



Claim control of your
Docker images

\$ whoami

>> **Evgeny Shmarnev**

- Was born In Russia, work in Prague @ **SUSE**
- Sr. OpenStack Automation Engineer
- Specializing in Linux / OpenStack / Containers and all things quality (yes, I like TDD)!
- Active open-source contributor (Docker, weechat, OpenStack, some python-related projects, etc)
- Docker Prague Meetup co-organizer (since this year)

What is it all about ?

What do we have:

1) Docker Hub

2) Docker Registry:

- Open source
- 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

Here comes Portus!



Portus

Portus is an open source authorization service and user interface for your on-premise Docker Registry.











- 100 % Free and Open-Source (Apache 2.0 License)
- Portus implements the login procedure from Docker Registry

Highlights

LDAP Integration

- Portus can be configured to use an LDAP server for the authentication
- Portus will just act as a proxy between users and the LDAP server for authentication
- Even if users are authenticated through the LDAP server, Portus needs to store them in its database in order to perform all the interaction with the registry

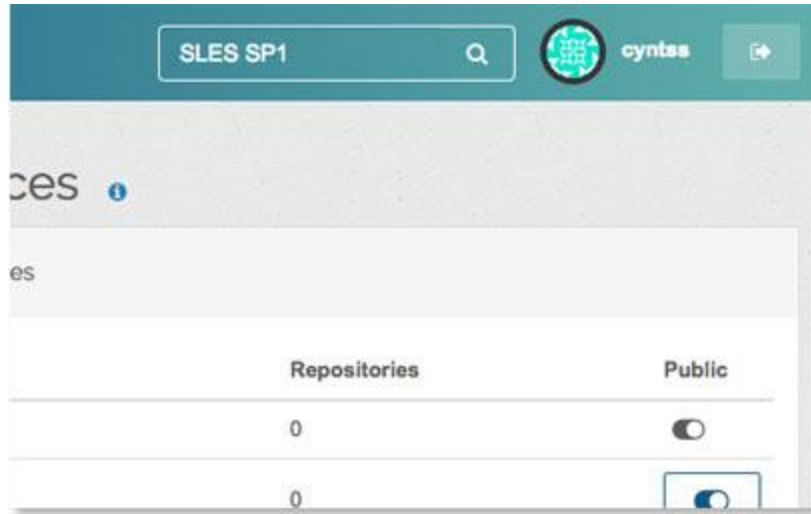
Security

Members ?		 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 the user 'mssola'. Each activity is preceded by a colored icon representing the action type (team creation, push, role change, user addition, namespace setting, namespace creation, and team creation). The activities are timestamped relative to the current time. On the right side, there is a 'Repositories' section with tabs for 'All', 'Starred', and 'Personal'. The 'All' tab is selected, showing a list of repositories, with 'public/busybox' visible at the top. The top of the interface features the Portus logo, a search bar, and the user's profile information.

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:

- 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 (<https://github.com/suse/portus/wiki>):
 - Using a [Vagrant/VM](#) environment.
 - [Docker Compose](#) setup.
 - A [bare metal](#) environment.

Don't bore us, get to the demo!

You can be a contributor too!

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

Contacts:

- shmarnev@gmail.com
- github.com/evalle
- [@eshmarnev](https://twitter.com/eshmarnev) on Twitter