Cybersecurity Presentation

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PVE Neighborhood Watch

Annual Meeting 2023

Cybersecurity Strategies for Identity Theft, Fraud & Scams

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Education is Critical

- Types of Cyber Attacks
- Focus on "Social Engineering"
  - Techniques
  - What to Look For
  - Examples of Attacks
- Further reading

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Dividing Cyber Attacks in Two Categories

Primary Focus for Today

	"TECHNICAL ATTACK" HARDWARE/SOFTWARE	"SOCIAL ENGINEERING" PSYCHOLOGY 101
TYPES	• Malware (malicious software) • Ransomware • Security vulnerabilities in operating system or mainstream loaded software • Network	• Phishing & Vishing (impersonating others to gain your access codes) • Email Scams (Nigerian Prince) • "Help Desk" Scams
YOUR ROLE	• Set operating system and software to **AUTO UPDATE** if available… or update regularly • Use **antivirus software** from **major** provider • Lock down **home router** with password (to get on your WIFI) • **Don't click on links or files** when you do not trust sender • **Backup critical data** to "cloud" (iCloud, One Drive, etc.)	• ***You have a big role in preventing these sort of attacks*** • Educate yourself • Don't panic • Regularly check your accounts for suspicious activity • Employ good password practices • Phone a friend

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Social Engineering

so·cial en·gi·neer·ing
/ˌsōSH(ə)l ˌenjəˈniriNG/

noun: **social engineering**

the use of deception to manipulate individuals into divulging confidential or personal information that may be used for fraudulent purposes.

Social Engineering

Characteristics

- These attacks **target** specific companies and the individuals in the company versus mega blast
- Leverage **publicly available** information… social media…
- And… they may try to **"mine"** more data by contacting company resources on false pretenses

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Basic Psychology & Marketing Tricks

- **Urgency**: Thieves create an urgent situation
- **Familiarity**: Attack will leverage familiar Companies and Institutions
- **Volume**: We are inundated by data (emails, texts, marketing, etc.)… *No time to validate*
- **Realism**: Websites, emails look legitimate… and your twelve year old could create them
- **Personal Data**: Your personal data is public… family members, address, phone, job, taxes… and anything you post on social media…

Attacks really just leverage old school techniques… Psychology or Marketing 101

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What to Look For…

- **Unusual Payment Types**: Payments requested in strange untraceable formats (gift cards)
- **Too Good**: If it is too good to be true… it is…
- **Urgency**: Nothing has to happen immediately… give yourself time.
- **Phone Number to Call**: Thieves want to get you on the phone
- **Legit Phone Number**: Question any phone number you have not verified and dialed yourself
- ***Email Account: Protect your email account****… it is the key to your castle*

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Social Engineering Example
Email Attack

Your Email Account is the KEY TO YOUR CASTLE!

