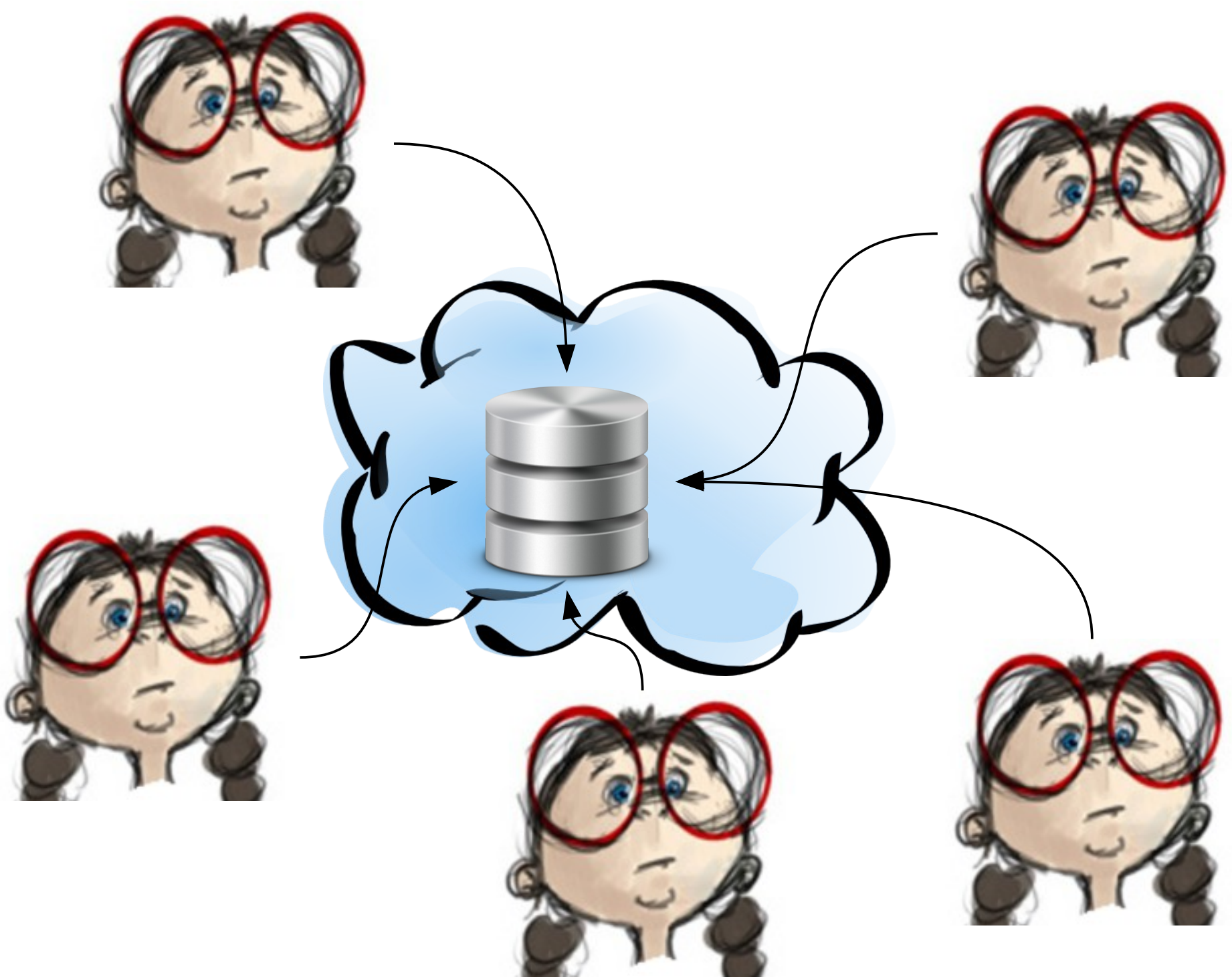
ARVER

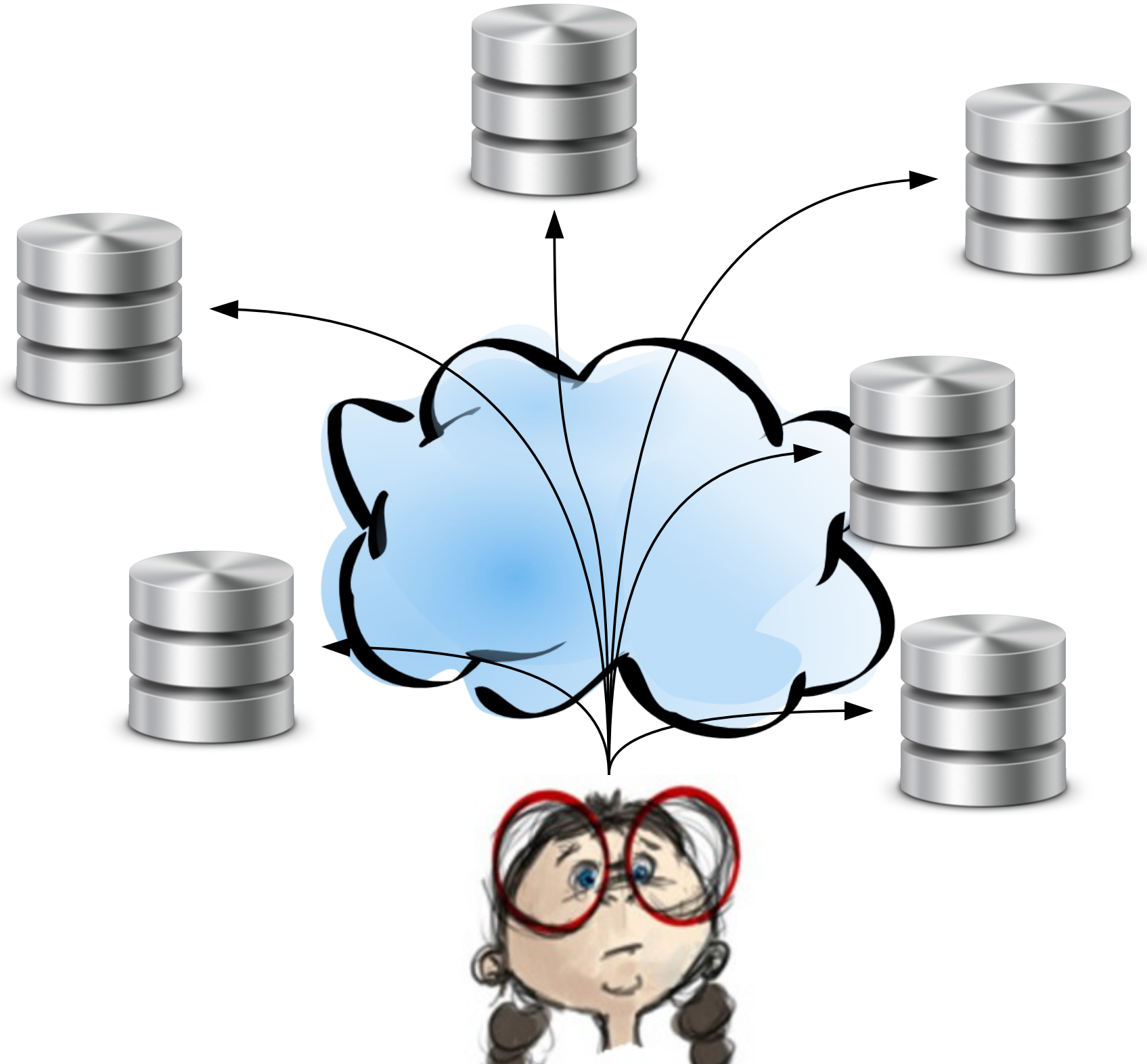
