

# Sane Secrets Sharing

3. bash

benjamin in ~/sane-secrets-sharing

\$ █

⌘

# Deal with it

3. bash

```
benjamin in ~/sane-secrets-sharing  
$ cat who-is-benjamin
```

Hi,

J.B. Rainsberger said about me:

"Benjamin Reitzammer is a pretty smart guy.

You owe it to yourself to see what he has to say.

He lives in Frankfurt."

Who am I to dispute that?

So I only add: I'm @benjamin on Twitter.

```
benjamin in ~/sane-secrets-sharing  
$ █
```

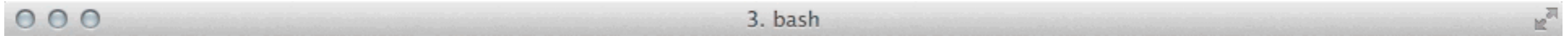
# `trousseau`

```
3. bash
benjamin in ~/sane-secrets-sharing
$ cowsay vaamo

  _____
< vaamo >
  -----
     \      ^  ^
     \      (oo)\_____
        (__) \       )\/\
           ||-----w  ||
           ||           ||

benjamin in ~/sane-secrets-sharing
$ █
```

# `trousseau`?



```
$ cat trousseau.gif  
ZZZZZZZZZZZZZZZZZZZZ.        ZZZZZZZZZZZZZZZZZZZZZZZ  
ZZZZZZZZZZZZZZZZZZZZZZ ZZZZZ= ZZZZZZZZZZZZZZZZZZZZZ  
ZZZZZZZZZZZZZZZZZZZZZZ ZZZZZ ZZZZZZZZZZZZZZZZZZZZZ  
ZZZZZZZZZZZZZZZZZZZZZZ=      ZZZZZ, ZZZZZZZZZZZZZZZ  
ZZZZZZZZ~ Z : ZZZ ZZZZZZ ZZ ZZZZZZZZZZZZZZZZZZZ  
ZZZZZZZZ+ Z ZZ ZZZ ZZZZZ? Z. ZZZZZZZZZZZZZZZ  
ZZZZZZZZZZZ Z~ ZZZZZ ZZZZZZ ZZZ ZZZZZZZZZZZZZ  
ZZZZZZZZZZZZ : Z, \Z ZZ ZZ? ZZZZZZZZZZZZZZZ  
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ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
```

**benjamin** in **~/sane-secrets-sharing**

**\$** █

# Interacting w/ stores

```
3. bash
$ trousseau create benjamin.reitzammer@vaamo.de
Trousseau data store succesfully created
benjamin in ~/sane-secrets-sharing/example
$ gpg --decrypt trousseau.asc
```

Sie benötigen eine Passphrase, um den geheimen Schlüssel zu entsperren.

```
Benutzer: "Benjamin Reitzammer <benjamin.reitzammer@vaamo.de>"
2048-Bit RSA Schlüssel, ID F938CCAA, erzeugt 2014-04-22 (Hauptschlüssel-ID BD2B61EE)
```

```
gpg: verschlüsselt mit 2048-Bit RSA Schlüssel, ID F938CCAA, erzeugt 2014-04-22
```

```
"Benjamin Reitzammer <benjamin.reitzammer@vaamo.de>"
{"KVStore":null,"_meta":{"created_at":"2014-10-20 15:36:57.93878046 +0200 CEST","last_modified_at":"2014-10-20 15:36:57.939730878 +0200 CEST","recipients":["benjamin.reitzammer@vaamo.de"],"version":"0.3.0"},"data":{}}
benjamin in ~/sane-secrets-sharing/example
$ █
```