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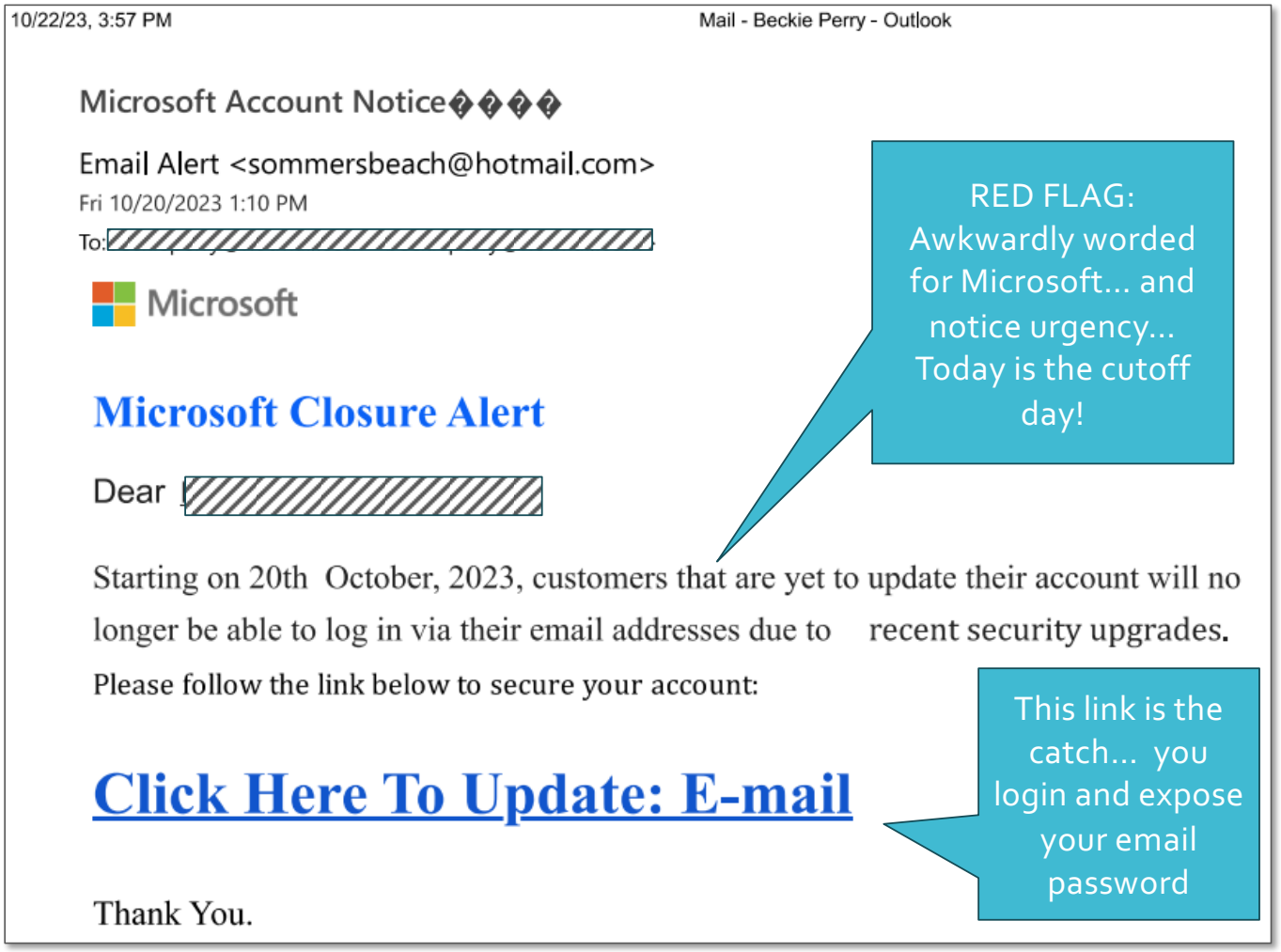
Example: Email Attack



10/22/23, 3:57 PM Mail - Beckie Perry - Outlook

Microsoft Account Notice

Email Alert <sommersbeach@hotmail.com>

Fri 10/20/2023 1:10 PM

To:

Microsoft

Microsoft Closure Alert

Dear

Starting on 20th October, 2023, customers that are yet to update their account will no longer be able to log in via their email addresses due to recent security upgrades.

Please follow the link below to secure your account:

Click Here To Update: E-mail

Thank You.

RED FLAG: Awkwardly worded for Microsoft… and notice urgency… Today is the cutoff day!

