Computer Science Department Computer Facilities (CSD-CF)

YOUR LOCAL IT SUPPORT STAFF

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Stanford University

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18:17:31.419  M      CN        3812    124.133.246.50 42896    ->    171.67.72.10 22        14    14    2863    -0.127    FSPA_FSPA    3.691
18:17:31.441  M      CN        3864    120.194.74.123 34874    ->    171.64.64.28 22        12    14    2781    -0.062    FSPA_FSPA    4.333
18:17:31.473  M      IT        3874    213.243.241.60 33907    ->    171.64.74.219 22       14    14    2995    -0.165    FSPA_FSPA    3.924
18:17:31.492  M      RU        3892     78.37.125.18 40876     ->    171.64.92.40 22        14    12    2875    -0.130    FSPA_FSPA    1.561
18:17:31.681  M *    US        3874    171.64.74.213 37702     ->    172.24.74.109 22       12     8    2654    -0.961    FSRPA_SPA    0.030
18:17:31.728  M      HK        3874     210.3.92.14 55954      ->    171.64.74.213 22       12    14    2782    -0.326    FSPA_FSPA    3.834
18:17:31.766  M      CN        3802    42.192.52.249 47144     ->    171.66.3.12 22         12    12    2915    -0.142    FSPA_FSPA    1.466
18:17:31.926  M      CN        3868    153.35.131.90 56104     ->    171.64.68.210 22       14    14    2979    -0.161    FSPA_FSPA    3.585
18:17:31.942  M      ZZ        3802    192.144.167.212 49446   ->    171.66.3.10 22         14    11    2899    -0.138    FSPA_FSPA    2.261
18:17:32.092  M      AR        3800    190.112.41.86 34813     ->    171.64.100.240 22      14    14    2863    -0.127    FSPA_FSPA    7.897
18:17:32.600  M *    US        3874    171.64.74.213 59721     ->    172.24.74.112 22       12     8    2654    -0.961    FSRPA_SPA    0.027
18:17:32.682  M      IN        3892    106.51.78.188 46218     ->    171.64.93.3 22         12    14    2887    -0.134    FSPA_FSPA    4.872
18:17:32.825  M      CN        3888    49.234.158.16 50310     ->    171.64.88.26 22        12    14    2863    -0.127    FSPA_FSPA    3.468
18:17:32.926  M      CN        3864    42.194.148.212 47838    ->    171.64.64.222 22       12    14    2198    -0.351    FSPA_FSPA    5.545
18:17:33.175  M r    CN        3802    120.48.16.22 54522      ->    171.66.3.45 22         12    10    2206    -0.354    FSPA_FSPA    2.227
18:17:33.298  M      CO        3800    181.63.248.149 51269    ->    171.64.100.46 22       12    14    2863    -0.127    FSPA_FSPA    3.181
18:17:33.339  M      PA        3864    179.43.147.67 55458     ->    171.64.64.56 22        14    14    2245    -0.537    FSPA_FSPA    3.705
18:17:33.590  M      UA        3804    213.109.238.204 51958   ->    171.67.64.53 22        12    14    2919    -0.144    FSPA_FSPA    5.145
