
OSG User Support & Campus Grids

Bala Desinghu • University of Chicago



OSG Area Coordinator's Meeting, **April 12 , 2017**

Open Science Grid

Outline



- Review of OSG Connect user support
 - A steady number of active users and active projects during the first quarter of 2017
 - Report on helpdesk tickets
 - Improving the new user on-boarding process
- Singularity support and documentation
- Condor_annex tutorial at AHM17 training event was well received, need further adjustments
- Fsurf - engagement with users and upcoming webinar
- SPT - user engagement and jupyter notebook
- Xenon1t - Rucio integration with compute jobs and targeting multiple resources
- GRACC summary page and creating groups with multiple access points
- Upcoming workshops with user support and campus integration

Usage statistics during Jan-Mar 17



OSG Connect

Active Users = 88, Active Projects = 46, WallHours = 11.4 M, Jobs = 14 M
(about 240K wall hours/project, each job ran for an hour)

XD-Login (OSG XD + part of Direct)

Active Users = 23, Active Projects = 17, WallHours = 14 M, Jobs = 22 M
(about 825K wall hours/project)

(UChicago, Duke) CI Connect

Active Users = 33, Active Projects = 18, WallHours = 2.4 M, Jobs = 3.2 M

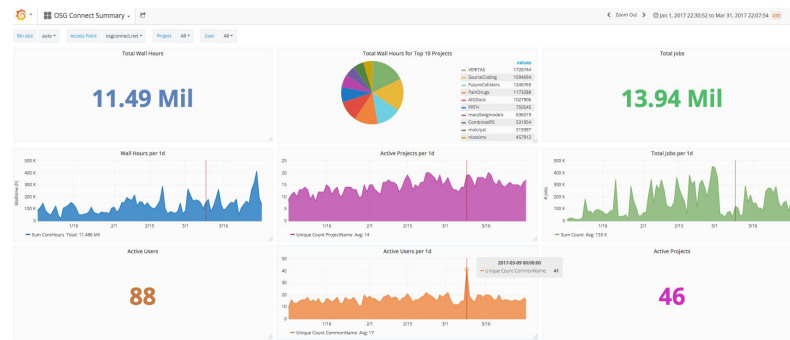
SPT

Active Users = 37, WallHours = 1.5 M, Jobs = 0.5 M

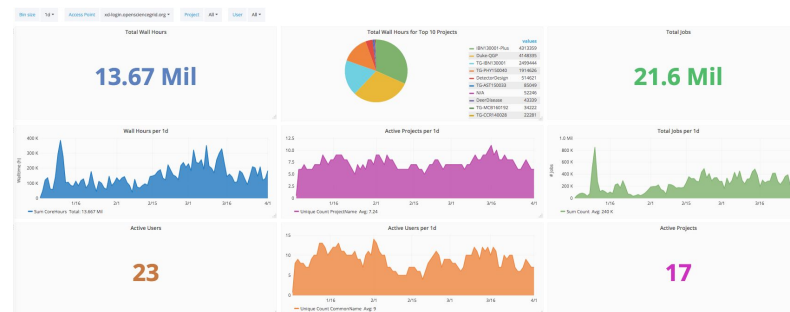
(UChicago, Duke) CI Connect

SPT

OSG Connect



Xd-Login (OSG XD + part of Direct)



Helpdesk tickets resolved during Jan-Mar 17



Resolved = 280

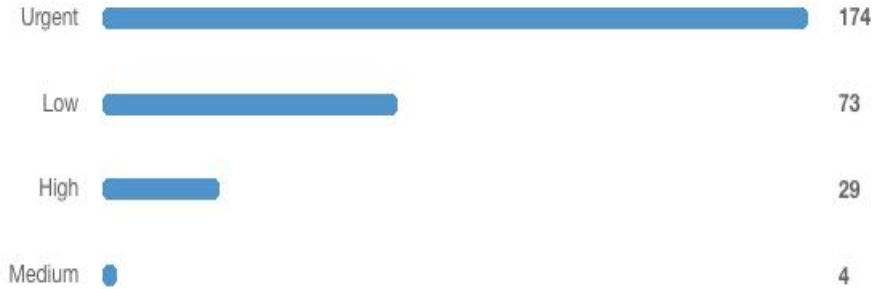
Created = 279

About 20 tickets resolved per week

Average First Response Time = 3 hours

Average Resolution Time = 27.5 hours

Resolved tickets split by priority



Positive response from the users

Please tell us what you think of your support experience.



