Read how Google Cloud Armor blocked the largest Layer 7 DDoS attack at 46 million rps (https://cloud.google.com/blog/products/identity-security/how-google-cloud-blocked-largest-layer-7-ddos-attack-at-46-million-rps)

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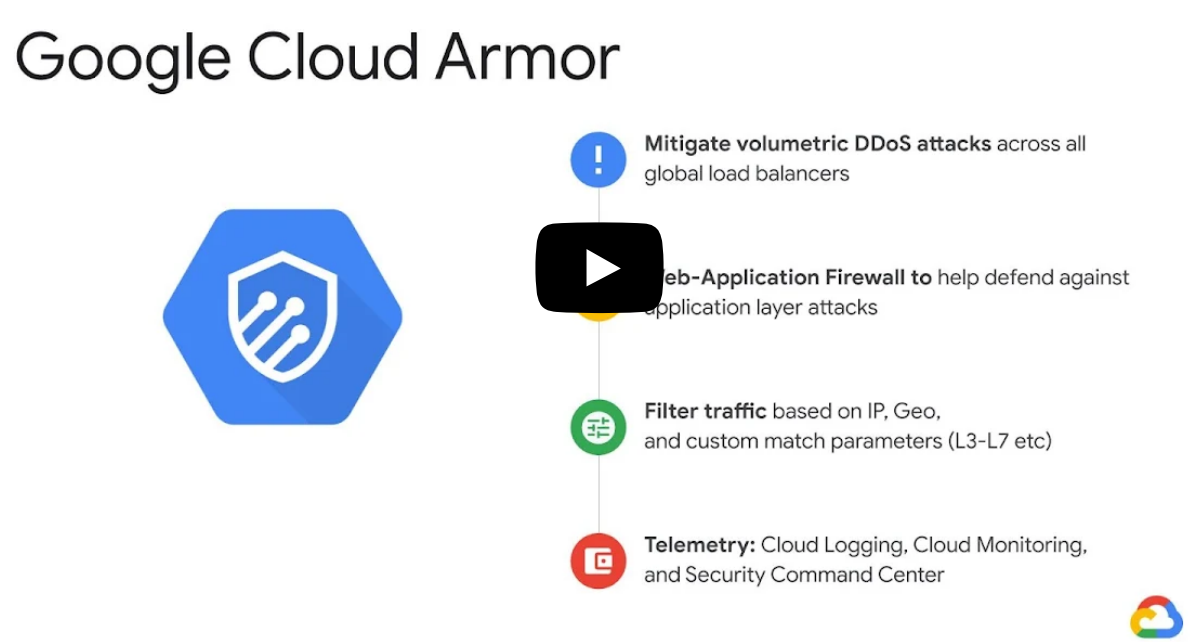
JUMP TO (#)

Google Cloud Armor

Help protect your applications and websites against denial of service and web attacks.

Try Google Cloud free (https://console.cloud.google.com/freetrial)

- Benefit from DDoS protection and WAF at Google scale
- Detect and mitigate attacks against your Cloud Load Balancing (https://cloud.google.com/load-balancing) workloads
- Adaptive Protection (https://cloud.google.com/armor/docs/adaptive-protection-overview) ML-based mechanism to help detect and block Layer 7 DDoS attacks
- Mitigate OWASP Top 10 risks and help protect workloads on-premises or in the cloud
- Bot management (https://cloud.google.com/armor/docs/bot-management) to stop fraud at the edge through native integration with reCAPTCHA Enterprise (https://cloud.google.com/recaptcha-enterprise)



VIDEO

Protect Your Web Sites and Applications with Google Cloud Armor

30:00

(https://www.youtube.com/watch?v=oXJ68Sa8jfU)

BENEFITS

Enterprise-grade DDoS defense

Cloud Armor benefits from our experience of protecting key internet properties such as Google Search, Gmail, and YouTube. It provides built-in defenses against L3 and L4 DDoS attacks.

Mitigate OWASP Top 10 risks

Cloud Armor provides predefined rules (/armor/docs/rule-tuning) to help defend against attacks such as cross-site scripting (XSS) and SQL injection (SQLi) attacks.

Managed protection

With Cloud Armor Managed Protection Plus (https://cloud.google.com/armor/docs/managed-protection-overview) tier, you will get

access to DDoS and WAF services, curated rule sets, and other services for a predictable monthly price. Learn more (https://cloud.google.com/armor#section-7).

KEY FEATURES

Key features

Adaptive protection

Automatically detect and help mitigate high volume Layer 7 DDoS attacks with an ML system trained locally on your applications. Learn more (https://cloud.google.com/armor/docs/adaptive-protection-overview).

Support for hybrid and multicloud deployments

Help defend applications from DDoS or web attacks and enforce Layer 7 security policies whether your application is deployed on Google Cloud or in a hybrid or multicloud architecture.

Pre-configured WAF rules

Out-of-the-box rules based on industry standards to mitigate against common web-application vulnerabilities and help provide protection from the OWASP Top 10. Learn more in our WAF rules guide (https://cloud.google.com/armor/docs/rule-tuning).

