



GENI


GEC18 GENI Update

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October 28, 2013
www.geni.net

Reminder From October 2012: Spiral 5 High-Level Goals

Key Spiral 5 Goals

- Rapid growth in GENI resources (racks, campuses, regionals)
- Clean, consistent experimenter experience
- Steadily increasing experiment and classroom use



Why are we doing these things?

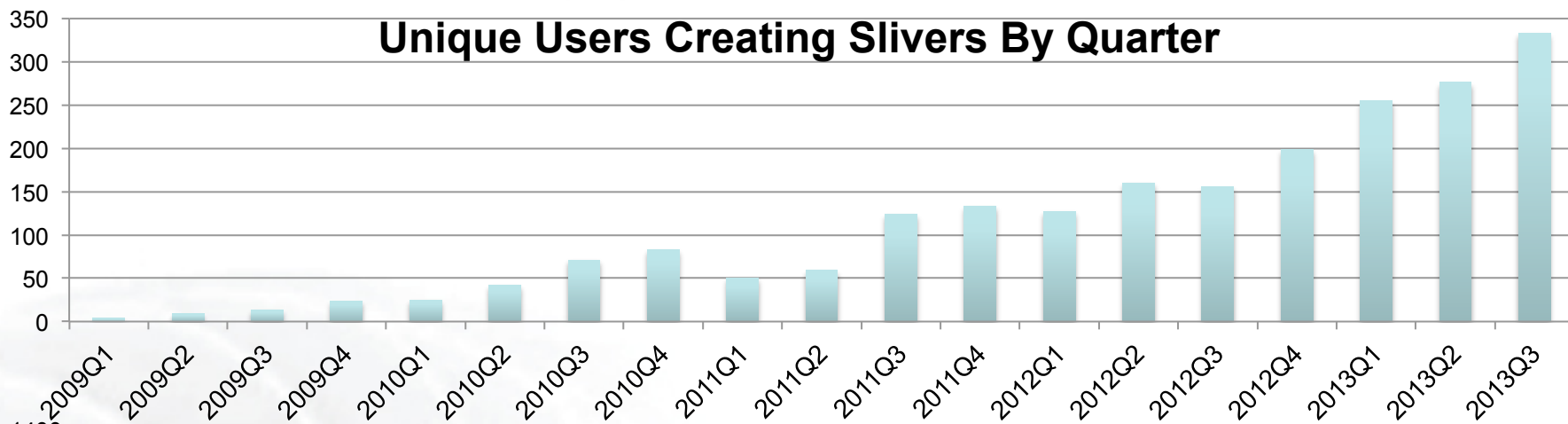
The top GENI goal of the upcoming year is increased adoption in the lab and classroom.

