Using GENI for *Evaluating Networked Systems*

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GEC21

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Evaluating Networked Systems

Evaluating Networked Systems ("ENS") is a class I'm developing at the University of Utah.

The complete "source" for the class, including assignments, homework, lecture notes, the syllabus, etc., is publicly available in a git repository for easy "forking". Pre-built versions of all of these files can be found at the bottom of this post.

The goal of this course is to acquaint students with the theory and practice of evaluating systems that have a network as a major component. At its conclusion, students should be prepared to conduct rigorous evaluations as part of their own research, as well as looking with a critical eye at evaluations they find in the literature. It will have a major hands-on component, using testbed facilities such as Emulab, GENI, and PlanetLab. Topics will include experiment design, avoiding typical evaluation pitfalls, basic statistical analysis of empirical data, presentation of results, and use of the available tools.

lab1-handout.pdf	11.4 KB	1/1/1970 12:00 am
lecture1-notes.pdf	11.2 KB	1/6/2014 10:36 am

- Fundamental of performance analysis (Jain)

- Reading and evaluating papers

- Hands-on practice

geni portal

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Home → Project *CS6963-S14*

GENI Project: *CS6963-S14*

Project Actions

Create Slice   **Edit**

Project Identifiers (public)

Name	CS6963-S14
Purpose	Evaluating Networked Systems class at Utah
Expiration	2014-05-16 23:59:59 Z
Creation	2014-02-09 20:53:24 Z
URN	urn:publicid:IDN+ch.geni.net+project+CS6963-S14

Contact Information

Project Lead	**Robert Preston Ricci e-mail**

Jacks

Save Load View Source   Cleanup View

Name

server

Node Type

emulab-xen
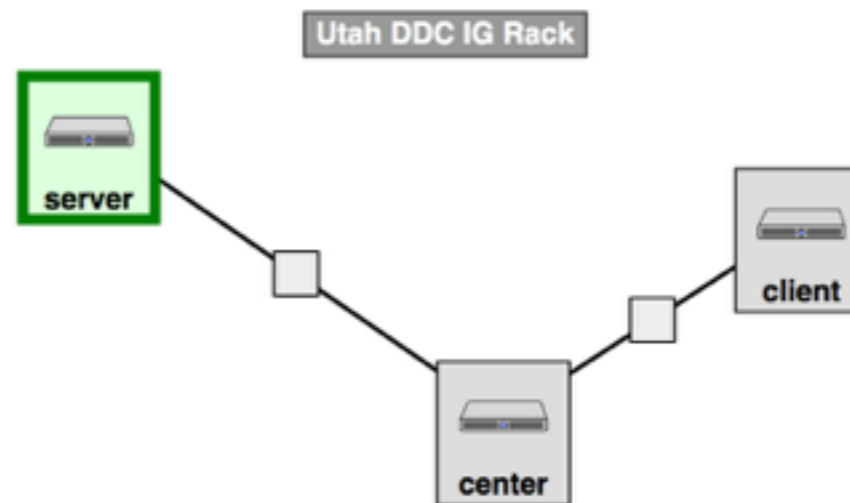
Hardware Type

(any)

Disk Image

Ubuntu 12.04 LTS

Install from URL

ex: http://example.com/mystuff.tar.gz

Execute Command

ex: sh /local/myscript.sh

Delete Node

Utah DDC IG Rack

server

client

center

v1.6

Main Issues

- Getting a VM image students like

  - Ubuntu 12.04 was eventually OK

- Scripting all software installs / setup

  - Shared scripts used by all students

- Slices / slivers disappearing

  - Told them to check in and push all the time

http://www.flux.utah.edu/users/ricci/ens

http://gitlab.flux.utah.edu/ricci/ens