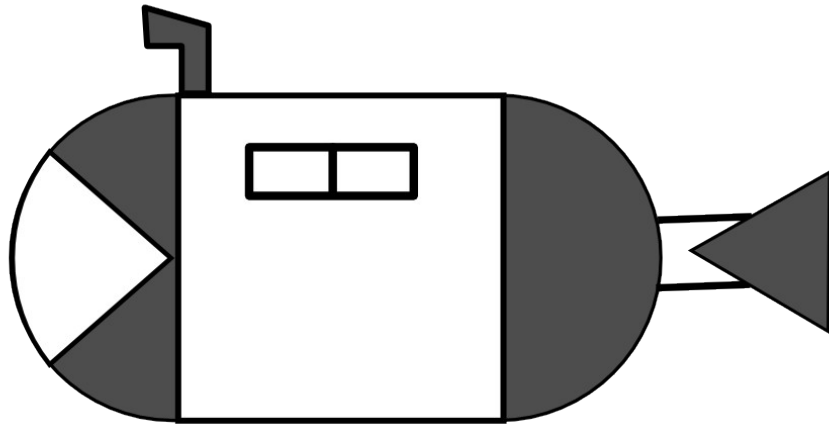


subuser.org



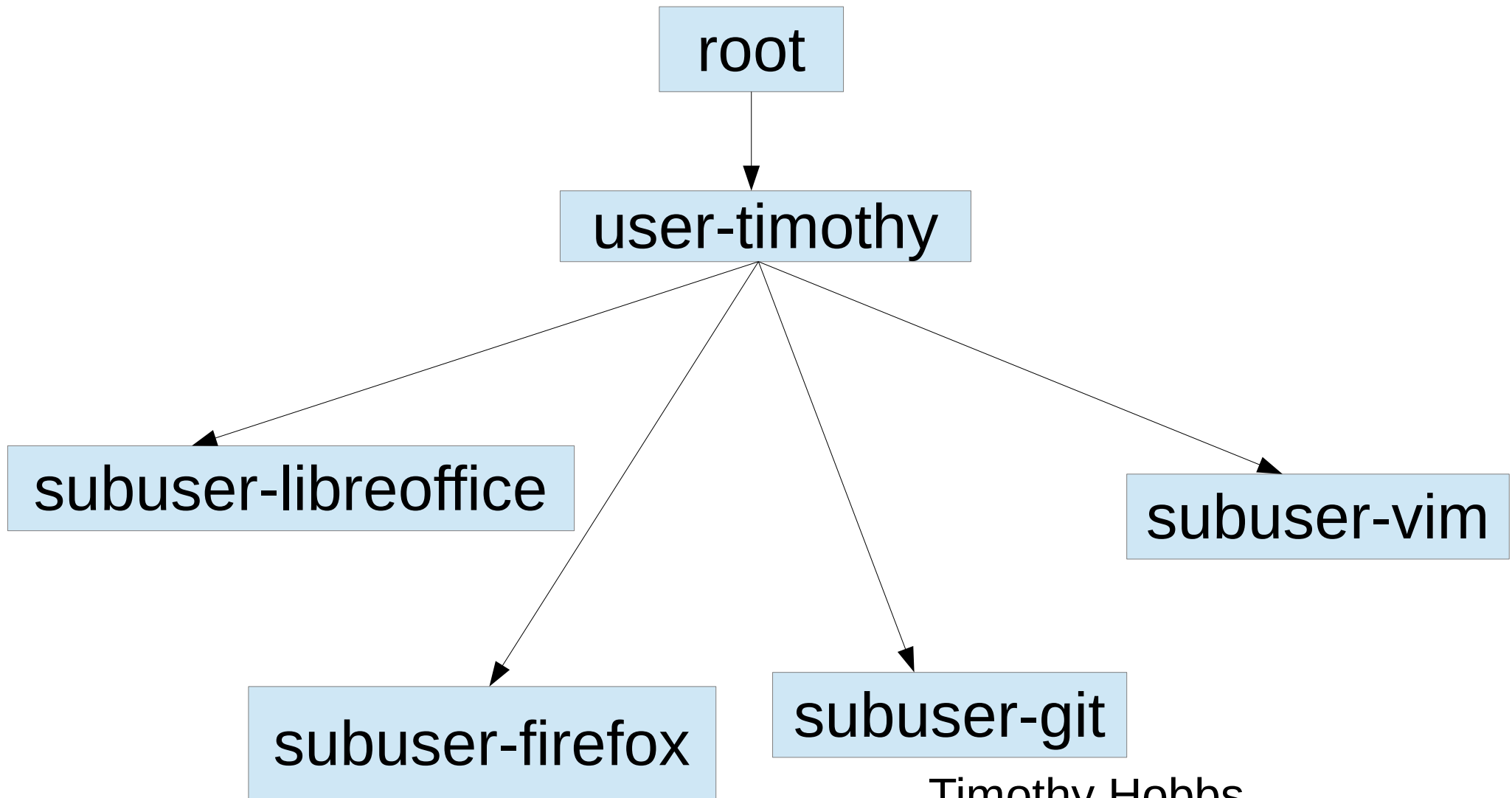
Timothy Hobbs

thobbs.cz

u s e r

timothyhobbs@seznam.cz

Docker™ + subuser(not tm)

