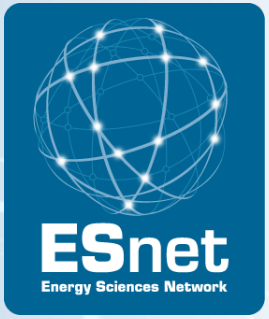
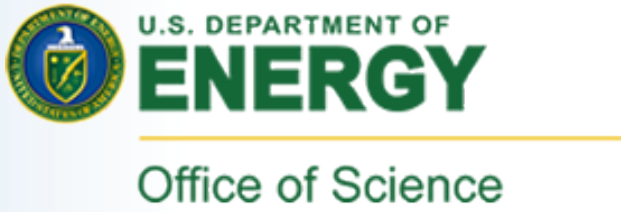




SOFTWARE DEFINED NETWORKING (SDN) PROGRAM REVIEW

Inder Monga (PI)

Energy Sciences Network
Lawrence Berkeley National Lab

December 17th, 2013

Welcome!

Sponsors


Grant Miller


Vince Dattoria


Bryan Lyles

Angela Carter

Thank you!


Keri Cagle

Organizing Committee


Inder Monga


Chip Elliott


Ron Hutchins


Roy Campbell


Eric Boyd


Bill Snow

Steering Committee

Vince Dattoria (DOE), Bryan Lyles (NSF), Robert Bonneau (AFRL), Matthew Goodman (DARPA), Kevin Thompson (NSF), Bob Walter (DARPA)

NSF PIs

Joe Evans and Sean Peisert


EXECUTIVE OFFICE OF THE PRESIDENT OF THE UNITED STATES
E PLURIBUS UNUM
OFFICE OF SCIENCE AND TECHNOLOGY POLICY

Three Goals

1. Bridge the 'operational' gap
   – architecture, tools and policies
2. Deploy and operate **securely** multi-layer, multi-domain SDN networks
   – *Interwork* with the current set of Internet technologies
3. Identify research, development and technologies needed to support new, innovative users and applications

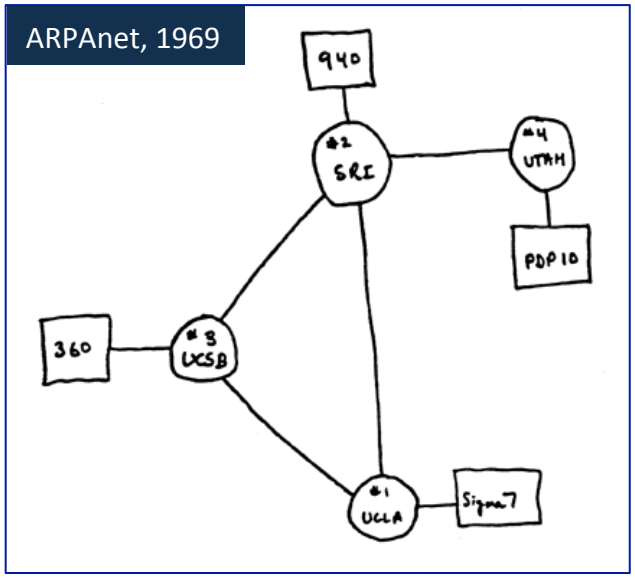
The ‘SDN operational gap’

