

A background network diagram consisting of a complex web of interconnected nodes and lines, rendered in a light gray color against a dark gray background. The nodes are represented by small squares and circles, connected by thin lines, creating a dense, abstract network structure.

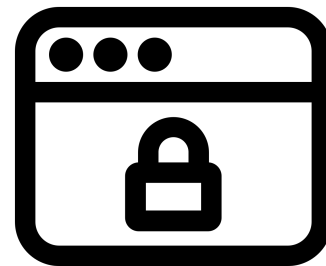
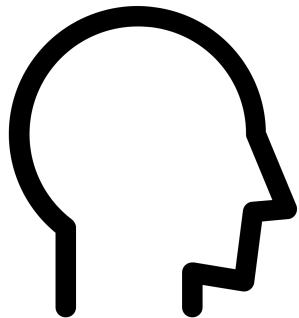
moz://a

Countering Phishing

with Cryptography

J.C. Jones
Crypto Engineering

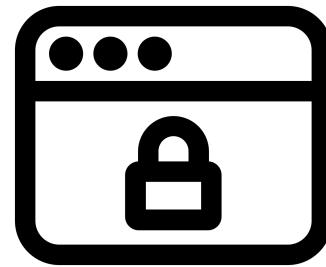
Login



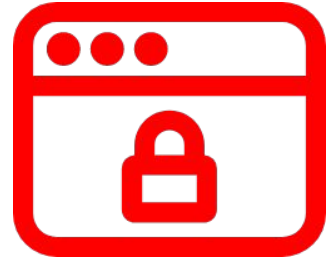
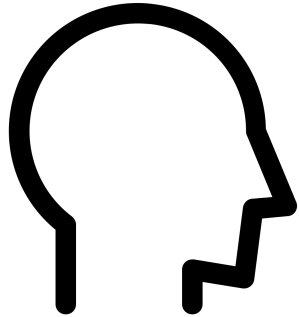
Login



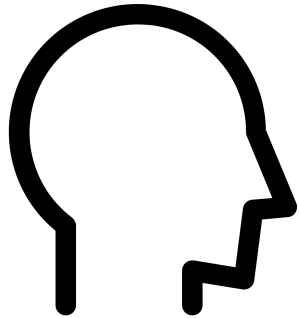
(username, password)



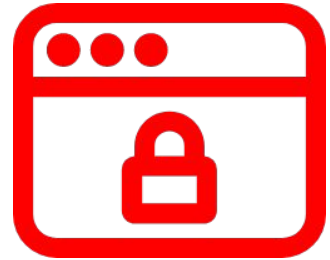
Phishing



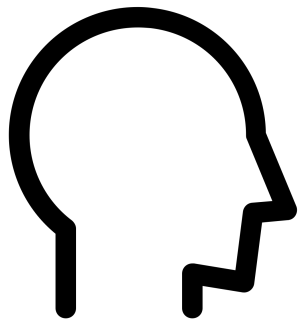
Phishing



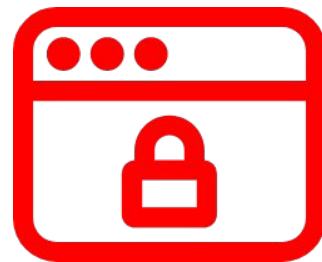
(username, password)



Phishing

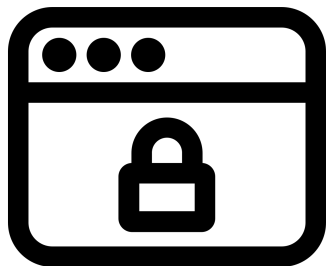


(username, password)

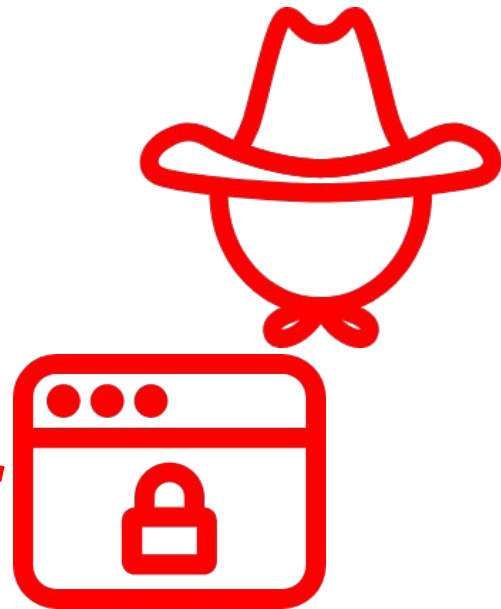


**Save for later:
(username, password)**

Phishing



Stolen (username, password)



