



**RED HAT
DEVELOPERS**

Eclipse DemoCamp 2016/Bonn

Docker Tooling for Developers

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November 14, 2016

About me

- Senior Software Engineer
- Working at Red Hat for ~5 years
- JBoss Tools team member
- Committer on Docker Tooling at eclipse.org

Agenda

- Quick introduction to Docker
- Docker tooling at Eclipse
- Demo
- Conclusion

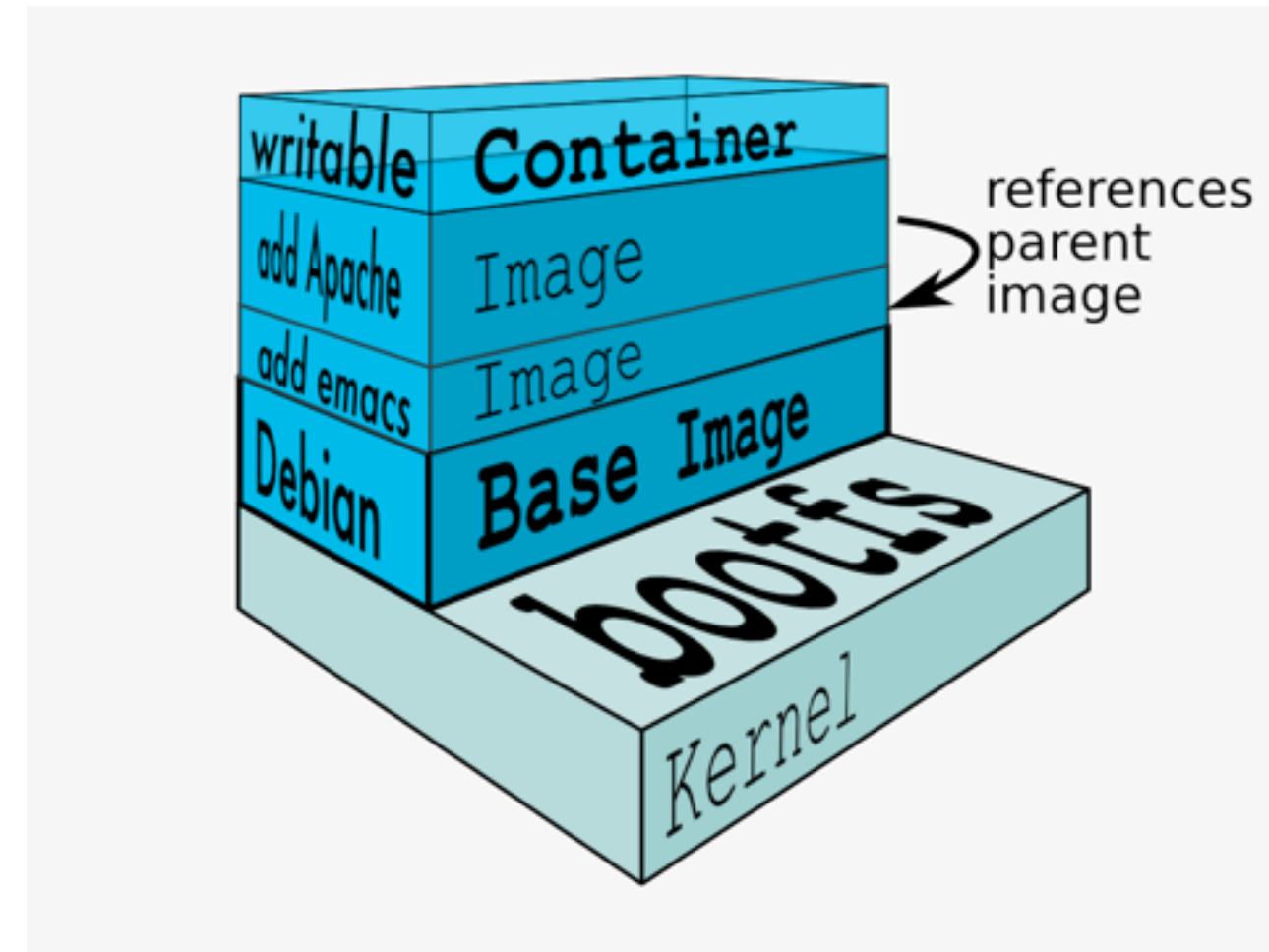
Introduction to Docker

Docker components

- Images
- Containers
- Daemons
- Clients
- Registries

Docker Images

- "build" components
- read-only templates
- combination of layers
- built using a Dockerfile



