CISCO
SECURE

cisco The bridge to possible

Есть ли жизнь без паролей?

Михаил Кадер
mkader@cisco.com
16.06.2021

The Problems with Passwords

Cumbersome & Costly

20-50%

Help desk tickets are for password related issues

- Gartner Group

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

The Problems with Passwords

Cumbersome & Costly

20-50%

Help desk tickets are for password related issues

- Gartner Group

Poor User Experience

190

# of passwords in use by an average corporate

- LastPass Research

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

The Problems with Passwords

Cumbersome & Costly

20-50%

Help desk tickets are for password related issues

– Gartner Group

Poor User Experience

190

# of passwords in use by an average corporate

– LastPass Research

Easily Compromised

81%

Of breaches involve **weak or stolen credentials**

– Verizon Data Breach Report

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Passwordless: Definition

Passwordless authentication removes the shared secret, or “something you know,” factor from MFA and relies on something you have something you are.

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Passwordless: The Appeal

Why Now?

The ubiquity of
the **smartphone.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Passwordless: The Appeal

Why Now?

The ubiquity of the **smartphone.**

The improvement and prevalence of **biometrics.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Passwordless: The Appeal

Why Now?

The ubiquity of the **smartphone.**

The improvement and prevalence of **biometrics.**

The inclusion of a **secure enclave** in endpoints, enabling the storage of **FIDO2** credentials.

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Passwordless: The Appeal

Why Now?

The ubiquity of the **smartphone.**

The improvement and prevalence of **biometrics.**

The inclusion of a **secure enclave** in endpoints, enabling the storage of **FIDO2** credentials.

What's the Appeal?

The promise of passwordless is both **improved security** and **improved usability**.

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

The Challenges of Passwordless

It's confusing!

Passwordless is a market with few definitions and **lots of buzz.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

The Challenges of Passwordless

It's confusing!

Passwordless is a market with few definitions and **lots of buzz.**

It's a journey!

Modern **IT environments are complex.** Change requires planning.

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

The Challenges of Passwordless

It's confusing!

Passwordless is a market with few definitions and **lots of buzz.**

It's a journey!

Modern **IT environments are complex.** Change requires planning.

It has user experience issues too.

Nascent technology has yet to implement mature User Experience functionality.

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Cisco Duo's Passwordless Vision

Bring simplicity and clarity

Provide clear information regarding our **use cases and capabilities**.

- Easily configure for **federated applications.**
- Native support for platform **biometrics and security keys.**
- Passwordless authentication through **Duo Mobile.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Cisco Duo's Passwordless Vision

Bring simplicity and clarity

Provide clear information regarding our **use cases and capabilities**.

- Easily configure for **federated applications.**
- Native support for platform **biometrics and security keys.**
- Passwordless authentication through **Duo Mobile.**

Secure the entire journey

Provide **robust & flexible security** regardless of IT stack.

- **Identity agnostic.**
- Roll out passwordless to **specific groups of users.**
- **Smooth, secure fallback** where passwordless isn't a fit.

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Cisco Duo's Passwordless Vision

Bring simplicity and clarity

Provide clear information regarding our **use cases and capabilities**.

- Easily configure for **federated applications.**
- Native support for platform **biometrics and security keys.**
- Passwordless authentication through **Duo Mobile.**

Secure the entire journey

Provide **robust & flexible security** regardless of IT stack.

- **Identity agnostic.**
- Roll out passwordless to **specific groups of users.**
- **Smooth, secure fallback** where passwordless isn't a fit.

Provide frictionless useability

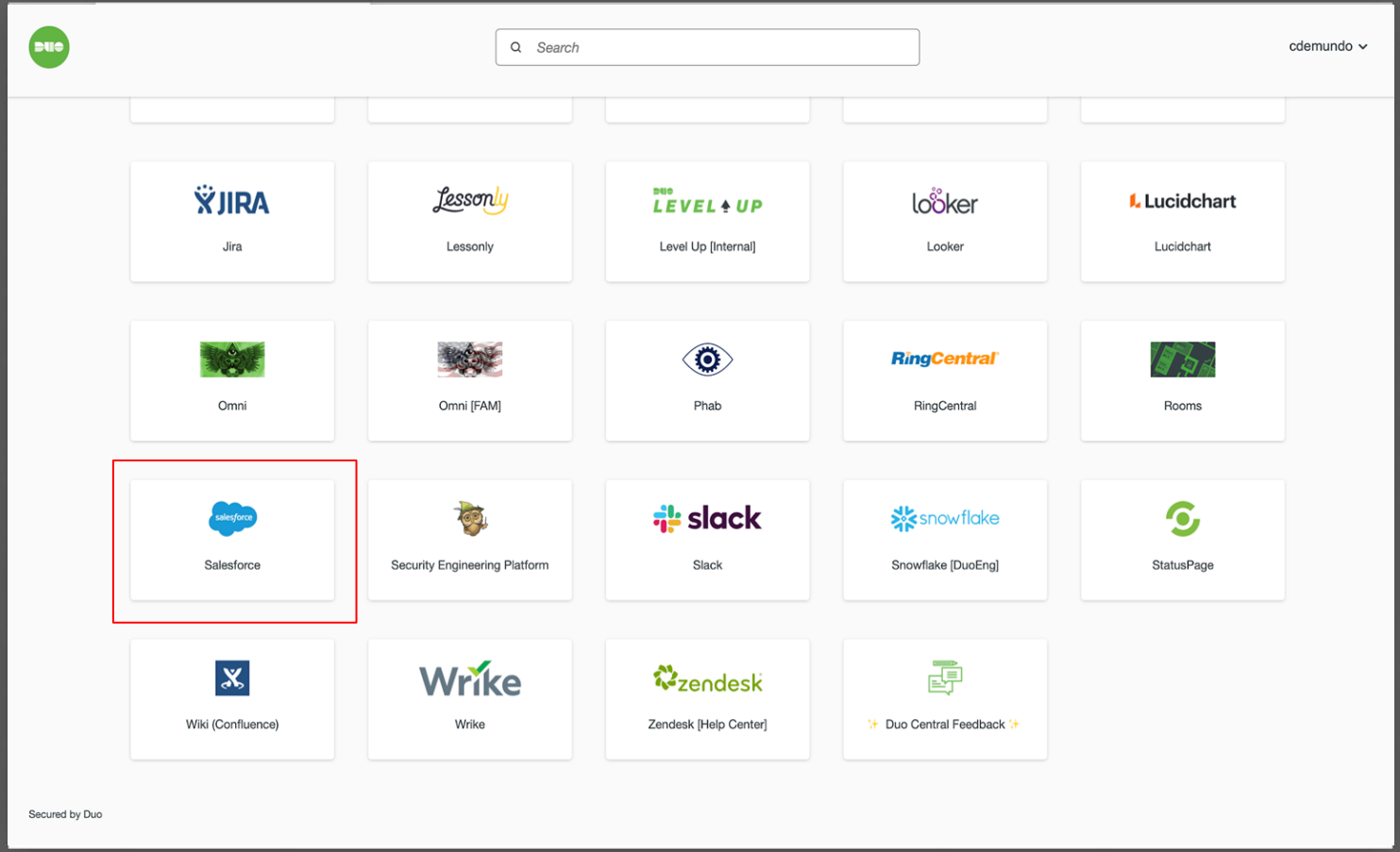
Make it **consistent and easy** for users to understand and use.

