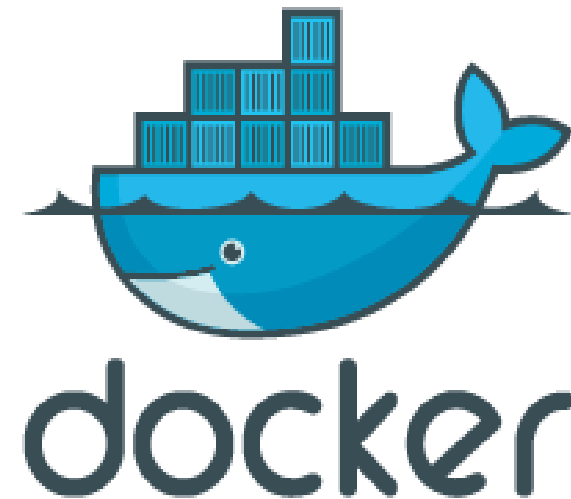
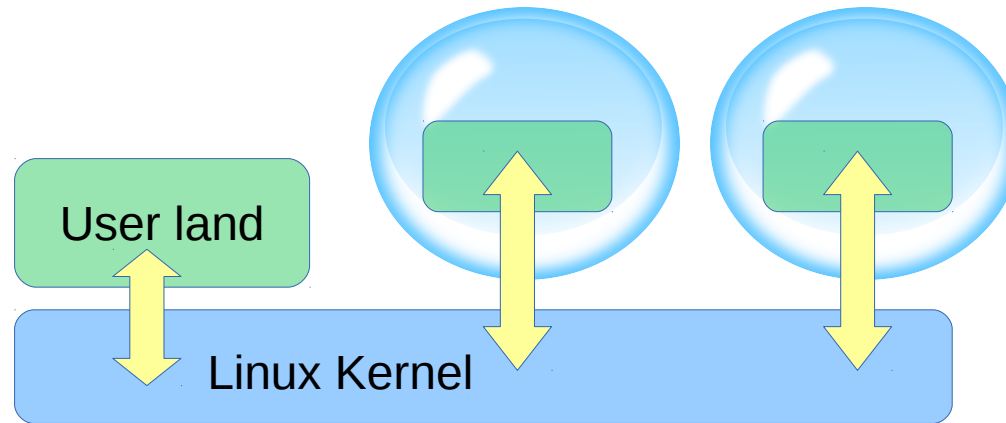


