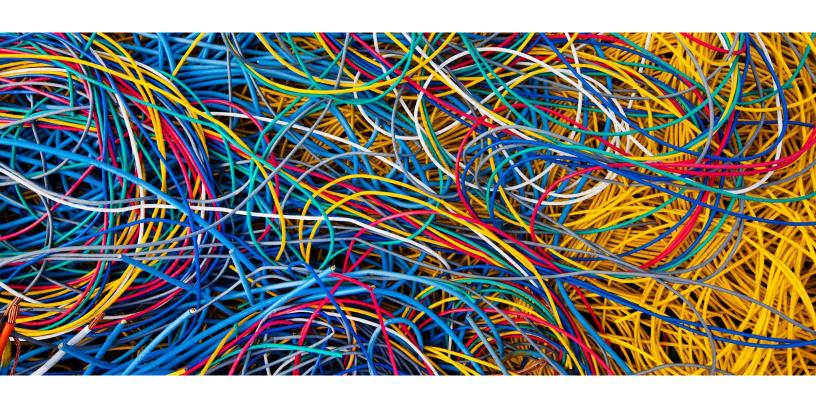
Safeguards for international data transfers with Google's advertising and analytics products

August 2022



Introduction

This paper explains safeguards and supplementary commitments to EU GDPR and UK GDPR¹ requirements Google offers to protect personal data processed when you² use Google's advertising and analytics products. This information should assist you in assessing the impact of the Court of Justice of the European Union (CJEU) judgment in case C-311/18, known as the Schrems II decision and the European Data Protection Board's (EDPB) Recommendations on Supplementary Measures, as they relate to data transfers occurring through the use of Google's advertising and analytics products. We have also included information about United States laws and their applicability to Google's advertising and analytics products to aid your risk assessment in light of the Schrems II decision.

The EU GDPR and the UK GDPR do not require data localisation. In addition, the EU GDPR does not prohibit the transfer of European personal data outside the EEA, and the UK GDPR does not prohibit the transfer of UK personal data outside the UK. The EU GDPR imposes conditions on transfers outside the EEA and the UK GDPR imposes conditions on transfers outside the UK, to ensure an adequate level of data protection.

On 16 July 2020, the CJEU invalidated the European Commission's decision underlying the EU-U.S. Privacy Shield Framework, but did not invalidate the European Commission's Model Contract Clauses (MCCs, also known as Standard Contractual Clauses or SCCs) as a mechanism to provide appropriate safeguards for transfers of personal data in compliance with the strict requirements imposed by the EU GDPR.

On 12 August 2020, in light of the Schrems II decision, we moved to reliance on SCCs to validate our transfers of advertising and analytics personal data. Subject to certain conditions, these can continue to be a valid legal mechanism to transfer data under the EU GDPR. On 4 June 2021, the European Commission adopted new EU SCCs, and then additionally on 21 March 2022, the ICO (the UK's data protection authority) adopted a UK addendum to the new EU SCCs (the UK SCCs) to harmonise the EU SCCs with the laws applicable in the UK.

Google welcomes the new EU SCCs and the UK SCCs and we have updated our <u>Google Ads Data Processing Terms</u>, <u>Google Ads Controller-Controller Data Protection Terms</u> and <u>Google Measurement</u>

<u>Controller-Controller Data Protection Terms</u> to incorporate the EU SCCs and from 21 September 2022, the UK SCCs into our contracts to meet the requirements of European privacy legislation and UK privacy legislation. You can find additional information relating to the EU SCCs and the UK SCCs at this site.

¹ In this paper, "EU GDPR" refers to Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC; and "UK GDPR" refers to the EU GDPR as amended and incorporated into UK law under the UK European Union (Withdrawal) Act 2018 and applicable secondary legislation made under that Act.

² In this paper, "you" or "your" refers to customers of Google's advertising and analytics products listed at privacy.google.com/businesses/adsservices.