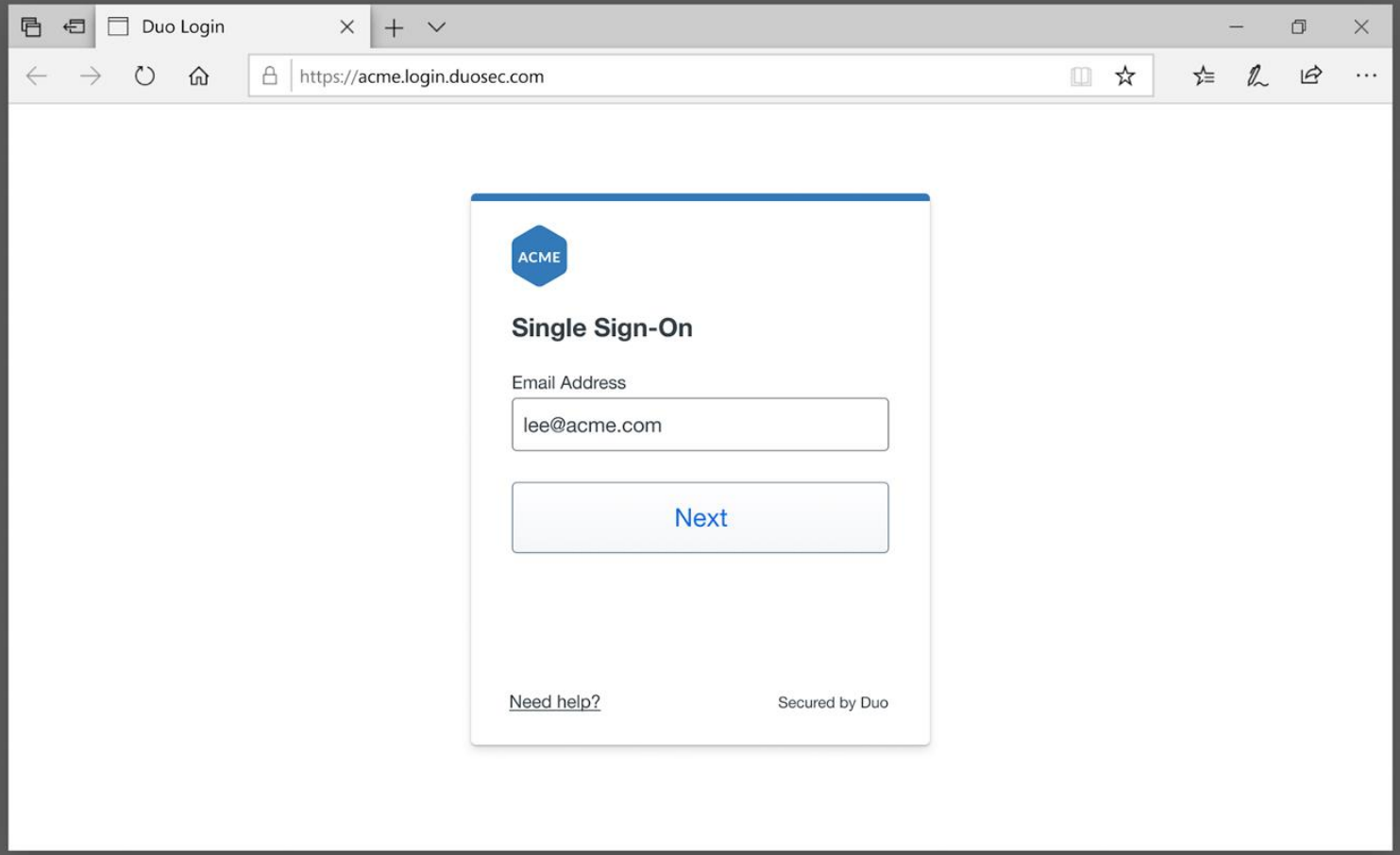
- **One application** for all authentication scenarios.
- Register **multiple devices** for passwordless authentication.
- Simple **recovery workflow** for lost/stolen devices.