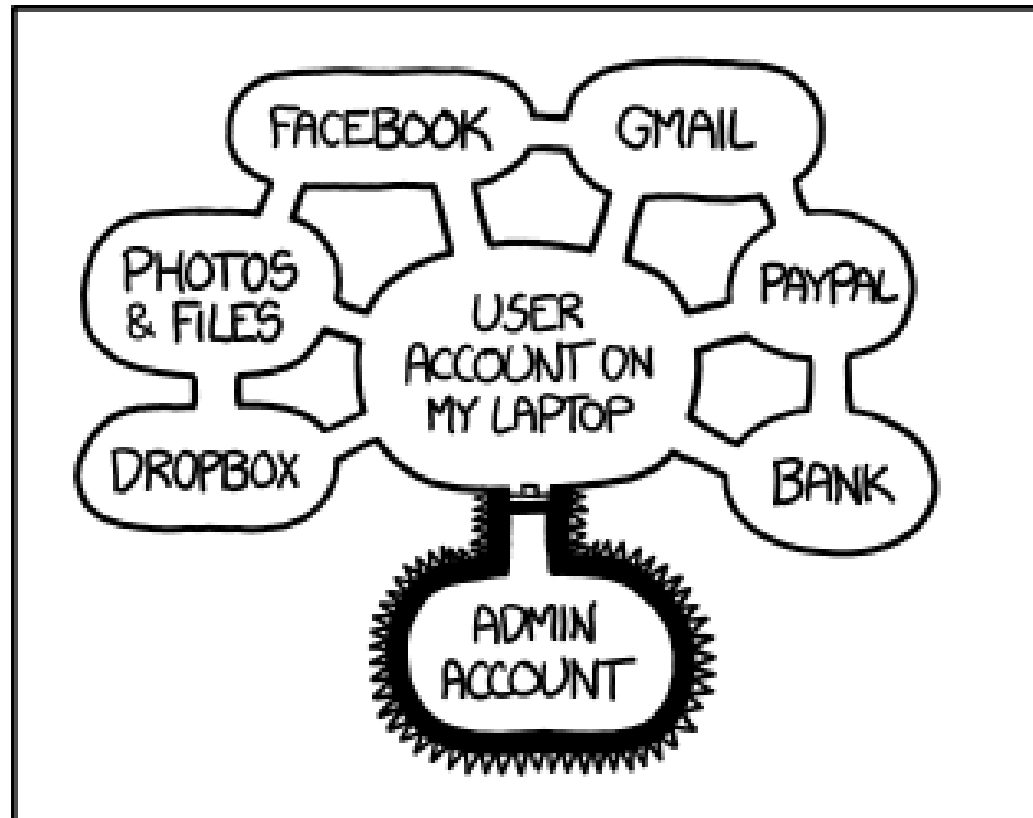


Timothy Hobbs
timothyhobbs@seznam.cz

The problems:

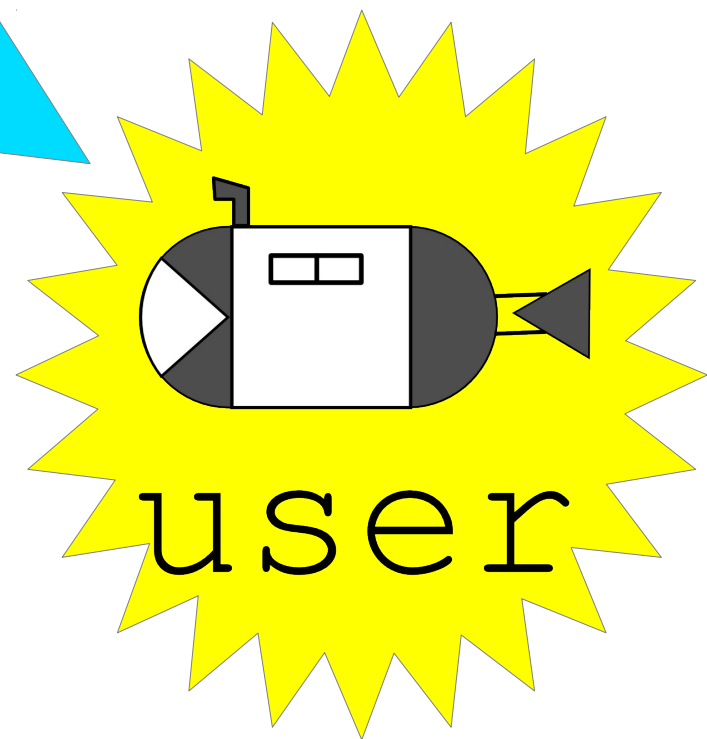
1. Installing/Distributing software is hard
2. Downloading untrusted software is unsafe
3. The cloud will eat your soul

