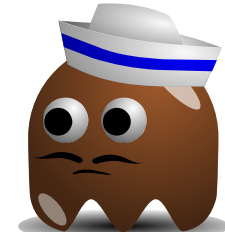




Client

password registration (over a secure channel, e.g. TLS)



Server

registration form, incl. policy description f



**choose user id
choose pw**

$\xrightarrow{\text{pw}, f}$

\xleftarrow{r}

Password Registration
with
Policy Check

\xleftarrow{f}

if $f(\text{pw}) = \text{true}$:
 $H(\text{pw}, r)$



$\xrightarrow{\text{user id}, r}$

store (user id, $H(\text{pw}, r)$, r)

password authentication

$\xrightarrow{\text{user id}}$

search for (user id, $H(\text{pw}, r)$, r)

recall user id, pw

$\xrightarrow{\text{pw}}$

\xleftarrow{K}

Verifier-based PAKE
(VPAKE)

$\xleftarrow{H(\text{pw}, r), r}$

\xrightarrow{K}