18:17:33.794  M      SG        3865    150.95.82.153 42280     ->    171.64.65.163 22       12    14    2805    -0.055    FSPA_FSPA    3.871
18:17:34.053  M      RU        3812    91.122.159.193 47994    ->    171.67.73.11 22        12    14    2847    -0.122    FSPA_FSPA    3.836
18:17:34.102  M      US        3804    159.89.169.95 48738     ->    171.67.64.53 22        12    14    2919    -0.144    FSPA_FSPA    5.928
18:17:34.260  M      ID        3892    202.55.175.236 53344    ->    171.64.92.40 22        12    12    2230    -0.361    FSPA_FSPA    1.865
18:17:34.272  M      CN        3875     106.13.19.75 54068     ->    171.64.75.198 22       12    14    2147    -0.336    FSPA_FSPA    3.879
18:17:34.342  M      US        3800    209.141.51.60 49100     ->    171.64.100.34 22       14    14    2831    -0.140    FSPA_FSPA    2.188
18:17:34.301  M      ES        3868    80.26.92.152 40658      ->    171.64.69.53 22        12    14    2919    -0.144    FSPA_FSPA    5.025
18:17:34.360  M      CN        3888    49.232.130.225 59366    ->    171.64.88.16 22        12    14    2926    -0.146    FSPA_FSPA    4.376
18:17:34.473  M      US        3865    107.170.131.23 47570    ->    171.64.65.14 22        12    14    2935    -0.148    FSPA_FSPA    3.505
18:17:34.680  M      US        3816    64.225.106.52 54796     ->    171.67.76.23 22        14    14    2663    -0.061    FSPA_FSPA    3.409
18:17:34.811  M      CN        3868    121.5.150.238 44788     ->    171.64.68.36 22        14    14    2979    -0.161    FSPA_FSPA    4.105
18:17:34.828  M      RU        3892    193.93.62.33 33913      ->    171.64.93.8 3389        9     7    2580     0.031    SRPAEC_SPA   3.376
18:17:34.853  M      CN        3892    180.97.182.111 51634    ->    171.64.92.40 22        14    12    2875    -0.130    FSPA_FSPA    1.401
18:17:34.887  M      SG        3802    139.59.188.13 58398     ->    171.66.3.13 22         14    14    2915    -0.142    FSPA_FSPA    5.047
18:17:34.914  M      US        3800    135.125.106.194 57348   ->    171.64.101.169 22      12    14    2885    -0.096    FSPA_FSPA    4.685
18:17:35.251  M      CN        3802    82.156.229.10 60498     ->    171.66.3.45 22         14    10    2899    -0.138    FSPA_FSPA    2.008
18:17:35.338  M      US        3892    162.55.129.16 50352     ->    171.64.93.8 3389        8     7    2570     0.027    SRPAEC_SPA   1.931
18:17:35.387  M      US        3899    162.55.129.16 52811     ->    171.64.99.243 3389      9     9    3198     0.059    SRPAEC_SPA   1.909
18:17:35.465  M      CN        3868    183.230.160.130 31857   ->    171.64.69.53 22        12    14    2919    -0.144    FSPA_FSPA    4.799
