

# From Lift-Off to Landing

Simple Security Improvements  
That Make a Big Difference

**Nick Lloyd**

Head of Modern Work & Security Pre-Sales

**Callum Butler**

Principal Security Engineer



# Two Forces Reshaping the Threat Landscape





# Two Forces Reshaping the Threat Landscape

## Geopolitical Conflict

The Iran conflict (Operation Epic Fury / Roaring Lion, February 2026) has triggered a wave of retaliatory cyber operations targeting Western businesses and critical infrastructure.





# Two Forces Reshaping the Threat Landscape

## AI-Powered Adversaries

Threat actors are weaponizing AI to operate faster, at greater scale, and with higher precision than ever before. Attack campaigns that once took weeks now take hours.

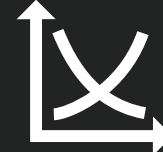


# Understanding the Adversary



## Nation-State Retaliation

Cyber is cheaper, deniable, and hits harder than traditional warfare



## Financial Gain

Ransomware, data extortion, Cybercrime-as-a-Service



## Espionage & IP Theft

State actors target trade secrets, defence data, and intelligence



## Hactivism & Influence

DDoS, defacement, hack-and-leak to shift public opinion

# AI: The Adversary's New Force Multiplier

44% increase in attacks on public facing applications, driven by AI-Enabled Vulnerability Scanning, then publishing false content.



# Death of “Spot the Phish”



## AI Phishing Strips Away Old Tells

No typos, perfect branding, contextually relevant content



## Deepfake Video Calls

Used to impersonate CFOs, CEOs, and senior leadership



## Voice Cloning

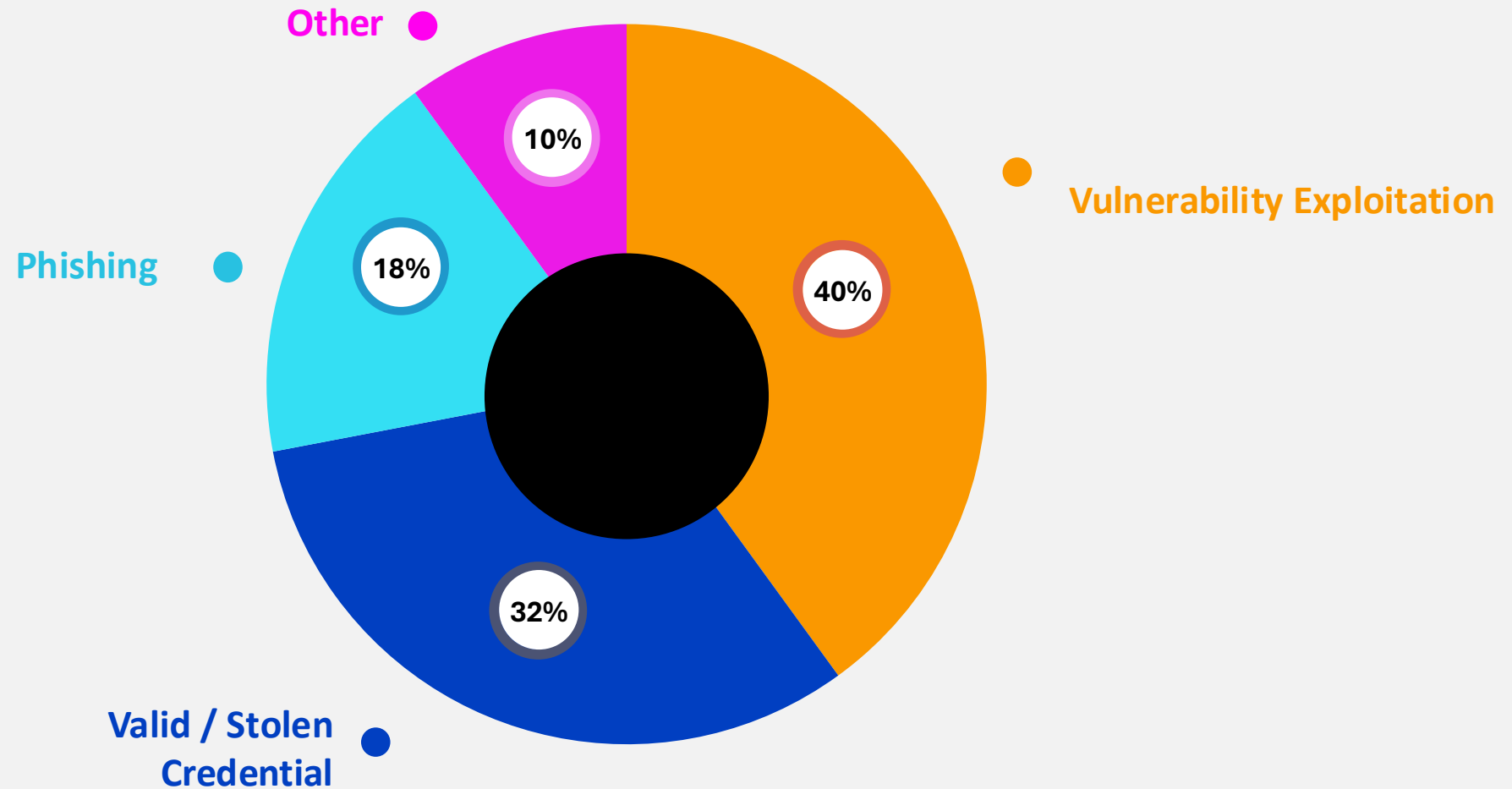
Enables real-time phone-based social engineering



## Staff Training Alone is no Longer Sufficient

Layered technical controls are essential

# How Attackers Get In



So how is this happening?

**Your Domain**  
*Is Their Weapon*

**In plain terms:** the signpost is still up, but the destination is empty — and anyone can move in and put their own content there, under the a trusted brand.

# Subdomain Takeovers

*"Its free real estate"*



**You decommission  
a cloud service**

*Azure, AWS, Github – Resource  
Deleted*



**You forget to  
remove the DNS  
Record**

*CNAME still pointing at  
nothing, dangling*

# Attacker claim it. Now it's theirs

**No Hacking. No access to your systems  
needed. Captured in less than 5 minutes**

# The Trust Problem



**<https://login-micr0s0ft-secure.xyz>**

*Emails filters will catch this.  
Browser flags, and even Dave  
from accounts is going to catch  
this one*



**<https://portal.yourcompany.com/login>**

*Trust domain. Your Domain.  
Email Gateway waves it  
through, no one will question it.*

# Now Add AI



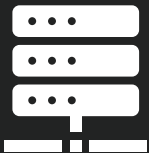
## 1. Takeover

Adversary claims the forgotten subdomain



## 2. Prompt

AI Builds login replica with logging mechanism



## 3. Deploy

Application is deployed to the captured instance



## 4. Harvest

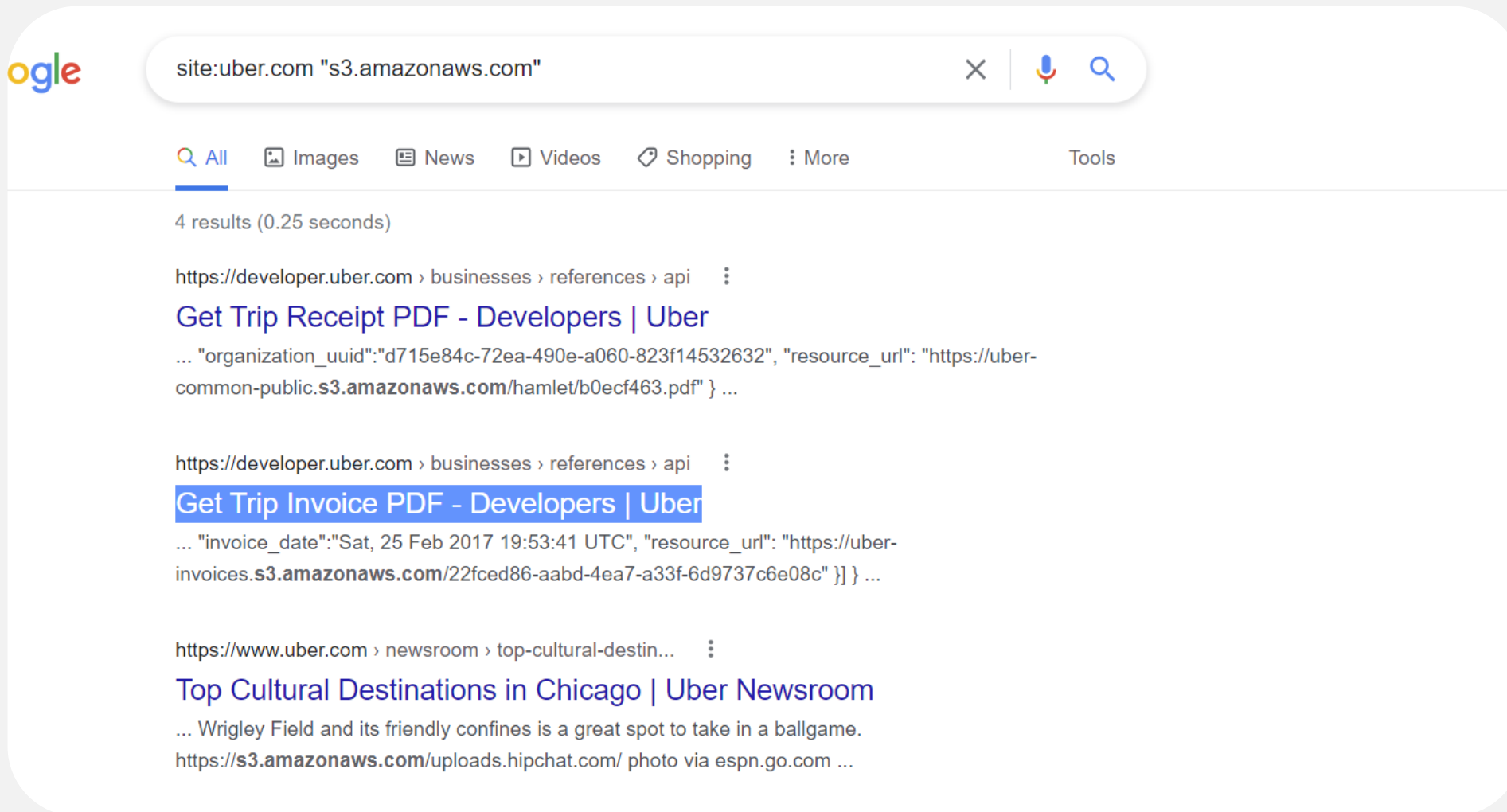
Data is fed back to a command and control. Credentials, Payment details etc.

