

How Healthcare Organizations Can Defend their Online Assets

- Safe, effortless digital connections and secure data and applications are essential requirements in healthcare.
- There's no place for web application or bot attacks that exploit vulnerabilities to compromise patient and other data. Or DDoS attacks that block availability or extort ransoms. Or DNS attacks that threaten connections and assets. Or slowdowns in access and page loads.
- But with an expanding network and the most valuable data on the dark web, how do you protect it all?

Protect web apps anywhere



Web applications were the number one vector for data disclosure in the healthcare sector in 2021¹

Detect and manage bots



Healthcare is second among all industries for moderate or advanced bad bot traffic²

Mitigate any DDoS attack



31% increase in DDoS attack volume targeting healthcare in Q1 2021³

Strengthen DNS security



53% of healthcare orgs had DNS attack downtime in 2021; avg. cost \$862K⁴

Ensure great performance, reliable access



1 in 4 visitors leave a site that loads in 4+ seconds⁵

¹ [Web Application Attacks in Healthcare, July 21, 2022, HHS](#)

² [Sophistication Level of Bad Bots Worldwide in 2021, by Industry](#)

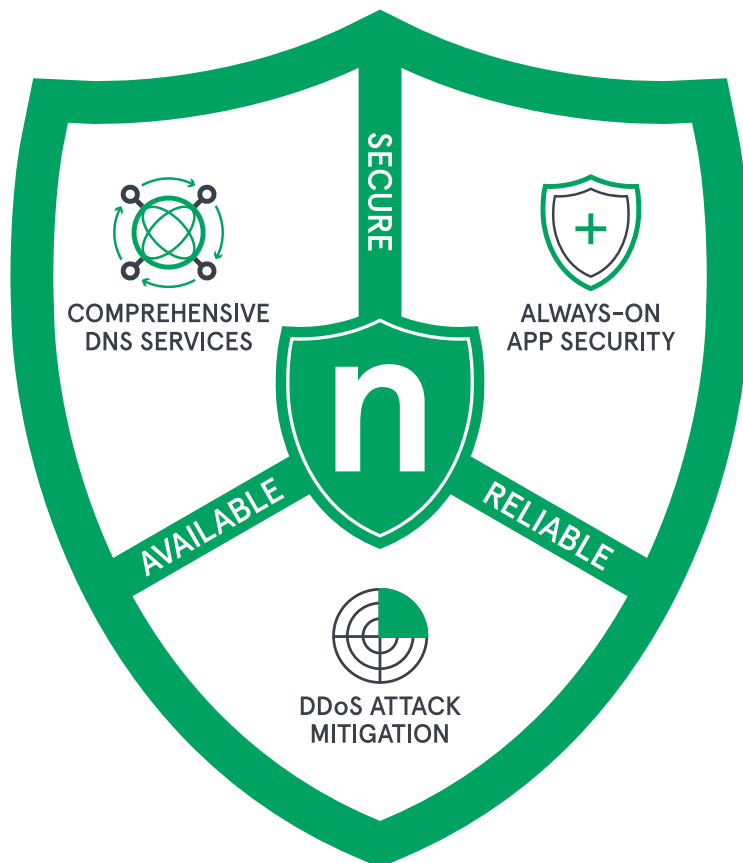
³ [Cyber Attacks on Enterprise Healthcare Organizations Focusing on Operations](#)

⁴ [Healthcare Suffering from DNS Attacks More than Other Industries](#)

⁵ [Website Load Time Statistics: Why Speed Matters in 2022](#)



Protect Your Digital Assets and Ensure Reliable, High-Performance Access with Neustar Security Solutions



- Integrated application and network security protecting your environment.
- Web application firewall that protects apps anywhere from multiple threats.
- General bot detection and management.
- Proven DDoS protection for healthcare portals and applications against attacks of any size, length, or complexity.
- Fast, secure, reliable DNS services.
- Managed authoritative DNS service for accurate, safe connections.
- Flexible, expert professional services.
- Service implementation and policy tuning to simplify deployment.
- Security advisory services to evaluate and improve defenses.
- Website monitoring and load testing to optimize performance.
- 24/7 Security Operations Center and expert assistance always on call.
- Technical account management services to support client success and maximize operational benefits.