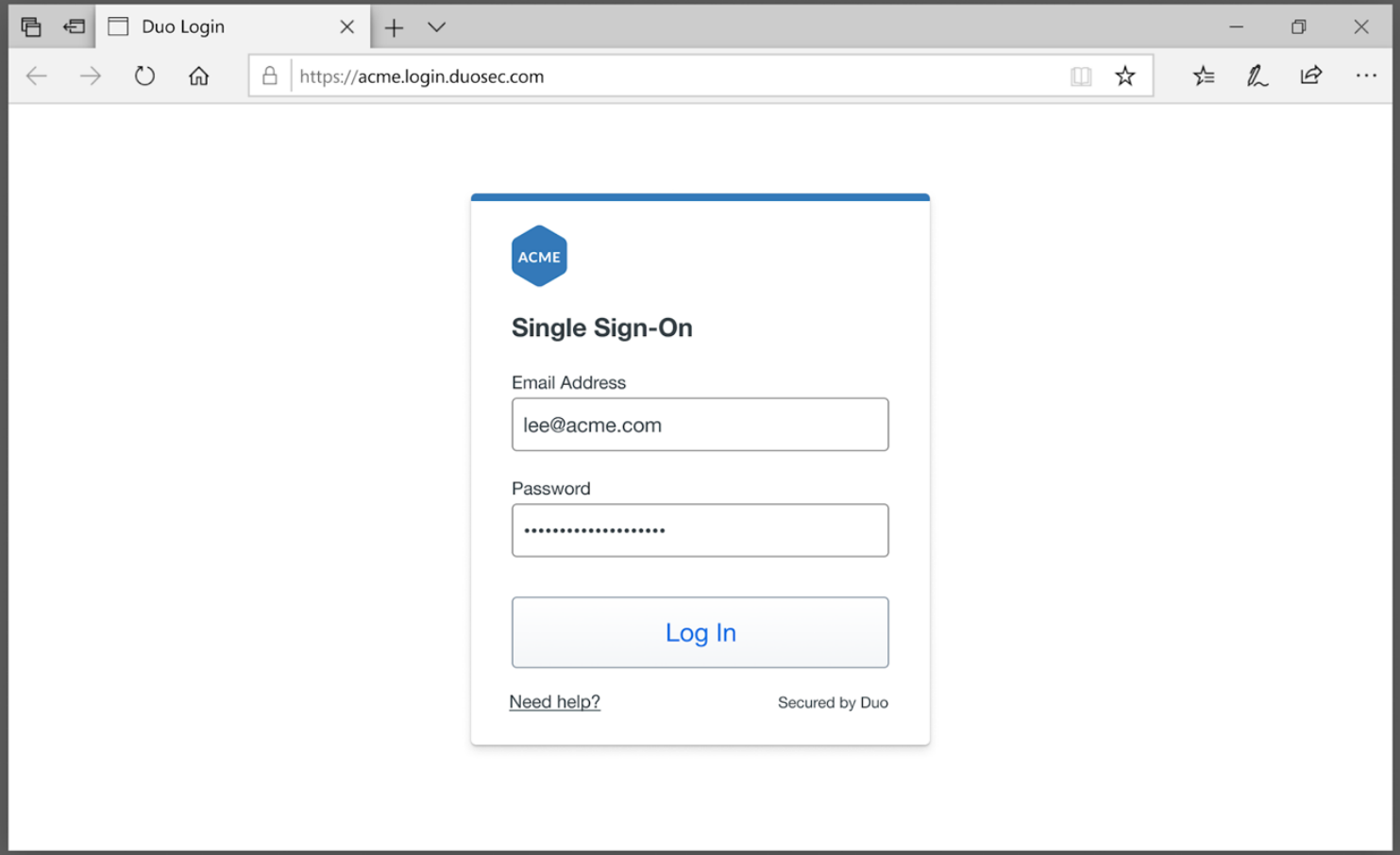
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