In the Schrems II decision, the CJEU ruled that entities transferring (i.e. exporting) personal data out of the EEA to a third country (i.e. the country of import) in reliance on SCCs should assess whether that third country provides protection essentially equivalent to that guaranteed by EU law in order to determine whether the SCCs can ensure an adequate level of protection in practice. In other words, in order to rely on the SCCs to transfer personal data to a third country, entities (i.e. the data importer and exporter) should assess whether the laws in the relevant third country undermine the adequate level of protection otherwise provided by the SCCs. If it is uncertain whether in specific circumstances SCCs alone will ensure the protection required by EU law, the CJEU indicated that "supplementary measures", when used with SCCs, could establish an adequate level of protection.

In light of the EDPB's Recommendations on Supplementary Measures, we are glad to reaffirm our commitment to improving user privacy, helping our customers protect their data, and assisting our customers in their compliance with applicable laws and regulations when using our services. This paper provides information on the additional safeguards and supplementary commitments offered by Google's advertising and analytics products to enhance the protection for transferred personal data. Please note, however, that we are not in a position to provide you with legal advice - this is something only your legal counsel can provide.

Quick links:

- C-311/18
- Recommendations on
 Supplementary
 Measures
- New EU SCCs
- UK addendum to the new EU SCCs
- Google Ads Data
 Processing Terms
- Google Ads
 Controller-Controller
 Data Protection Terms
- Google Measurement
 Controller-Controller
 Data Protection Terms
- Google GDPR Business
 Page





01

Technical safeguards



State of the art security

Security features are built into all our products, services and infrastructure to keep data protected at every layer. We invest in teams and technology to continually improve that security, protecting not only our operations, but your business as well.

Google has <u>global scale technical infrastructure</u> designed to provide security through Google's entire information processing life cycle. Specifically, this infrastructure is designed to provide secure deployment of services, secure storage of data with end user privacy safeguards, secure communications between services, and safe operation by administrators.

The security of the infrastructure is designed in progressive layers starting from the physical security of data centres, continuing on to the security of the hardware and software that underlie the infrastructure, and finally the technical constraints and processes in place to support operational security. Find out more in the "Data centres and physical security" section of this paper below.



Our infrastructure is not designed to, and does not, give any government "backdoor" access to user data (including customer personal data) or to our servers storing user data. That means no government entity, U.S. or otherwise, has direct access to our users' information or to customer personal data. In addition, we utilise robust technical measures (such as encryption, as described below) to protect against interception in transit, including surveillance attempts by government authorities around the world.

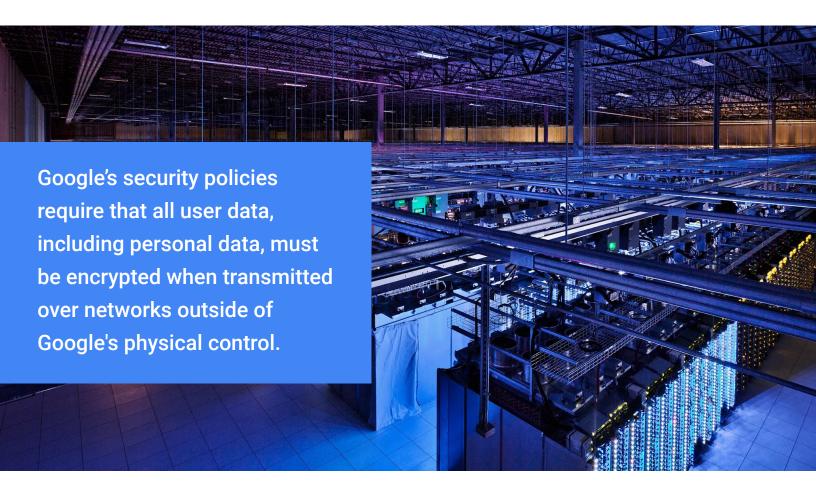


Encryption

Encryption is a process that takes readable data as input (often called plaintext), and transforms it into an output (often called ciphertext) that prevents reading of the plaintext. If data is encrypted, it will be unreadable to a third party without the encryption key, and therefore cannot be accessed in a meaningful form by any third party, including a U.S. or other government agency, that intercepts or otherwise accesses the ciphertext. Access to the plaintext requires going through formal access channels, as described in the "Organisational safeguards" section of this paper below. Encryption is therefore an effective means of preventing any "covert" or unauthorised access to customer personal data.