distributed

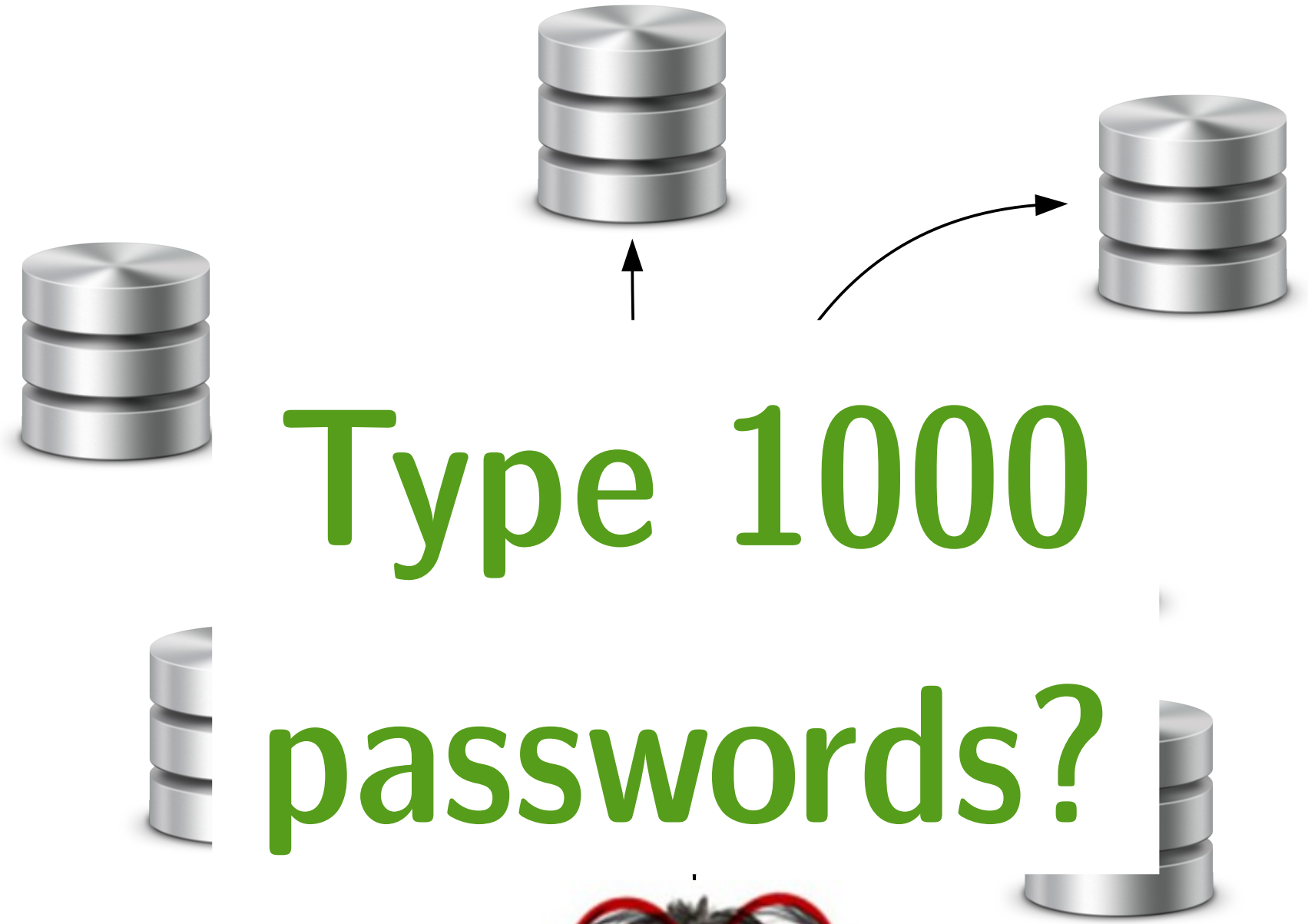
LUKS management

immerda.ch



Share the passwords?





Type 1000 passwords?