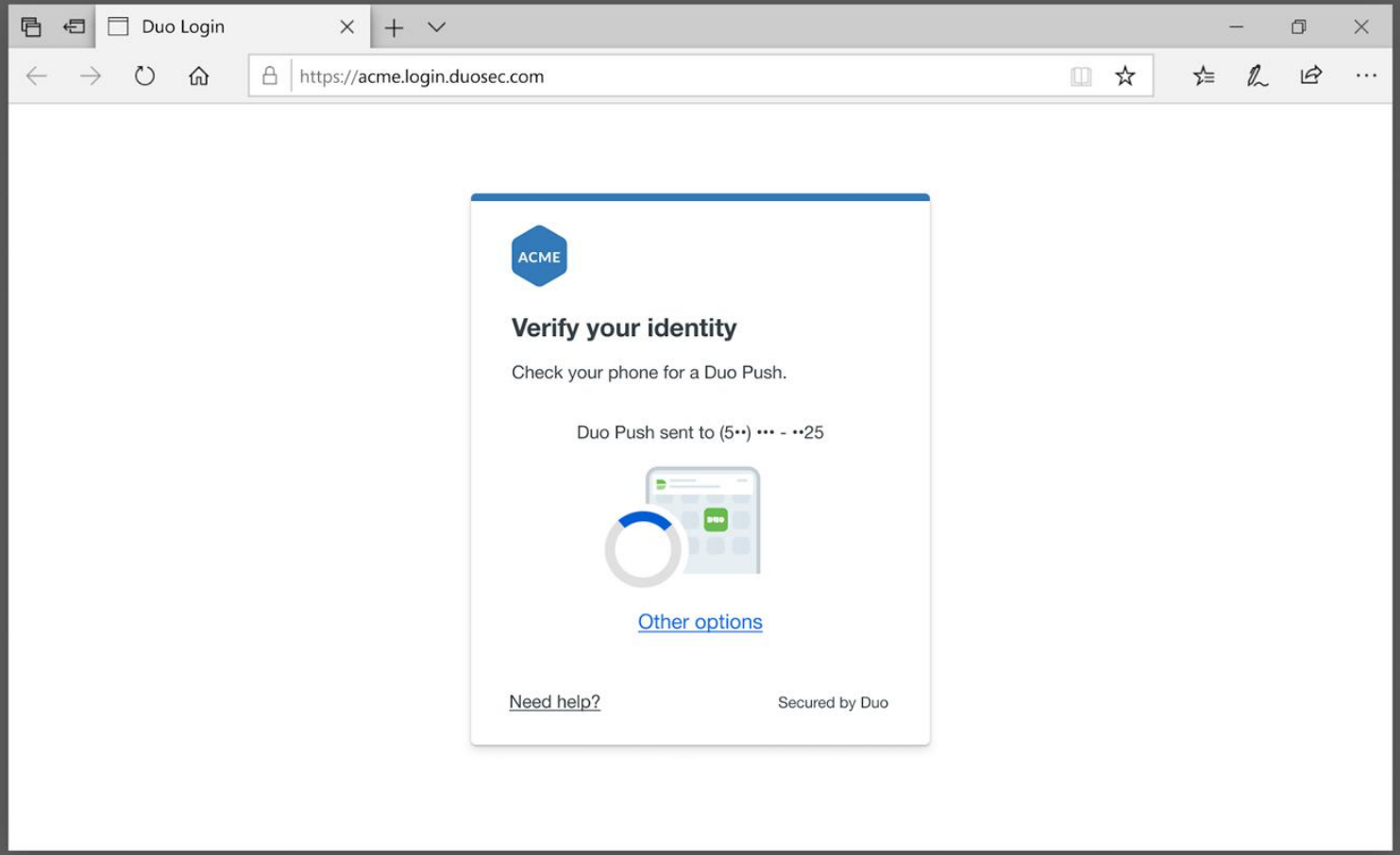
Demo

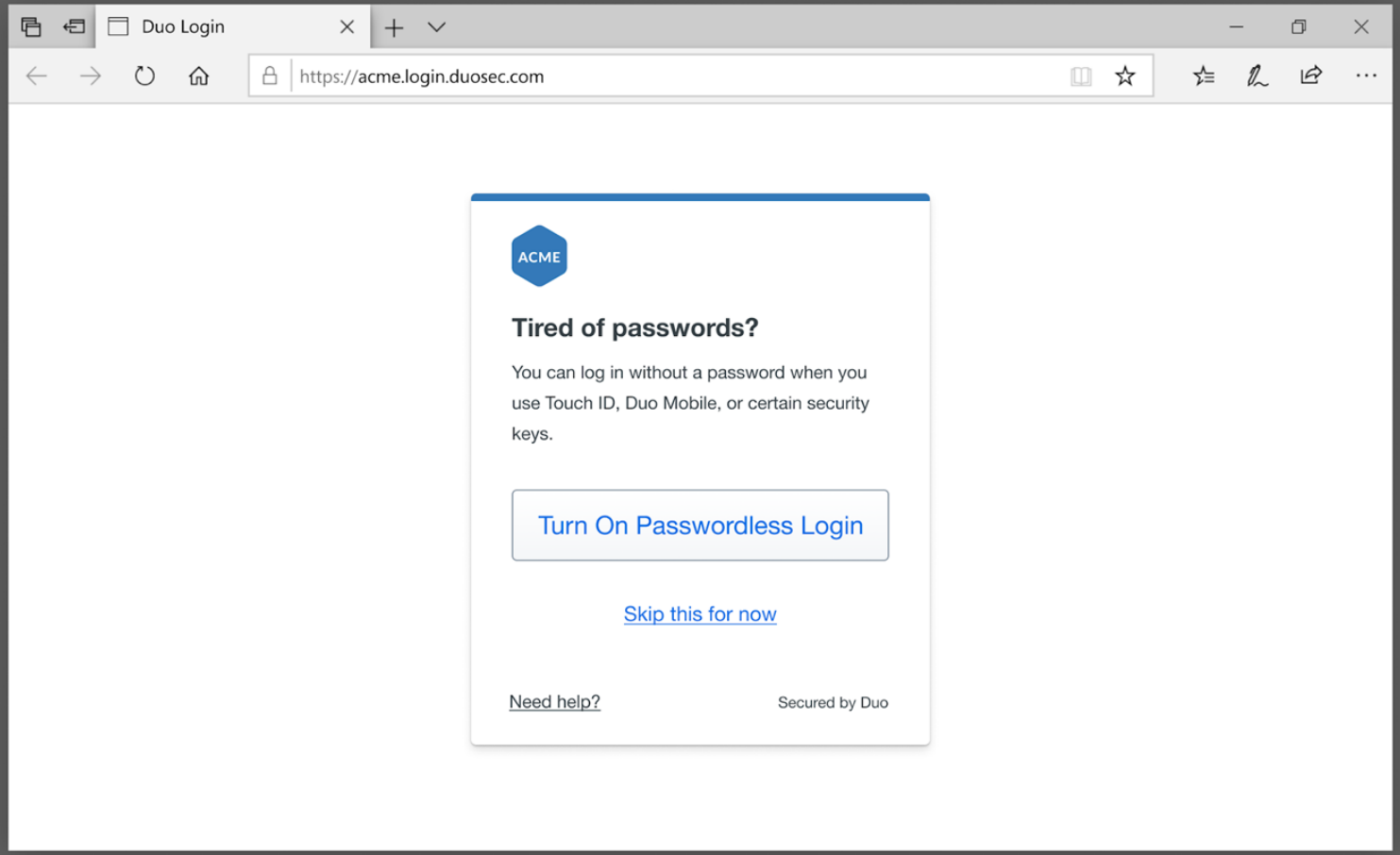
Enrollment

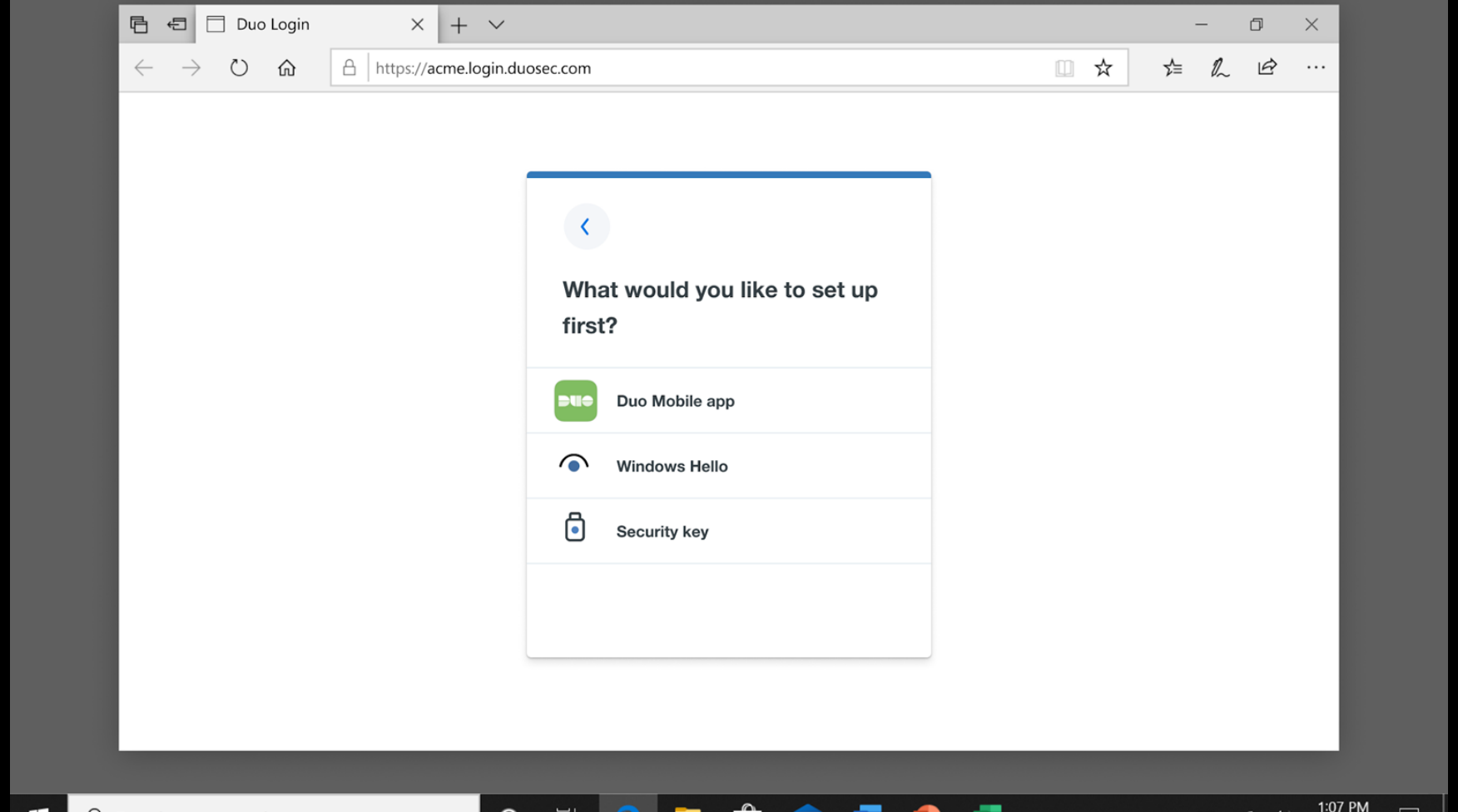

Search
cdemundo
Jira
Lessonly
Level Up [Internal]
Looker
Lucidchart
Omni
Omni [FAM]
Phab
RingCentral
Rooms
Salesforce
Security Engineering Platform
Slack
Snowflake [DuoEng]
StatusPage
Wiki (Confluence)
Wrike
Zendesk [Help Center]
Duo Central Feedback
Secured by Duo