Encryption in transit

Google encrypts data at one or more network layers when data moves outside physical boundaries not controlled by Google or on behalf of Google, for example, when data is transferred between Google's data centres. Even if any data were intercepted during these transfers, it would be unreadable.





Protecting data in transit within Google's infrastructure

Google protects service-to-service communications at the application layer using a mutual authentication and transport encryption system developed by Google called <u>Application Layer Transport Security (ALTS)</u>. ALTS is similar in concept to mutually authenticated TLS but has been designed and optimised to meet the needs of Google's data centre environments. ALTS authenticates the communication between Google services and helps to protect data in transit. ALTS is a highly reliable, trusted system that provides authentication and security for Google's Remote Procedure Call (RPC) communications. ALTS requires minimal involvement from Google services themselves. When Google services communicate with each other they do not need to explicitly configure anything to ensure data transmission is protected; this is protection of user data by design and by default.

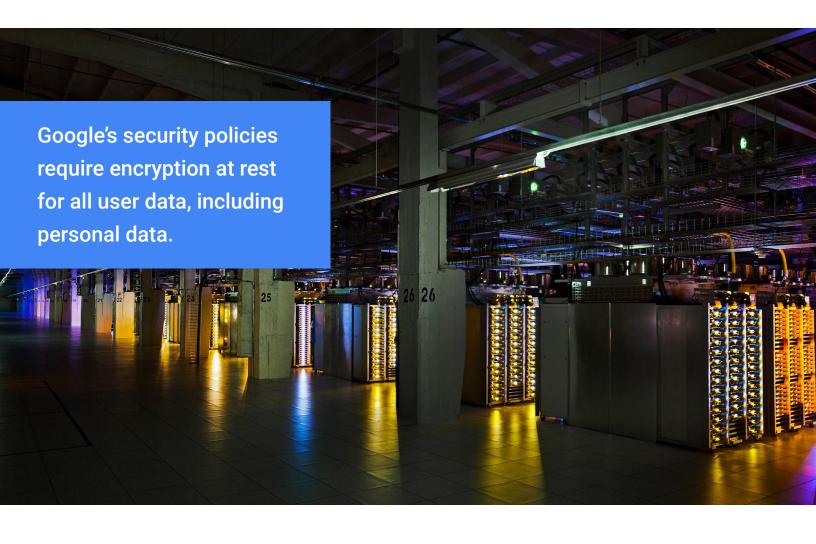
Protecting data in transit between data centres

ALTS ensures the integrity of Google traffic is protected, and encrypted as needed. After a handshake protocol between the client and the server is complete and the client and the server negotiate the necessary shared cryptographic secrets for encrypting and authenticating network traffic, ALTS secures RPC (Remote Procedure Call) traffic by forcing integrity, using the negotiated shared secrets. Google supports multiple protocols for integrity guarantees, e.g. AES-GMAC (Advanced Encryption Standard) with 128 bit keys. Whenever traffic leaves a physical boundary controlled by or on behalf of Google, e.g. in transit over WAN (Wide Area Network) between data centres, all protocols are upgraded automatically to provide encryption as well as integrity guarantees.

