

What's new in implement a Passwordless practice?

How hard can it be!



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About “Ronny de Jong”

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Agenda

Key takeaways:

- **Determine your passwordless state with activity monitoring**
- **Get used & deploy at least one passwordless method**
- **Nudge your end-users**

- **Introduction of Passwordless**
Because passwords are not enough...
- **Define a Passwordless strategy**
Determine your deployment journey
- **Windows Hello for Business Cloud Trust**
What is cloud trust & why should I plan to use it?
- **Temporary Access Pass**
Bootstrap your identities without passwords
- **Next steps**
Tips & tricks to kickstart your Passwordless deployment

Introduction of Passwordless

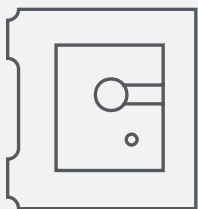
Because passwords are not enough...





Introduction of Passwordless

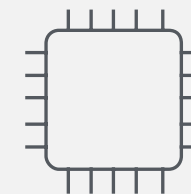
What is Passwordless?



Promise to remove attack vector of standalone passwords



A better user experience than Passwords + Multi-Factor Authentication



Strong, device-based authentication methods

- Windows Hello for Business
- Microsoft Authenticator – Passwordless phone sign-in
- FIDO2 security keys (platform and external)



Introduction of Passwordless

Why Passwordless is important?

Year	Company	Impact
2018	Blank Media	7.6 million compromised accounts
2018	Quora	100 million compromised accounts
2018	Facebook	50 million compromised accounts
2018	Cathay Pacific	9.4 million compromised accounts, including 860 thousand passport numbers
2018	Marriot	500 million compromised accounts
2017	Equifax	143 million accounts exposed, including 209k credit card numbers
2016	Uber	57 million compromised accounts
2016	MySpace	360 million compromised accounts
2016	Linkedin	117 million emails and passwords leaked
2015	Anthem Inc	80 million company records were hacked, including social security numbers
2014	ebay	145 million compromised accounts
2013	Target	110 million compromised accounts
2013	Yahoo	All 3 billion accounts compromised

Source: Visual Capitalist

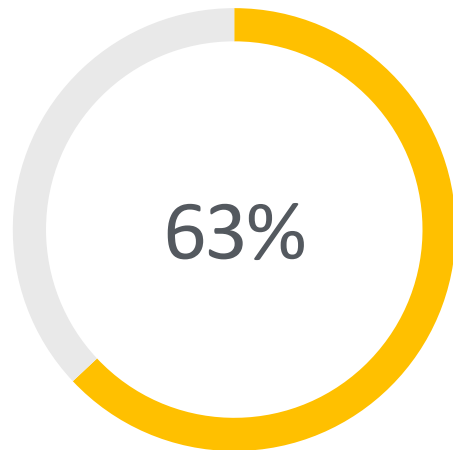


Introduction of Passwordless

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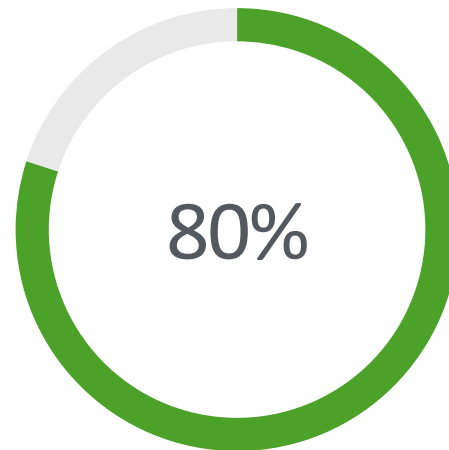
Passwords are expensive & vulnerable to breaches