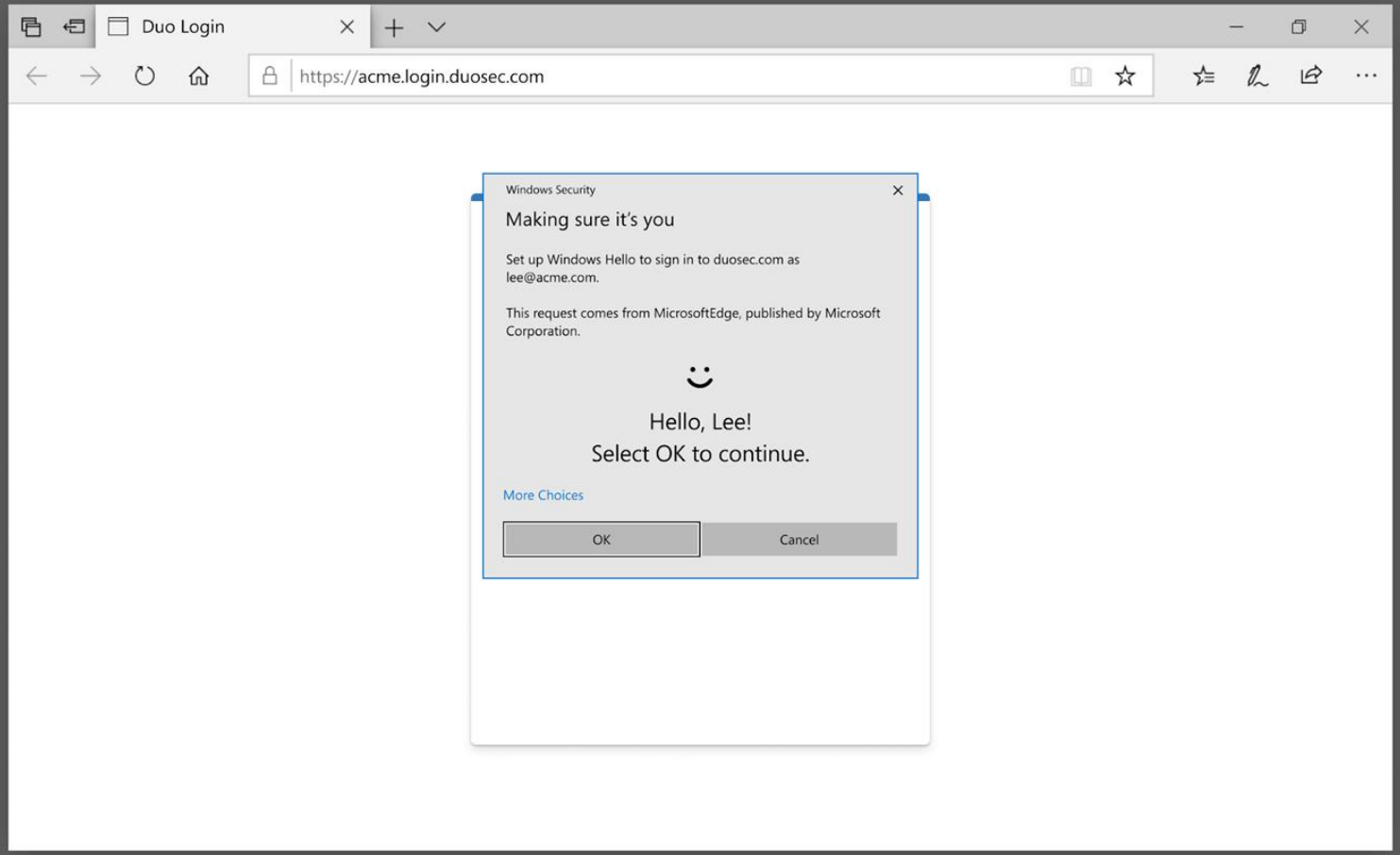

Duo Login
https://acme.login.duosec.com
ACME
Single Sign-On
Email Address
lee@acme.com
Next
Need help?
Secured by Duo
Type here to search
1:07 PM
7/2/2020

