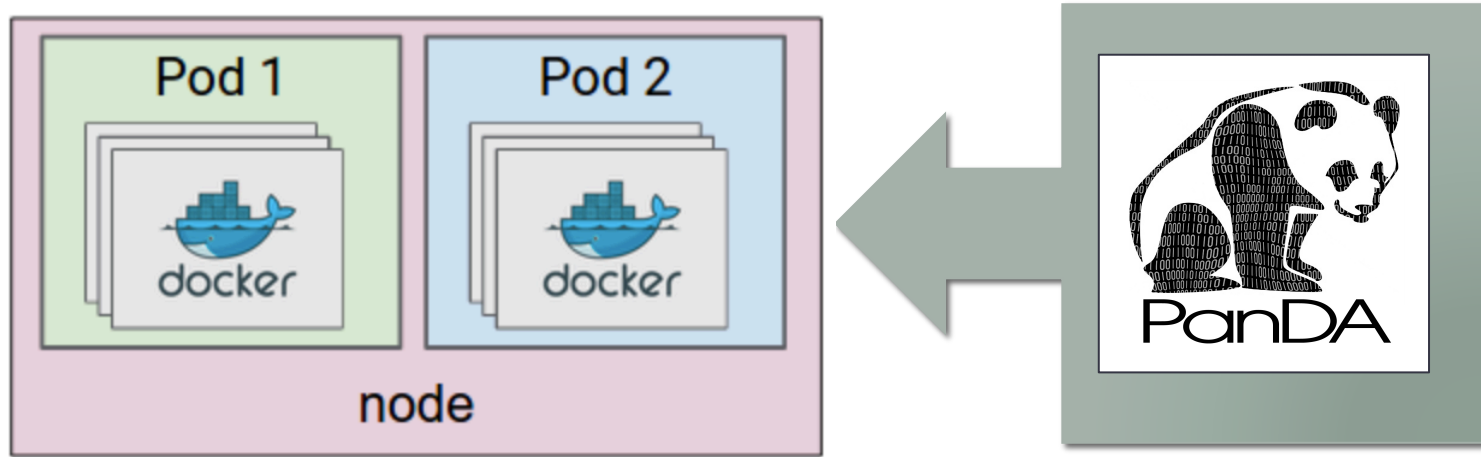


BIGPANDA@TITAN

Ruslan Mashinistov (UTA) – BigPanDA TIM at ORNL - March 30-31, 2017

PanDA server as Docker container

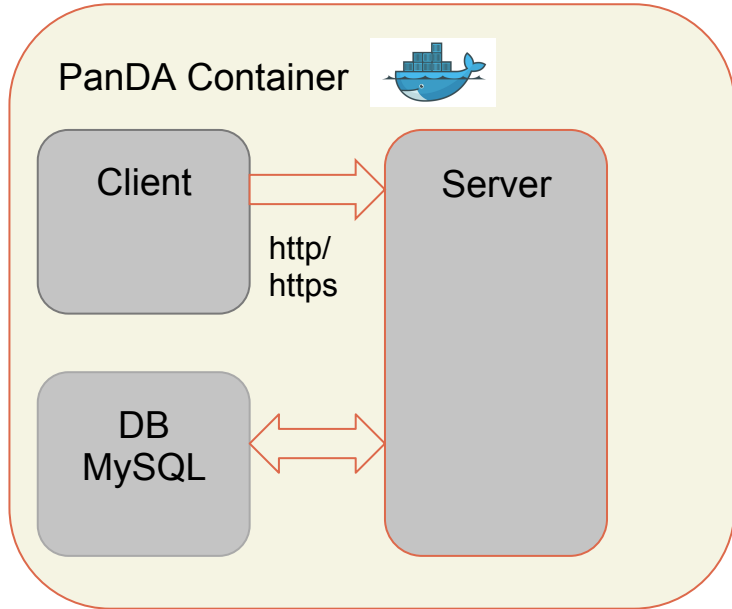


- Kubernetes is an open source system for automating deployment, scaling, and management of containerized applications.
- Kubernetes concept of a pod is one or more containers deployed together
- Docker allows to package an application with all of its dependencies into a standardized unit
- PanDA server will be installed and run inside Docker container
- The main idea is to streamline the PanDA deployment procedure and provide possibility to manage PanDA service on high level without experience of PanDA development

Progress (1/2)

- I used Docker for Mac. Is an easy-to-install desktop app for building, debugging and testing Dockerized apps on a Mac.
- PanDA server was installed and run as Docker container
- PanDA container image was created. The SLC6 container image was used as a basis
- PanDA container includes MySQL DB and Client for proof of the concept

Progress (2/2)



- Client-server interaction is based on OpenSSL self signed certificates.
- PanDA queue was defined for Titan
- 'Hello world' test-job was successfully submitted to the server
- Submitted jobs have 'activated' status that means they ready to be taken by the pilot

Next steps

- Import PanDA container to the OpenShift
- Starting the PanDA service from OpenShift
- Test the full life-circle of the job with the pilot
- Deployment of other PanDA components like Monitor, Harvester etc.
- Verify other deployment models
- Data management system - TBD

Thank you