Without Docker+subuser

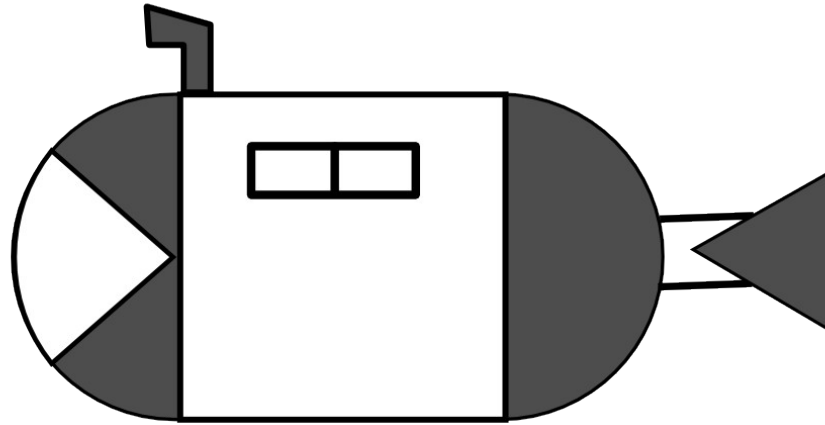


All programs on my computer have full access to my home directory.

There is a solution!