# This Isn't Theoretical

**It's a wide problem, only  
growing as business  
grow**

- 34x US Universities  
Compromised
- 2,000+ exploitable DNS  
records at ONE organisation
- Attacks are happening, now

# Let's See It For Real



Google search results for the query "site:uber.com \"s3.amazonaws.com\"". The search bar shows the query and icons for clearing, voice search, and search. Below the search bar are navigation tabs for All, Images, News, Videos, Shopping, More, and Tools. The results section shows 4 results in 0.25 seconds. The first two results are for Uber developer resources: "Get Trip Receipt PDF - Developers | Uber" and "Get Trip Invoice PDF - Developers | Uber". The third result is "Top Cultural Destinations in Chicago | Uber Newsroom".

Google

site:uber.com "s3.amazonaws.com" × | 🔊 🔍

[All](#) [Images](#) [News](#) [Videos](#) [Shopping](#) [More](#) [Tools](#)

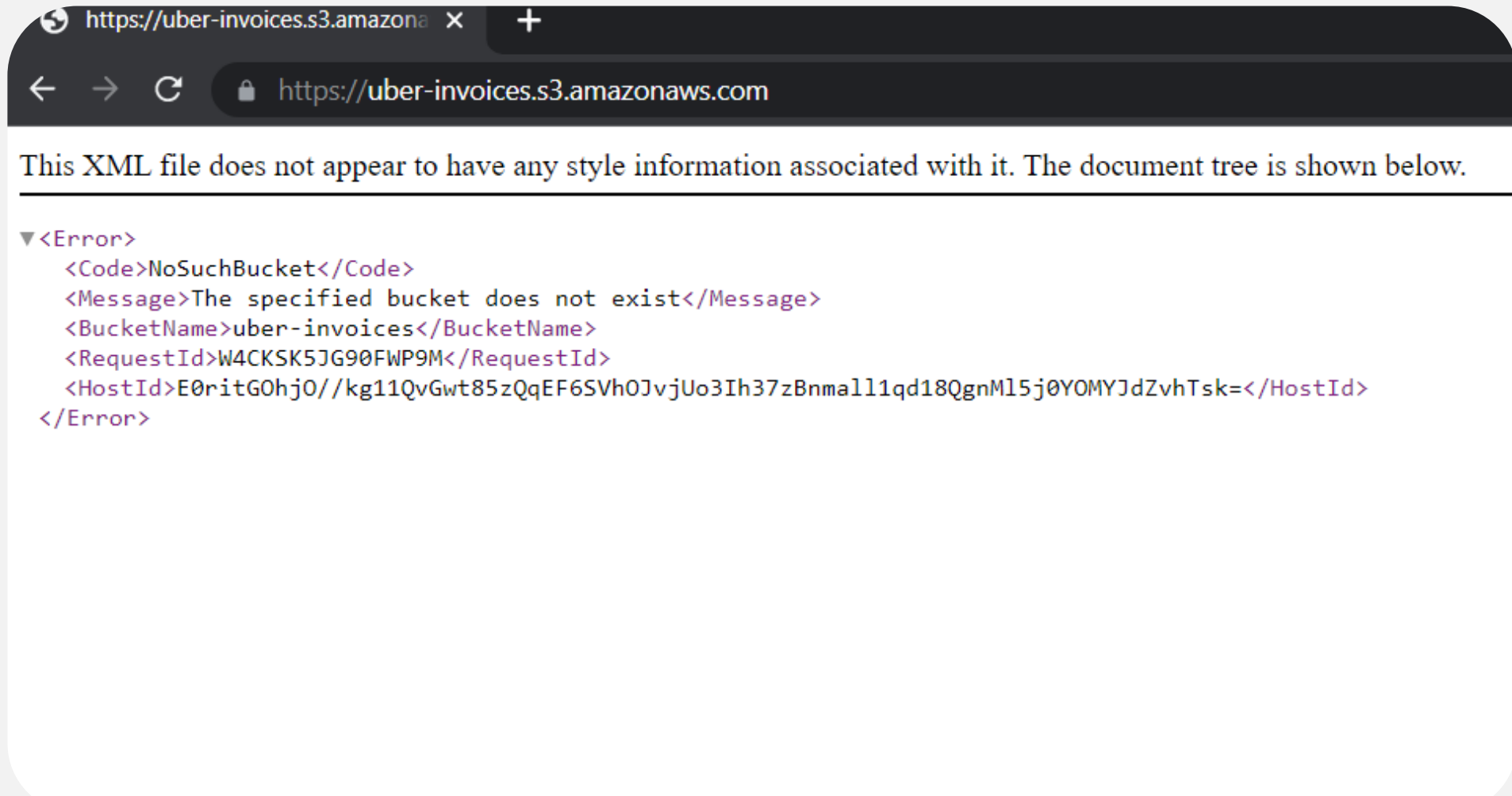
4 results (0.25 seconds)

[https://developer.uber.com > businesses > references > api](https://developer.uber.com/businesses/references/api) ⋮  
**Get Trip Receipt PDF - Developers | Uber**  
... "organization\_uuid":"d715e84c-72ea-490e-a060-823f14532632", "resource\_url": "https://uber-common-public.s3.amazonaws.com/hamlet/b0ecf463.pdf" } ...

[https://developer.uber.com > businesses > references > api](https://developer.uber.com/businesses/references/api) ⋮  
**Get Trip Invoice PDF - Developers | Uber**  
... "invoice\_date":"Sat, 25 Feb 2017 19:53:41 UTC", "resource\_url": "https://uber-invoices.s3.amazonaws.com/22fced86-aabd-4ea7-a33f-6d9737c6e08c" }} ...

[https://www.uber.com > newsroom > top-cultural-destin...](https://www.uber.com/newsroom/top-cultural-destin...) ⋮  
**Top Cultural Destinations in Chicago | Uber Newsroom**  
... Wrigley Field and its friendly confines is a great spot to take in a ballgame.  
[https://s3.amazonaws.com/uploads.hipchat.com/ photo via espn.go.com](https://s3.amazonaws.com/uploads.hipchat.com/photo_via_espn.go.com) ...

