





# **Radware Cloud Security Services**

Where Real World Threats Meet Real World Protection



# Change is the Only Constant

Protecting web assets poses a daunting challenge. As the threat landscape rapidly evolves, attacks are growing in complexity and persistency, while zero-day attacks swiftly exploit newly-discovered vulnerabilities. Bots, crawlers and spammers crowd web assets, using new techniques to disguise nonproductive traffic as legitimate.

Meanwhile, web assets continuously adapt to evolving business needs. Usage patterns of existing applications constantly change, introducing new baselines for legitimate traffic, while new applications are launched leading to potential new vulnerabilities. The underlying application delivery infrastructure is also evolving. Organizations are adopting cloud technologies to improve overall efficiency and expand business opportunities. As applications are migrated to the cloud, the traditional enterprise IT perimeter dissolves and organizations face a more distributed data center infrastructure that spans multiple cloud providers and the organization's private network.

With the accelerated change of both attack vectors and assets, any static web security solution is quickly rendered obsolete. To successfully overcome the challenges imposed by the rapidly evolving web security challenge requires a new paradigm: continuous readiness through automatically dynamically adapting to the rapidly evolving threats and assets.

#### **Real World Threats Meet Real World Protection**

Radware, a proven leader in enterprise and carrier-grade WAF and DDoS protection services, offers a full suite of enterprise-grade cloud security services. Radware Cloud Security Services provide continuously adaptive, real-time protection for the most sophisticated DDoS and web security threats via best-in-class cloud WAF and DDoS protection services with the widest security coverage supporting both negative and positive security models. Radware's Cloud Security Service includes:

- Cloud WAF Service offering always-on WAF service to protect both on premise and cloud-based applications. The service is also offered in a hybrid environment with fully-managed on premise WAF to protect premise-based applications.
- Cloud DDoS Protection Service
   offering Radware's industry leading
   DDoS protection technology in the
   cloud. Radware offers a full range of
   cloud DDoS protection services including
   Hybrid Cloud DDoS Protection Service
   integrated with a fully-managed on premise DDoS protection device, an
   Always-On Cloud DDoS Protection
   Service where all the traffic is routed
   through Radware's cloud centers, and an
   On-Demand Cloud DDoS Protection
   Service where traffic is diverted to
   Radware's cloud centers only when an
   attack is detected.



Figure 1: Cloud Security Services Portal Dashboard

# **Continuously Adaptive Protection**

With the constant evolution of threats and change in protected assets, organizations need a service that can continuously and automatically adapt protections. Radware's Cloud Security Service is the only continuously adaptive cloud web security service that adapts to evolving threats and protected assets. The service can automatically generate protections for zero-day attacks within seconds. With Radware's real-time signature creation process that can generate a signature in less than 18 seconds, organizations are better protected from zero-day DDoS attacks. Radware's cloud-based WAF technology also supports automatic policy generation processes to build positive protection models that help protect an organization from zero-day web-based attacks. Radware's cloud service can automatically identify, blacklist and block machines that are used for attacks regardless of IP they hide behind via IP-agnostic fingerprinting technology as well as automatically detect new applications as they are added to the network and create new policies to protect them.

# **Smart SSL Attack Mitigation**

Radware's Cloud Security Services offers the only SSL-attack mitigation in the cloud that maintains user data confidentiality and removes operational dependencies between the service provider and the organization when keys are changed. Radware performs the HTTPS validation with independent certificate management. This means that once a user is validated as legitimate, HTTPS session resumes with the customer's certificate, which is unknown to Radware. As a result, user data remains fully encrypted and customer certificate management remains unchanged. In addition, the solution allows usage of wildcard certificates to reduce operational complexity when needing to protect a large number of subdomains.

# As Simple as it Gets

Radware is the only service provider to offer fully managed services for WAF and DDoS protection, both on premise and cloud-based, with security experts available to configure, update, detect, alert and mitigate attacks.