18:17:35.458  M      KR        3888    211.239.124.246 39204   ->    171.64.88.35 22        14    14    2863    -0.127    FSPA_FSPA    4.141
18:17:35.497  M      JP        3865    210.142.113.132 52778   ->    171.64.65.14 22        12    14    2935    -0.148    FSPA_FSPA    5.391
18:17:35.559  M      CN        3864    120.194.74.123 36182    ->    171.64.64.28 22        12    14    2781    -0.062    FSPA_FSPA    4.675
18:17:35.578  M      IN        3888     202.71.0.76 38539      ->    171.64.88.16 22        12    14    2926    -0.146    FSPA_FSPA    3.492
18:17:35.655  M      CN        3800    159.75.67.197 47150     ->    171.64.100.22 22       12    14    2887    -0.134    FSPA_FSPA    4.791
18:17:36.151  M *    US        3874    171.64.74.213 57569     ->    172.24.74.116 22       12     8    2654    -0.961    FSRPA_SPA    0.028
18:17:36.245  M      TW        3812    60.248.165.72 53133     ->    171.67.72.19 22        12    14    2863    -0.127    FSPA_FSPA    2.573
18:17:36.265  M      IN        3888    27.116.18.155 42446     ->    171.64.88.26 22        14    14    2234    -0.362    FSPA_FSPA    4.013
18:17:36.819  M      BR        3800     177.91.80.8 39308      ->    171.64.100.46 22       12    14    2863    -0.127    FSPA_FSPA    2.880
18:17:36.817  M      CN        3812    81.68.120.99 51714      ->    171.67.72.19 22        12    14    2863    -0.127    FSPA_FSPA    2.618
18:17:36.891  M      PA        3864    179.43.147.67 57334     ->    171.64.64.56 22        12    14    2245    -0.537    FSPA_FSPA    3.754
18:17:36.920  M      CN        3864    117.139.13.92 22623     ->    171.64.64.12 22        13    14    3153    -0.173    FSPA_FSPA    4.246
18:17:37.506  M      RU        3874    109.167.197.20 60448    ->    171.64.74.20 22        14    14    2843    -0.121    FSPA_FSPA    3.723
```

CSD-CF: Who

- Team of 5

- 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

- Infosec

- Full life-cycle support

CSD-CF: What

- Network:
    - 85M - 100M network flows / day
    - 600k - 1M SSH trolls / day
    - 40 TB / day (⅔ off campus)
    - 4000 unique active devices / day
    - 86 network switches
    - 2x 40 Gbit/s to campus core
- Data Centers @ SLAC, Forsythe, Gates:
    - 46 racks; 778 servers; 1301 GPUs
    - Max RAM per node: 12TB
    - Total Storage: >5PB
- Desktop farm

CSD-CF: Where

- Under the sky(light)

- Gates Basement (**B**), Wing A

- Offices B28 - B36

- Weekdays 9am - 5pm PST/PDT

- https://support.cs.stanford.edu
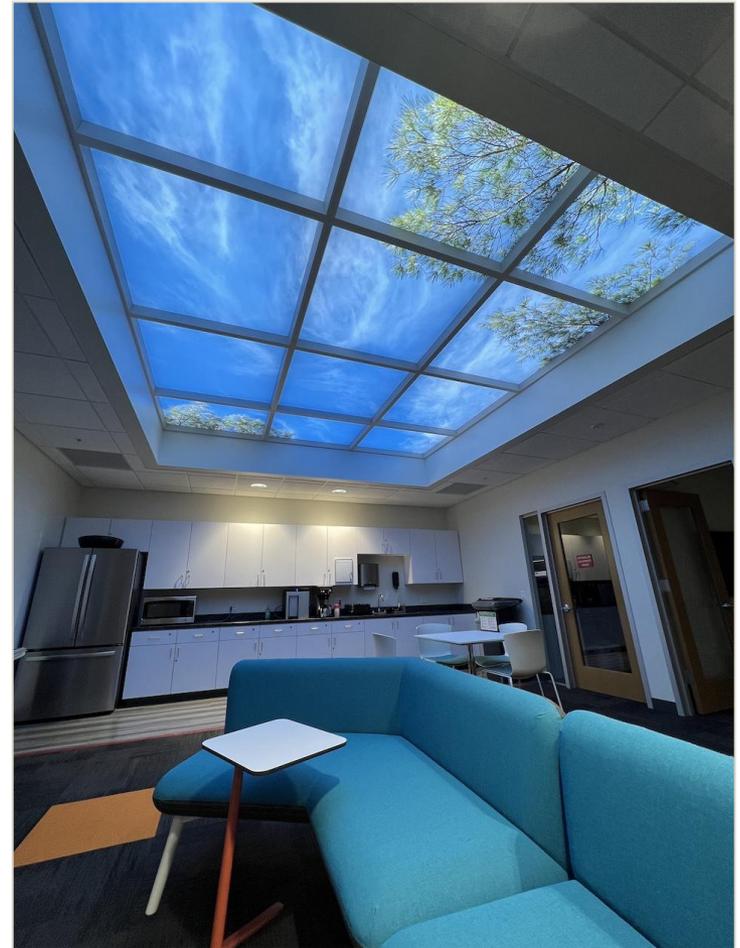
- action@cs.stanford.edu

https://support.cs.stanford.edu

Or email:

action@cs.stanford.edu

Support: Opening a request/ticket

Who	Where
What	Unique

Support: Bad request

```
From: xz4242@example.net

Subject: URGENT REQUEST


I cant connect to server. It is urgent for my project.