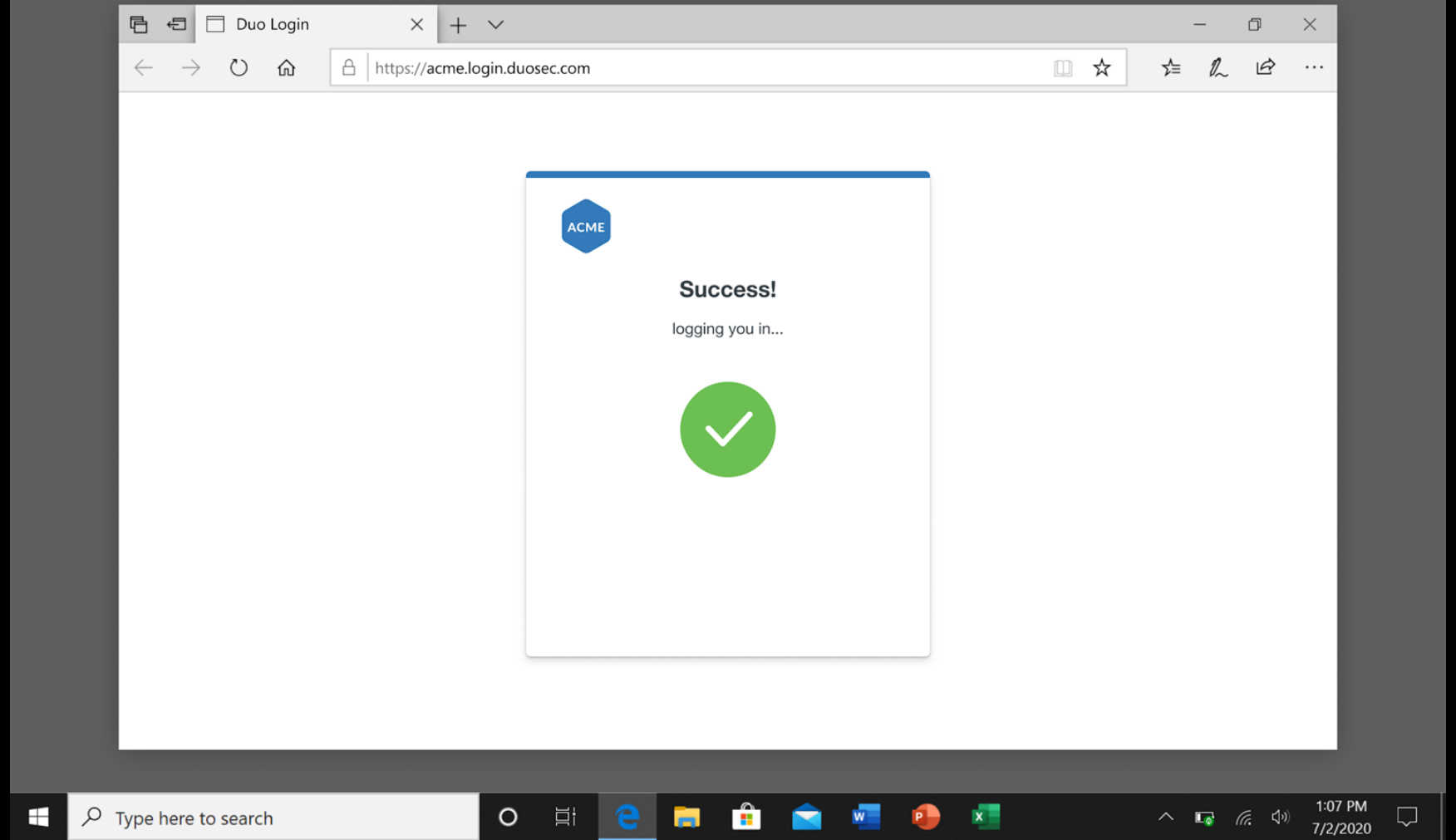

Duo Login
https://acme.login.duosec.com
ACME
Single Sign-On
Email Address
lee@acme.com
Password
Log In
Need help?
Secured by Duo
Type here to search
1:07 PM
7/2/2020


Duo Login
https://acme.login.duosec.com
ACME
Verify your identity
Check your phone for a Duo Push.
Duo Push sent to (5••) ••• - ••25
Other options
Need help?
Secured by Duo

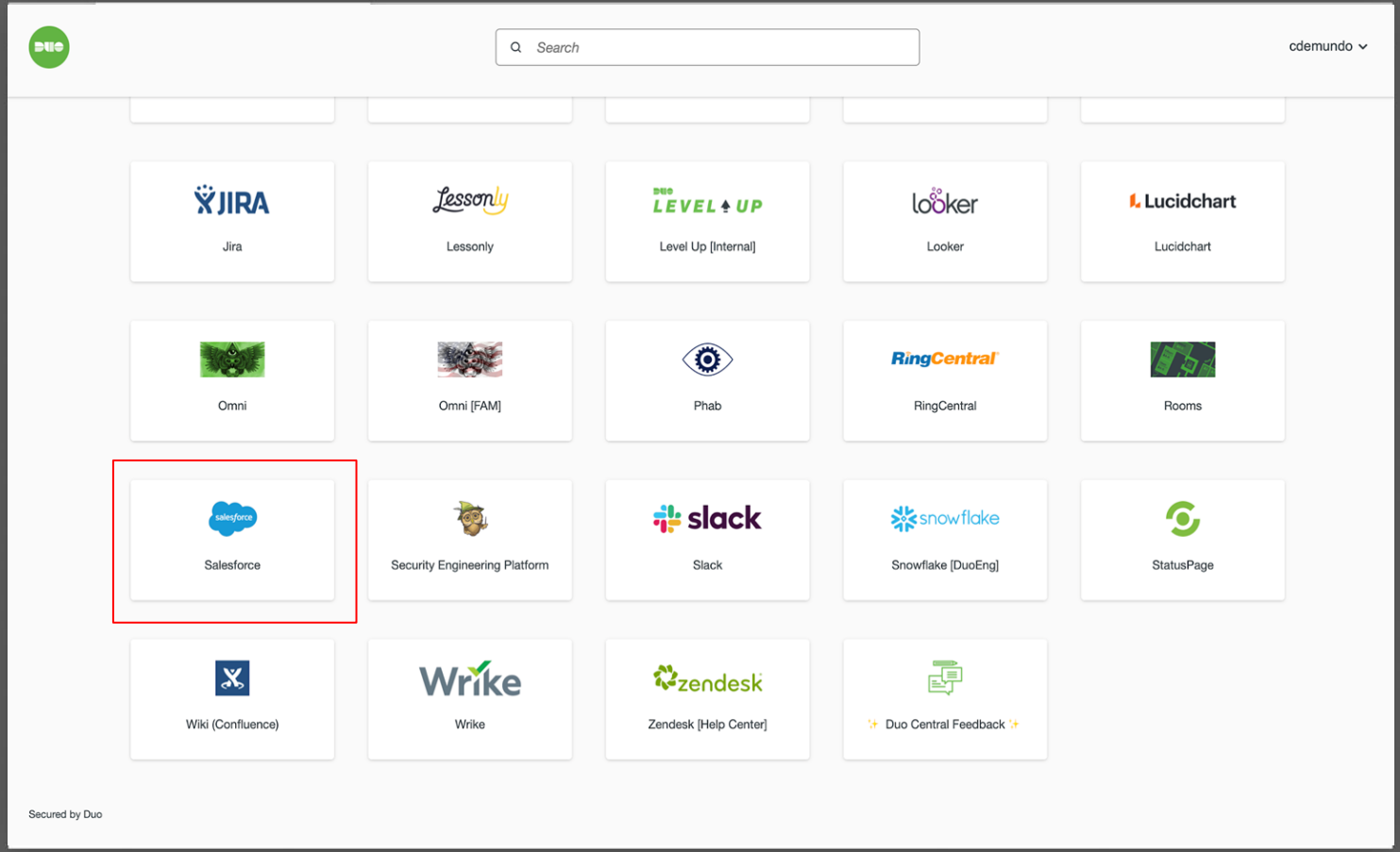

Duo Login
https://acme.login.duosec.com
ACME
Tired of passwords?
You can log in without a password when you use Touch ID, Duo Mobile, or certain security keys.
Turn On Passwordless Login
Skip this for now
Need help?
Secured by Duo