APPLICATION AND NETWORK SECURITY

Defend Web Applications and Stop Bad Bots



50% of all web applications were vulnerable to attacks in 2021⁶

Web applications are critical for everything from telemedicine to inventory management to patient records. But vulnerabilities have made them a preferred vector and target for attacks that can cripple critical functions and result in serious data theft.

Bot attacks are at an all-time high, targeting apps, data, and user credentials, and attempting account takeovers.

You need to be protected against these threats, around the clock, in data centers and the cloud.

Neustar Security Services has you covered with an always-on, cloud-based Web Application Firewall (WAF) and bot management solution.

- **Flexible, proven security** with built-in configurations for OWASP and zero-day threat protection and customizable negative and positive security options.
- **Adaptable, intelligent defense** that learns from your traffic patterns to improve threat detection.
- **Sophisticated bot detection** utilizing multiple techniques to detect and classify bot traffic and apply a range of countermeasures.
- **Vendor and location agnostic** for reliable protection of all assets, wherever they are hosted.

ULTRAWAF

Get comprehensive cloud-based protection for all web applications, regardless of location, through an easy to deploy solution with consistent rule management and unparalleled visibility into application traffic.

Defend against all threats targeting the application layer with our [always-on, cloud-based Web Application Firewall](#).

ULTRABOT PROTECT

UltraWAF includes dynamic bot protection that detects when a bot is accessing your applications, determines if the traffic is good and expected or malicious, and alerts you or blocks malicious bots before they impact your applications.

Counter the threats of malicious bots without impeding legitimate bots with our [proven bot management solution](#).

⁶ NTT Application Security Report, 2022



APPLICATION AND NETWORK SECURITY

Ensure Access and Prevent Threats from DDoS Attacks

DDoS (Distributed Denial of Service) attacks block access to online assets. Cybercrooks use them to shut down your online presence, extort ransom payments, disrupt connections to your partner providers, or distract from other attacks and threats. They damage your reputation and cost you money and productivity.

DDoS attacks are not new. But today they are more frequent, more sophisticated, more intense, larger, and more varied than ever before. You need an effective real-time defense that can handle whatever an attacker throws at you.

- **Protects against even massive attacks** with 15+ Tbps of globally distributed scrubbing capacity using multiple Tier 1 network providers.
- **Instantaneous response and defense in depth** thanks to sophisticated automation driving an advanced orchestration platform with best-in-class appliances.
- **Expert 24/7 support** from senior DDoS security professionals in our Security Operations Center.
- **Flexible protection options** include always-on cloud-based defense as well as on-demand and hybrid cloud-plus-on-premise solutions.



Over 3x increase
in number of attacks
in 2021

Our SOC managed over 80,000 attacks in 2021

ULTRADDOS PROTECT

Defend all assets wherever they are deployed and ensure their availability with cloud-based DDoS protection including always-on, on-demand and hybrid options to meet your needs.

Protect cloud-based applications and any type of infrastructure asset including VPN, proxies, email, VoIP, servers, routers, switches, firewalls, and other vulnerable systems.

Leverage a world-class mitigation platform and 24/7 expertise with our [proven DDoS protection solution](#).



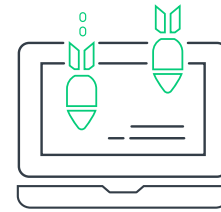
DNS SERVICES

Improve & Ensure Online Access and Protect Assets

Your users expect – demand, really – immediate access to safe, secure, responsive online experiences. Fast, reliable DNS service is the foundation of all of them. But DNS is both a target and vector for cybercrooks, and healthcare has the highest rate of compromised sites.⁷ With increasingly complex networks in constant change, it’s far more difficult to manage and defend DNS.

Neustar Security Solutions offers DNS services that include the option of a fully redundant anycast network to ensure the integrity and availability of your DNS data while protecting your customers, users, and network.

