Galaxy Deployments at Indiana University

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National Center for Genome Analysis Support

April 16, 2015

INDIANA UNIVERSITY

About IU and NCGAS, and me

A bit about Indiana University:

Very culturally diverse campuses
Known for our Jacob's School of Music and Kelley School of Business

A bit about NCGAS:

National Center for Genome Analysis Support
NSF/NIH/IU funded group offering bioinformatics support/Linux help and lab experience to researchers

A bit about me:

NCGAS Staff since Oct 2012
First year PhD student, woohoo!
An unhealthy obsession with turkeys

NATIONAL CENTER FOR
GENOME ANALYSIS SUPPORT

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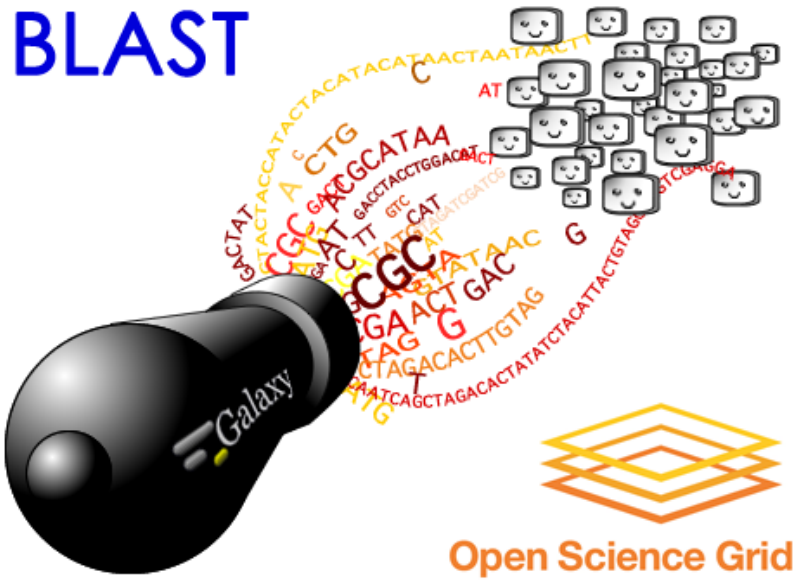

National Center for Genome Analysis Support: http://ncgas.org

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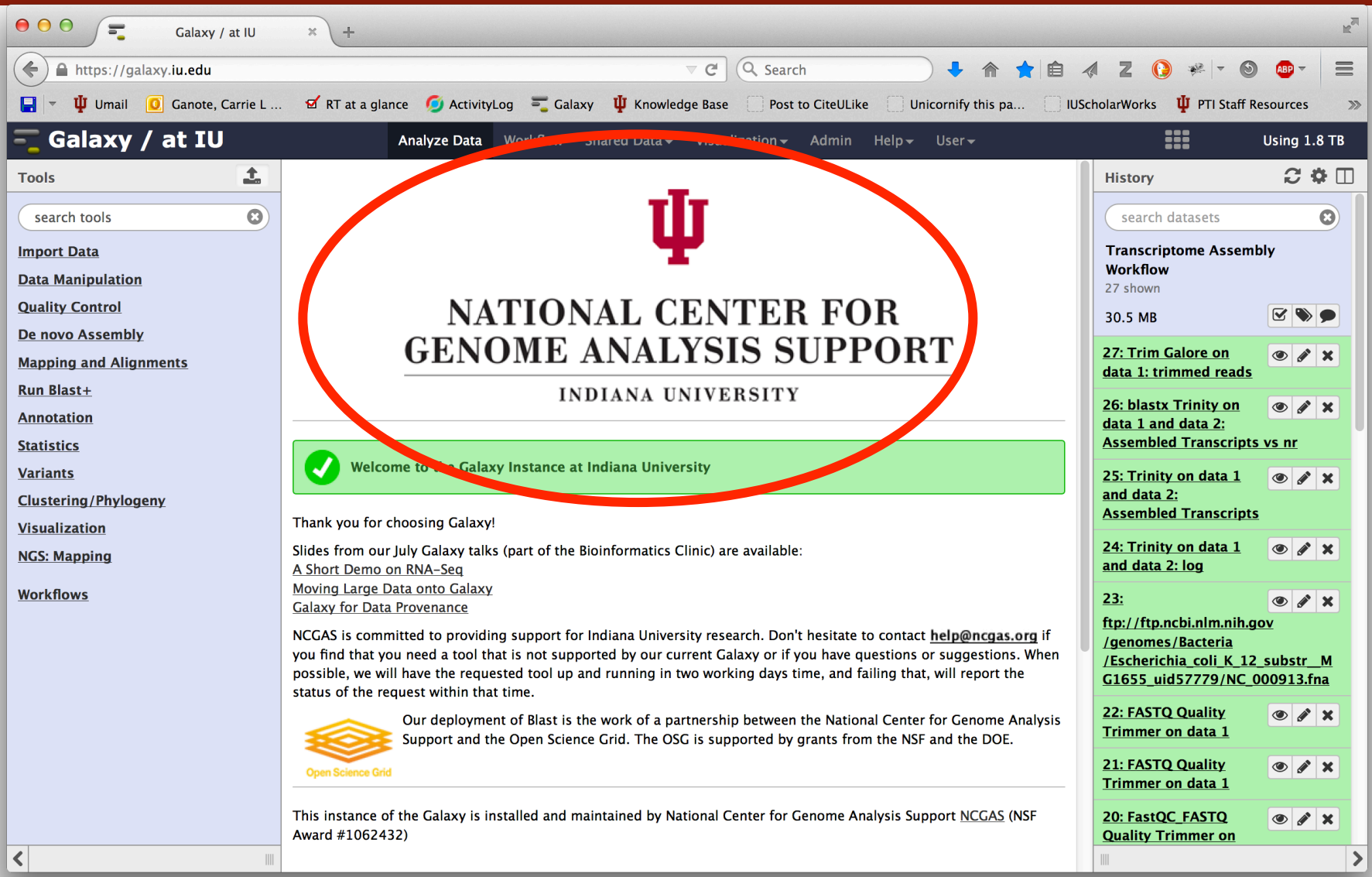

