Partnering for a Safer <>>> Internet: The Role of APIs

To protect users and other organisations from bad actors, we build and share Application Programming Interfaces (APIs) that detect and block online threats, and help make the internet safer for everyone.



BUILD

We create safety APIs to protect across 3 key areas. Some examples of these APIs are:

Child Safety

- Content Safety API
- CSAI Match API
- Hash Matching API

Security

- Safe Browsing API
- Project Shield API
- VirusTotal API

Information Quality

- Perspective API
- Vision API
- FactCheck API
- Civics Information API
- Text Moderation



SCALE

To scale our impact we share our safety APIs with partners:

4.6 crore

In 2022, Cloud Armor API blocked one of the largest Layer 7 DDoS attacks in history, at 4.6 crore requests per second.

200 crore

Perspective API is called by 1000+ partners almost 200 crore times a day.

400 crore

The Child Safety Toolkit (Content Safety API + CSAI Match API) processed 400 crore+ images and videos in the last 30 days.



LIMIT

To ensure only trusted partners have access to our APIs and that they are used in a compliant and safe manner, we take 3 critical steps:



We limit access of our safety APIs to carefully vetted partners, restrict unauthorised usage of these tools, and strictly enforce our terms of service policies. Empowering our trusted partners with safety APIs allows us to work together, and create a safer internet for everyone.

Google's Safety APIs



Child Safety APIs

Child Safety Toolkit

Content Safety

Google's proprietary model helps partners classify and prioritise billions of Child Sexual Abuse Material images. It uses ML classifiers to help identify neverbefore-seen CSAM imagery for fast review, removal, and reporting.

CSAI Match

YouTube's proprietary technology (and the first technology to use hashmatching) to identify Child Sexual Abuse Imagery (CSAI) videos and systematically flag for partners to review, confirm, report, and act upon.

Hash Matching

We provide Google's Hash Matching API to NCMEC to help them prioritise and review CyberTipline reports more efficiently, allowing them to hone in on those reports involving children who need immediate help.



Security APIs

Cloud Armor

Protects websites, services, and APIs against advanced targeted and automated Distributed Denial of Service (DDoS) attacks, which censor information.

reCAPTCHA

Google's WAAP Solution

Defends websites from fraudulent activity, spam, and other abuses. reCAPTCHA Enterprise uses an adaptive risk analysis engine to keep automated software from engaging in abusive activities.

Safe Browsing

Our Safe Browsing API allows client applications to check URLs against our constantly-updated lists of unsafe web resources. This tool protects 500 crore devices a day by warning users against sites that host malware or unwanted software.

VirusTotal

Allows developers to submit files or URLs for analysis and receive a report on whether or not they are infected with malware.

Apigee

Google Cloud's full lifecycle API management platform enables businesses to design, secure, deploy, monitor, and scale APIs.

Safer with Google

Information Quality APIs



Perspective

Open-source API that uses machine learning to identify "toxic" comments. Used not only to facilitate interactions between humans, but also to help promote high-quality human interactions with large language models and generative AI.

Civic Information

The Civic Information API allows developers to build applications that let citizens and voters in the U.S. know about their political representation, ballot information, and voting locations. During supported elections, voters can look up their polling place, early vote and dropbox locations, and candidate information.

Vision

Allows developers to easily integrate vision detection features within their applications. This includes image labeling, face and landmark detection, optical character recognition (OCR), and tagging of explicit content.

Text Moderation

Google's Text Moderation tool, available through the Cloud Natural Language API, helps organisations scan for sensitive or harmful content. This tool is able to identify a wide range of harmful content, including hate speech, bullying, and sexual harassment.

FactCheck

Aims to facilitate the work of fact checkers, journalists, and researchers in discovering what has & has not been debunked globally. With this tool, users can search claims from among 3 lakh fact checks from reputable publishers.

Every day you're safer with Google

We invest in building and sharing APIs that detect and block online threats to ensure that **every day you're safer with Google**. Visit our <u>Safety Centre</u> to learn more about how we keep more people safer online than anyone else.