



Shared IT Services for Higher Education & Research

Conference 2018

Planning a campus-wide deployment of multi-factor authentication

Sean Feil
University of Calgary



Live Demo





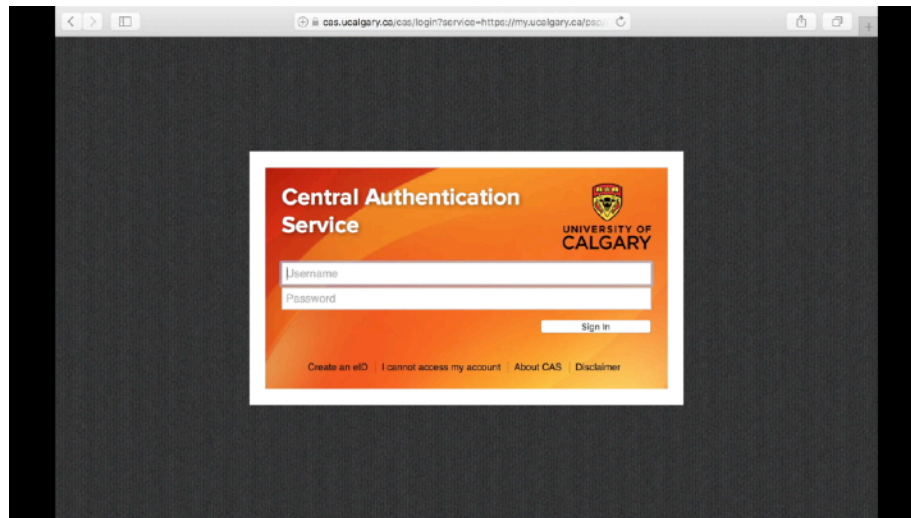
Sean Feil

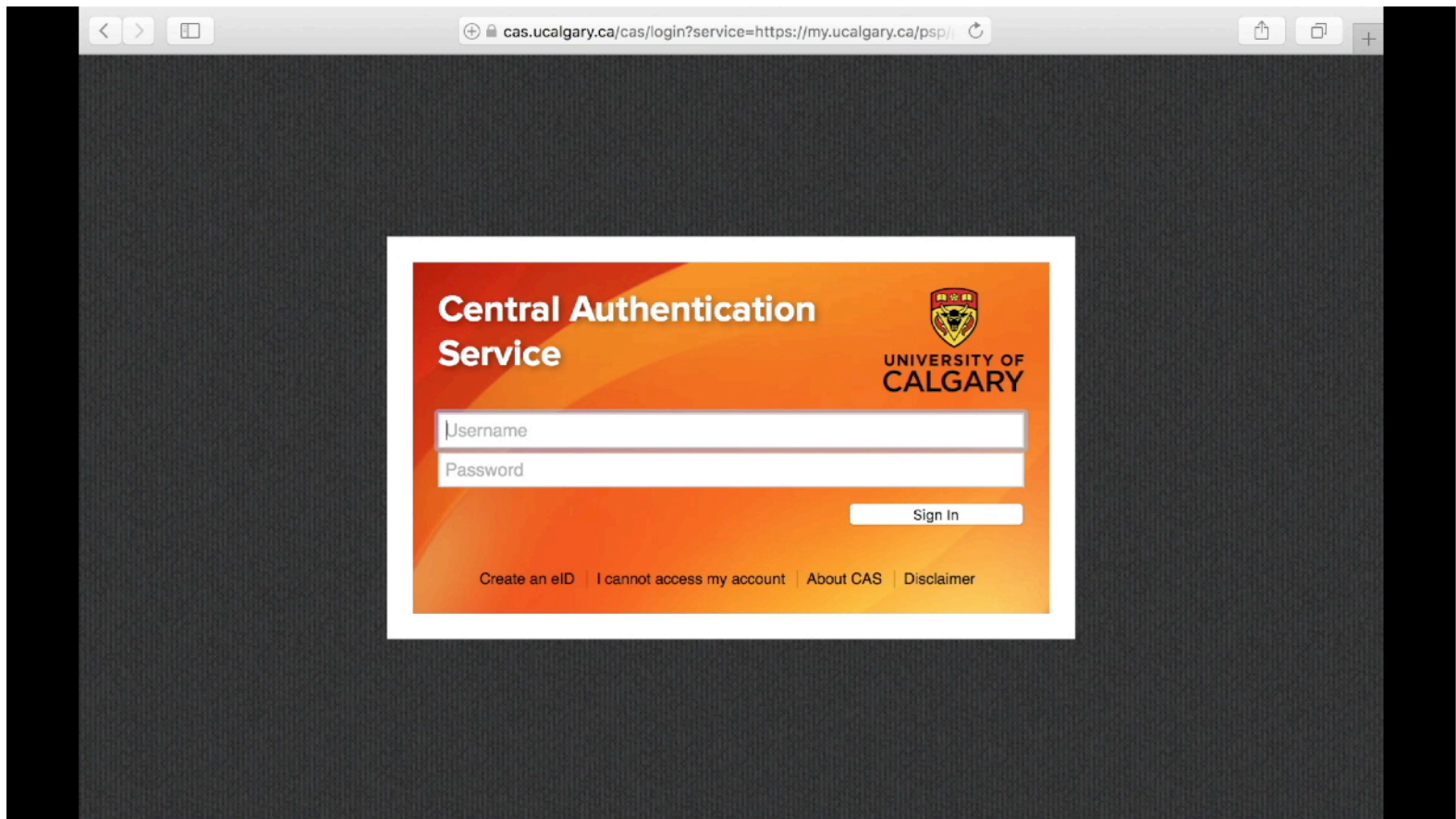
Identity, Messaging, and Middleware

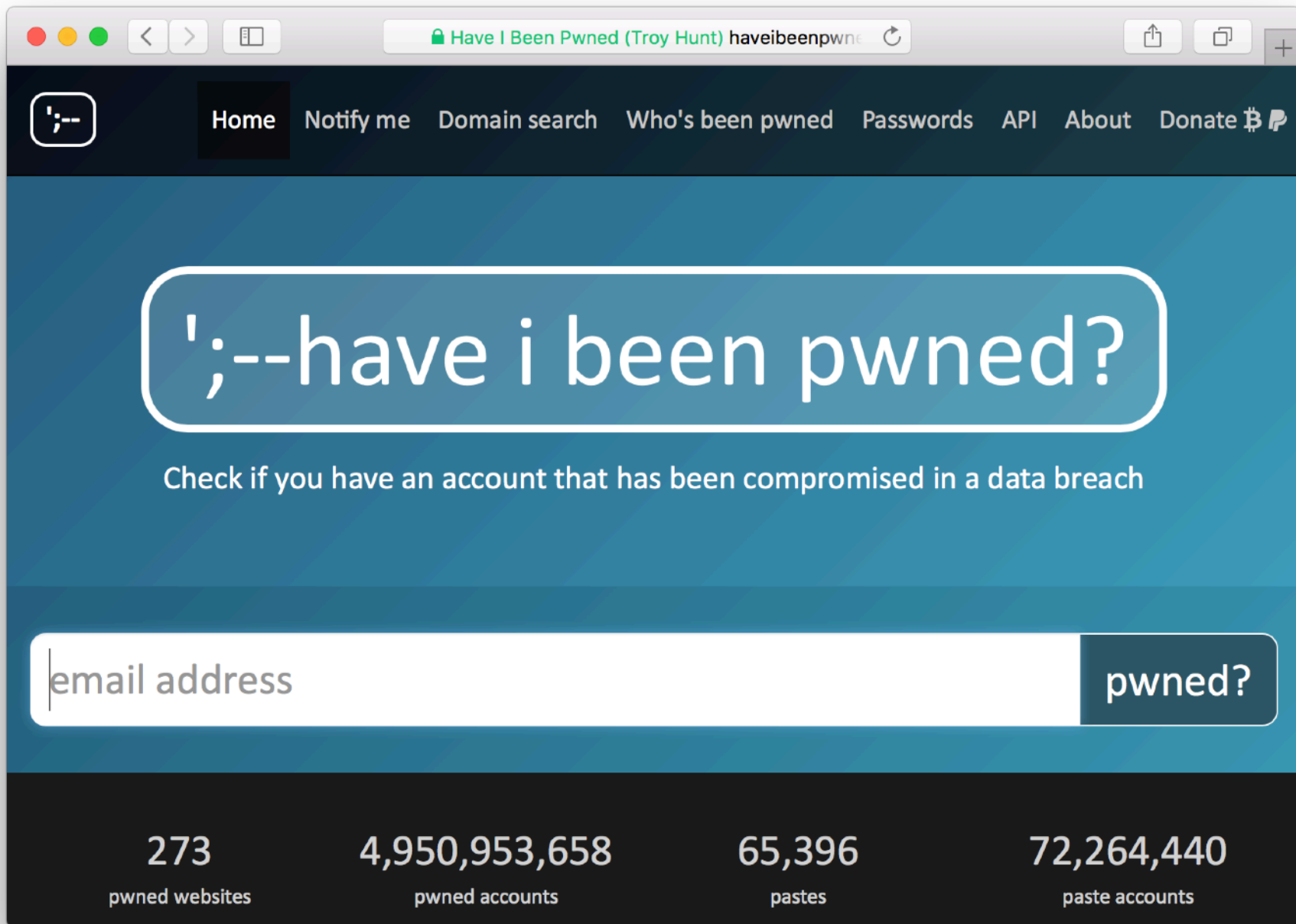


UNIVERSITY OF CALGARY

Information Technologies









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Hello Sean,
Welcome to myUofC