This link is the catch… you login and expose your email password

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Example
Paypal

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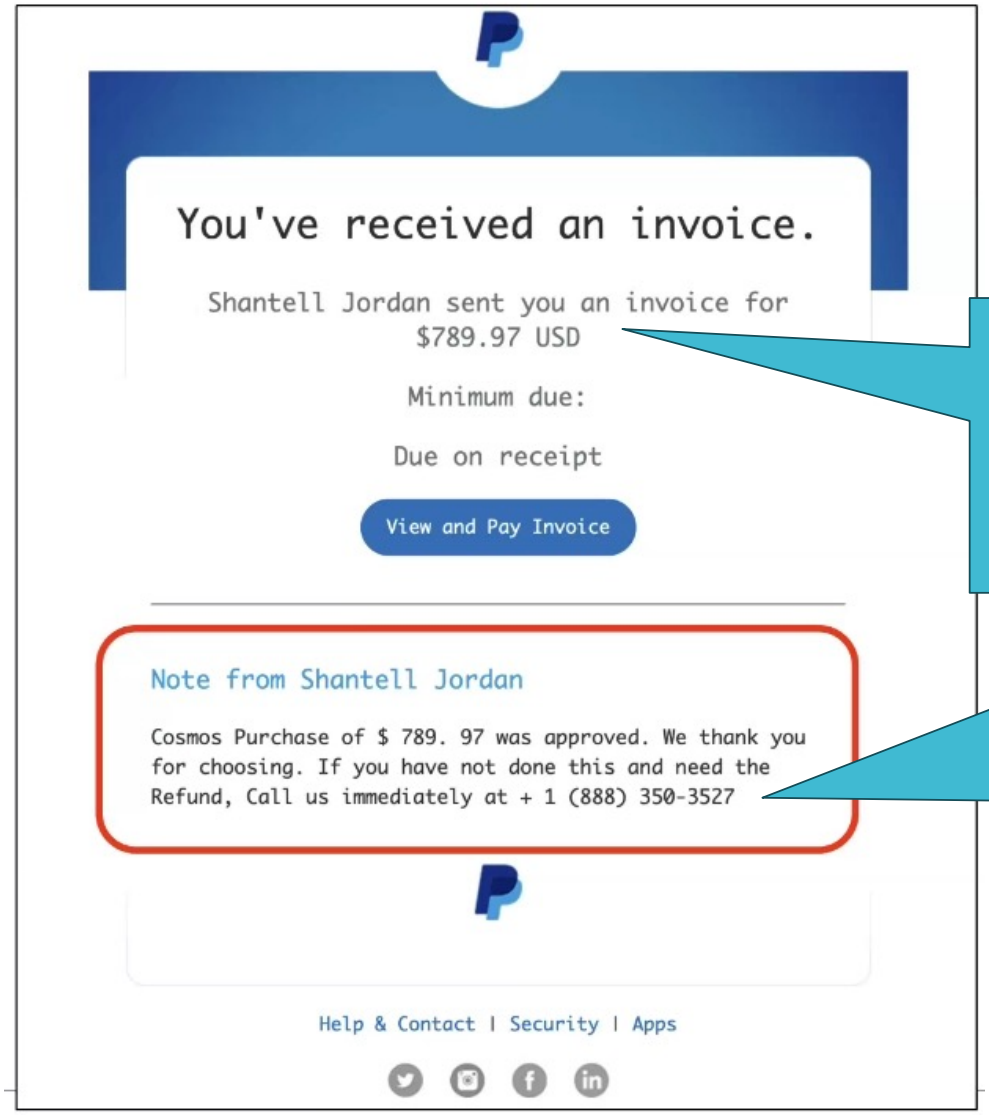
Example: Paypal

(from SANS.ORG)



RED FLAG: You don't know this person… but Paypal IDs are commonly strange…

This link is the Real catch… It gets you on the PHONE… this is NOT Paypal's Real Phone Number!

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Example
Warning of a Compromised System
VIRUS!

