Case Study -- Nationwide Processing

Don't Get Hammered by Hackers:
Beating Toll Fraud, Hacker Attacks with an E-SBC

"We were getting hammered by hackers," said Nationwide Processing's President, who turned to eTechHelp and Ingate® Systems to secure their SIP trunking service and their network from ongoing toll fraud and hacker attacks.

Nationwide Processing provides outsourced mortgage production services to the lending industry.

Initially connected directly to the Internet, Nationwide Processing's IP PBX continuously registered brute force registrations, toll fraud, Denial of Service (DoS) and SIPVicious attacks. These assaults flooded the PBX with thousands of requests per second, freezing the PBX and blocking all calls to and from their 60 at-home agents.

Working with eTechHelp they installed Ingate SIParator® Enterprise Session Border Controllers (E-SBCs) at the data center. This placed the PBX behind the Ingate E-SBC, which blocked all attacks.

The Ingate SIParators also enabled remote NAT/firewall traversal (Far-End Network Address Translation) making it possible for Nationwide Processing's agents to access SIP trunking services through the IP PBX, located in a Tier III data center.

Although this IP PBX had a second IP interface that could be connected to a public IP address, it was not hardened for such usage. Ingate provided both IP-level and SIP-level security mechanisms.

The Ingate SIParator is a powerful and cost-effective E-SBC for SIP connectivity, security and interoperability, such as connecting PBXs and UC solutions to SIP trunking service providers.

Ingate E-SBCs offer enhanced security with:

- TLS (Transport Layer Security) for secure SIP signaling

- SRTP (Secure Real-time Transport Protocol) for encrypted voice and video

- Authentication and replay protection to shield users from eavesdroppers, hackers and spoofers and protect against theft of service

- SIP IDS/IPS (Intrusion Detection System/Intrusion Prevention System), which works in tandem with Ingate's other security technologies to further strengthen security for VoIP, SIP trunking, UC and other SIP applications

Ingate products protect customers from the evolving array of security attacks. Ingate E-SBCs were not affected by the "Bash Bug" or Shellshock security issue. They were also not vulnerable to Heartbleed.

"Ingate eliminated the entire problem. We are now clean and running issue-free," said Guru Amrit Khalsa, President, Nationwide Processing. "eTechHelp has been the technical lead for the design, implementation and maintenance of our in-house, multinational VoIP phone system. They can handle whatever comes up."

> People have asked me, 'Do I really need an SBC? I think of it like American Express — don't leave home without out it.
>
> –Rich Garboski, President of eTechHelp