National Center for Genome Analysis Support: http://ncgas.org

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Thanks for watching!

Questions and comments:

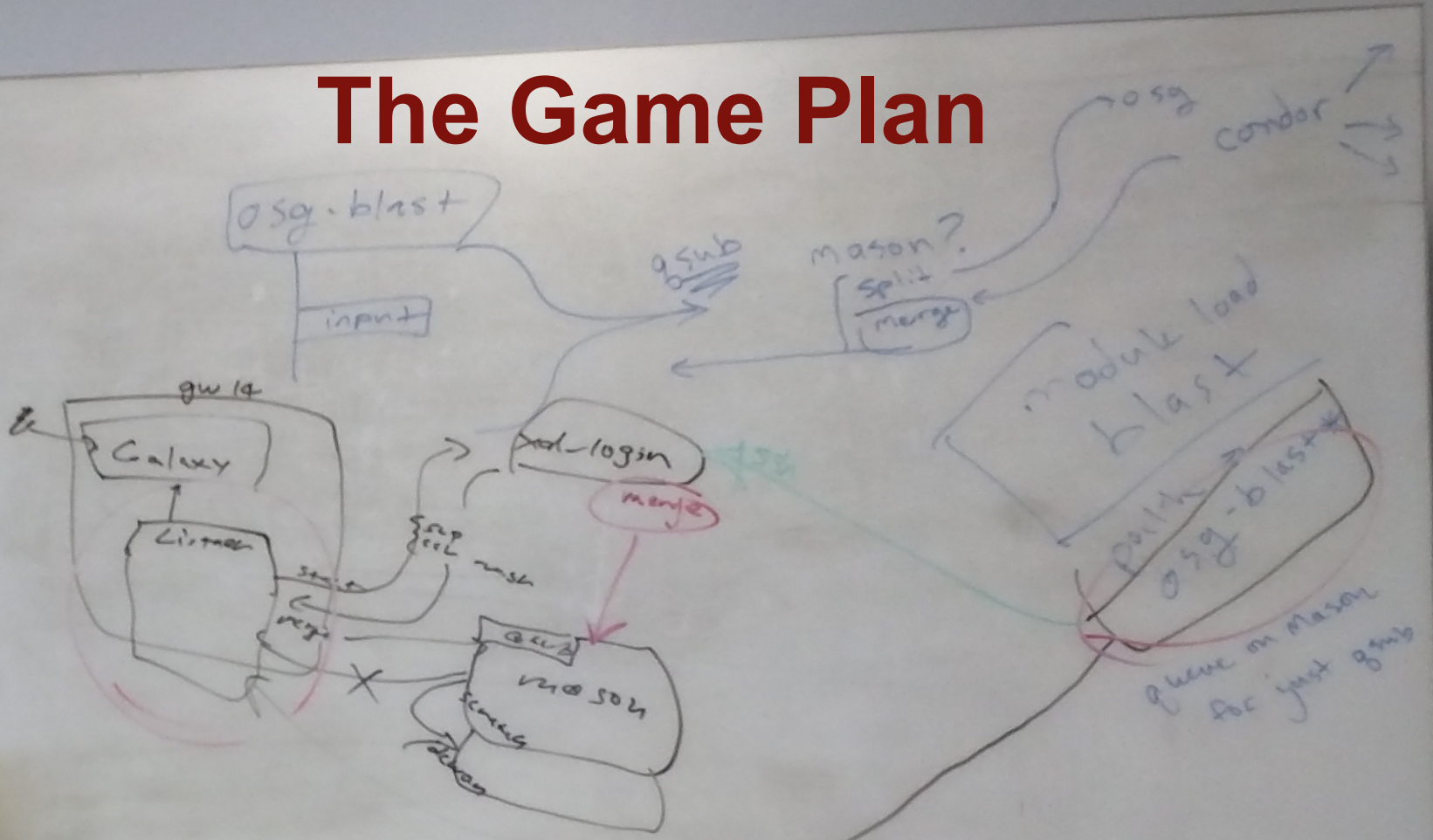
Email help@ncgas.org

IU Galaxy

- Running since 2012 on Mason cluster at IU
- Deployed on Quarry, Big Red2 and soon to be Karst
- Apache proxy + Kerberos Authentication
- Lustre Filesystem
- Most tools, with emphasis on large memory applications
- University-wide, plus collaborators
- Still using hg

Fancy javascript tool menus!