The service offered is a 24/7 fully-managed by Radware's Battle-proven Emergency Response Team (ERT). The ERT's security experts are experienced with fighting widely known, as well as emerging, single and multi-vector attacks, and provide attack mitigation best practices. Radware's trained professionals have deep knowledge & intelligence of threats, tools and technologies while developing and implementing new ones.

In addition, Radware's Cloud Security Services provides organizations with full visibility into the security status of their networks and protected assets to their mobile device.

# **Shortest Time to Detect and Mitigate**

Attack complexity requires sophisticated technologies to ensure immediate and accurate detection and mitigation of cyber-attacks. Radware's service is based on best-of-breed WAF and DDoS protection technologies that include:

- Patent-protected, behavioral-based detection technology that creates a baseline of normal network, application and user behavior and can then accurately detect DDoS attacks in a very short timeframe with minimal false positives.
- Real-time signature creation for automated protection from the most sophisticated and zero-day DDoS attacks.
   When an anomalous behavior is detected as an attack, Radware's Cloud DDoS Protection Service creates a real-time signature that uses the attack characteristics and starts blocking the attack immediately.
- IP-Agnostic Device Fingerprinting for sophisticated Web application protection. Offers IP-agnostic source tracking to
  help address the threats posed by advanced bots, such as web scraping, web application DDoS, brute force attacks
  for password cracking and clickjacking. Radware's Cloud WAF Service can detect malicious sources operating in a
  dynamic IP environment and activity behind a source NAT, such as an enterprise network or proxy.
- Unique DefenseMessaging between Radware's security CPE and cloud security nodes, which shares real-time
  information on normal traffic baselines, protections and attack footprints, thereby eliminating blind spots and
  protection gaps across the organization's disaggregated network.

# **Most Robust Global Cloud Security Network**

Radware's global network of mitigation devices total over 2Tbps of mitigation capacity. This capability is spread strategically across scrubbing centers around the world for instances when volumetric attacks threaten to saturate customers' link capacity. Radware scrubbing centers are designed to serve major markets with minimal latency and are constantly being expanded and upgraded based on the growth of the customer base and changes in DDoS attack trends.

In addition to its scrubbing centers, Radware also support multiple cloud POPs for always-on WAF and DDoS protection service. Radware is the only service provider that has dedicated scrubbing centers that segregate clean traffic from attack traffic – further securing the organization's legitimate traffic.



Figure 2: Radware's Global Cloud Security Network

# **Summary**

Radware's Cloud Security Services provide continuously adaptive, real-time protection for the most sophisticated DDoS and web security threats through best in class cloud WAF and DDoS protection technologies with the widest security coverage.

The service offers the full range of cloud WAF and DDoS protection services that can provide organizations optimal cloud protection services to meet the unique needs of their networks and applications.

### **About Radware**

Radware<sup>®</sup> (NASDAQ: RDWR), is a global leader of application delivery and cyber security solutions for virtual, cloud and software defined data centers. Its award-winning solutions portfolio delivers service level assurance for business-critical applications, while maximizing IT efficiency. Radware's solutions empower more than 10,000 enterprise and carrier customers worldwide to adapt to market challenges quickly, maintain business continuity and achieve maximum productivity while keeping costs down. For more information, please visit <a href="https://www.radware.com">www.radware.com</a>.

Radware encourages you to join our community and follow us on: Facebook, Google+, LinkedIn, Radware Blog, SlideShare, Twitter, YouTube, Radware Connect app for iPhone® and our security center DDoSWarriors.com that provides a comprehensive analysis on DDoS attack tools, trends and threats.

# Certainty Support

Radware offers technical support for all of its products through the Certainty Support Program. Each level of the Certainty Support Program consists of four elements: phone support, software updates, hardware maintenance, and on-site support. Radware also has dedicated engineering staff that can assist customers on a professional services basis for advanced project deployments.

#### **Learn More**

To learn more about how Radware's integrated application delivery & security solutions can enable you to get the most of your business and IT investments, email us at <a href="mailto:info@radware.com">info@radware.com</a> or go to <a href="https://www.radware.com">www.radware.com</a>.

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