Protecting communication between users and websites

HTTPS (Hypertext Transfer Protocol Secure) encryption helps keep users' browsing safe by securely connecting their browser or app with the websites they visit. HTTPS relies on encryption technology - SSL (Secure Sockets Layer) or TLS (Transport Layer Security) - to secure these connections. Such encryption prevents intruders from being able to passively listen to communications between websites and users. Since 2008 Google has been working to make sure Google services use strong HTTPS encryption by default. In 2015 Google announced a set of initiatives to bring this "HTTPS Everywhere" mission to our advertising products as well, to support our advertiser and publisher customers. We publish a report that provides data on the status of HTTPS adoption and usage at Google and across the web, including for our advertising and analytics products, as well as additional information about Google's use of encryption.





Encryption at rest

Encryption "at rest" in this section means encryption used to protect user data that is stored on a disk (including solid-state drives) or backup media.

All user data is encrypted at the storage level, generally using AES256 (Advanced Encryption Standard). Data is often encrypted at multiple levels in Google's production storage stack in data centres, including at the hardware level, without requiring any action by Google customers. Using multiple layers of encryption adds redundant data protection and allows Google to select the optimal approach based on application requirements.

Google uses common cryptographic libraries which incorporate Google's FIPS 140-2 validated module to implement encryption consistently across products. Consistent use of common libraries means that only a small team of cryptographers needs to implement and maintain this tightly controlled and reviewed code.



Pseudonymous advertising and measurement data

Online advertising data is commonly associated with online identifiers stored in cookies or mobile advertising identifiers, such as IDFA, or Android Ad IDs. This data on its own, to the extent it is personal data, is considered "pseudonymous" if it cannot be attributed to a specific individual without the use of additional information, provided that such additional information is kept separately and is subject to technical and organisational measures to ensure that the personal data is not attributed to an identified or identifiable natural person.

Google has a robust set of policies and technical and organisational controls in place to ensure the separation between pseudonymous online identifiers and personally identifiable user data (i.e. information that could be used on its own to directly identify, contact, or precisely locate an individual), such as a user's Google account data.

Technical protection measures for keeping pseudonymous online identifiers separate from identifiable user data include the encryption of identifiers with rotating keys. This prevents records, e.g. in log files, from being linkable across pseudonymous and identifiable ID spaces. In addition, Google has controls in place aimed at preventing the joinability of data sets through common data elements, e.g. precise, stable time stamps associated with an event other than the pseudonymous online identifiers themselves.

Only a strictly limited set of Google employees has access to user data in line with their job function and strict authorisation procedures. Google has an additional authorisation and allowlisting process in place to provide another layer of protection in case individual engineers require access to both pseudonymous advertising data and Google user account data. Engineers must acknowledge Google's policies about user data access and agree not to join these ID spaces.

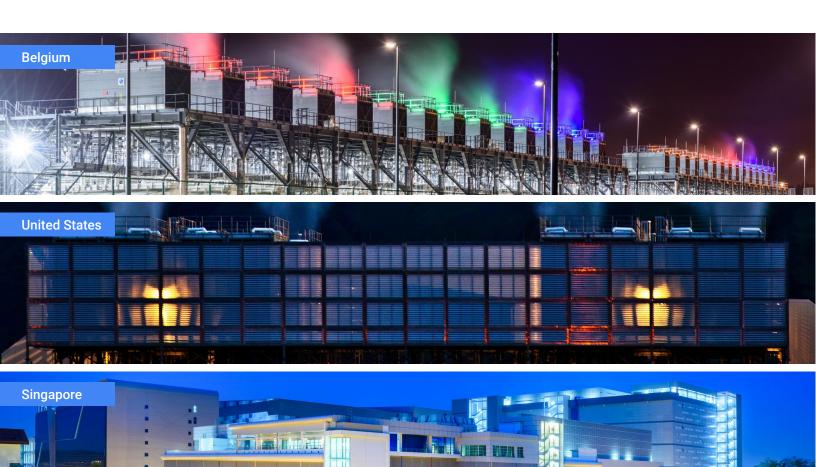
Launch reviews for new products and features are another pillar for the enforcement of Google's privacy and security policies across its products and infrastructure. Any launch at Google has to undergo a privacy review prior to launch. Privacy reviews are conducted by specially trained privacy engineers. In launch reviews related to advertising and measurement products, privacy engineers ensure that all applicable policies and guidelines are followed, including but not limited to those regarding the processing of pseudonymous data.



