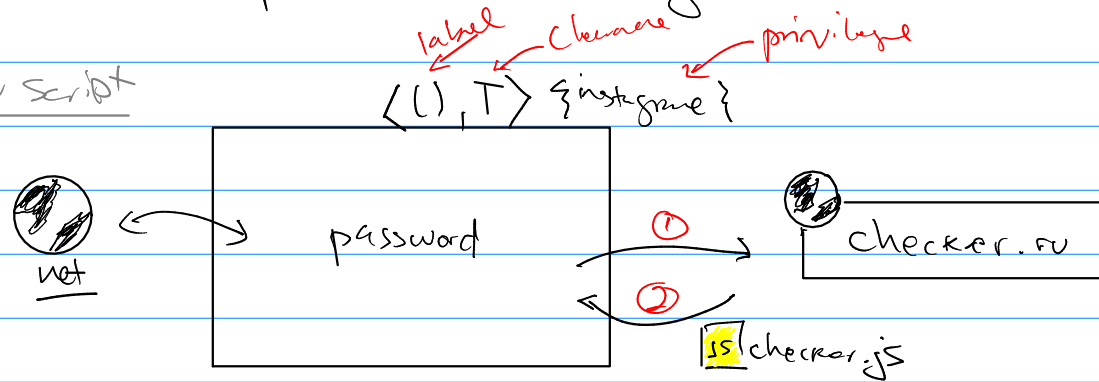
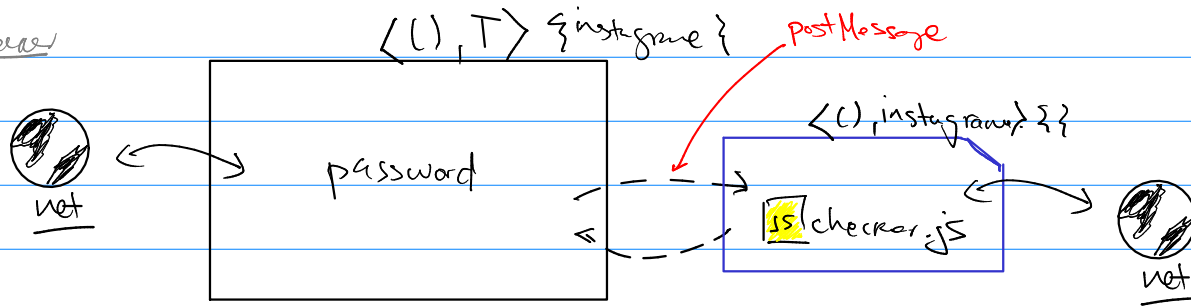