# Let's See It For Real

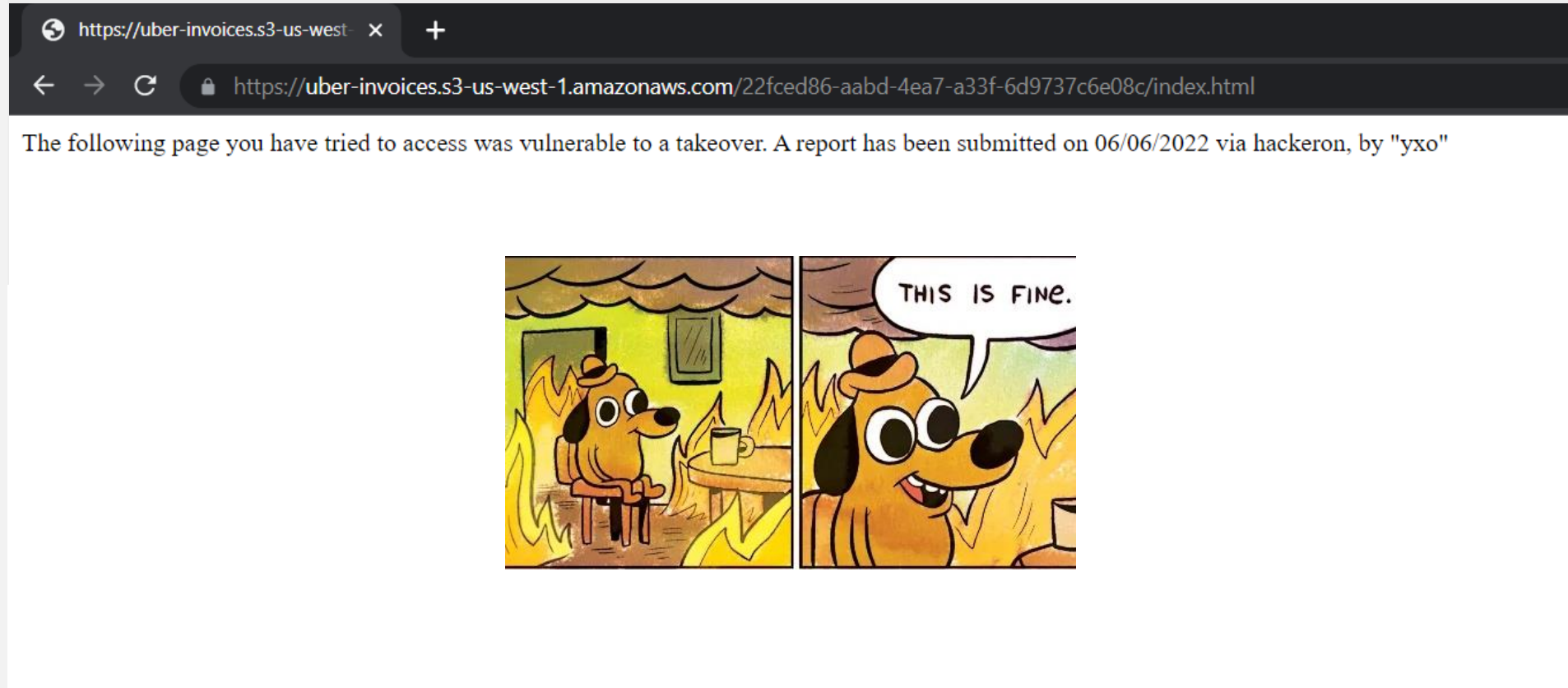


A screenshot of a web browser window. The address bar shows the URL `https://uber-invoices.s3.amazonaws.com`. Below the address bar, a message states: "This XML file does not appear to have any style information associated with it. The document tree is shown below." The XML content is displayed as follows:

```
▼<Error>
  <Code>NoSuchBucket</Code>
  <Message>The specified bucket does not exist</Message>
  <BucketName>uber-invoices</BucketName>
  <RequestId>W4CKSK5JG90FWP9M</RequestId>
  <HostId>E0ritG0hj0//kg11QvGwt85zQqEF6SVh0JvjUo3Ih37zBnmall1qd18QgnMl5j0Y0MYJdZvhTsk=</HostId>
</Error>
```

**Register > Upload > Serve**

# Let's See It For Real



**Only a S3 bucket... What's the  
harm... Right?**

# Ooh no.....

er ▾	operation ▾	useragent ▾	request_uri
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /favicon.ico HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /favicon.ico HTTP/1.1"
	REST.GET.OBJECT	"Mozilla/5.0 (iPad; CPU OS 12_5_5 like Mac OS X) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/12.1.2 Mobile/15E148 Safari/604.1"	"GET /d2a15e04-7c2d-41fc-81b2-9abb4ec98e8d?Signature=XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX&Expires=1474815844&AWSAccessKeyID=AKIAIOSFODNN7EXAMPLE" HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon-precomposed.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon-precomposed.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon-152x152.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon-152x152.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon-152x152-precomposed.png HTTP/1.1"
	REST.GET.OBJECT	"MobileSafari/604.1 CFNetwork/978.0.7 Darwin/18.7.0"	"GET /apple-touch-icon-152x152-precomposed.png HTTP/1.1"

**We often see these services be  
linked to a lot more...**

# That's not good....

[REDACTED].53

"https://uber-invoices.s3.amazonaws.com/"

REST.GET.OBJECT

"Mozilla/5.0 (Macintosh; Intel Mac OS X 10\_15\_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/102.0.0.0 Safari/537.36"

[REDACTED].53

"https://t3.uberinternal.com/"

REST.GET.BUCKET

"Mozilla/5.0 (Macintosh; Intel Mac OS X 10\_15\_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/102.0.0.0 Safari/537.36"



"https://uber-invoices.s3.amazonaws.com/"

REST.GET.OBJECT

"Mozilla/5.0 (Macintosh; Intel Mac OS X 10\_15\_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/102.0.0.0 Safari/537.36"

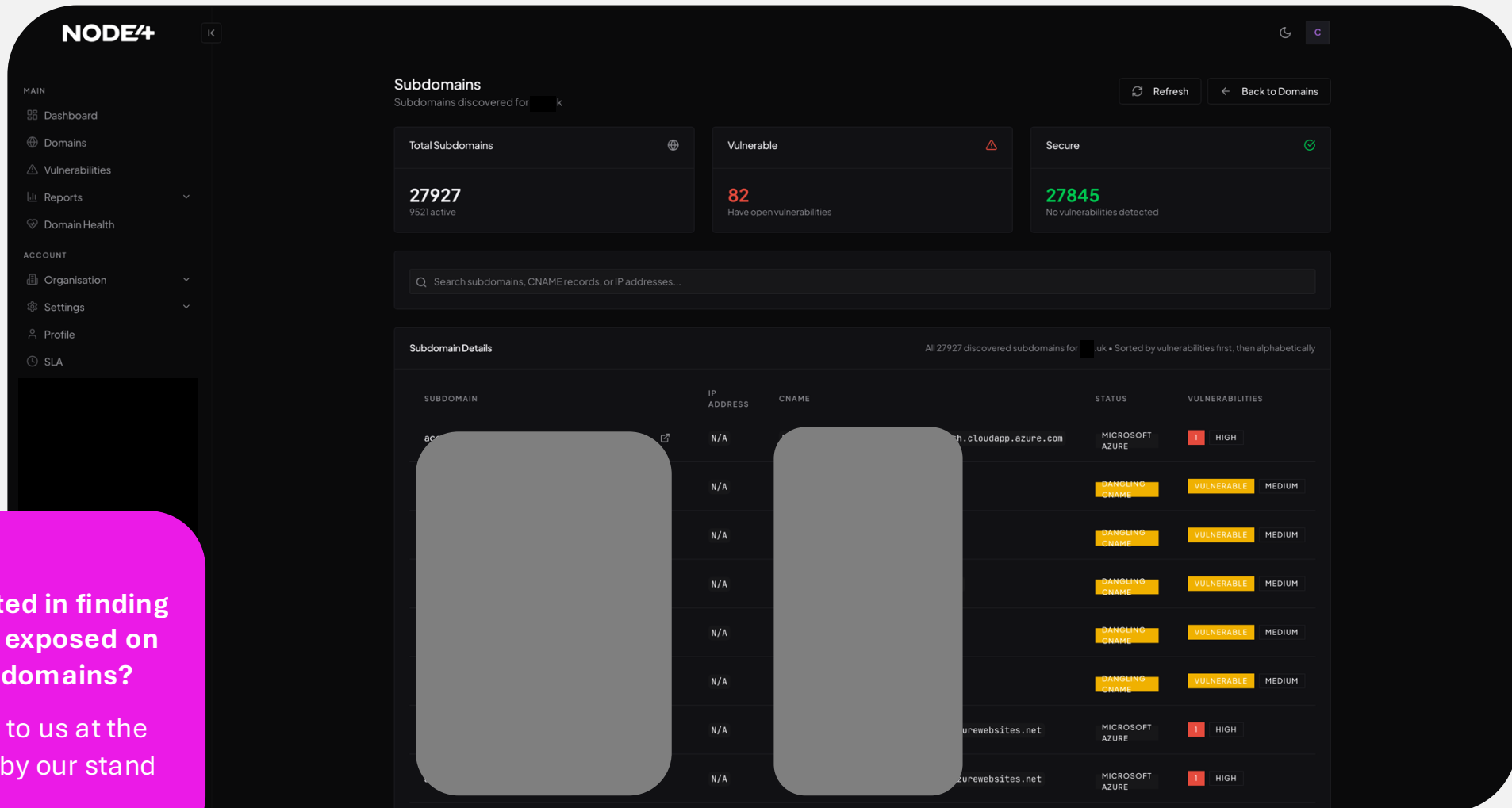
"https://t3.uberinternal.com/"

REST.GET.BUCKET

"Mozilla/5.0 (Macintosh; Intel Mac OS X 10\_15\_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/102.0.0.0 Safari/537.36"

**Now imagine this being your  
business... what could an  
adversary get?**

# The Scale Of The Problem



Interested in finding what's exposed on your domains?

Speak to us at the end or by our stand

# Detection Isn't Enough



Detect The Risk

- Monitor Attack Surface
- Find Dangling DNS
- Watch CT Logs



Make Credentials Worthless

- SSO & Passkeys
- Conditional Access
- Device Compliance

**Demo Time**

# Beyond MFA



Payroll Update  
Payroll Update <payrollservices@payrolltooling.com>  
To: Adele Vance  
Fri 9/12/2025 2:15 PM

Adele Vance, Your payroll details need updating, please click below to start the update.