Das

Direct Depositit

Change Direct Deposit

Sean Feil

Your Bank Information

Review Sample Cheque BEFORE entering Banking Information

Bank ID

Branch ID

Distribution Instructions

☐ Edit Account Number

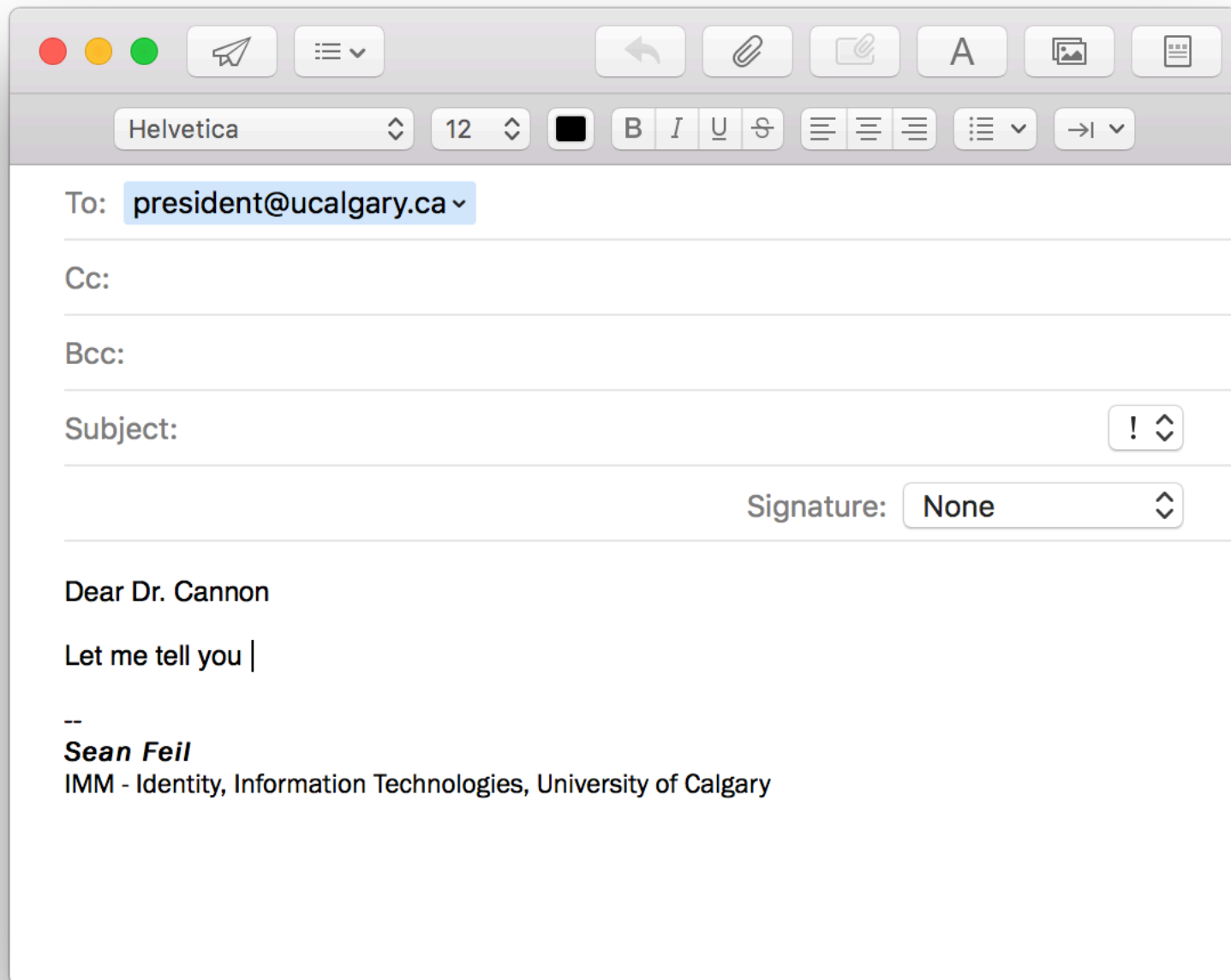
Account Number XXX1234

Retype Account Number

*Account Type

*Deposit Type

*Deposit Order (Example: 1 = First Account Processed)



A screenshot of a Mac OS X Mail application window. The window has a title bar with standard red, yellow, and green window control buttons. Below the title bar is a toolbar with icons for sending (paper plane), menu (three lines with a dropdown arrow), undo (curved arrow), redo (curved arrow), attach (paperclip), detach (paperclip with slash), font size (A), insert image (picture icon), and insert link (link icon). Below the toolbar is a formatting bar with a font family dropdown set to 'Helvetica', a font size dropdown set to '12', a color picker (black square), and buttons for bold (B), italic (I), underline (U), strikethrough (ABC with slash), bulleted list, numbered list, indent, outdent, and a right-align button. The main composition area has fields for 'To:', 'Cc:', 'Bcc:', and 'Subject:'. The 'To:' field contains the email address 'president@ucalgary.ca' with a dropdown arrow. The 'Subject:' field has a warning icon (exclamation mark) and a dropdown arrow. Below these fields is a 'Signature:' label and a dropdown menu currently set to 'None'. The body of the email contains the text: 'Dear Dr. Cannon', 'Let me tell you |', a line separator '--', and a signature block for 'Sean Feil' from 'IMM - Identity, Information Technologies, University of Calgary'.

To: president@ucalgary.ca ▾

Cc:

Bcc:

Subject: ! ▾

Signature: None ▾

Dear Dr. Cannon

Let me tell you |

--

Sean Feil
IMM - Identity, Information Technologies, University of Calgary

Central Authentication Service



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https://feducalgary.wix.com



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UNIVERSITY OF
CALGARY


IT Username

Password

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This message contains remote content.

Load Remote Content

Parking Services

Inbox - Exchange

December 4, 2017 at 9:18 AM

PS

Notice of Parking Infraction

To: Sean Feil

Hello,

Our annual year-end review of tickets issued, indicates that you currently have an outstanding parking fine.

Ticket: #0034296527

Infraction: 15.5 – PARKING INCORRECTLY IN A LOT

As such, we require you to pay the existing balance listed below before December 6, 2017. Please note if the ticket remains unpaid then the right to park on campus is suspended and the vehicle is subject to towing and impoundment. To pay the ticket please follow the instructions below:

Ticket Amount	\$60.00
Amount Recieved	\$0.00
Amount Owed	\$60.00

Click [here](#) to proceed to payment.

If you believe this ticket issued to you was unjustified or in error, please click [here](#) for the appeal's link that gives you information on the Grounds for Appeal and the process.

Note: The discount of \$10.00 for payment within 24 hours of notice is still available.

Parking and Transportation Services

University of Calgary

1833 Crowchild Trail NW, Calgary, AB, T2M 4S7

[http://
www.calgaryparking.com.onmicrosoft.com/?
rid=Qr1cmrx](http://www.calgaryparking.com.onmicrosoft.com/?rid=Qr1cmrx)



✉ Parking Options for Staff Relocating to SMART — Inbox



A

A



UofC Parking 

📁 Inbox - Exchange March 15, 2017 at 1:40 PM



Parking Options for Staff Relocating to SMART

To: UofC Parking

Good afternoon,

You have been identified as a staff member that is being relocated to the SMART building and you currently have a parking permit through the University.

Please find attached the SMART Parking Request form. Complete the form and return to parking@ucalgary.ca by **Friday, March 24, 2017**.

Thank you,

Parking and Transportation Services

parking@ucalgary.ca



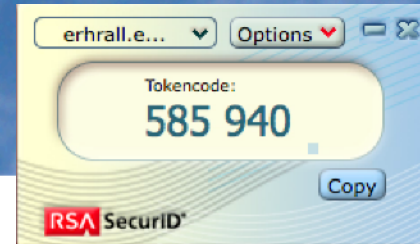
SMART parking
requests.docx







My UofC

[Home](#)[Help](#)

Register for an eID to access MyUofC

Learn how myUofC can improve your experience at the University of Calgary

[Click here >](#)

Forgot your password or eID?

Forgot your password? No problem. Just fill out our easy form and we will get you going again ASAP

[Click here >](#)[Security & Privacy Information](#) | [MyUofC Help](#)

Sign On

WARNING: Protect your confidential information!

I agree to SIGN OFF* when I am finished my Web Applications and Portal sessions:

1. **Sign off*** all Web Applications (such as PeopleSoft, Blackboard, Webmail).
2. **Sign off*** from my Portal (My UofC) session.
3. Close all active browser windows before leaving my computer.