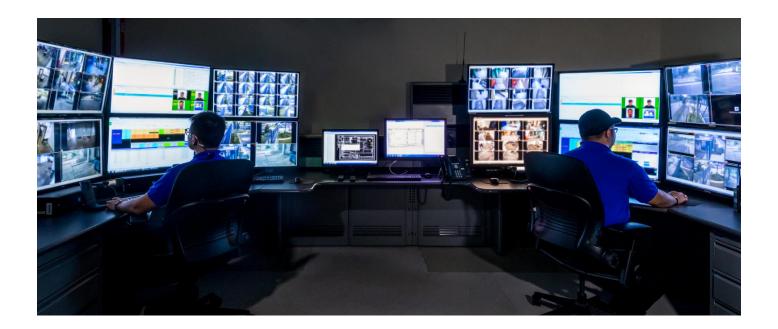
Data centres and physical security

Google operates data centres globally and to maximise the speed and reliability of our services, our infrastructure is generally set up to serve traffic from the data centre that is the closest to where the traffic originates. Therefore the precise location of Google advertising and analytics personal data may vary depending on where such traffic originates, and this data may be handled by servers located in the EEA and UK or transferred to third countries. Our customers' properties where Google advertising and analytics products are implemented are generally available globally and often attract a global audience. The technical infrastructure that supports these products is deployed globally to reduce latency and ensure redundancy of systems. Information about the locations of Google data centres is available here.

The safeguards
described in this
paper apply
regardless of the
location of the data.







Security is part of Google's data centres' DNA

Google custom-builds servers exclusively for its data centres and maintains an industry-leading security team to ensure that Google's data centres are among the safest in the world. Google's production data centres are protected by several layers of security to prevent any unauthorised access to data, including specifically:

- Boundary security and secure perimeter: Data centre site boundaries are physically secured with fencing, signage and other measures. Secure perimeter defence systems are also used, including full thermal and standard camera coverage, smart fencing, visitor movement analysis, crash barriers and 24/7 guard patrols.
- **Building access:** Visitors are authenticated using badge readers before access through secure doors is permitted. Google uses multiple physical security layers to protect each floor. They include technologies like biometric identification, metal detectors, cameras, physical barriers, and laser-based intrusion detection.
- **SOC:** Google's security operations centre (SOC) monitors the data centre 24/7.
- Data centre floor: Access to the data centre floor is strictly "as needed". Google's security policies require
 encryption at rest for all user data, including personal data. Rather than storing each user's data on a single
 machine or group of machines, Google distributes all data across many computers in different locations. Data is
 chunked and replicated across multiple systems to avoid any single point of failure. Google names these data
 chunks randomly for additional security.
- Secure disposal of data storage devices: Google rigorously tracks the location and status of each hard drive in its data centres. Hard drives that have reached the end of their lives are destroyed in a thorough, multi-step process to prevent access to data.

Find out more in Data and Security - Data Centres.



Strong controls to limit access to trusted personnel

We limit access to Google's advertising and analytics personal data to Google personnel who need it to do their jobs:

