What Internet2 Means for SDSU Faculty

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NATIONAL PARTNERSHIP FOR ADVANCED COMPUTATIONAL INFRASTRUCTURE

June 30, 2004 CH3338 Provost Marlin Council of Deans *upd

Who am I?

- **Computer Science Professor, Computer Sciences Department, College Sciences**

- **Co-PI for NSF grant "CalREN2-Phase2" – our access to Internet2 (www.abilene.iu.edu)**

- **Director, NPACI EdCenter on Computational Science and Engineering (supported by NSF, SDSU Academic Affairs, CSU Chancellor Office)**

NSF Award 9729574

FLAWS

NSF Award Abstract - #9729574

CalREN-2: The Calfornia Research and Education Network- Phase 2

NSF Org ANI
Latest Amendment Date January 13, 2000
Award Number 9729574
Award Instr. Continuing grant
Prgm Manager William Decker
ANI DIV OF ADVANCED NETWOR INFRA & RESEARCH
CSE DIRECT FOR COMPUTER & INFO SCIE & ENGINR
Start Date March 1, 1998
Expires June 30, 2000 (Estimated)
Expected Total Amt. $1309200 (Estimated)
Investigator David J. Ernst dernst@calstate.edu (Principal Investigator current)
Thomas W. West (Principal Investigator former)
Gary E. Adams (Co-Principal Investigator current)
Jack F. Paris (Co-Principal Investigator current)
Kris Stewart (Co-Principal Investigator current)
Yasha J. Karant (Co-Principal Investigator current)
Elhami T. Ibrahim (Co-Principal Investigator current)
Sponsor California State Univ
PO Box 3842
Seal Beach, CA 907407842 562/985-9406
NSF Program 4091 NETWORK INFRASTRUCTURE
Field Application 0206000 Telecommunications

Abstract

This award is made under the high performance connections portion of ANIR's "Connections to the Internet" announcement, NSF 96-64. It provides partial support for two years for DS-3 connections for three institutions to a California statewide network and then to the vBNS. The three institutions are California State University, San Bernardino; California State Polytechnic University, Pomona; and San Diego State University. Applications include biomedical and bioinformatics use of fractals, remote data acquisition and control research, distributed computing, and seismic research. Collaborating institutions include the National Center for Supercomputing Applications, University of Pennsylvania, University of Texas, University of Wisconsin and Rice University.

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Stewart Participation

CENIC yearly conference

IPv6 yearly Summit

SCxy yearly conference

SDSU University Senate IT Committee Chair

SDSU NAC Security Subcommittee

CalREN2 – Phase2 Projects (1997)

http://www.aldea.com/cenic/phase2/asdsu.html

Bob Pozos/Eric Frost – Seismic Cubes

Richard Wright/Eric Frost – Remote Sensing & GIS

Roman Swiniarski – Data Mining, Knowledge Discovery

Steve Barlow – Scanning Electron Microscope

Doug Deutschmann - SORTIE
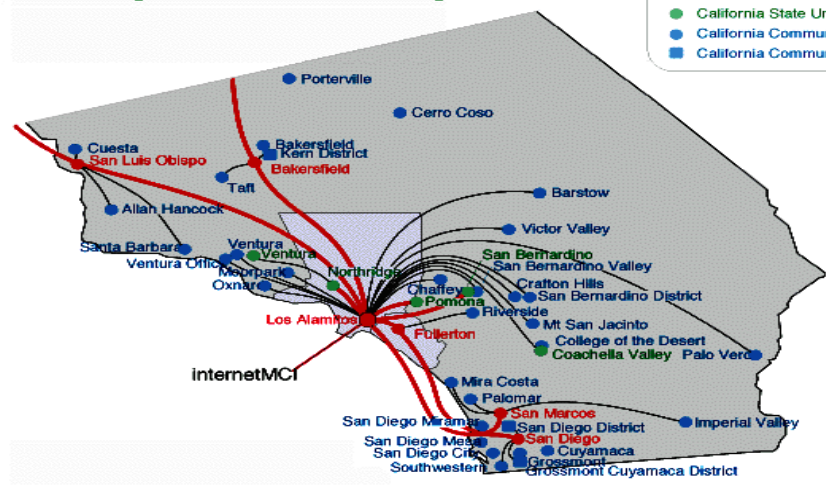
Kris Stewart – EdCenter on Computational Sci & Eng