 Sponsored by the National Science Foundation

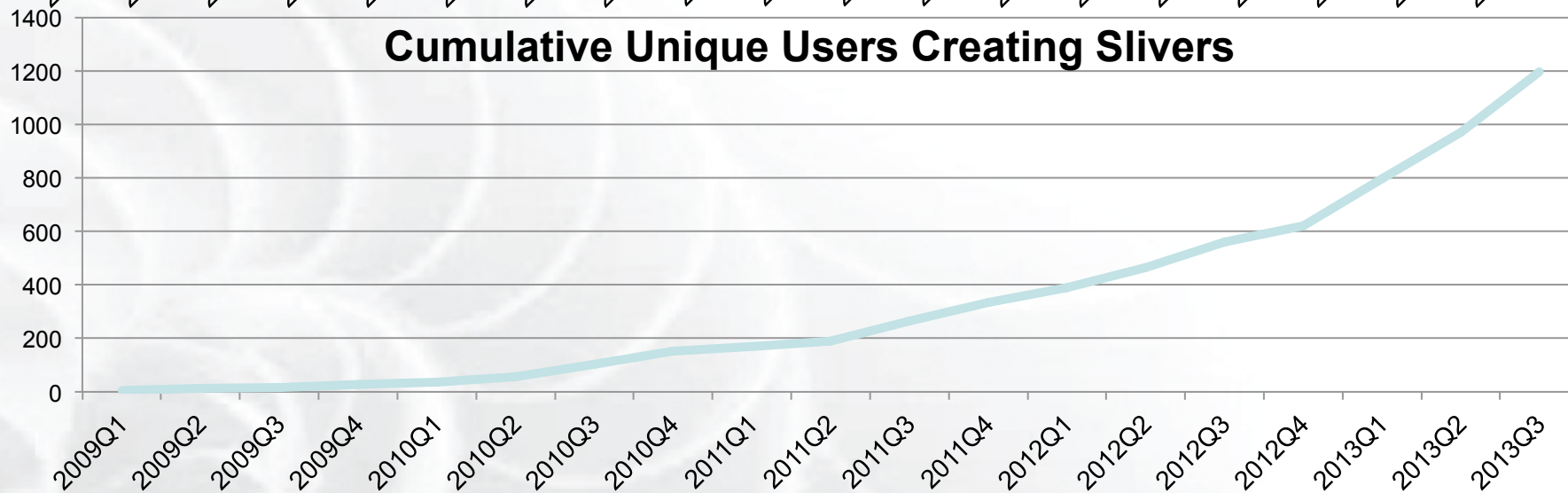
October 24, 2012

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Unique Users Creating Slivers By Quarter



Cumulative Unique Users Creating Slivers



Over 1200 unique users and rapid classroom uptake!

Making More Resources Available To Experimenters and Educators

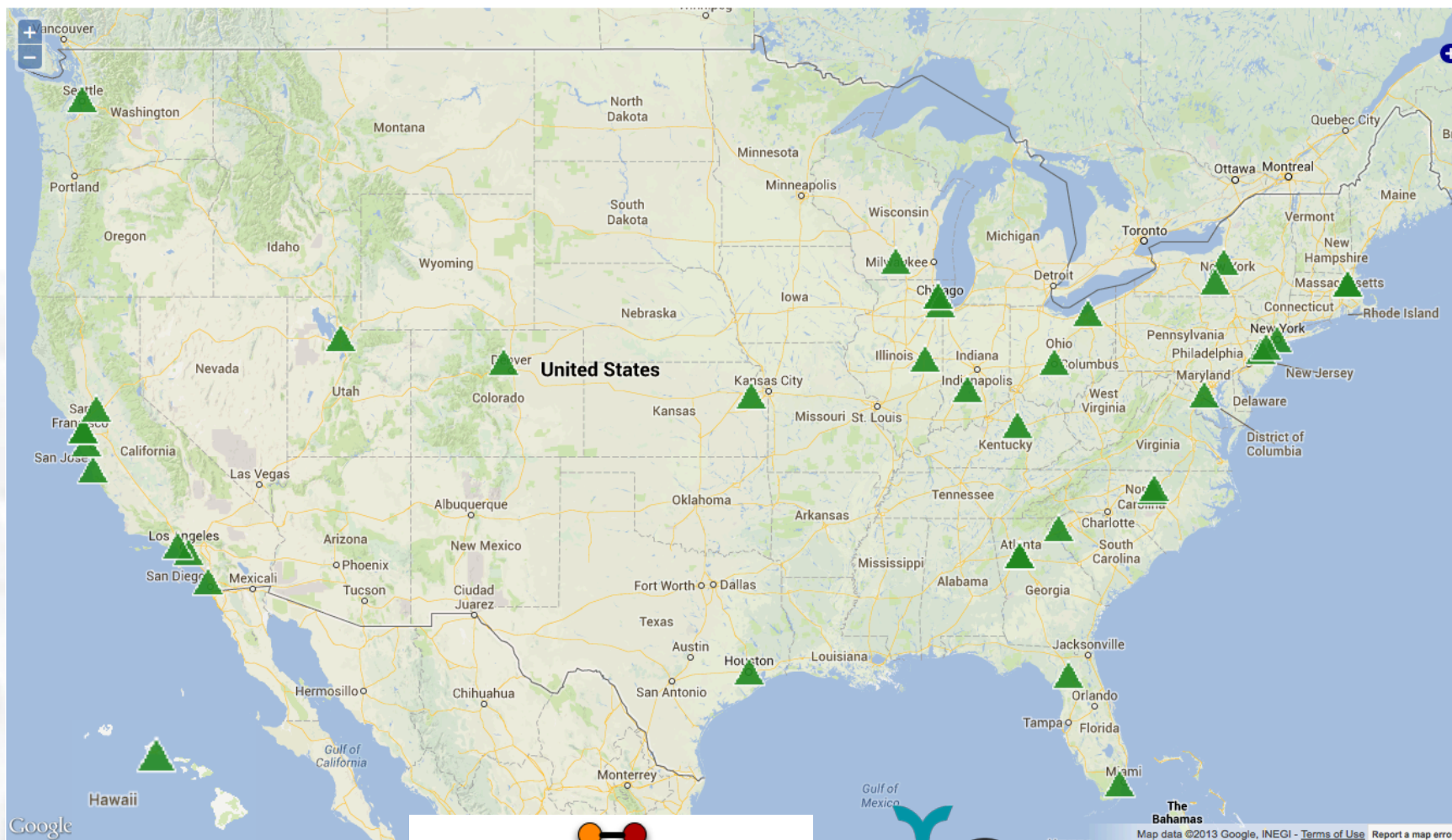
A growing number of GENI racks are rapidly becoming available for use.

