Centre for High Performance Computing 2023 National Conference



Contribution ID: 4 Type: Workshop

Building an HPC Cloud with OpenStack

Monday, 4 December 2023 09:00 (1h 30m)

OpenStack has become the de facto standard for on-premise cloud infrastructure. This hands-on workshop will introduce an open project to create private and hybrid cloud infrastructure, and how it can be used to address the requirements of HPC.

Through the pooled collaboration effort of an open community involving many scientific institutions world-wide, many complexities and overheads commonly associated with OpenStack operation are overcome.

The hands-on workshop will provide access to a lab environment where an OpenStack system can be built and the components within it explored and explained.

Familiarity with technologies such as Linux, Docker and Ansible will be helpful (but not essential).

Target audience:

- People interested in running HPC workloads in the cloud: HPC users
- · People interested in learning how to Deploy HPC service in the cloud: cloud admin, engineers
- People interested in learning openstack: cloud admin, engineers, cloud users

Format: Hands on tutorials

Duration: Full day (divided into 2 half day)

• we can accommodate the first 30 attendees before lunch and the last 30 attendees after lunch

Requirements:

- Sebowa will be used to run this workshop and delegates will be provided temporary training accounts.
- Attendees must come with their own laptops.
- Ansible and Terraform expertise are not compulsory but advantageous
- · Openstack expertise not compulsory but advantageous

Student or Postdoc?

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Track Classification: Cloud Computing