```

Support: A better request

From: Johnny Bravo <xz4242@example.net>

Subject: SSH connection error to xanon.stanford.edu

Hi!

My name is **Johnny Bravo**, CSID jbro. I work with professor Knuth.

I am working from my **campus residence**, my current IP is **1.2.3.4**.

I am trying to ssh to xanon.stanford.edu, but I get a **connection error** (please see below). My computer is registered as jbro-PC, my wireless MAC is **aa:bb:cc:dd:ee:ff**.

Johnny

$ ssh xanon.stanford.edu

ssh: Could not resolve hostname xanon.stanford.edu: nodename nor servname provided, or not known

Services: Network access

"Network is the purest form of a shared resource"
    -- Gerth 2018

- Devices @ Stanford need to be **registered** for network access
  - Self registration upon connecting
  - https://cs.stanford.edu/**ip** for CS networks
- Connecting to Stanford networks requires MinSec compliance
  - https://minsec.stanford.edu

Services: Wired networks @ Gates

- Converged and **research**

- 802.1x MAC Auth

- Registration required: https://cs.stanford.edu/**ip**

- **Never** grab an IP address

- TSO: Top left port active on the research network

- If trouble: support request

  ○ Office number, Port number

  ○ Group affiliation, MAC address

- **Do not** run your own router / DHCP server

  ○ If you think you need to: support request

Services: Wireless networks @ Gates

- Legacy:
  - SSID **Stanford Visitor**: **no** registration, digitally off campus
  - SSID **Stanford**: registration required
