

Computer Science Department Computer Facilities (CSD-CF)

YOUR LOCAL COMPUTER SUPPORT STAFF

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Some numbers

- Network:
 - 2.6B flows / month; 1000 flows / second
 - 600-700TB / month; 1TB / hour
 - 5000 active devices / day
 - 600,000 remote IPs / day
- Data Center @ SLAC:
 - 411 servers; 440 GPUs
 - 25 network switches
 - Max RAM: 12TB; Max Storage: 324TB
- Gates:
 - 110 servers; 101 VMs
 - 22 leaf switches, 6 core switches



<https://support.cs.stanford.edu>

THE MOST IMPORTANT THING TO REMEMBER FROM THIS PRESENTATION

This slide deck is available here:
<http://cs.stanford.edu/csdcf/about-us>

Opening a support request (ticket)

Who

Where

What

GUID

Computer Facilities (CF)

- Team of 11
- Local @ Gates Computer Science
- Independent of University IT and School of Engineering IT
- Basic CS Services
- Gates Building Network
- High Performance Computing (HPC) for Research and Teaching
- Full life-cycle support



Photo by: Warner Bros

Basic CS Services

- CSID
 - Apply for one at <https://cs.stanford.edu/csuid>
 - Authentication for most resources here in CS
 - Manage it at <https://cs.stanford.edu/pedit>
 - Mail forwarding, Web page redirection, Contact information
 - Keep it up to date!
- Xenon (xenon.stanford.edu)
 - Linux Shell access via SSH
- GIN - Gates Information Network
 - Room scheduling within Gates Building, Waiver forms, Events, ...

Gates Building Network

“Network is the purest form of a shared resource”

-- Gerth 2018

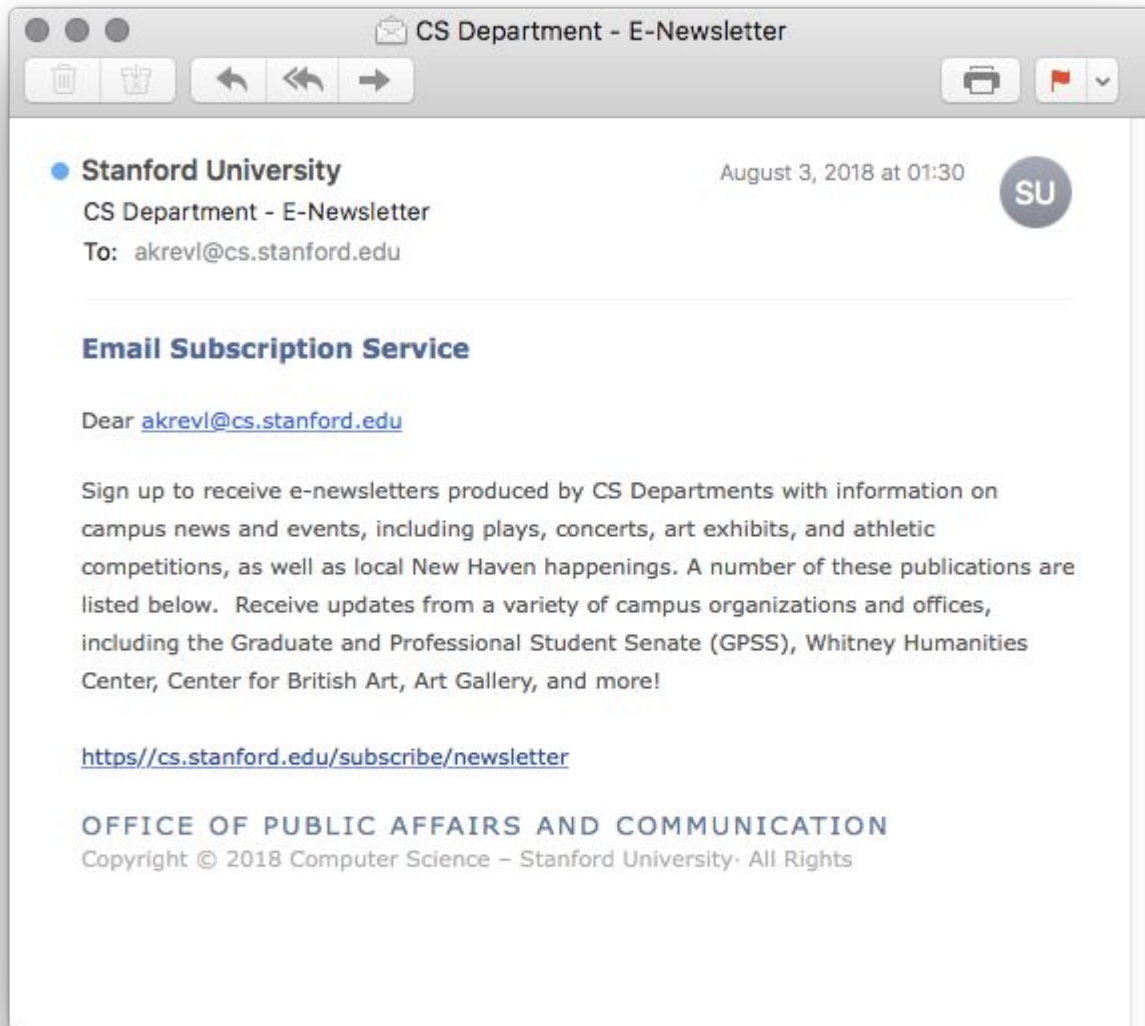
Register your device at <https://cs.stanford.edu/ip>

