



Solution Overview

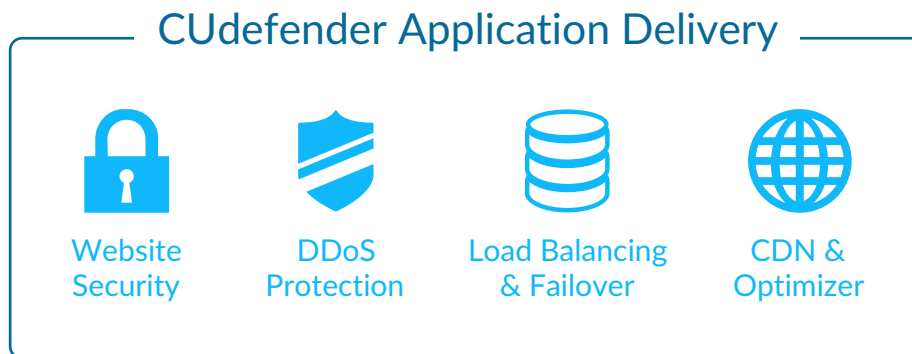
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Application Delivery from the Cloud

Whether you're a single community branch or national multi-billion dollar institution, the number of security related items you've got to worry about is overwhelming. The cost and complexity of the different systems and appliances you need to manage and integrate continues to skyrocket. At the same time, you need powerful tools to make sure your website is always available and secure while delivering an optimal user experience.

CUdefender offers credit unions the right selection of website security and performance services to meet their needs.

Whether you need a Web Application Firewall or DDoS Protection, CDN or Failover solutions, CUdefender has you covered. Our inclusive, fully integrated Application Delivery solution allows credit unions to simplify their IT operations and reduce costs by consolidating multiple services and appliances into a single enterprise-grade cloud service.

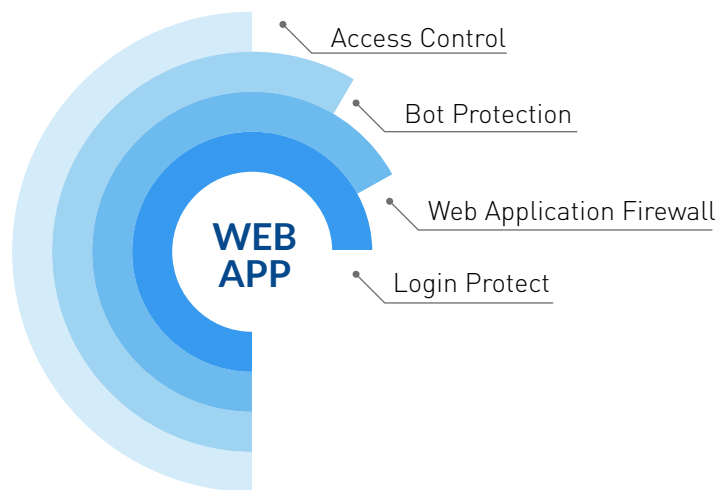


CUdefender offers a cloud-based solution that enables credit unions of all sizes to enjoy enterprise-grade website security, performance, and availability. Through an application-aware global CDN platform powered by best-in-class technology, CUdefender provides any website or web application with best-in-class security, DDoS Protection, Load Balancing and Failover solutions, which are available as standalone services or as an integrated solution. CUdefender is activated by a simple DNS change - no hardware/software installations, code changes, or complex integrations are needed.

Website Security

Enterprise-Grade Security from the Cloud

Unmatched web application security experience, enhanced by real-time big data analytics, allows CUdefender to provide affordable and best-in-class security to all credit unions. Our website security solution redefines and extends the Web Application Firewall (WAF) beyond traditional concepts. An advanced client classification engine analyzes all incoming traffic to your site, preventing access to malicious and unwanted visitors.



Enterprise Grade Web Application Firewall (WAF)

CUdefender's enterprise-grade, PCI-Certified WAF technology ensures that your credit union website or application is always protected. This industry leading WAF technology allows CUdefender to defend against all Application Layer attacks. Easily apply your credit union's security policy by setting custom security rules.

Advanced Bot Protection

Using advanced client classification technology, crowdsourcing, and reputation-based techniques, CUdefender distinguishes between "good" and "bad" bot traffic. This lets you block scrapers, scanners, and comment spammers that overload your servers and steal your content, while allowing search engines and other legitimate services to freely access your website.

Login Protect

Implement two-factor authentication on any website or application without integration, coding, or software changes. Single-click activation lets you protect administrative access, secure remote access to corporate web applications, restrict access to particular webpages, and centrally manage multiple logins across several websites.

Granular Website Access Control

Take full control over who and what can access your site. Granular filters and controls prevent access from unwanted visitors (e.g., countries, specific bots, URLs, IPs), while enabling uninterrupted access to legitimate visitors (customers, leading search engines, etc.). IP Address Shielding hides your web server's IP address.