Password reuse across
multiple accounts



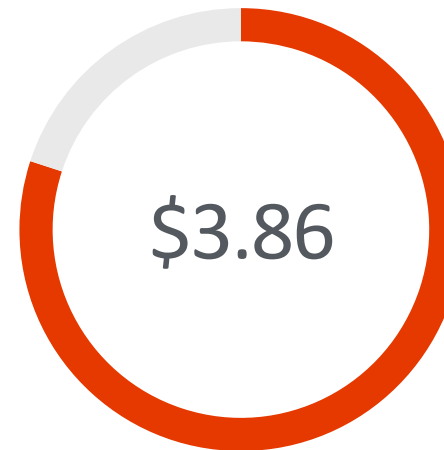
of workers admit to reuse of
passwords

Passwords are the
weak link



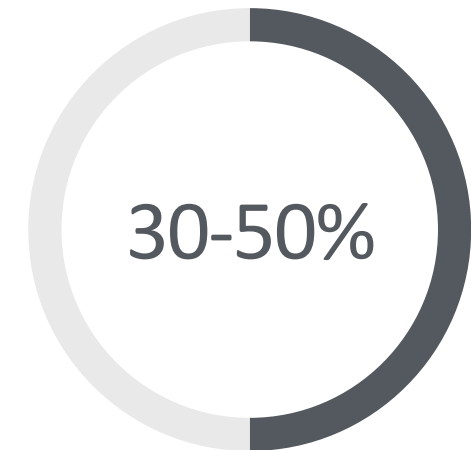
of breaches leveraged passwords

Data breaches are
expensive



million, the average total cost of a
data breach

Passwords generate tons
of support calls



of help desk calls are related to
password resets



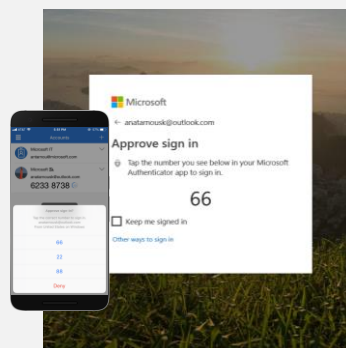
Introduction of Passwordless

What Passwordless options we have?

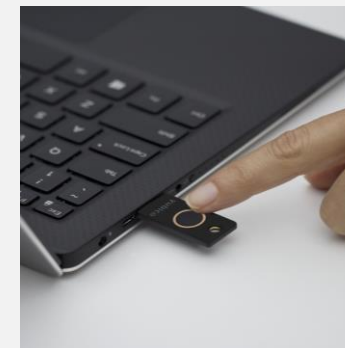
- Make sign-in even more convenient and secure



Windows Hello



Microsoft Authenticator



FIDO2 Security Keys

Define a Passwordless strategy

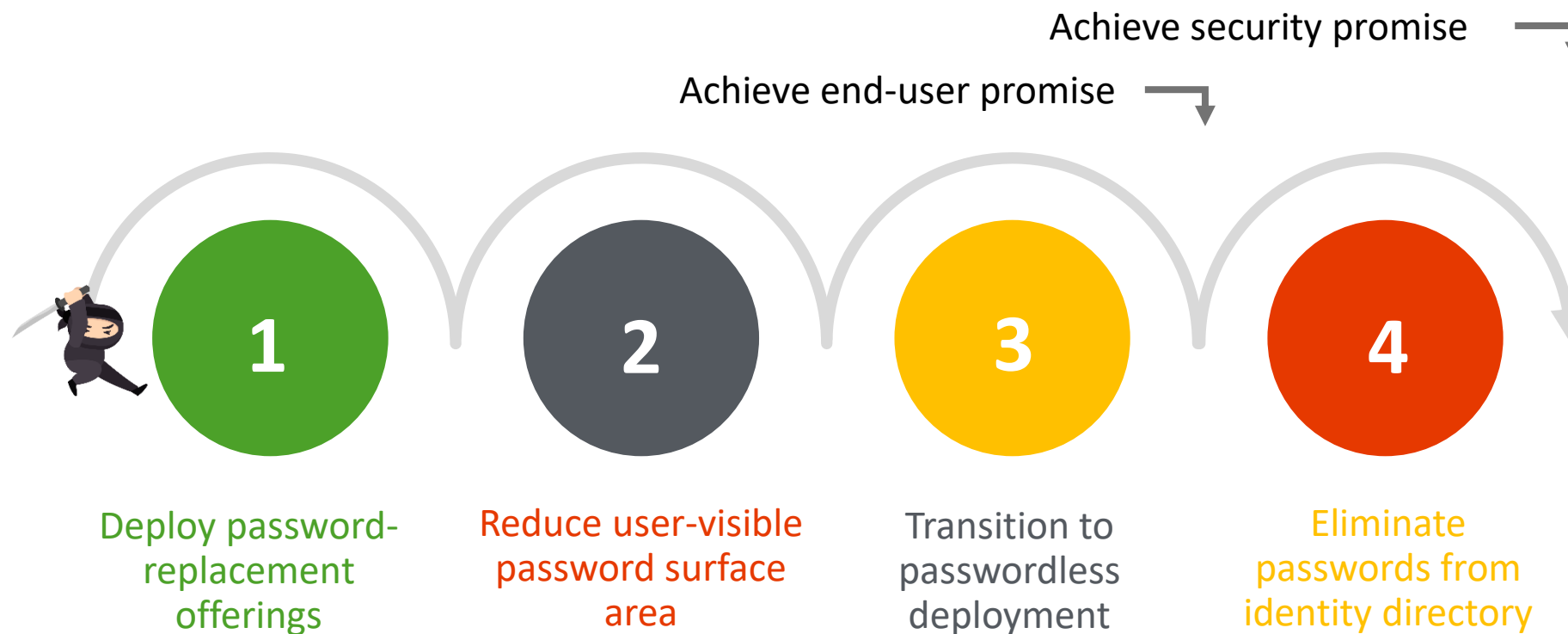
Prepare for the journey to a password freedom...