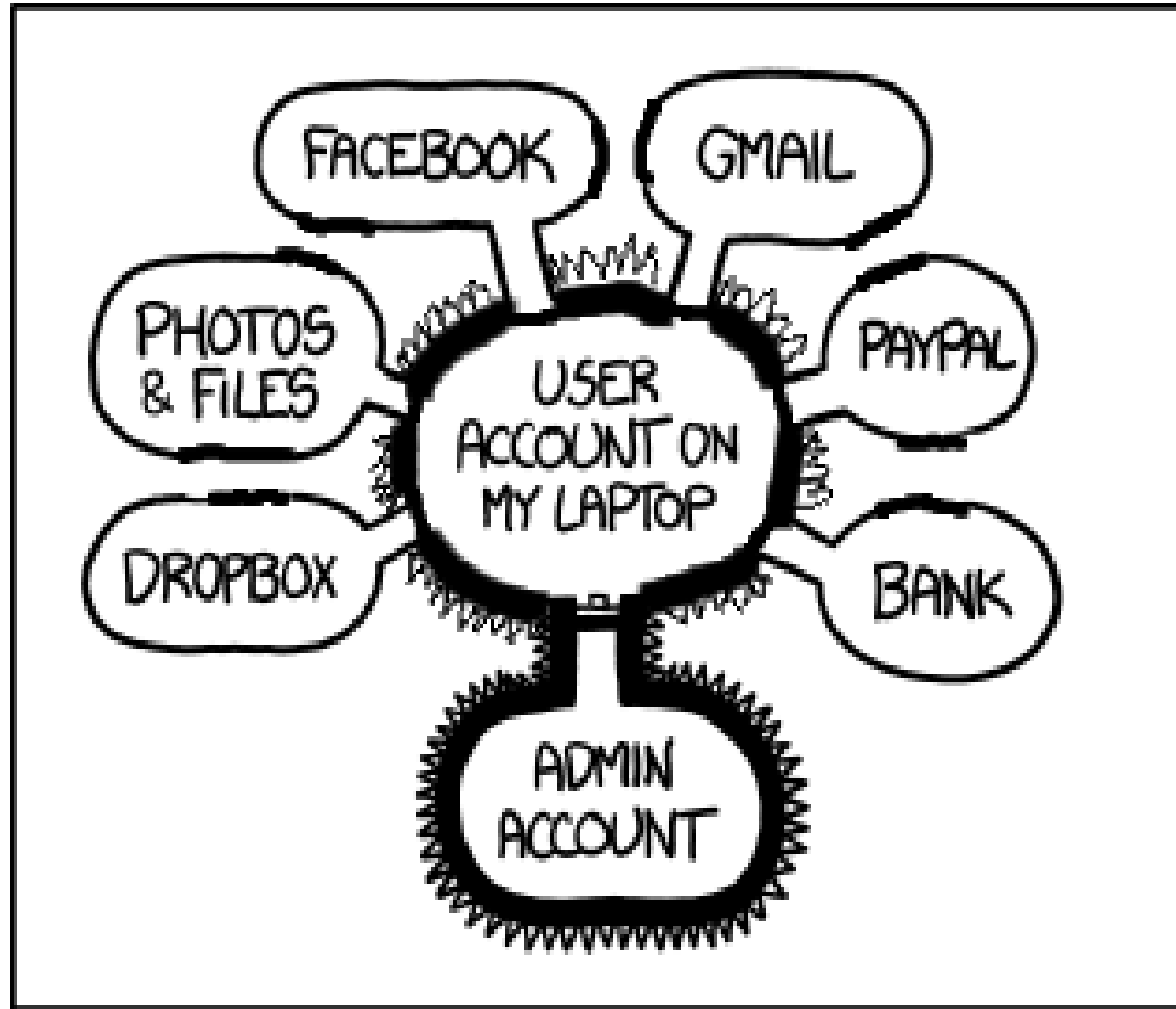


What is subuser?



u s e r

With Docker+subuser



Every subuser has its own home directory

firefox



```
$ ls -a ~/  
.  
..  
.cache Desktop  
.gconf .mozilla  
.dbus Downloads  
.local
```

vim



```
$ ls -a ~/  
.  
.. .vim .viminfo
```


But they can share the stuff they need to share

firefox



```
graph LR; A[firefox] --> B[Can access the user's ~/Downloads directory.];
```

Can access the user's
~/Downloads directory.