SWAPI Password strength checker

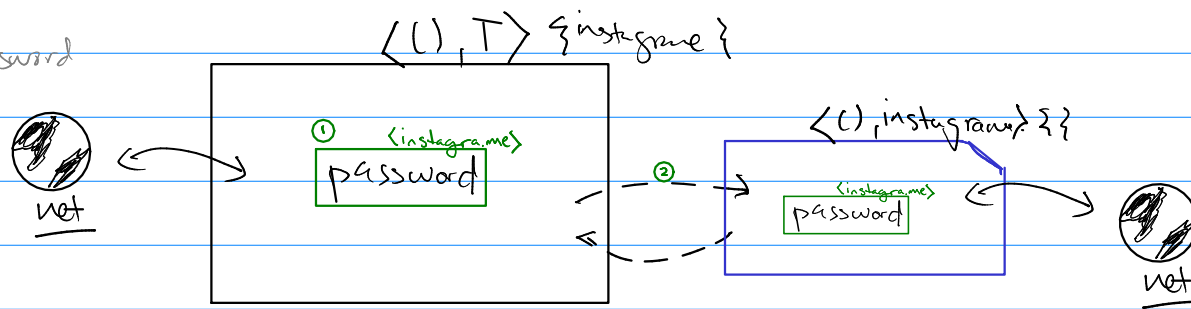
(a)
Fetch checker script



(b)
execute checker



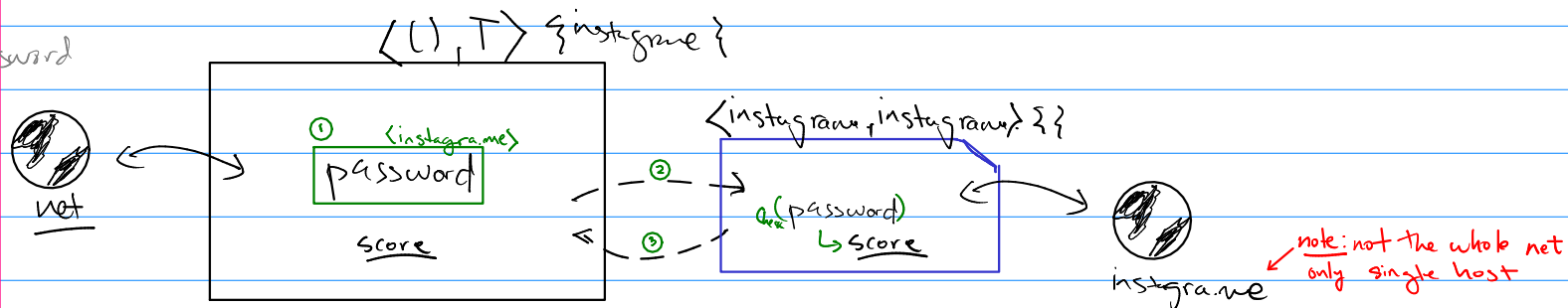
(c)
Send password



First approach
(labeled values)

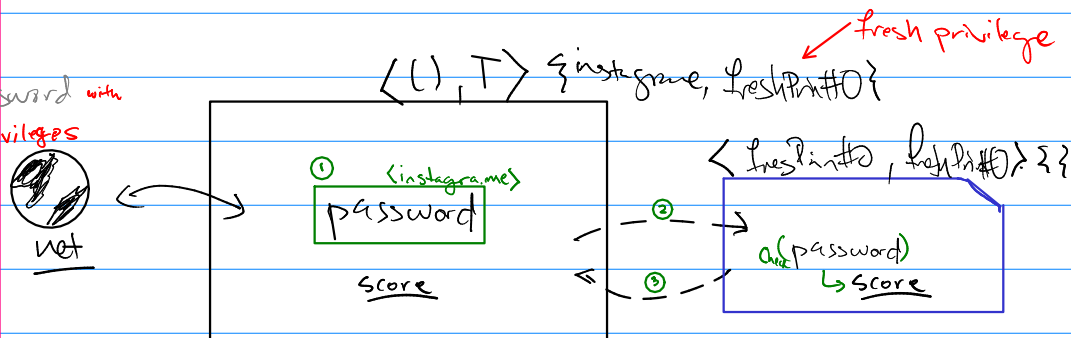
(d)

unlabel: password



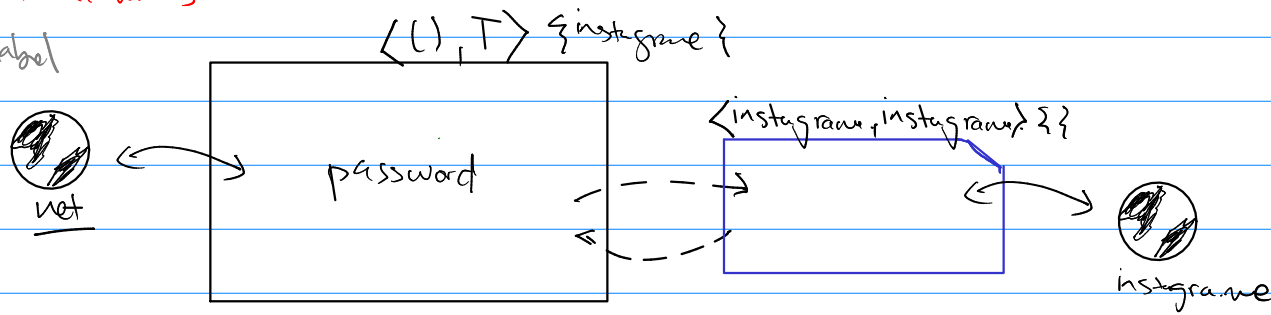
(d)