Define a Passwordless strategy

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Define a Passwordless strategy

- Determine which Passwordless **method(s)** applies/fits my organization?
 - Requirements in place (TPM, corporate phone, shared devices)
 - Priority of Passwordless methods
 - Complexity of Passwordless methods
- Create a plan to introduce/implement in a phased approach.
 - Identity of your organization (departments, applications, work personas, IT structure)
 - Low hanging fruit/value add
- Be open for **innovation**. Passwordless is relatively new and develops continuous.
- User adoption is key!



Define a Passwordless strategy

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Presence in
Azure AD



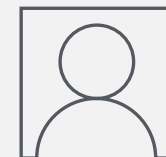
Modern Apps on
Azure AD



Device &
Platform Ready



Securely
Bootstrap Creds



Drive User
Registration



Track Rollout
and Usage

Windows Hello for Business

Cloud Trust



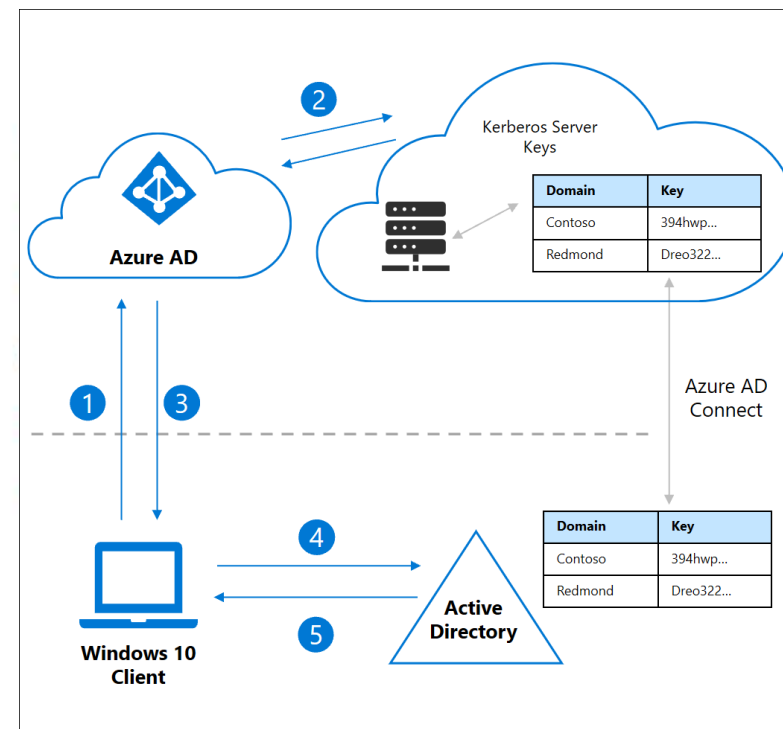


Windows Hello for Business Cloud Trust

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- What is Windows Hello for Business Cloud Trust?

