# Protect Infrastructure and Applications Against DDoS Attacks and Evolving Threats

Distributed denial-of-service (DDoS) attacks are increasing in frequency and ferocity. Powerful IoT-botnets for hire over the darkweb make launching large-scale attacks accessible, effortless and cheap. Professional hackers are continuously seeking new ways to disrupt the flow of network traffic and undermine the user experience, resulting in loss of revenue, tarnishing of the brand and increased customer churn rates.

DefensePro, Radware's award-winning real-time perimeter attack mitigation device, secures organizations against emerging network multivector attacks, powerful DDoS campaigns, IoT botnets, application vulnerability exploitation, malware and other types of cyberattacks. DefensePro's proven behavioral-based technology is designed to prevail over modern sophisticated attack tools and cybercriminals.

### AUTOMATED ZERO-DAY ATTACK DEFENSE

Behavioral-based detection and mitigation to defend against unknown zero-day attacks without impacting legitimate user experience

### KEYLESS SSL/TLS FLOOD MITIGATION

High-capacity keyless protection from SSL/TLS-based DDoS attacks without adding latency to customer communications and while preserving user privacy

### ADVANCED ATTACK PROTECTION

Detection and mitigation of today's most advanced attacks, including Burst attacks, Domain Name System (DNS) amplification attacks, IoT botnet floods, Layer 3–7 and other crippling DDoS attacks

### PATENT PROTECTED REAL-TIME ATTACK SIGNATURE

Automated signature creation and advanced challenge escalations to achieve the highest mitigation accuracy that can automatically mitigate unknown attacks and minimize the impact on legitimate traffic

## How Radware Keeps Your Network Elements Secure

### Dedicated DDoS Mitigation Hardware

A dedicated hardware module that allows DefensePro to mitigate attacks without impacting legit traffic and the user experience, even against large attacks.

### Analytics and Reports

Radware's management platform provides alerts, reports, forensics and insight into denial-of-service (DoS) and web application attacks both for historical data and in real time.


### DefenseMessaging

Synchronizes attack information and baselines across the various elements of the solution to improve detection and mitigation response and accuracy.

## Widest Attack Coverage

- Complete Layer 3–7 protection against known and zero-day DoS/DDoS attacks that misuse network bandwidth, server and application resources.
- Bidirectional visibility to defend against even the most complicated attacks that require looking at both ingress and egress traffic.
- Burst attack protection provides immediate behavioral-based detection and mitigation from one of today's top threats with signature creation and instant enforcement for the fastest remediation.
- Advanced DNS attack coverage that leverages first-in-class behavioral-based algorithms to protect from known and unknown DNS Flood attacks, including DNS Water Torture attacks, in the most cost-effective way.
- A patent-protected stateless and keyless SSL/TLS attack mitigation solution that protects from all types of encrypted attacks with reduced latency and no packet decryption for high protection capacity.

## Multiple Deployment Options to Fit Your Needs

- Supports both in-line or out-of-path (SmartTap) implementations or a scrubbing center deployment.
- Integrates with Radware's Hybrid Cloud DDoS Protection Service to offer a single vendor hybrid solution that provides zero time to mitigate.
- Enables service providers to offer market-leading DDoS mitigation services to hosted applications and network tenants with multitenant and multipolicy support.
- Virtual appliance enables DDoS mitigation for software-defined data centers (SDDC).
- Range of protection devices offers mitigation capacity from 6Gbps to 400Gbps.

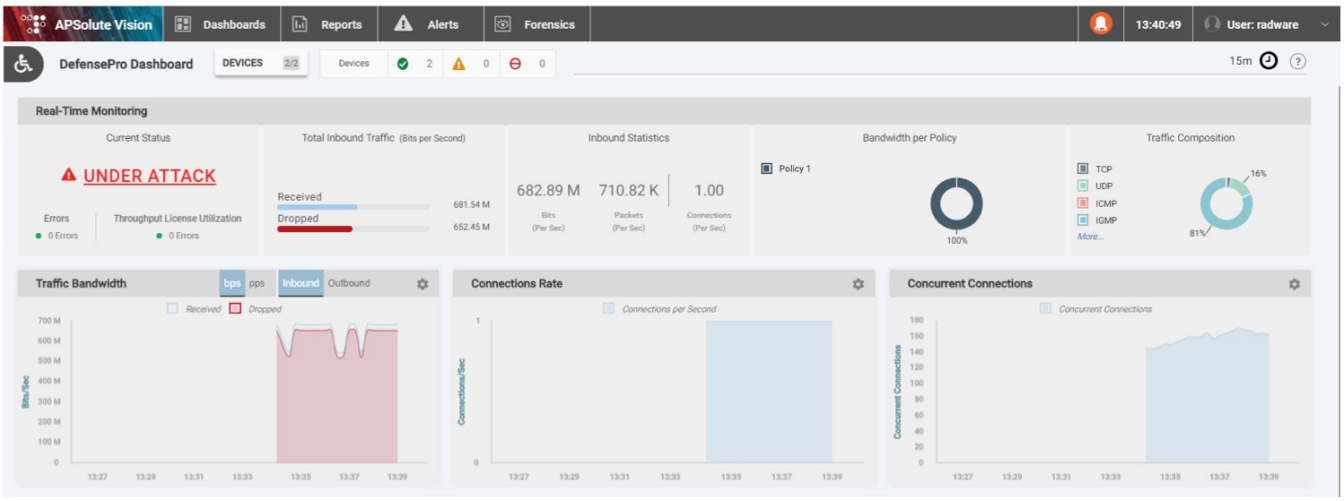


**Figure 1:** A centralized dashboard to display threats in real time with the ability to drill down for increased visibility into specific attack data and characteristics

## Ongoing Threat Intelligence and Security Expert Support

**Security Update Subscription** — ongoing provisioning of attack signatures for known attack types, based on Radware's security research team.

**Emergency Response Team (ERT) Active Attackers Feed** — automated updates to enable blocking of attack sources actively involved in DDoS attacks.

**Location-Based Mitigation (GeoIP)** — network traffic filtering of countries and regions based on the geolocation mapping of IP subnets.

**ERT Service and Device Management** — Offering 24x7 direct access to security experts for support and assistance against persistent attacks as well as on-premise device management and configuration.