81% Positive



19% Neutral



0% Negative

26 Answered

111 Unanswered

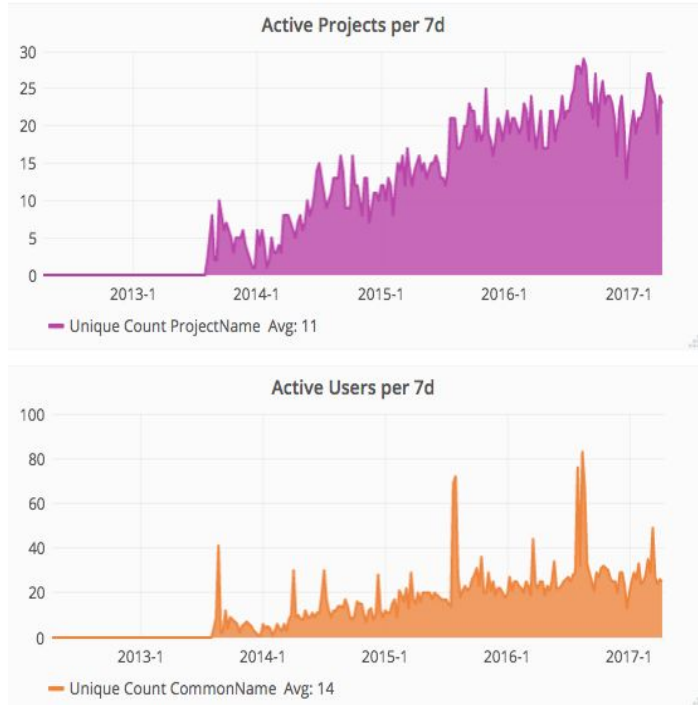
Above expectations



Met expectations



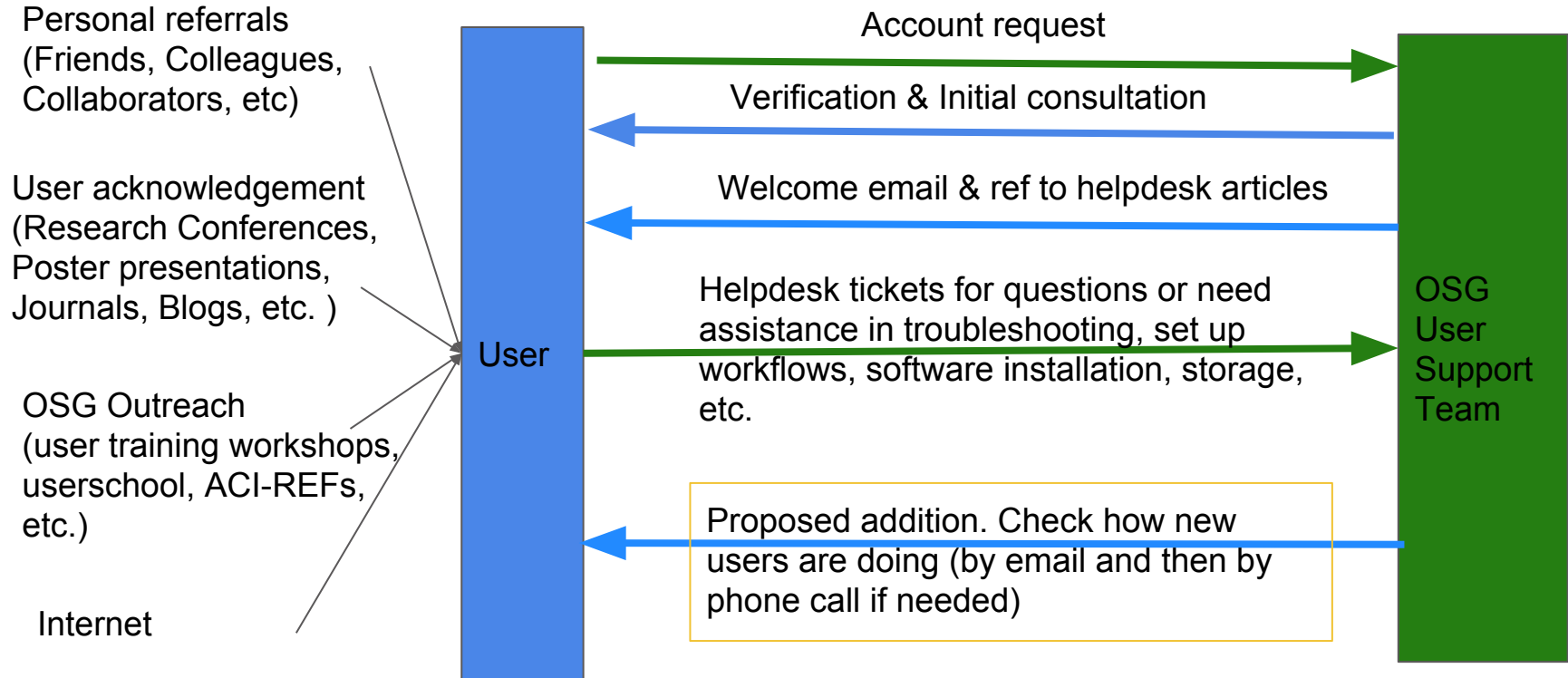
Strengthening New User On-boarding



A steady increase in the number of active projects and active users. How to improve further?

- Challenge: Many new OSG Connect accounts are not being used. New users might have difficulty getting started on OSG? HTCondor? X?

Strengthening New User On-boarding



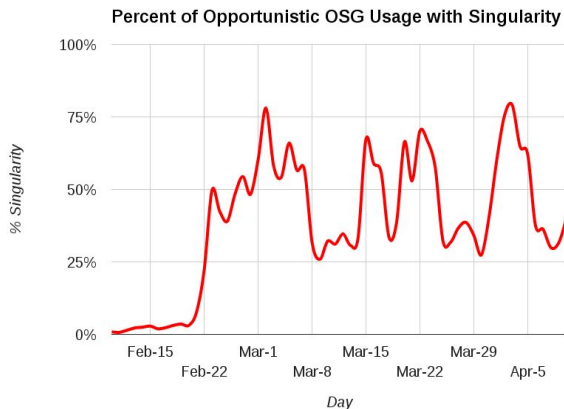