- Allows users to sign into their device with biometrics or a PIN
- Breach, theft, and phish resistant credentials
- Single sign-on experience



On Premises Certificate Trust

- Device is not AAD Registered
- No Certificate Deployed to Device
- Requires 2016 ADFS

Not Modern!

st!

1. User signs into their Windows 10 device key and authenticates to Azure AD.
2. Azure AD checks the directory for a Kerberos server key matching the user's on-premises AD domain.
 - a. Azure AD generates a Kerberos TGT for the user's on-premises AD domain. The TGT only includes the user's SID. No authorization data is included in the TGT.
3. The TGT is returned to the client along with their Azure AD Primary Refresh Token (PRT).
4. The client machine contacts an on-premises AD domain controller and trades the partial TGT for a fully formed TGT.
5. The client machine now has an Azure AD PRT and a full Active Directory TGT and can access both cloud and on-premises resources.



Windows Hello for Business Cloud Trust

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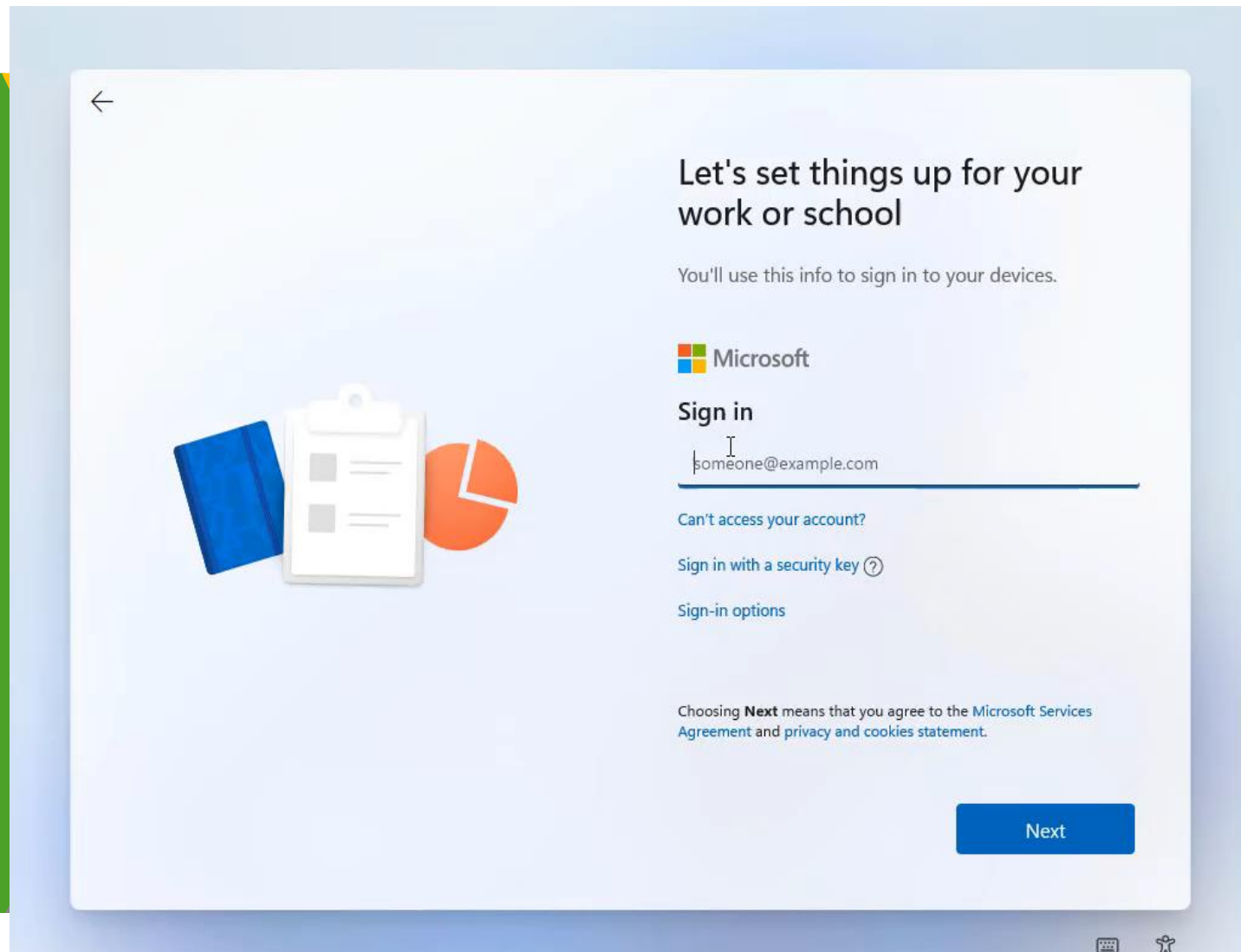
- Why using Cloud Trust?
 - Simplify Windows Hello for Business deployments
- What are we solving with Cloud Trust?
 - No PKI infrastructure required
 - No Azure AD Connect key sync dependency (write back/sync interval of max 30 minutes)
 - *No device write back (applies only for cert trust deployments)*
 - *No ADFS deployment required (applies only for cert trust deployments)*
- Requirements
 - Windows 10 Dev Channel or Windows 11 (21H2 - 10.0.21327 or higher)
 - Azure AD Connect 1.4.32 or higher
 - Windows Server 2008 R2 domain/forest functional level
 - Windows Server 2016/2019 domain controllers (with latest updates)