* Sign off does **not** mean just closing the open window -- **I must click on the Sign Off link.**

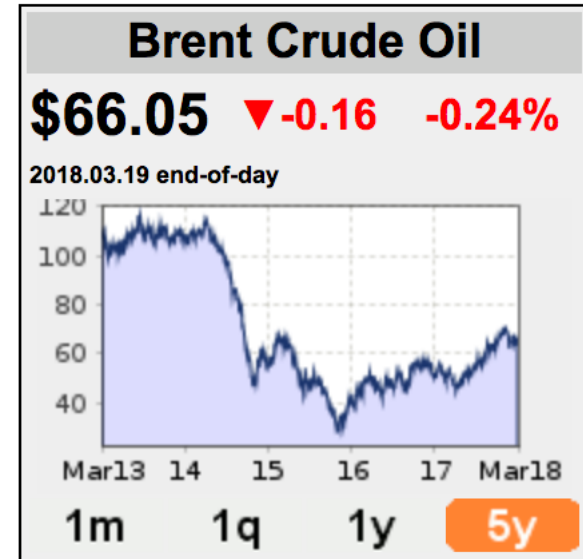
eID:

Password:

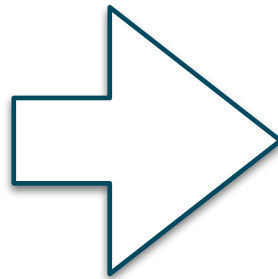
[Sign On](#)



200 users



200 users

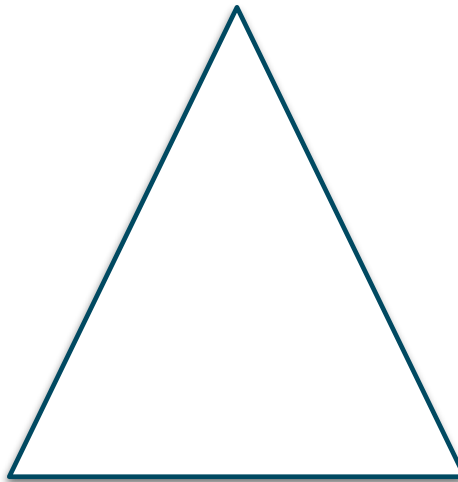


60,000 users





Cheap



Quick

Easy



The user experience



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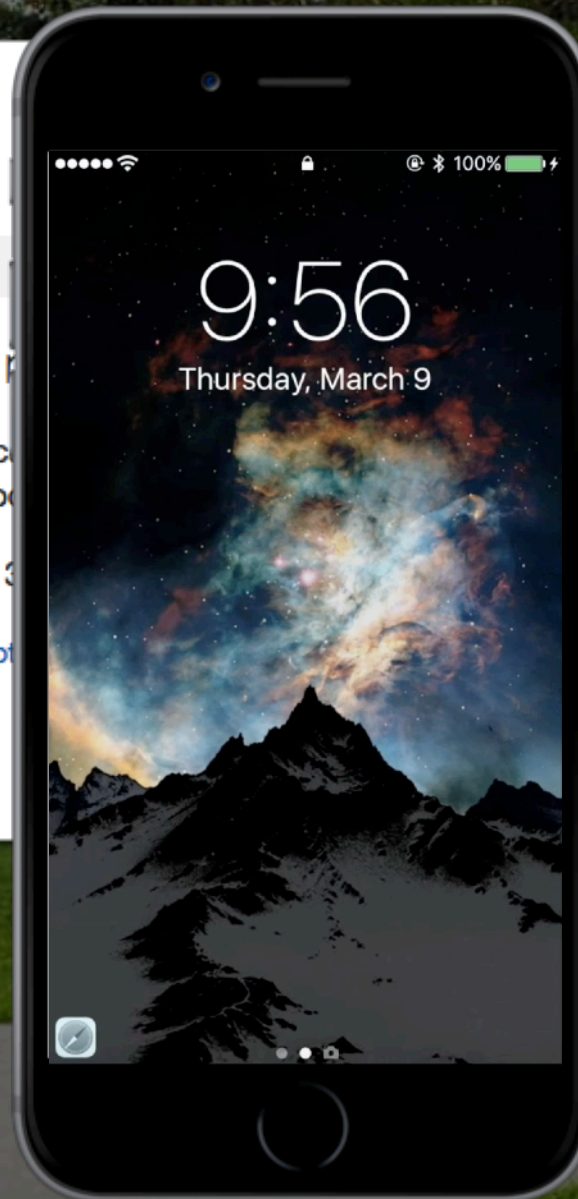
Approve sign in

 We've sent a notification to your device. Please respond.

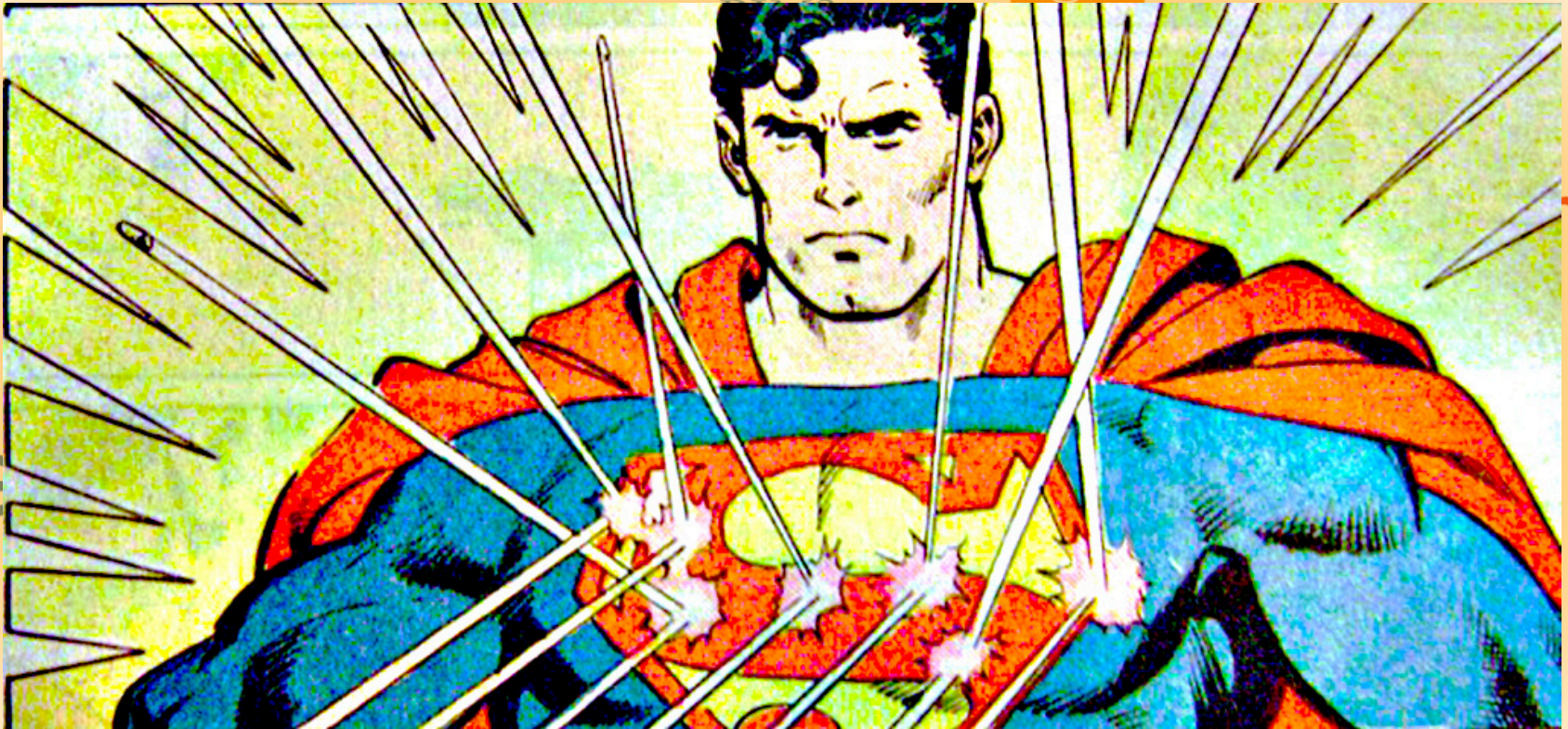
☐ Don't ask again for 30 days

Having trouble? [Sign in another way](#)

[More information](#)



