

# AWS Cloud DDoS

Topics : [AWS](#)

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Distributed Denial of Service (DDoS) attacks are malicious attempts to disrupt the normal functioning of a network, service, or website by overwhelming it with a flood of internet traffic. Amazon Web Services (AWS) provides several tools and services to help customers protect their applications and infrastructure from DDoS attacks.

## 1. AWS Shield:

- AWS Shield is a managed Distributed Denial of Service (DDoS) protection service that is built into the AWS infrastructure. It provides automatic detection and mitigation of DDoS attacks to help keep applications available.

## 2. AWS Shield Standard:

- AWS Shield Standard is a default, no-cost service that provides DDoS protection for all AWS customers. It includes automatic and continuous monitoring of traffic patterns to detect and mitigate common DDoS attacks.

## 3. AWS Shield Advanced:

- AWS Shield Advanced is a premium DDoS protection service with additional features for more complex and sophisticated attacks. It includes 24/7 DDoS response team (DRT) support, DDoS cost protection, and web application firewall (WAF) integration.

## 4. Layer 3/4 and Layer 7 Protection:

- AWS Shield protects against both volumetric attacks (Layer 3/4) and application layer attacks (Layer 7). This comprehensive protection helps defend against various types of DDoS threats.

## 5. Intelligent DDoS Mitigation:

- AWS Shield uses machine learning algorithms and anomaly detection to identify and respond to DDoS attacks in real-time. It automatically adjusts mitigation strategies based on the evolving threat landscape.

## 6. Global Anycast Network:

- AWS Shield leverages a global anycast network that spans multiple AWS locations. This allows for efficient and distributed DDoS attack mitigation across the AWS infrastructure.

## **7. Rate Limiting and Web Application Firewall (WAF):**

- AWS WAF can be integrated with AWS Shield to provide additional protection against application layer attacks. It allows you to set rate limiting and create rules to filter and block malicious traffic.

## **8. Advanced Threat Intelligence:**

- AWS Shield Advanced includes access to advanced threat intelligence that helps identify and block sophisticated DDoS attacks. This intelligence is gathered from a variety of sources to enhance protection.

## **9. DDoS Cost Protection:**

- AWS Shield Advanced includes DDoS cost protection, which helps protect against scaling charges incurred due to a DDoS attack. This feature is designed to minimize financial impact during an attack.

## **10. Incident Response and Reporting:**

- AWS Shield Advanced provides 24/7 access to the AWS DDoS Response Team (DRT) for assistance during and after an attack. It also includes detailed attack diagnostics and reporting.

## **11. VPC Traffic Mirroring:**

- AWS provides VPC Traffic Mirroring, which allows you to capture and inspect network traffic in your Virtual Private Cloud (VPC). This can aid in analyzing and mitigating DDoS attacks.

## **12. AWS Partnerships:**

- AWS collaborates with various DDoS protection vendors and integrates with third-party solutions to provide customers with a range of options for protecting their applications.