Storage for your GENI slice
IDMS Experimenter Demo

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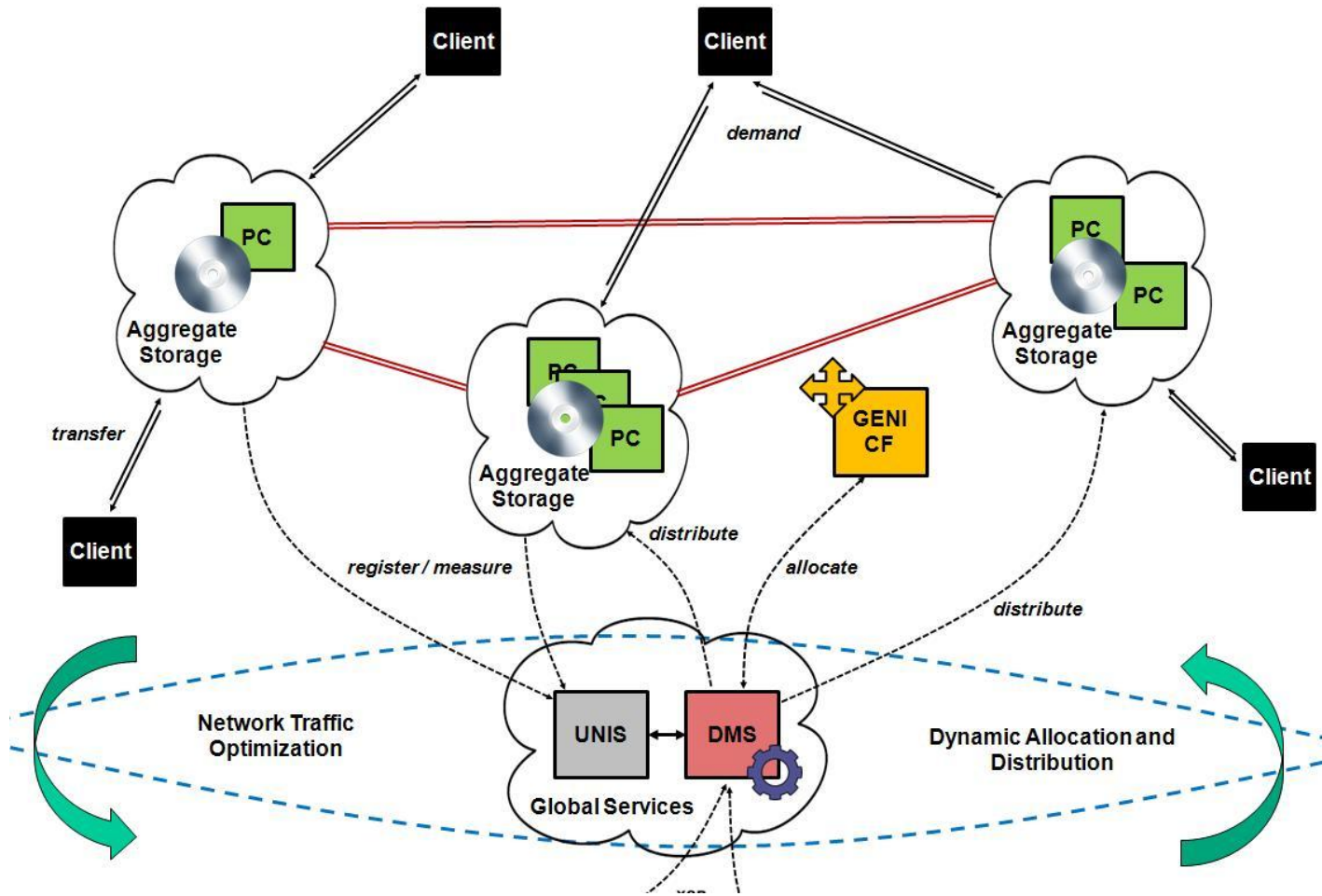June 24th 2014
GEC20 – Upcoming Experimenter Tools

