Minutes of China-Chile Database workshop

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Contents

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1 Contents

1.1 Current Status

- part of open alma data(30TB)(bring by disks copy)

  - all the open fits files are available
  - lack ASDM(cycle 0,1,2 are available, cycle 3 are public but not sure if all cycle 3 are obtained)

- data process

  - access through vpn(jupyter)
  - jupyter hub through docker
  - lack of astromer testing jupyter

- direct hpc computing

  - simulation
  - need to program with C
  - software are provided by Huawei and might be changed further

- Jovial

  - no public IP, through vpn, need account
  - HPC is not supported through GUI
  - quota can be imposed through BCM

- one more IP address

  - for service not public needed

- VM

  - 2 machine for vm, might need to move one from computing node to vm
    * now everything is okay

- Apache Spark

  - the way we access lustre(plan)
  - june 29 10:00 spanish talk about archetecture

- access

  - public: VO
  - private: HPC, Jovial
  - management software: ibmc, neteco, smtp, lustre, ovirt, smtp, LDAP,

- Data

  - 4.5TB data available
  - ADQL similar to SQL
  - first VO to deal with big data like ALMA
  - only qa data(fits) and adsm file,
  - metadata is about 1% of the total meta data extract asdm

- lustre

  - we need to update lustre, if we update the lustre, the website would be down for 2 weeks
  - now we can not update lustre
  - we need help from huawei in china(??)
    * can't get connection with Huawei people in China
    * no more info from intel after they ask the log

- casa install

  - installed by each person
  - no need to run casa on cluster if you don't run MPI, only the memory is large but if there are more people the memory is also low
  - GUI can not work if network speed is slow

1.2   CASSACA and ChiVO:

- CASSACA is more customized, ChiVO is like that

- ChiVO can provide the alma data, CASSACA is not authorized, CAS-SACA need to ask permissions

- ? Can Cassaca host other data that ChiVO host(gemini or other things)

- official name for chile-china astronomy data center and logo

1.3   Service:

- character: much faster for south american astronomy community

- provide btter stamp image

    - 3D
    - better than compressed icon image?

- uvfits file

    - as an index of asdm and fits?

- jovial (service)

    - not a library, not a GUI(aladin or topcat...)
    - jupyter extention
    - jupyter hub
    - you can repeat the procedure with the paper
        * starlink
        * astropy
        * casa
    - library
        * acalib
        * ...

- help for users/astronmers

    - normal service
        * help desk or faq

4

- – expert service
    - ∗ 3d/ reproduce data
- • log information

1.4 Security and network Issue

- • security
    - – virus?
    - – hack?
        - ∗ port attack
        - ∗ from china
    - – carlos is making the webpage more secure
    - – no way to recover from attack in short time
    - – no https only http
        - ∗ add ssl is quick and should be done after the development
        - ∗ user and password
- • network
    - – archive update
        - ∗ day by day: program will do it as frequently as you want
        - ∗ fits and other: not sure how frequently will be updated
        - ∗ calan: no reuna, problem in ISP(not solved yet)
            - · we are informed that calan would have an update for internet but we don't
            - · calan have a fiber but the property is catolica(but we can pay some money and make a big improvement to the internet bandwidth and share the bandwidth)
    - – download
        - ∗ download bandwidth(put restriction on downloading site)