  - SSID **CS.Stanford.EDU**: no comment ;-)

  - Please do **not** run your own wireless network

- New:
  - SSID **Stanford Visitor.CS**: no registration, terms & conditions portal, limited

  - SSID **Stanford.CS**: captive portal, SUNetID login required (SSO)
  - Available today in Gates basement, coming soon elsewhere
  - SSID eduroam: in progress, please wait

Services: CSID, PEDIT

- **CSID** = Your CS username & password

- Apply for a CSID at <u>https://cs.stanford.edu/**csid**</u>

- Authentication for most resources here in CS

- Manage it at <u>https://cs.stanford.edu/**pedit**</u>

- Mail forwarding, Web page redirection, Contact information

- Keep it up to date!

- Basic shell access:

```
ssh <csid>@xenon.stanford.edu
```

Services: mailing lists

- Uneditable:
  - Based on your **relationship** to the department
  - phdcs@cs, mscs@cs, students@cs
- Based on **PEDIT** contact info:
  - If your office is Gates 403
  - gates@cs, gates4@cs, gates4a@cs
- Mailing list editor:
  - https://cs.stanford.edu/**medit**
- Other Stanford lists available at: https://lists.stanford.edu
  - cs-seminars@lists.stanford.edu

Services: Email

- **Forwarding only** for @cs.stanford.edu

  - Set destination via [https://cs.stanford.edu/**pedit**](https://cs.stanford.edu/pedit)

  - Forward to your Stanford account, GMail …

  - Blank forwarding = **No** email

  - Note: can't test forwarding from GMail to GMail

- Spam filtering

  - Mail through cs.stanford.edu is tagged if it looks like SPAM