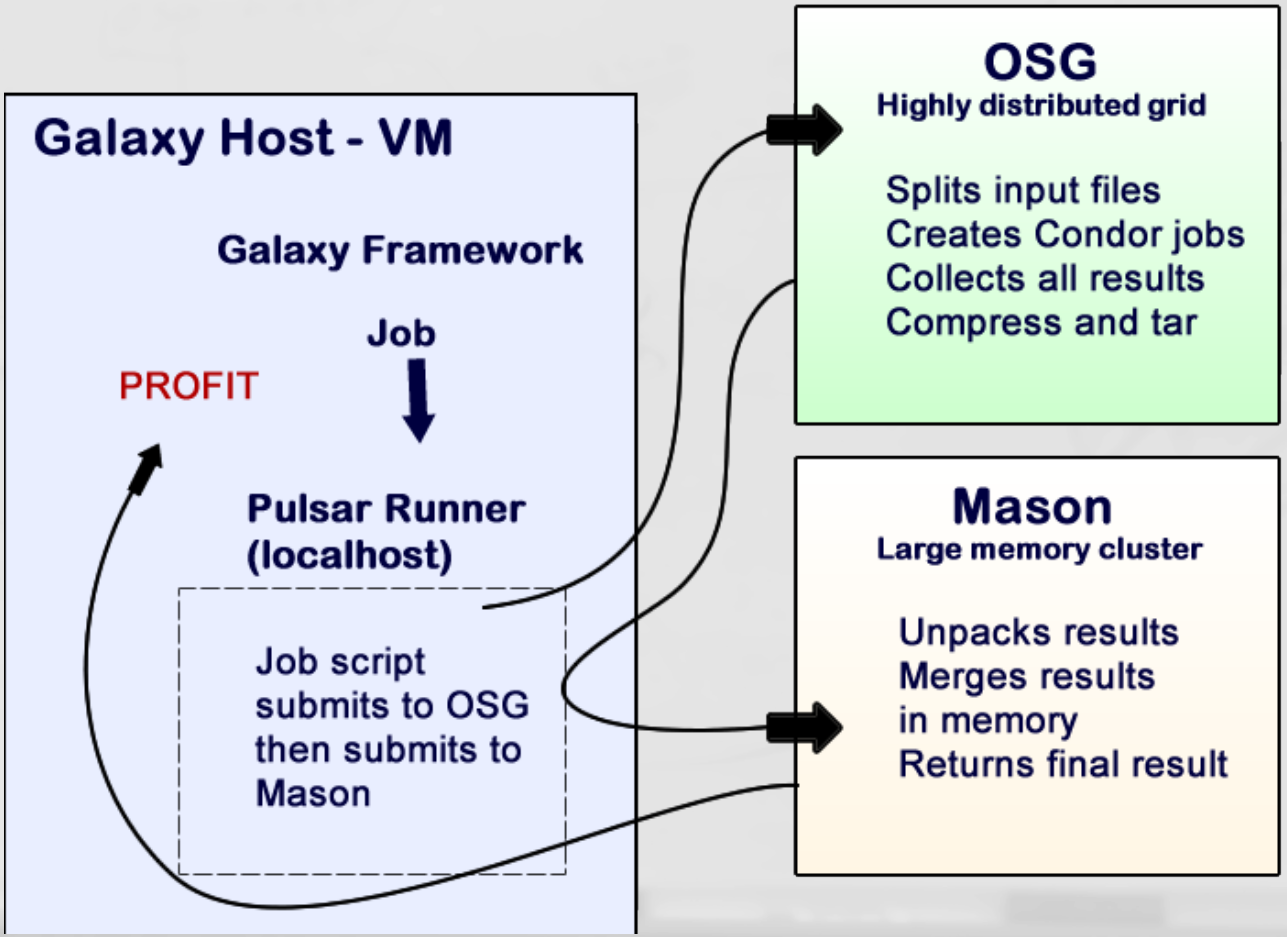
The Game Plan



BLAST is an embarrassingly parallel program – it's our only tool that uses the grid.

Photo by Soichi Hayashi. National