

Operate First Cloud Instance

...

An Overview

By: Humair Khan

Senior SE at Red Hat

Office of the CTO - Open Services
Group

Agenda

Cloud Overview

- OCP Clusters

Open Data Hub

- JupyterHub
- Trino
- Superset
- Seldon

Other Useful Services

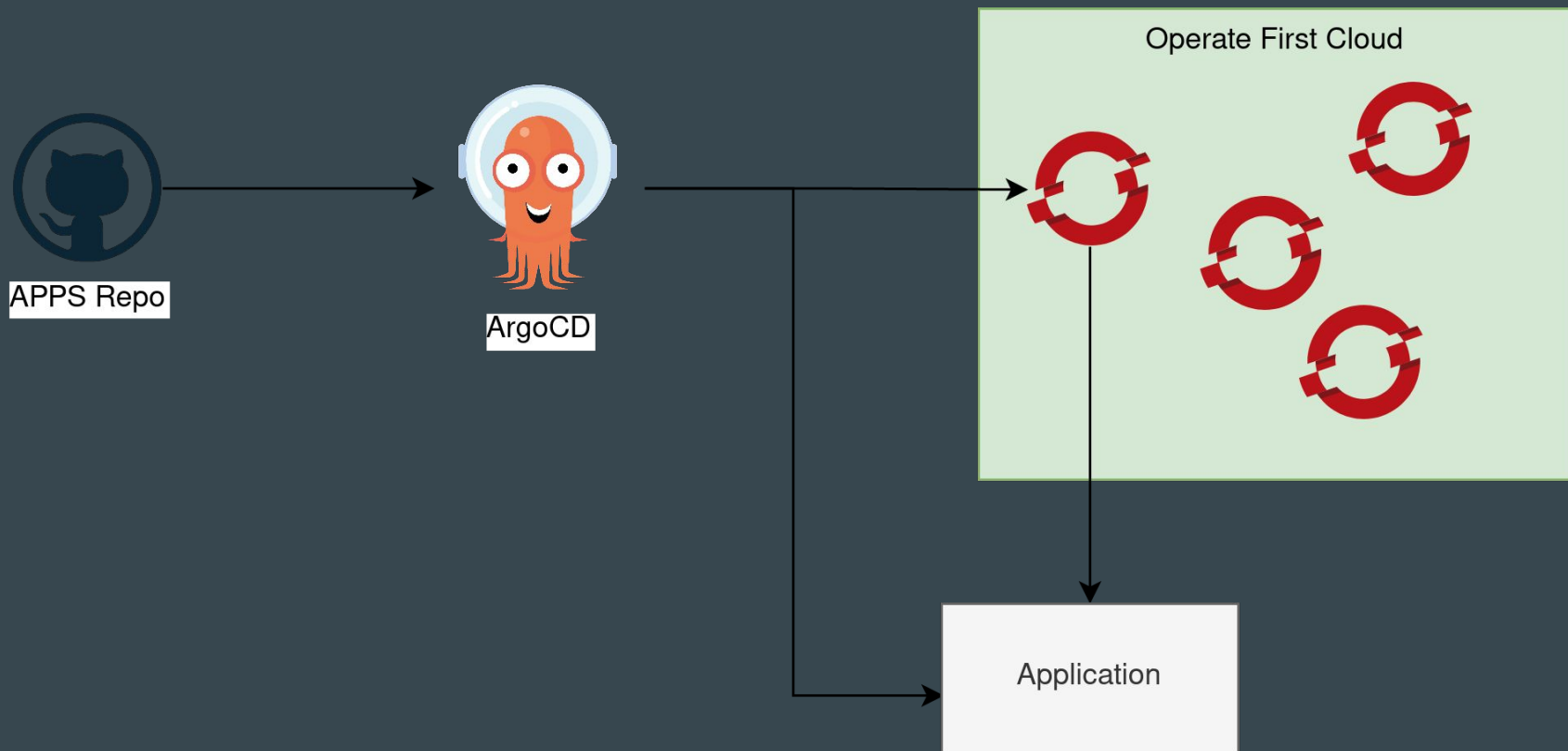
Documentation

How to get involved/contribute

What is the Operate First Cloud Instance

- A collection of OpenShift Clusters
- Clusters are grouped by Environments
- Managed by ClusterOps subgroup under Sig Operations ([read more](#))
- Centrally managed via Advanced Cluster Management and ArgoCD
- Everything managed through Git/Github (via GitOps)

Brief GitOPS workflow overview



Operate First Cloud Instance is NOT interchangeable with Operate First

The latter is a philosophy while the former is a living, opinionated, application of the philosophy.