Add Digital Signatures

aka Web Authentication

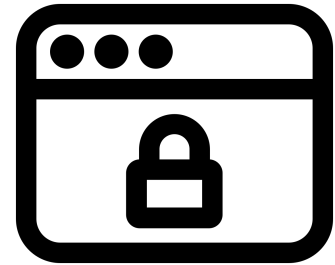
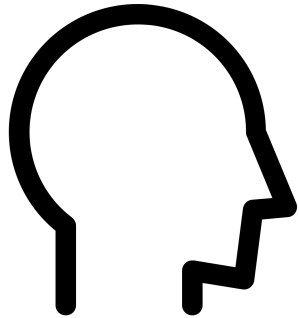


moz://a

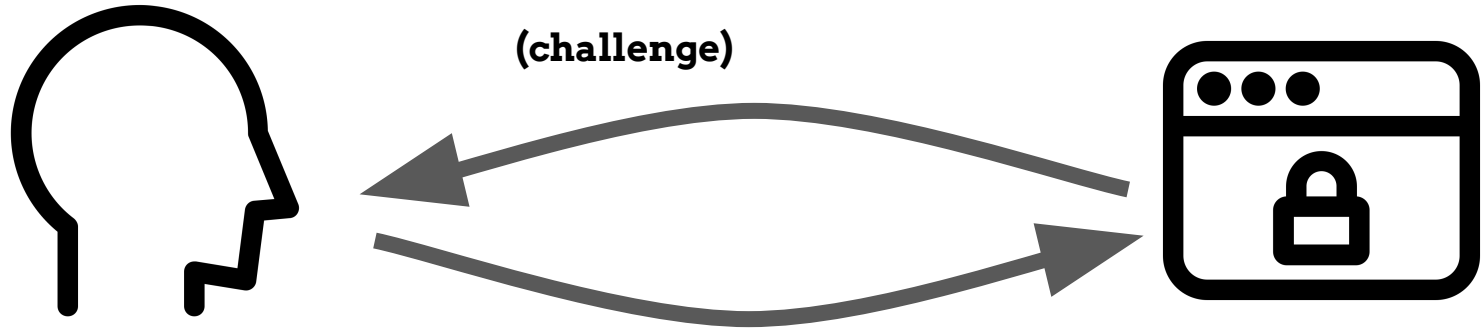
NOTE: This FIDO U2F Token is one example. There are more, and more coming.



Login including Digital Signatures

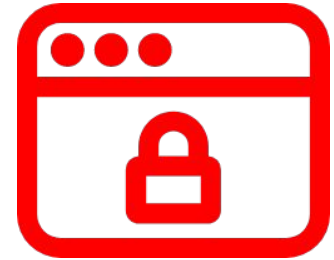
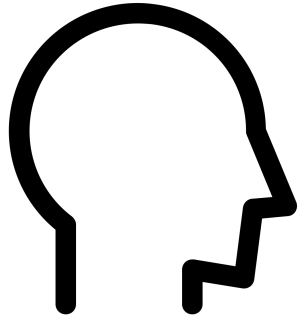


Login including Digital Signatures

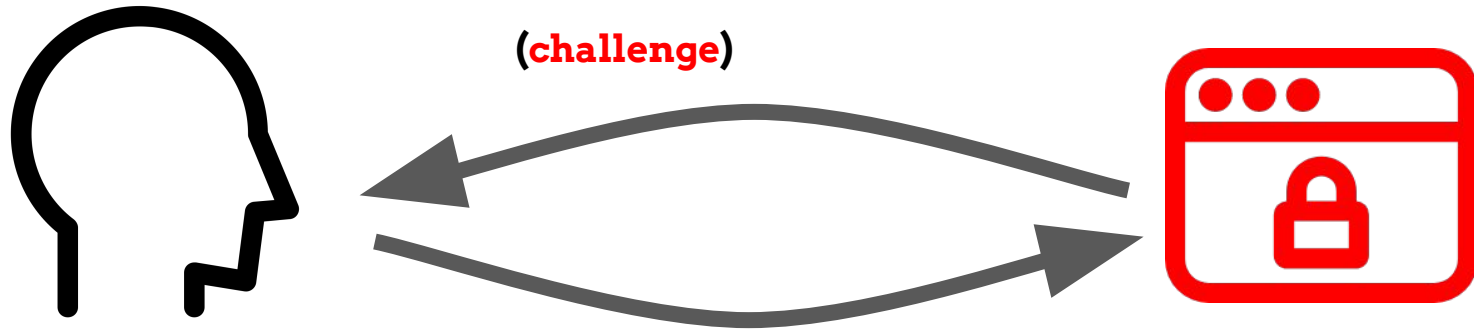


(username, password,
digital signature(origin, challenge))