Strengthening New User On-boarding (Emelie, Bala)



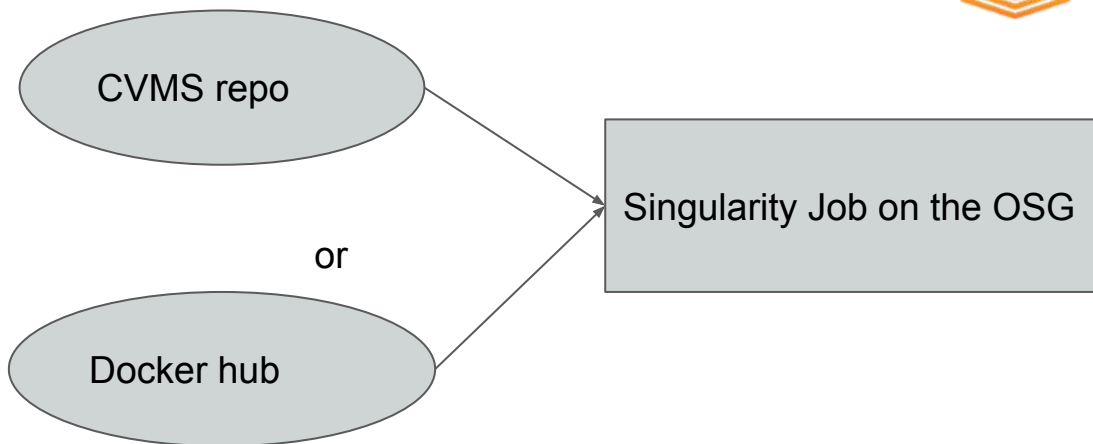
We are in the process of strengthening and expanding our new user on-boarding procedures using ACI-REF & others as guides

- Document: **Facilitation in the OSG Context** *(under construction)*
 - Defines a 4-step process for orienting new OSG Connect users.
 - Includes 2 consultation sessions with OSG User Support staff, one following the initial account setup, and the other scheduled for one month later.
 - Detailed user profiles and interaction records will be created and maintained.