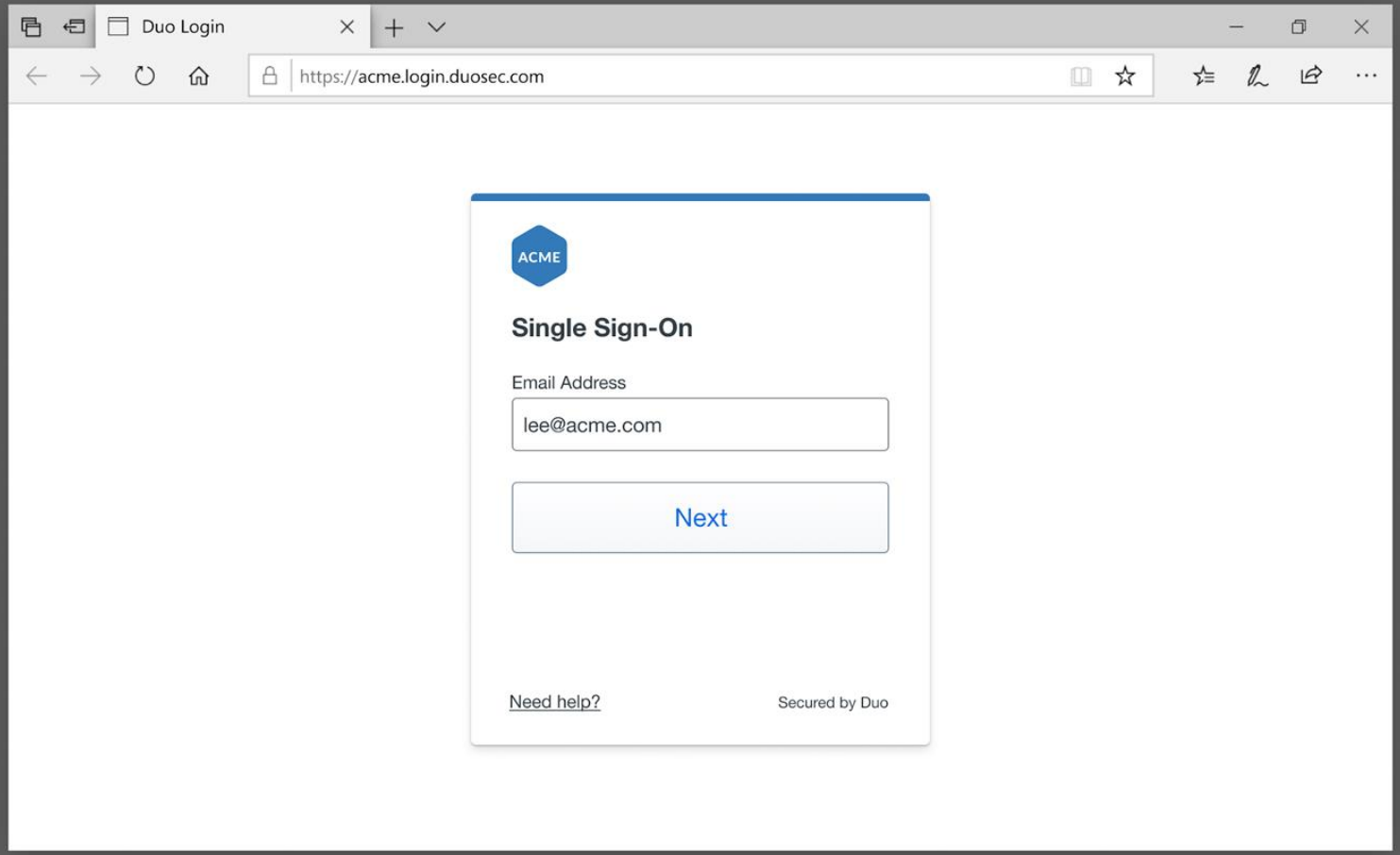

Duo Login
https://acme.login.duosec.com
What would you like to set up first?
Duo Mobile app
Windows Hello
Security key
Type here to search
1:07 PM
7/2/2020