## Wide Field Astronomy Unit (WFAU)

### Docker deployment



# What is a container ?



Linux name space = bubble

## What it is not



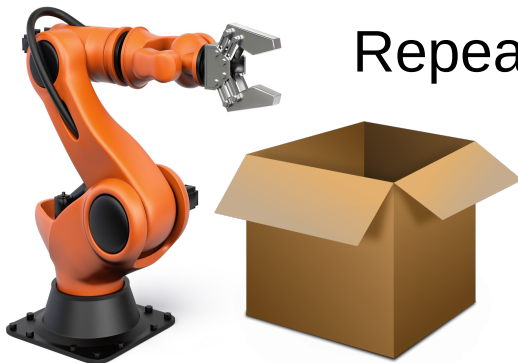
- Standard shape
- Standard connectors

## Why use Docker ...

Rapid  
prototyping



Repeatable builds



Linux flavour agnostic



Platform independent



Documented configuration

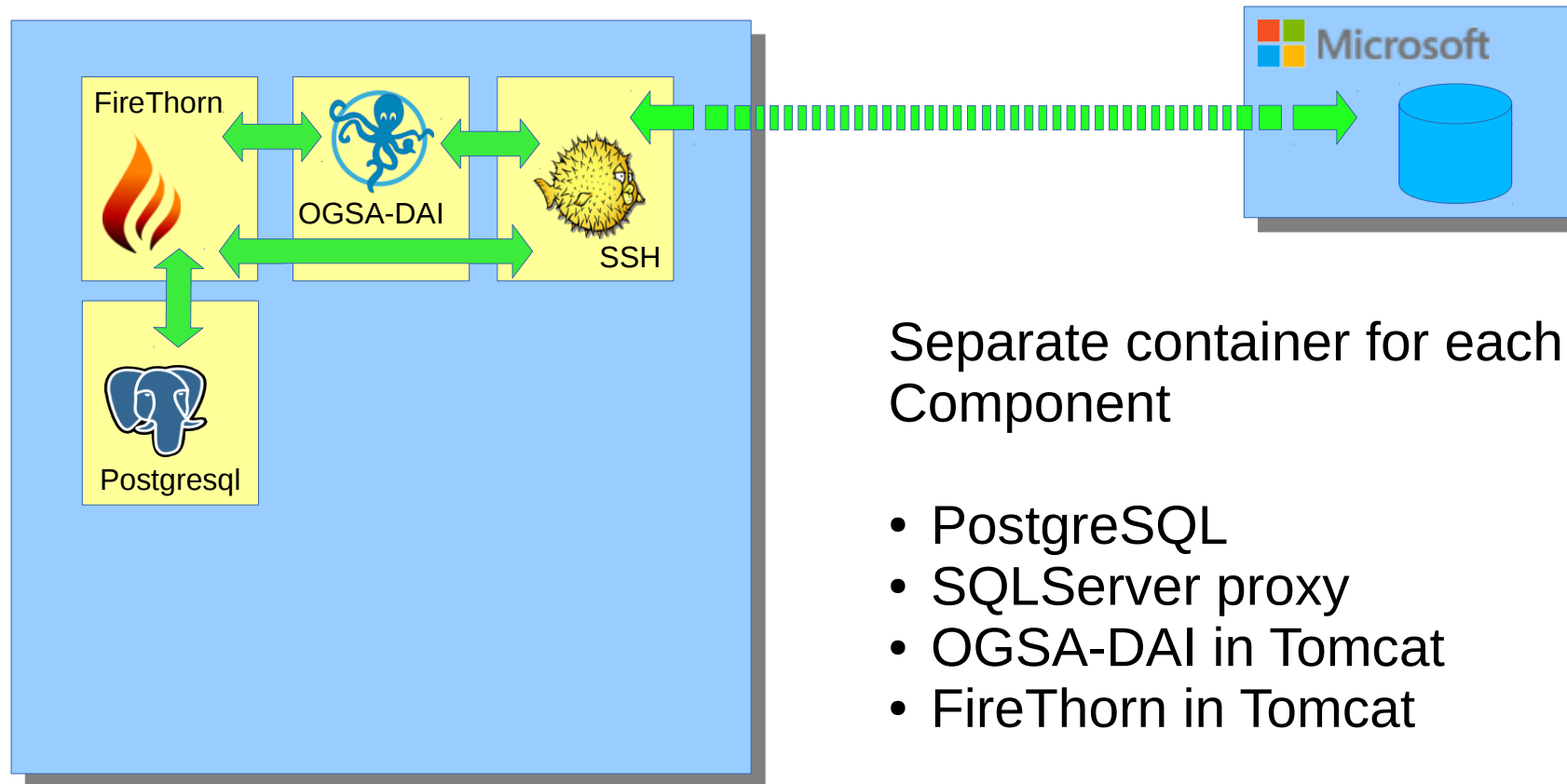


- Version info
- Dependencies