  - Subject prefix *****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 (spam@cs.stanford.edu)

Stanford University

Security: Phishing: suspicious link - hover

Stanford University
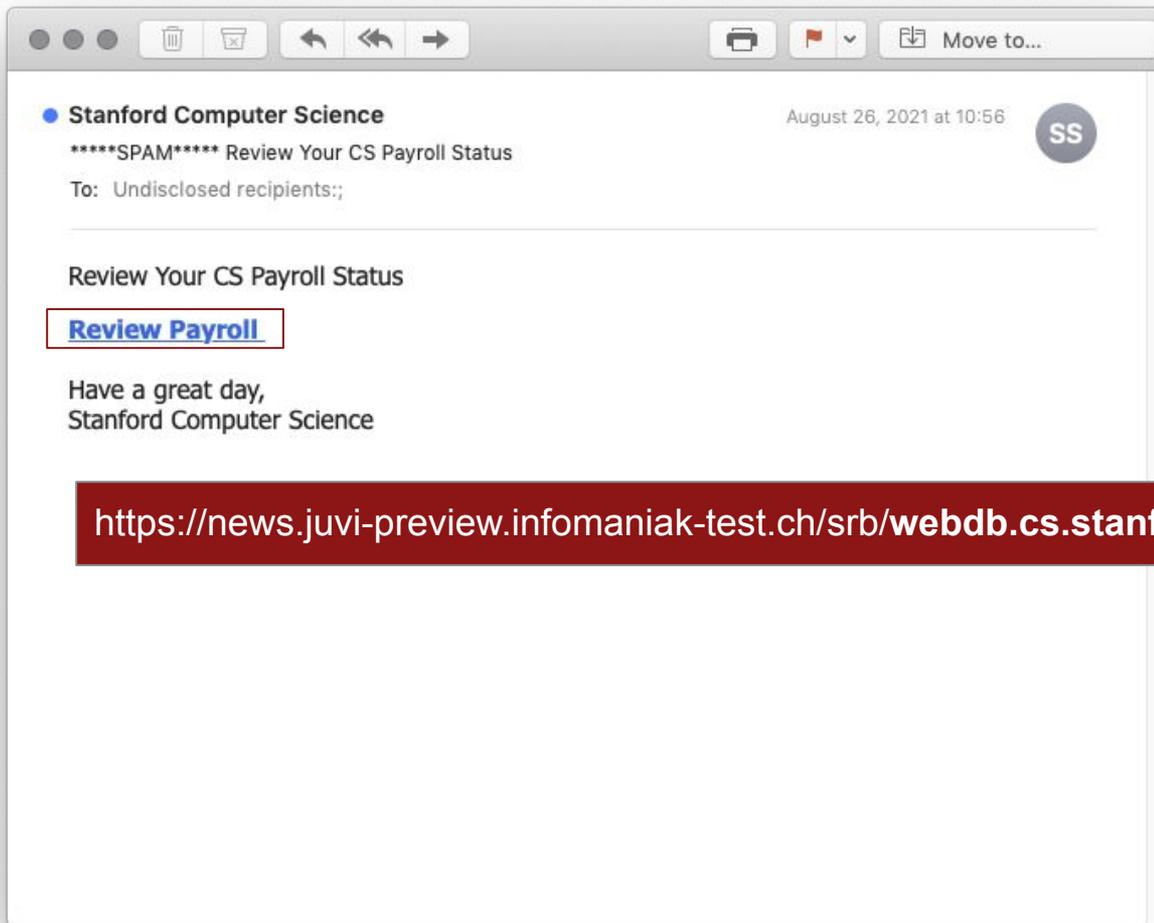
Security: Phishing: destination
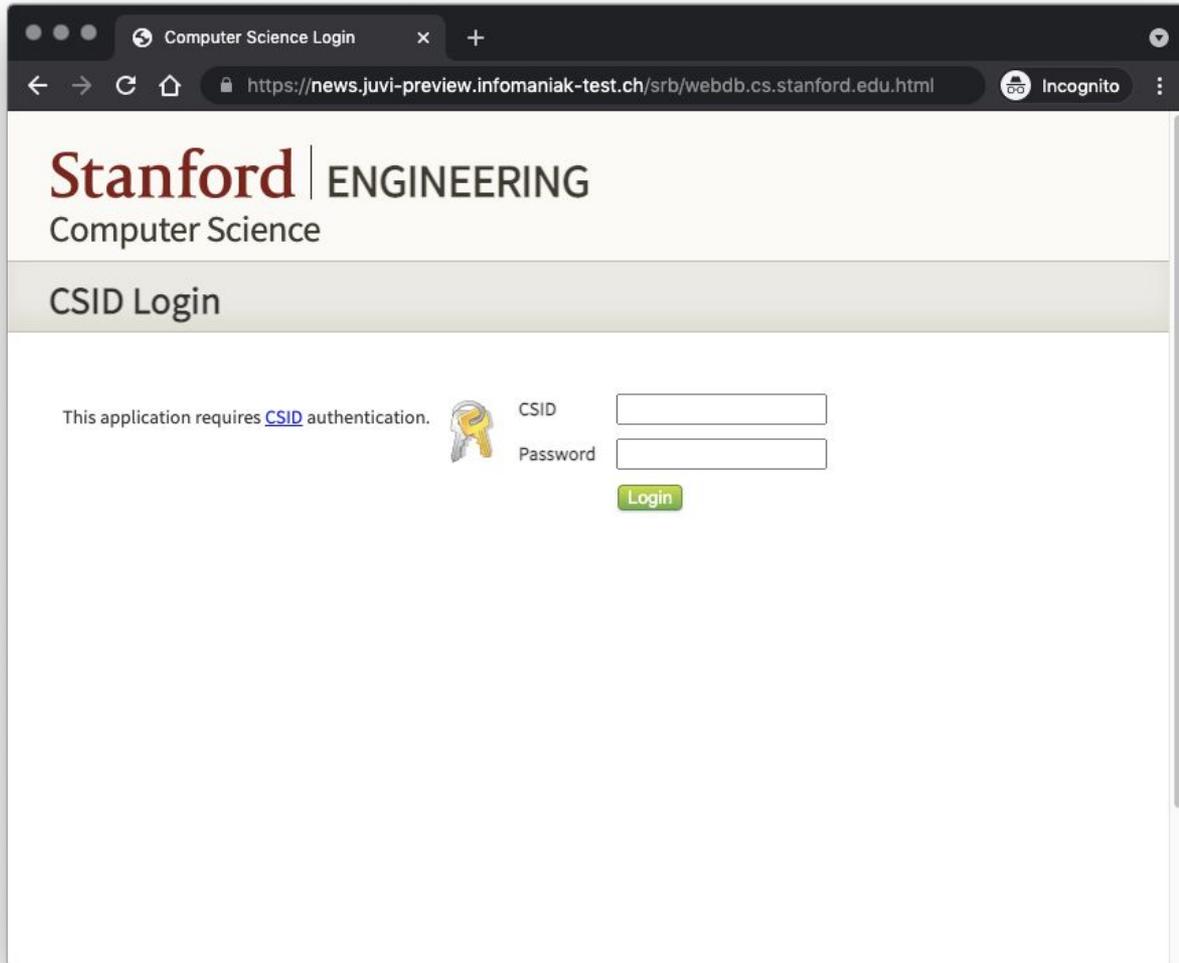
228 emails received

9 ACCOUNTS SUCCESSFULLY ABUSED

Stanford Computer Science   August 26, 2021 at 10:56   SS

*****SPAM***** Review Your CS Payroll Status

To: Undisclosed recipients:;

Review Your CS Payroll Status

Review Payroll

Have a great day,
Stanford Computer Science
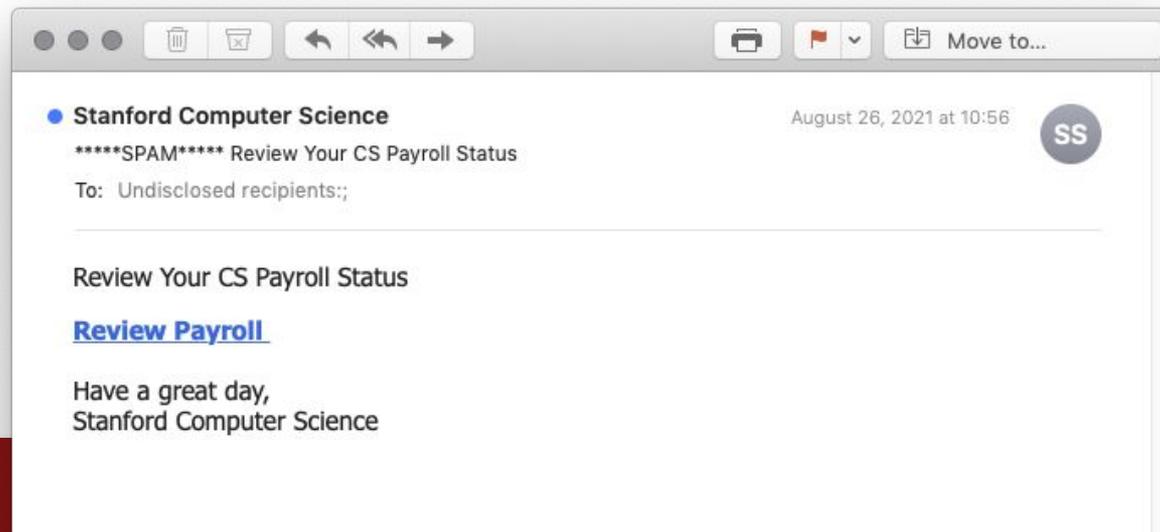
3750 emails received

137 LIKELY COMPROMISED

Phishing is still the #1 threat to our security.
-- Michael Tran Duff, Stanford CISO & CPO, Sep 2021

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 notebooks
  - **NEVER** set easy "temporary" passwords
- MinSec (Minimum Security requirements)
  - https://minsec.stanford.edu
  - Compliance for all devices connected to Stanford
  - Every time you work with a new dataset, **check** MinSec

HPC access

- Clusters available only to students working with research groups
- **NO** general compute resources
- HPC Cluster information:
  - https://cs.stanford.edu/sc/
- Cluster access **request form**:
  - https://cs.stanford.edu/sc/access
- Most clusters on SLURM

Frequently Asked Questions

- Can I use public keys with SSH?

  - No, but you can set up Kerberos*

- How to set up printing?

  - It depends. Ask your research group.