“Environments”

- Think of it as a grouping of clusters
- Grouping can be dictated by organization (MOC/OSC) or cluster region (EMEA)
- Could be more consistent ~_(\ツ)_/~

Current environments: MOC, OSC, EMEA

Where do these clusters come from?

- Different organizations, teams, collaboration projects
- MOC – joint collaboration with the Mass Open Cloud
- OSC – Joint collaboration with OS Climate
- Red Hat – OCTO

Operate First Cloud

MOC



Smaug



Curator



Infra

OSC



osc-cl1



osc-cl2

EMEA



Morty



Balrog



Rick

You Probably only care about.....

Operate First Cloud

MOC



Smaug



Curator



Infra

OSC



osc-cl1



osc-cl2

EMEA



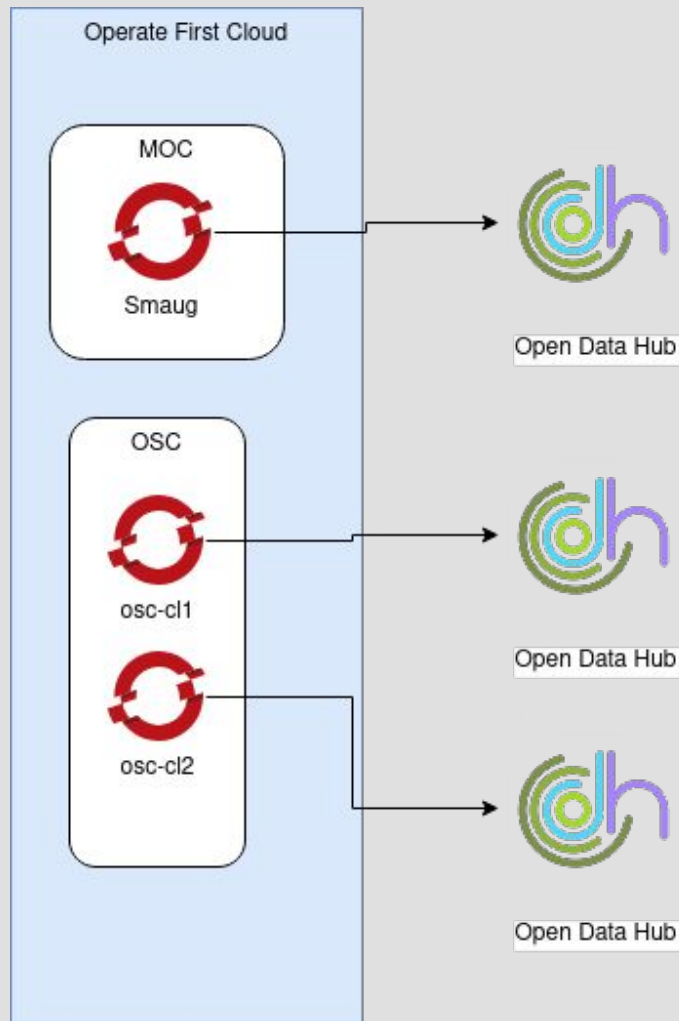
Morty



Balrog



Rick

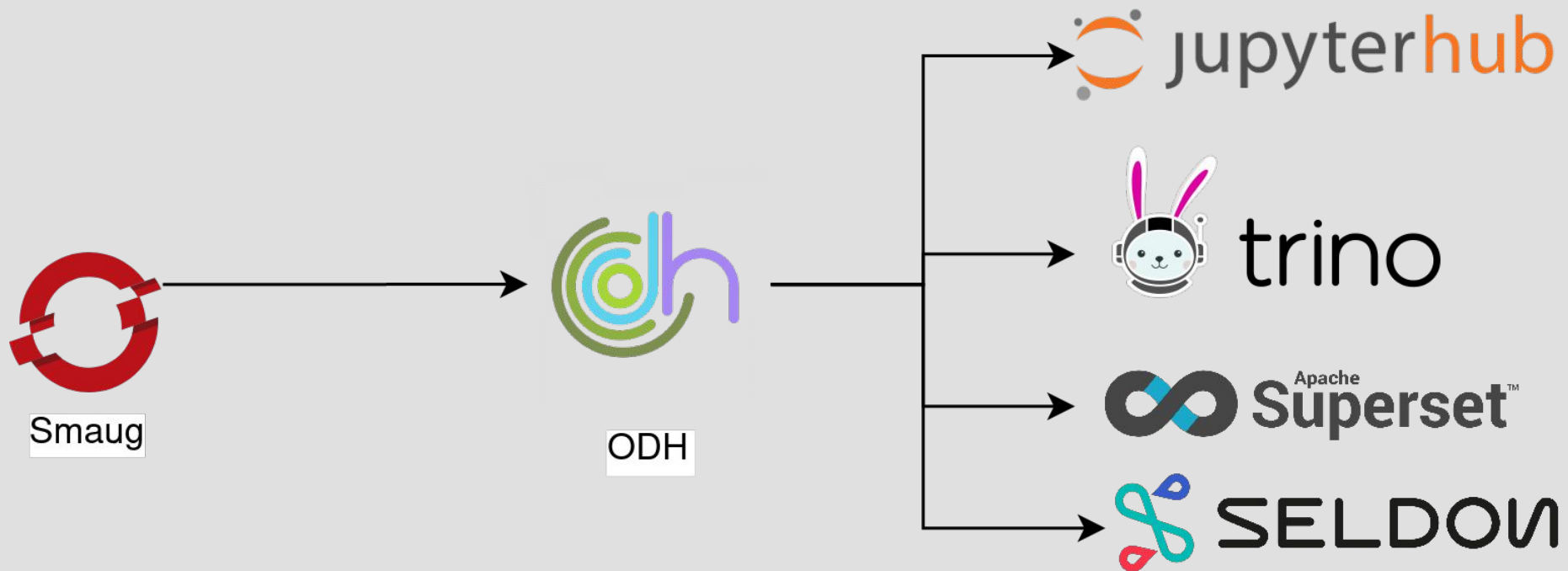


- Currently 3 different clusters, with 3 different ODH installations
- OSC-CL1 and OSC-CL2 for OSC work
- Smaug for everything else

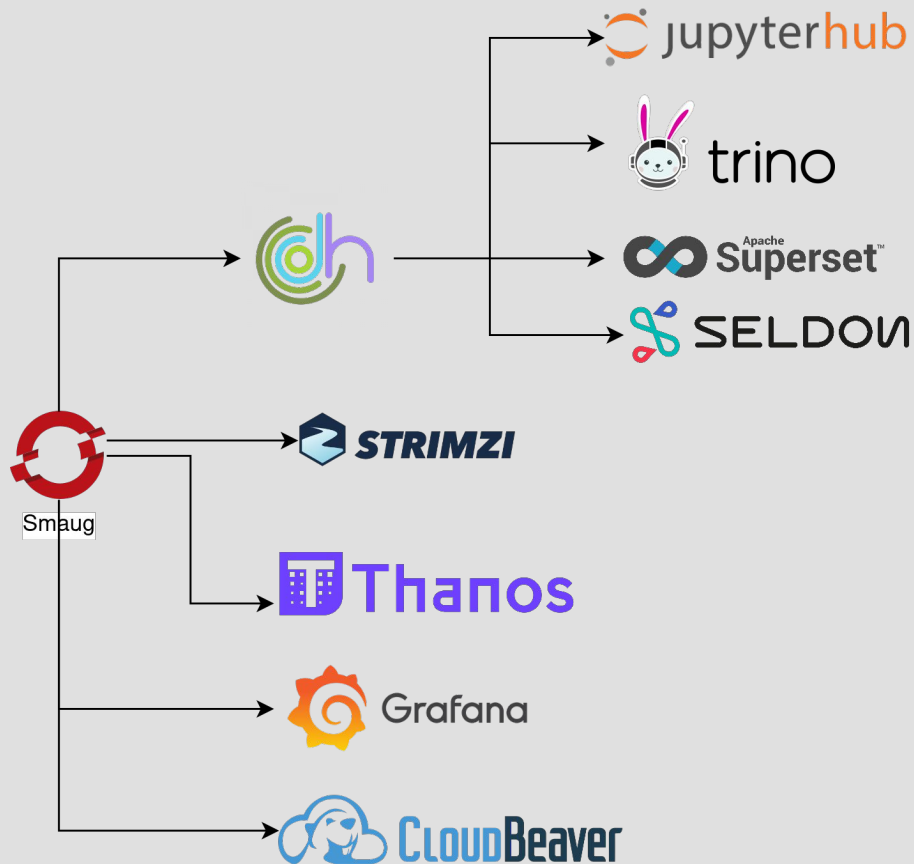
The dream:

- Only one ODH installation managed by one team, with help from ODH community
- We're not there yet

ODH on Smaug



But you might also be interested in....