Singularity (Mats, Brian B, Derek)



Note: numbers fluctuates due to different sites contributing at different times.



Images are served via `/cvmfs/singularity.opensciencegrid.org/`, synced automatically from a list of images from DockerHub

Helpdesk article: <https://support.opensciencegrid.org/support/solutions/articles/12000024676-singularity-containers>

Derek's Blog: <https://djw8605.github.io/2017/01/12/singularity-on-the-osg/>

Tensorflow jobs with Singularity, a use case



Tensorflow Installation

- A lot of package dependencies, so installation is a challenge. For every release, the user need to wait for the support team to make the package available on CVMFS

Tensorflow Singularity Solution

Available for the user on the same day as docker image or available in the cvmfs repo in few hours

Use Case : We have already a user (Rami) on OSG Connect tried installation path and now using singularity to run jobs successfully. (singularity-gpu is pending).

Pointed the user to the documentation.

<https://support.opensciencegrid.org/support/solutions/articles/12000024676-singularity-containers>

- We hope to add more tutorials

Condor_annex Tutorial (Mats, Lincoln, Marty, Tom M)



- Well received module at AHM 17 user training
- Remaining issues for production
 - Difficult to set up AWS account (remember that we want users to come in via their own accounts / credit cards)
 - AWS account setup has multiple “wait until this is activated” steps - prevents end-to-end setups during workshops
 - Have to share pool password
- We will be working on the integration

FSurf (Suchandra)



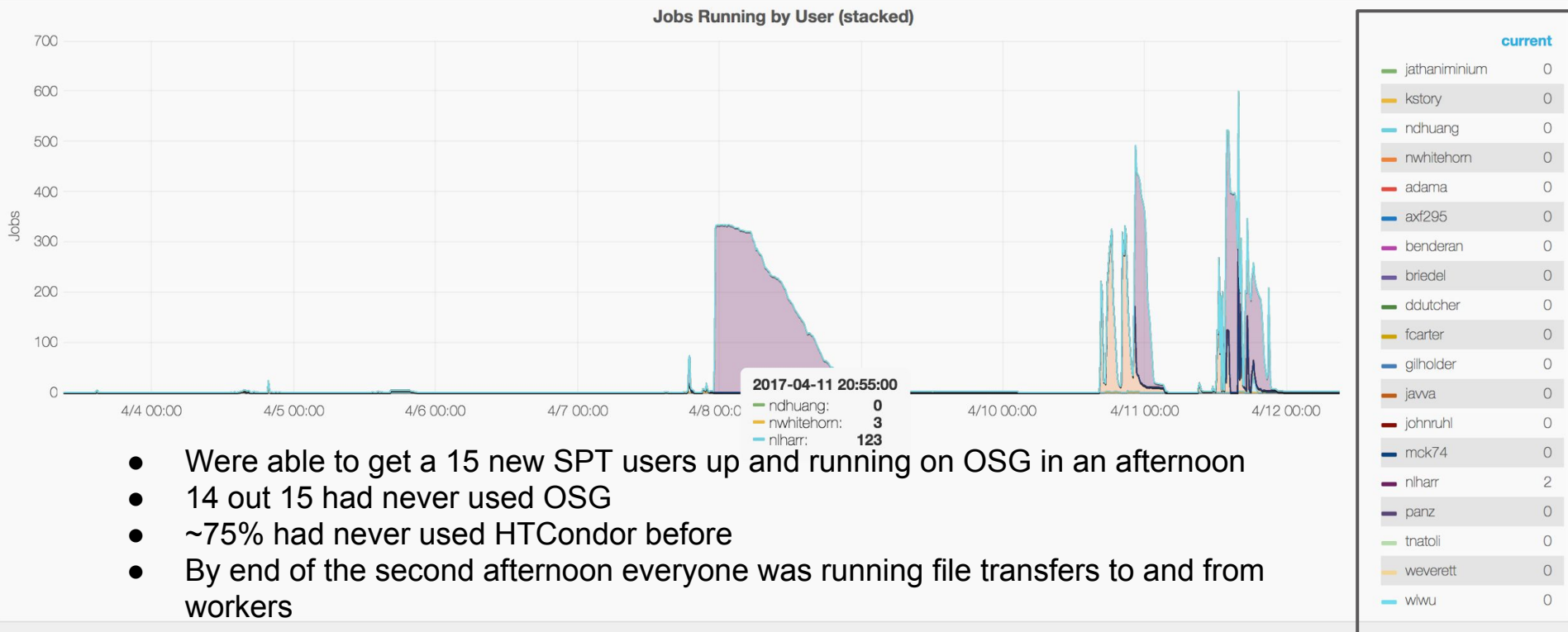
- Have several users consistently using service every week
- Engagements with several potential users:
 - Andy Pohl at Wisconsin
 - Neuroscience group at IU through Soichi
 - Neuroscience group at MIT
- Adding support for FreeSurfer 5.1 and 6.0 due to user requests
- Hosting a webinar tomorrow on using service