Identify gaps and propose approaches at the workshop today

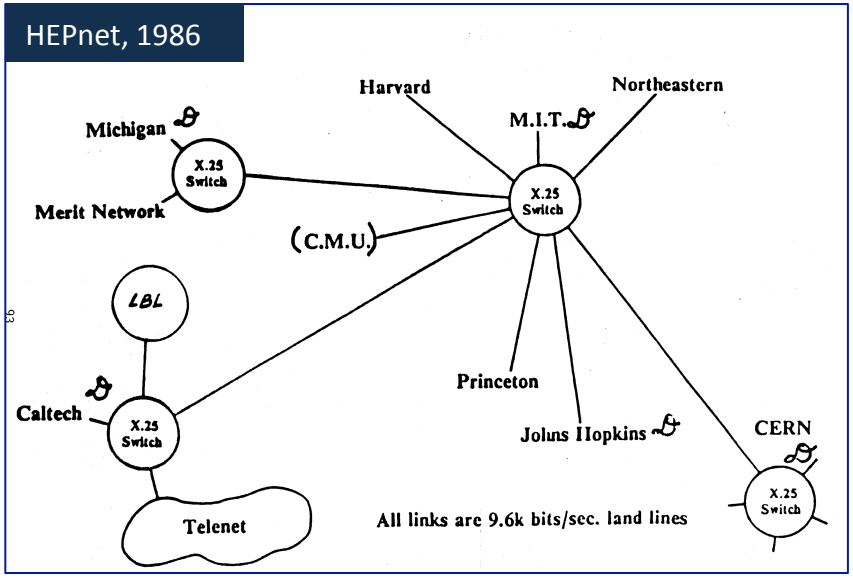
+ GENI
+ CCNIE
+ ASCR
+ DARPA
+ Academia
+ Vendors
+_____?

The Approach

Develop, deploy and (inter)operate
a prototype multi-domain SDN network



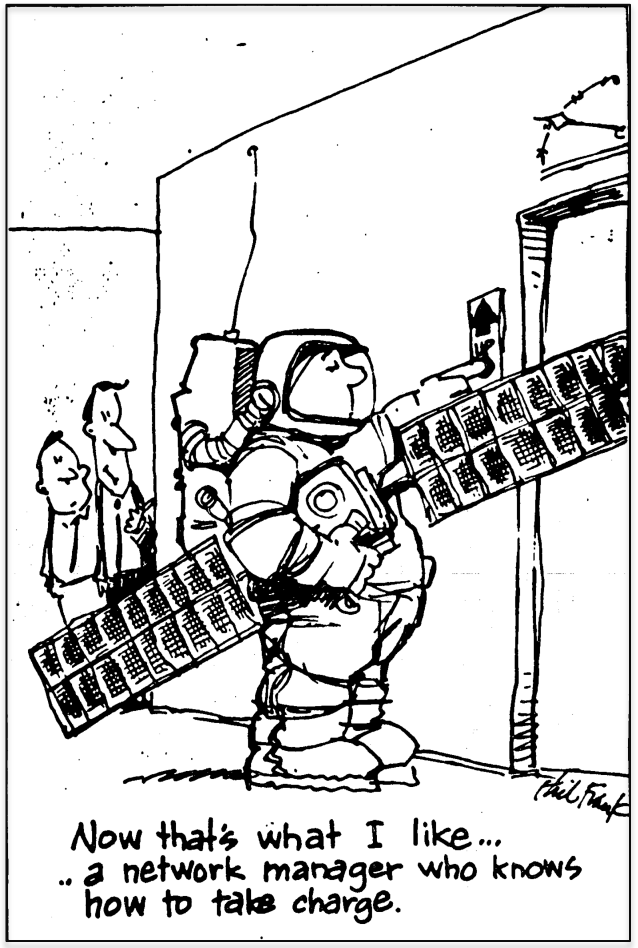
http://www.computerhistory.org/internet_history/full_size_images/1969_4-node_map.gif



Future of intersite networking, LBL, 1986

What does that help achieve?

- Build an ecosystem of security-savvy, operational SDN experts with government and academic networks leading the way
- Rapid prototypes with open-source tools
- Share experiences
- Engage operational knowledge with academia, open-source enthusiasts and industry at a larger scale



Workshop Structure

- Keynotes
- Breakout groups
  - Brainstorming
  - Three broad areas
    - Users and Applications (UAM)
    - Technology and Operational Deployment (TOD)
    - Security
- Readouts and Discussion
- Workshop Report