**Certificate Authorities**:

CAs are used for a few different reasons. The first one is being utilized to create digital certificates. Another reason is that they are there to help validate domain names and organizations. This validation process can be used to help create trust between different users and services.

Most of the advantages of using the CA come from the trust that is built using them. It allows a user to feel safe with whatever task they are performing without fear of malicious tendencies. The trust is built off of knowing that the certificate is held by a party that was already verified and can be trusted. The CA will also house any information about the certificate.

**Certificate Generation:**

A black screen with a black background

Description automatically generated

A black screen with a black rectangle

Description automatically generated

A screen shot of a computer

Description automatically generated

**Citations**

Awati, R., & Loshin, P. (2021, September 1). *What is a Certificate Authority (CA)?*. Security. https://www.techtarget.com/searchsecurity/definition/certificate-authority#:~:text=As%20an%20integral%20part%20of,to%20validate%20their%20identities%3B%20and

Benefits of self-signed and CA-signed Digital certificates. (n.d.). https://www.ibm.com/docs/en/b2b-integrator/5.2?topic=certficates-benefits-self-signed-ca-signed-digital-certificates

Manico, J., & Detlefsen, A. (n.d.). *Iron-clad Java*. O’Reilly Online Learning. https://learning.oreilly.com/library/view/iron-clad-java/9780071835886/?sso\_link=yes&sso\_link\_from=SNHU