Experimenter / Developer Roundtable: GPO Status Review
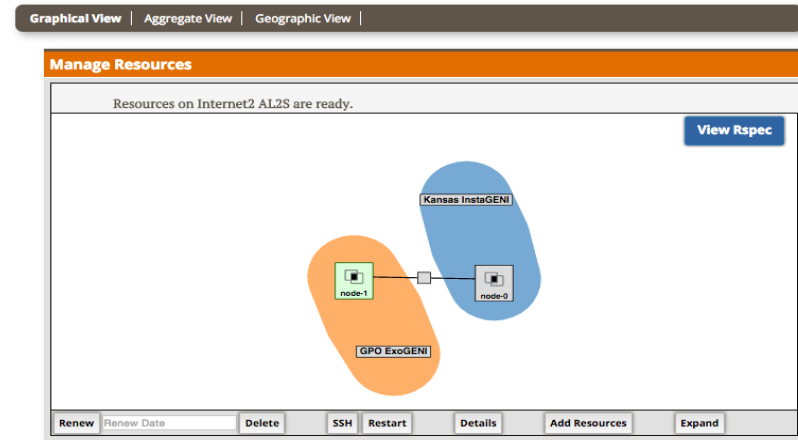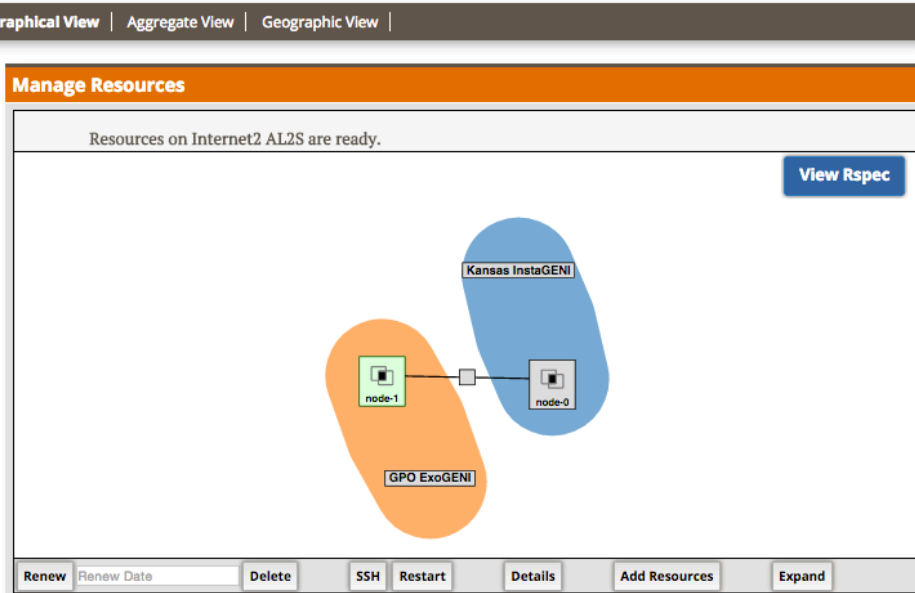# GEC 22

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March 24, 2015
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- ## GENI Portal
  - ### Jacks out of Beta
  - ### Flack Deprecated
  - ### 33 new aggregates
  - ### New Aggregates include OpenGENI, AL2S, CloudLab (ARM architecture), Apt, iMinds Virtual Wall

- ## Omni / Stitcher 2.8
  - ### More reliable
  - ### Better ExoGENI support

- Slice page shows slice resources using Jacks
  - Old 'Aggregate View' available in a tab
  - Manage your resources graphically

- Add Resources page uses Jacks to create, edit RSpecs and select aggregates

- Manage RSpecs
  - Create, Edit and
  View RSpecs in Jacks
- Flack is deprecated