CDN & Optimizer

Application-Aware CDN & Content Caching

CUdefender's Content Delivery Network (CDN) is a globally distributed network of data centers that deliver Full Site Acceleration through intelligent caching and content optimization tools. CUdefender's application-aware CDN profiles website resources to enable the caching of dynamic content. In this way, our CDN identifies all cacheable content (dynamic and static), including content that other CDNs consider to be uncacheable. Moreover, dynamic profiling and frequency analysis ensures that the most frequently accessed resources are detected and served directly from memory. This allows the CDN to bypass the file system without having to rely on generic mechanisms, such as buffer-cache.



Intelligent Content Caching

CUdefender uses application-aware traffic analysis technologies to analyze real traffic trends and dynamically profile website resources and usage patterns. This analysis determines what content can be cached and reused, while making sure that users always receive fresh and accurate content.

Content and Transport Optimization

CUdefender goes beyond content caching to optimize the user experience when browsing your website or using your application. CUdefender uses a variety of content and transport optimization techniques to accelerate page rendering and minimize latency. These techniques include:

- Content minification
- File compression
- Image compression and compaction
- Session optimization
- TCP optimization and connection pre-pooling

DDoS Protection

Automated Mitigation of the Largest & Smartest DDoS Attacks

Comprehensive Protection Against Any Type of DDoS Attack

Using a high-capacity network of globally distributed servers, CUdefender protects you against all types of DDoS threats, including network-based attacks (Layers 3 & 4 such as SYN or UDP floods) and application-level attacks (Layer 7 such as GET floods), that attempt to overwhelm server resources. The service detects and mitigates advanced attacks that exploit application, web server, and DNS server vulnerabilities, hit-and-run attacks, and large botnet threats.

Transparent Mitigation

CUdefender offers transparent mitigation with less than 0.01% false positives and without degrading the normal user experience in any way. This lets you enjoy true DDoS protection, even from lengthy attacks, without disrupting business performance.

Automatic Detection and Immediate Triggering

CUdefender offers automatic "always on" DDoS mitigation, well-equipped to handle hit-and-run attacks consisting of short bursts of traffic in random intervals over a long period of time.

Advanced Mitigation of Layer Attacks

CUdefender's visitor identification technology differentiates legitimate website visitors (humans, search engines, etc.) from automated or malicious clients. CUdefender distinguishes between humans and bots ("good" and "bad") and can identify AJAX and API based traffic.

DNS DDoS Protection

CUdefender protects against DNS targeted attacks by redirecting all DNS queries for your domains to the CUdefender cloud for inspection and cleansing so only safe queries reach your origin DNS server. In addition, this feature blocks attempts to use your DNS server as a platform for DNS amplification attacks against other servers.

BGP Routing

To protect critical infrastructure (e.g., web, email, FTP servers) across an entire subnet of IP addresses, CUdefender offers on-demand DDoS protection based on BGP routing. When under attack, traffic is re-routed through traffic scrubbing centers using BGP announcements. Following inspection, legitimate traffic is securely forwarded to the enterprise network via GRE tunneling.

World-Class Support by Credit Union DDoS and Security Experts

CUdefender's experienced team of credit union security specialists and engineers perform continuous monitoring and DDoS mitigation. Our service includes proactive security event management and response, continuous real-time monitoring, adept policy tuning, summary attack reports, and 24x7 technical support.

"With CUdefender, you'll no longer have major worry about DDoS threats. The cloud-based DDoS Protection is so easy..."

Director of Risk and Compliance

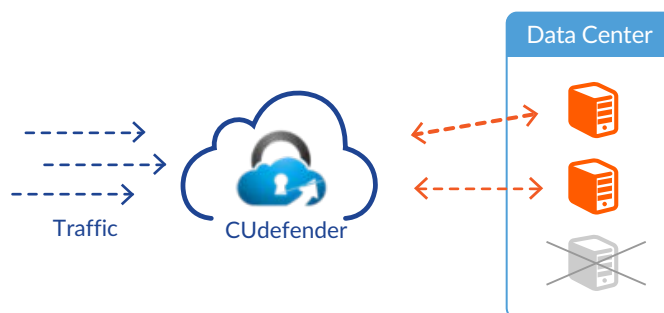
Load Balancing & Failover

Traffic Distribution & High Availability from the Cloud

CUdefender's Load Balancing and Failover service enables credit unions to replace their costly appliances with an enterprise-grade cloud-based solution. Based on a global CDN, this service offers the built-in flexibility to support a single data center with multiple servers, data center failover scenarios, and Global Server Load Balancing (GSLB). Real-time health monitoring and notifications ensure that traffic is always routed to a viable web server.