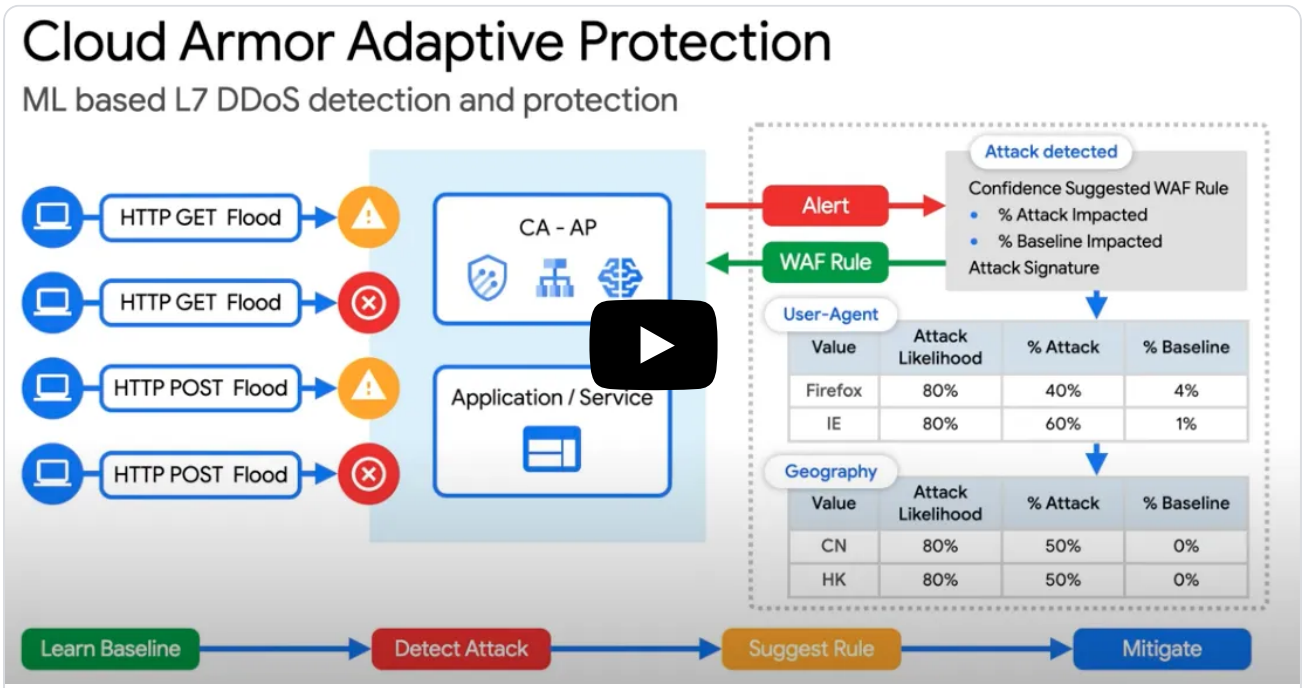
Bot management

Provides automated protection for your apps from bots and helps stop fraud in line and at the edge through native integration with reCAPTCHA Enterprise. Learn more (https://cloud.google.com/armor/docs/bot-management).

Rate limiting

Rate-based rules help you protect your applications from a large volume of requests that flood your instances and block access for legitimate users. Learn more (https://cloud.google.com/armor/docs/rate-limiting-overview).

iew all features (#)



VIDEO

Getting started with Cloud Armor Adaptive Protection

7:00

(https://www.youtube.com/watch?v=Ti-ln36t__I)

CUSTOMERS

Learn from customers using Cloud Armor

BLOG POST

Cloud Armor helps mitigate a wide array of threats

2-min read

ee all customers (https://cloud.google.com/customers)

WHAT'S NEW

What's new

Sign up (https://cloud.google.com/newsletter) for Google Cloud newsletters to receive product updates, event information, special offers, and more.

BLOG POST

How Google Cloud blocked the largest Layer 7 DDoS attack at 46 million rps

Read the blog (https://cloud.google.com/blog/products/identity-security/how-google-cloud-blocked-largest-layer-7-ddos-attack-at-46-million-rps)

DOCUMENTATION

Documentation

TUTORIAL

Cloud Armor overview

Learn how Cloud Armor works and see an overview of Cloud Armor features and capabilities.

Learn more (https://cloud.google.com/armor/docs/cloud-armor-overview)

TUTORIAL

Hands-on lab: HTTP load balancer with Cloud Armor

Learn how to configure an HTTP load balancer with global back ends, stress test the load balancer, and denylist the stress test IP.

Learn more (https://www.cloudskillsboost.google/focuses/1232?catalog_rank=%7B%22rank%22%3A1%2C%22num_filters%22%3A0%2C%22has_search%22%3Atrue%7D&parent=catalog&search_id=5489793)

GOOGLE CLOUD BASICS

Cloud Armor security policy overview

Use Google Cloud Armor security policies to help protect your load-balanced applications from distributed denial of service (DDoS) and other web-based attacks.

