

# Google Cloud Armor

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

- Benefit from DDoS protection and WAF at Google scale
- Detect and mitigate attacks against your [Cloud Load Balancing](#) workloads
- [Adaptive Protection](#) 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](#) to stop fraud at the edge through native integration with [reCAPTCHA Enterprise](#)

## 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](#) to help defend against attacks such as cross-site scripting (XSS) and SQL injection (SQLi) attacks.

### Managed protection

With [Cloud Armor Managed Protection Plus](#) tier, you will get access to DDoS and WAF services, curated rule sets, and other services for a predictable monthly price. [Learn more](#).

## 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](#).

### 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](#).

### 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](#).

### 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](#).

## 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 <a href="#">Security Command Center</a> dashboard.
Logging	Get visibility into Cloud Armor decisions as well as the implicated policies and rules on a per-request basis via <a href="#">Cloud Logging</a> .
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.