

# ORACLE®

## Cloud Infrastructure

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### 5 Reasons Why You Need a Cloud-based Web Application Firewall

DDoS attacks. Bad bots. Web server vulnerability exploits. The list of threats to websites and internet-facing applications grows longer all the time. Malicious hackers are constantly targeting web servers and internet-connected endpoints to crash sites, steal data, and wreak havoc on your IT infrastructure. One mitigation to protect your business from harmful incoming web traffic is to block it with a powerful web application firewall (WAF).

But it's important to know that the WAF market is changing fast. While many companies rely solely on appliance-based WAF solutions, the market requirements for web application security are clearly shifting toward an edge security platform approach that combines a variety of protections suited to distributed hybrid and multicloud environments.

Here's a quick look at the five main reasons why many organizations are adopting cloud-based WAF solutions.

#### Did you know...

*not all cloud WAF solutions are created equal? Many providers offer WAFs as a virtual machine (VM) that runs in a public cloud hypervisor service. But cloud-based VMs must still be patched and updated by the customer. Customers are responsible for scaling their VMs, whereas true, cloud-native WAFs are built to scale. When evaluating WAFs, be sure to look for a purely cloud-based solution that's supported by a global cloud infrastructure.*

## 1. They scale with your business.

Scalability is a major factor to consider when evaluating WAF solutions. That's because a WAF is typically configured as a reverse proxy, which means it serves as the entry point—the last line of defense—before incoming web traffic hits your website and internet-facing applications.

A key benefit of cloud-based WAF solutions is that they leverage the power and scalability of massive edge networks with globally distributed points of presence to ensure minimum latency and maximum coverage. If incoming web traffic sharply increases for any reason, you can rest assured that a cloud-based WAF will leverage its underlying cloud infrastructure to rise to the challenge and quickly isolate your endpoints from incoming threats.

## 2. They block attacks outside your perimeter.

The further away a cyberattack is from your internal infrastructure when it's identified and mitigated, the better. One benefit of a pure, cloud-based WAF is that it blocks malicious traffic long before it reaches your network. In other words, the WAF serves as a security perimeter outside of internal or cloud infrastructure, helping to keep malicious traffic a safe distance from your application and data servers. This security perimeter allows a cloud-based WAF to effectively support multicloud deployments as discussed in the next section.

## 3. They provide the best security for multicloud deployments.

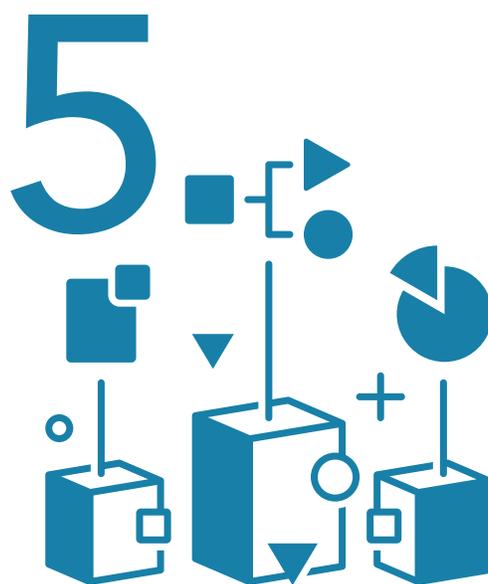
Most companies today embrace hybrid or multicloud computing strategies. The best cloud-based WAFs support multiple web application hosting environments including on-premises, cloud, hybrid, and multicloud. That means a WAF can protect your network edge from malicious traffic regardless of how many infrastructure providers you use. The right cloud-based WAF will provide you with an independent platform for securing all internet-facing applications and APIs, no matter where they reside.

## 4. Managed services ease your burden.

The best cloud-based WAFs are managed 24/7 by a team of experienced internet security experts who monitor your environment and recommend proven threat mitigation steps when issues arise. The benefits of managed WAF services include significant risk reduction. They also reduce your management burden because WAF configuration, monitoring, tuning, and incident response is handled for you. Continuous monitoring protects your business from unplanned downtime and the resulting damage to your brand's reputation. Additionally, managed services enable you to spend more time focusing on your core business and improving the bottom line.

## 5. They have low total cost of ownership.

Cloud-based WAFs provide the highest level of web application security without a major upfront investment in resources or ongoing costs related to maintenance, hardware replacement, and software upgrades. Cloud-based WAFs offer ease of deployment and predictable subscription pricing, which makes it easier to plan your annual budget.



## Checklist:

### Key questions to ask when selecting a cloud-based WAF

If you answer “yes” to the following questions, you’ll know you’ve found the right cloud-based WAF solution.

1. Can it protect internet-facing applications across your entire hybrid or multicloud environment?
2. Is it a true cloud-based solution and not simply an appliance or a WAF that is deployed as part of a VM in a public cloud?
3. Is it an extremely scalable, cloud-based WAF that is supported by globally distributed points of presence?
4. Will it isolate your infrastructure from cyberthreats by ensuring that web applications only accept traffic from WAF nodes?
5. Is it managed 24/7 by a team of internet security experts?
6. Can the WAF provider support your requirements for bot mitigation and API protection now and in the future?
7. Does it offer predictable subscription pricing without requiring a major upfront investment in equipment?
8. When it’s time to patch or upgrade the WAF, does your organization have a designated person assigned?
9. Do you have a plan to handle Layer 7 DDoS attacks to complement your volumetric strategy?

## Why Oracle WAF?

Oracle WAF is the right choice for any business that wants to tighten security at the web application layer. Oracle WAF is 100 percent cloud native and vendor-agnostic, which means it can protect your entire hybrid or multicloud environment regardless of where internet-facing applications are hosted. It’s monitored 24/7 by our security operations center experts, and it leverages the power of automated threat identification and a global cloud infrastructure with points of presence spread over the world.

## ORACLE® Cloud Infrastructure

Oracle Cloud Infrastructure is an enterprise infrastructure-as-a-service (IaaS) platform. Companies of all sizes rely on Oracle Cloud to run enterprise and cloud-native applications with mission-critical performance and core-to-edge security. By running both traditional and new workloads on a comprehensive cloud that includes compute, storage, networking, database, and containers, Oracle Cloud Infrastructure can dramatically increase operational efficiency and lower total cost of ownership. For more information, visit [cloud.oracle.com/iaas](https://cloud.oracle.com/iaas).