http://www.fastlane.nsf.gov/servlet/showaward?award=9729574

http://www.abilene.iu.edu/images/logical.pdf

CalREN2-California GPoP Map

San Diego Network Map

http://www.csu.net/maps/southern_sites.html Nov. 4, 1999

Southern California combined CSU /CCC Sites

General location for CSU Network Maps is http://www.csu.net/maps/

What is the issue?

The Campus Network is a community resource and if it is compromised on any computer, attached to the campus backbone, every other computer is vulnerable

Need for awareness of who is responsible:
Technical support – individual college staff
Network support – who is your SysAdmin?
Security support (new) – who for Academic Affairs?

Draft document developed (Hard copy handout)
– your feedback?
http://security.sdsu.edu/policy/security-policy.html

Why should faculty be involved?

Communications (via email) is ubiquitous

Collaborations with colleagues, sharing documents, Video Teleconferencing

Network researchers (Computer Science faculty, Computer Engineering faculty, Computational Science faculty, others?)

Distributed Learning

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ON COMPUTATIONAL
SCIENCE & ENGINEERING

The
Internet
today

Mapnet

http://www.caida.org/tools/visualization/mapnet

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A Little History - May 10, 1869

What was the major event?

Golden Spike (Promontory Summit, UT)

The final step for the transcontinental railroad.

How does this relate to us today?
(Qwest's High Speed Fiber located on the Railroad Right of Way)
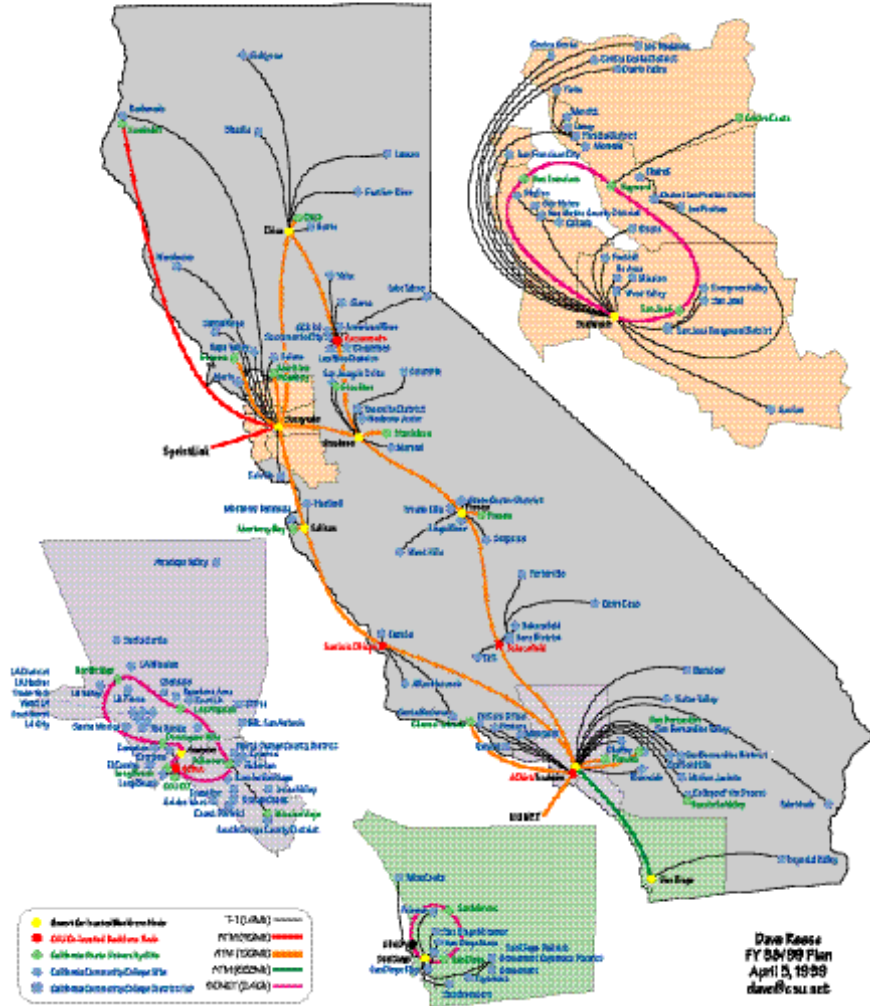
Virtual Golden Spike
New Millenium, the first high speed fiber across the border