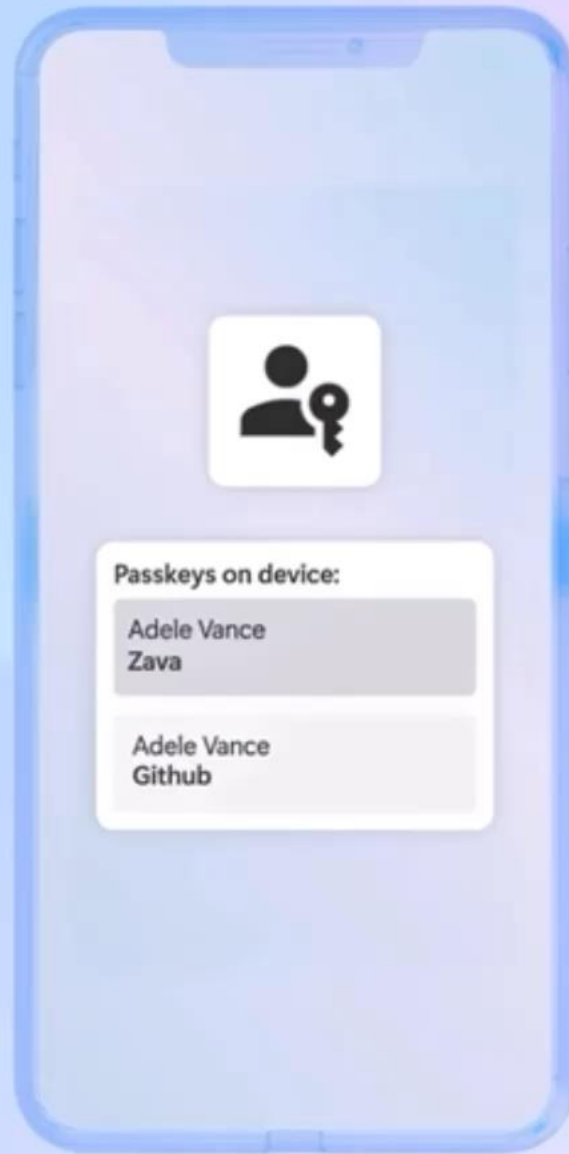
[UPDATE YOUR ACCOUNT DETAILS](#)

Failure to update your account details will result in delays with your salary being processed. Please make sure to update the details at least 5 days before the next Payroll cycle to avoid a unnecessary delay in processing.

Please let us know if you have any questions.

Zava payroll team

# Device-bound passkeys





Archie Bazarbaykyzy  
arba15@woodgrove.ms



Overview



Security info



Devices



Change Password



Organizations



Settings & Privacy



Recent activity



My Apps



My Groups



My Access

## Security info

These are the methods you use to sign into your account or reset your password.

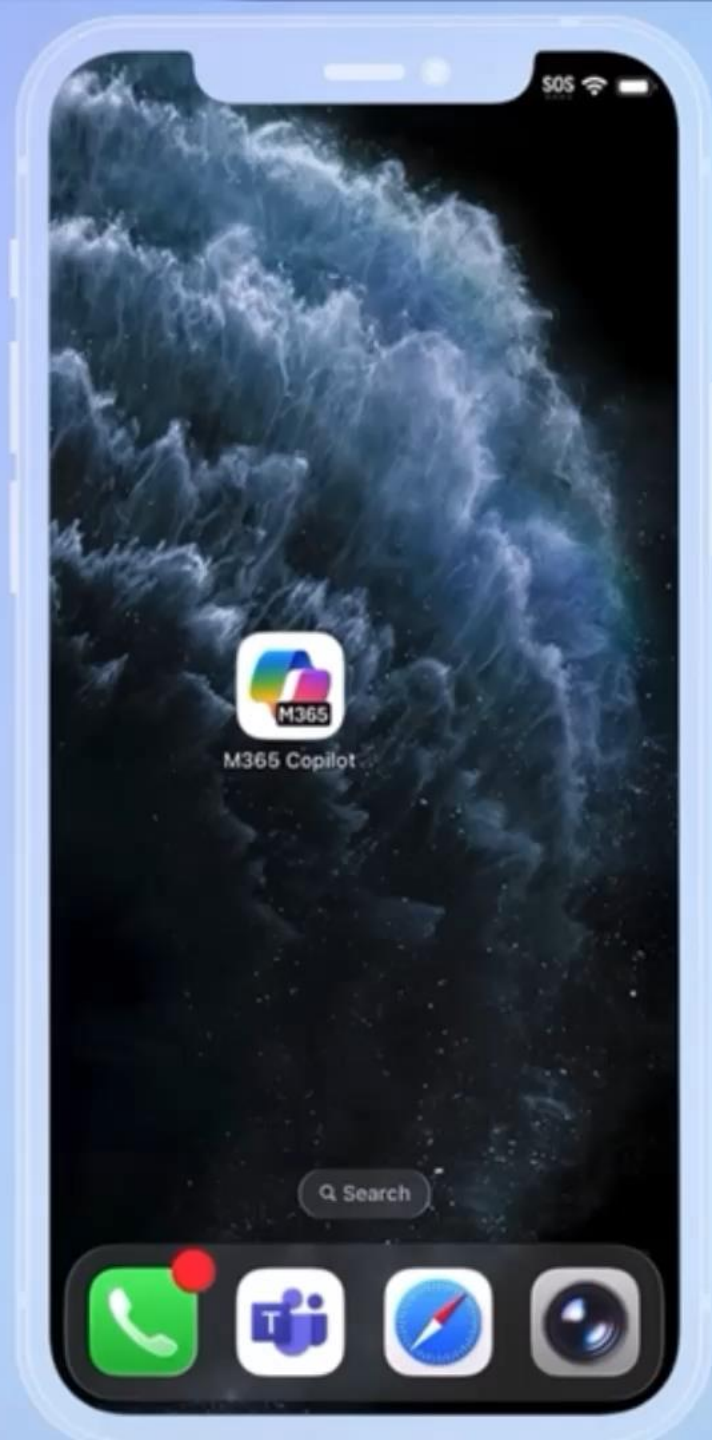
You're using the most advisable sign-in method where it applies.

Sign-in method when most advisable is unavailable: Microsoft Authenticator - notification Change

+ Add sign-in method

 Microsoft Authenticator Passwordless sign-in	GooglePixel Fold	Delete
 Passkey (device-bound) Microsoft Authenticator	Authenticator: Default Profile Android device	Delete 

Lost device? Sign out everywhere



# Welcome to the Microsoft 365 Copilot app

Your everyday AI companion that understands your work, helps you stay focused, and moves you from idea to impact with less friction and more flow.

Sign in

Get Microsoft 365

## Start a conversation with these prompts in Microsoft 365 Copilot Chat\*

### Improve my writing

Rewrite this text to make it more professional and less verbose.

Try this prompt

### Create an image

Design an image of a drawing of a database in colored pencil.

Try this prompt

### Coach me

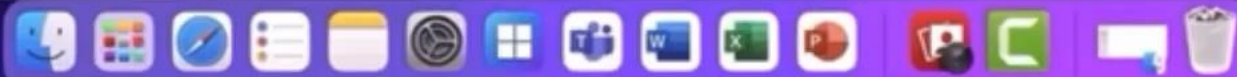
Tell me best practices for creating a persuasive presentation.