Docker Containers

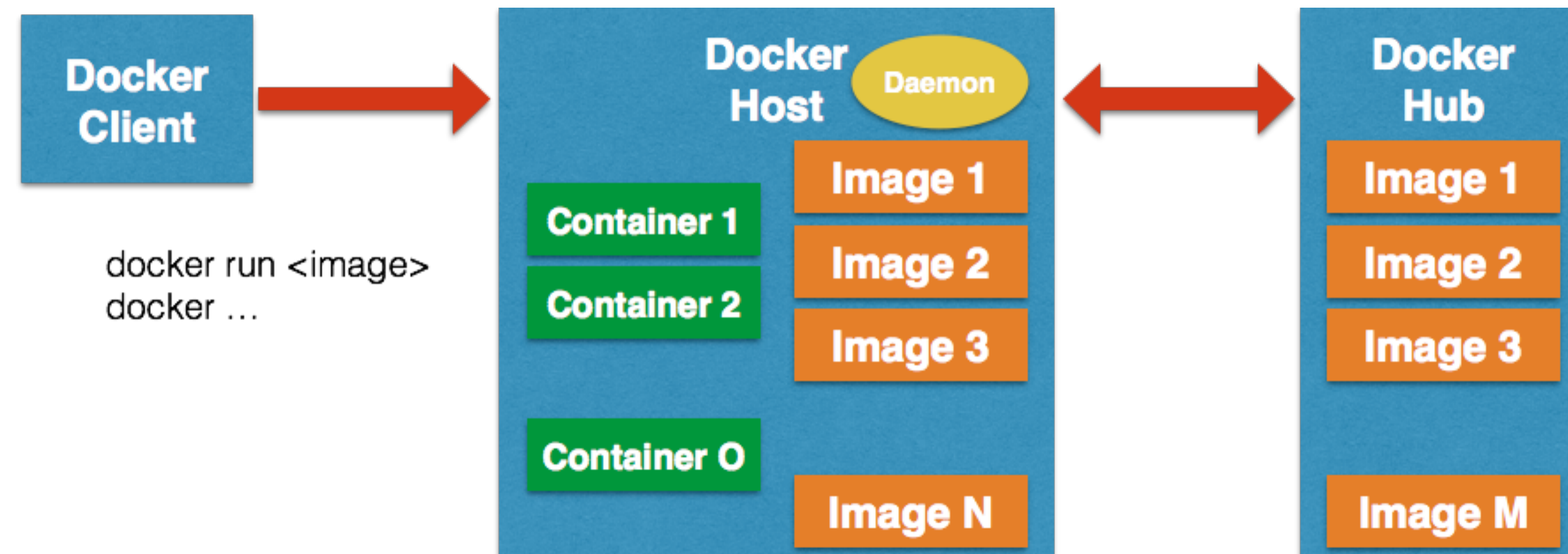
- "run" components
- based on Images
- contain application and dependencies but share same kernel
- can be started, stopped, paused, deleted
- can be linked to other containers
- containers are immutable and disposable

Docker Daemon

- runs natively on Linux
- inside a VM on Windows and Mac OS X

Docker Clients

clients (CLI, IDE) run on host VM



Docker tooling at eclipse.org

- Linux tools project (works on macOS and Windows, too)
- Make Docker accessible from Eclipse
- Works with existing Docker tools (docker-machine, etc.)
- Focus on developer experience
- Allow reuse by other plugins