- Infrastructure security personnel: Google has, and maintains, a security policy for its personnel, and requires security training as part of the training package for its personnel. Google's infrastructure security personnel are responsible for the ongoing monitoring of Google's security infrastructure, the review of Google's advertising and analytics products, and responding to security incidents.
- Access control and privilege management: Administrators and users of Google's advertising and analytics
 products must authenticate themselves via a central authentication system or via a single sign on system in order
 to use the products.
- Internal data access processes and policies: The group of Google employees with access to advertising and analytics personal data is strictly limited. For Google employees, access rights and levels are based on their job function and role, using the concepts of least-privilege and need-to-know to match access privileges to defined responsibilities. Google employees are only granted a limited set of default permissions to access company resources, such as employee email and Google's internal employee portal. Requests for additional access follow a formal process that involves a request and an approval from a data or system owner, manager, or other executives, as dictated by Google's security policies. Approvals are managed by workflow tools that maintain audit records of all changes. These tools control both the modification of authorisation settings and the approval process to ensure consistent application of the approval policies. An employee's authorisation settings are used to control access to all resources, including data and systems for Google advertising and analytics products. Google employee access is monitored and audited by our dedicated security, privacy, and internal audit teams. The systems are designed to detect any inappropriate access.

Google employs a centralised access management system to control personnel access to production servers, and only provides access to a limited number of authorised personnel. LDAP, Kerberos and a proprietary system utilising digital certificates are designed to provide Google with secure and flexible access mechanisms. These mechanisms are designed to grant only approved access rights to site hosts, logs, data and configuration information. Google requires the use of unique user IDs, strong passwords, two factor authentication and carefully monitored access lists to minimise the potential for unauthorised account use.

Access to systems is logged to create an audit trail for accountability. Where passwords are employed for authentication (e.g. login to workstations), password policies that follow at least industry standard practices are implemented. These standards include restrictions on password reuse and sufficient password strength. As part of its Insider Risk Program, Google also has controls in place to address unilateral access risks, i.e. the ability of an individual Google employee to perform actions without approval or oversight by another Google employee including reading or modifying user data.



Additional information about Google Analytics

- Pseudonymous data: To the extent Google Analytics data transferred by customers is personal data, it must be
 pseudonymous. The <u>Google Analytics Terms of Service</u> mandate that no data be passed to Google that Google
 could use or recognise as personally identifiable information (PII) i.e. information that could be used on its own to
 directly identify, contact, or precisely locate an individual. <u>Learn more</u> about what Google considers PII. Therefore
 Google Analytics data which is transferred to a third country is pseudonymous and access of any third party to the
 data will generally not put that party in a position to identify the data subject based on that data.
- First party cookies: The cookies set by Google Analytics for measurement are first party cookies, which means that data subjects' cookie values will be different for each customer (i.e. there is not a single Google Analytics cookie ID that is used on all sites using Google Analytics).
- IP Anonymisation (Universal Analytics): Google Analytics customers who are using Universal Analytics can enable IP Anonymisation (or IP masking) to instruct Google to anonymise all IP-addresses immediately after they are collected. If IP Anonymisation is turned on, at no time is the full IP-address written to disk as all anonymisation happens in memory nearly instantaneously after the request has been received. More details about IP Anonymisation are available here.
- No logging of IP-addresses (Google Analytics 4): Google Analytics 4 does not log or store IP-addresses. Any
 IP-addresses that Google Analytics 4 receives are collected in local servers, and then discarded before being
 transferred or logged. As a result, IP-addresses for EU, Swiss and UK user traffic are not transferred outside of the
 EU, Switzerland or UK (as applicable).
- Secure transmission of Google Analytics JavaScript libraries and measurement data: Google Analytics by default
 uses HTTP Strict Transport Security (HSTS), which instructs browsers that support HTTP over SSL (HTTPS) to use
 that encryption protocol for all communication between end users, websites, and Google Analytics servers. Find
 out more here.
- **Customer controls**: Google Analytics offers a set of tools and functionalities to help you control how data is used in Google Analytics, including regional controls for collection of granular location and device data in Google Analytics 4. Find out more in this EU-focused data and privacy page, and this blogpost.
- User controls: Google Analytics provides privacy controls to users, including a Google Analytics opt-out browser add-on for websites. If users install this add-on, it prevents the Google Analytics JavaScript that is running on websites from sharing information with Google Analytics about visit activity. In addition, Google Analytics 4 provides privacy controls to property editors and admins to disable collection of Google-signals data and/or granular location and device data, both on a per-region basis. If property editors/admins disable either or both of these data collections, then no Google-signal data and/or the relevant location and device data (as applicable) is collected following the change.