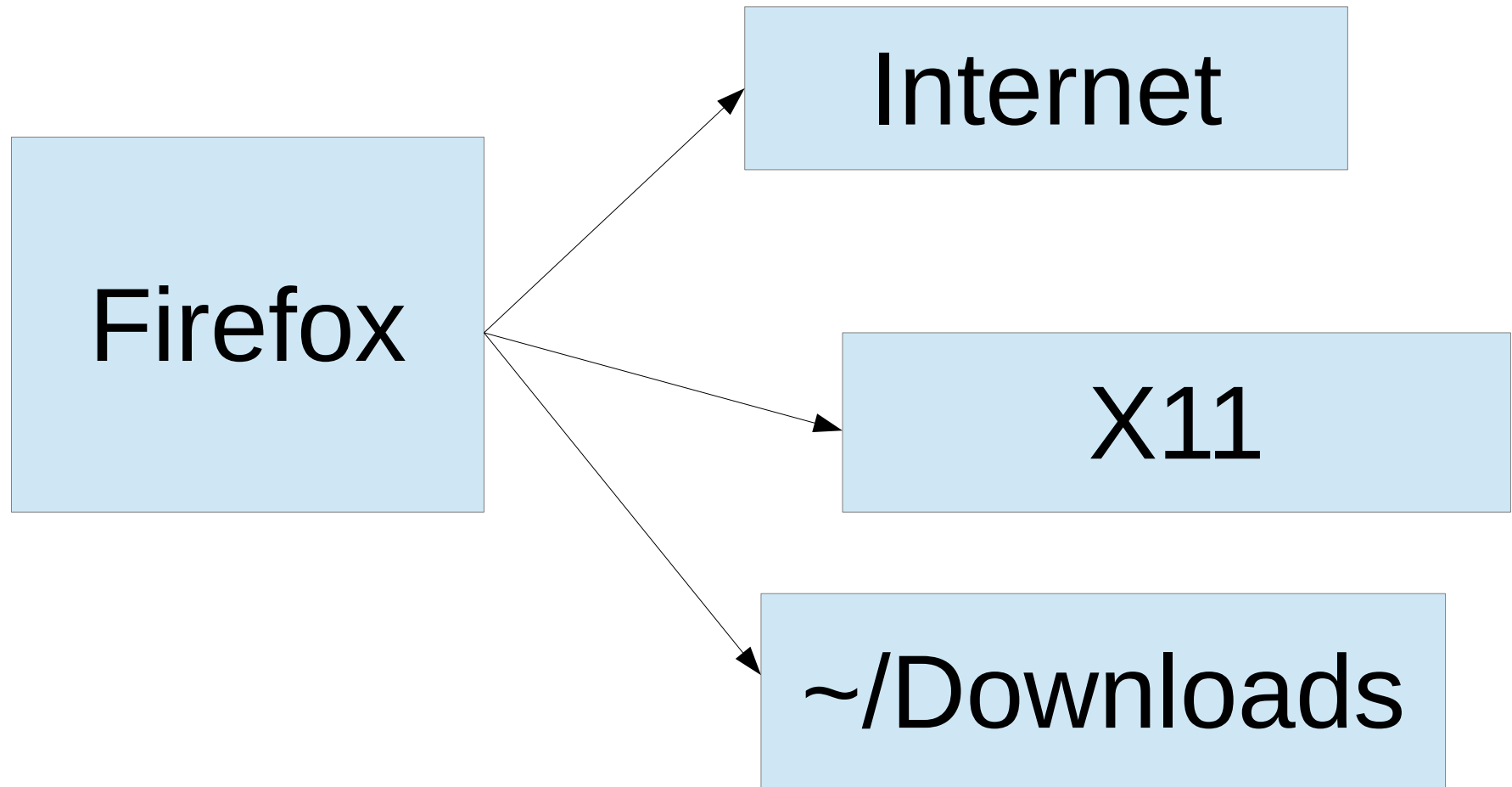
vim

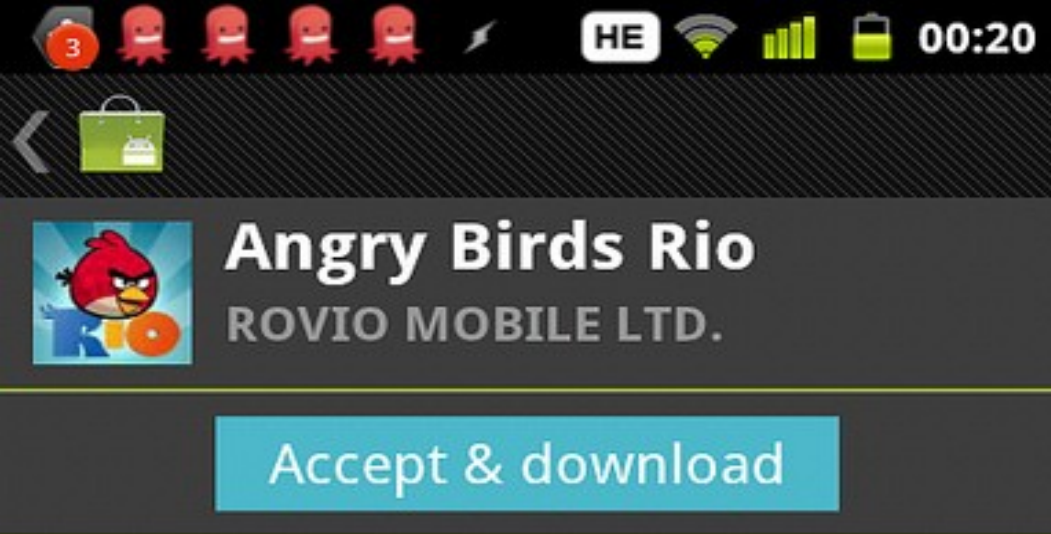


```
graph LR; C[vim] --> D[Can access the $PWD from which it was launched.];
```

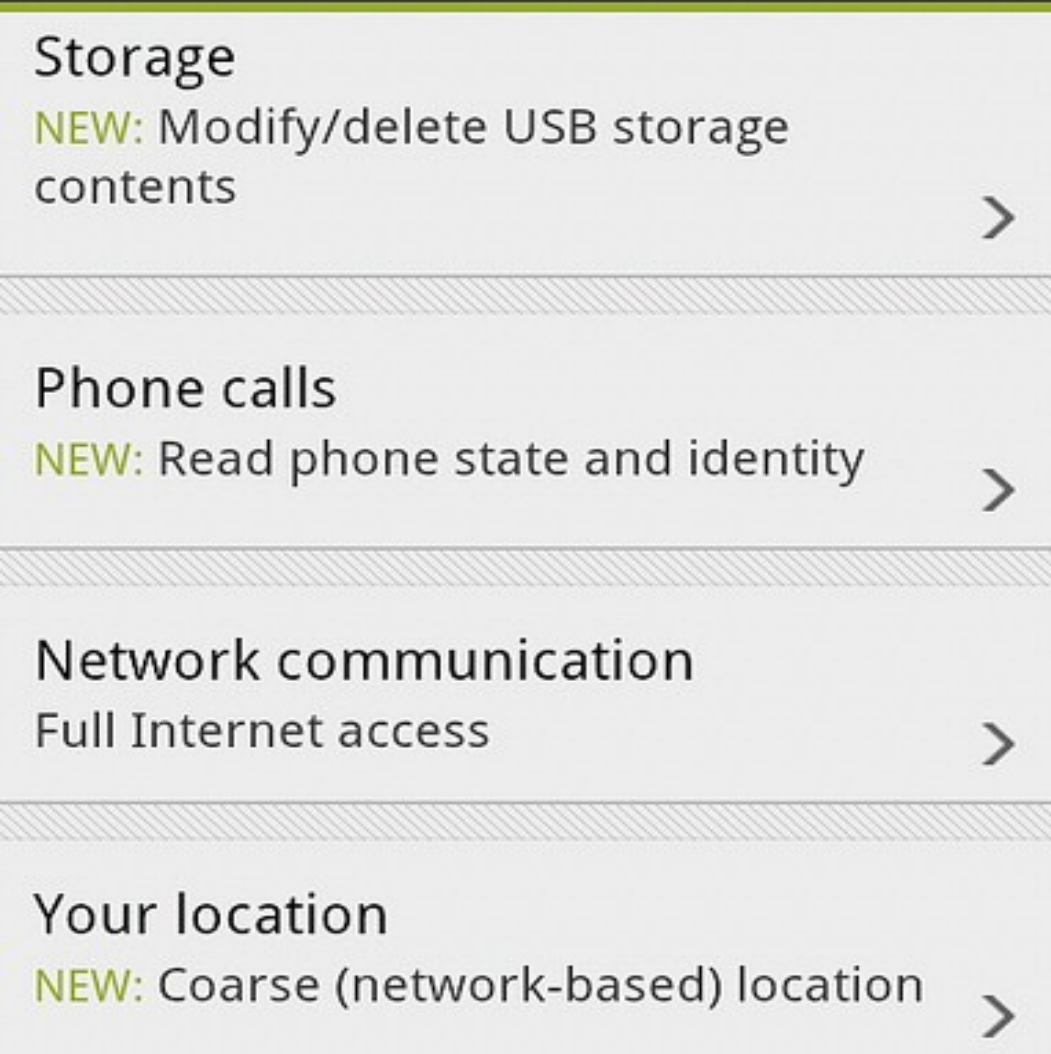
Can access the \$PWD
from which it was launched.

