



GENI ROUNDTABLE EXPERIMENTERS TALK

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EXPERIMENTS

- Global analysis of clients perceived quality of watching YouTube videos using PlanetLab.
- PlanetLab to verify the network capability of cloud services for real-time weather application
- Short term weather prediction using research cloud services such as GENICloud and ORCA cloud clusters.
- Clustered measurement of experiments on several GENI resources using GIMI framework.



GENI RESOURCES

- Have used PlanetLab for almost all my experiments.
- Used GENICloud and ORCA cloud clusters for the workshop paper in GEC13.
- Used ProtoGENI and Emulab resources for a demo during GEC13.
- OMNI and Flukes to acquire resources.



EXPERIENCE USING GENI

- Useful framework for researchers to perform distributed experiments.
- ORCA allows to acquire resources with your own images. It helps when you are performing a distributed measurement.
- Useful to test our applications on the next generation network architecture and analyze the performance for the future Internet.



DRAWBACKS

- Too many credentials to worry about.
- Need to remember the expiration date of the slices if using many resources for a experiment.
- PlanetLab resources have outdated OS (Fedora 8), which sometimes is a problem to install certain software.
- Need to install software on many instances if doing a global analysis with large set of nodes.
- Exact same instances not always available.
- Lack of storage services on cloud platforms.



THANK YOU



RESULTS

- Have successfully used PlanetLab for most of my research on global analysis of YouTube videos.
- Have used PlanetLab as a tool to verify the network capability of cloud services for real-time weather application.
- Have successfully used GENICloud and ORCA cloud clusters for short term weather prediction. (Paper presented in GEC13 workshop)
- Have used ProtoGENI, ORCA and Emulab resources for a Demo during the GEC13 event.

