**PKI**

ACME Defense contractors use a combination of in-house and outsourced PKI solutions. In-house PKI to manage the internal active directory, as well as the entire business infrastructure and outsourced PKI to help automate business certificate life cycles, maintenance, scalability, and other things by service providers like Certificate Authority (CA). The business uses a 2048-bit SSL RSA key size for web and personal certificates in the PKI solution to raise the difficulty of cracking them exponentially. The key lifetime for web and personal certificates is 12 months, after which it must be renewed continuously every 12 months to guarantee that the key is not compromised by clusters or GPU attacks. Setting up the key, maintaining and transporting it, and employing trust paths such as a bidirectional trust for cross-certification or employing a hybrid trust model via bridge CA are all part of PKI implementation.