Demo

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- **Validate Cloud Trust set up**
- **Cloud Trust user experience**
 - Enrollment
 - Instant access to resources



Temporary Access Pass

Bootstrapping your identities...and more

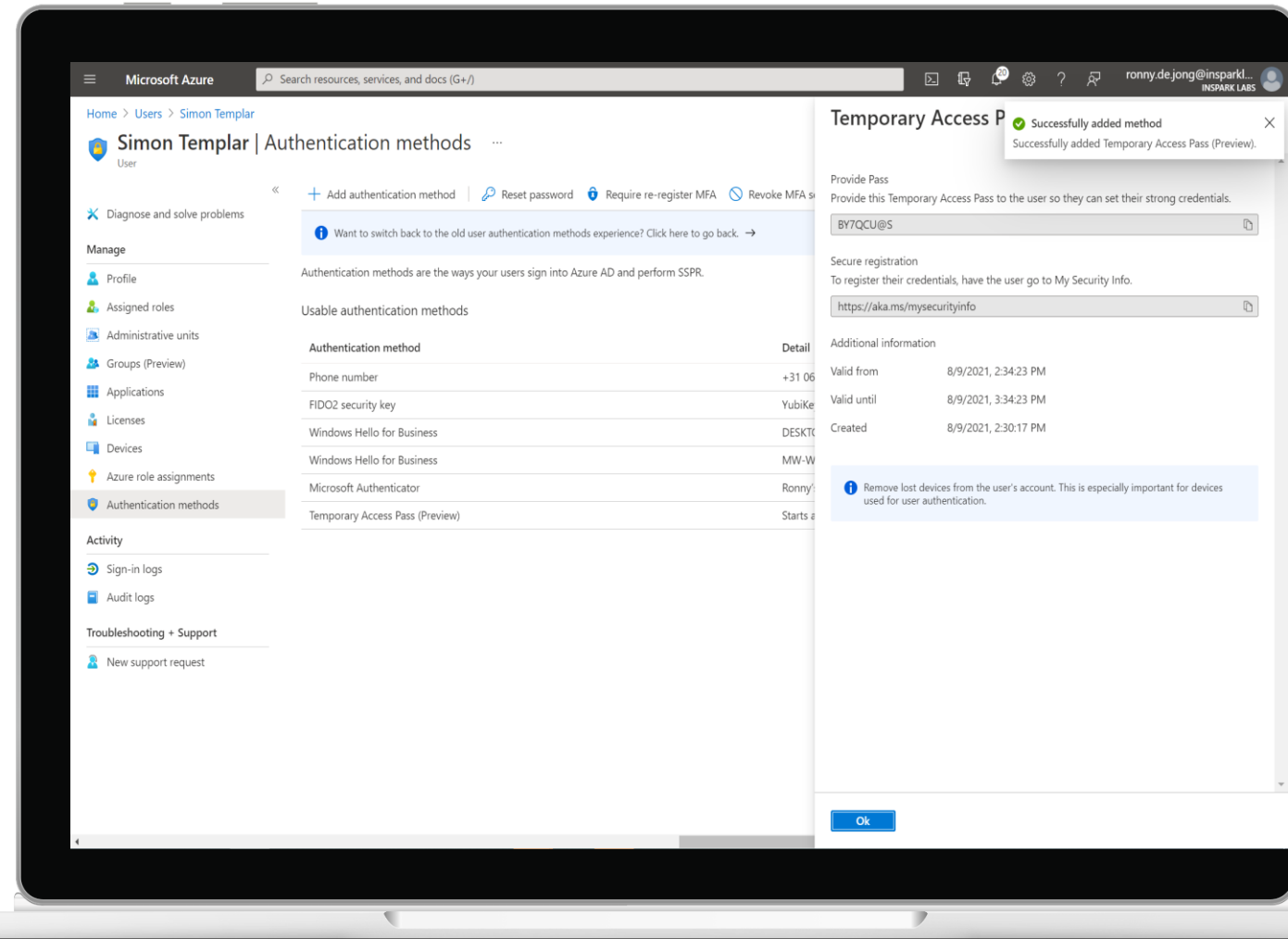




Temporary Access Pass

- Why using TAP?

- Time-limited code for passwordless credentials set up and account recovery
- Enables end-to-end passwordless user journeys and remote onboarding/recovery scenarios
- User can receive a temporary passcode to login and register their account, and then register a passwordless credential
- Streamline initial MFA registration via Authenticator App and set passwordless as primary authentication method