That was **SMAUG** cluster

What about **OS Climate**?

2 Clusters: **osc-cl1** and **osc-cl2**

Why are there 2 clusters? **osc-cl1** and **osc-cl2**?

osc-cl1

- First iteration
- Will transition to more unstable cluster-level development work
- I.e. cluster-wide instability is possible
- Not prod

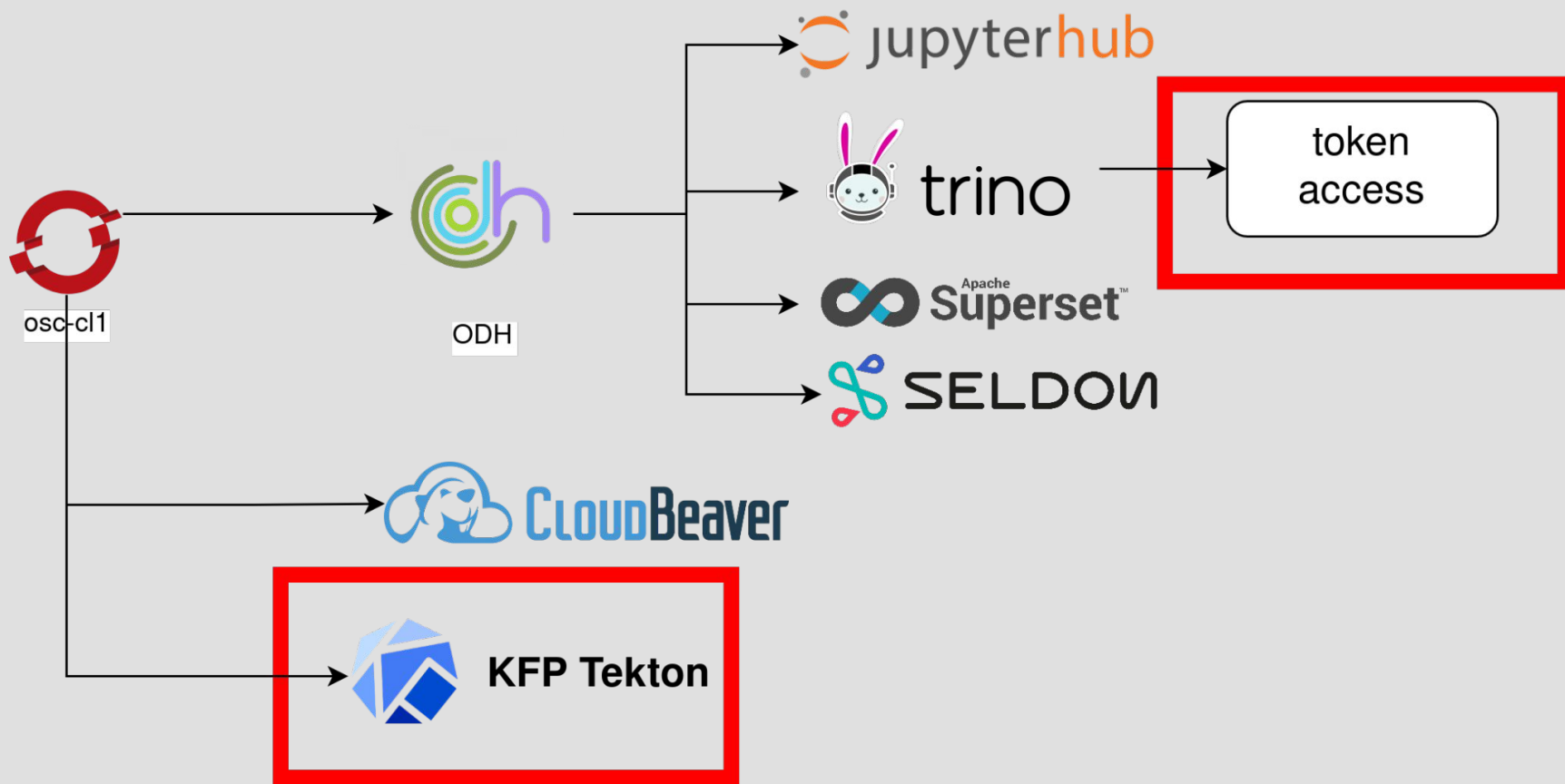
osc-cl2