Center for Genome Analysis Support: http://ncgas.org

The Game Plan



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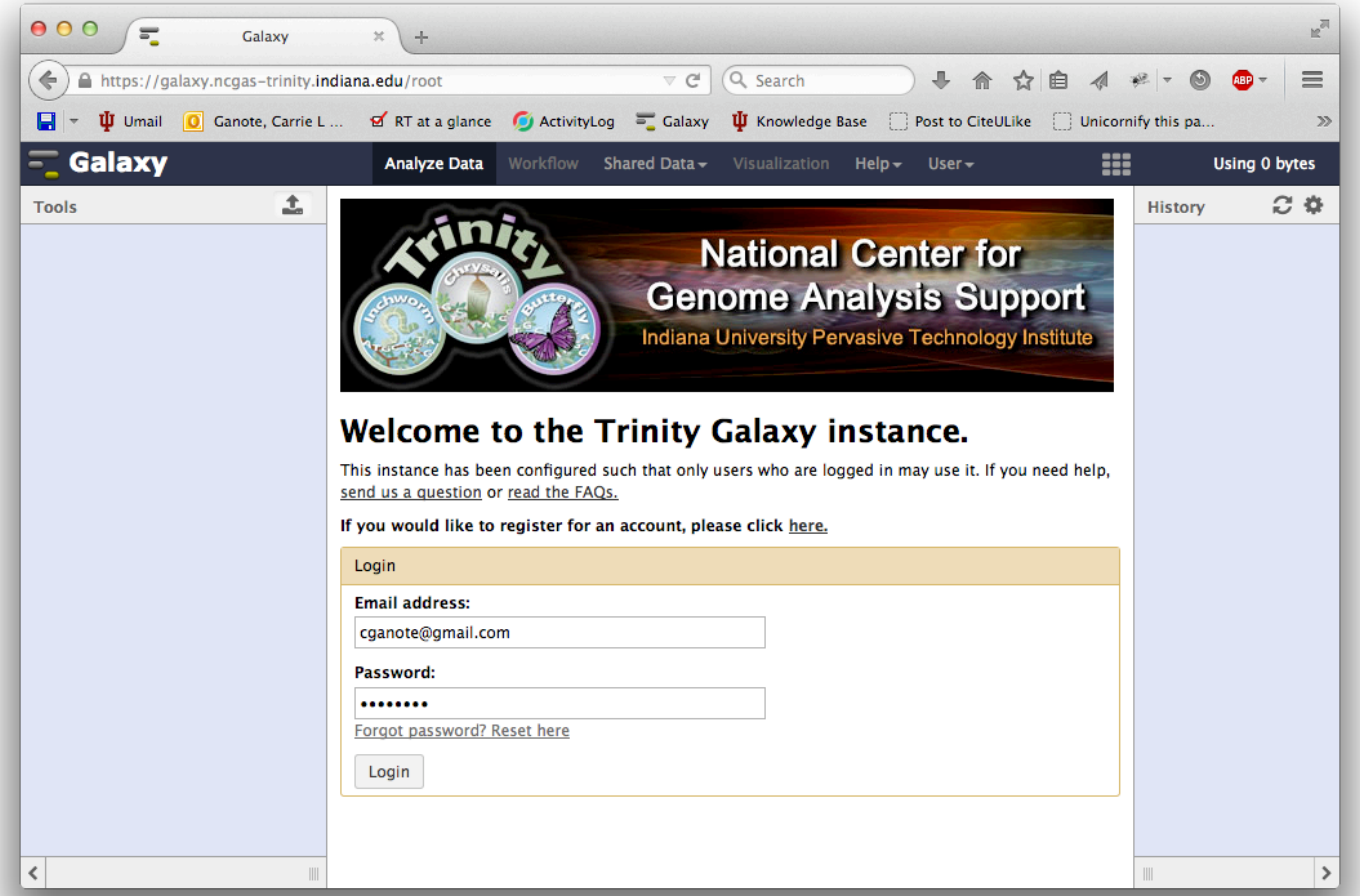
Trinity Galaxy