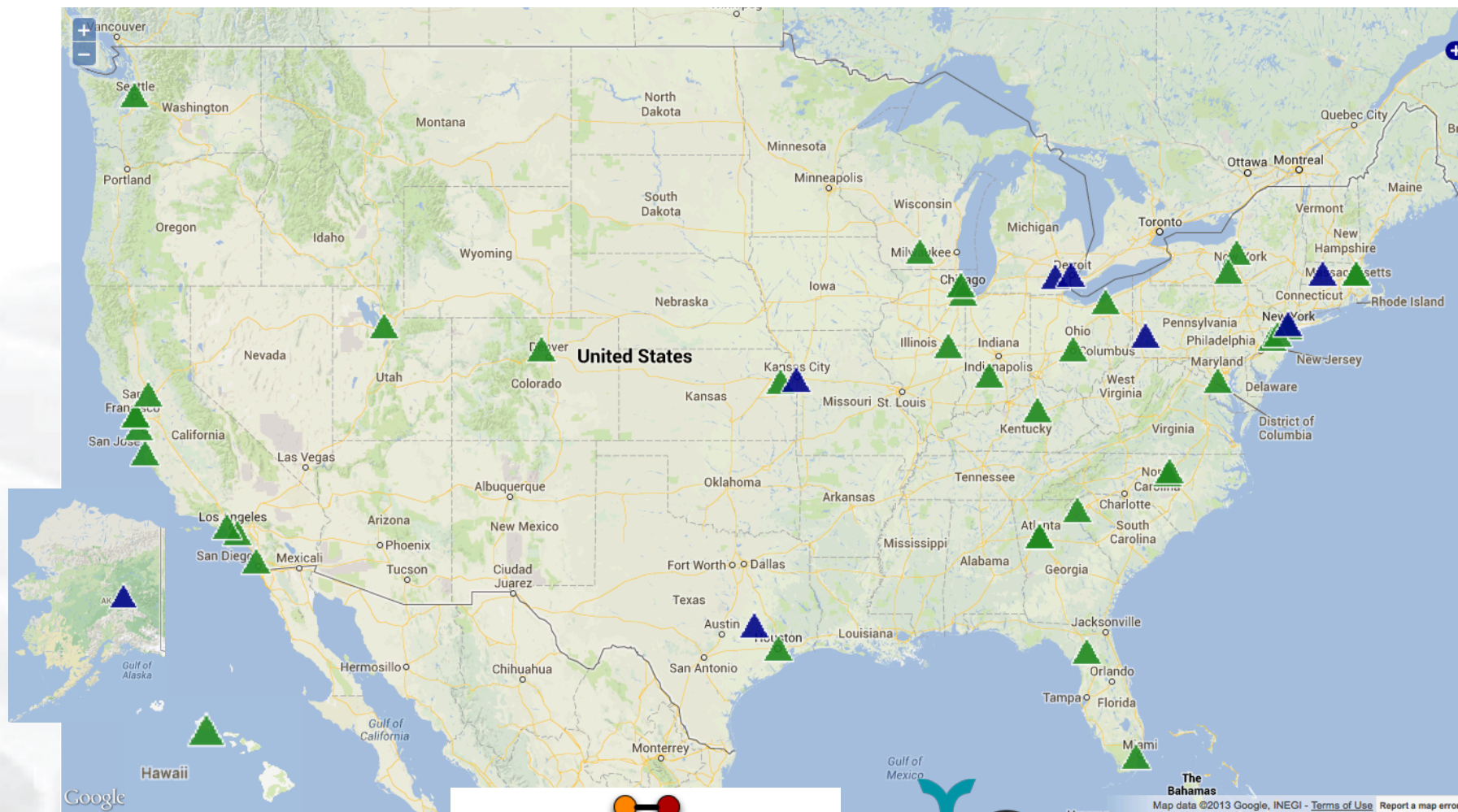
- Each rack incorporates additional compute, network, and storage resources and increases options for experimenter-specified topologies.
- ExoGENI and InstaGENI racks are actively supporting experimenters and education.
- Universities and equipment vendors are increasingly pursuing “spontaneous” GENI racks
 - A strong validation of the GENI rack concept

