



VERISIGN

## DDoS ATTACKS THREATEN EVERY ENTERPRISE

### HIGH-VOLUME ATTACKS CAN OVERWHELM EVEN THE MOST SOPHISTICATED ON-PREMISE DEFENSES; CLOUD MITIGATION SERVICES OFFER INCREASED PROTECTIONS.

When anti-spam services provider Spamhaus was hit with an unprecedented high-volume distributed denial-of-service (DDoS) attack in March 2013, it was a clear illustration that cyber assaults are now capable of overwhelming even the most robust on-premise defenses.

In a recent IDG Research Services survey, conducted in conjunction with Verisign, only half of the respondents indicate they are highly confident in their ability to detect DDoS attacks; and even fewer are highly confident in their ability to successfully remediate such an attack. But those who have experienced such assaults may argue that confidence levels are higher than they should be. In fact, half say it took longer than expected to remediate attacks. Add to that the fact that attacks are becoming more sophisticated. For example, DDoS perpetrators can up the ante with Domain Name System (DNS) amplification attacks in which the bots are instructed to send a DNS query and a forged source address to a perfectly legitimate server, resulting in a larger response being sent back to the actual owner of that forged address. Attacks using thousands of name servers can direct gigabits of data per second against the target, while the actual bot used to initiate the assault is invisible to the victim. What's worse, publicly available DDoS tools and information-sharing sites make it easy for attackers to learn from each successive wave of assaults in order to combat defenses.

#### TURNING TO THE CLOUD FOR DEFENSE

With attackers able to marshal ever-greater resources, enterprises are increasingly vulnerable if they go it alone in building DDoS defenses. Almost half of the organizations polled are using on-premise solutions such as fire-walls and intrusion prevention to thwart DDoS attacks.

But even the most sophisticated, specialized on-premise appliances are no match for the scope of today's volumetric attacks. They are also costly to buy and operate, requiring constant attention to keep them current. What's more, attackers may be able to monitor a target's defensive moves and change the attack strategy midcourse to counter mitigation strategies, making defense all the more challenging.

Cloud-based services, though, provide advantages to keep enterprises up and running in the face of high volume assaults. Cloud mitigation service providers have built out massive amounts of network bandwidth and DDoS mitigation capacity at multiple sites around the Internet. They can work seamlessly with customers that are multi-homed with multiple ISPs and scrub data in the cloud closest to the attack before sending "clean" traffic back to the enterprise's data center.

Additionally, staffed round the clock with security specialists dedicated to the task of staying abreast of the latest security threats and assault tactics, cloud mitigation service providers can invest in numerous types of DDoS mitigation hardware and develop multiple layers of filtering that are beyond the scope of most enterprises.

In the IDG Research Services survey, 76 percent of respondents are using, considering, or may consider, adopting a cloud-based approach.

Bottom line: Effective protection against today's sophisticated assaults and potentially more sophisticated attacks of the future calls for a cloud defense that bolsters enterprise security with an always-on service.

For a copy of the full research report, go to URL: [https://www.verisigninc.com/en\\_US/forms/wpddosattacksclouddefenses.xhtml](https://www.verisigninc.com/en_US/forms/wpddosattacksclouddefenses.xhtml)

#### ABOUT VERISIGN

As the global leader in domain names, Verisign powers the invisible navigation that takes people to where they want to go on the Internet. For more than 15 years, Verisign has operated the infrastructure for a portfolio of top-level domains that today include .com, .net, .tv, .edu, .gov, .jobs, .name and .cc, as well as two of the world's 13 Internet root servers. Verisign's product suite also includes Distributed Denial of Service (DDoS) Protection Services, iDefense® Security Intelligence Services and Managed DNS Services. To learn more about what it means to be Powered by Verisign, please visit [VerisignInc.com](http://VerisignInc.com).