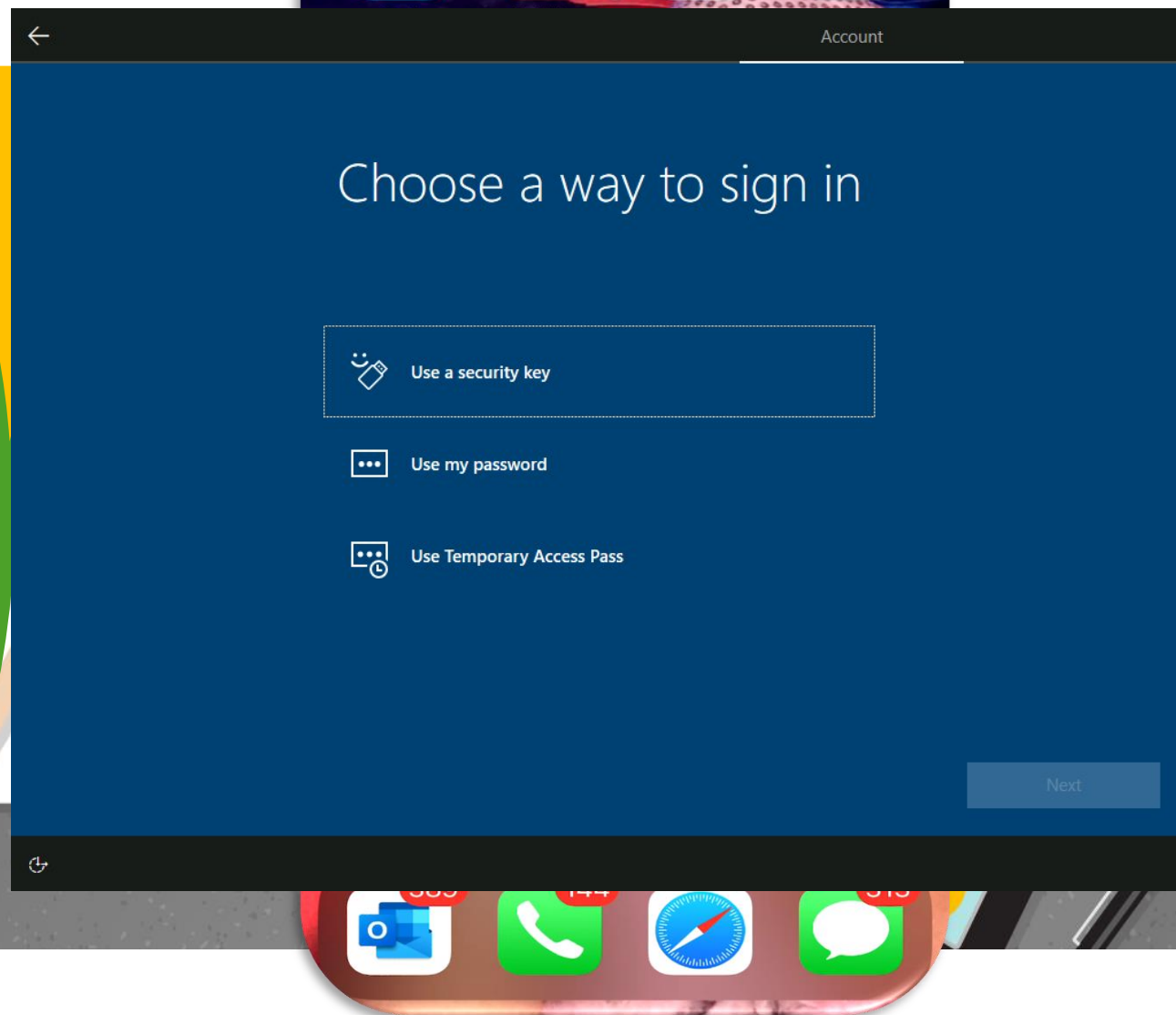




Demo

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- Setup Temporary Access Pass
- Temporary Access Pass user experience
 - Joiner Authenticator App setup (one-time use)





Known challenges/limitations

- Passwords can still not be '**disabled**'. Password surface area (credential providers) is still required.
 - e.g. Remote Desktop, legacy apps, apps with own/local IdP
- Authenticator App
 - Passwordless Phone sign-in limited to a single tenant (Azure AD Registration)
- Nudge will not appear on mobile devices (Android & iOS)
- FIDO2
 - No lock on removal of FIDO-key.
- Windows Hello for Business
 - **No simple migration path** of Windows Hello for Business **Cert-trust** to **Cloud-trust** scenario.
- Temporary Access Pass
 - Cannot be restricted to a specific resource(s) (e.g. Exchange, SharePoint or Windows Autopilot enrollment)



Key takeaways

- Authenticator App
 - Improved registration (combines MFA & SSPR)
 - Nudge your end-users for using Authenticator App 😊
- Phone Sign-in
 - Use TAP for initial Authenticator App enrollment
- Windows Hello for Business Cloud-trust
