



Claim control of your  
Docker images

# \$ whoami

## Evgeny Shmarnev

- Was born In Russia, work in Prague @ SUSE
- Senior OpenStack Automation Engineer
- Specializing in Linux / OpenStack / Containers and all things quality (yes, I like TDD)!
- Active open-source contributor (openSUSE, Docker, some python-related projects, etc)
- Co-organizer of Docker Prague Meetup

**What is it all about ?**

# What do we have:

- 1) Docker Hub
- 2) Docker Distribution: (<https://github.com/docker/distribution>)
  - Open source (it's not Docker Hub!)
  - Stores and distributes Docker images.
  - Integrates with the Docker engine (login/pull/push).
  - Does not deal with authorization.
  - Provides an API to:
    - Modify & check the state of the registry.
    - Allow an external authorization process (Portus!).

# Here comes Portus!













# An authorization service

**Portus + Docker Distribution = <3:**

- 100 % Free and Open-Source
- Portus implements the login procedure from Distribution

# Highlights

# Security

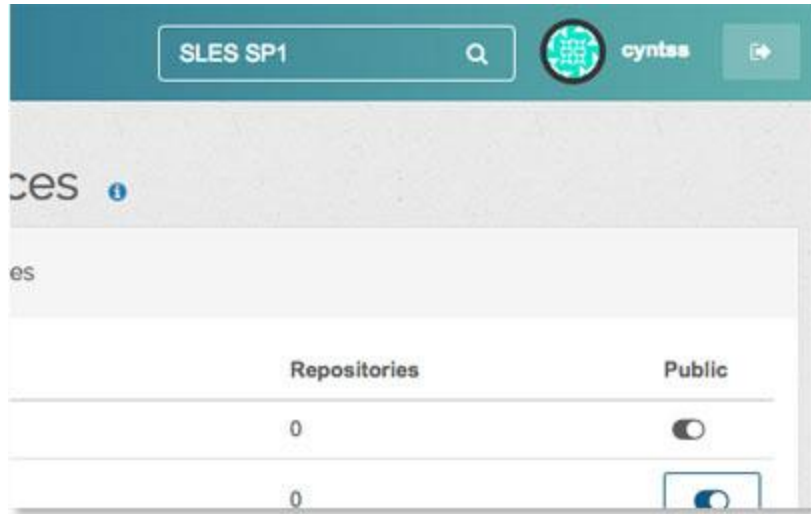
Members <span>?</span>		 Add members	
User	Role	Edit	Remove
 cyntss	Owner		
 mssola	Viewer		
 meggie	Contributor		



# Easily manage users with teams

- Viewers
- Contributors
- Owners

# Search



# Audit

The screenshot displays the Portus web interface. On the left is a dark sidebar with navigation links: Dashboard, Namespaces, Teams, and Admin. The main content area is titled 'Recent activities' and lists a series of actions performed by user 'mssola'. Each activity includes a colored icon, a user profile picture, the action description, and a timestamp. The activities are: creating a team 'Machinery', pushing a commit to 'public / busybox:latest', changing the role of user 'john' in the 'Docker' team, adding user 'john' to the 'Docker' team, setting the 'public' namespace as public, creating an 'internal' namespace under the 'Docker' team, creating a 'public' namespace under the 'Docker' team, and creating a team 'Docker'. On the right, a 'Repositories' panel shows tabs for 'All', 'Starred', and 'Personal', with 'public/busybox' listed under the 'All' tab. The footer states 'Created with ❤ by the SUSE team'.

Portus

Search repository

mssola

Dashboard

Namespaces

Teams

Admin

Recent activities

- mssola created team Machinery  
0 less than a minute
- mssola pushed public / busybox:latest  
0 4 minutes
- mssola changed role of user john from viewer to contributor within the team Docker  
0 7 minutes
- mssola added user john with role viewer to the Docker team  
0 7 minutes
- mssola set the public namespace as public  
0 9 minutes
- mssola created the internal namespace under the Docker team  
0 10 minutes
- mssola created the public namespace under the Docker team  
0 10 minutes
- mssola created team Docker  
0 12 minutes

Repositories

All Starred Personal

public/busybox

Created with ❤ by the SUSE team

# Other features:

- LDAP user authentication
- Synchronization with your private registry in order to fetch images and tags are available
- Removing images and tags from registry through Portus
- Star your favorite repositories
- Disable users temporarily, or remove them from the system
- Users that fail at logging in too many times will have their account locked
- Users can recover their password if they forgot it
- Showing users by their preferred “display name” rather by their user names

**How it works?**

Docker Registry



Portus



Execute operation X on Y



Docker Registry



Portus



Provide proof



Docker Registry



Portus



Request permission to do  
operation X on Y.





Docker Registry



Portus



Permission granted



Docker Registry



Portus



Execute operation X on Y



Docker Registry



Portus



Execute operation X on Y



Docker Registry



Portus



Execute operation X on Y



# Deploying Portus

- <https://software.opensuse.org/package/Portus>
- <https://hub.docker.com/r/opensuse/portus/>
- Other setups

**Demo time**

# You can be a contributor too!

- <https://github.com/SUSE/Portus>
- <https://groups.google.com/forum/#!forum/portus-dev>

# Contacts:

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# Questions ?

