## Cloud Services in EBI

First step to move towards cloud technology

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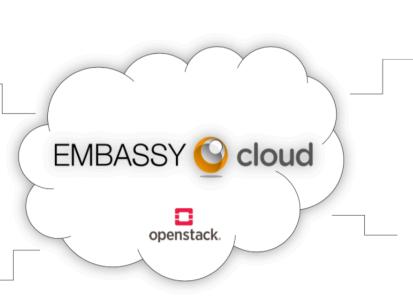
## EBI cloud services

#### What is it?

A cloud infrastructure based in **OpenStack** owned and operated by EMBL-EBI. It allows you to share data easily with collaborators and deploy workloads in your own cloud tenancy

# How do you control resources?

EMBL GTLs sponsor tenancies for collaborators who are assigned a 12 month tenancy (renewable)



#### How can I use it?

Request a tenancy and you will be able to create your own VMs (IaaS), run your own Kubernetes clusters (EHK), store and share your data and much more!

#### Who uses it?

We already host projects like PhenoMeNal, ExpressionAtlas, SureChEMBL and collaborators such as IDR and the PanCancer Project.

2015 - Embassy v1 RedHat OpenStack 6 NFS as a Service **2017 Q1 - Embassy v2** RedHat OpenStack 9

> Swift Compatible Object Store S3 Compatible Object Store

2017 Q3 - Embassy v3 RedHat OpenStack 11

Load Balancing as a Service (LBaaS)

Federation

2019 Q3 - Embassy v4 RedHat OpenStack 13

Multi Site

Federated Access

Ceph Storage



## EBI cloud services

### Get a Kubernetes Cluster! (EHK - Embassy Hosted Kubernetes)



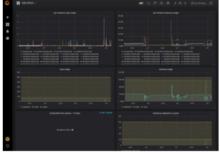
We provide you with a Kubernetes Cluster ready to use including ingress and persistent storage

#### **Create your own VMs!** (laaS - Infrastructure as a Service)



Deploy your workloads automatically using tools like Terraform or Ansible

#### Monitor your workloads!



We offer monitoring dashboards based in Grafana/Prometheus

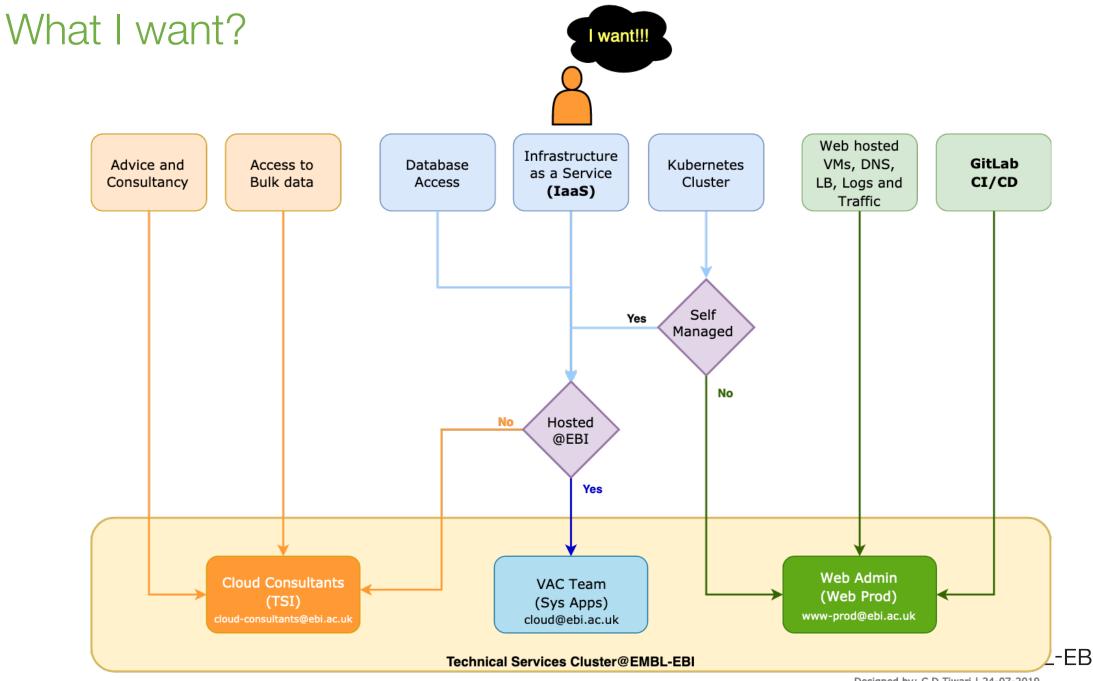
### Use Cloud Native Storage and access EBI Data!



Ready to try?







Designed by: C.D.Tiwari | 24-07-2019

## How to reach right team for EBI Cloud services

- Web-Prod
  - Web infrastructure
    - Collaboration tools (JIRA, GitLab, Confluence, OwnCloud)
    - Web VM provisioning
    - Web prod managed Kubernetes.
    - Log analysis
    - Web Traffic reports and management
  - Core web services (EBI Search)
  - URL: <a href="http://bit.ly/tsc-webprod">http://bit.ly/tsc-webprod</a>

- VAC
  - Embassy Cloud(OpenStack) laaS
  - EHK (Embassy Hosted K8s)
  - Services included:
    - Cloud Native storage
    - Monitoring workloads
      - Prometheus & Grafana
  - URL: <u>https://tsc.ebi.ac.uk/cloud</u>



# Thanks, Our team.