Graphical View | Aggregate View | Geographic View |

Manage Resources

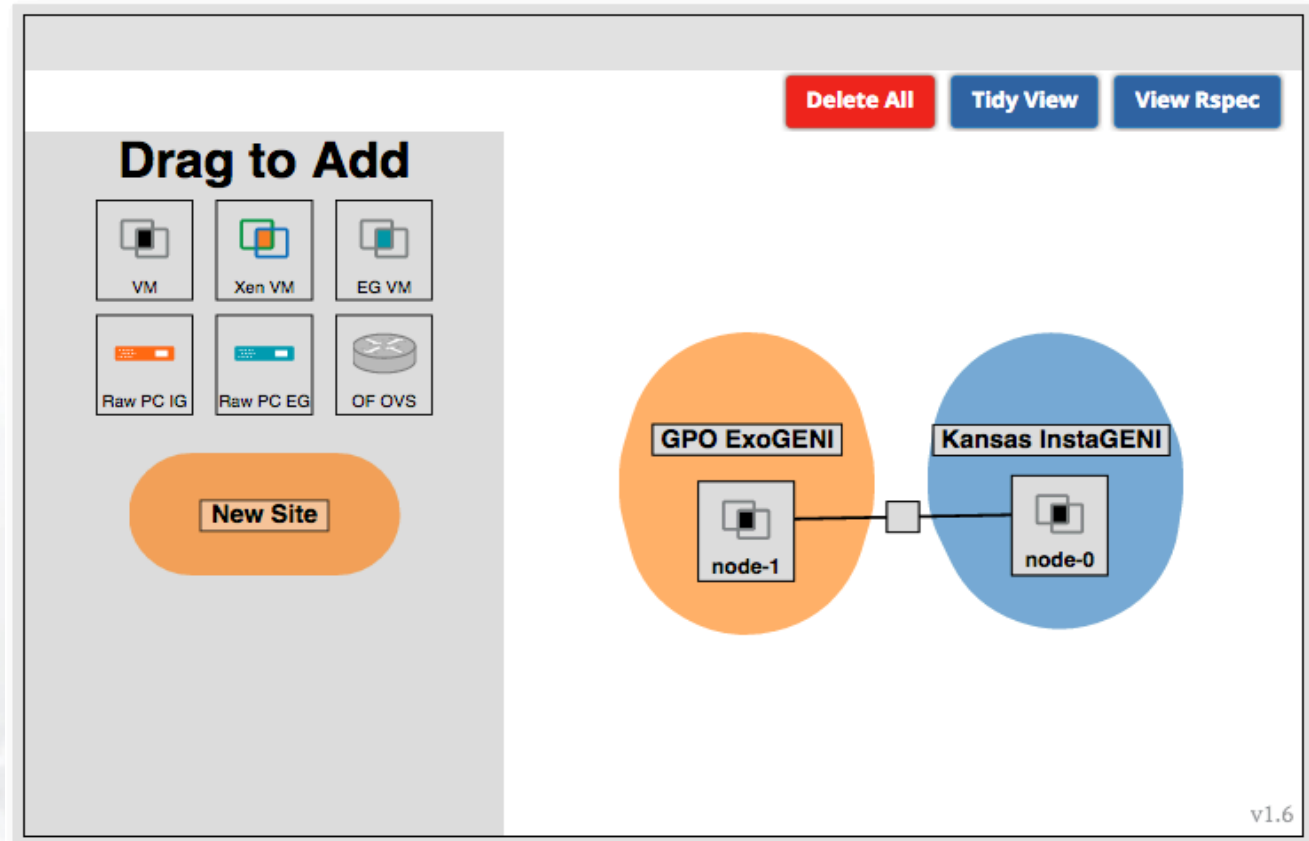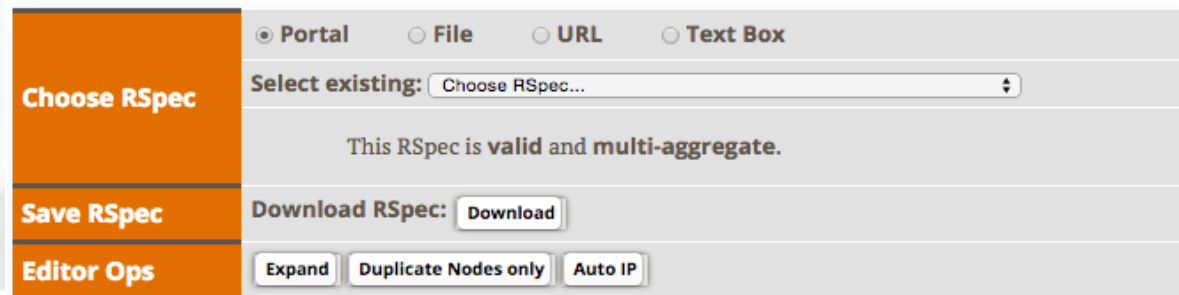Resources on Internet2 AL2S are ready.

