### The GENI Desktop

### A Framework for Accessing and Using GENI

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GEC 18 - Developing GENI Tools Session

## The Challenge

- The Problem: The experiment lifecycle is currently fragmented.
  - Many different tools are needed in order to work with various parts of the GENI system.
  - Some aspects of the lifecycle have no (or very limited) tools available.

 The need: A unified framework and interface for accessing, controlling, and interacting with GENI experiments throughout the lifecycle of an experiment.

# Lifecycle of an Experiment

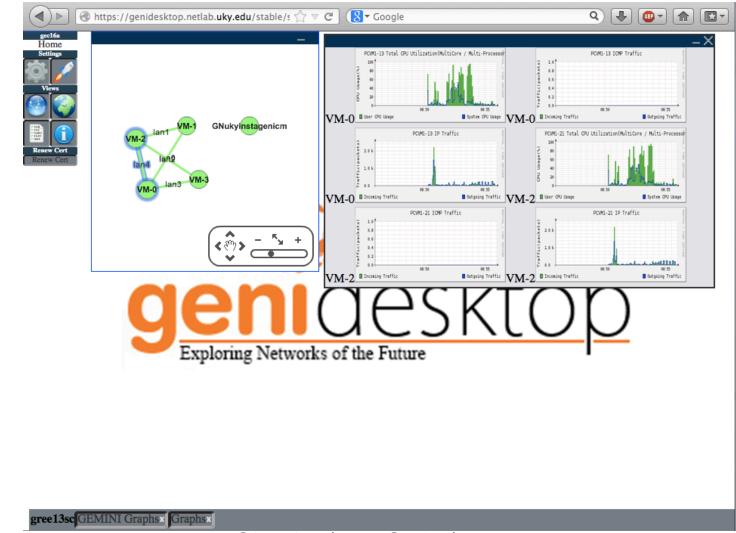
- Experiment design,
- Setup and deployment,
- Experiment control
- Runtime interaction
- Experiment monitoring,
- Data collection,
- O Data analysis
- O Data Visualization
- O Data storage/archiving

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# The GENI Desktop

### (An initial step toward a unified framework)



# Enhancing the GENI Desktop

- Design, Setup, and Configuration
  - Portal, Flack/Jack, Awe/OMNI, Lab Wiki
- Initialization and Validation
  - Manifest validation
  - Regression testing
- Execution and Runtime Support
  - New Modules
  - Integrating Third-party Tools
  - Cooperation with other tools
- Archival Storage and Analysis
  - Meta-data support
- Command Line Interfaces
  - Scripting integration
  - Re-executing experiments

## Thank You!

## Questions?

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