  - Big xerox printers have instructions on them (with a QR code!!)

  - Don't print to **xerox0**!!

- Do you have the USB-C adapter I could use with my MacBook?

  - **No**, talk to your administrative associate.

- I'm having WiFi issues in Gates

  - Legacy: https://support.cs.stanford.edu

  - New: http://my.nilesecure.com

- Do I have to install Bigfix / SWDE?

  - No, you can install VLRE instead

Stanford University

Frequently Asked Questions

- I brought in the workstation I built, help me put it on AFS
  - Not so fast, we'll want to take a look

- VPN is bad, mmkay? Give me a public IP!

  - Sure, are you MinSec or ResSec compliant?

  - ResSec: logging to remote server, firewall, emergency access

- Can you install software X for me?

  - Maybe. What's the X's URL?

- What information do I need to provide when I have a problem?

  - Who, What, Where, Unique

- Can you subscribe me to all the mailing lists I need to be on?

  - No. We do not know which mailing lists you should be on.

https://support.cs.stanford.edu

Or email:

action@cs.stanford.edu

Summary / useful links

- Support requests:

  - https://support.cs.stanford.edu

  - action@cs.stanford.edu

- Slides: https://cs.stanford.edu/csdcf/about-us

- CSID, contact info, email forwarding: https://cs.stanford.edu/pedit

- Network registration: http://cs.stanford.edu/ip

- Minimum Security Requirements: https://minsec.stanford.edu

- Cluster intro and access:

  - https://cs.stanford.edu/sc/

  - https://cs.stanford.edu/sc/access