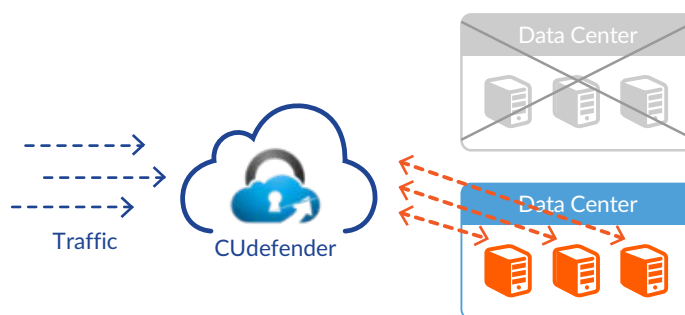
Intelligent Layer 7 Load Balancing

Through real-time monitoring of actual HTTP requests to each server, CUdefender's Layer 7 load balancing intelligently distributes the load among servers using sophisticated algorithms. By understanding the real flow of traffic to each server, CUdefender guarantees optimal resource utilization. Unlike DNS-based load balancing, which is TTL-dependent, CUdefender's routing changes are immediate and across-the-board for all users.



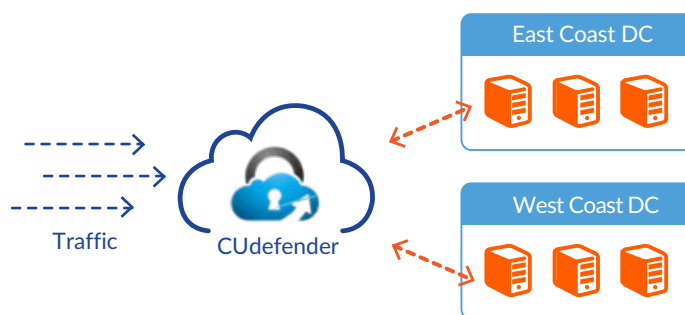
Data Center Failover (Disaster Recovery)

CUdefender's service supports automatic failover between active and standby sites to accelerate disaster recovery in the event of an outage. As soon as CUdefender detects that the active site has gone down, it automatically kick-starts the standby data center.



Global Server Load Balancing (GSLB)

Global Server Load Balancing for credit unions operating multiple data centers ensures high availability and consistent performance of applications and websites, as well as compliance with regulatory issues. CUdefender's GSLB can route traffic to a specific data center using either Best Connection Time or Geo-Targeting methods and based on a user's geographical location.



Real-Time Monitoring & Alerts

Real-time health and performance checks of server activity are used to detect outages and eliminate downtime. Credit Unions can fine-tune the system to receive email alerts for virtually any possible failover scenario. Real-time dashboards let you verify that your traffic is balanced correctly between the different servers and proactively handle potential issues on the fly, before they have an impact on your credit union members.

CUdefender Services

Our credit union security experts understand credit union websites and web applications, and work closely with IT teams to address their specific integration and customization requirements. Backed by an enterprise-grade uptime Service-Level-Agreement (SLA) and premium support, CUdefender's end-to-end application delivery service maximizes the security and performance of each application. At the same time, it enables credit unions to simplify IT operations and reduce costs by consolidating multiple appliances and services into a single cloud-based solution.

Key features of CUdefender's offering include:

- **Enterprise-Grade SLA**
When it comes to service availability, there are no compromises. Backed by our uptime and support SLA, CUdefender's enterprise-grade website security and performance services are engineered to always be available.
- **Premium 24x7 Support**
Our credit union support engineers and security experts are available around-the-clock to give you the support you need, when you need it.
- **Enterprise-Grade Security**
Featuring a PCI-certified Web Application Firewall and comprehensive protection against DDoS attacks, CUdefender secures your credit union website or application from external attacks, maximizes uptime, and maintains business continuity.
- **API for Provisioning, Management, and Events**
CUdefender's API enables easy integration with streamlined user provisioning and account management. Export security events to your log management and SIEM systems and create customized reports for your review.
- **Customized Setup**
Our customization options allow you to easily customize solution settings and rules to meet your credit union's specific needs.
- **Dedicated Account Management**
CUdefender's dedicated credit union security experts will work with you on setup, integration, and customization requirements to ensure your credit union's security and operational goals are met.

Company Highlights



We protect Credit Unions from Cyber Threats.

CUdefender exists to protect credit unions from cyber threats. We have created the only 100% credit union focused and cloud-based security service delivering complete DDoS Protection, Web and Application Security, Social Risk Management, Penetration Testing, and more.

Whether you're a single community branch or national multi-billion dollar institution, we have the tools you need to maximize your security, meet NCUA and FFIEC guidelines, and remain protected from cyber threats.

CUdefender at a Glance

- Headquartered in Chicago, IL
- Best-in-class PCI certified technology stack

Our mission is simple:

We protect Credit Unions from cyber threats.

Our Customers

We proudly serve any credit union seeking affordable, best-in-class, security solutions.