GEC #6, November 16, 2009 Robert Ricci

# ProtoGENI Cluster Meeting Monday





### Agenda



- Introduction
- Short project talks
  - Break in the middle
- Break out into groups of interest
  - Demo prep

#### Welcoming New Projects



- We were already the largest cluster
  - Already had 8 projects
- Approx. 12 new ones
  - Depending on how you count
  - We'll hear from many of them today
- Some of the projects not here today
  - International collaborators: IBBT and TWISC
  - Howard University: Wireless measurements

## What It Means to Be A Part of the Cluster



- Provide a substrate (Aggregate Manager)
  - Many are Emulab-based
  - Some are implementing their own
  - Provide a service that integrates into AM
- Run in a slice
  - Provide a service in the slice (eg. measurement)
  - Experiments
- Analyze properties of the control framework

#### **Current Organization**



- Collaboration through Emulab
  - "geni" project
  - Apply to sign up at www.emulab.net
- Mailing lists:
  - geni-users@emulab.net (automatic with project)
  - geni-dev@emulab.net (link on protogeni.net)
- Wiki up at www.protogeni.net
  - Editable by project members
- Bi-weekly conference calls (Weds., 3 ET)
  - Not everyone on every call

## **Evolving Organization**



- Identify "sub-clusters"
  - Common interests
  - Combination of existing and new projects
- Occasional all-hands calls (1/month)
- More frequent sub-cluster calls
  - Will ask for more help with agendas
- Manage with sub-groups of Emulab project
  - Each one gets its own mailing list

#### **Sub-Clusters**



- Aggregates
- Measurement services
- Services, Experiments, and Security

#### Aggregates



- Emulab-based
  - CMULab
  - Programmable Edge Node
  - CRON
  - IBBT
  - TWISC
  - BBN
  - Instrumentation Tools (Kentucky)
  - Measurement System (Wisconsin)
- Implementing own aggregate manager
  - DTunnels
  - Million Node GENI
  - PrimoGENI
  - ETRI
  - ShadowBox

#### **Measurement Services**



- Instrumentation Tools (Kentucky)
- Measurement System (Wisconsin)
- LAMP (PerfSONAR)
- Scalable Monitoring (S<sub>3</sub>)
- On Time Measurements
- Opportunistic Wireless Measurements

## Services, Experiments, and Security



- Digital Object Registry
- Davis Social Links
- GENI Security Analysis
- ABAC
- Experiment Security Analysis

#### Rest of the Afternoon



- Talks from Spiral One projects
- Short break
- Talks from Spiral Two projects
- Break into sub-clusters
  - Demo presenters may want to leave at this point

### Speakers: Spiral 1



- Robert Ricci, University of Utah (x2)
- Nick Feamster, Georgia Tech
- Justin Cappos, University of Washington
- Yan Luo, University of Massachusetts, Lowell
- Giridhar Manepali, CNRI
- Jim Griffioen, University of Kentucky (x2)
- Steve Schwab, Cobham (x2)

### Speakers: Spiral 2



- Xiaoyan Hong, University of Alabama
- Felix Wu, UC Davis
- Prasad Calyam, Ohio State University
- Martin Swany, University of Delaware
- Sonia Fahmy, Purdue
- Jason Liu, Florida International University
- ETRI Korea
- ETRI, KISTI, and Indiana University
- Seung-Jong Park, Louisiana State