02

Contractual safeguards



Contractual safeguards

The <u>Google Ads Data Processing Terms</u>, <u>Google Ads Controller-Controller Data Protection Terms</u> and <u>Google Measurement Controller-Controller Data Protection Terms</u> offer strong legal protections:

- Standard Contractual Clauses: The European Commission has published new EU SCCs to help safeguard
 European personal data and the ICO has published new UK SCCs to help safeguard UK personal data, together the
 SCCs. Google has incorporated the SCCs into its advertising and analytics contracts to help protect personal data
 and to meet the requirements of European and UK privacy legislation. Like the previous SCCs, these clauses can
 be used to facilitate lawful transfers of data.
- Security commitments: Where Google acts as a data processor, Google commits to implementing and maintaining technical and organisational measures providing an appropriate level of security, as specified in Appendix 2 of the Google Ads Data Processing Terms, and to ensuring appropriate security compliance by its staff. The measures specified in the Google Ads Data Processing Terms include measures to encrypt personal data; to help ensure ongoing confidentiality, integrity, availability and resilience of Google's systems and services; to help restore timely access to personal data following an incident; and for regular testing of effectiveness. Google further commits to notifying customers of any data incidents without undue delay and to promptly take steps to secure any affected data. Where Google acts as a data controller, Google contractually commits in the Google Ads Controller-Controller Data Protection Terms to comply with its EU GDPR and UK GDPR obligations, which include its security obligations in Article 32 of the EU GDPR and in Article 32 of the UK GDPR. In addition, when it acts as data importer, Google commits in the SCCs to implementing and maintaining technical and organisational security measures that are appropriate to the risks presented by the processing.
- **Processing in accordance with instructions**: Where Google acts as a data processor, Google commits to processing customer personal data strictly as instructed by the customer.
- Subprocessor commitments: Google engages third party subprocessors to perform limited activities in connection with Google's advertising and analytics products, such as customer and service support. Information about Google's subprocessors and the services they support is available at https://privacy.google.com/businesses/subprocessors/. Before onboarding a subprocessor, Google conducts an audit of the security and privacy practices of the subprocessor to ensure the subprocessor provides a level of security and privacy appropriate to their access to data and the scope of services they are engaged to provide. Once Google has assessed the risks presented by the subprocessor, the subprocessor is required to enter into appropriate security, confidentiality and privacy contract terms. In particular, Google will ensure via the contract that the subprocessor accesses user data only if and to the extent required to perform their limited activity and that all access is in accordance with Google's data protection terms, including the SCCs where applicable. Google remains fully liable for all the activities of its subprocessors and continuously monitors their performance and contractual compliance, including via regular assessments and audits.



03

Organisational safeguards



Transparency

At Google, we believe that trust is created through transparency, and we want to be transparent about our commitments and what you can expect when it comes to our shared responsibility for protecting user data. We understand that a big part of being transparent is providing information on when requests are being made for access to data.

In our <u>Transparency Reports</u>, we share information about how the policies and actions of governments affect privacy, security and access to data. Twice a year, we report the number of requests made by governments for user information, and the number of accounts subject to those requests.

Government requests for data

If a government seeks Google's advertising and analytics personal data during the course of an investigation, a dedicated team of Google lawyers and specially trained personnel will carefully review the request to verify that it is lawful, proportionate and complies with Google's policies.

Generally speaking, for us to produce any data, the request must be made in writing, signed by an authorised official of the requesting agency and issued under an appropriate law. Our legal team rejects requests that are invalid and pushes back when we believe the request is overly broad.

We will notify a customer before any of their information is disclosed unless such notification is prohibited by law or the request involves an emergency, such as an imminent threat to life. We will provide delayed notice to the customer if a legal prohibition on prior notification is lifted, such as when a statutory or court ordered disclosure prohibition period has expired. Where we act as a data importer, we will promptly notify customers, as our SCCs require us to do, if we have reason to believe that the laws and practices in the third country where the personal data is being processed prevent us from fulfilling our obligations under the SCCs.