- **Wired**
 - Register first
 - **Never** grab an IP address
 - State office, port number (TSO), group affiliation in your request
 - Do **not** run your own router / DHCP server
- **Wireless**
 - SSID “Stanford Visitor”: **no** registration, digitally off-campus
 - SSID “Stanford” and “CS.Stanford.EDU”: registration required
 - Do **not** run your own wireless network
- Connecting to Stanford networks requires **MinSec** compliance

Email

- Forwarding only for @cs.stanford.edu
 - Set destination via <https://cs.stanford.edu/pedit>
 - Forward to xenon.stanford.edu, your Stanford account, GMail ...
 - Blank forwarding = **No** email
- Spam filtering
 - Mail through cs.stanford.edu is tagged if it looks like SPAM
 - Subject prefix *****SPAM*****
 - Personalize your settings at <https://cs.stanford.edu/spam>
- Phishing
 - Happens regularly, becoming more sophisticated
 - Stanford/CSD-CF will **never** ask for your password via email
 - Don't click on web links in email
 - Ask / open a ticket if you are not sure!

Phishing Example



Managed services

- Provided by your research group
- Managed by CSD-CF
- Common services:
 - High Performance Compute Clusters
 - GPU Clusters
 - Storage
 - Workstations and other hardware
 - Accessories
 - Printing



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Graphic by: Sarah Andersen

Security

- Open research network (if we can keep it)
 - Your computer **will** be under attack as soon as it appears on the network
 - Default & easy to guess accounts compromised in 2 min - 2 hrs
 - Keep your software up-to-date
- Use strong passwords, and do not share them
 - Containing upper and lowercase letters, digits, punctuation
 - Password length is your friend
 - Password managers are ok, so are little black notebooks
 - **NEVER** set easy “temporary” passwords
- MinSec
 - <https://minsec.stanford.edu>
 - Compliance for all devices connected to Stanford
 - Every time you work with a new dataset, **check** MinSec

Useful links

- <https://support.cs.stanford.edu>
 - CSD-CF support portal
- <https://cs.stanford.edu/csdcf>
 - These slides and other useful information
- <https://cs.stanford.edu/pedit>
 - CSID, email forwarding, and personal information
- <http://cs.stanford.edu/ip>
 - Connect a new computer to the network
- <https://minsec.stanford.edu>
 - Minimal Security Requirements

Frequently Asked Questions

- Can I use public keys with SSH?
 - No, but you can setup Kerberos.
- How to set up printing?
 - It depends. Ask your research group.
- Do you have the USB-C adapter I could use with my MacBook?
 - No.
- I'm having WiFi issues
 - <https://support.cs.stanford.edu>, make sure to give us your MAC
 - <http://ap.meraki.com>, to do your own testing.
 - Also 802.11a*bgn sucks, CAT-6e FTW.

<https://support.cs.stanford.edu>

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