

AWS Certified Cloud Practitioner  
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# AWS WAF, Shield & Firewall Manager

# What is a Web Application Firewall (WAF) ?

- **AWS WAF is a web application firewall that monitors connections forwarded to your web application**
- **A WAF is a protocol layer 7 defense (OSI model) and is not designed to defend against all types of attacks**
- **As opposed to typical network firewalls, WAFs understand traffic from the application perspective; with WAF you can monitor HTTP and HTTPS traffic, which is more than just TCP protocol and 80/443 port numbers**

# What is a Web Application Firewall (WAF) ?

- WAF typically protects web applications from attacks such as cross-site forgery, cross-site-scripting (XSS), file inclusion, and SQL injection
- This method of attack mitigation is usually part of a suite of tools which together create a holistic defense against a range of attack vectors
- Deploying a WAF in front of a web application, literally means installing a shield between the web application and the Internet users



# AWS WAF Configuration Options

- WAF provides several options that you can configure:
  - Allow all traffic except specific requests
  - Block all traffic except requests that you permit
  - Monitor and count requests with properties defined

# AWS WAF General Benefits

- WAF brings several benefits that you may want to take into consideration in a real-world implementation:
  - Additional level of security for your web apps
  - Define custom rules to protect web apps
  - Use WAF API for automated administration

# What is AWS Shield ?

- AWS Shield helps you protect against DDoS attacks
- A denial-of-service (DoS) attack is a type of cyber attack in which a hacker aims to make a computer or other server unavailable to its users by interrupting the device's normal functioning
- A distributed denial-of-service (DDoS) attack is a DoS attack that comes from many distributed sources
- AWS Shield helps you stay protected from DDoS attacks



AWS Shield

# What is AWS Firewall Manager ?

- AWS Firewall Manager simplifies your AWS WAF administration and maintenance tasks across multiple accounts and resources
- With AWS Firewall Manager, you set up your firewall rules just once
- The service automatically applies your rules across your accounts and resources, even as you add new resources

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Thank you