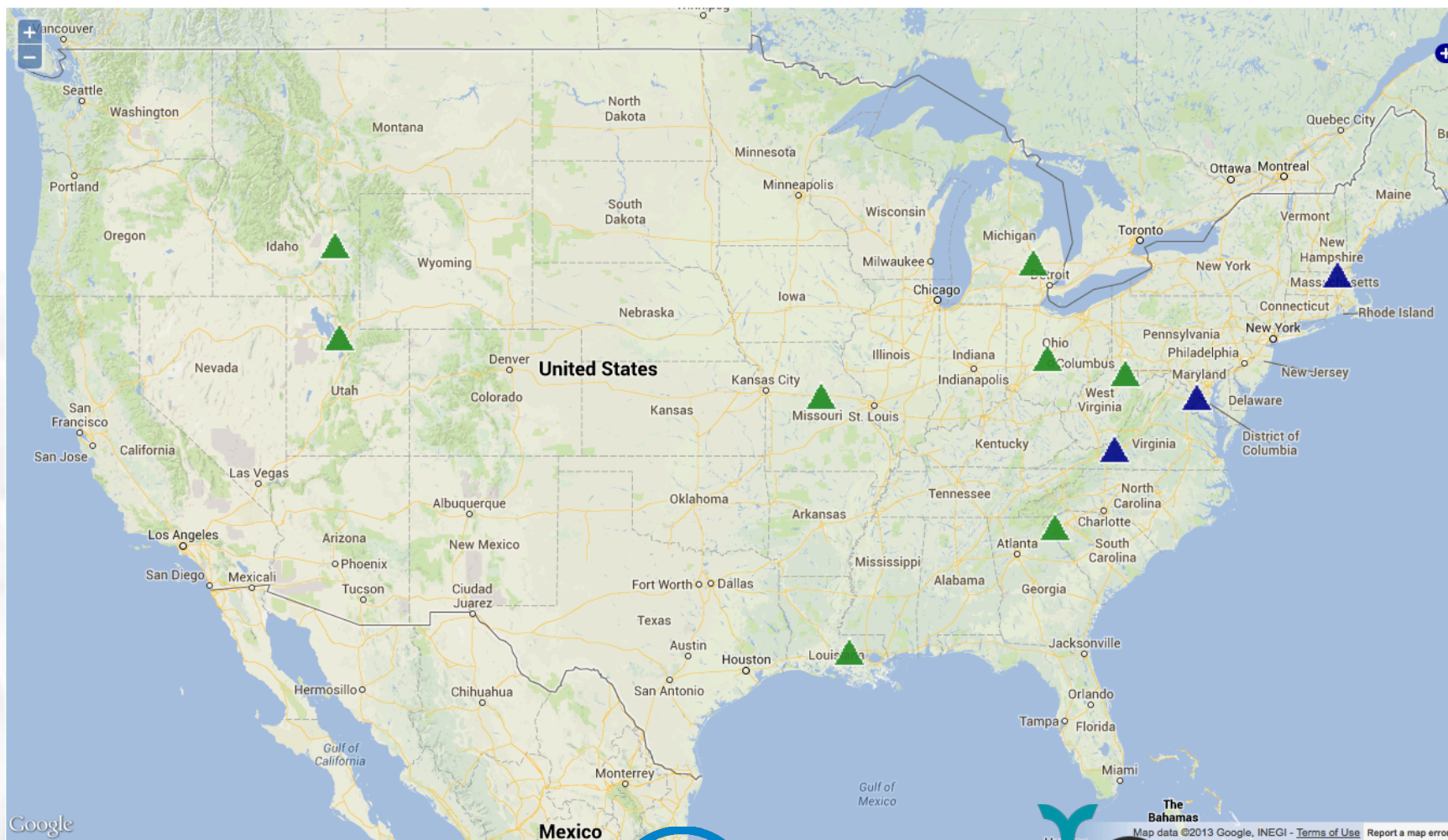
GENI WiMAX is available and actively employed in a variety of research and educational efforts.