COGNOS



פשוט

G



Drupal™



THE UNIVERSITY OF CALGARY
DEGREE NAVIGATOR

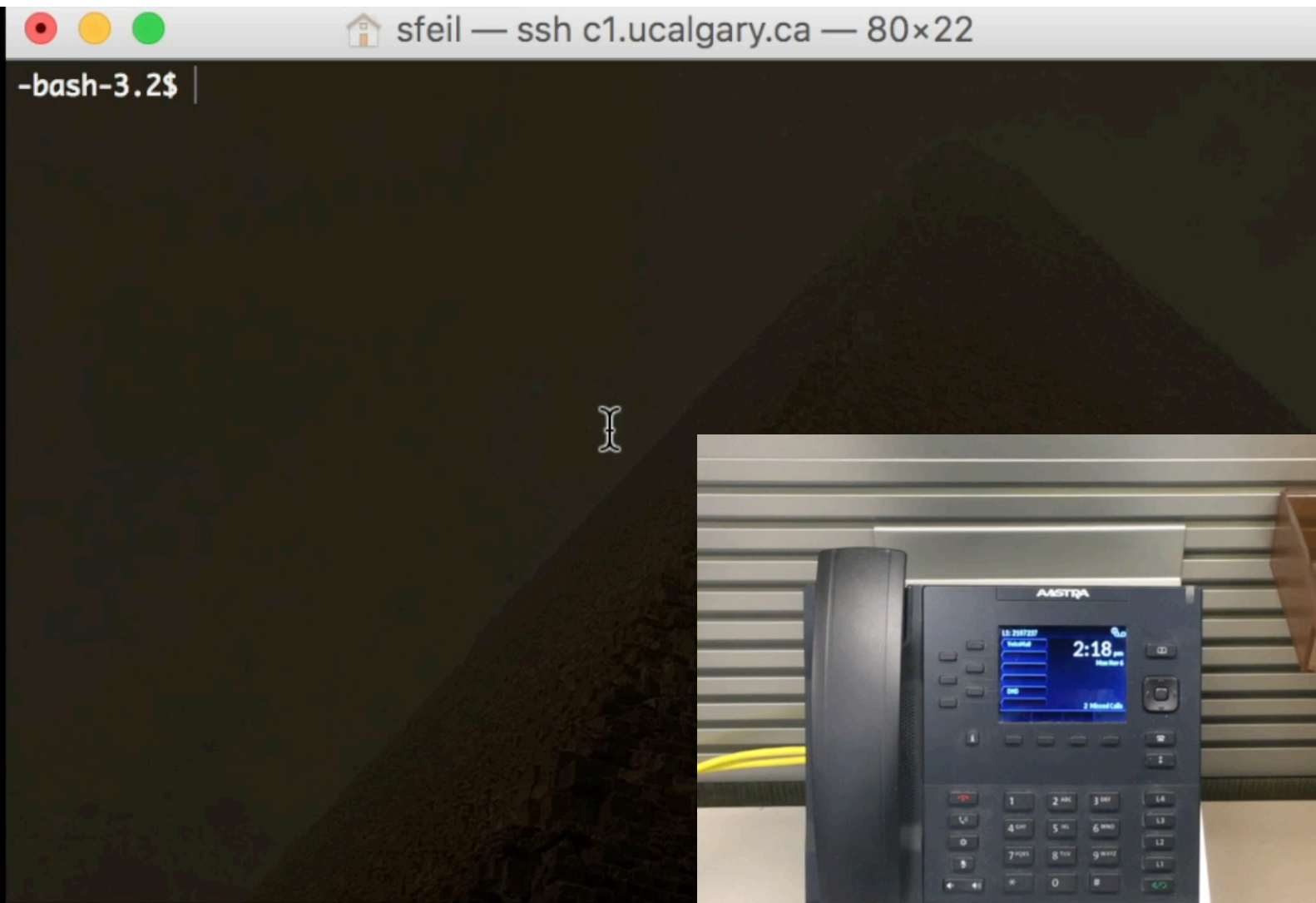


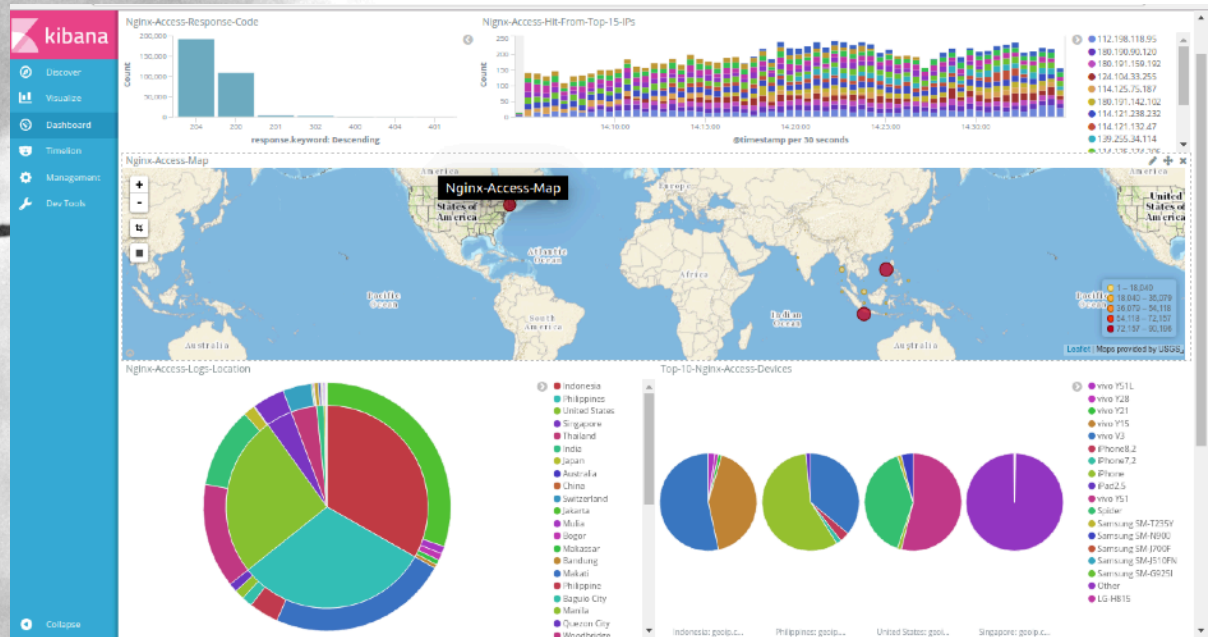
IRISS

EZproxy®



GitLab





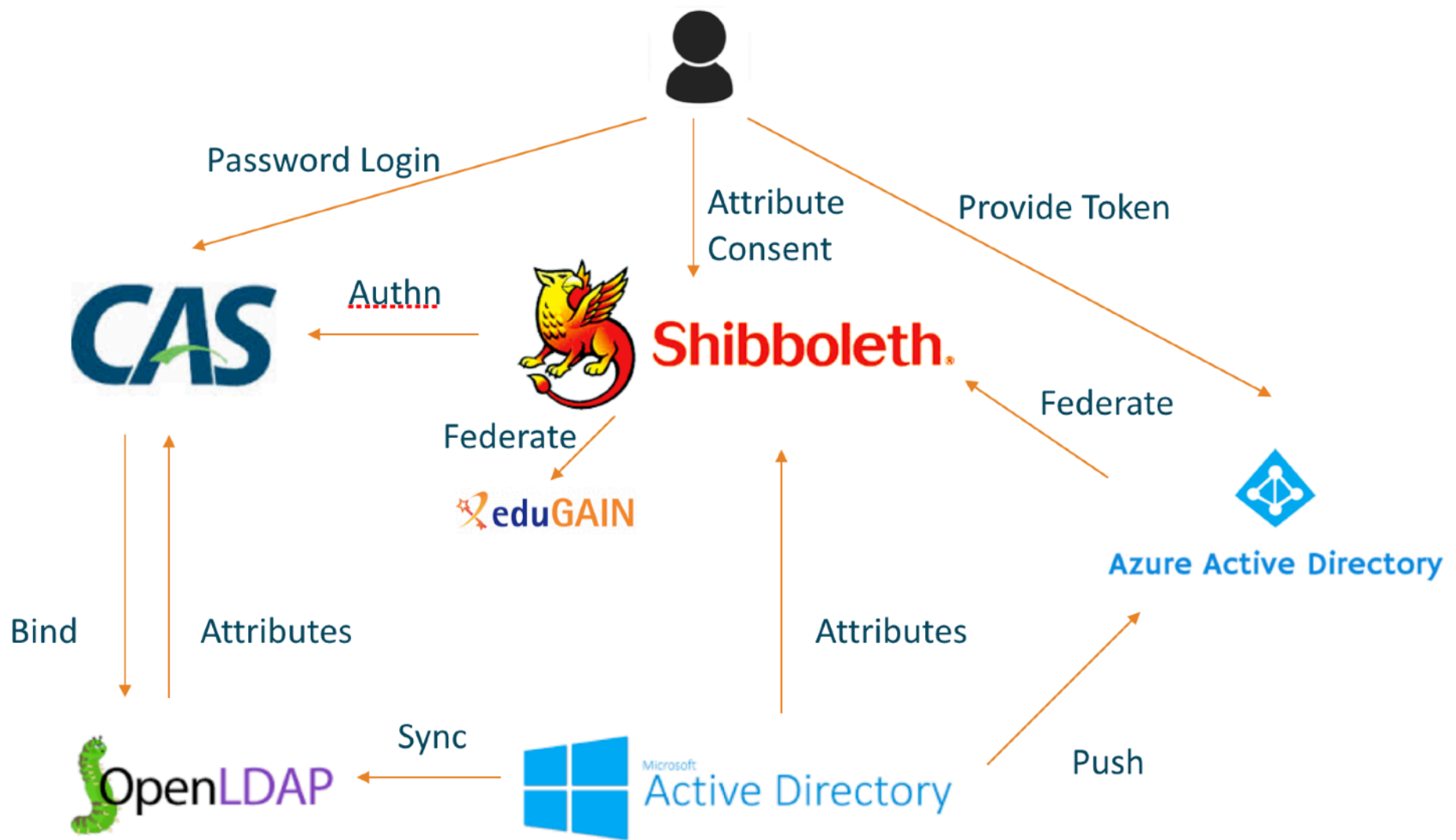


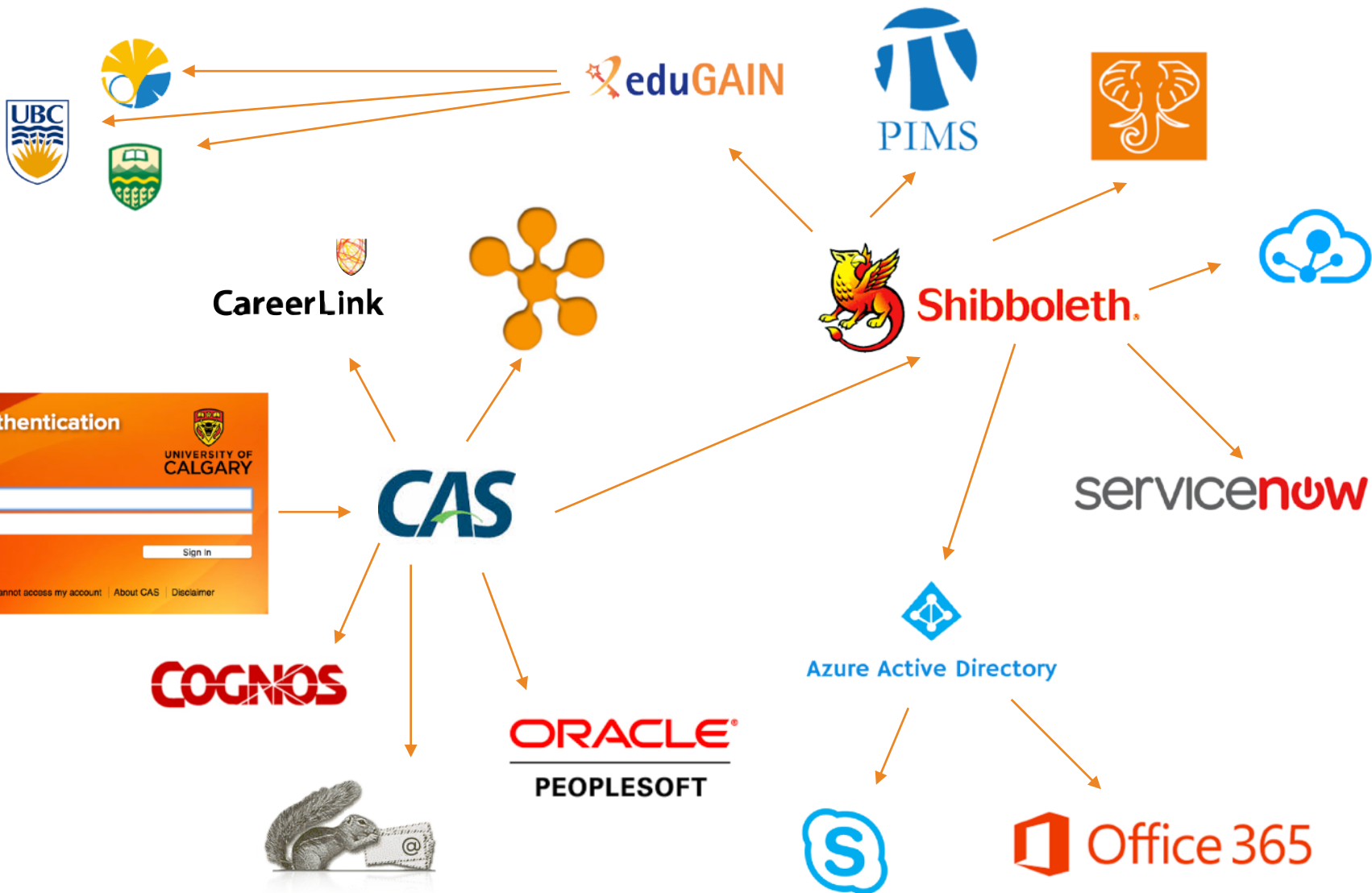
How we got tokens to the masses

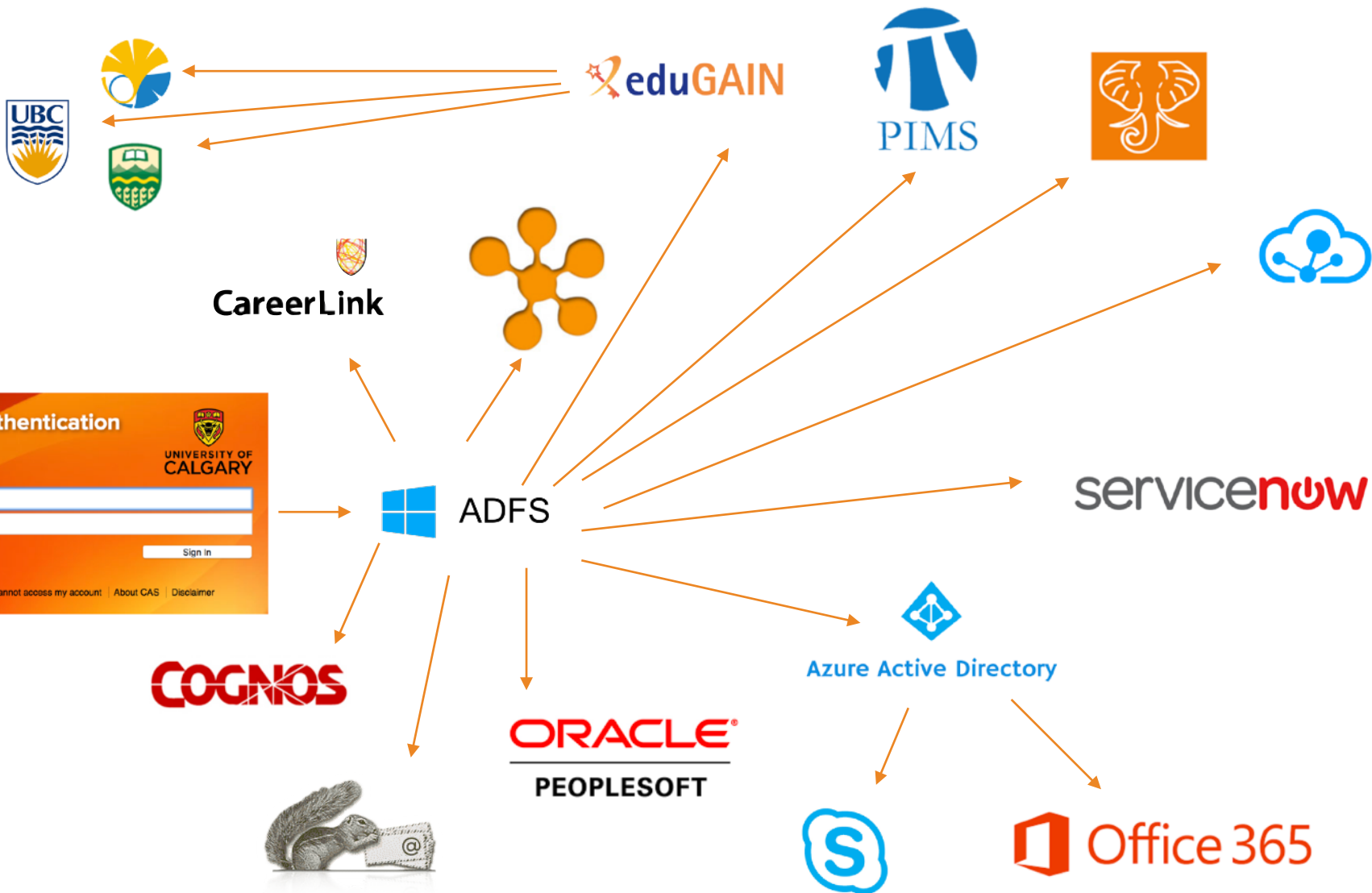




1









2







For added security, we need to further verify your account



sfeil@ucalgary.ca

Your admin has required that you set up this account for additional security verification.

[Set it up now](#)

[Sign out and sign in with a different account](#)

[More information](#)

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3



<input type="checkbox"/>	Sample TEST STUDENTD	sample.teststudentd@ucalgary.ca	Disabled
<input type="checkbox"/>	Sample TEST STUDENTC	sample.teststudentc@ucalgary.ca	Disabled
<input checked="" type="checkbox"/>	erfunddo eratest01	erfunddo.ertest01@ucalgary.ca	Disabled
<input checked="" type="checkbox"/>	erawdept eratest03	erawdept.ertest03@ucalgary.ca	Disabled
<input checked="" type="checkbox"/>	erawfac eratest02	erawfac.ertest02@ucalgary.ca	Disabled

5 selected

quick steps

[Enable](#)


[Manage user settings](#)



Test

ucalgary.service-now.com/it?id=kb_article&sys_id=044c

Login



UNIVERSITY OF
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Information
Technologies

Home

My Stuff

IT Services

Knowledge Base

News & Updates

Contact & Help

Cart

MFA - Office365 - Multi-Factor Authentication (MFA) - Getting started

KB0032021

815 Views

Published 19d ago

Last Updated 8d ago

Getting started with MFA (Video)

Azure multi-factor authentication protects your Office 365 applications, including mail, calendar, and Skype for Business. Before you can continue to use your existing Office 365 applications, you must set up at least one of the multi-factor authentication methods to verify your login. Choose from responding to an app notification on your smart device, receiving a text message, or getting an automated phone call to your desk or mobile phone.

