redwolf®

Enterprise DDoS Testing & Simulation

COMPREHENSIVE DNS OFFERINGS FOR 2017

RedWolf DNS Offerings

For Public Release

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RedWolf Security DNS Offerings

For Public Release
February 2017

New Features. No Extra Cost.

RedWolf is proud to announce a number of new capabilities with a DNS-centric view. The new feature set is available directly from RedWolf or our consulting partners and, best of all, is offered at *no additional cost* to all RedWolf customers with active licenses.

Summary:

- ***Monitoring: Peace-time*** **and** ***test-time integrated DNS, Web, Route, BGP/ASN***
- ***Test scenarios: Baseline testing, DDoS, all known DNS attack vectors, latest IoT/Mirai attacks***
- ***New Data Visualizations: User-customizable view designer***

Overview of the Solution

Enhanced Monitoring: Many organizations are using RedWolf's monitoring in peace-time when they're not doing load/stress/DDoS tests. Realizing this, RedWolf sought to build a feature that would provide best-in-class, 360-degree visibility of global DNS health by allowing the highest-resolution monitoring of web and DNS availability, service-latency, route performance, CDN and BGP/ASN monitoring from a single solution.

Enhanced DNS Testing: This capability is coupled with updated and enhanced DNS attack vectors covering everything from load-testing to DDoS, and includes the latest IoT/Mirai DDoS attacks as well as RedWolf Enhanced Mirai+ attacks. RedWolf's DNS testing capability is the strongest in the industry, offering IPV4, IPV6, IPSEC, DNS reflection, and numerous fuzzing/randomization/DDoS attacks that can be easily "dragged-and-dropped" from a library of hundreds of vectors. The systems can be used to generate safe tests at levels that would not impact production—all the way to massive 100,000,000 packets-per-second+ tests. Never has such an integrated monitoring/testing system been made available to easily harden systems and verify performance.

Enhanced Visualization: RedWolf now offers a user-customizable drag-and-drop dashboard visualization system that allows for purpose-built “single-pane-of-glass” views. The RedWolf visualization widgets are extensive and take advantage of the RedWolf data-cloud, which is capable of absorbing millions of time-series and by-the-second log events. Customers can also use the RedWolf APIs to feed in arbitrary metrics, logs and binary objects, and visualize them.

Enhanced Managed Services Offering: RedWolf can make it easy to evaluate all your DNS providers and defense systems. RedWolf offers a full DNS Baseline Rundown program that identifies numerous vulnerabilities in your DNS architecture. This full-stack service can test third-party (cloud) and local DNS architectures. The testing includes checking primary and secondary DNS server architecture, security, scalability and attack defensibility. Since DNS servers don’t stand alone, RedWolf will also examine how firewalls, load-balancers and anti-DDoS systems perform to ensure DNS server availability.

Enhance your security with DNS solutions from RedWolf

REDWOLF 2017 DNS-CENTRIC CAPABILITIES

Availability	**Globally monitor your DNS availability** › **During peace-time *and* test-time:** Use RedWolf's monitoring 24/7, even when you're not doing DNS testing › **Spot problems instantly:** RedWolf's intelligent probes auto-diagnose many types of DNS problems › **High-resolution monitoring:** RedWolf sees problems missed by other monitors, which check infrequently › **Global visibility:** Test globally from more than 100 data centers › **Local visibility:** Local agentless VMs and agents available › **Architecture independent:** Anycast, Unicast, GLB architectures › **CDN-aware:** Testing can target edge servers in local markets
Reliability	**Continuously verify DNS functionality** › **DNS changes:** Measure DNS change propagation speed globally, which is great for "failover" testing › **BGP monitoring:** Alert on all BGP advertisements that could affect DNS › **Route monitoring:** Verify route between monitors and DNS servers, changes in which can affect availability and performance › **Blacklist checking:** Scan RBL, CBL, Cobion, PSBL, and others › **Open resolver check:** Confirm your DNS against popular open resolvers (Google, Yandex, OpenDNS, Dyn, OpenNIC, Verisign, FreeNom)
Performance	**Load test to confirm system capability and stability** › **Baseline throughput:** Safe, controlled load/stress testing lets you know exactly how systems perform before any service degradation is seen › **Identify bottlenecks:** Firewall state tables, logging IO bottlenecks, and more › **Small to titanic:** Testing from 1 to 100,000,000+ queries per second

Security	Attack (DDoS and others) simulations and vulnerability scans › **Vulnerabilities:** Full DNS security scan identifies potential vulnerabilities › **AI-Probes:** Automatically detect DDoS countermeasures with intelligent probes › **Protocols/Options:** RedWolf supports UDP, TCP, IPV4, IPV6, DNSSEC, EDNS0 extensions › **Attack vectors:** Positive/negative queries with any DNS options, including randomized attacks, DNS reflection, bad protocol, IoT DDoS (Mirai and others) › **Test:** DNS servers, firewalls, IPS, anti-DDoS, load balancers and cloud defense
Scalability	Growth planning and flash crowd verification › **Local and cloud:** Local DNS and cloud DNS performance characterization › **Legitimate STORM simulation:** RedWolf can simulate 100% legitimate internet storms—surges that far exceed day-to-day averages, including web traffic › **SDN testing:** Test load-based auto-scaling
Third Party DNS Vendors (cloud and appliance)	Testing all top managed DNS providers and vendors › Akamai › Amazon Route53 › Arbor Networks › Bluecat › CDN Networks › Citrix › CloudFlare › DNSBox › DNSPod › DYN › easyDNS › EdgeCast › F5 Networks › Google Cloud DNS › Incapsula › Infoblox › Juniper › NSFocs › Microsoft Azure DNS › TCP Wave › UltraDNS › RadWare › Verisign Managed DNS › Windows DNS Server

About RedWolf

RedWolf is an advanced security simulation platform. It gives you the ability to test all your security defense system against realistic attacks.

Visit our website at www.redwolfsecurity.com and start improving your security capability.

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