# Webapp – service deployment

## Docker containers inside a virtual machine



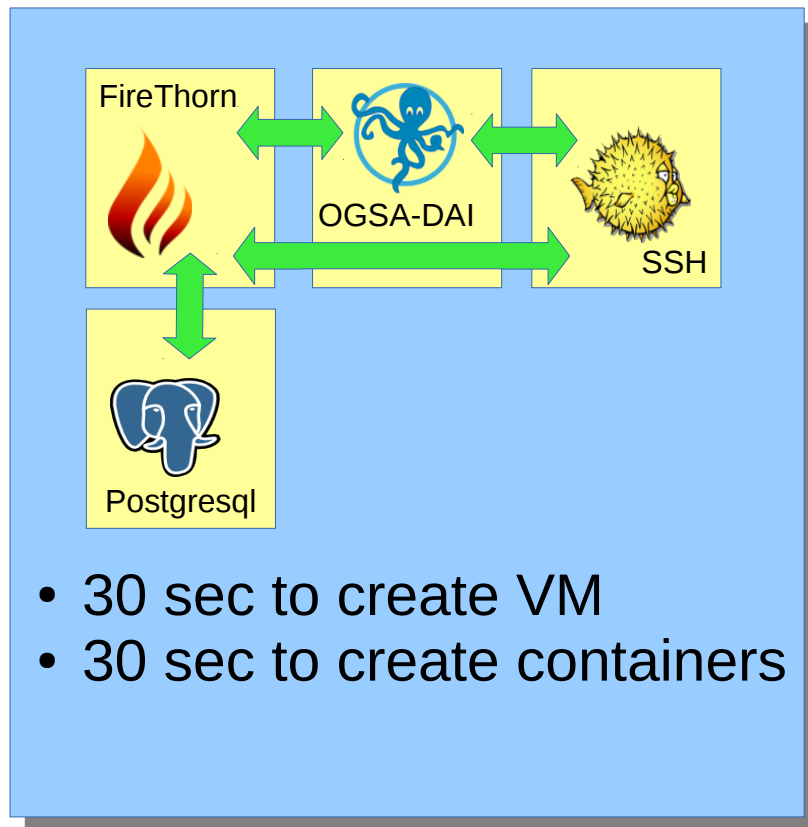
Separate container for each Component

- PostgreSQL
- SQLServer proxy
- OGSA-DAI in Tomcat
- FireThorn in Tomcat

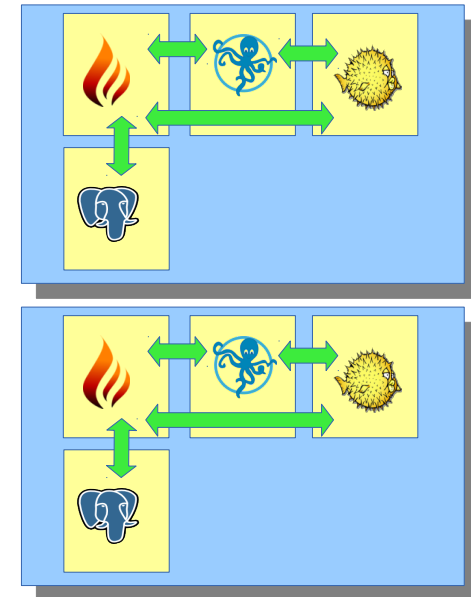
- Basic shell script to launch
- Not using Docker Compose (yet)



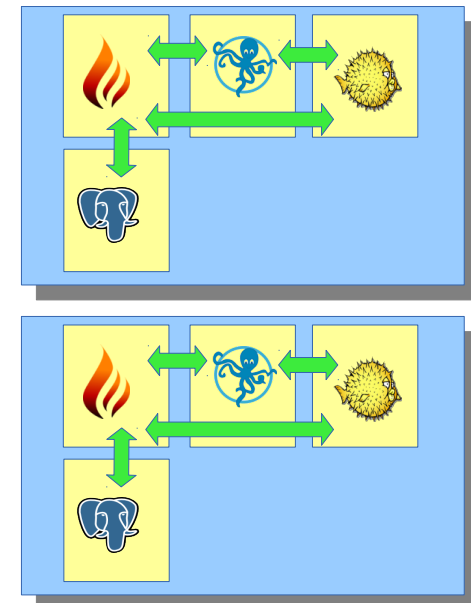
## Reproducible testing (in testing)



