

Kevin Walsh

College of the Holy Cross



Research background:

- Large network emulators & simulators
- Planetlab, Emulab

Teaching:

- Networks/distributed systems (alternate years)
 - Operating Systems (alternate years)
 - CS1, CS2, Organization/Architecture
- ~ 10 CS majors per year

What can GENI do to support educators?

I intend to use it (or another testbed) in my class

... and I need the following kinds of help.

... but need the following things to happen first.

Kevin Walsh
College of the Holy Cross



Big Picture

- 1) Needs to be **easier** than doing it myself
 - Low-overhead administration
 - Low-overhead assignments

- 2) Needs to be **better** than doing it myself
 - Real network conditions
 - Wide-area distribution
 - Large-scale, heterogeneous
 - Path to future opportunities (compare: AWS)



Small school: networks/distributed systems taught in alternating years

1) Can I use GENI in other courses?

e.g. Operating Systems, Databases, Software Engineering

2) How can I cope with a project in flux?

→ **Low overhead** assignments, easily integrated with existing curriculum

→ **Curated** assignments / tutorials



Using GENI as an outsider

1) Documentation for students

→ Need tutorials

→ Need student portal

2) Documentation for instructors

→ Jargon-free **GENI Roadmap** & status

Seattle, Emulab, Planetlab

ProtoGENI, ORCA, ExoGENI, InstaGENI

→ **GENI Quick Start**

Wiki:newcomers vs. Seattle Educator Portal

Kevin Walsh
College of the Holy Cross



Not needed:

TA Training

(I don't have TAs! And it had better be easy enough to do without much training...)

Kevin Walsh
College of the Holy Cross