- Most recent OS-C cluster deployed (at the time of this writing)
- Meant for experiments at the “service” level, i.e. experimental notebooks etc.
- Cluster meant to be relatively stable
- Not prod

**Side Note: No cluster provided/managed by
Operate First should be considered Production
level.**

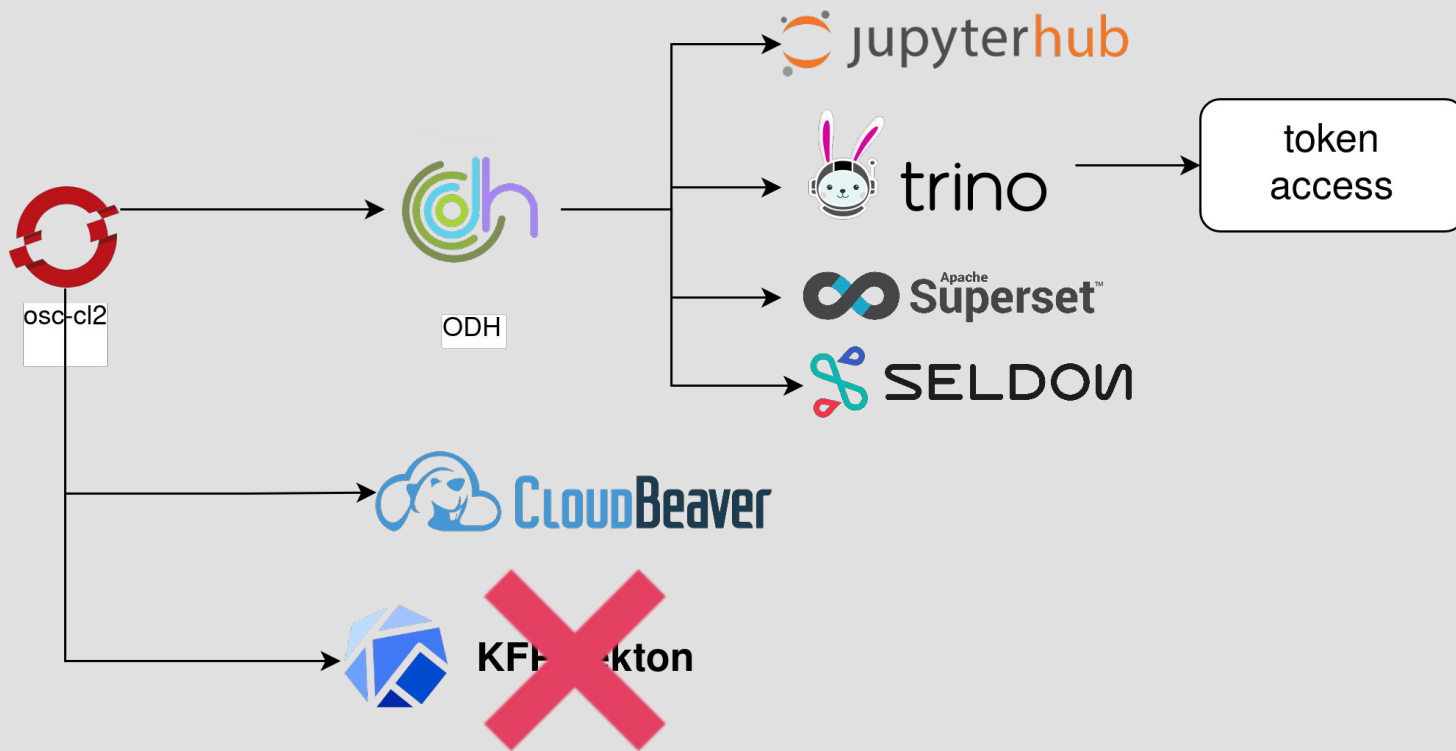
We try to keep clusters stable and secure. But we make no guarantees.