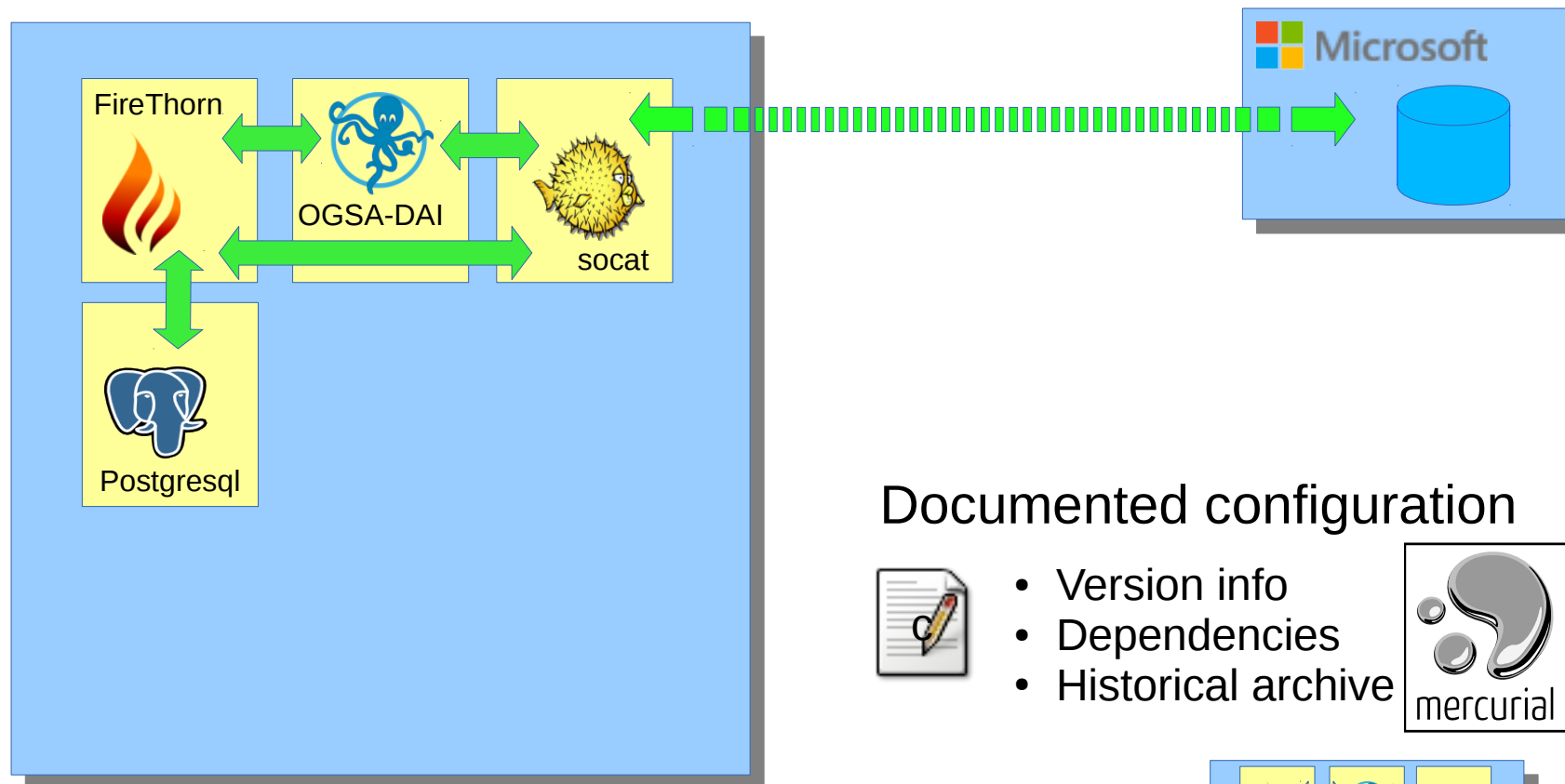
Quick and easy  
developer  
testing



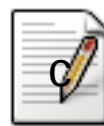
Long  
duration  
testing



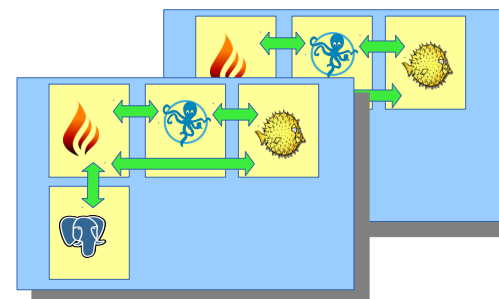
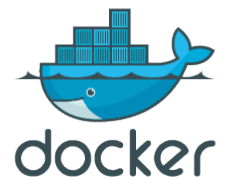
# Reproducible deployment (in development)



## Documented configuration



- Version info
- Dependencies
- Historical archive





Maven - application deployment (in use)



Maven running in a container, deploying our webapps into Tomcat in containers



IvoaTex - application deployment (in use)



<https://github.com/ivoa/ivoatex>





## Issues

Resources – logging to stdout

Security – root access to the host

Tracking – who is running what







## Tricks and tips

Ambassador – socat or ssh

Unix sockets – Docker, SSH and X

Normal user - notroot