Phishing including Digital Signatures



Phishing including Digital Signatures

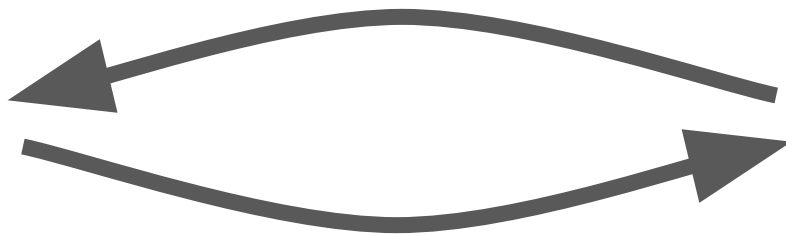


(username, password,
digital signature(**phishing origin, challenge**))

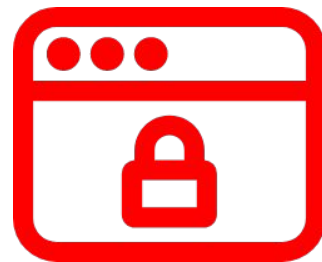
Phishing including Digital Signatures



(challenge)

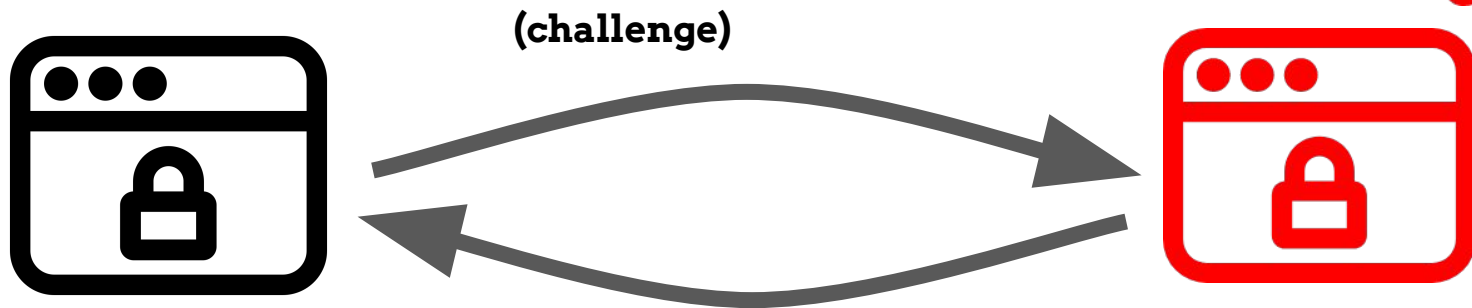


Save for later:
(username, password,
digital signature)



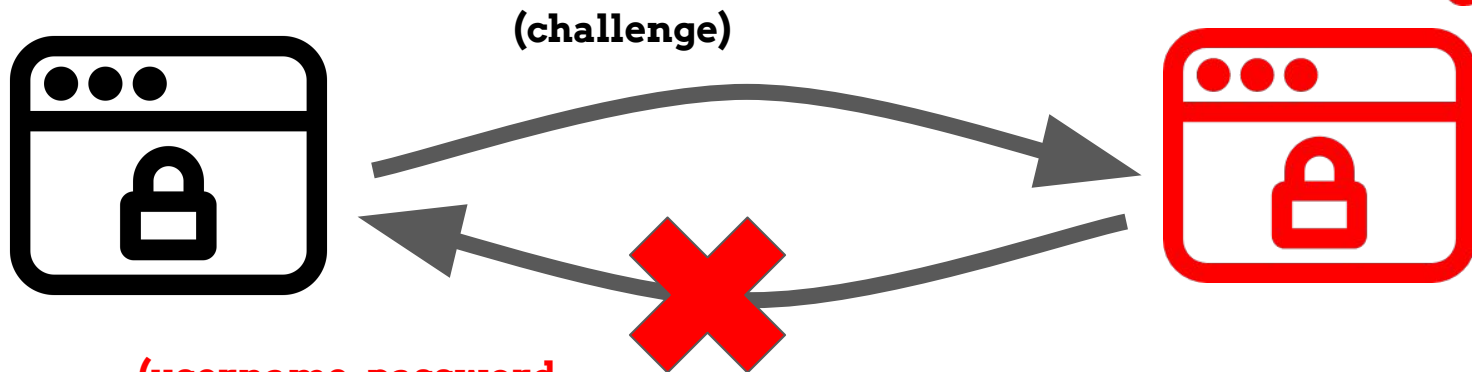
(username, password,
digital signature(**phishing origin, challenge**))

Phishing including Digital Signatures



(username, password,
digital signature(phishing origin, challenge))

Phishing including Digital Signatures



(username, password,
digital signature(phishing origin, challenge))

FIDO U2F

Web Authentication

Intent to Ship in 60