# Cryptography In Practice



**Gus Khawaja** 

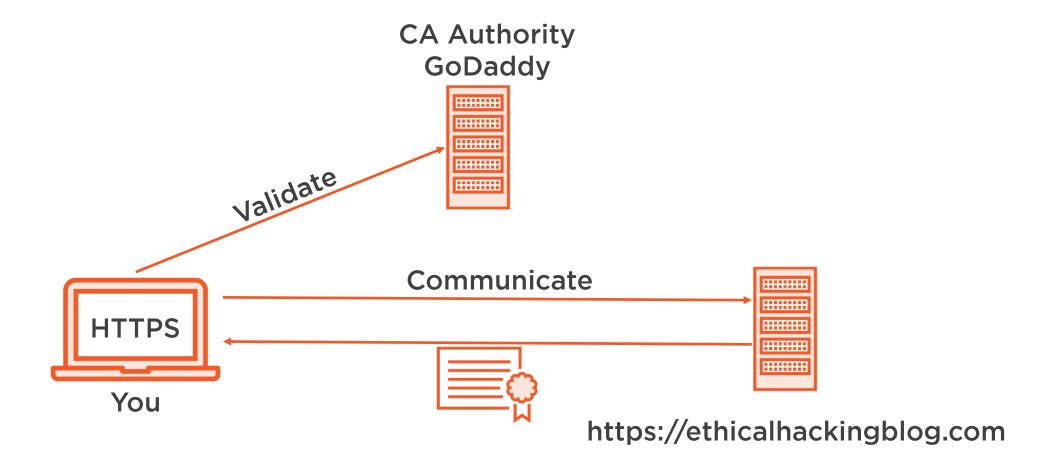
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## Digital Certificates

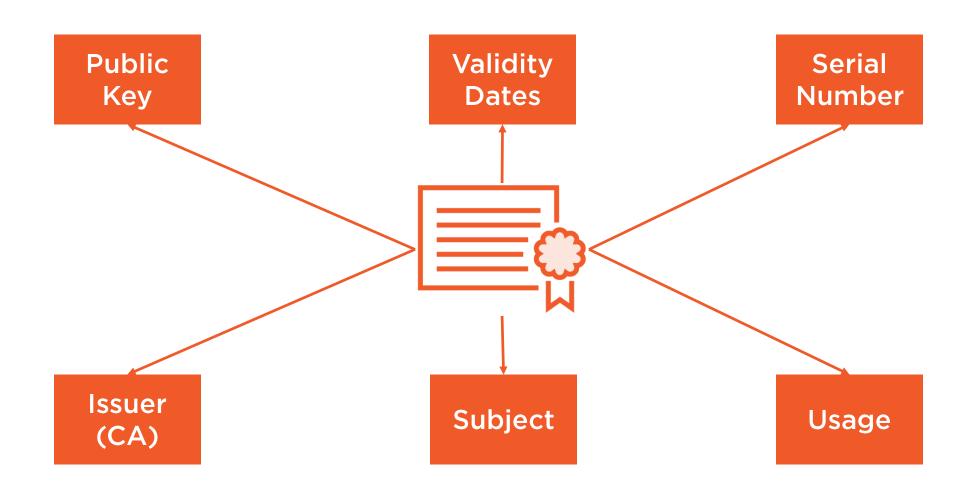


#### How It Works





#### Certificate

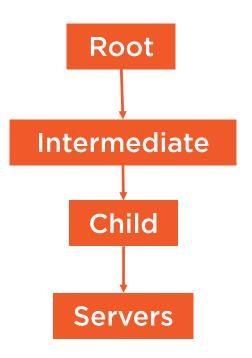




#### Certificate Authorities



- Create
- Validate
- Revoke





### Certificate Types



- Self-Signed
- Wilcard: \*.pluralsight.com

test.pluralsight.com Blogs.pluralsight.com

...



### TLS



#### TLS





Certificate (RSA Pubk)

RSA Pub<sup>k</sup>(AES<sup>k</sup>)

**Symmetric Encryption Communication** 

Google

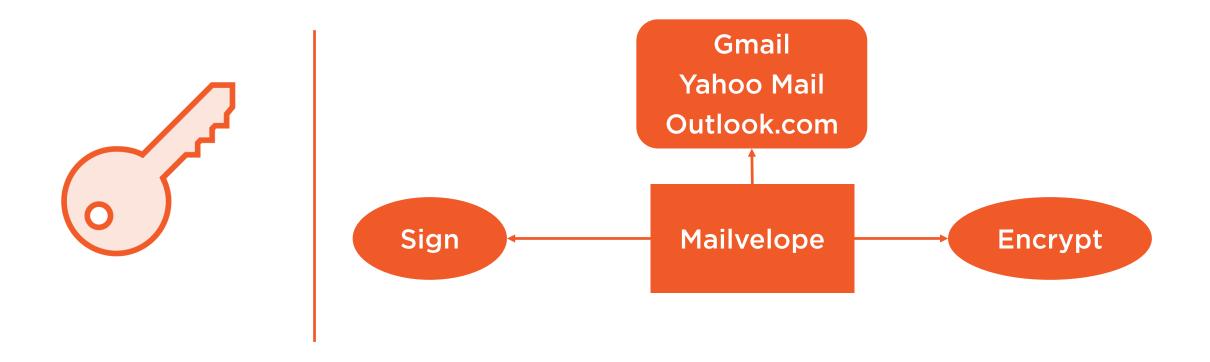




### Practical Email Encryption



#### Demo





### Practical Email Signature



#### Summary



#### **Practical Cryptography**

- Digital Certificates
- TLS
- Email Encryption Example
- Email Signature Example