the wish list

- [x] Per-admin policy
- [x] Key distribution
- [ ] Automation
- [ ] Deniability

Linux Unified Key Setup

Slot 1: Alice

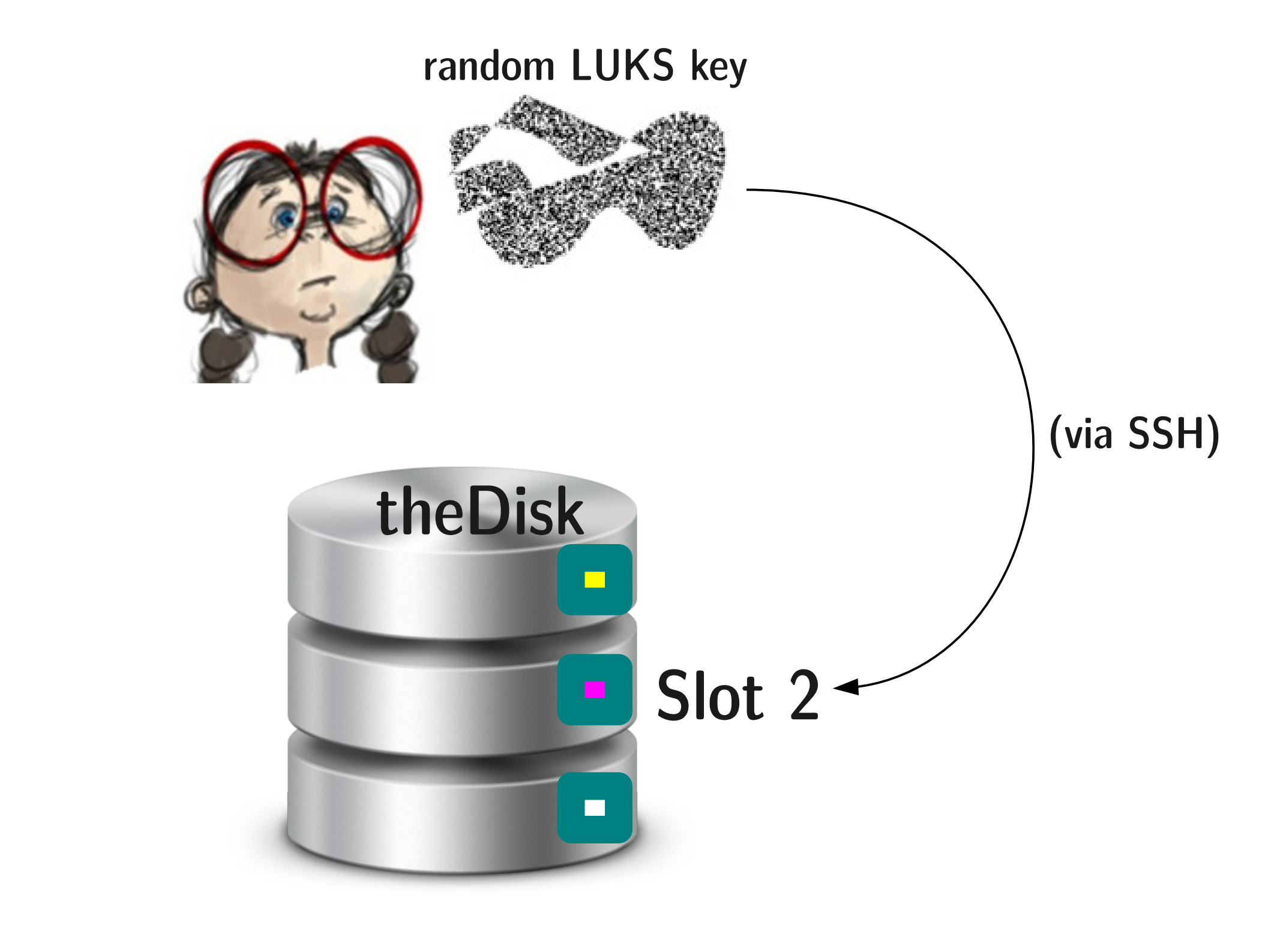
Slot 2: (empty)

Slot 3: (empty)

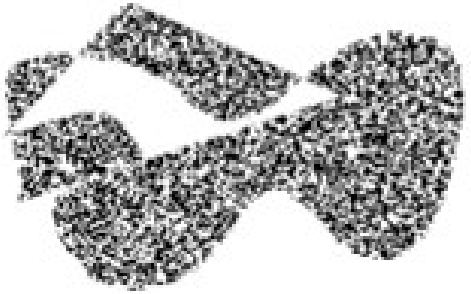
...

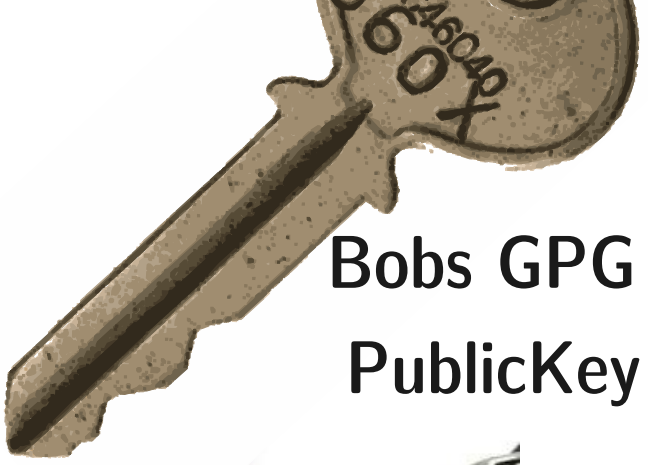
Slot 8: (empty)

