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CS 305 Module Five Assignment

A certificate authority is a trusted third party that verifies entities (websites or organizations) and issues digital certificates to authenticate their public keys. Thus, a CA builds trust so that communication between networks can remain secure. When a client connects to a server, the client checks the server’s certificate to ensure the server is not a phony. This verification prevents MLM attacks the most since an attacker can intercept or alter these communication pathways.

Obviously there are other means of securing these communication networks, though, so why would you prefer a CA over anything else? A CA uses trusted third parties to validate the identity of the certificate requestor before issuing a certificate. This independent verification ensures that the public key belongs to the actual entity, which reduces the risk of impersonation.By using these certificates that have been verified and signed by a CA, it prevents attackers from intercepting or with communication pathways. The digital signature provided by the CA assures that the certificate is real and not a phony.

Additionally, multiple industries require the use of CA-signed certificates to meet security standards. Using a CA can therefore be essential for compliance and for establishing a secure reputation. Some more advantages include: ca services can provide automated processes for certificate issuing or renewal, and sometimes also offer advanced security options alongside the certificate. In conclusion, using a CA for security allows for a scalable safe way to verify agents and establish safe communication pathways.

Cited:

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