View Rspec

Kansas InstaGENI

node-1   node-0

GPO ExoGENI

Renew | Renew Date | Delete | SSH | Restart | Details | Add Resources | Expand

Jacks for Adding Resources

- Graphically Draw your Experiment

- Constraints guide you to create a valid request

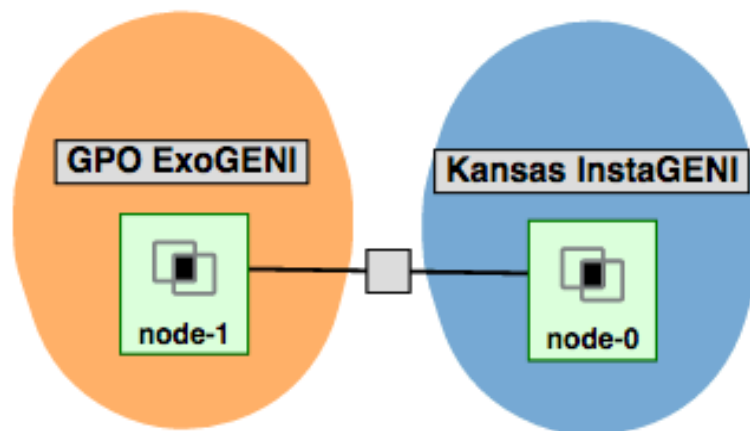- Easy to create stitched topologies: just draw a link

Jacks Slice Management

Other Changes at the GENI Portal

- Slice Status and Details on a single page

- CloudLab federation

- jFed launches in slice context

- 33 new Aggregates since GEC21

- Reservation attempts time out after 45 minutes

- Better support for changing account attributes
  - e.g. name

- **Omni 2.8 released in February**
  - Multiple Stitching improvements
  - Basic Update() support
  - Better logging control for tools

- Omni is a command-line reservation tool
  - For advanced experimenters, and used by tools:
    - The GENI Portal
    - GENI Desktop
    - geni-lib

- Linux, Mac and Windows installers
- Supports many Clearinghouse operations
  - list slices, create slice, manage slice members
- SSH keys for your slice members are installed on new nodes by default
- Reports new reservations to the Clearinghouse

- Catch keyboard interrupts and clean up

- Authenticate to the SCS

- Check available VLANs where possible/useful before reservations

- Better support for reservations across multiple ExoGENI sites
  - Can use individual sites, not forced to use ExoSM
  - Can use GENI stitching between ExoGENI sites
    - ExoGENI stitching remains the default

- Support recreating combined manifest

- Better support for slow sliver deletion at InstaGENI

- GCF is the sample GENI aggregate and Clearinghouse delivered with Omni and Stitcher

- GCF aggregate now supports scheduled reservations

- Aggregate code refactored
  - Argument processing and error handling in a common 'Method Context'

- Aggregate supports policy-based authorization engine
  - ABAC like per aggregate authorization policies
  - For example, "GENI users may reserve at most 10 VMs during school hours"

GENI Portal Status

- ## 3050+ users
  - About 850 more than last GEC
  - About 1250 active since the last GEC
  - 70%+ from InCommon
  - 400+ International
- ## 295+ active projects
  - 68 new since last GEC
- ## 795+ active slices
  - Over 3000 slices since January 1
- ## > 5000 resource reservations since January 1
- ## 92 Aggregates – +33 since GEC21

Portal only statistics; there are other ways to use GENI.