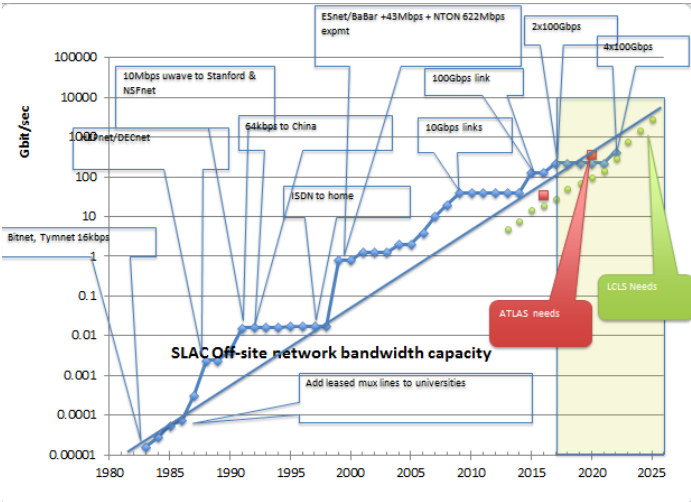


SLAC Network History

SLAC Network

[SLAC Network Announcements](#)

[SLAC's Off site bandwidth capacity 1983-2017](#)



[Upgrade to SLAC core network March 2017.](#)

[OCIO Senior management update, Oct 2015](#)

[SLAC network top level page 1993-2012](#)

[SLAC Computing Highlights](#), by Les Cottrell, after dinner talk to Silicon Valley Tour group, May 2011

[Networking Restropective](#), Les Cottrell, presentation at 2011 HEPiX meeting

[The Internet: where did it come from, what are the challenges?](#) Les Cottrell, talk given at Helwan University in Cairo Egypt, 2010

[Network Case Studies 2000-2008](#)

[SLAC Network Architecture, 2007](#)

[SLAC network diagrams 2004](#)

[SLAC network diagrams 2003](#)

[SLAC switched network 2000](#)

[SLAC LAN/WAN description 1999](#)

[SLAC LAN size 1999](#)

[SLAC networking 1999](#)

[SLAC switched network 1999](#)

[SLAC network connectivity 1998](#)

[SLAC switched network 1997](#)

[The Internet and SLAC 1997](#)

[SLAC's HEP Internet Monitoring 1997.](#)

[SLAC switched network 1996](#)

[SLAC WAN 1995](#)

[SLAC Structured Wiring Plan, 1994](#)

[SLAC Server MIPS 1991-1993](#)

[SLAC Workstation purchases 1982-1983](#)

[SLAC-Stanford micro-wave link 1991](#)

[SLAC Data Center: Jan 1990, April 1991](#)

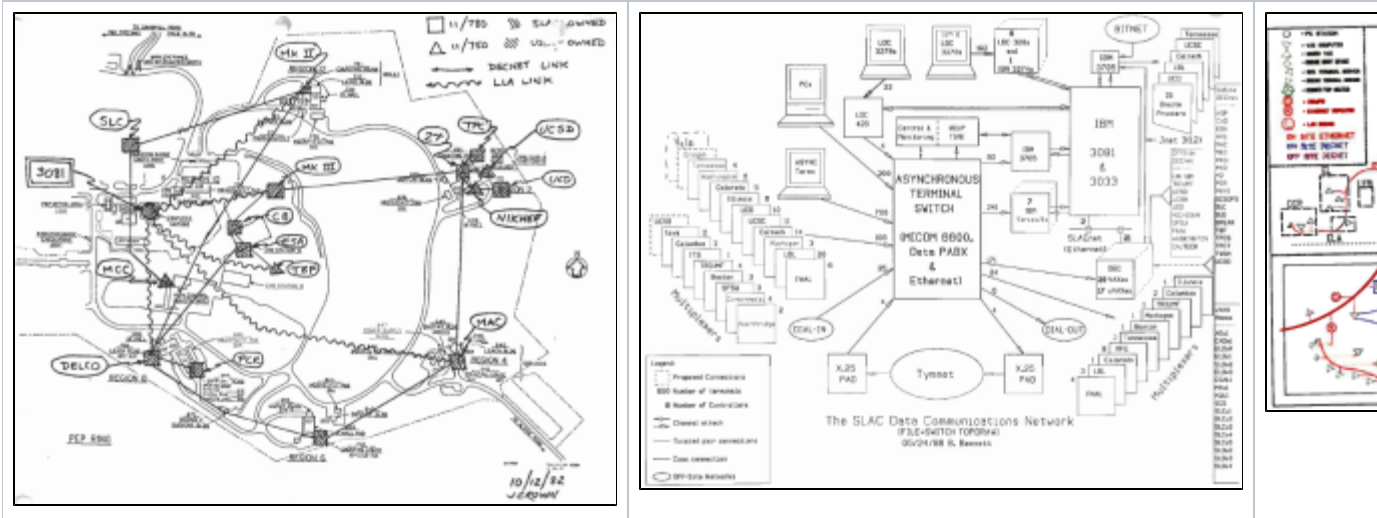
[BARRNET 1990](#)

