

# International GENI

## Advanced Programmable Networks @ SC11

#### **iGENI SCI1 Scinet Ressearch Sandbox Partner Institutions**

Stichting Academisch Rekencentrum Amsterdam **Communications Research Centre Canada** National Center for High Performance Computing National Cheng Kung University National Kao Hsiung University of Applied Science

Northwestern University University of Illinois Chicago University of California, San Diego

#### Abstract

The international partnership participating in the iGENI initiative is creating architecture and technology to support APN, Advanced Programmable Networks, distributed environments, which allow the direct customization of communication services and network resources. This initiative is also implementing and demonstrating prototypes. At GEC12, iGENI showcases previews of experimental prototype designed for SC11, the international supercomputing conference, as part of the SCinet Research Sandbox OpenFlow demonstration. Also, shown here is the RENCI, ESnet and NERSC SC11 control plane dynamic provisioning demonstration, which utilizes an integration of NLR's Sherpa, ORCA as part of the iGENI GCDnet, and ESnet's OSCARS.



#### **International Testbeds**

iGENI is establishing international multi-continental network testbeds for large scale experimental research. These testbeds can support the activities of interdisciplinary international research teams.



### The International Global Environment for Network Innovations project (iGENI)

The International Global Environment for Network Innovations project (iGENI) is developing national and international distributed infrastructure to enable the creation of a virtual laboratory for exploring future internets at scale. iGENI will ensure that GENI is truly global. Led by the International Center for Advanced Internet Research (iCAIR) at Northwestern University, the consortium includes the Electronic Visualization Laboratory (EVL) at the University of Illinois at Chicago; the California Institute for Telecommunications and Information Technology (Calit2) at the University of California, San Diego; Cisco Systems, Inc.; and the BBN Technologies GENI Program Office (GPO). iGENI Consortium members have formed partnerships with many participants in the Global Lambda Integrated Facility (GLIF) as well as with National Research and Education Networks (NRENs), and research consortia and institutions.