Some Odds and Ends About Computational Infrastructure

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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

Questions?

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

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