permissions.json: just like an apparmor profile but *much* simpler





Think of app level permissions like on Android™



Angry Birds is a trademark of Rovio Mobile LTD

Image Credit:
<http://www.flickr.com/photos/yoav85/>
CC BY-NC-SA 2.0

What is Docker?



Docker is a sandbox

What is Docker like?

Docker is like a virtual machine.

- Programs are shipped in Docker images
- Images are portable across all x86-64 linux distributions

How does Docker work?

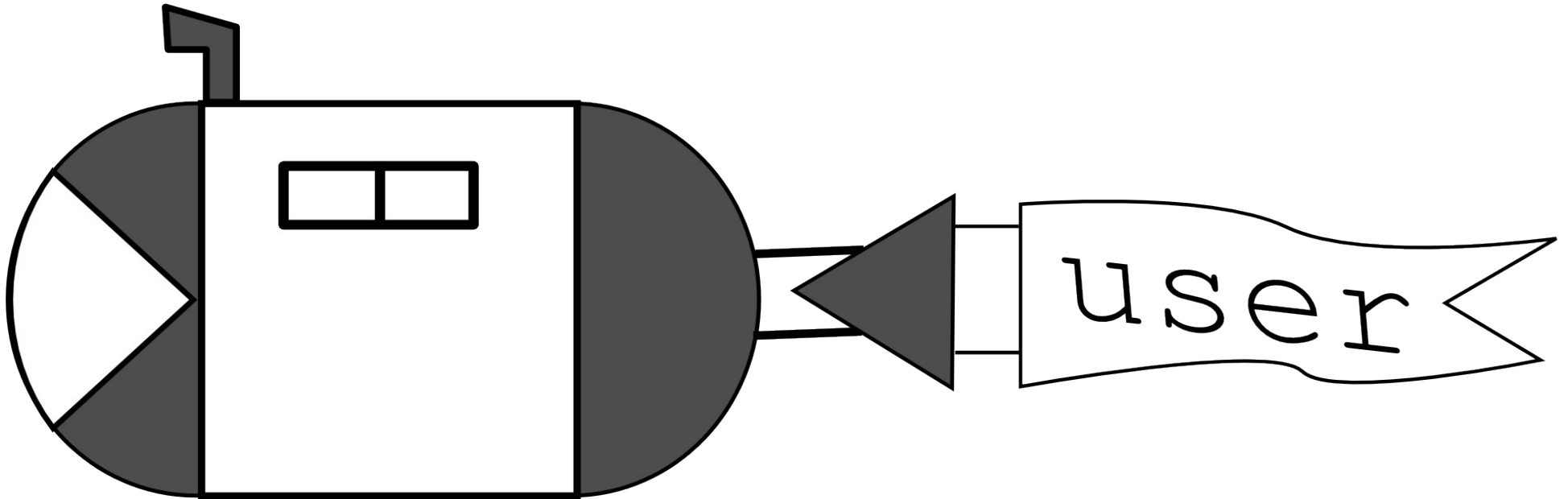
- It uses:
 - cgroups
 - chroot
 - Apparmor or SELinux

What does Docker solve?

