

# ADDRESSING NETWORK SECURITY IN AN ERA OF CYBER INSECURITY

The ever-increasing sophistication and scope of network attacks mean that more and better tools are needed to combat them. NTT Communications believes it provides both the services and the network scale to help customers out

Global carriers have every reason to be excited about the future, with the growth of software-defined networking (SDN) and virtualisation, the cloud and big data, as well as the promise of services such as 5G and the Internet of Things (IoT). All these developments open up new prospects with multiple possibilities.

However, at the same time, these fresh business areas are creating new avenues for cybersecurity breaches, shown by large-scale distributed denial of service (DDoS) attacks such as those that hit the Rio Olympics in August 2016 or hundreds of thousands of IoT devices towards the end of last year. As well as seriously affecting end users, these types of incident can result in big revenue losses and damaged assets.

Carriers and other players in the industry cannot therefore afford to just forge ahead with new services without pausing to address the security side of things. And NTT Communications (NTT Com) for one believes that this is among the most critical factors that the industry needs to deal with.

“Network security is one of the top priorities for the wholesale IP industry and certainly for our company,” says Michael Wheeler, executive vice president of the Global IP Network business unit at NTT Com. “The challenge is that it’s such a broad, far-reaching area, covering everything from identity theft to large-scale denial of service attacks.”

Although network threats are an ongoing and ever-evolving issue that cannot be eradicated altogether, NTT Com has a number of approaches that it believes can provide effective mitigation against them – and seeks to be proactive by stopping threats before they happen, rather than just reacting to breaches that have already occurred.

One of its key offerings is its Distributed Denial of Service Protection Services (DPS) product suite, which the company recently expanded to give customers more flexibility in choosing and customising the type of mitigation support that best fits their cyber defence strategy, rather than just having a single option.

The DPS Control option offers an entry-level version of the service for customers that do not require full mitigation assistance, while the DPS Core option provides an advanced tier of service for those that want complete support against DDoS attacks.

## BROAD APPROACH

But this is just one tool that NTT Com offers, with the company looking to give customers as many as possible to defend themselves and secure their networks. The company, for instance, provides blackholing capabilities, as well as a complete suite of proactive solutions designed to support multi-threat security environments on a single platform.

“DPS is just one of the pieces of the puzzle,” says Wheeler. “We believe that security is an area where our customers have to leverage multiple types of defence. There’s no one thing that we throw at attacks: it’s a combination of things, depending on what type of attack it is, what type of traffic is being sent, and how it’s being sent.”

And NTT Com’s services themselves form just one part of the company’s approach. One aspect that helps bolster this is the sheer breadth of its network, enabling it good access to network data that it can analyse and use for countermeasures such as redirecting and scrubbing out bad traffic.

“The first line of defence against attacks is scale and scope,” says Wheeler.

Backing this up is a dedicated network security team with an average tenure of 10-plus years, providing significant expertise to combat attacks.

On top of this, NTT Com acts as a provider for several of the larger DDoS mitigation companies and works with them as they grow, as well as playing a proactive part in several industry groups. Overall, the company seeks to collaborate closely with other industry players to make sure that networks have the best possible chance of eradicating attacks. “As an industry, our number-one goal is making sure that we address these threats proactively,” says Wheeler.

This approach to security gives NTT Com various layers of defence against attacks and potential breaches. “We try to play a number of different roles with regard to enabling network security, providing our own solutions and product offerings, as well as being a participant in that community to make sure that we’re learning, but also sharing,” concludes Wheeler. ■