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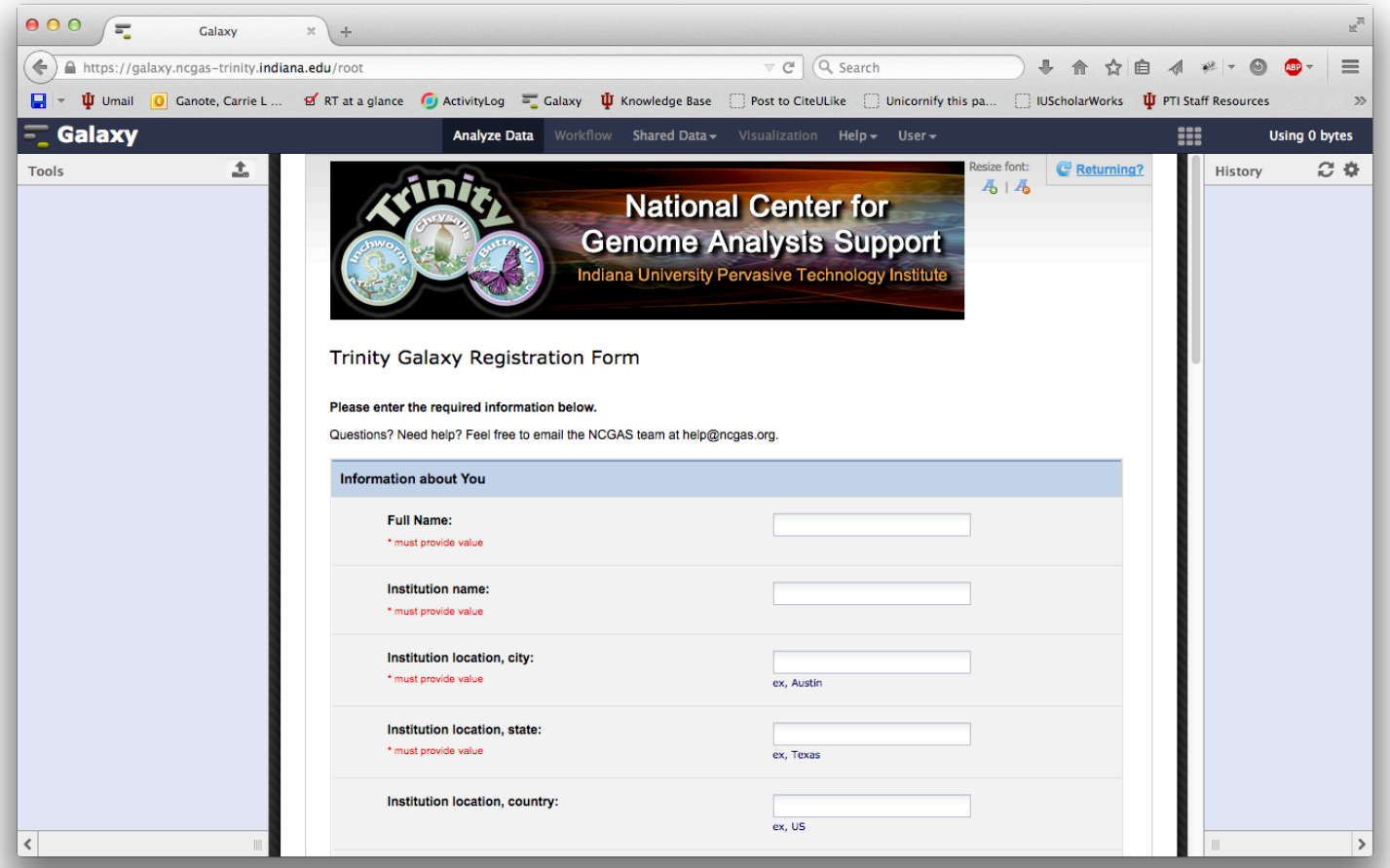
Trinity Galaxy