Try this prompt

### Visualize my data

Create a bar chart of [energy c- top 5 energy consuming count

Try this prompt

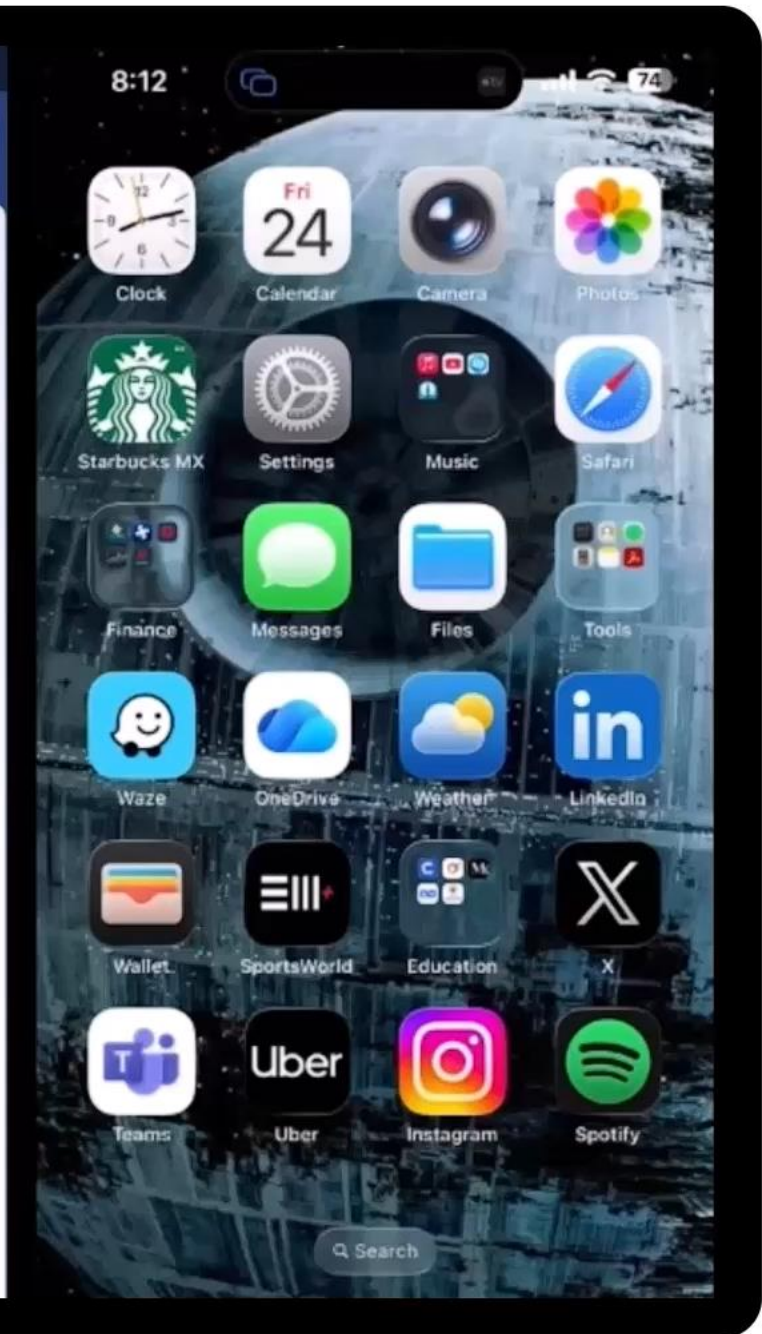
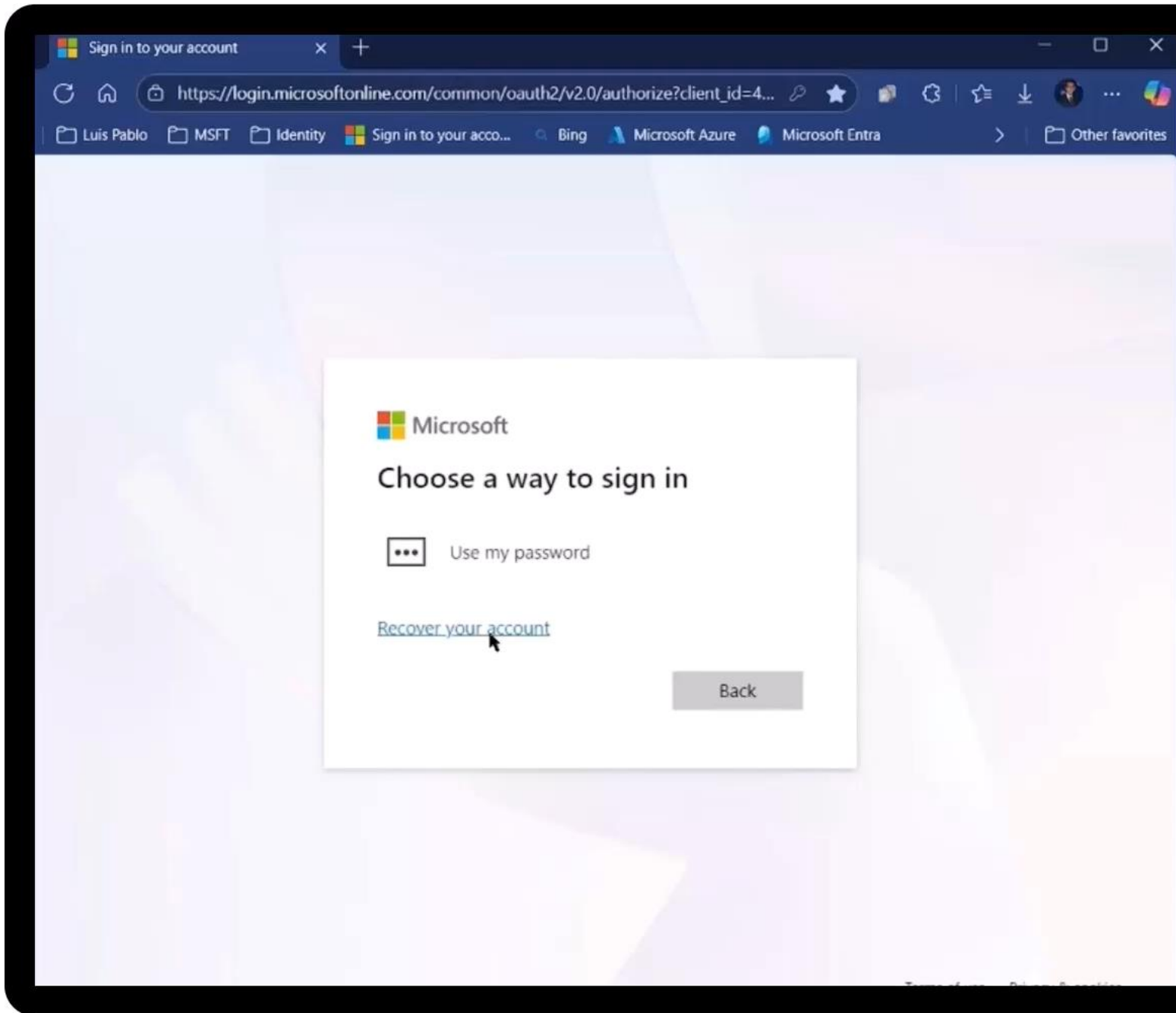




VS

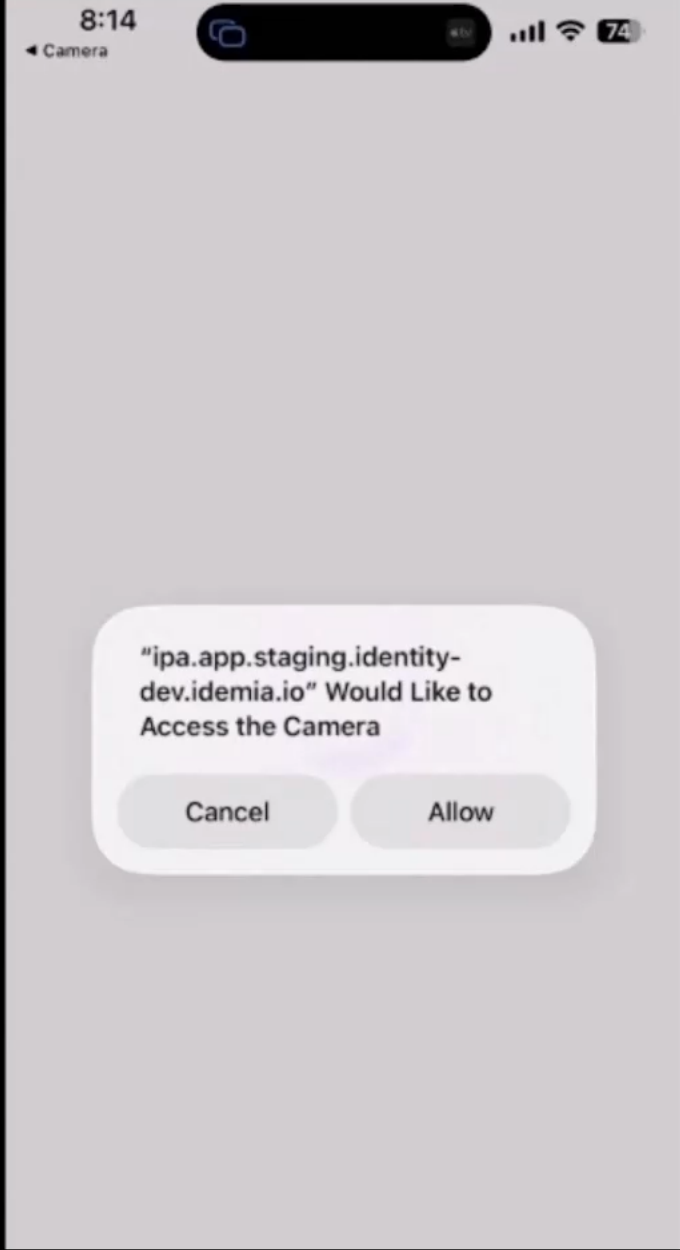
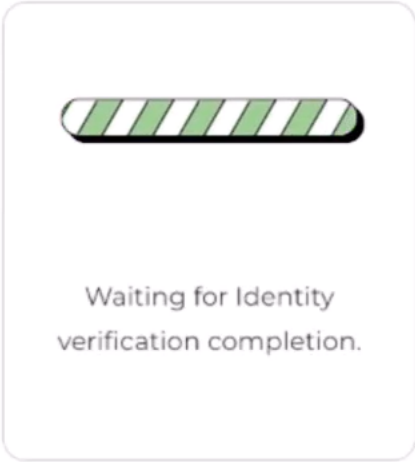


**Face ID**



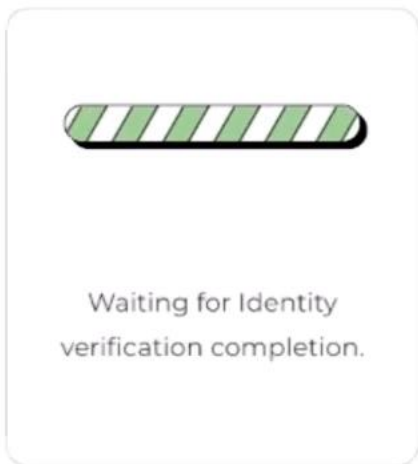
## Follow the instructions on your Mobile Device

You'll be automatically redirected back to where you started at the end of the process.