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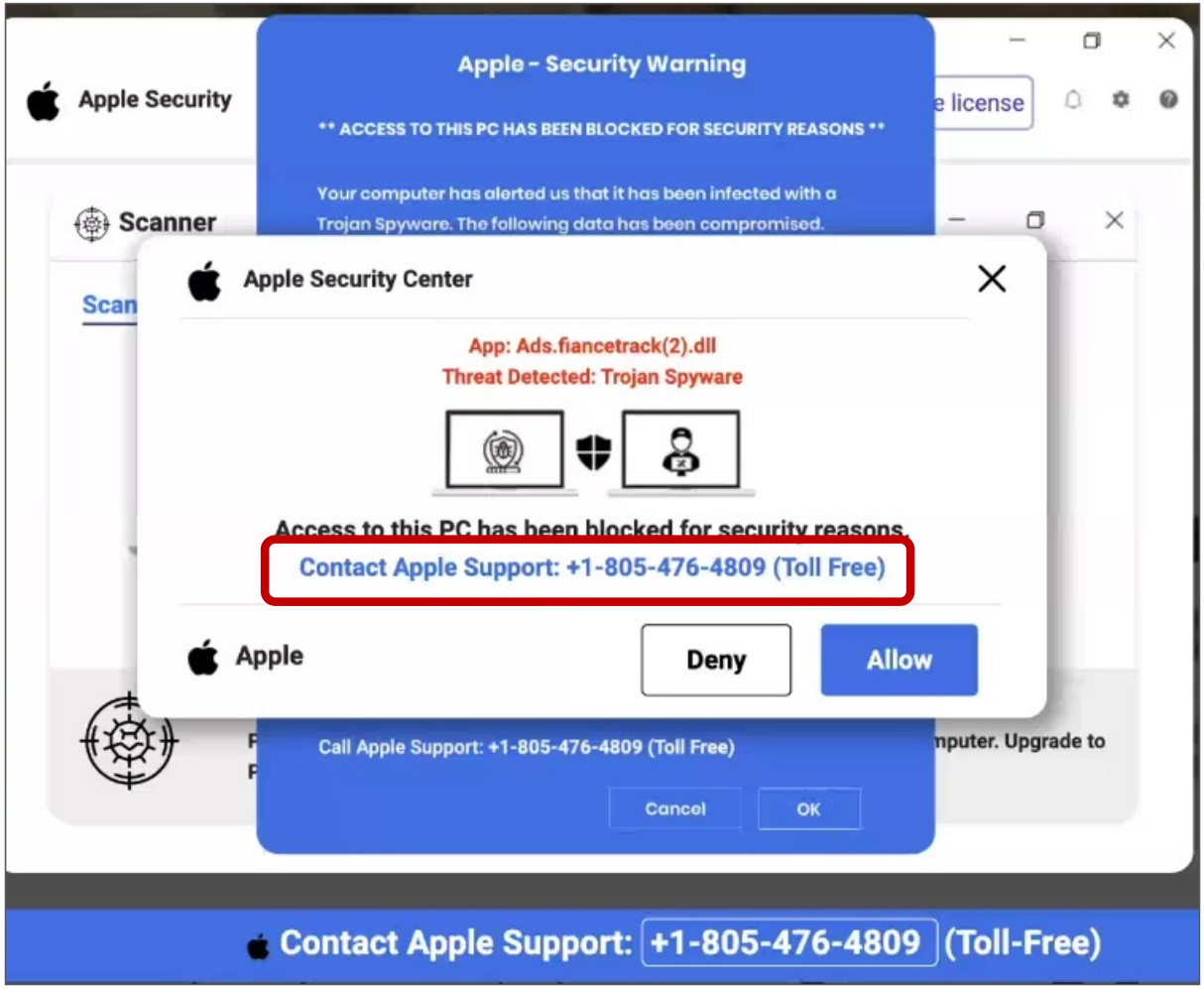
Example: Warning of a Compromised System

(you have been infected)



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Example: Warning of a Compromised System

(you have been infected)

Why this attack is so insidious??

Teams of seemingly nice people will be working against you under the guise of helping you.

One ploy is that you will be informed that they have alson detected that your other banking, etc. accounts have also been compromised. ***BUT, they can transfer you to the proper department to resolve…***

Once they have transferred you they recommend that you **move your funds into a special protected account** until they can resolve the breach.

Once the funds are moved, they are no longer yours…

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RECOMMENDATIONS

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EMPLOY GOOD PASSWORD PRACTICES

- Don't share passwords across websites… *especially your email password*
- Leverage a mechanism to keep track of passwords:
  - **Good**: Write Down Usernames on Hidden Piece of Paper
  - **Better**: Record Usernames & Password in password protected Word or Excel Document
  - **Best**: Use Password Manager like Microsoft Authenticator… ***and use 2-factor authentication (sends an additional verification request to phone)***
- Use Complex Passwords (ex: $d5Kbkx.#)

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KEEP SOFTWARE UP TO DATE

- Keep software up to date
  - Operating System (Windows, Mac, etc.)
  - Phone (IOS, Andoid)
  - Microsoft Office
- Turn on Auto Update
- Use Antivirus with Automatic Updates… And.. use big names (Norton Mcafee, etc.)

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OTHER…

- ***Don't live scared… just be aware***
- Review bank & credit statements regularly for suspicious activity
- Google can be your friend… just search the topic + "scam" and you will get back interesting and useful results
- Norton Lifelock is really good for dealing with Identity Theft
- Credit Cards are very good at reversing fraudulent charges

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References & Good Reading

SANS.ORG

FBI: https://www.fbi.gov/contact-us/field-offices/springfield/news/internet-crime-complaint-center-releases-2022-statistics

Paypal: https://cybermagazine.com/articles/most-common-paypal-scams-of-2023-and-how-to-avoid-them