CUDI and CENIC will announce the fiber connection across the international border using COX fiber. Spearheaded by Prof. Bob Pozos, Sciences, in conjunction with Dr. Joe Vasquez, SDSU Business Affairs

CalREN -2...

SDSU working closely with CSU Networking Group to provide access to nearby schools.

Recommendations

Each college have Assistant Dean level appointment for Information Technology – to share the resources and resposibility of our position on the Global Internet.

Each college have Technical Staff to assist faculty in accessing this resource effectively for their research, curriculum and collaborations

Review and permanently adopt the Computer Security Policy – by the University Senate

Resources

Calculate optimal time to transfer files:

http://www.edcenter.sdsu.edu/repository/calc_filetranstime.html

What does Internet2 Mean for SDSU Faculty:

http://www.edcenter.sdsu.edu/repository/I2_meaning_faculty/

This Presentation:

http://www.stewart.cs.sdsu.edu/PPT/I2update_sdsu_june04.ppt

Your Suggestions?

Your College member for University Senate IT committee?

Your College contract for IT (Information Technology) issues?

SDSU Campus Infrastructure Buildout – your participation?

SDSU University Senate
IT Committee Spr04 (http://senate.sdsu.edu/)

Instructional Technology
Chair 2002-2003: Mary Ann Lyman-Hager
One Year Term: Jan-Dec

NameSenator [S]Senate Term CollegeCommittee TermSenate Approved (date)
Hoffman, BobEducationDec 2005December 3, 2002
Lyman-Hager, Mary Ann A&LDec 2004December 4, 2001
Sciglimpaglia, DonBusinessDec 2004 December 4, 2001
Kolen, Paul EngineeringDec 2004December 4, 2001
Seidman, Rob H&HS Dec 2005December 3, 2002
Burkett, Richard PSFA Dec 2006December 2, 2003
Frey, Terrence SciencesDec 2006December 2, 2003
Razo, Felipe IVCDec 2003
Chie, Cyndi StaffDec 2005December 3, 2002
Director, Media Technology
Chair, Media Technology
Director, Office of Distributed Learning
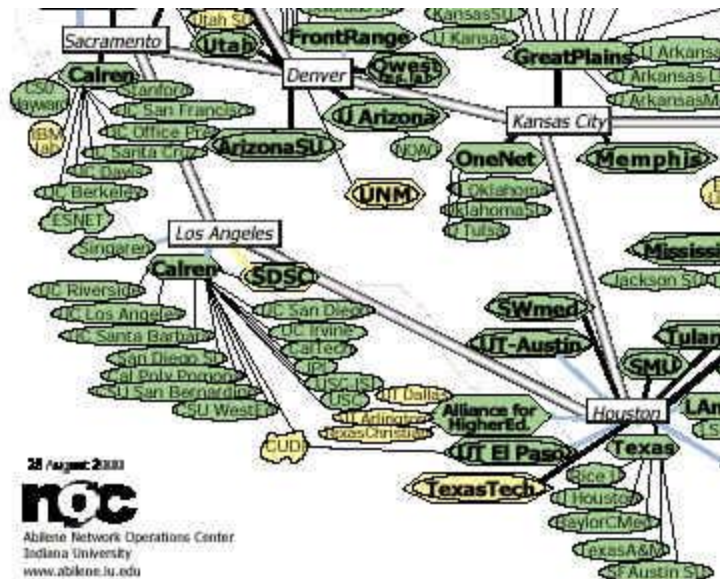**Assoc Students**

Subset Abilene Network Map

Focus on the Southwest portion:

From the Abilene map: http://www.abilene.iu.edu/images/logical.pdf

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