unlabel: password with
fresh privileges



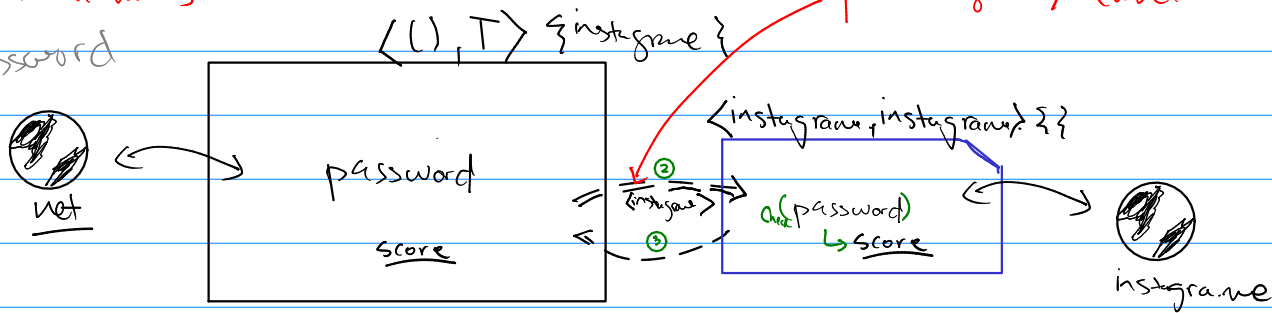
Second approach
(no labeled vals)

(c) without
labeled values
raise label



note: not the whole net
only single host

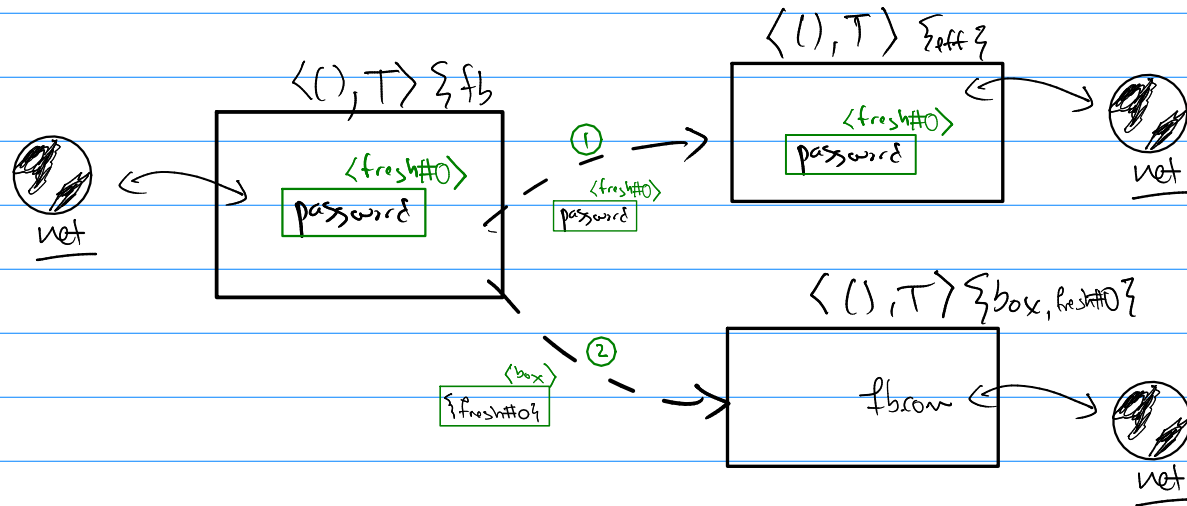
(d) without
labeled values
send password



