Computer Science Department
Computer Facilities
(CSD-CF)

Your local computer support staff

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Live Troll

UNSUCCESSFUL SSH ATTEMPTS, LIVE
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 7
- 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
Computer Facilities (CF)

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Basic CS Services

- **CSID**
  - Apply for one at https://cs.stanford.edu/csid
  - 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](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](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

Stanford University
CS Department - E-Newsletter
To: akrevl@cs.stanford.edu

Email Subscription Service

Dear akrevl@cs.stanford.edu

Sign up to receive e-newsletters produced by CS Departments with information on campus news and events, including plays, concerts, art exhibits, and athletic competitions, as well as local New Haven happenings. A number of these publications are listed below. Receive updates from a variety of campus organizations and offices, including the Graduate and Professional Student Senate (GPSS), Whitney Humanities Center, Center for British Art, Art Gallery, and more!

https://cs.stanford.edu/subscribe/newsletter

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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
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 (dashlane!), so are little black notebooks
  - **NEVER** set easy “temporary” passwords

- MinSec
  - [https://minsec.stanford.edu](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](https://support.cs.stanford.edu)
  - CSD-CF support portal
- [https://cs.stanford.edu/csdcf](https://cs.stanford.edu/csdcf)
  - These slides and other useful information
- [https://cs.stanford.edu/pedit](https://cs.stanford.edu/pedit)
  - CSID, email forwarding, and personal information
- [http://cs.stanford.edu/ip](http://cs.stanford.edu/ip)
  - Connect a new computer to the network
- [https://minsec.stanford.edu](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](https://support.cs.stanford.edu), make sure to give us your MAC
  - [http://ap.meraki.com](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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