Energy Company Achieved 99.99 Percent Network Availability with Hillstone’s Solution

The Customer

The customer is an Energy Company that holds a monopoly on electricity transmission and distribution in LATAM. It operates the national transmission grid, composed of 27,000 miles of high voltage lines, 28,000 miles of medium voltage lines, and 370,000 miles of low voltage distribution lines. The customer manages and is responsible for the following:

- Planning of the national electricity system
- Inclusion of smart electricity network elements
- Expansion and modernization proposals of the national transmission network
- General distribution networks in the wholesale market
- Incorporation of strategic electricity infrastructure projects needed to fulfill national energy policy.

The customer has a major foothold with respect to IT assets on a multi-site environment on a nationwide level, using a rich telecom carrier transport, including administrative and Industrial Control System (ICS) traffic.

The Challenge

With business operations spanning the entire country, the customer relies on a national network to connect employees 24/7/365—whether they’re at a desktop in one of the company’s 20 branch offices or connecting remotely while traveling. However, every time a user logs into the corporate CRM application, shares a file via email, or conducts any form of communication and collaboration online in their internal network, they are exposed to potential cyber threats. In addition, the lack of real-time monitoring and reporting is a business constraint. To make intelligent operational decisions, the IT team needs access to real-time data about potential network vulnerabilities.

The IT team operates data centers that support millions customers and thousands of employees located in more than 20 branch offices. “We have more than 100 specialized applications,” states the IT manager, “Everything from planning of national electricity system to distribution of electricity in the wholesale market runs through these data centers; we cannot run our business effectively without them.” Any disturbance in production network availability has the potential to affect users by inhibiting their access to key applications and services, ultimately resulting in poor customer experiences.

“We know that network availability is critical for our employees and for our customers. That is why we adhere to an internal service-level agreement (SLA) of 99.99% network availability,” says the IT manager.

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The Solution

The customer’s comprehensive cybersecurity strategy is now built on the Hillstone Networks Next-Generation Security Platform. The platform delivers application, user and content visibility and control, as well as protection against known and unknown cyber threats.

The customer has deployed the Hillstone Networks E-series next-generation firewalls (NGFW) and T-series intelligent NGFW in its headquarters to protect both internal network and production data center operations. Another set of next-generation firewalls were deployed in branch offices with redundant and secure virtual private network (VPN) connections enabled for remote users. All Hillstone Networks NGFWs are configured with antivirus, intrusion prevention system (IPS), URL filtering and quality of service (QoS). In addition to these features, all intelligent NGFWs are configured with Hillstone Stoneshield service, which consists of Abnormal Behavior Detection (ABD) and Advanced Threat Detection (ATD) features. Hillstone Security Management (HSM) provides centralized management for device configurations, uniform policy enforcement, and reporting across the entire secured network.

Network Security with Increased Visibility

With the Hillstone solution, the customer now has a more comprehensive protection against cyber threats. The Hillstone threat protection service consists of antivirus (AV), and intrusion prevention system (IPS). Hillstone’s Abnormal Behavior engine continuously monitors the network to learn what normal network traffic looks like for that particular day, and provides alerts when network activity exceeds calculated thresholds.

Thanks to improved visibility and built-in prevention capabilities, the security team can now see all traffic on the network, get real-time information on attempted intrusions, and automatically block unauthorized packets from infiltrating the network or any devices connected to it.

“It was truly an eye-opening investigation as to the level of protection with the combination of Threat protection service, and Stoneshield service. The solution protects our network from attacks including Wannacry, with zero hosts compromised,” said the IT manager.

Unified Security Control and Prevention

The HSM segments networks into multiple virtual domains and provides the versatility and flexibility needed to manage the infrastructure while simplifying configurations, accelerating deployment cycles, and reducing management overhead. “The ease of management of the Hillstone NGFW was very impressive,” said the IT manager. “With HSM, we can configure, manage and distribute security policies across the Hillstone Network platform and know that they will be applied to each appliance uniformly. This way, all users, regardless of location or type of endpoint device, are consistently protected. In addition, HSM monitors device availability, as well as VPN topography for each registered device. This is an incredible boost for our business productivity.”

High Network and Service Availability

Hillstone solutions allow the IT team to effectively keep the company’s high-demand, high performance network up and running. One of the keys to achieving the 99.99 percent network availability SLA is the device-monitoring capabilities of Hillstone appliances. “The intelligent features of Hillstone appliances, such as abnormal behavior analysis and threat correlation analytics, and armed intelligent security perimeter brings awareness and fast incident remediation to minimize response time, as well as the attack surface,” says the IT manager. “This greatly reduces network downtime and helps us achieve 99.99 percent network availability.”

The IT team has developed well-vetted IT processes with the help of these solutions. These processes have enabled the IT team to rapidly respond to both strategic business changes as well as random issues that are a normal part of running a large, complex network.

“The Hillstone solution has hugely benefitted our IT team. All of the various components that comprise the Hillstone solution gives us the ability to manage security in a highly automated manner, enabling IT to be more productive and visible within the business.”

— IT manager