alice#: arver --add-user bob theDisk


random LUKS key
(via SSH)
theDisk
Slot 2

random LUKS key





Bobs GPG PublicKey

Bobs ARVER key for theDisk

Bobs ARVER key

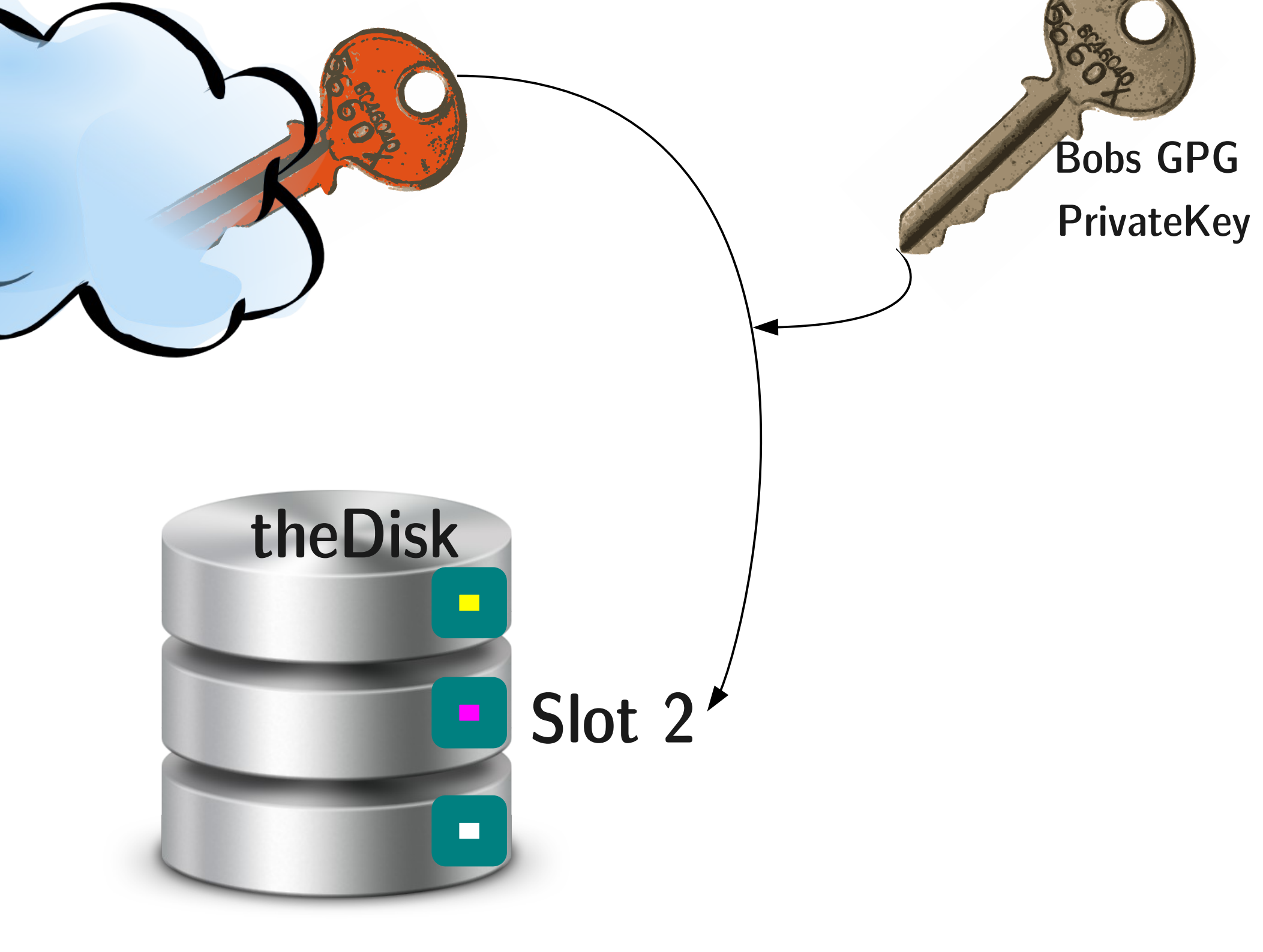
(for theDisk)

Mail

Git

...

bob#: arver --open theDisk


Bobs GPG
PrivateKey
theDisk
Slot 2

- [ ] Per-admin policy
- [ ] Key distribution
- [x] Automation
- [ ] Deniability

Examples

arver --open /coloX/serverY

arver --del-user eve ALL

- [ ] Per-admin policy
- [ ] Key distribution
- [ ] Automation
- [x] Deniability

Future Work

(split) Secret Sharing

Other crypto stacks

https://git.codecoop.org/projects/arver

https://tech.immerda.ch/2011/08/arver-distributed-luks-key-management/

arver@lists.immerda.ch

6036 9F10 3542 9963 EAE9 B698 D4C1 6590 A6C0 C4BD