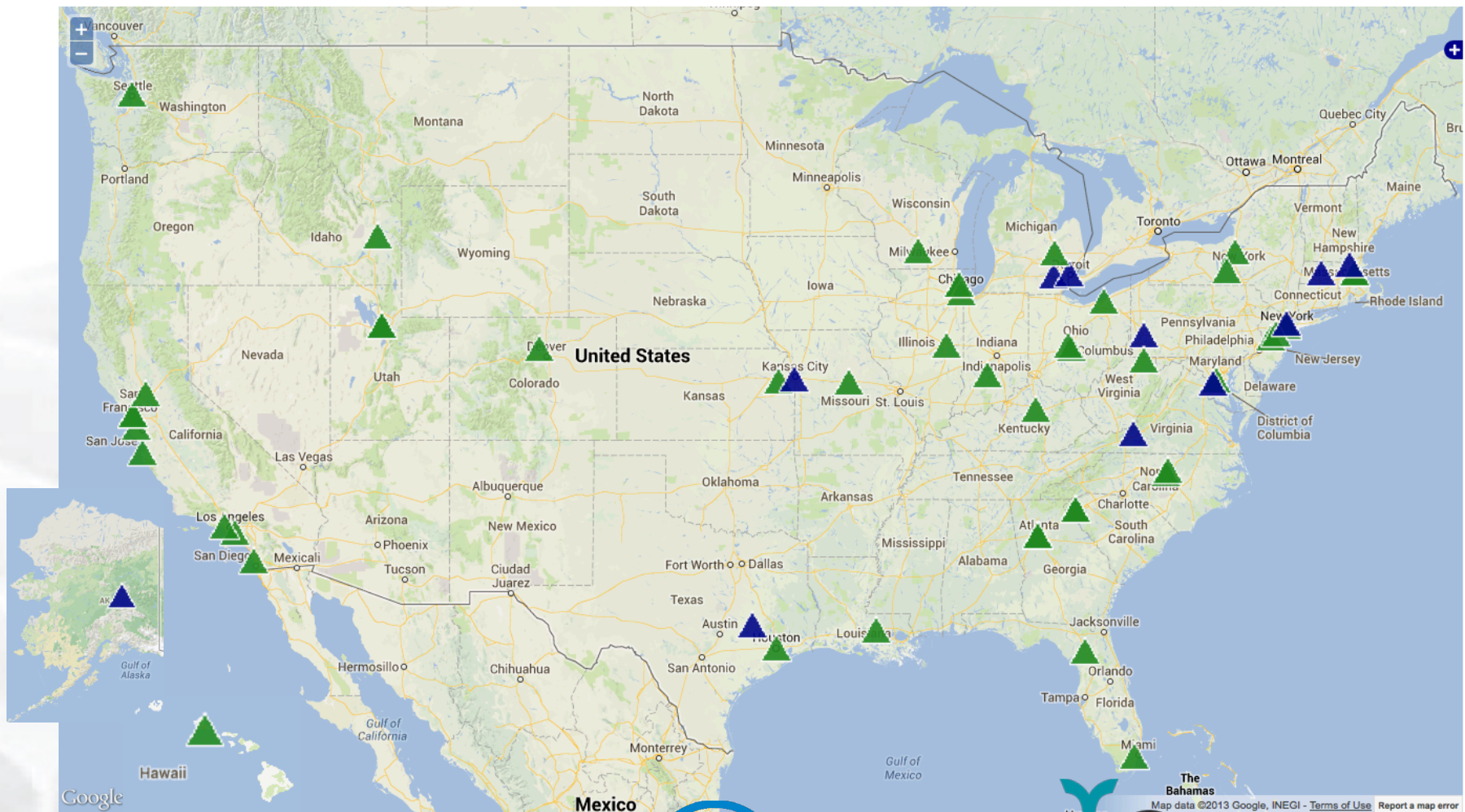
GENI Racks Available and In Progress

October 2013



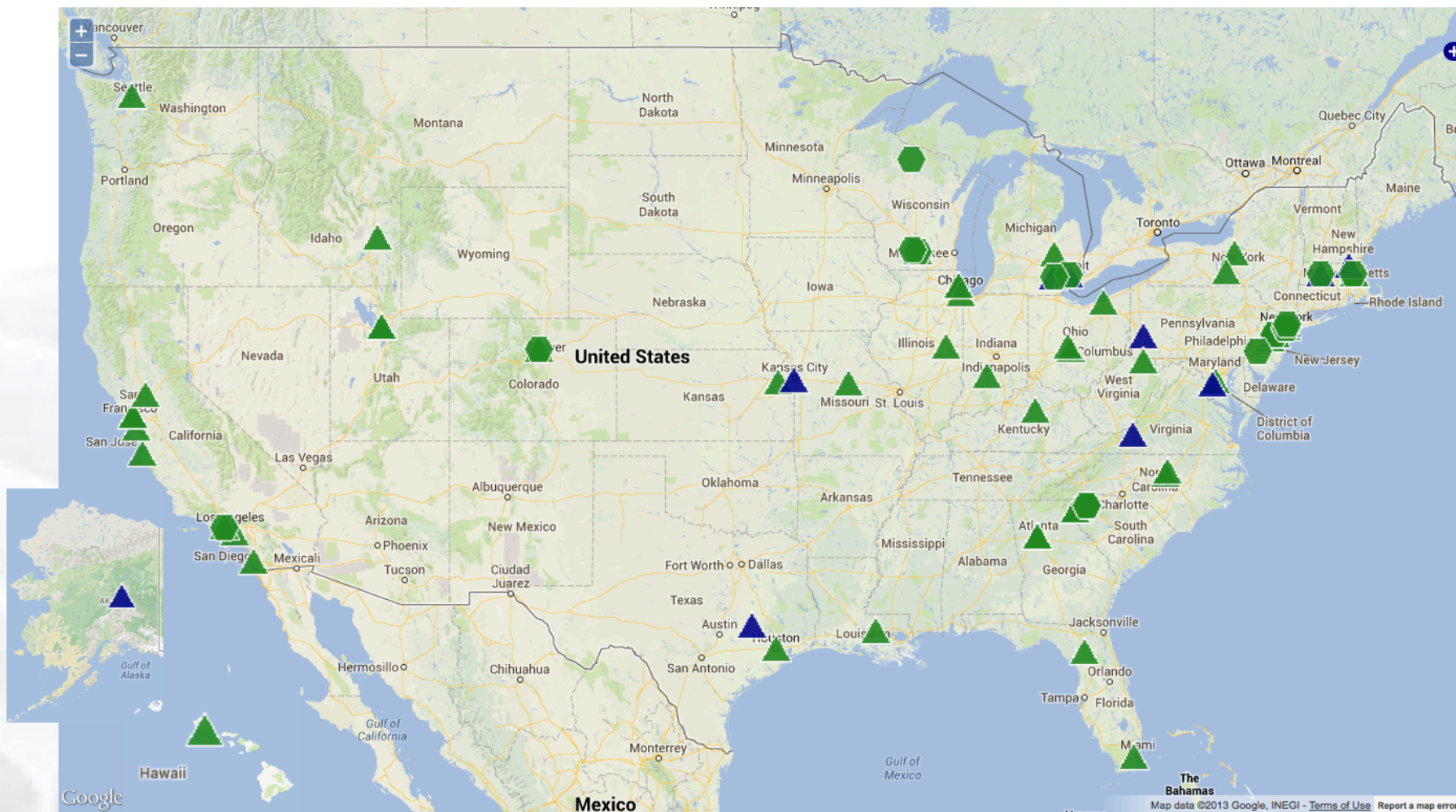