[SLAC LAN 1989](#)

[SLAC Terminal use 1975-1995](#)

Some diagrams of the network are shown below. By 2003 it was no longer possible to show the network in a single drawing.

SLAC WAN 1995	SLAC LAN 1996	SLAC LAN 1997
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SLAC WAN 1988	1988 SLAC DECnet map	SLAC DECnet areas	HEPNET/DECnet map, Feb 1988	HEPnet governance	HEPnet traffic
SLAC Off-Site Links See CERNET December 1988 - Terminal Logins - SLAC to TELF - SLAC to MCC - SLAC to HEP - SLAC to LBL - SLAC to UCSD - SLAC to Stanford - SLAC to Caltech - SLAC to Princeton - SLAC to MIT - SLAC to Cornell - SLAC to UIUC - SLAC to OSU - SLAC to UNL - SLAC to UIowa - SLAC to UIChgo - SLAC to UIIndy - SLAC to UIKy - SLAC to UIAriz - SLAC to UIWash - SLAC to UIConn - SLAC to UIIll - SLAC to UIPa - SLAC to UISt - SLAC to UIChi - SLAC to UIInd - SLAC to UIKy - SLAC to UIAriz - SLAC to UIWash - SLAC to UIConn - SLAC to UIIll - SLAC to UIPa - SLAC to UISt - SLAC to UIChi - SLAC to UIInd - SLAC to UIKy - SLAC to UIAriz - SLAC to UIWash - SLAC to UIConn - SLAC to UIIll - SLAC to UIPa - SLAC to UISt - SLAC to UIChi - SLAC to UIInd - SLAC to UIKy - SLAC to UIAriz - SLAC to UIWash - SLAC to UIConn - SLAC to UIIll - SLAC to UIPa - SLAC to UISt - SLAC to UIChi - SLAC to UIInd - SLAC to UIKy - SLAC to UIAriz - SLAC to UIWash - SLAC to UIConn - SLAC to UIIll - SLAC to UIPa - SLAC to UISt - 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ASCII terminal servers 1985-1994

Bridge Communications ASCII to Ethernet terminal servers, IBM 3705, IBM Series /1 ASCII to 3270 terminal servers

