

Survey of the specific needs :

André Schaaff (Observatoire de Strasbourg): iRODS in production. Beginning of usage, feedback in the coming month. Small usage compared to other data volumes. No problem, iRODS larger needs. iRODS used in CDS portal: FITS files, JPEG, VOTable. Download and upload own data: aim to access these data through VOSpace. Need for quotas per users/groups? too early to answer. A few 100s users at first, a few GB per users. Trash can policy issues: it can be handled through a rule in order to use the trash can or not depending on the collections being used. First hardware configuration: 2 servers with 6 TB each, RAID5, 5 TB available for the users. Thus 4 copies of the same data (RAID + replica). Linux HA heartbeat system + VRDB. Assumption: 200,000 hits per day. Maybe 20000 or 30 per day for a start. Interaction with other sky surveys ? it is possible. Visualization of the workflow, connection to VOSpace.

Arun Jagatheesan (SDSC): Alma (ESO) looking for iRODS. Planetary JPL NASA interested in iRODS: multiple sites want to analyze data from the satellites. Caltech: M Graham, R. Wagner, are working also on a different implementation of VOSpace. Canada: S. Gaudet IVOA, start a new project with 300 TB of data. How many TBs or PBs in the new project Canadian project ? They have to make a choice quickly. Royal British Museum. LSST: iRODS currently used for data movement. What protocol used to move data ? LSST requirements to address their needs wrt iRODS: RUDP from Chile, interesting to see the quality of the network. LSST has no policy yet to share data with other continents. C APIs will be used. Useful Java APIs as a standard for iRODS ? Saga can be one of them ? Is it enough ? Goal to have people to interact directly with iRODS and not too interact only with VOSpace + web services. Reagan: image cut out services on top of iRODS.

Vincenzo Forchi (ESO): VLT archive. iRODS one of the solution ? Try to understand what should be added to iRODS: need for msi to extract metadata from FITS data. Using a database for the metadata, based on Sybase. Sybase iCAT + driver to tape lib is required in order to use iRODS. Amount: 80 TB, increasing a lot. 2 copies of the files: 1 on disk (NGAS: online in order to download through the web), 1 on tape. Nightly processing needs using the tape archive. External user through the web. Authentication and ACLs, for the first 6 months property, managed at the web portal. Data integrity needed. Potential switch to iRODS: because limited manpower to develop NGAS, so looking for newer solution. For Alma, a different branch of NGAS is used.

Pauline Mak (University of Tasmania): VLBI produces (or will produce) 6 TB / day. They want to transfer data to the processing center: no metadata. Potential iRODS users.

List of requirements: micro-services in order to extract metadata from FITS files. Handling failures of the iCAT database (failover mechanism). But apart from the specific micro-service for FITS files, nothing else specific to the astrophysics community is required with respect to iRODS.