SPT (Benedikt, Judith)



- Took part in 3 day computing F2F
 - Were able to get user to submit jobs, transfer files with GridFTP
 - More users starting to submit jobs
 - Very positive reactions to SPT setup
- Automatic processing jobs are now running
- **Setup Jupyterhub instances on both SPT login nodes, Globus Auth provided by OSG Connect accounts**
- Created large memory slots just for SPT on login nodes
- Ingesting more data from pole: 3ish TB right now
- Improving backup automation - Working with NERSC and SPT folks

SPT (Benedikt, Judith)

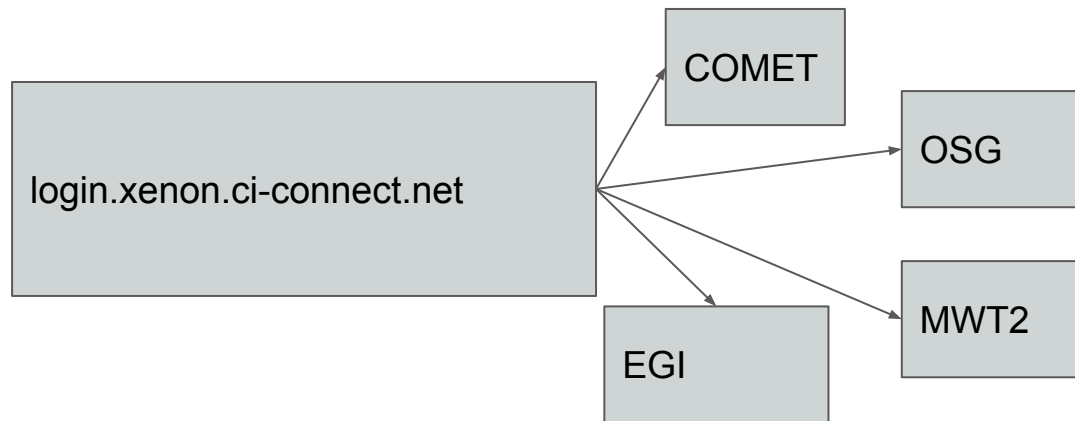


VERITAS (Benedikt, Suchandra)



- VERITAS is now a MWT2 Friends user - Better priority than regular OSG users on MWT2 resources
- Helping them with improving their workflow to increase throughput
 - Working on OASIS VERITAS CVMFS repo
 - Move to GridFTP file transfer, scp right now

Increased Xenon1T computing capability and capacity (Benedikt, Suchandra)