To learn more about how we handle government requests for data, please see:





FAQs on United States
national security requests



Internal audits and reviews

We conduct regular internal audits on matters relating to international transfers. We also review our internal policies to assess the suitability of the supplementary measures we have implemented.

Information in relation to EO 12333 and FISA 702

We recognise that the Schrems II decision has generated questions about the impact of United States law on data transfers and on the role of Google LLC, a U.S. company and the parent of the Google group, as the data importer under SCCs entered into with customers of Google's advertising and analytics products. Customers may have specific questions around U.S. Executive Order 12333 (EO 12333) and Title 50 United States Code (U.S.C.) § 1881a (FISA 702), both of which were considered by the CJEU in the Schrems II decision. To address these issues, we have set out specific information about those laws and their application to Google's advertising and analytics products below.

EO 12333

EO 12333 primarily governs intelligence activities that occur outside the U.S.. EO 12333 is understood to permit the U.S. to conduct electronic surveillance outside the U.S. consistent with U.S. legal requirements; it does not authorise electronic surveillance within the U.S. nor does it impose requirements on service providers inside or outside the U.S. Google's advertising and analytics personal data is always encrypted in transit when data moves outside physical boundaries not controlled by Google or on behalf of Google (see "Encryption" section above) and, as stated above, Google's infrastructure does not give the U.S. government "backdoor" access to customer data. EO 12333 requires the U.S. government to use the least intrusive means feasible of obtaining intelligence.



FISA 702

Section 702 of the FISA Amendments Act (FISA 702) allows the U.S. government to target certain communications of non-U.S. citizens who are located outside the U.S. for specific valid and documented foreign intelligence purposes. The U.S. government is required to minimise its use and dissemination of data collected under this authority.

FISA 702 has two components: Upstream and Downstream.

- Section 702 Upstream authorises U.S. authorities to collect data travelling over internet "backbone" infrastructure
 controlled by electronic communication service providers in the U.S. (e.g. U.S. telecom providers). To the extent
 any Google advertising and analytics data traverses networks subject to Upstream 702 collection, that data is
 encrypted in transit as described above, meaning that only the ciphertext could be accessed pursuant to Section
 702 Upstream.
- Section 702 Downstream authorises U.S. authorities to obtain targeted data directly from electronic
 communication service providers. To the extent Google LLC may be subject to targeted requests relating to
 Google customer personal data under Downstream 702, we carefully review each request we receive under FISA in
 accordance with the guidelines described above (see "Government requests for data" section above) to make sure
 the request satisfies all applicable legal requirements and Google's policies.

Third party certifications and compliance offerings

Google has earned <u>ISO 27001 certification</u> for a number of Google advertising and analytics products, which provides independent accreditation of their systems, applications, people, technology, processes and data centres. Customers with a Google account representative may request our ISO 27001 Statement of Applicability (SOA) from their representative. In addition, Google will allow customers or a third party auditor appointed by a customer to conduct audits (including inspections) to verify Google's compliance with its obligations in accordance with the terms outlined in section 2 ("Contractual safeguards") above.



Conclusion

We are committed to providing and continuing to advance technical, contractual, and organisational safeguards that will support Google's advertising and analytics customers in assessing the risk of international data transfers. We firmly believe that the transfers of personal data outside the EEA, Switzerland or the UK as discussed in this paper are in compliance with the strict requirements imposed by European data protection laws regarding international data transfers. We also consider that Google's advertising and analytics SCCs, along with the safeguards and commitments discussed above, provide our customers with adequate protection for transfers of their data.

We hope this paper is helpful for customers conducting compliance risk assessments, but encourage all customers to consult with their legal counsel as this paper should not be used as a substitute for legal advice.

