Service Deployment with ESD support

Lia Domide with input from many others 29.Nov.2024











What is a Service?



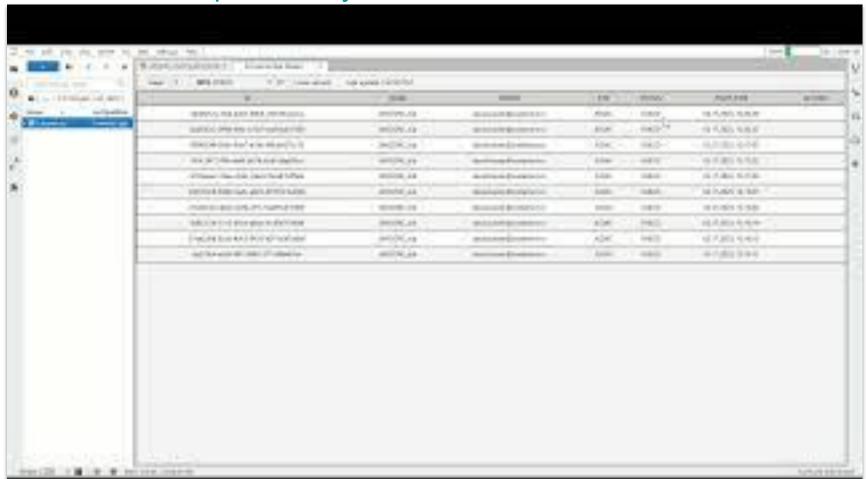








ext-unicore https://www.youtube.com/watch?v=3vebDzFDm98



ext-bucket https://www.youtube.com/watch?v=uNI1ZdbjVNg



EBRAINS Cloud Deployments











Rancher

- What is rancher
 - web application over k8s
 - if offers a good separation between services and execution infrastructure
 - CSCS vs JCS
 - OKD
- How it works
 - o IAM
 - separate users from the EBRAINS account
 - need to have your application as a container released
 - docker Hub or ebrains docker registry
 - expose something at a URL
 - web sockets server
 - REST api
 - web app



Rancher - vocabulary

- Workloads
 - Deployment
 - o Pod
- Storage
 - Persisted Volume vs Persisted Volume Claim
 - Config Map
- Service Discovery
 - Ingress
 - Auto-Scalers



TVB in EBRAINS Cloud











TVB - EBRAINS DEPLOYMENT SITES

- TVB @ Cloud 1
- Latest stable version of TVB Distribution, deployed in Juelich Rancher Cloud.
- Please create personal project(s) for your work. Don't keep data in Default_Project, as it will be periodically cleaned-up, and it is shared with all users, intended for read-only purposes!
- TVB @ Cloud 2
- Latest stable version of TVB Distribution, deployed in Juelich Rancher Cloud.
 - Please create personal project(s) for your work. Don't keep data in Default_Project, as it will be periodically cleaned-up, and it is shared with all users, intended for read-only purposes!

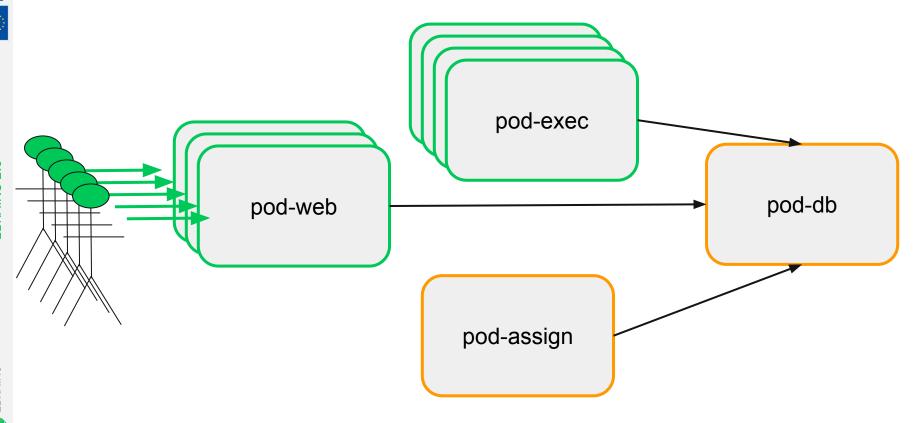


TVB in EBRAINS Cloud

- tvb-framework
- cherrypy web server
 - postgreSQL DB
 - h5 files for large data
- IAM integration with EBRAINS
- long operations to execute in the backend
 - web client pull mechanism to get status updates
 - synch through DB



TVB in EBRAINS Cloud - arch





live













more than services



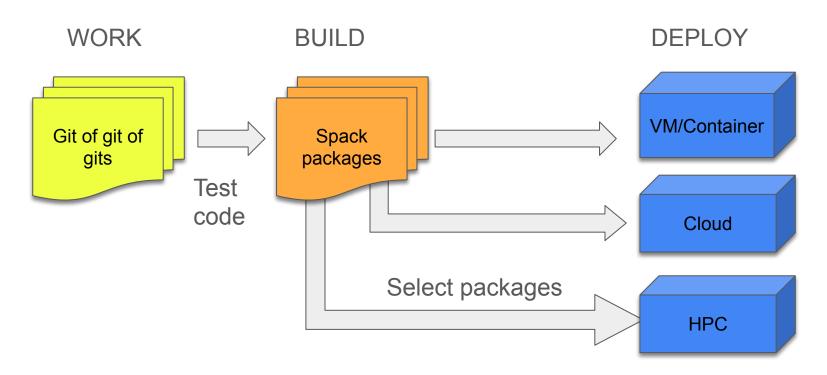




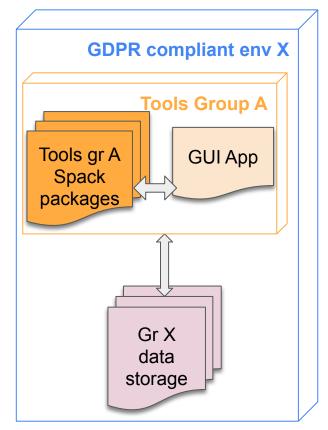


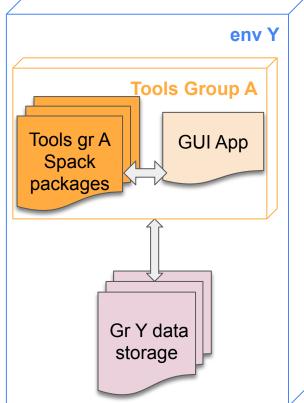


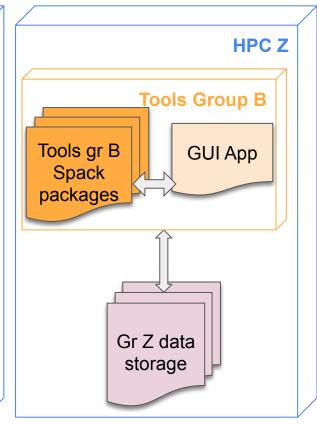
Twin: build and deployment flow



VBT - is Interested in this







Questions time











Thank you!