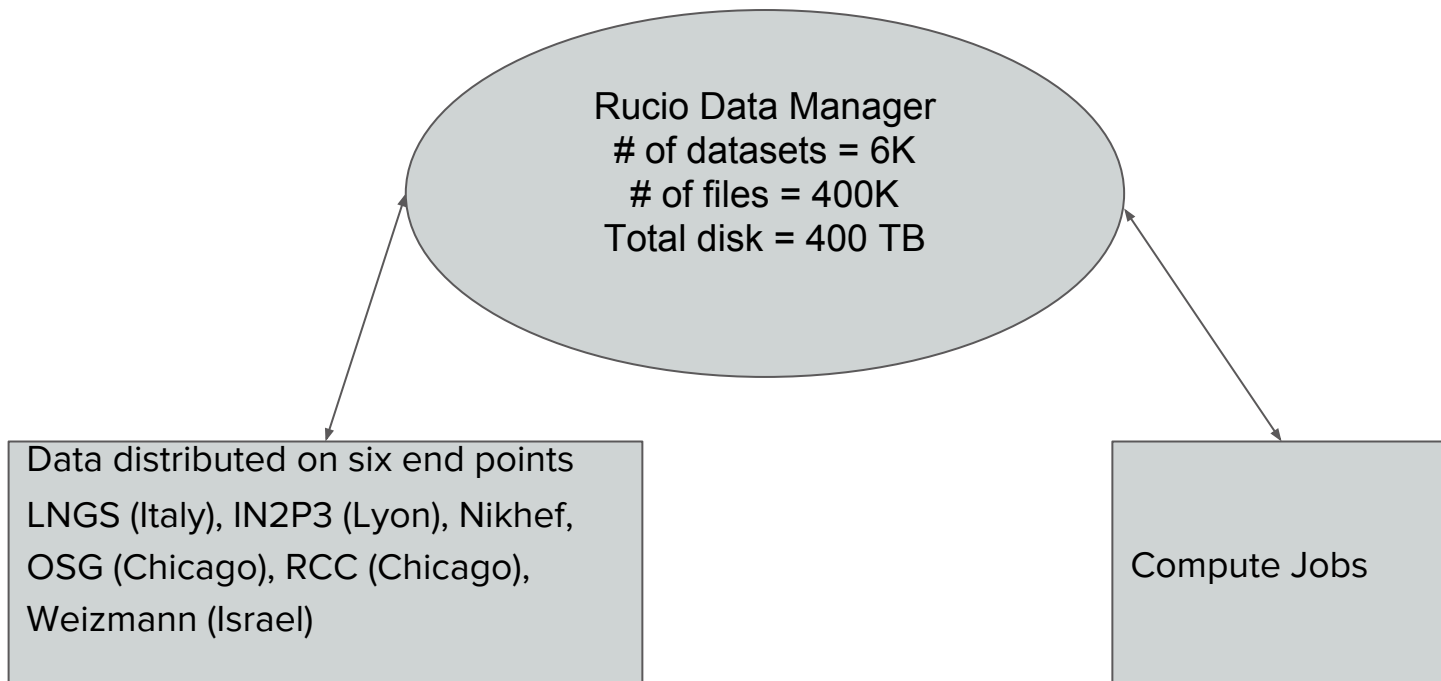
Have increased computing capability and capacity over the last few months:

- Transparently running jobs on COMET
- In process of adding glideins to EGI (IN2P3 at Lyon)
- Processing and reprocessing raw data consistently being run on OSG
 - **Planning on running all processing on OSG**
- Looking into staging data to Comet for processing, XRootD cache at UCSD CMS T2₁₅

Xenon1T Data (Benedikt, Suchandra)



- **Rucio has been integrated into regular computing workflow**



GRACC (Mats, Kevin, Derek)



- Need to finish up Gratia->GRACC transition of XD and XDMoD syncing tooling. This is mostly done and should finish up this or next week
- Still working on improving OSG Connect section of GRACC dashboard. Currently it is showing submit hosts. We want to change it to show groups such as “Connect”, “XD”, “Flocking”, “SPT”, ...

Upcoming Workshops with OSG User Support and Campus Integration



- May 17-19 *OSG Software Carpentry Workshop*
 - Thomas Jefferson National Accelerator Facility (JLAB) in Newport News, VA
 - <https://swc-osg-workshop.github.io/2017-05-17-JLAB/>
- SCSU, Orangeburg, SC, May 18-19
 - HBCU (Historically Black Colleges and Universities) Cyberinfrastructure orientation workshop
- SAC-PA, University of Pittsburgh, June 22nd - 23rd
 - SAC-PA: Towards Security Assured Cyberinfrastructure in Pennsylvania
 - <http://www.sis.pitt.edu/lersais/research/sac-pa/>
- PEARC17, New Orleans, July 9-13, 2017
 - <http://www.pearc.org/call-for-participation>
- RMACC, Boulder, August 15-17
 - <https://www.rc.colorado.edu/news/rmacccallforparticipation>



Thank You