 - Simplified deployment
 - Instantly active
 - Windows 10 Dev Channel & Windows 11 (Cloud-trust)



How & where to start tomorrow?

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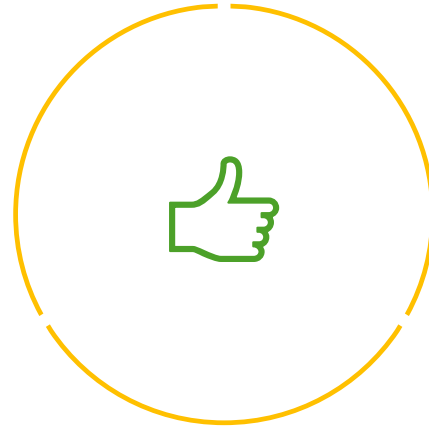
- Create a **Passwordless strategy**.
- Make sure the **correct AD Premium licenses** (P1 or P2) are in place.
- Make sure **Authentication Methods** are configured.
- Validate your **hardware- & software readiness**.
- **Start** deploying at least **one passwordless method**.
- Use **Conditional Access** to **ease** your Authenticator App **deployment(s)**.
- **Bootstrap** your accounts with **Temporary Access Pass**.
- **Boost** your Authenticator App **deployment** by enabling '**Nudge**' functionality.
- **Keep track** on **deployment** (registration & usage) with built-in **reports**.
- Make sure you have **mandate** from your **leadership** (buy-in).
- Explore* your Windows Hello for Business **migration** options to **Cloud-trust** deployment.



Q&A

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Thank You



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