## Follow the instructions on your Mobile Device

You'll be automatically redirected back to where you started at the end of the process.



### Review the results.

Before submitting photos, make sure that:

- All corners are visible
- All data is visible (nothing is covered)
- No glares and shadows

### Front



Submit photos

Retake photo

Let's recover your account x Proofing App x +

https://ipa.app.staging.identity-dev.idemia.io/?tokenId=8115612a-cc8b-4119-be7a...


Luis Pablo MSFT Identity Sign in to your acco... Bing Microsoft Azure Microsoft Entra Other favorites

You have successfully completed the process.

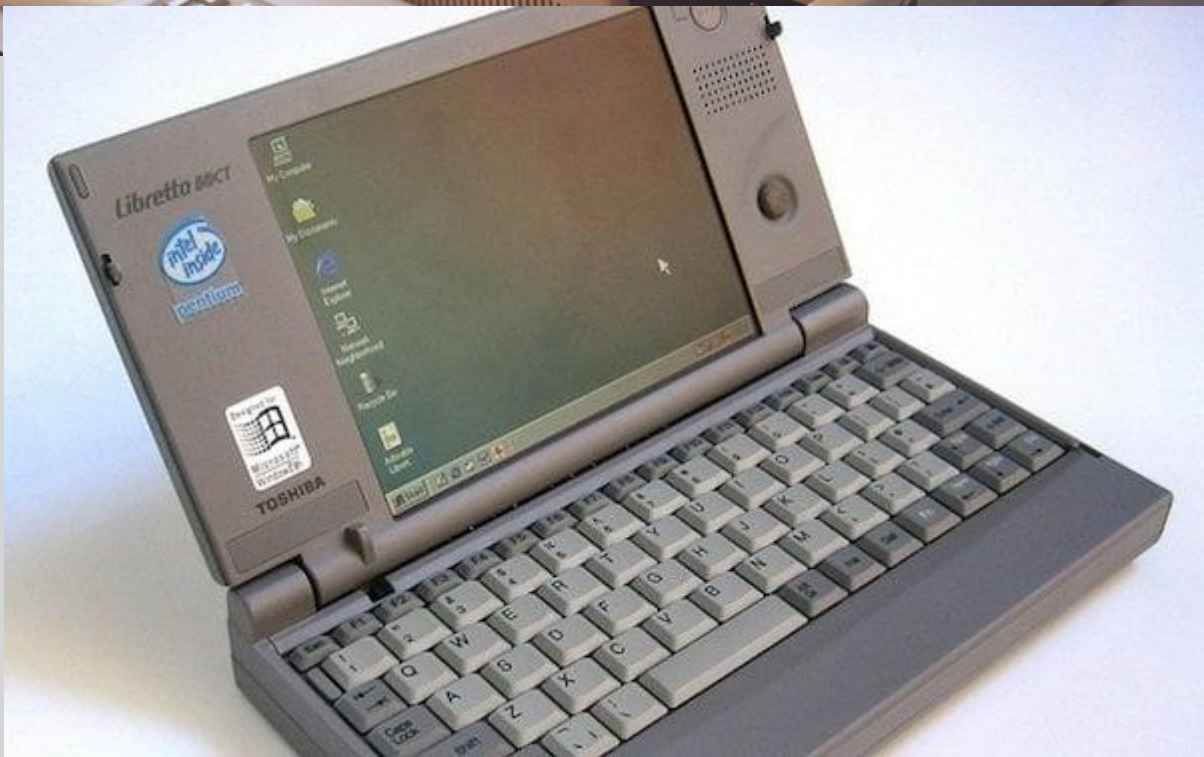
File Explorer

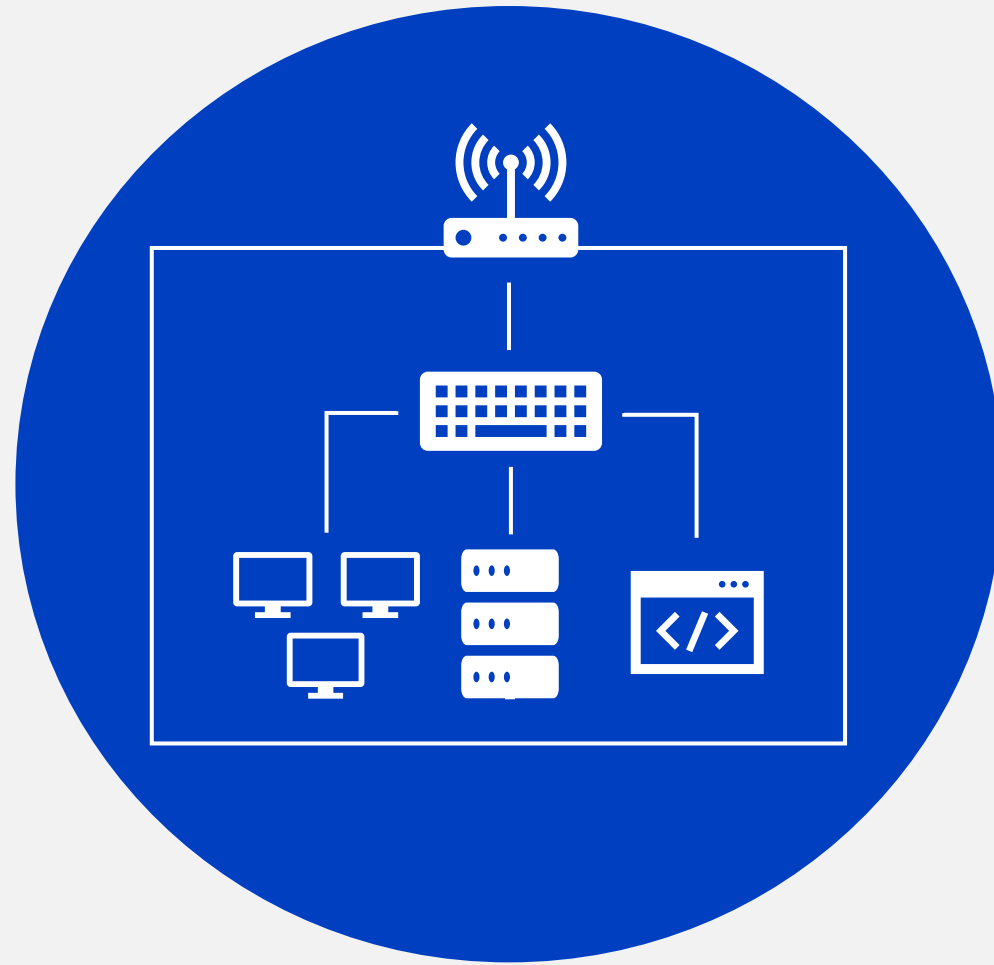
8:16 Safari

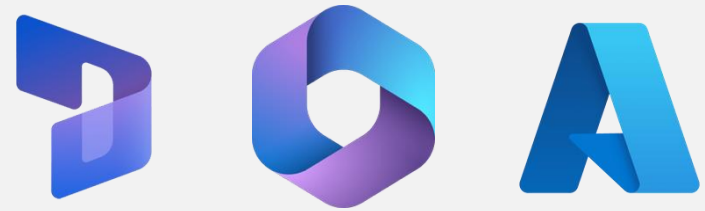
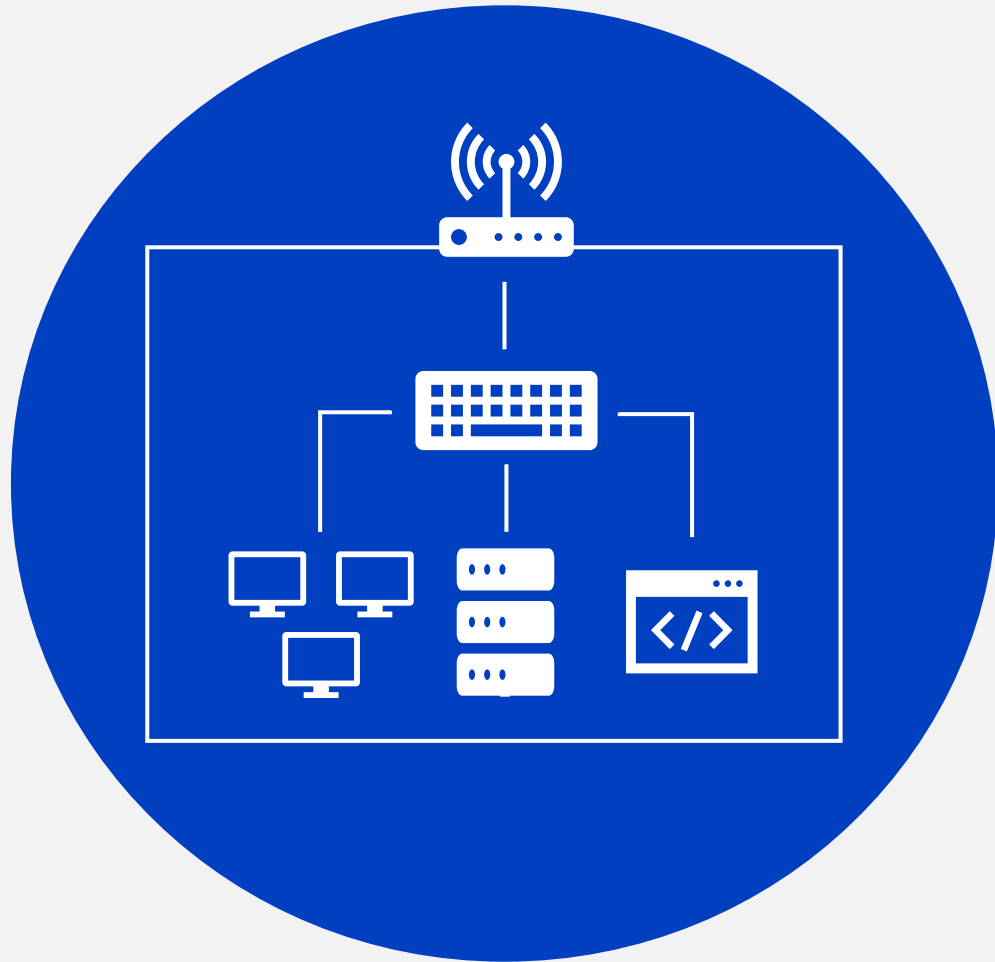
Success