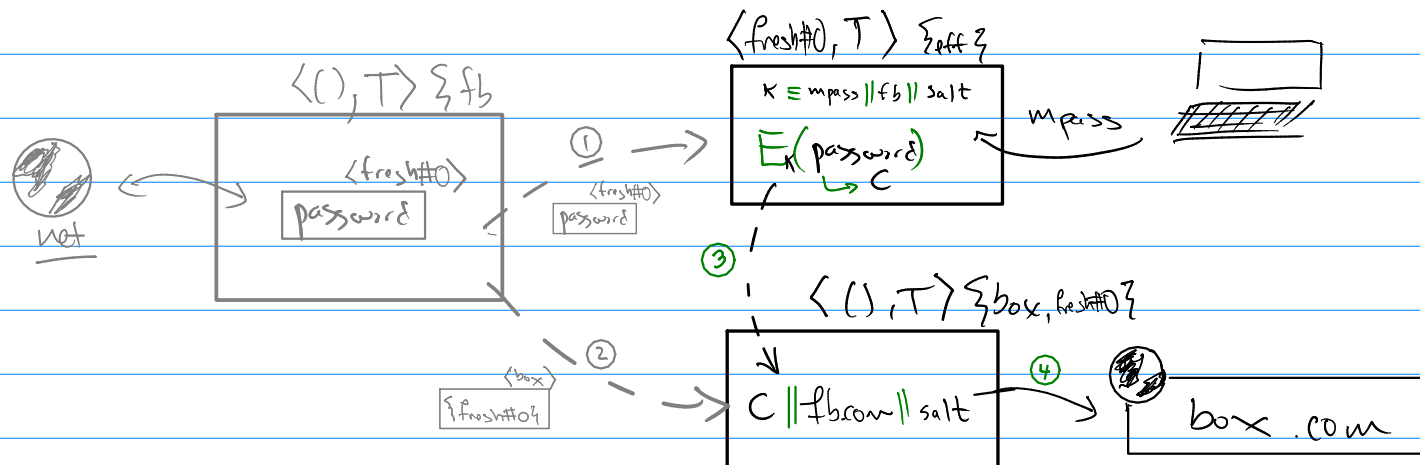
(d) the fresh privilege approach follows as before.

password manager (Saving)

(a) send labeled password



(b) encrypt & store

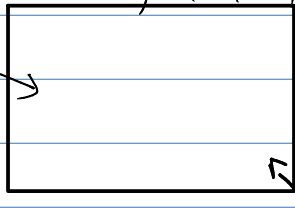


Password manager (retrieve)

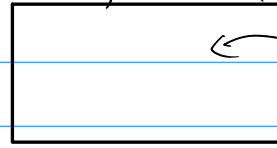
(a) fetch credentials + grant privs



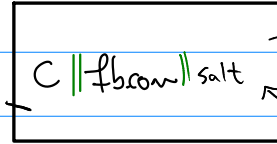
$\langle () , T \rangle \{ fb, fresh\#0 \}$



$\langle () , T \rangle \{ eff \}$



$\langle () , T \rangle \{ box, fresh\#0 \}$



box.com

$\{ fb, fresh\#0 \}$

③

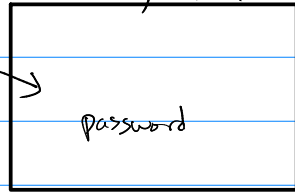
①

②

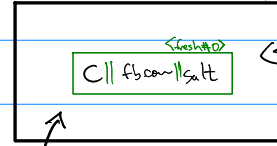
(b) pass credentials to manager



$\langle () , T \rangle \{ fb, fresh\#0 \}$

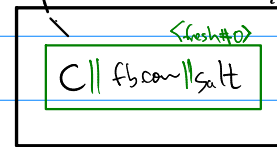


$\langle () , T \rangle \{ eff \}$

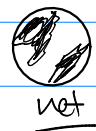


①

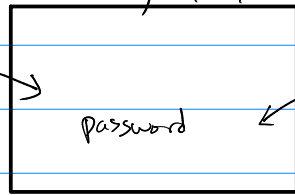
$\langle () , T \rangle \{ box, fresh\#0 \}$



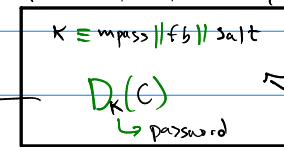
(c) decrypt and send credentials to fb.com



$\langle () , T \rangle \{ fb, fresh\#0 \}$

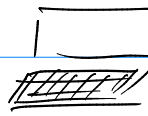


$\langle fresh\#0 , T \rangle \{ eff \}$



mpass

①



②