Step 1: Activate multi-factor authentication

Step 2: Set up one or more ways to receive your multi-factor authentication:

- Setup the Mobile App (Preferred method)

Related Articles

MFA - Office 365 - How to Setup Multi-Factor Authentication

MFA - Office 365 - How to Use Multi-Factor Authentication

MFA - Office365 - How to Activate Multi-Factor Authentication on your Office 365 Account

MFA - Office365 - How to add or update multi-factor authentication



Test





Test



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Multi-Factor Authentication

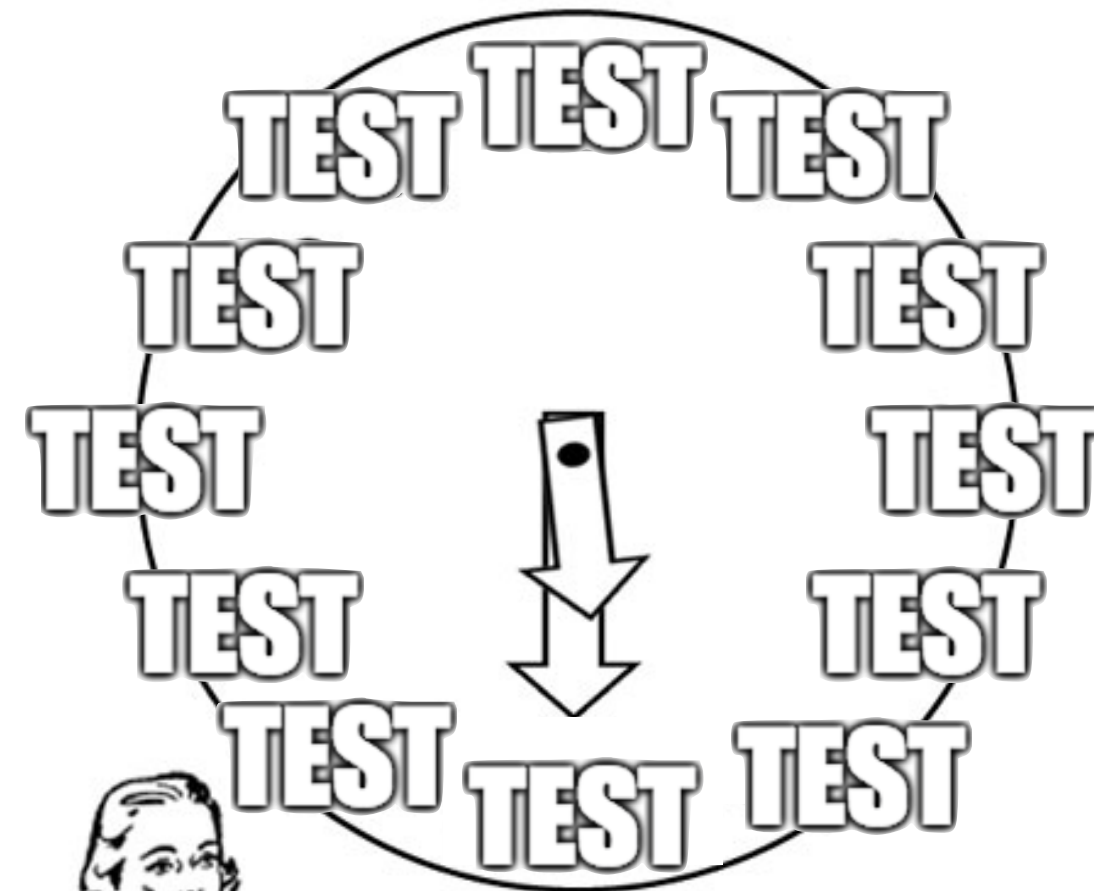


Test

A	S
MFA Stats	15-Mar
Total Activated by date	36
Enforced (at end of day)	32
Activated, but not enforced (EOD)	4
% complete (EOD)	89%
# tickets each day	27
#tickets / % of activated users (percentage)	75%
# of those that were calls (no incident created)	4
# of tickets for people activated today	
TOTAL ACTIVATED OVERALL	688
TOTAL enabled overall (EOD)	16
% Enforced overall (EOD)	98%
Total # tickets overall	211
% ticket / total activated	31%



Test

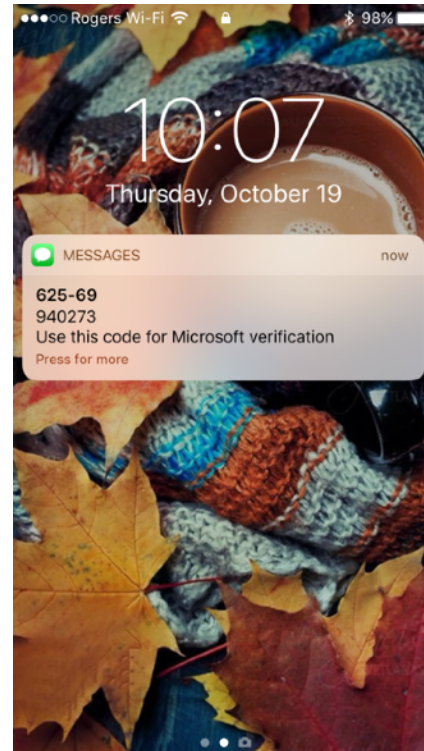
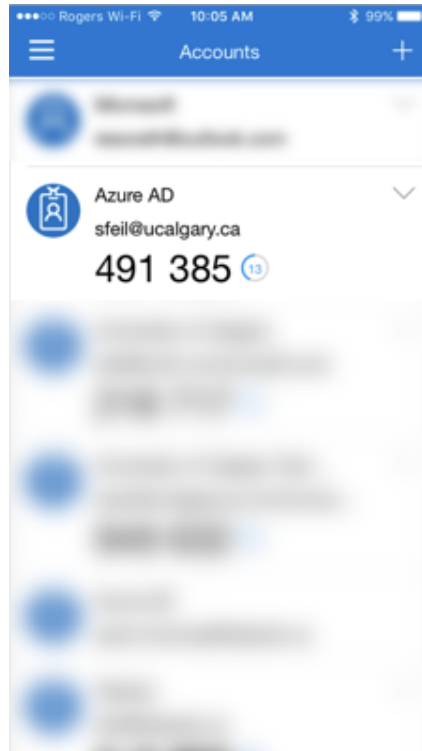
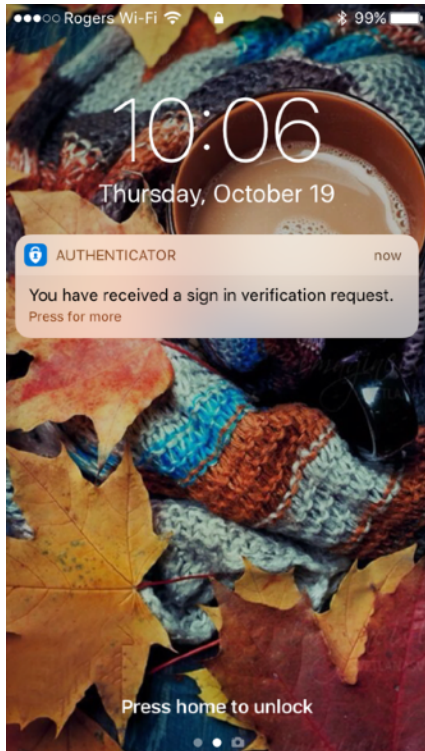


**Good Heavens, just
look at the time!**




Strategies











Multifactor Authentication (MFA) will be added to your Office 365 account this week

Need help?

- Review the information on the handout at your desk.
- Visit the IT website at ucalgary.ca/it and search "MFA" under the Knowledge Base tab to find the setup guide.
- Click on Something is broken on the IT website homepage to log a ticket to get assistance.
- Call the IT Support Centre at 403.220.5626, or talk to them online through chat.
- Take your laptop and cell phone to room 1E-055 (the IT Training Lab) between 8:30 and 11:30 a.m. to get face-to-face assistance.

ucalgary.ca/IT


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Usability Testing



Pain Points

- 👉 Enroll desk phone
- 👉 Set up Microsoft Authenticator
- 👉 Setting up Outlook
- 😞 Using App Passwords
- 😞 30 day re-authentication

PINE 4.05 MAIN MENU Folder: INBOX 5 Messages

PINE 4.05 MAIN MENU Folder: INBOX 5 Messages

?	HELP	-	Get help using Pine
C	COMPOSE MESSAGE	-	Compose and send/post a message
I	MESSAGE INDEX	-	View messages in current folder
L	FOLDER LIST	-	Select a folder OR news group to view
A	ADDRESS BOOK	-	Update address book
S	SETUP	-	Configure Pine Options
Q	QUIT	-	Leave the Pine program