2013 GENI WiMAX Deployment





Federation Extends the Reach of GENI and International Peer Testbeds

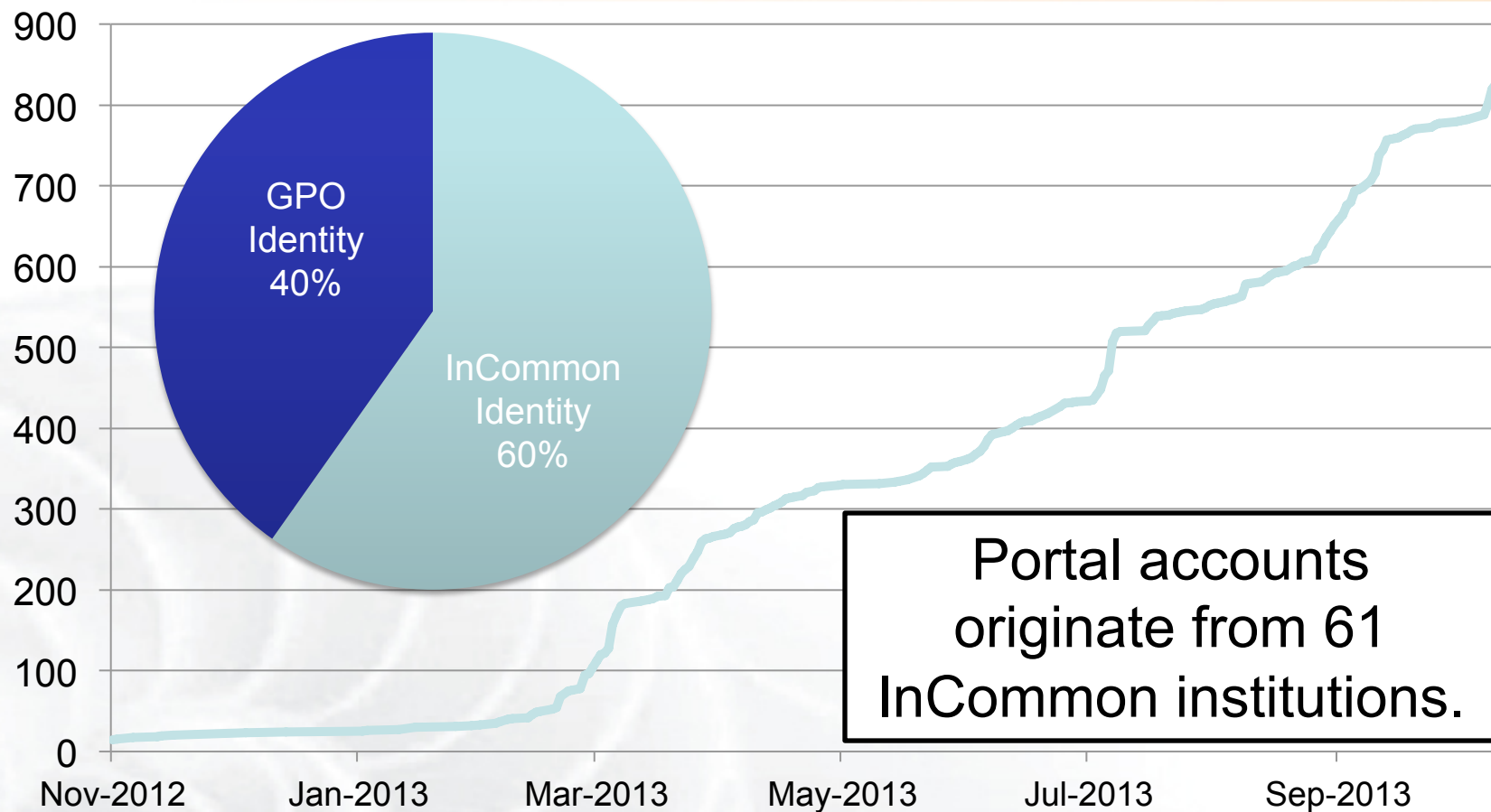


Collaborative efforts are underway to establish common API and federated infrastructure for transcontinental experiments.

