

The GENI Desktop

(A GUI for Creating, Running, and Monitoring Experiments)

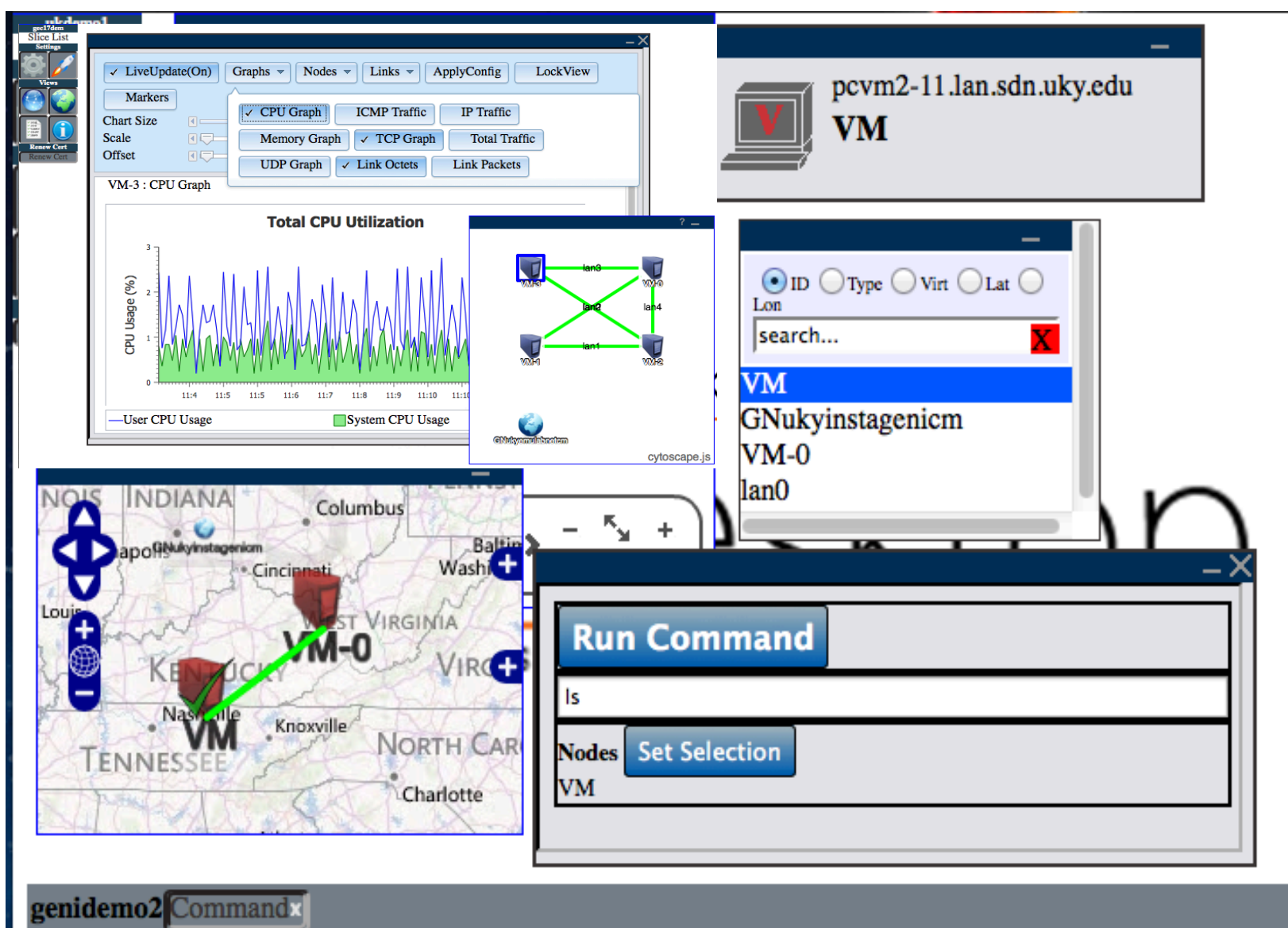
James Griffioen, Zongming Fei, Hussamuddin Nasir, Charles Carpenter, Xiongqi Wu, Jeremy Reed, Lowell Pike
(Laboratory for Advanced Networking, University of Kentucky)

The GENI Desktop

- The goal of the GENI Desktop is to make it easier for experimenters to create, control, interact with, and evaluate the performance of the resources that comprise their slice.
- The GENI Desktop provides an easy-to-use graphical user interface (GUI) by which experimenters can create, run, and monitor experiments.
- The GENI Desktop serves as the GUI for the GEMINI instrumentation and measurement services. It also acts as a one-stop interface for access to a growing number of GENI Tools (e.g., Flack, GEMINI, the GENI portal, iRods, etc.)
- The GENI Desktop provides windowing-system style features inside a web browser to create the look-and-feel of locally running tools (without having to actually install, manage, and run tools locally).
- Users interact with their resources using a single abstraction that involves (1) Selecting resources, and (2) apply operations on those resources.

GENI Desktop Features

- Single sign-on to tools.
- Create slices
- Create slivers via Flack, GENI Portal or GENI Desktop
- Instrumentize a slice for use with GEMINI.
- Multiple topology views.
- Support for cross control framework experiments
- Create super slices
- SSH into nodes
- Upload files onto nodes
- Run commands on nodes
- View traffic graphs
- Drill-down to detailed packet-level monitoring data
- View both active and passive measurement data
- Access to archival services
- Support projects
- Enhanced slice management



New Features

- We enhanced the GENI Desktop to use Speaks-for credentials for accessing resources from other GENI components on behalf of users.
- We improved the user interface based on feedback from last GEC.
- We implemented an initial version of the slice verification and configuration testing service.



[Authorize the GeniDesktop](#)

[FAQ/Help](#) | [Feedback/Bug Report](#)

Start Validation				
Node	IP	Interface Name	Status	Ping Test
GN0	127.0.0.1	lo	UP	N/A
	128.163.233.36	eth999	UP	N/A
VM	10.10.1.1	eth5531	UP	PASSED
	10.10.3.1	eth5532	UP	PASSED
	127.0.0.1	lo	UP	N/A
	172.17.1.8	eth999	UP	N/A

Super Slice Support

- Users can use the GENI Desktop to create a super slice by combining multiple existing slices together.
- Super Slicing service sets up GRE tunnels between nodes from different slices. The GENI Desktop provide a GUI for users to pick any pair of nodes from different slices to super slice together.

