GA4	Measurement Data Transmission	Measurement Data Collection	Data Storage & Processing	Measurement Reporting

VISITOR

WEB

JS container

🖥️

Encrypted HTTP POST (HTTPS) Request [1]

Regional Collection Servers

🌐 **General traffic domains** [4]

WEB
https://analytics.google.com/g/collect
https://google-analytics.com/g/collect

APP
https://app-measurement.com/a

🇪🇺 **EU visitor traffic domains** [4, 5]

WEB
https://region1.analytics.google.com/g/collect
https://region1.google-analytics.com/g/collect

APP
https://region1.app-measurement.com/a

APP

Google Analytics For Firebase SDK

Server-side Container [2]
Server-side tagging & owner-managed processing containers (web only)

Encrypted HTTP POST (HTTPS) Request [1, 3]

Initial Data Filtering [7]

Derive location data (city, country, region, etc.)

Discard IP data [8]

Check collection settings & discard unnecessary personal data from request [9]

Data Forwarding

Forward measurement data to storage servers

🇺🇸 US-based Servers

Data center storage

Data Processing & Aggregation

🇺🇸 US-based Servers

Measurement Reporting

OWNER

SERVER

Measurement Protocol

🖥️

Encrypted HTTP POST (HTTPS) Request [1]

Data Import

Collection Server

🌐 **Measurement Protocol domain** [4, 6]
https://google-analytics.com/mp/collect

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1. HTTPS request header
Request URL
IP Address
User Agent String
Language
Query string parameters

1. HTTPS request body
Cookies & Identifiers: device id (client_id, app_instance_id), IDFA, AdId, user_id (optional)
User properties (optional)
Events (e.g. views, clicks, purchases, etc.)
Event parameters: (e.g. timestamp, price, currency, etc.)

2. Data owners may use server-side tagging and owner-managed processing containers for initial web data collection.
3. All HTTPS requests from server-side tagging and MP (#6) to Analytics Collection are routed to general traffic domains.
4. Data collection is routed to the closest available server based on location.
5. Traffic from EU-based visitors (based on IP geo lookup) is routed to EU-based collection servers for data filtering.
6. MP allows server-to-server interactions, allowing the customer to remove unwanted browser metadata (GA4 MP).
7. Data filtering occurs in server memory and typically processes and forwards data to US servers within 15 minutes.
8. IP data is only used for geo-location and immediately discarded prior to forwarding to Analytics storage. For EU- based traffic, IP data is discarded from all Google logs and cannot be accessed or used for any additional use cases.
9. This includes regional data collection for advertising features or granular location & device data.