BRIDGE ASCII terminal to Ethernet terminal servers
FRONT REAR

IBM 3705

IBM Series/1
ASCII to 3270 terminal servers

Micom Data PBX for ASCII terminals, WAN Network racks, IBM 3081 Monitor

Micom DATA PBX

WAN NETWORK CONNECTIONS

IBM 3081 MONITOR

IPv6 planning 2013

Telecom

2008 Guest House Phone System Upgrade

2010 presentation on phone upgrade

Other documents

- [Les Cottrell's publications](#), also see [those registered in OSTI](#) for author Cottrell, or a generic OSTI search via <https://www.osti.gov/search> (e.g. <https://www.osti.gov/search/semantic:SLAC-PUB-9202>)
- [Les Cottrell's CV 2019](#)
- [Networking papers and presentations.](#)
- [Web's Killer "App"](#), chapter in [WEB 25: Histories from the first 25 years of the World Wide Web](#). Edited by Niels Bruggen. 2017.
- [Dick and Anna Johnson's recollections of SLAC computing](#)
- [SLAC's Computing Highlights](#), 2011 talk by Les Cottrell
- [Happy Birthday, Dear Web](#), 2009
- [SCS Pictures 2002-2008](#)
- [SCS Trip reports 1998-2008](#)
- [Email on end of dial up modem service](#) Feb 7, 2008
- [First US Web site at SLAC](#)
- [SLAC network announcements, news etc., 2000-2013](#)
- [SCS Managers meeting notes 2005-2008](#)
- [Trip reports 1996-2004](#)
- [China](#)
 - [First email link to China](#)
 - [SLAC Archives document on Les' role](#) by Jean Deken. An overview including key dates in 1970's and Panofsky's early efforts.
 - [Chinese Visitors to SLAC 1983](#)
 - [Burt Richter](#), the director of SLAC at the time was very instrumental in convincing DoE of the importance of this project and that it should be funded. See [extract from Burt's 1990 trip to China report](#).
 - [Invitation to Dr. Les Cottrell to visit China 1991](#)
 - [Photos from Dr. Les Cottrell's trip to IHEP, Beijing, China 1991](#)
 - [Networking with China](#), paper published at CHEP 1994
 - [YouTube China's first Internet connection](#), 1994,
 - [China celebrates 10 years of being connected to the Internet](#), PCWorld article, May 17, 2004
 - [Les Cottrell: Bringing the Internet to China](#), Symmetry Magazine, 11/1/2005
 - ["Contributions of HEP to China Internet"](#) (mainly in Chinese), Rongsheng Xu, Aug 25, 2006.
 - [China Internet Connection 2010](#), including a [video](#)
 - I put together a [Powerpoint presentation](#) to capture my thoughts in preparation for the China 2.0 meeting, October 2010.
 - [YouTube](#), [Les Cottrell interview](#)
 - [How Stanford and China first Connected](#), Cisco Blog, 10/17/2010
 - [Point Reyes, California Ground Station, 2010](#)
 - [Pioneer's of China's first Internet connection recall work](#), PCWorld article, Oct 18, 2010
 - [China's father of the Internet tracks changes](#), from China daily 20th October 2010
 - [Presentation at the Symposium on 30 years of BES physics](#), September 5-6 2019.
- [VM and the VM Community: Past, Present, and Future](#), Melinda Varian, 1997
- [Foundation of HEPiX 1991](#), proposal presented by Les Cottrell, see last slide
- [Future of Intersite Networking](#), Oct 1986 LBL, copies of viewgraphs etc presented at workshop, includes overview of multiple networks including BITNET (SLAC first national Lab Bitnet node 1983). 368 pages
- [HEPnet 1985](#), slide created from a DEC network management tool called NMCC that shows HEPnet. Just for orientation, FNAL is in the center, SLAC is out to the left, CalTech is below SLAC, with BNL, LBL, and ANL just sort of single points. There's also a number of universities attached, mostly to FNAL. This was just about the time that HEPnet began to act as a network, and not just a bunch of individual network connections directly to the experiment location a university was involved with. The links, of course, were all 9.6 or 4.8kb/s, and the network design was cobbled (vs architected...). But it was one of the earliest really distributed networks (I think Bitnet & Milnet were the only other ones around at that point...). Phil Demar.
- [STATUS OF NETWORKING FOR HIGH ENERGY PHYSICS IN THE UNITED STATES](#), [SLAC PUB 3705](#) by [Paul Kunz](#), [SLAC](#), 1985

Retirements

- [George Crane](#)
- [Fred Hooker](#)
- [Sadia's & Amber's year at SLAC](#)

SLAC WAN 1990