Add 2FA to your ownCloud in 15 minutes

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about me

- Cornelius Kölbel
- 2FA since 2005
- 2014: privacyIDEA
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Status

- ownCloud 10.
- Connected to Active Directory.
- User authenticates with password.
Massive breach leaks 773 million email addresses, 21 million passwords

The best time to stop reusing old passwords was 10 years ago. The second best time is now.

BY ALFRED NG | JANUARY 17, 2019 8:40 AM PST

TOTP in ownCloud

- Pro: User is in control.
- Cons: It is TOTP.
- Cons: User is in control!
- Cons: biiiiig keychanin.
TOTP Second-factor Auth

☑ Activate TOTP

This is your new TOTP secret: HRUOPPW6TXL
Scan this QR code with your TOTP app

To enable second-factor verify authentication

[Input field] Authentication code [Submit button] Verify
Requirements for enterprise 2FA

- Users need to comply to policies.
- Choose token type that is best for your organization.
- Central management
  - Managed by admins or helpdesk.
  - Can be used for lots of applications.
What privacyIDEA can do for you

- **Central** Mgmt with admins and service desk.
- Use existing **userstore** (LDAP, SQL, Flatfile, SCIM)
- Many **token types**.
- Policies and events.
- Connect your ownCloud, SSH, Desktop, VPN, Web-Application...
example 2FA setup - enterprise grade

- privacyIDEA reads **users from** AD.
- ...and **assigns** tokens to users.
- Authentication at ownCloud UI:
  1. ownCloud (Active Directory)
  2. privacyIDEA
Installation privacyIDEA on Ubuntu 16.04LTS

Start at 9:09am by adding the launchpad repository.

```
root@privacyidea-fosdem:~ # add-apt-repository ppa:privacyidea/privacyidea
```
Read new repo data

At 9:10 we update the repository data...

```
apt-get install privacyidea-apache2

Then you need to create your initial administrator via

pl-manage admin add administrator

For more information see https://privacyidea.org
More info: https://launchpad.net/privacyidea+archive/ubuntu/privacyidea
Press [ENTER] to continue or ctrl-c to cancel adding it

gpg: keyring '/tmp/tmp1n3t_n/secring.gpg' created
gpg: keyring '/tmp/tmp1n3t_n/pubring.gpg' created
gpg: requesting key C24DCF7D from hkp server keyserver.ubuntu.com
gpg: /tmp/tmp1n3t_n/trustdb.gpg: trustdb created
gpg: key C24DCF7D: public key "Launchpad PPA for privacyidea" imported
gpg: Total number processed: 1
gpg: imported: 1  (RSA: 1)
OK

root@privacyidea-fosdem:~ # apt update
Get:1 http://ppa.launchpad.net/privacyidea/privacyidea/ubuntu xenial InRelease [18.1 kB]
Get:2 http://security.ubuntu.com/ubuntu xenial-security InRelease
Get:3 http://de.archive.ubuntu.com/ubuntu xenial InRelease
Get:4 http://de.archive.ubuntu.com/ubuntu xenial-updates InRelease
Get:5 http://de.archive.ubuntu.com/ubuntu xenial-backports InRelease
Get:6 http://ppa.launchpad.net/privacyidea/privacyidea/ubuntu xenial/main amd64 Packages [3,072 B]
Get:7 http://ppa.launchpad.net/privacyidea/privacyidea/ubuntu xenial/main i386 Packages [3,072 B]
Fetched 26.1 kB in 0s (31.3 kB/s)
Reading package lists... 10%
```
System update

...and update the system.
At 9:10 we choose to install a meta package...
Install meta package

Wow! All batteries included!

0 upgraded, 250 newly installed, 0 to remove and 0 not upgraded.

After this operation, 609 MB of additional disk space will be used.

Do you want to continue? [Y/n]
Meta package ships its own database.

During installation at 9:11 we set the MySQL root password.
Configuring mysql-server-5.7

While not mandatory, it is highly recommended that you set a password for the MySQL administrative "root" user.

If this field is left blank, the password will not be changed.

New password for the MySQL "root" user:

<****>

<ok>
Initial administrator

9:13:34: No standard passwords involved!
Install privacyIDEA ownCloud App in under a minute.
Hands On!

- Connect privacyIDEA to Active Directory.
- Enroll Tokens to users.
  - Smartphone App.
  - OTP Card.
  - Yubikey.
- Configure privacyIDEA ownCloud App.
- Authenticate.
  - Administratively block user.
  - Provide lost token.
Next steps...

- Processes...
- Helpdesk groups...
- Policies for users and admins...
- Workflows...
- Connect more applications...
Thanks a lot!

Star, Clone, Pull Requests:
https://github.com/privacyidea

Questions: https://community.privacyidea.org

@privacyidea

Enterprise Grade Two Factor Authentication