# Teams

```
3. bash
2048-Bit RSA Schlüssel, ID F938CCAA, erzeugt 2014-04-22 (Hauptschlüssel-ID BD2B61EE)

gpg: verschlüsselt mit 2048-Bit RSA Schlüssel, ID F938CCAA, erzeugt 2014-04-22
    "Benjamin Reitzammer <benjamin.reitzammer@vaamo.de>"
{"KVStore":null,"_meta":{"created_at":"2014-10-20 15:42:31.496880834 +0200 CEST","last_modified_at":"2014-10-20 15:42:31.497270341 +0200 CEST","recipients":["benjamin.reitzammer@vaamo.de"],"version":"0.3.0"},"data":{}} benjamin in ~/sane-secrets-sharing/example
$ trousseau set id_rsa/pass somesecret
benjamin in ~/sane-secrets-sharing/example
$ trousseau get id_rsa/pass
somesecret
benjamin in ~/sane-secrets-sharing/example
$ trousseau keys
id_rsa/pass
benjamin in ~/sane-secrets-sharing/example
$ █
```

# Teams - VCS

```
3. bash
benjamin in ~/sane-secrets-sharing/example
$ trousseau meta
CreatedAt : 2014-10-20 15:42:31.496880834 +0200 CEST
LastModifiedAt : 2014-10-20 15:42:31.497270341 +0200 CEST
Recipients : [benjamin.reitzammer@vaamo.de]
TrousseauVersion : 0.3.0
benjamin in ~/sane-secrets-sharing/example
$ trousseau add-recipient timo.hirt@vaamo.de
benjamin in ~/sane-secrets-sharing/example
$ trousseau meta
CreatedAt : 2014-10-20 15:42:31.496880834 +0200 CEST
LastModifiedAt : 2014-10-20 15:42:31.497270341 +0200 CEST
Recipients : [benjamin.reitzammer@vaamo.de timo.hirt@vaamo.de]
TrousseauVersion : 0.3.0
benjamin in ~/sane-secrets-sharing/example
$ █
```

# Teams - Split stores

```
3. bash
benjamin in ~/sane-secrets-sharing/example
$ git diff trousseau.asc
benjamin in ~/sane-secrets-sharing/example
$ █
```



# Teams - Split stores

```
3. bash
benjamin in ~/sane-secrets-sharing/example
$ git diff trousseau.asc
benjamin in ~/sane-secrets-sharing/example
$ cd ..
benjamin in ~/sane-secrets-sharing
$ mkdir weblogins
benjamin in ~/sane-secrets-sharing
$ cd weblogins
benjamin in ~/sane-secrets-sharing/weblogins
$ trousseau create benjamin.reitzammer@vaamo.de
Trousseau data store succesfully created
benjamin in ~/sane-secrets-sharing/weblogins
$ trousseau set squirrel.vaamo.de supersecret
benjamin in ~/sane-secrets-sharing/weblogins
$ trousseau keys
squirrel.vaamo.de
benjamin in ~/sane-secrets-sharing/weblogins
$ █
```

# Integrate w/ Chef

```
3. bash
$ cd weblogins
benjamin in ~/sane-secrets-sharing/weblogins
$ trousseau create benjamin.reitzammer@vaamo.de
Trousseau data store succesfully created
benjamin in ~/sane-secrets-sharing/weblogins
$ trousseau set squirrel.vaamo.de supersecret
benjamin in ~/sane-secrets-sharing/weblogins
$ trousseau keys
squirrel.vaamo.de
benjamin in ~/sane-secrets-sharing/weblogins
$ cd ..
benjamin in ~/sane-secrets-sharing
$ (cd example/ && trousseau keys)
id_rsa/pass
benjamin in ~/sane-secrets-sharing
$ (cd weblogins/ && trousseau keys)
squirrel.vaamo.de
benjamin in ~/sane-secrets-sharing
$ █
```

# Integrate w/ Chef

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing
$ head -n +1 chef-integration
* Put data bag secrets into trousseau too
benjamin in ~/sane-secrets-sharing
$ █
```

# Integrate w/ Chef

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing
$ head -n +5 chef-integration
* Put data bag secrets into trousseau too
* deploy encrypted data bag to Chef server
  & data bag secret to target server
* there's no step 3

benjamin in ~/sane-secrets-sharing
$ █
```

# Integrate w/ Chef

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing
$ tail -n 10 chef-integration
```

But here are the pros and cons

\* pro

- \* individual secrets per databag item
- \* easy to automate

\* con

- \* updates to secrets need to be triggered manually
- \* principle of least privilege only achievable  
by segregating stores by privilege ... kind of hacky