**Trust is King**



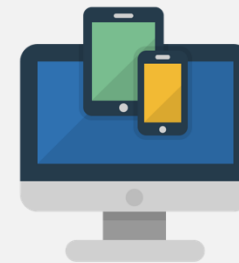




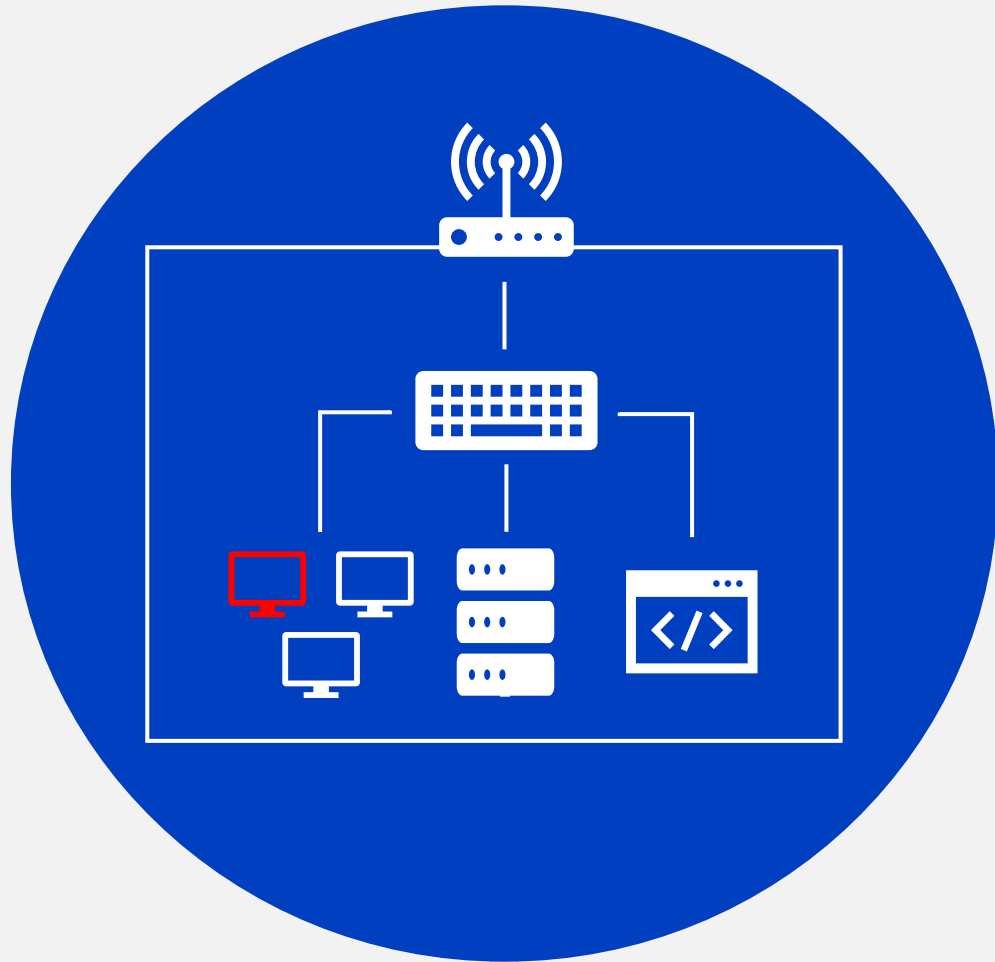
Cloud Apps & Services



Remote Working



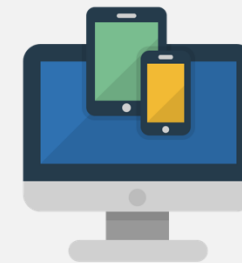
User Owned Devices



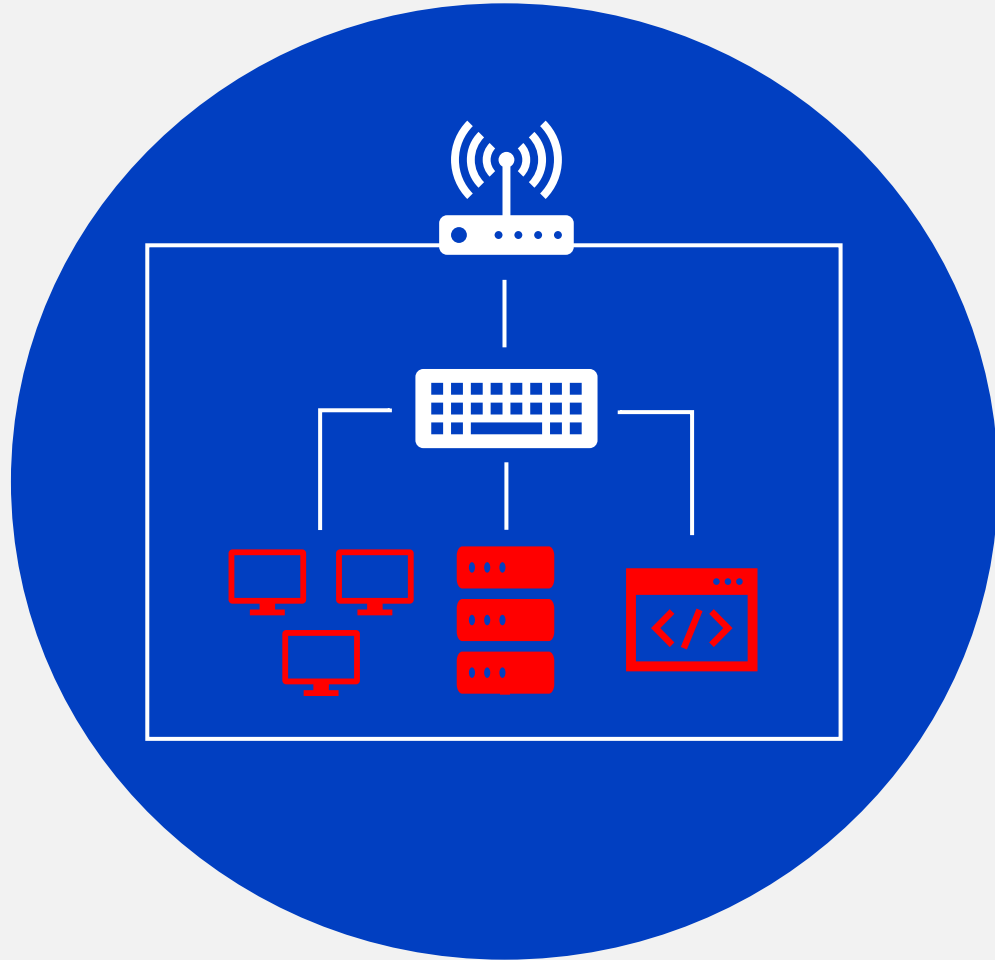
Cloud Apps & Services



Remote Working



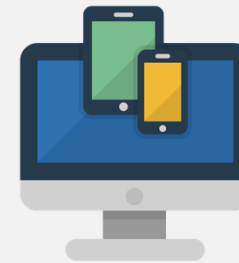
User Owned Devices



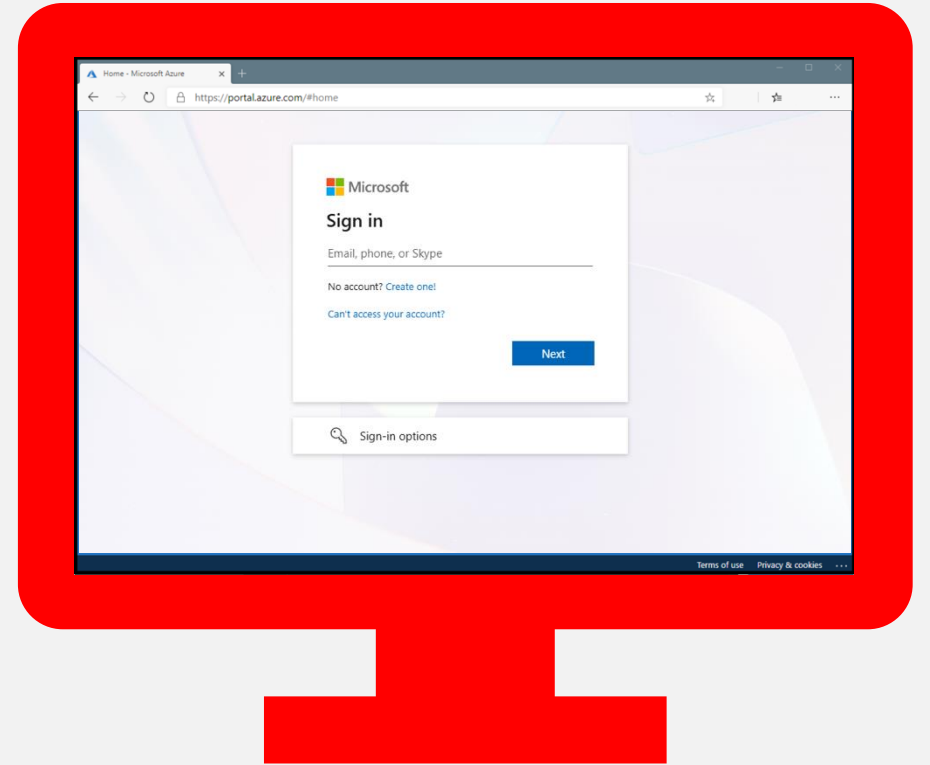
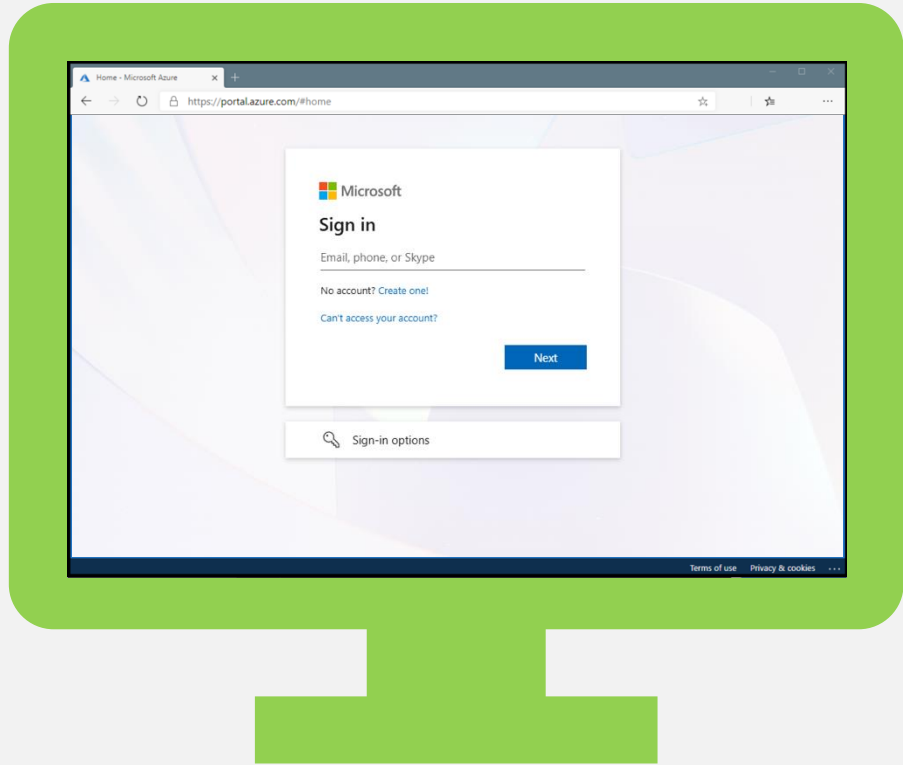
Cloud Apps & Services

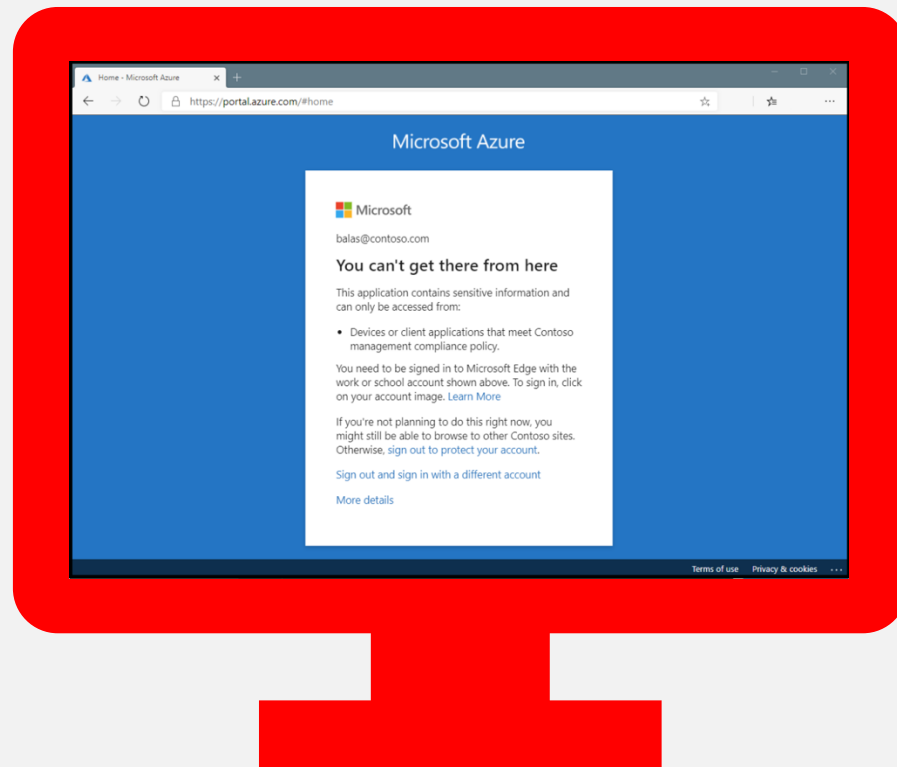
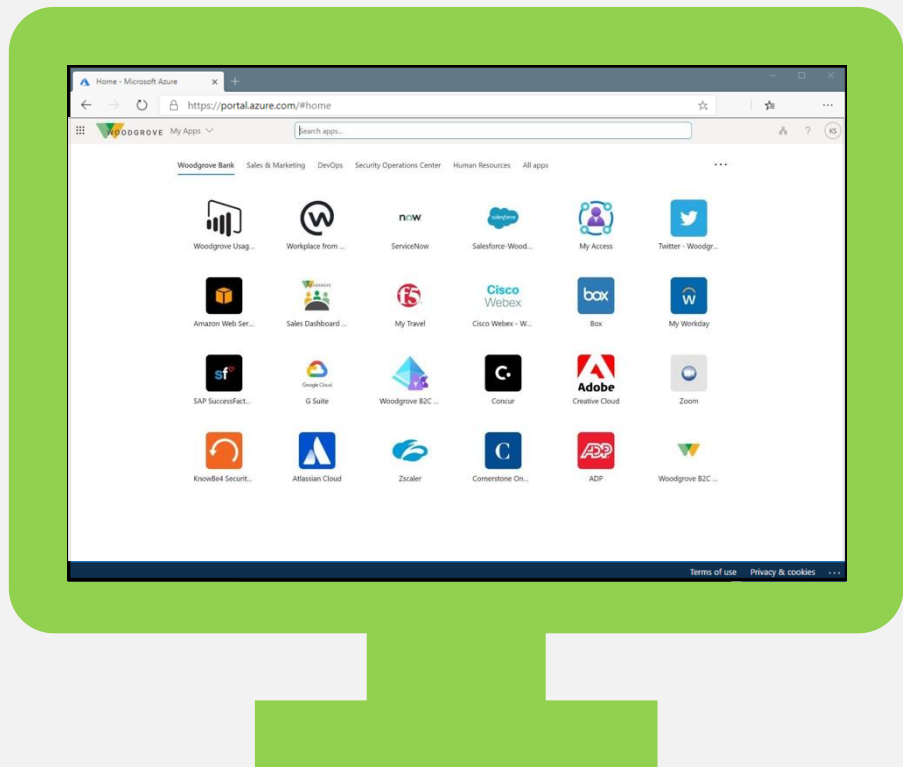


Remote Working



User Owned Devices





**Wrap Up**

# You're Only as Strong as Your Weakest Supplier

## Attackers Exploit Trust Relationships

SaaS integrations, CI/CD pipelines, managed service connections

## Geopolitical Shift

Events create supply chain cyber risk for companies in affected regions

## Being Proactive

Due diligence, continuous monitoring, and contractual security requirements are essential

# Takeaways

## The Threat Landscape Has Shifted

Geopolitical conflict and AI have changed the speed, scale, and sophistication of attacks. This is not business as usual.

# 01

## Identity is the New Battleground

Cloud identity infrastructure (Entra ID, Intune, IAM) is where the most impactful attacks are happening.

# 02

## The Basics Still Matter the Most

MFA, patching, backups, and incident planning prevent the vast majority of successful attacks.

# 03

**Any Questions?**

# Thank You.

[node4.co.uk](https://node4.co.uk)

 [linkedin.com/in/ncdlloyd](https://linkedin.com/in/ncdlloyd)

 [linkedin.com/in/callumrbutler](https://linkedin.com/in/callumrbutler)