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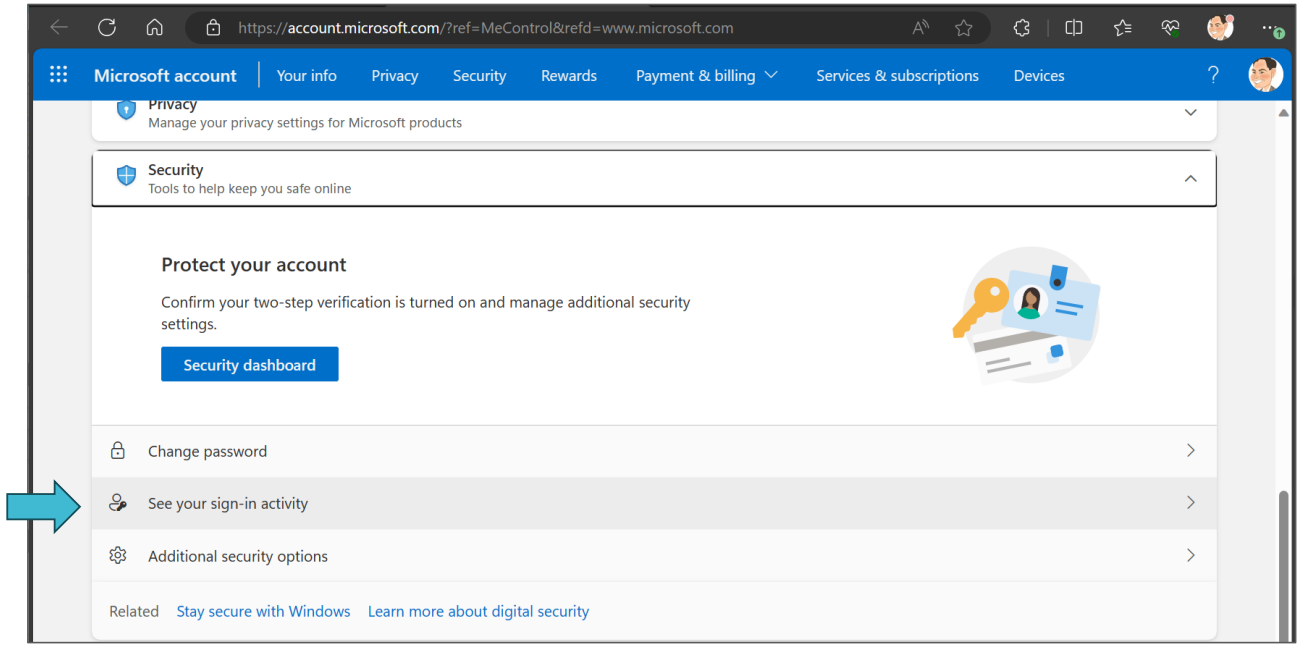
APPENDIX