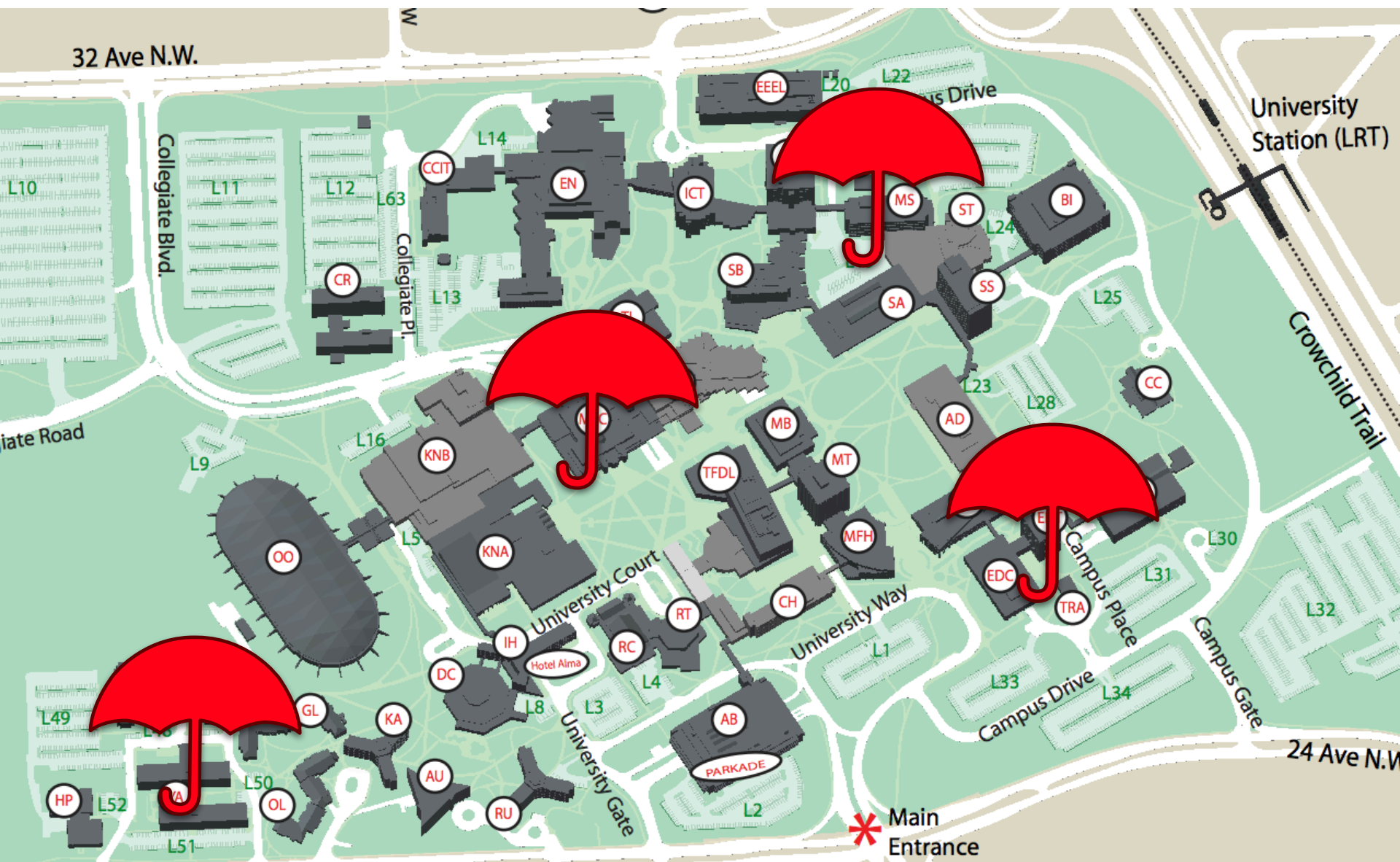
Copyright 1989-1998. PINE is a trademark of the University of Washington.

```
[Sorting "INBOX" | 100% |]
```

```

? Help                                P PrevCmd                            R RelNotes
0 OTHER CMDS > [ListFldrs] W NextCmd  K KBlock

```







Findings







reddit

PREFERENCES

options

apps

RSS feeds

friends

blocked

password/email

deactivate

show images (0)



preferences



logout

update your email

current password (required)

email

save

update

current

new

verify

log

save

two-fa

status

Enable Two-Factor Authentication



1. Access an authenticator app like Google Authenticator or Authy on your mobile device. Select an option to setup a new account and follow the instructions given to you in your app.
2. Use the app to scan the barcode below or [enter the key manually](#).



3. Enter the verification code generated by your authenticator app to complete setup.

[Learn more](#)

CANCEL

ENABLE TWO-FACTOR

How to draw an owl

1.



1. Draw some circles

2.



2. Draw the rest of the owl

Central Authentication Service



Aaron.Thomas@talarak.ca

Sign In

This is the Talarak ADFS QA Environment. This is not production.

[Register an IT Account](#)

[Forgot password?](#)

[Account FAQs](#)

[Contact IT Support](#)

Central Authentication Service



Login to Microsoft Teams



Sign in

someone@example.com

Next

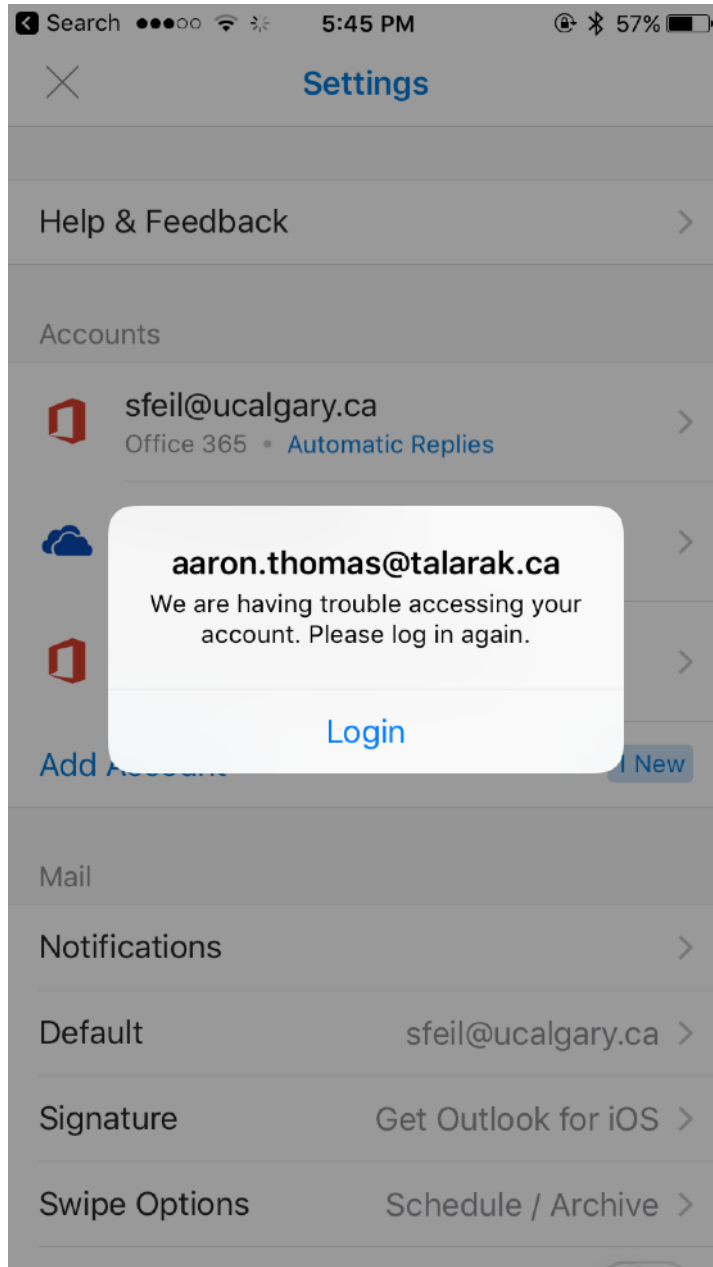
[Can't access your account?](#)

Office 365 Message ...
Weekly digest: Office 365 C...

▲ Last Month

Office 365 Message ...
Weekly digest: Office 365 c... 2018-0

Office 365 Message ...
Message Center Major Up... 2018-0





Your app password

Name: Laptop

Password: ssksdpwnfsxzhvnd

Note: This password will not be displayed again.


copy password to clipboard

close


Mail Account Setup

Your name: Your name, as shown to others

Email address:

Password:  Username or password invalid

☒ Remember password

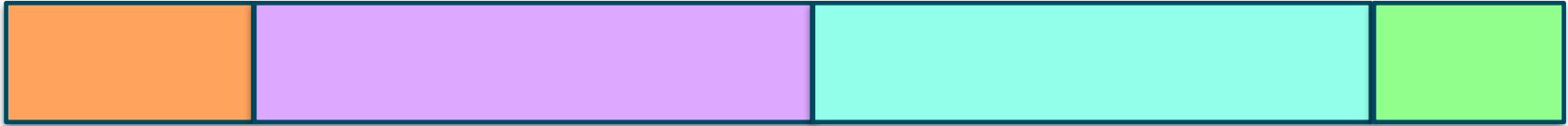
 **Configuration could not be verified — is the username or password wrong?**

☒ IMAP (remote folders) ☐ POP3 (keep mail on your computer)

Incoming:

Outgoing:

Username:





