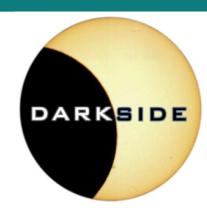
### Cloud Server for DarkSide





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Réunion Plateforme de Calcul

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## Openstack (Thx Carlos)

- Create a server
  - Image: CentOS-7-x86\_64
  - Flavor: large
  - Contextualization
    - Low amount of packages (wget)
    - Mount darkside shared volume (20T) for user
    - A "data" directory not provided yet
      - Temporary use of the shared volume

#### Anaconda environment

- Create a "soft" directory on shared volume
  - Install Anaconda3
  - Create "analysis" environment as centos user
    - Git
    - gcc, cython
    - ROOT, uproot
    - Pandas, scipy, matplotlib
    - And others ...
  - Side effect: OS contextualization is slim

## ssh connection in analysis environment

- .ssh/config
  - Host "ds cloud" entry created to connect cloud server
- ssh -t ds\_cloud
  "/home/centos/darkside/soft/anaconda3/bin/conda init
  bash > /dev/null; bash --init-file <(echo \".
  \"/home/centos/.bashrc\";conda activate analysis\")"</li>
  - Initialize anaconda and activate "analyses" environment
  - Could be done with LocalCommand ssh config
    - not available

#### Initial tests

- Pyproto (DS-20k soft) on gitlab server
  - Public key register on gitlab server
  - Copy of the private key on ds\_cloud
  - Git clone → ok
- Calibration example python code
  - Compile Python code
  - Run example → ok
- Analysis python code
  - Replicate 14 G of data from CC on shared volume
  - Replicate a database from CC on shared volume
  - Run code → ok

# Backup

## GPU test on margpu1

- Use TensorFlow Deep Learning API: Keras
  - Done with anaconda to activate tensorflow-2.2-gpu
- Run 1D Convolutional Neuron Network model
  - Test ok
  - Can't use helpful tool : TensorBoard callback
    - It profiles the execution of your TensorFlow code
    - Issue solved at CC
    - Not urgent (in touch with Julien)