

Federated k8s clusters for IRIS-HEP SSL analysis systems

Tuesday, November 17, 2pm-3pm Central

Coordinates:

- <https://indico.cern.ch/event/975543/>
- Join Zoom Meeting
<https://uchicago.zoom.us/j/97225919363?pwd=UW9rM0IGSDRZNW1zaVYwSk51eVUwZz09>
Password: 1212

Attending: Rob, Lincoln, Horst, Dima, Diego, John, Brian Lin, Matyas,

Agenda

Roundtable - federation activities and plans at sites. c.f. last meeting's notes:

- https://docs.google.com/document/d/1km5DxMZNYpjnt5poBZcFyAlwSAiEz3P3RWHq_Vl0h2Y/edit?usp=sharing

Discussion / Notes

- UChicago SSL-RIVER-dev (Lincoln)
 - Tried deploying Admiralty on river-dev (1.17, worker) and uchicago-prod (1.19, manager)
 - So far unsuccessful, but only ~40min of effort applied thus far.
 - Get json parsing errors in admiralty logs
 - Initial impressions of Admiralty:
 - Like the design, seems to be very 'kube native' and fit for our purposes, setup seems simple
 - Seems like a lot of the nice management features gated behind their commercial product ("open core" ?). Seems we need to manually rotate our keys and soon if we're using only the open source product
- UCSD-PRP (Dima)
 - No significant updates; currently using gitlab to run workers on different clusters.
 - Users are not using Admiralty atm, but soon. Prep for an IoT w/ arm processors.
 - Expanse is now federated w/ Nautilus - went through acceptance tests. "Composable systems" on Expanse - one large workflow for wildfire studies - will use for burst capability.
 - NVidia Jetson / Nano devices in K8S
 - Namespace for Expanse/PRP federation.

- MinIO and workers running in Nautilus
 - Controller is running in Expanse, spawning workloads in Nautilus via Admiralty
- UW-Tiger (BrianL and Mat)
 - No updates. We're looking to start investigating Admiralty in the next month
- UNL-Tier2 (CarlL)
 - ntr
- UIUC-Boneyard (Mark)
 - ntr
- Oklahoma (Horst) - old OCHEP cluster
 - need to upgrade to RHEL7; happy to contribute in any which way
 - Dima: can share pxe configuration
 - <https://gitlab.nautilus.optiputer.net/prp/pxe-install>
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- **Applications**
 - sflow ? Currently a daemonset on all PRP nodes
 - Can we federate? Dima will ask Adrian if daemonsets can be federated as such
 - Collector needs to be exposed to the internet
 - ATLAS production? with CVMFS maybe?