Open Science Grid

RDA
RESEARCH DATA ALLIANCE
U.S.

Some Odds and Ends About Computational Infrastructure

DOSAR

Original slides by: Rob Quick <rquick@iu.edu>

INDIANA UNIVERSITY

Computing Infrastructures

- Local Laptop/Desktop – Short jobs with small data
- Local Cluster – Larger jobs and larger data but subject to availability
- HPC – Prime performance with parallelized code
- HTC – Sustained computing over a long period for serialized workflows
- Cloud – Need deeper permission on an OS and/or have deeper pockets

Some Examples of Academic CIs Worldwide

- HTC
  - EGI (formally European Grid Initiative)
  - OSG (Open Science Grid)
  - ASGI (Asia Pacific Grid Initiative)
  - NorduGrid
  - Earth System Grid (ESG)
  - Many other regional and national infrastructures

Some Examples of Academic CIs Worldwide

- HPC
  - XSEDE (eXtreme Science and Engineering Discovery Environment)
  - PRACE (Partnership for Advanced Computing in Europe)
  - Compute Canada
  - Greek Research and Technology Network (GRNET)
  - Centre for HPC (South Africa)
  - Many other national infrastructures

Some Examples of Academic CIs Worldwide

- Cloud
  - EGI Federated Cloud
  - NeCTaR – National eResearch Collaboration Tools and Resources
  - Jetstream (Part of XSEDE)
  - SwissACC (Swiss Academic Computing Cloud)
  - Many other national cloud infrastructures

What happens when you go home?

- DOSAR: Distributed Organization for Scientific and Academic Research dosar.org/
- You are welcome to join our bi---weekly video (Vidyo) meetings. Send request to be added to DOSAR email list to Prof. Greenwood: greenw@phys.latech.edu reference you attended the ASP2018
- If you want long--term grid access, you can request membership in the DOSAR VO

Questions?

- Questions? Comments?
  - Feel free to ask us questions now or later:

Julia Gray julia.ann.gray@gmail.com

Horst Severini severini@ou.edu

Pat Skubic pskubic@ou.edu