

# Minutes of China-Chile Database workshop

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## 1 Contents

### 1.1 Data Access to Alma Data

- 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
- IP
  - 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 part we are going to join
  - june 29 10:00 spanish talk about architecture
- access
  - public: VO
  - private: HPC, Jovial
  - management software: ibmc, neteco, smtp, lustre, ovirt, smtp, LDAP,
- network
  - 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)
- 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

## 1.2 Service:

- character: much faster for south american astronomy community
- provide btter stamp image
  - 3D
  - better than compressed icon image?

### 1.3 CASSACA and ChiVO:

- CASSACA is more customized, ChiVO is like that
- ChiVO can provide the alma data, CASSACA is not authorized, CASSACA 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
- 

### 1.4 Security and network Issue

- no https only http
- user and password
- user restriction
  - download bandwidth(put restriction on downloading site)
- 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
- security
  - virus?
  - hack?
    - \* port attack
    - \* from china
  - carlos is making the webpage more secure
  - no way to recover from attack in short time
  - add ssl is quick and should be done after the development

- 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
  -
- archive update
  - day by day: program will do it as frequently as you want
  - fits and other: not sure how frequently will be updated
- 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
    - \* ...
- hardware
  - move one computing node to vm

## 1.5 CASSACA VO

- stamp image
  - uv fits file
- service
  - normal service

- \* help desk or faq
  - expert service
  - \* 3d/ reproduce data
- log information