- **Fast reliable query responses** through a high-performance, fault-tolerant infrastructure, deployed across 30 locations worldwide for lightning-fast response regardless of location.
- **Outstanding security protections** including robust, easy-to-manage DNSSEC and DDoS protection for reliable authoritative DNS availability.
- **Advanced traffic management** including load balancing, geographic routing and monitored failover service.
- **Easy-to-use administrative tools** with granular access management and real-time notification of DNS changes to improve security and accuracy and prevent errors.
- **Service level network redundancy with UltraDNS²**, a revolutionary dual primary authoritative DNS network managed by Neustar Security Services that provides the geographic, network level, transit, and operational redundancy necessary to meet your business continuity goals while providing a single pain of glass solution that supports all advanced features across the redundant networks.



DNS attacks hit 72% of companies⁸

61% suffered multiple attacks in the 12 months ending Q4 2021

ULTRADNS

Ensure fast, safe, reliable access to your digital resources for customers and users anywhere in the world with our enterprise-grade, cloud-based authoritative DNS service.

Get security and reliability you can count on – and 24/7 support – with the [original enterprise DNS service](#).

ULTRADNS²

UltraDNS² provides greater certainty in business continuity with a separate 18-node global network added to the original UltraDNS network, sharing a common set of advanced features.

Ensure business continuity with the highest degree of network, provider, and operational redundancy with [UltraDNS²](#).

⁷ Healthcare Suffering from DNS Attacks More than Other Industries

⁸ 72% of Organizations Hit by DNS Attacks in the Past Year, HelpNetSecurity



PROFESSIONAL SERVICES AND WEBSITE PERFORMANCE SOLUTIONS

Improve Network Security and Web Performance

Staff and users don't have much patience with delays, and none at all when sensitive data is lost or threatened.

But ensuring your security practices are optimized to reduce risks and improve performance – and your website tuned to minimize delays – is an enormous challenge with a large, complex infrastructure in a constant state of change while supporting secure interactions. It's not like you have staff members sitting around with nothing to do.

Fortunately, you can leverage the expert professional security services and turnkey website performance management solutions from Neustar Security Services.

- **Strengthened, improved network security** through security and vulnerability assessments, risk mitigation evaluations, DNS configuration audits, and more.
- **Improved global website performance** from detailed, granular performance insights based on privacy-compliant user data and synthetic monitoring data.
- **Unmatched expertise whenever you need it**, sharing insights and best practices to improve staff expertise while freeing internal teams for essential work.
- **A partner you can trust** with seasoned, experienced professionals focused on your success using certified tools and processes.



46% of users don't revisit poorly performing sites⁹

And a 1 second delay reduces customer satisfaction by 16%

PROFESSIONAL SERVICES

Assess and strengthen your security posture, identify and prioritize vulnerabilities, and benchmark performance whenever you need to with [expert security advisory services](#).

PERFORMANCE MONITORING

Find and fix the widest range of website performance issues with 24/7 monitoring around the globe, both inside and outside the firewall, with [website performance solutions](#).

WEB LOAD TESTING

Launch new sites and applications with confidence by load testing for bandwidth limitations, error rates, server CPU limitations, and more with [proactive load testing](#).

⁹ Website Load Time Statistics: Why Speed Matters in 2022



WHY NEUSTAR SECURITY SERVICES?

Security: Day in and day out, our solutions have proven themselves against some of the largest and most complex threats and attacks on record.

Availability and reliability: Our global platforms are highly redundant and significantly overprovisioned to ensure reliable resolution of queries and protection against unforeseen events.

Ability to scale: Our global infrastructure is provisioned for 10x volume over current steady-state levels, with a highly adaptable edge node design; our solutions scale effortlessly.

Experience: Our security experts draw on more than 20 years of corporate experience, and are committed to staying ahead of the curve.





About Neustar Security Services

The world's top brands depend on Neustar Security Services to safeguard their digital infrastructure and online presence. Neustar Security Services offers a suite of cloud-delivered services that are always secure, reliable, and available and enable global businesses to thrive online. The company's Ultra Secure suite of solutions protects organizations' networks and applications against risks and downtime, ensuring that businesses and their customers enjoy exceptional [and uninterrupted] interactions all day, every day. Delivering the industry's best performance and always-on service, Neustar Security Services' mission-critical security portfolio provides best-in-class DNS, application and network security including DDoS, WAF and Bot management to its global 5000 customers and beyond.

Find more information at:

neustarsecurityservices.com



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