

How To Dev - Workshop



Core Idea



Core Idea

Software is messy, especially when distributed.



Greatest compliment



Greatest compliment

It just works!



What brakes programs?



What brakes programs?





What brakes programs?

Code

Environment





Code



Code - Version control system



Code - Version control system - Git



Code - Version control system - Git
Environment



- Code Version control system Git
- Environment Containerized environment



Code - Version control system - Git

Environment - Containerized environment - Docker



Git

Docker



Linux

Git

Docker





Most computations runs on servers



- Most computations runs on servers
 - Most servers runs Linux



- Most computations runs on servers
 - Most servers runs Linux
 - Most effective in resources



- Most computations runs on servers
 - Most servers runs Linux
 - Most effective in resources
 - Linux Philosophy



Linux Linux Philosophy



Linux Philosophy

Do only one thing



Linux Philosophy

- Do only one thing
 - And do it well



Linux Linux Philosophy In practice



Linux Philosophy

In practice

Built out of tiny independent programs



Linux Philosophy

In practice

- Built out of tiny independent programs
 - Productive terminal environment



Fill at ~ in the \$



Fill at ~ in the \$

Fill at home in the terminal (shell)



This is the / of the problem



- This is the / of the problem
- This is the root of the problem



My ~ is at /home/user/



Where have you bin/?



```
Where have you bin/?
```

Directory structure:

/bin /home /opt /tmp /usr /var /etc



Don't Bash your head against the keyboard



Hand-on keyboard!



Hand-on keyboard!

Go to cmd



Hand-on keyboard!

Go to cmd

ssh



Utilities



Utilities



Utilities

ls

cd

Change directory



Utilities

ls

cd

cat / less

Show content of file



Utilities

ls

cd

cat / less

ø cp / mv

Copy, move or rename files