OSC-CL1 Cluster



OSC-CL2 provides the same thing
except...

OSC-CL2 Cluster



**OSC Cluster services not
as easily explorable...yet**

So here are some links for now.... :)

osc-cl1

- [JupyterHub](#)
- [Trino](#) / [Token Access](#)
- [Superset](#)
- [Cloudbeaver](#)
- [KFP-Tekton](#)

osc-cl2

- [JupyterHub](#)
- [Trino](#) / [Token Access](#)
- [Superset](#)
- [Cloudbeaver](#)

Cool, how do I use this stuff?

Getting Access

- Most of the times, you can self provision access by checking the docs
- List of services (non-exhaustive): [link](#)
 - An exhaustive list in the works
- Will need basic Git knowledge (GitOPs)
- Need to make a pull request

Always read the docs first: [link](#)

When all else fails, make an issue in support: [link](#)

Add Superset user access #450



Closed

leihchen opened this issue on Nov 2, 2021 · 3 comments



leihchen commented on Nov 2, 2021

Member



Could someone help me add the curator team members (@skanthed @gagansk) to superset on Smaug. I would like get dashboards, charts access for the team.



1



HumairAK commented on Nov 2, 2021

Member



can you follow the instructions here and make a pr? https://github.com/operate-first/apps/blob/master/docs/odh/superset/add_superset_users.md



leihchen commented on Nov 2, 2021



Member





Author







Created: [operate-first/apps#1263](#)

add curator team to superset user #1263

 Merged **sesheta** merged 1 commit into `operate-first:master` from `leihchen:master`  on Nov 2, 2021

 Conversation **2**  Commits **1**  Checks **0**  Files changed **1**

Changes from all commits ▾ File filter ▾ Conversations ▾ Jump to ▾  ▾

2   cluster-scope/base/user.openshift.io/groups/superset-user/group.yaml 

... @@ -7,3 +7,5 @@ users:

7	7	- aakankshaduggal
8	8	- chauhankaranraj
9	9	- leihchen
10	+	- gagansk
11	+	- skanthed



HumairAK approved these changes on Nov 2, 2021

[View changes](#)

HumairAK left a comment

Member



/lgtn
/approve

Expect to take part in *some* of the GitOps process

I.e. Working with GIT, GITHUB, following docs, making pull requests

Examples of other common requests:

- How do I add an image to JupyterHub: [link](#)
- How do I get more space in JupyterHub: [link](#)
- How do I add a new bucket to trino: [link](#)

**How can I get a new service/tool deployed on
Operate First Cloud**

Always start with an Issue first

- Create an Issue in the [support repo](#)
- Provide link to docs, as much operational info as you can
- Some questions worth considering:
 - What is the service?
 - What does it do?
 - Who is it for?
 - Is it OCP/K8S friendly?
 - Does it have multi-tenancy support?
 - What is the operational burden of managing this service?
 - Who will take on this burden?

I made an issue, how long do I need to wait?

Depends....who's servicing the issue?

Operate First admin team:

- Whenever we can fit it into our cycles
- No guarantee of turnaround time

You or someone else outside of the OPF Admin team is willing to deploy it:

- Depends on your familiarity with K8S/OCP, Git, Github, and the service being deployed
- We will help you get acquainted with our tooling
- We will work/support you in deploying/operating the service
- Don't be shy! We're here to help :)

How do I get access to my own OCP namespace so I can deploy my own tooling/services?

Complete Project Onboarding

- You will need to onboard your project
- This means:
 - Creating your own ocp namespace
 - Finding a quota that fits your needs (how much cpu/memory/storage capacity)
 - Who will need access
 - What cluster will this namespace live on?
- This process is automated via a notebook, follow docs [here](#)

I need to know more...
I have....questions...

Be part of the Community!

- Visit our website: www.operate-first.cloud
- Join our GitHub organization: [link](#)
- Join our slack: [link](#)
 - Notable channels:
 - #support : ask any and all questions here
 - #announcements: for any notable announcements regarding Operate First as a whole
 - #sig-operations: for operations related work/efforts
- Sig Operations charter: [link](#)
- Docs on existing cloud operations: [link](#)
- Apps repo: [link](#)

LOONEY TUNES



"That's all Folks!"