

Activity # 7 - Network Security Solutions

Started: Nov 25 at 6pm



You started this quiz near when it was due, so you won't have the full amount of time to take the quiz.



Quiz Instructions

You will learn about Network Security Tools.

This will lock questions after answering.



Question 22 1 pts

Web Application Firewall (WAF)

What is a Web Application Firewall (WAF)?

Web Application Firewall (WAF) is security software or hardware that monitors, filters, and blocks incoming packets to a web application and outgoing packets from a web application.

Types of WAF

There are several types of WAF products:

□

Network-based WAF

Network-based WAF is a security product that is hardware-based on the relevant network. It needs staff to write rules on it and to maintain it. Although it is an effective WAF product, it is more expensive than other WAF products.



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Host-based WAF

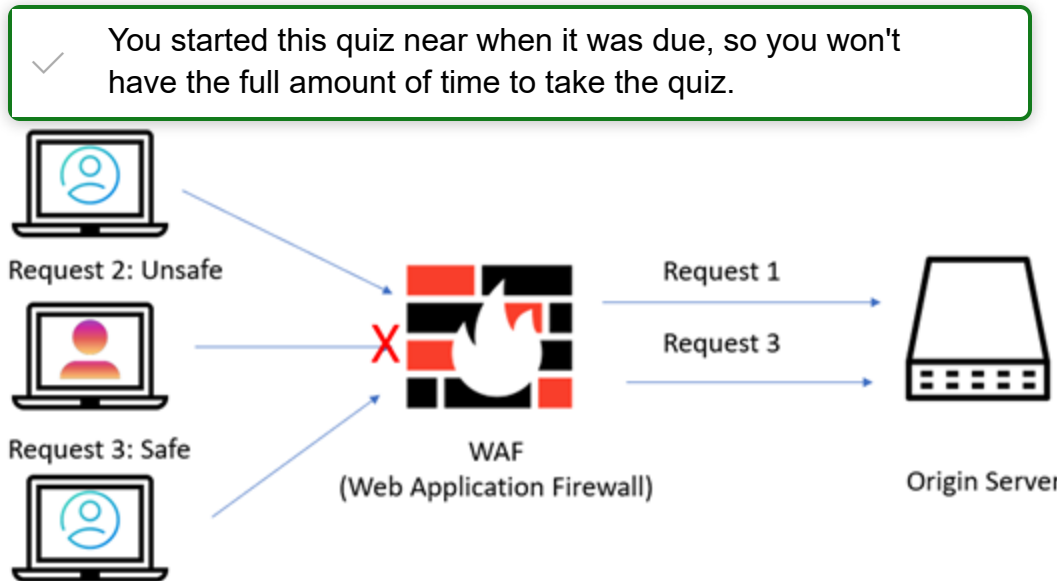
Host-based WAF is a cheaper product than network-based WAF. It is a WAF with more customization possibilities. Considering that it is a software product, it consumes the resources of the server it is on. It may be more difficult to maintain and the systems on it must be securely hardened.

Cloud-based WAF

Cloud-based WAF is a much more convenient and easy-to-apply security solution than other WAF products purchased as an external service. Since the maintenance and updates of the WAF product belong to the service area, there are no additional costs such as cost and maintenance. However, it is a matter to be considered that the cloud-based WAF product that is serviced has sufficient customizations suitable for you.

How does a web application firewall (WAF) work?

A WAF manages inbound application traffic according to existing rules on it. These requests, which belong to the HTTP protocol, are either allowed or blocked per the rules. Since it works at the application layer level, it can prevent web-based attacks. In the image below, the working logic of the WAF product is shown in a basic sense:



Before going to the web application, HTTP requests from users are met in the WAF product. According to the rule set on the WAF product, as shown in the image below, some requests are not allowed to pass, and thus requests that create malicious traffic are blocked. Here, it is very important how the rules on the WAF define the attack, otherwise, it is possible to block incoming normal requests even though they do not show malicious behavior. This shows that the WAF product is not used efficiently and correctly, so it may result in not being able to prevent the attack at some points.

The Importance of WAF for Security

Today, applications in almost every sector are available in local networks or open to the Internet. Ensuring the security of web applications, which are widely used in the IT world, is of critical matter. Serious data leaks or security breaches can occur on unsecured web applications. To prevent all these security breaches, WAF products are placed in front of web applications. Even the presence of the WAF product in front of the web applications is not sufficient to ensure application security, while the absence of the WAF product is not recommended at all.

Some popular WAF products used in the cybersecurity industry are as follows:

- AWS
- Cloudflare
- F5
- Citrix
- Fortiweb



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Q # 1

How many WAF Vendors are mentioned?

Next ►

Not saved

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