- Install multiple versions of the same program with ease
- Build programs reliably across linux distributions
- Install bleeding edge programs on stable systems without compromising system stability

Separate processes into securely isolated containers

Back to subuser



Dependencies

- Docker 1.2
- Python > 2.7 – without any external libraries
- Git
- In the future: ssh will be required for X11 programs

Distributed: Image Source addresses

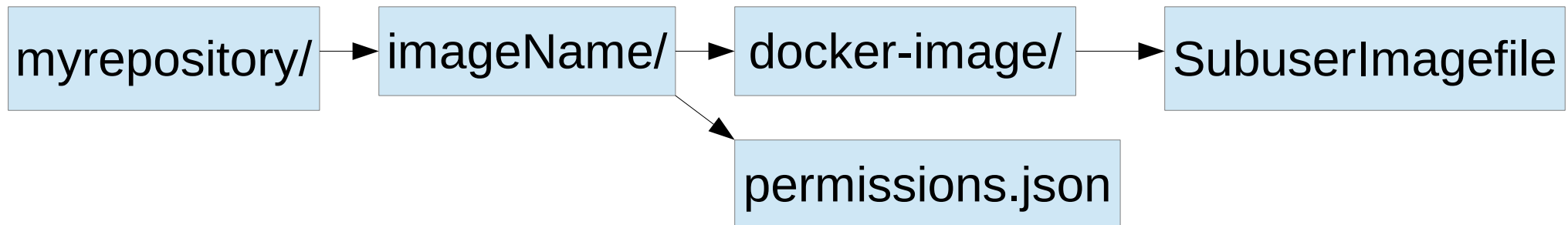
image-source-name@repository-name

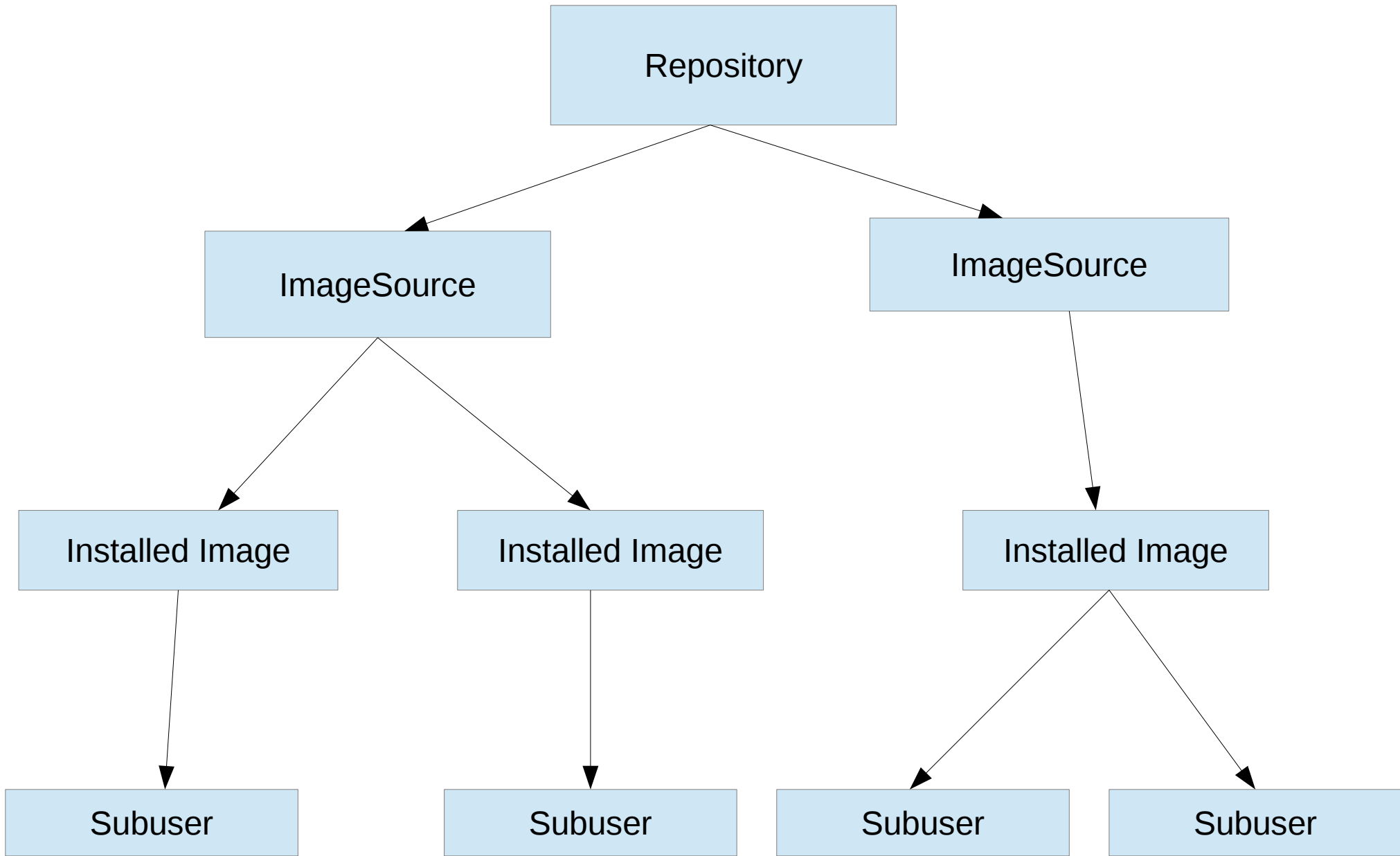
image-source-name@repository-url

```
subuser subuser add subuser-name source-name@http://example.com/subuser-repo.git
```