Docker setup

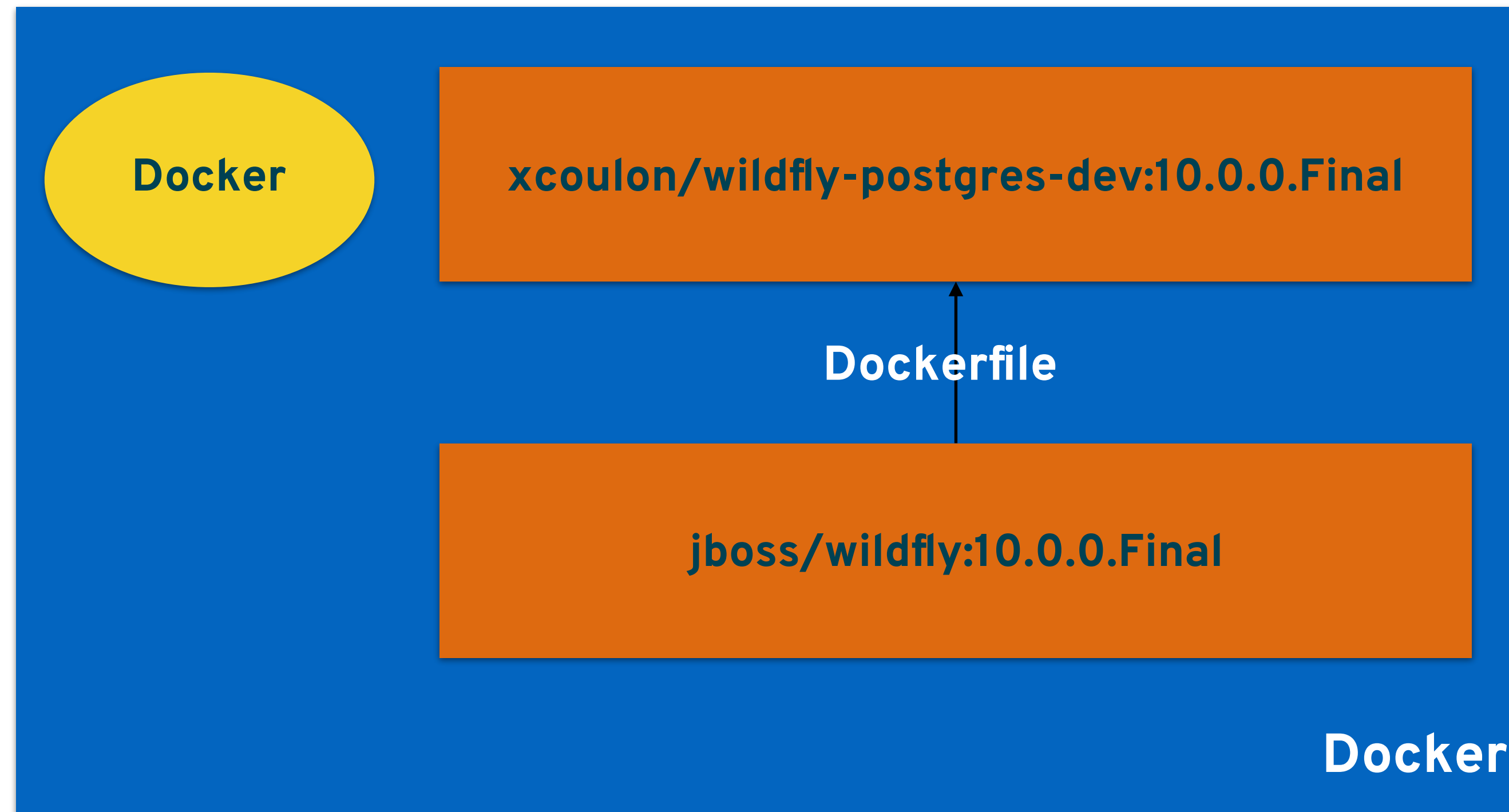
- Install Docker for Windows/Mac/Linux or Docker Toolbox from docker.com or the Red Hat Container Development Kit (CDK) at <http://developers.redhat.com/products/cdk>
- Install Eclipse Docker tooling
 - from Eclipse Marketplace
 - from eclipse.org/linuxtools
 - as part of Red Hat Developer Studio (<http://developers.redhat.com/products/devstudio>)
 - from tools.jboss.org (mirrors eclipse.org/linuxtools)