CREST
Center for Research in Extreme Scale Technologies
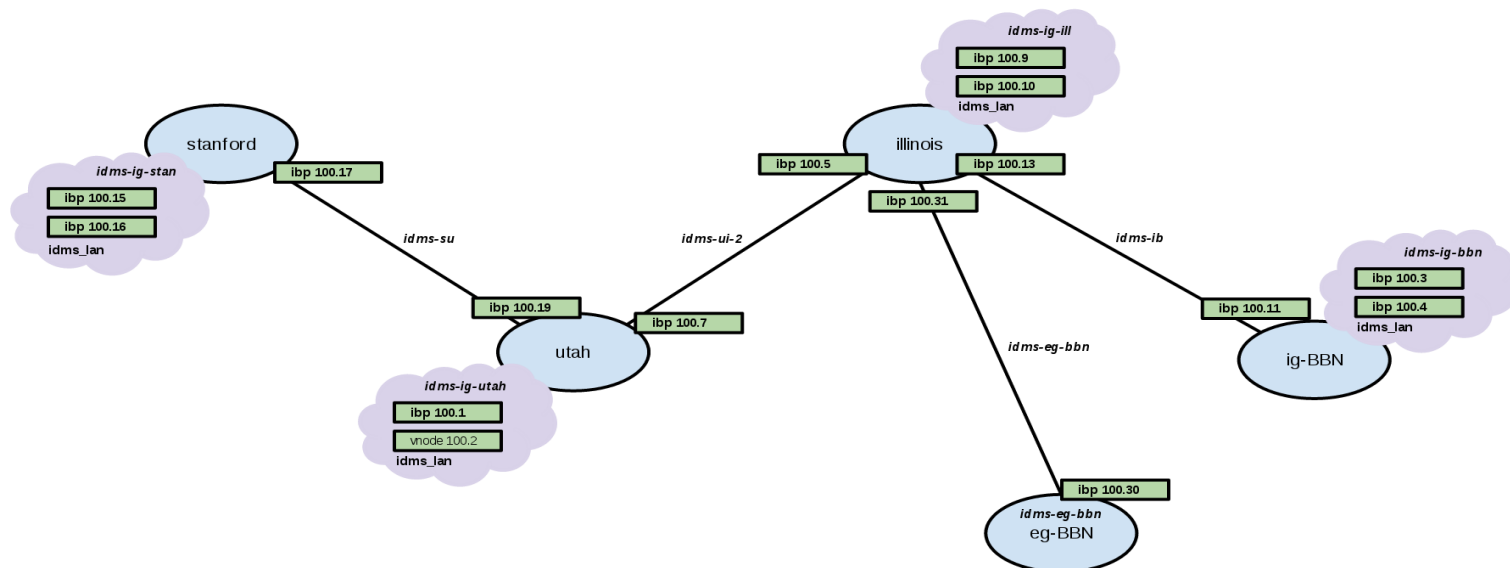
IDMS project overview

- Create a distributed, dynamic data storage and movement service as a long-running GENI experiment

- Distributed across many GENI aggregates, dynamism through responsiveness to experiment measurements

- Use existing, proven services as core components
  - Object store (IBP server)
  - WAN acceleration (Phoebus)
  - Network signaling (XSPd)
  - UNIS and I&M
  - Data Manager Service (new)

- Create appliance images that work across IG/EG aggregates

- Give other GENI user experimenters access to IDMS resources

IDMS component diagram

GEC20 Status

- Stitching together shared vlan "islands"
  - Stanford, Utah, Illinois, BBN
- Experiment runs in a /16 IP subnet
  - VMs act as bridges between stitched and shared vlan interfaces
- DMS tracks resources across IDMS slices
  - Dynamically provisions new capacity when needed and renews existing resources

Experimenter demo

- Tutorial link:
  - http://groups.geni.net/geni/wiki/sol4/IDMS/ExpTutorial

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- Project Wiki
  - http://groups.geni.net/geni/wiki/sol4/IDMS