Progress report from Brecht Vermeulen (iMinds)

Improving the Experimenter Experience

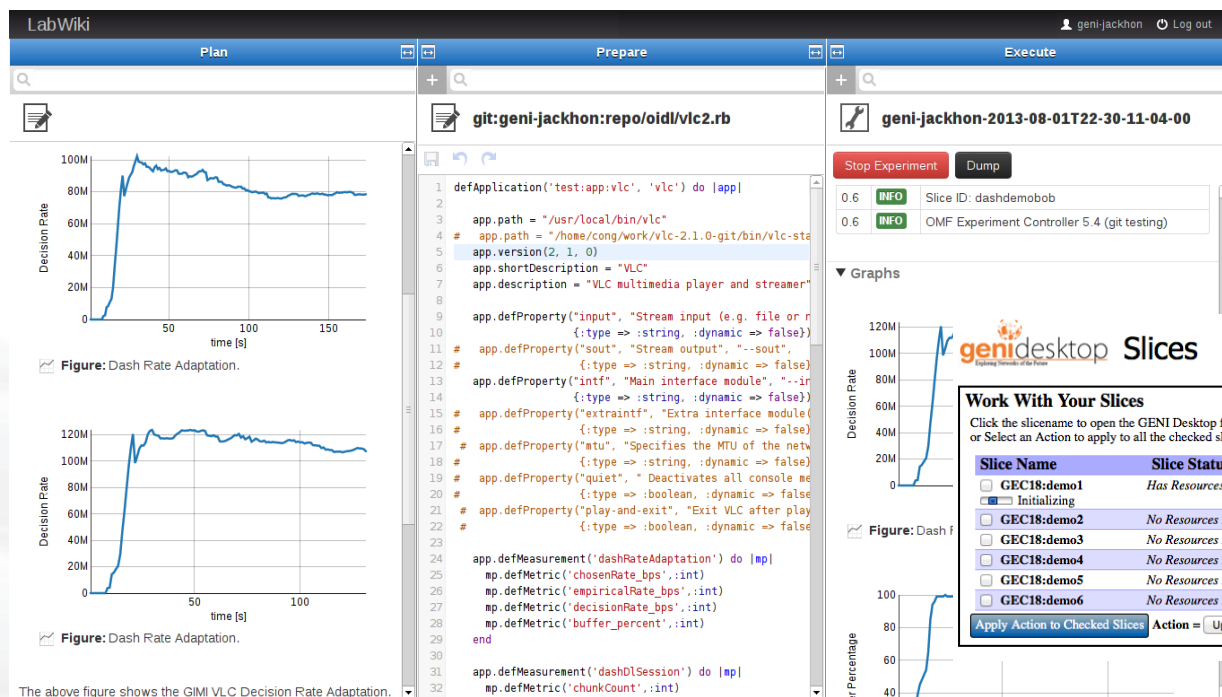
GENI Portal



Portal substantially reduces friction for new users.

- "... linking in the accounts with our university's accounts is awesome!"
- "The new GENI Experimenter Portal is really nice! I just set up a new project for my class"

Improving the Experimenter Experience Experimenter Environments



GENI Desktop

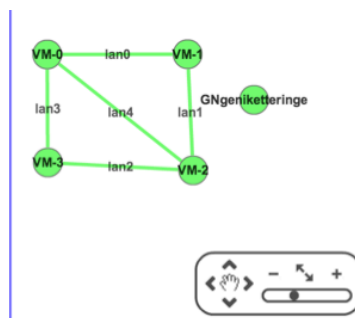
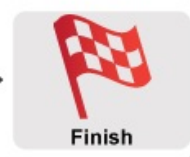
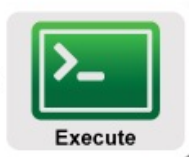
Create A New Slice

Name

Project

Create Slice

LabWiki



Integrated environments facilitate experiment management.

Key GENI Thrusts for the Next Year

- Expanded tool support for sophisticated and long-lived experiments
 - “Developing GENI Tools” session Mon. afternoon
- Continued push on GENI-supported curriculum and classroom use
 - Update from Vic Thomas coming next, including workshop outbrief
- Shakedown experiments to push GENI's boundaries and explore new domains
 - “New GENI Shakedown Experiments” Tues. morning
- Readiness for operations and ongoing community
 - “Planning GENI Operations for the Future” Mon. afternoon

**New efforts are launching in each of these areas.
Your ideas and feedback are important to guide their progress.**

Welcome Two New Members Of the GENI Architecture Team

Ilya Baldin
RENCI



Mike Zink
UMass – Amherst



Mike and Ilya both have a history of contributions to GENI, and their commitment to scientific computing and GENI-supported education will support important new efforts in these areas.

