CASE STUDY

Firewall Assessment Achieves Compliance & Enhances Network Security for State Agency

The state agency with broad responsibility across multiple industries relied on the AIS Network Information Security and Risk Management Team's expertise to perform a comprehensive firewall assessment in order to strengthen network security, meet audit requirements and ensure best practices. The team's work allowed the agency's firewall configuration to be brought up to industry standards and provided new firewall rules documentation.

Client

A $124 million Virginia State Agency is vested with authority over a significant array of business and economic interests.

Challenge

State agencies must adhere to the highest standards across all of their operations. The firewall is the first line of defense in an agency's network security. To ensure that the agency was satisfying information security audit requirements and industry best practices, the agency's CIO engaged AISN cybersecurity engineers to assess the organizatin's Cisco firewalls across multiple locations and recommend enhancements in configuration, implementation and management as well as security policy.

Solution

AISN provided engineers experienced with U.S. Department of Defense security protocol and the Cisco Adaptive Security Appliance family of security devices. Using a combination of automated scripts and manual techniques, AISN assessed the agency's configuration and construction for each firewall location, identifying and recommending detailed corrections for multiple rules and obsolete services within rules. The agency's IT Firewall Standard v2.0 was also reviewed to determine alignment with applicable industry standards such as NIST 800-41r1, SEC 501-11.2 and the Center for Internet Security Cisco Firewall Benchmark.

Results

Outdated firewall rules were cleaned up by agency personnel based on AISN's best practice recommendations to enhance firewall configuration, imple-mentation and management. All gaps, issues or problems were documented along with the recommended corrections, options for consideration and an implementation plan, putting the agency on a path to achieve full compliance and strengthened network security. AISN also aligned the agency IT Firewall Policies with identified industry standards and agency IT Security Policies, which required overhauling the agency's written firewall rules documentation.