Experiment Workflow and Services Working Group

GENI Engineering Conference 5
Seattle, WA

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www.geni.net

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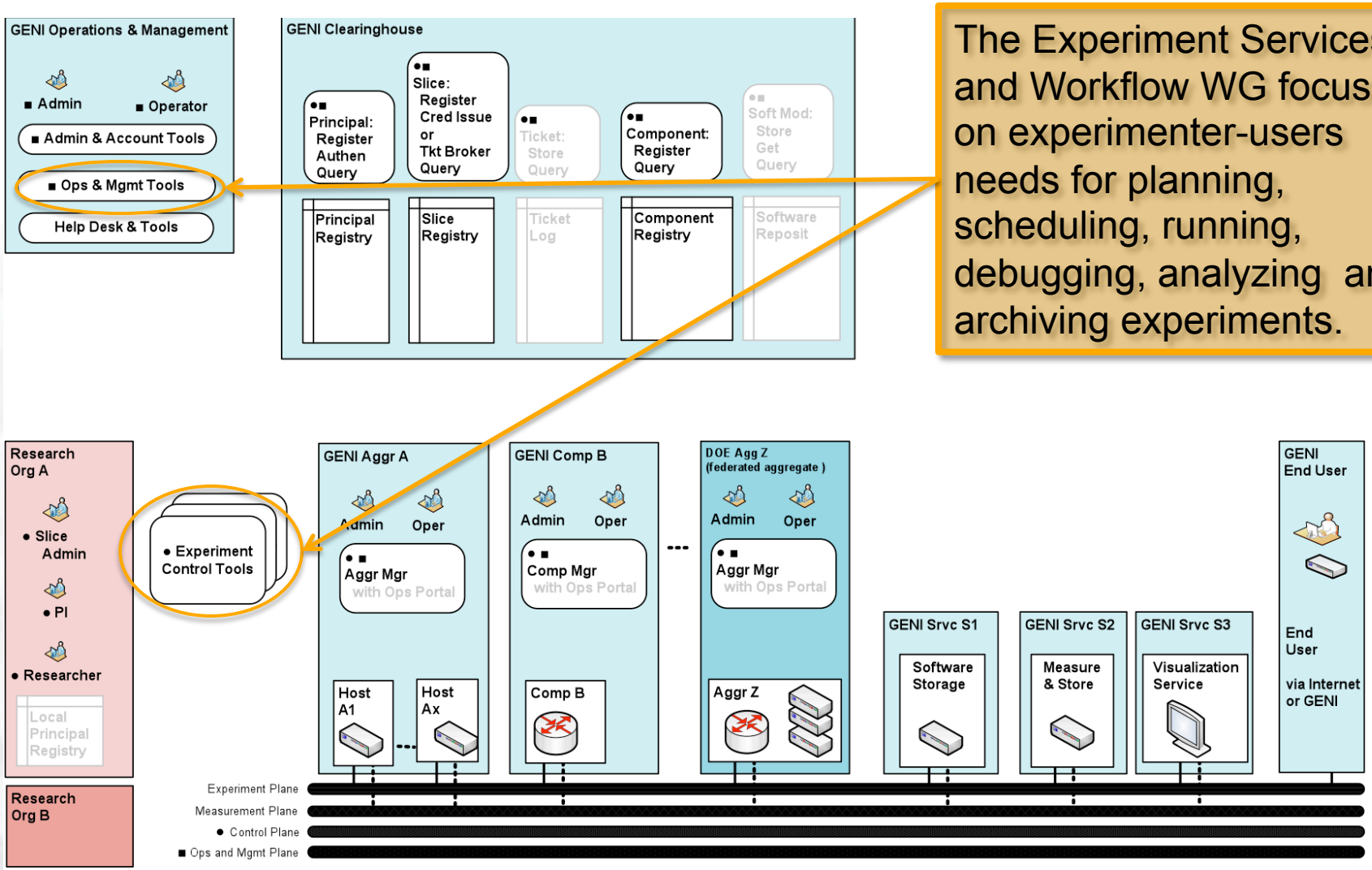
Working Group Charter

- Identify and specify tools and services needed to run experiments on GENI
  - Planning, scheduling, deploying, running, debugging, analyzing, growing/shrinking experiments
  - Collaboration
    - Multiple researchers on an experiment
    - Building on other experiments
- http://www.geni.net/wg/services-wg.html

Relationship to GENI Architecture



Working Group Mechanics

- Chair: Prof. Jeff Chase, Duke University
- Email list to discuss topics of interest
  - Open to all
  - Subscribe at URL on previous slide
- Working Group Wiki page
  - http://groups.geni.net/geni/wiki/GeniServices
  - Any email list subscriber can contribute to wiki
- Face-to-face meetings at GECs

Working Group Deliverables

- Lifecycle of a GENI Experiment
  - Community review held on Fri April 17
  - http://groups.geni.net/geni/attachment/wiki/ExperimentLifecycleDocument/ExperimentLifeCycle-v01.2.pdf
- Experiment Workflow Services: Spiral 1 Capabilities
  - Draft in review by clusters
- Workflow Services: Technical Requirements
  - Not started
- GENI Measurement System Architecture
  - Measurement workshop held on 26 June 2009

Document: Lifecycle of a GENI Experiment

- Purpose: Identify tools and services to support experimentation with GENI
  - Steps in the lifecycle of an experiment
    - From experiment planning to experiment sunsetting
  - Taxonomy of tools and services needed to support these steps
- Illustrated using a "usage narrative"
  - Fictional story of an experiment that starts at a university, grows to include a industrial collaborator and opt-in users, and eventual transitions to product

Document: Spiral 1 Capabilities

- Purpose:
  - Understand different approaches to experimenter tools and services
  - Inform Spiral 1 clusters about tools they may be able to leverage from other clusters
  - Identify areas where additional tools are needed
- Catalog of tools organized according to taxonomy in the lifecycle document
- Community review to be scheduled after comments from clusters

Meeting Objectives

- How are experiments specified in each of the Spiral 1 clusters? What are the declarative and procedural aspects of this specification?
- How is this specification used by the tool chain available to experimenters?
- What are the experimenter tools in one cluster that might be ported to other control frameworks?
- What assumptions do tools make about the control framework? What assumptions might be specific to their control framework?
- Identify issues that cut across working groups
  - Architectural, design, integration, organizational, …

WG Meeting Agenda

- 3.30pm - 3.40pm WG goals and deliverables; Status
- 3.40pm - 3.45pm Report on the GENI Measurement Workshop - Joel Sommers
- 3.45pm - 4.05pm ORBIT experimenter tools - Max Ott
- 4.05pm - 4.25pm ORCA experimenter tools -Yufeng Xin and David Irwin
- 4.25pm - 4.45pm ProtoGENI experimenter tools - Rob Ricci
- 4.45pm - 5.05pm PlanetLab experimenter tools - Jeannie Albrecht
- 5.05pm - 5.25pm TIED experimenter tools - Ted Faber
- 5.25pm - 5.30pm Wrap-up