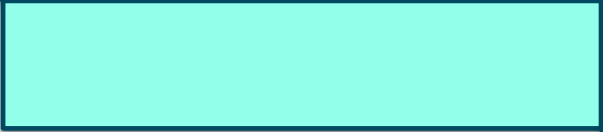
Rarely used computer



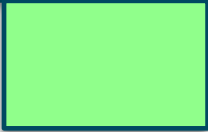
Uses computer for basic office tasks



Uses computer for most activities



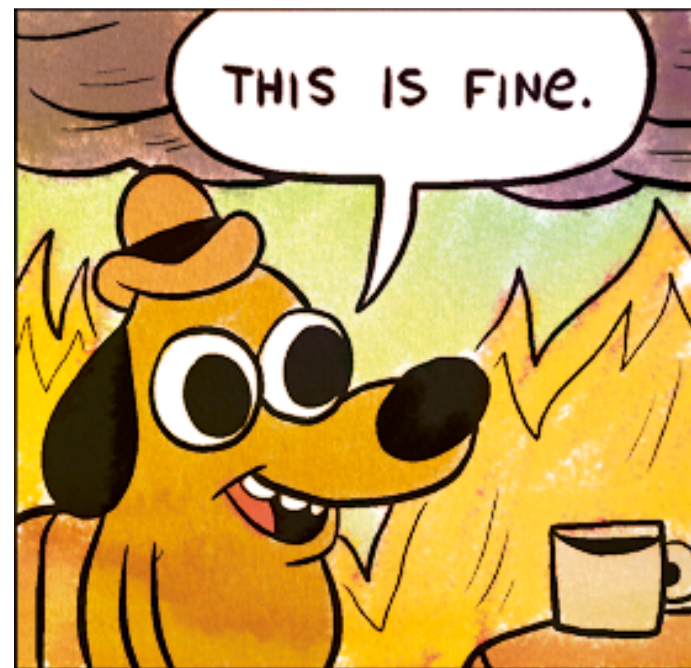
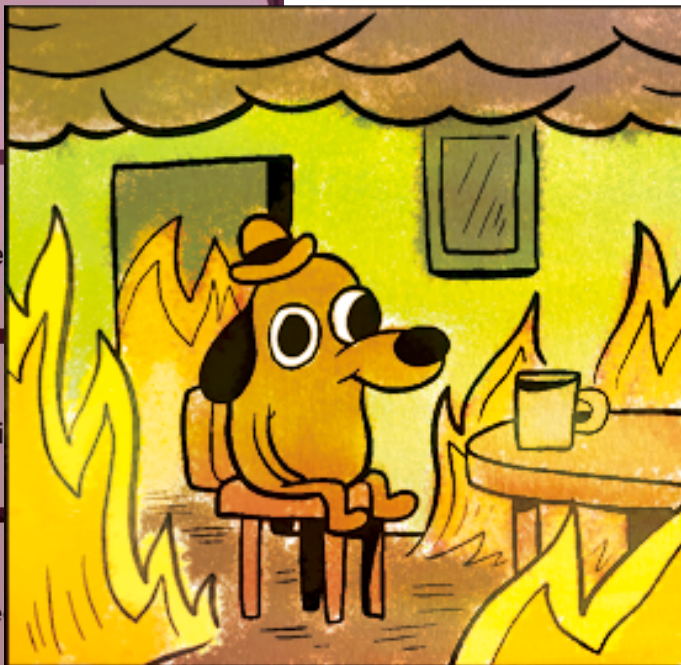
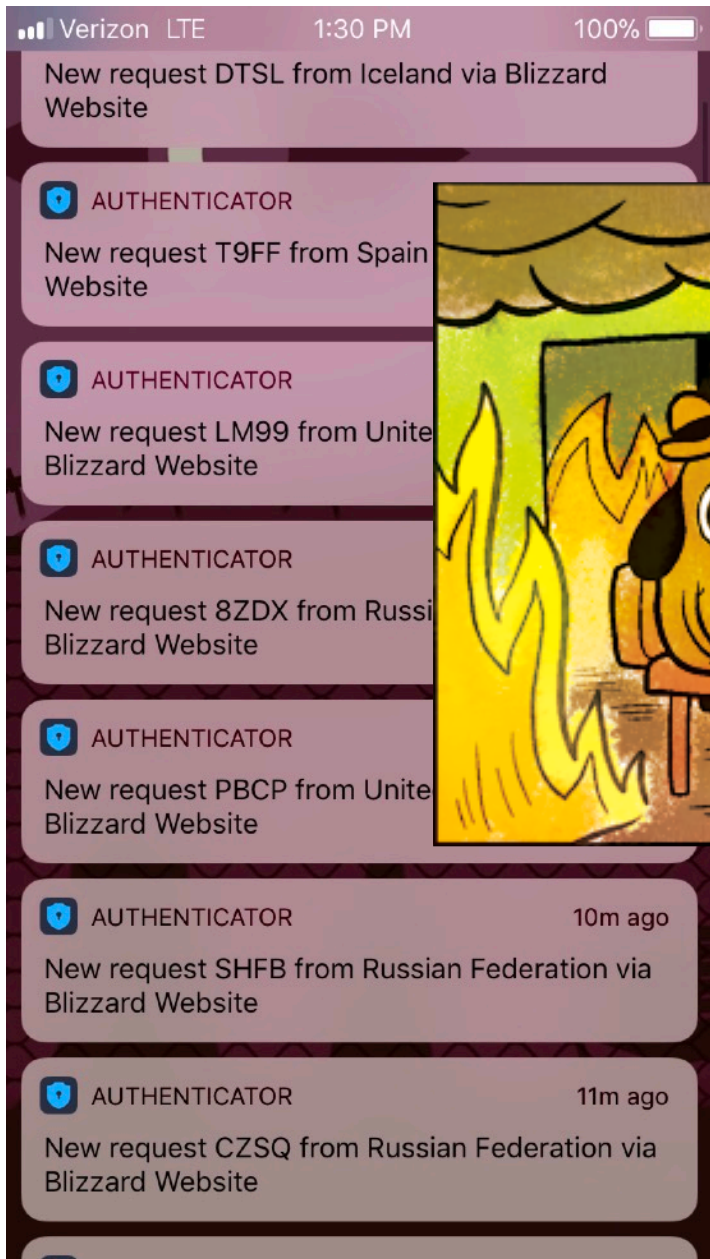
Power users



Most resistance



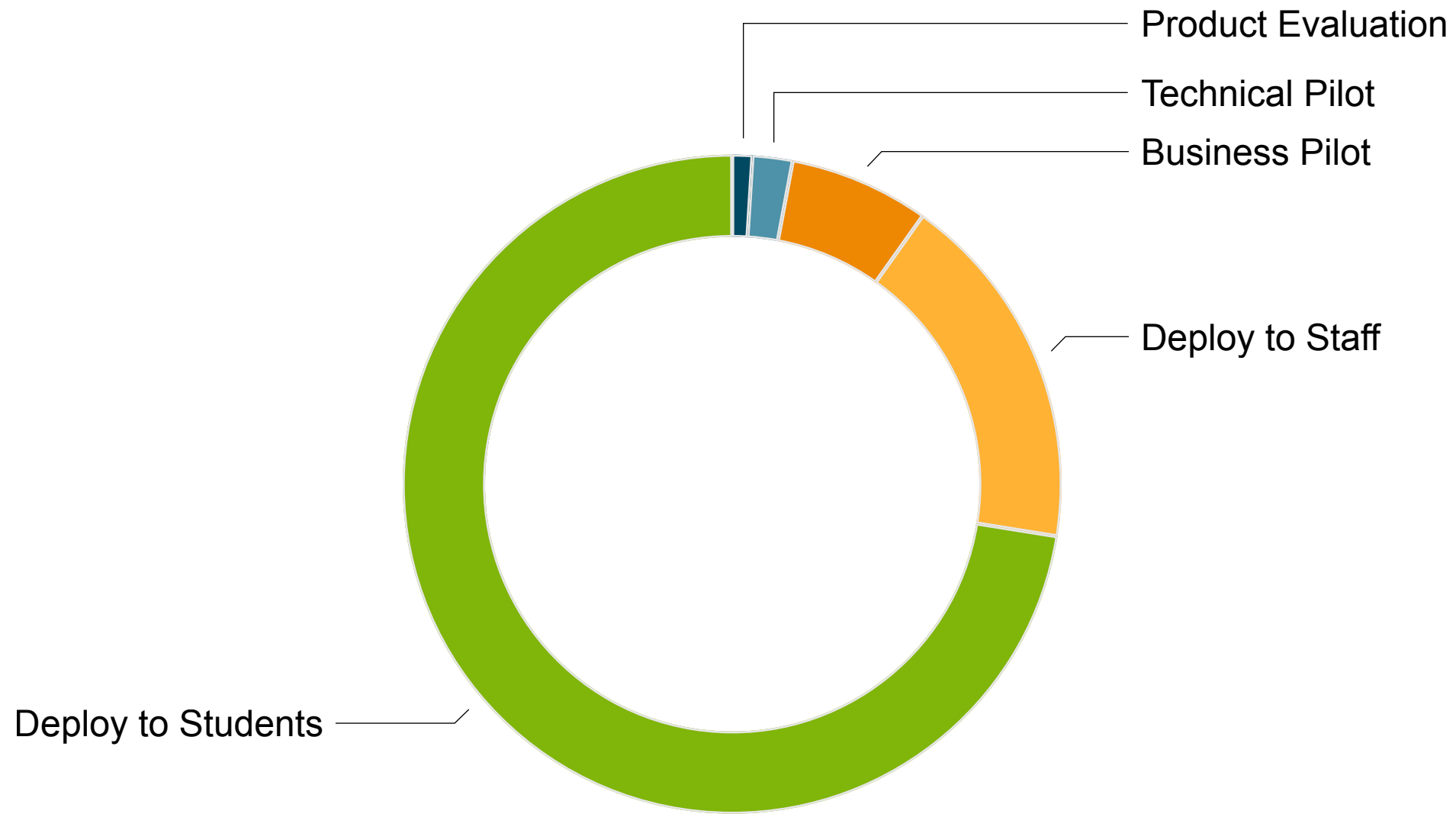
Most trouble

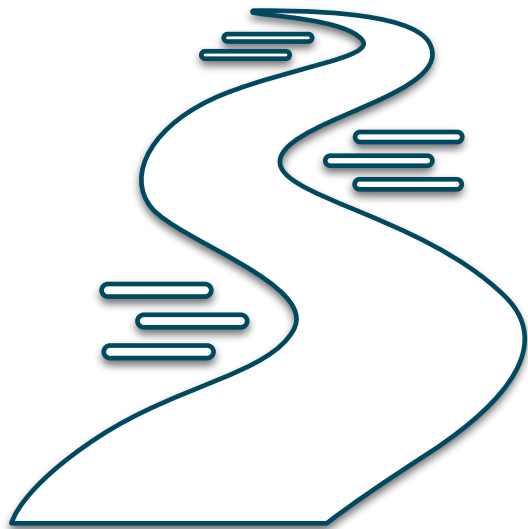




The Future







Hardware Tokens



Federated Identity



IDAM Cleanup



Your turn