Eclipse Neon Releases

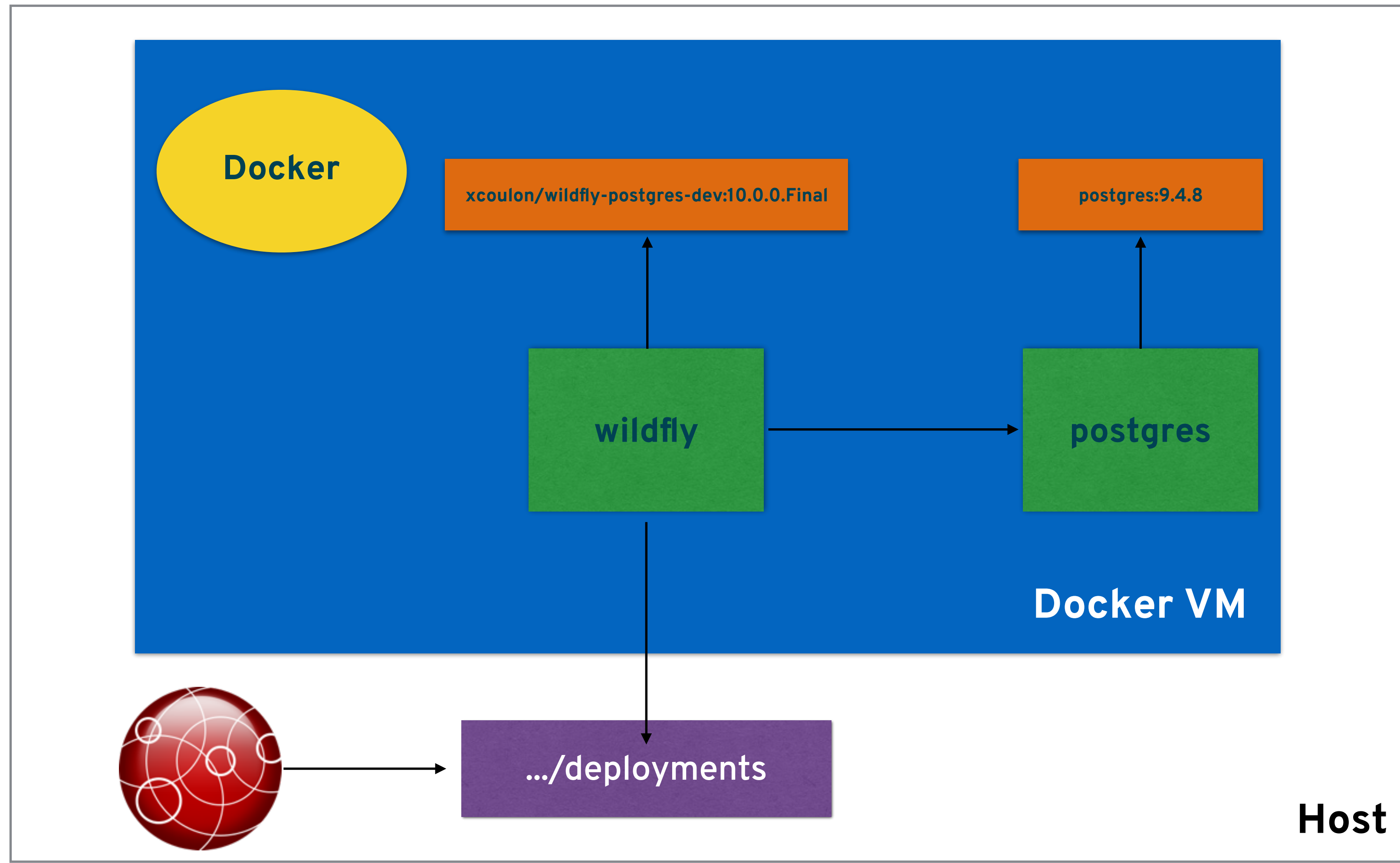
- Dockerfile editor (external contribution)
- Support for Docker Compose
- Image Hierarchy view
- Execute shell commands in Terminal view
- Improved support for connections
- Push to registries with authentication
- Bug fixes (thanks to AERI reports)

Demo

Demo scenario



Demo scenario



Conclusion

Summary of highlighted Docker features

- Manage connection to Docker daemons
- Search and pull images
- Build custom images from Dockerfile
- Run images with specific ports, volumes and links to containers
- Manage containers (start/stop/pause/unpause/kill)
- Use a server adapter
- Remote debug in a container
- View image hierarchy
- Run Docker Compose
- Copy files from containers to host

Ideas for Eclipse Oxygen

- Improve support for Docker Compose
- Support newest Docker core features
- Import/export "docker run" commands
- Server Adapter (JBoss Tools)

Let's Get in Touch !

- eclipse.org/linuxtools / linuxtools-dev@eclipse.org / bugs.eclipse.org
(product 'Linux Tools' / Component 'Docker')
- <http://tools.jboss.org> / jbosstools-dev@lists.jboss.org / @jbosstools
- <http://developers.redhat.com/> @rhdevelopers

Questions & Answers

Danke !

**Feedback appreciated:
@xcoulon or during the pause**