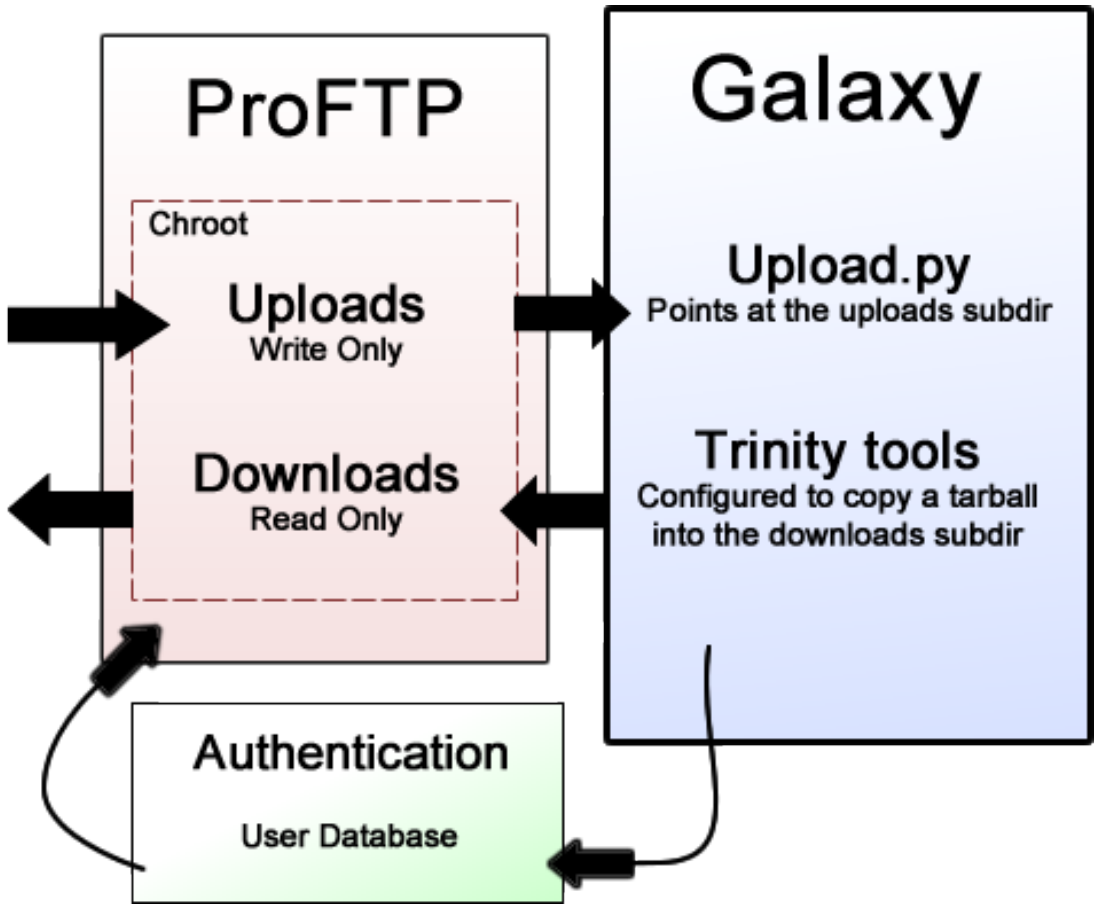


Trinity Galaxy

- One tool/pipeline emphasis
- Ftp server
- Local users

lib

- galaxy
  - config.py
  - managers
    - context.py
  - tools
    - parameters
      - grouping.py
    - api
      - remote_files.py



Challenges

Job Runners:

- PBS – still breaks with Torque 4x
  - Seems to have trouble interacting with the dynamic runner
- Drmaa – one destination possible?
- Dev servers are always somehow different than production!

Future Goals

- **Trinity needs some more guinea pigs!**
  Sign up now!
- IU Galaxy still needs to be moved to Github
- OSG-BLAST is still in beta

Guinea Pig by Peter Griffin

Fin (for real)

Thanks for watching!

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