Creating your own subuser repository

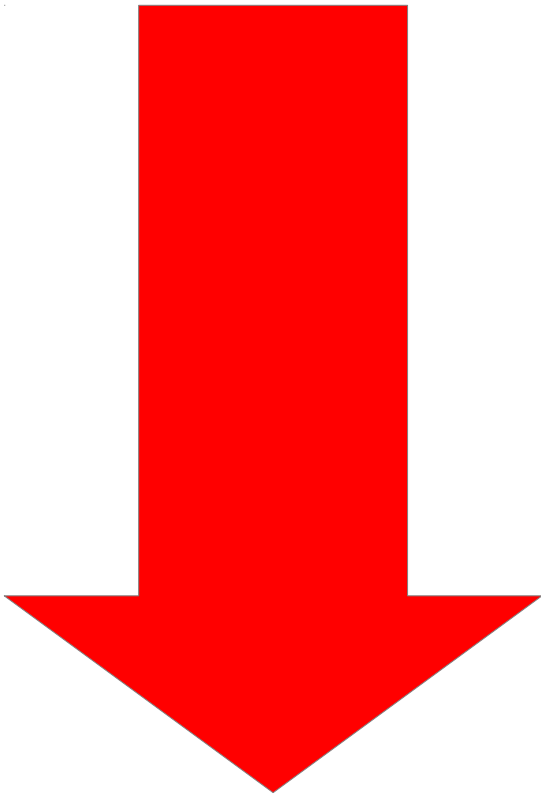
A subuser repository is a git repo



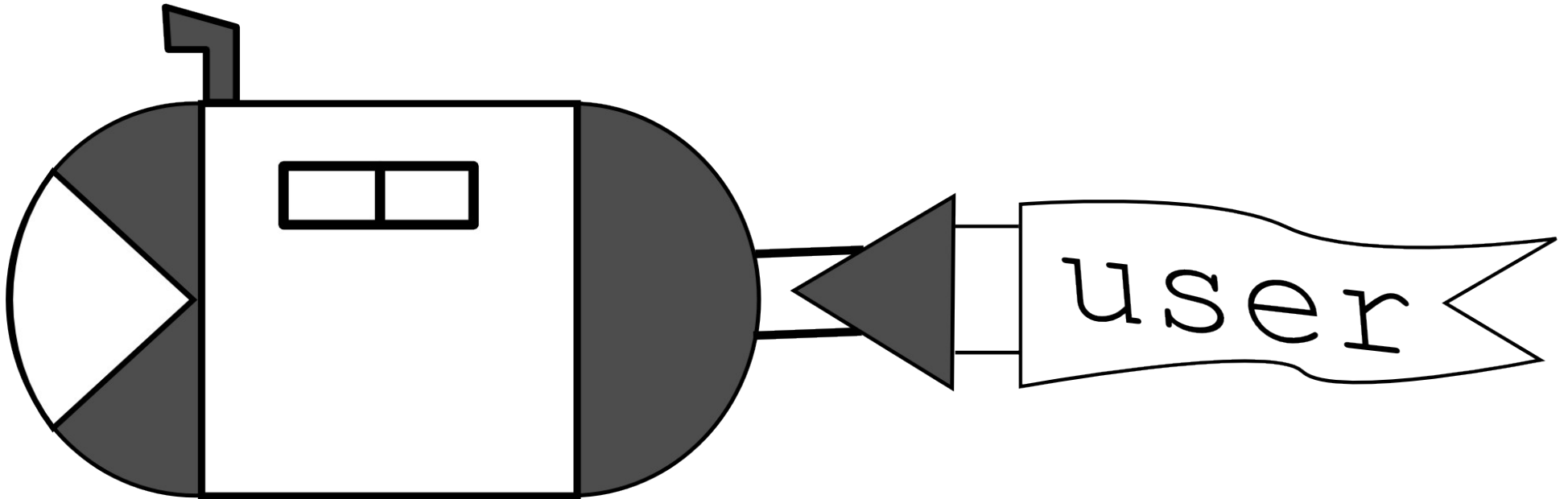


Download:

subuser.org



Demo!



Goodbye

subuser.org