```
benjamin in ~/sane-secrets-sharing
$ █
```

# Tips - upgrades

```
3. Thanks for flying Vim (bash)
Available commands:
  certificate      Create/Update encrypted data bag with the corresp
onding certificate for "fqdn".
  dkim             Create/Upload encrypted data bag with DKIM key
  duplicity        Create/Upload encrypted data bag with duplicity p
assphrases
  help            Displays help for a command
  keystore         Create/Upload encrypted data bag with base64 enco
ded binary keystore
  postgresql_user Create/Upload encrypted data bag with postgresql
user passphrases
  ssh_keypairs     Create/Upload encrypted data bag with ssh public/
private keypairs
  ssh_public_keys Upload ssh pubkeys to Chef server (unencrypted)

Options:
  -h, --help      Displays this help message
benjamin in ~/sane-secrets-sharing
$ █
```

# Tips - key completion

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing
$ cd example
benjamin in ~/sane-secrets-sharing/example
$ trousseau-0.3.4 --ask-passphrase upgrade
Password:
You are about to upgrade trousseau data store ./trousseau.asc (version 0.3.0) up to version 0.3.4. Proceed? [Y/n] n
upgrade cancelled
benjamin in ~/sane-secrets-sharing/example
$ █
```

# Tips - autoenv & Co

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing/example
$ trousseau set somereallylongnamethatscumbersometotype secret
benjamin in ~/sane-secrets-sharing/example
$ trousseau get somereallylongnamethatscumbersometotype
secret
benjamin in ~/sane-secrets-sharing/example
$ █
```



# Tips - process subst.

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing/example
$ cat .env
export TROUSSEAU_MASTER_GPG_ID=benjamin.reitzammer@vaamo.de
export TROUSSEAU_STORE=./trousseau.asc
benjamin in ~/sane-secrets-sharing/example
$ █
```

# Pros & Cons

```
3. Thanks for flying Vim (bash)
$ ls
id_rsa      id_rsa.pub  trousseau.asc
benjamin in ~/sane-secrets-sharing/example
$ trousseau set id_rsa/head --file <(head id_rsa)
benjamin in ~/sane-secrets-sharing/example
$ trousseau get id_rsa/head
-----BEGIN RSA PRIVATE KEY-----
Proc-Type: 4, ENCRYPTED
DEK-Info: AES-128-CBC, BB2FBE9FFCDFEBA9BCBA752D540C9378

fV35Ga5FSxMof0V/mJtqRPI5A0gDPY2MmuqeTqnmHjHd lUdjXJRj8pUd3IhbcKXd
blEYuyatESXmsBieA0sST4oZ5sZqGhGB/IALxT3w9ZpnQI0+S16+cz06nrIItMIR
hzTcuLyupktr2F/o2pqWEznhTU2wgz lEN0w1xqkt6GnwTRvUtxtF6VZFdCFcJea i
v4y0v2sW/etd5uXiRwU8pHditf7gomnfy+D5d2RMBACi3PBE921YVSn0 lm82ALHp
iRcvfUXxHNZKtap8xSC/HZ3CUEw8oEm5DTw+XiZcMfG09stTH0FJ lhBJb4XC fgGN
MCx12UdgSM7HHmLjevoJf3I0CIuCK6a1v2bVmF8/2mXQeEP1V9mE7PJqpqESSiQ2

benjamin in ~/sane-secrets-sharing/example
$ █
```

# TL;DR

3. Thanks for flying Vim (bash)

```
benjamin in ~/sane-secrets-sharing/example
$ vi pros-and-cons
benjamin in ~/sane-secrets-sharing/example
$ cat pros-and-cons
```

## PROS

- \* simplicity
- \* just works
- \* secure foundation with GPG

## CONS

- \* requires discipline and some tailoring
  - \* trousseau as a tool is still quite young
- ```
benjamin in ~/sane-secrets-sharing/example
$ █
```

# Thanks!

```
3. Thanks for flying Vim (bash)
benjamin in ~/sane-secrets-sharing/example
$ work 👍 when sharing secrets with 👩 + 👨 + 👨 for 🚢
```