

The GENI Experiment Engine

Andy Bavler, Jack Brassil, Jim Chen, Joe Mambretti, Rick McGeer,
Glenn Ricart, Stephen Tredger



Because It Ought To Take Longer To Write Your Experiment Than It Takes To Deploy It

- Five-Minute Rule: A User Should Be Able to Compile/Deploy/Run "Hello, World" in Five Minutes On Any IDE/Infrastructure/Cloud/Whatever
- GEE: Help GENI Pass the Five-Minute Test.

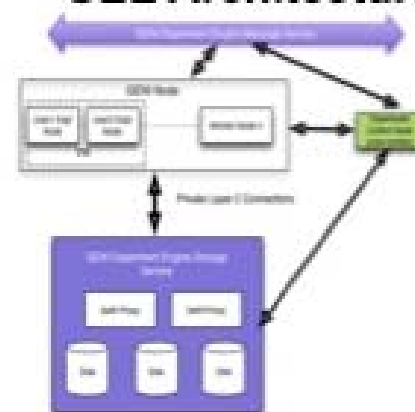
Running an Experiment

GENI	GEE
Obtain InCommon (etc) certs	Go to GEE Portal and ask for Slicelet
Go to GENI Portal and create Slice	Unpack downloaded zip file and add commands to fabfile.py
Use Omni/Flack/whatever to design experimental network	fabric run_experiment()
Wait for protoGENI/ORCA/whoever to allocate node/network	
Yum/apt-get/etc to install software	
"Hello, World"	

No Magic

- GENI is complex because GENI is flexible
- Designed to accommodate *any* experiment
- GEE is simple because GEE has fewer options
- Run any experiment, as long as....
 - Uses VM's only
 - Uses standard FC distro...
 - No control of network...
- Don't like these restrictions? Use Full GENI...

GEE Architecture



Simple Experiments Should Be Simple To Run