Learn more (/armor/docs/security-policy-concepts)

TUTORIAL

Managed protection

Managed protection is an application protection service that helps protect your web applications and services from DDoS attacks and other threats from the internet.

Learn more (https://cloud.google.com/armor/docs/managed-protection-overview)

TUTORIAL

Bot management

Provides effective management of automated clients' requests towards your back ends through native integration with reCAPTCHA Enterprise.

Learn more (https://cloud.google.com/armor/docs/bot-management)

TUTORIAL

Rate limiting

Rate-based rules help you protect your applications from a large volume of requests that flood your instances and block access for legitimate users.

Learn more (https://cloud.google.com/armor/docs/rate-limiting-overview)

TUTORIAL

Configuring Google Cloud Armor security policies

Use these instructions to filter incoming traffic to HTTP(S) load balancing by creating Google Cloud Armor security policies.

Learn more (/armor/docs/configure-security-policies)

GOOGLE CLOUD BASICS

Configuring Google Cloud Armor through GKE Ingress

Learn how to use a BackendConfig custom resource to configure Google Cloud Armor in Google Kubernetes Engine (GKE).

Learn more (/kubernetes-engine/docs/how-to/cloud-armor-backendconfig)

TUTORIAL

Tuning Google Cloud Armor WAF rules

Preconfigured web application firewall (WAF) rules with dozens of signatures that are compiled from open source industry standards.

Learn more (https://cloud.google.com/armor/docs/rule-tuning)

Not seeing what you're looking for?

View all product documentation (/armor/docs)

Explore more docs

Get a quick intro to using this product.

(/armor/docs)

Learn to complete specific tasks with this product.

(/armor/docs/how-to)

Browse walkthroughs of common uses and scenarios for this product.

(/armor/docs)

View APIs, references, and other resources for this product.

Release notes

Read about the latest releases for Cloud Armor

(/armor/docs/release-notes)

ALL FEATURES

All features

Pre-defined WAF rules to mitigate OWASP Top 10 risks	Out-of-the-box rules based on industry standards to mitigate against common web-application vulnerabilities and help provide protection from the OWASP Top 10.
Rich rules language for web application firewall	Create custom rules using any combination of L3–L7 parameters and geolocation to help protect your deployment with a flexible rules language.
Visibility and monitoring	Easily monitor all of the metrics associated with your security policies in the Cloud Monitoring dashboard. You can also view suspicious application traffic patterns from Cloud Armor directly in the Security Command Center (/security-command-center) dashboard.
Logging	Get visibility into Cloud Armor decisions as well as the implicated policies and rules on a per-request basis via Cloud Logging (/logging).
Preview mode	Deploy Cloud Armor rules in preview mode to understand rule efficacy and impact on production traffic before enabling active

	enforcement.
Policy framework with rules	Configure one or more security policies with a hierarchy of rules. Apply a policy at varying levels of granularity to one or many workloads.
IP-based and geo-based access control	Filter your incoming traffic based on IPv4 and IPv6 addresses or CIDRs. Identify and enforce access control based on geographic location of incoming traffic.
Support for hybrid and multicloud deployments	Help defend applications from DDoS or web attacks and enforce Layer 7 security policies whether your application is deployed on Google Cloud or in a hybrid or multicloud architecture.
Named IP Lists	Allow or deny traffic through a Cloud Armor security policy based on a curated Named IP List.

PRICING

Pricing

Google Cloud Armor tiers (https://cloud.google.com/armor/docs/managed-protection-overview):

Cloud Armor Standard provides a pay-as-you-go model, measuring and charging for security policies and rules within that policy, as well as for well-formed L7 requests that are evaluated by a security policy.

Managed Protection Plus, now Generally Available, offers a subscription-based pricing model starting at US$3,000 per month for the first 100 protected resources and then $30 per additional protected resource per month.

CLOUD ARMOR	STANDARD	MANAGED PROTECTION PLUS	NOTES
Billing	Pay as you go	Starting at $3,000/month	-
Protected resources	None	Includes first 100 ($30/month for additional protected resources)	Protected resou include backen and backend bu
Rules	$1 / month	Included in subscription	-
Policy	$5 / month	Included in subscription	-
Requests	$0.75 / million queries	Included in subscription	-
Data processing fee	None	Additional (details (https://cloud.google.com/armor/pricing))	-
Term	None	1 year	-

If a backend service has a Cloud Armor policy, you can use the user-defined request headers feature (/load-balancing/docs/backend-service#user-defined-request-headers) with that service without any

additional charge for the user-defined request headers feature.

If you pay in a currency other than USD, the prices listed in your currency on Google Cloud SKUs (/skus) apply.

iew pricing details (https://cloud.google.com/armor/pricing)

A product or feature listed on this page is in preview. Learn more about product launch stages (https://cloud.google.com/products#product-launch-stages).

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Start building on Google Cloud with $300 in free credits and 20+ always free products.

Try (Product) free (https://console.cloud.google.com/freetrial)

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Work with a trusted partner

Find a partner (https://cloud.withgoogle.com/partners/)

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