Checking Attempted Microsoft Logins

- www.microsoft.com



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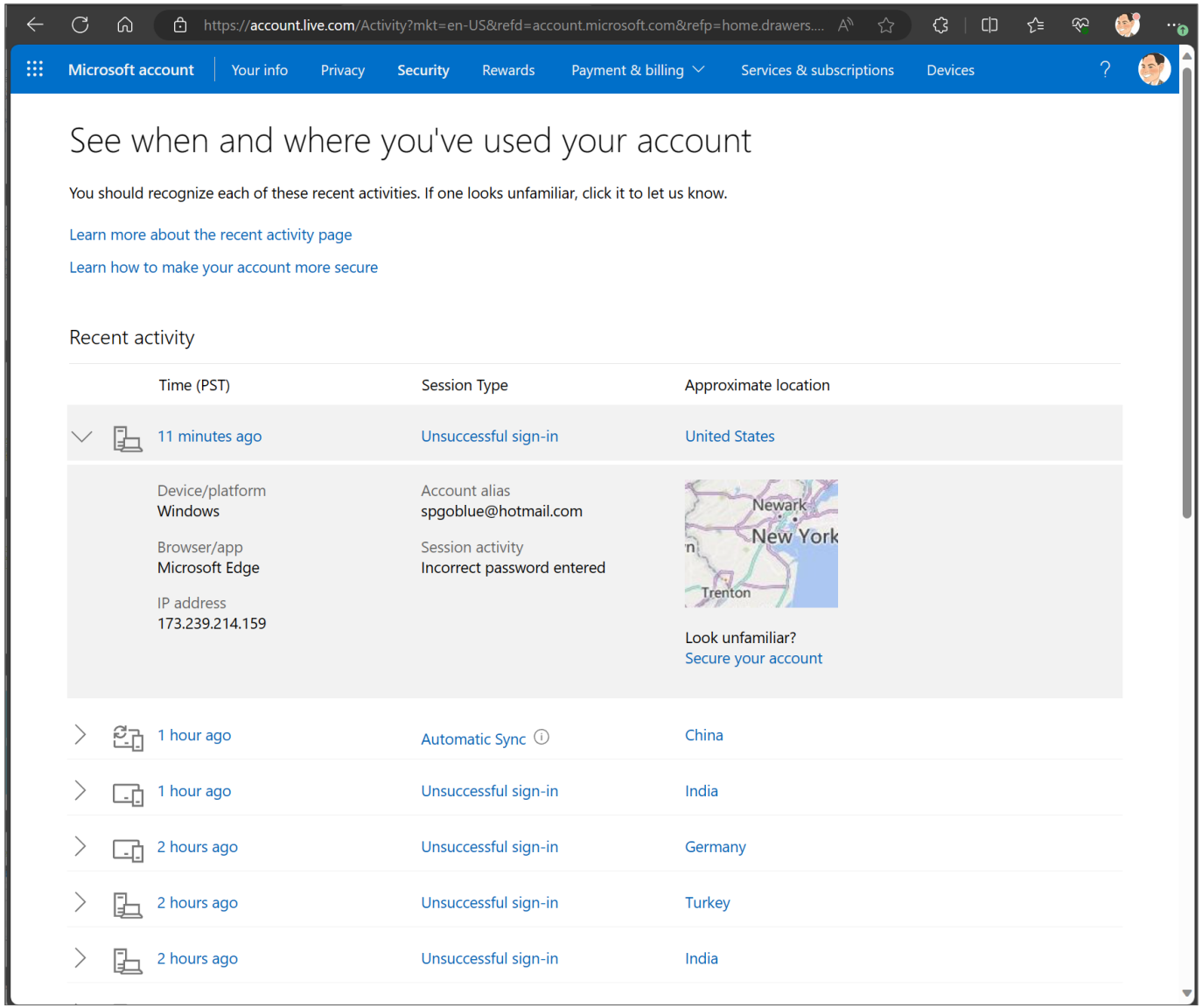
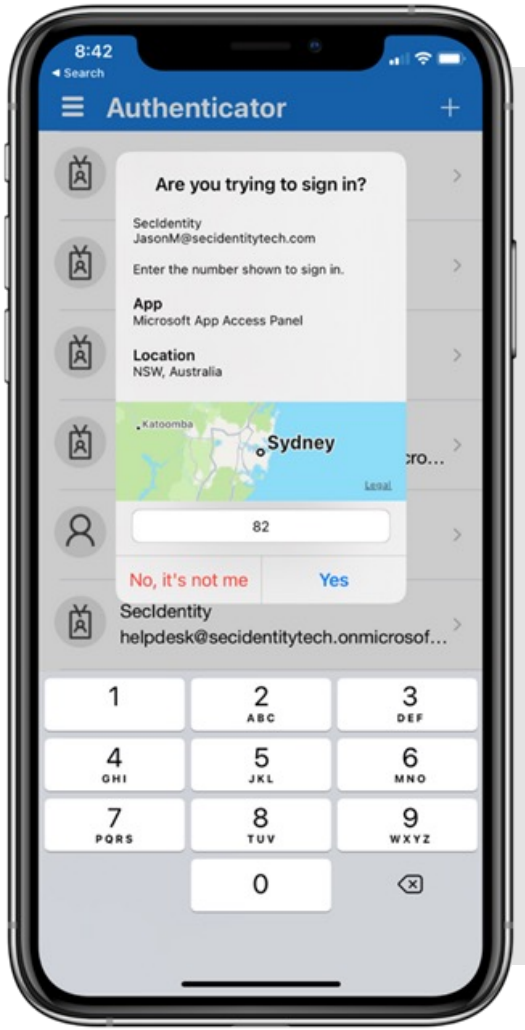
Checking Attempted Microsoft Logins



Microsoft Authenticator

Microsoft Authenticator works across many platforms to create, hold and manage complex password

- Windows PCs (Native)
- Mac PCs (in Browser)
- iPhone /Android (get App)
- Windows Edge (Native)
- Chrome Browsers (get Extension)