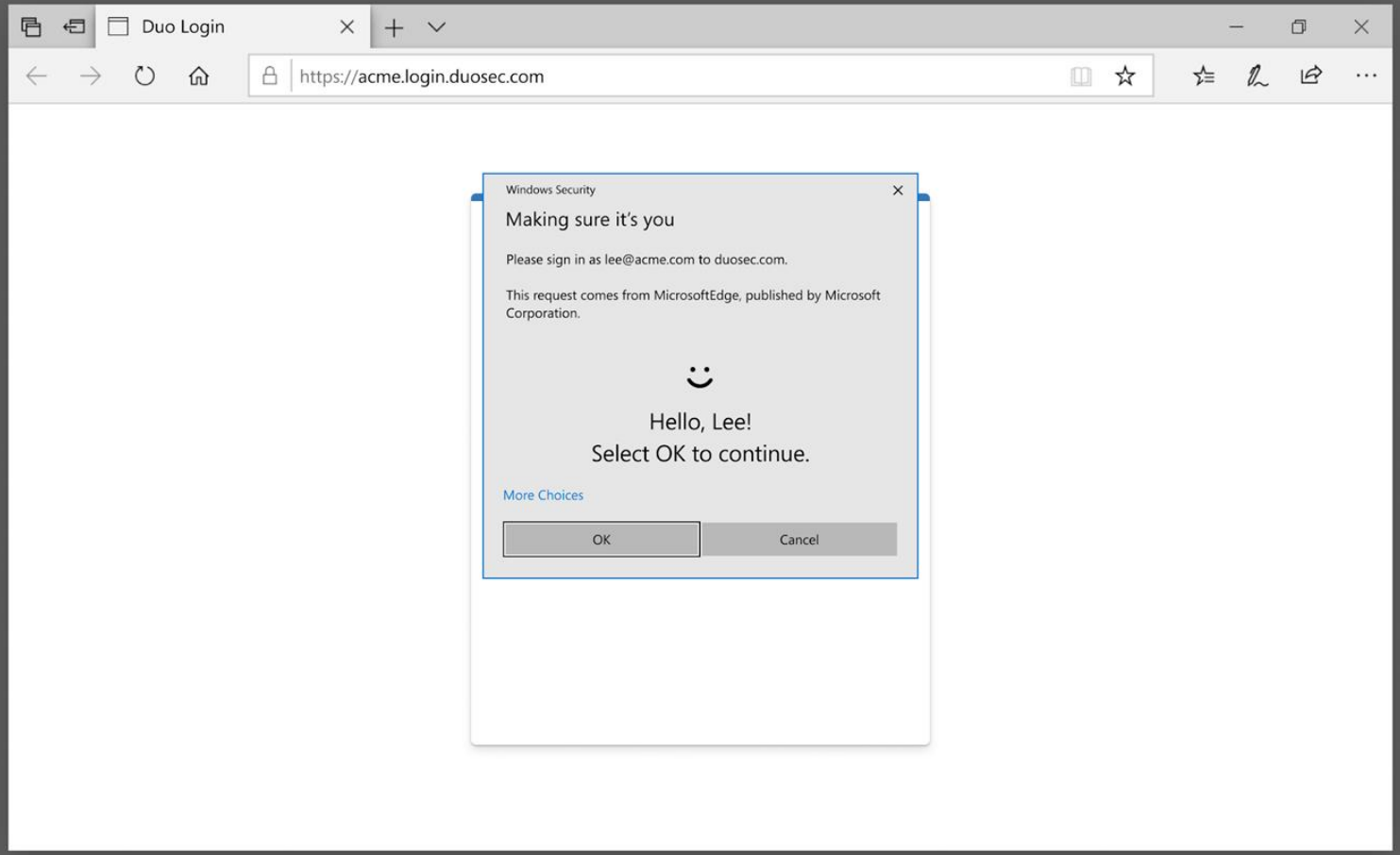

Duo Login
https://acme.login.duosec.com
Windows Security
Making sure it's you
Set up Windows Hello to sign in to duosec.com as lee@acme.com.
This request comes from MicrosoftEdge, published by Microsoft Corporation.
Hello, Lee!
Select OK to continue.
More Choices
OK
Cancel
Type here to search
1:07 PM
7/2/2020

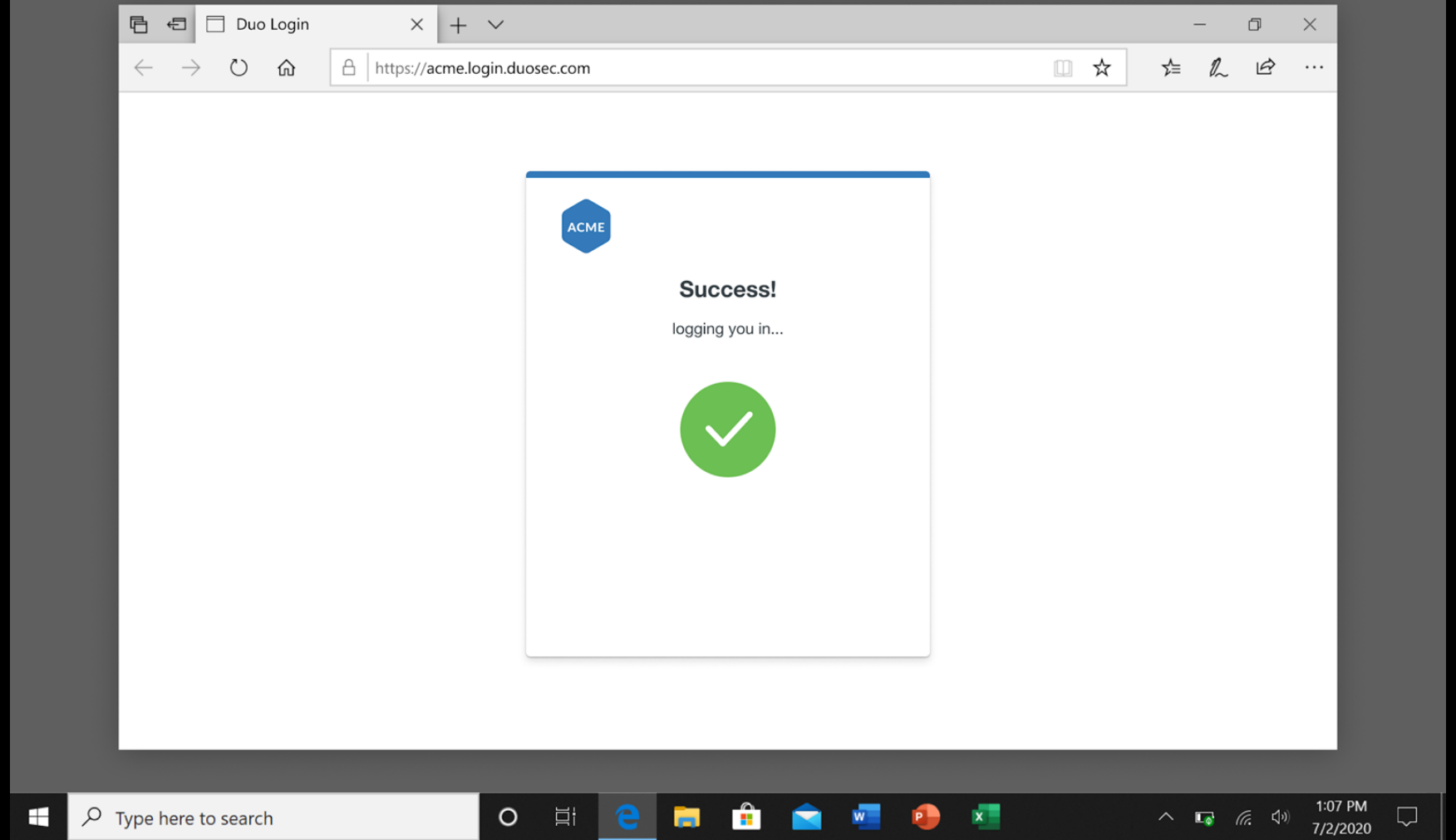

Duo Login
https://acme.login.duosec.com
ACME
Success!
logging you in...
Type here to search
1:07 PM
7/2/2020

Authentication


Search
cdemundo
Jira
Lessonly
Level Up [Internal]
Looker
Lucidchart
Omni
Omni [FAM]
Phab
RingCentral
Rooms
Salesforce
Security Engineering Platform
Slack
Snowflake [DuoEng]
StatusPage
Wiki (Confluence)
Wrike
Zendesk [Help Center]
Duo Central Feedback
Secured by Duo


Duo Login
https://acme.login.duosec.com
ACME
Single Sign-On
Email Address
lee@acme.com
Next
Need help?
Secured by Duo
Type here to search
1:07 PM
7/2/2020

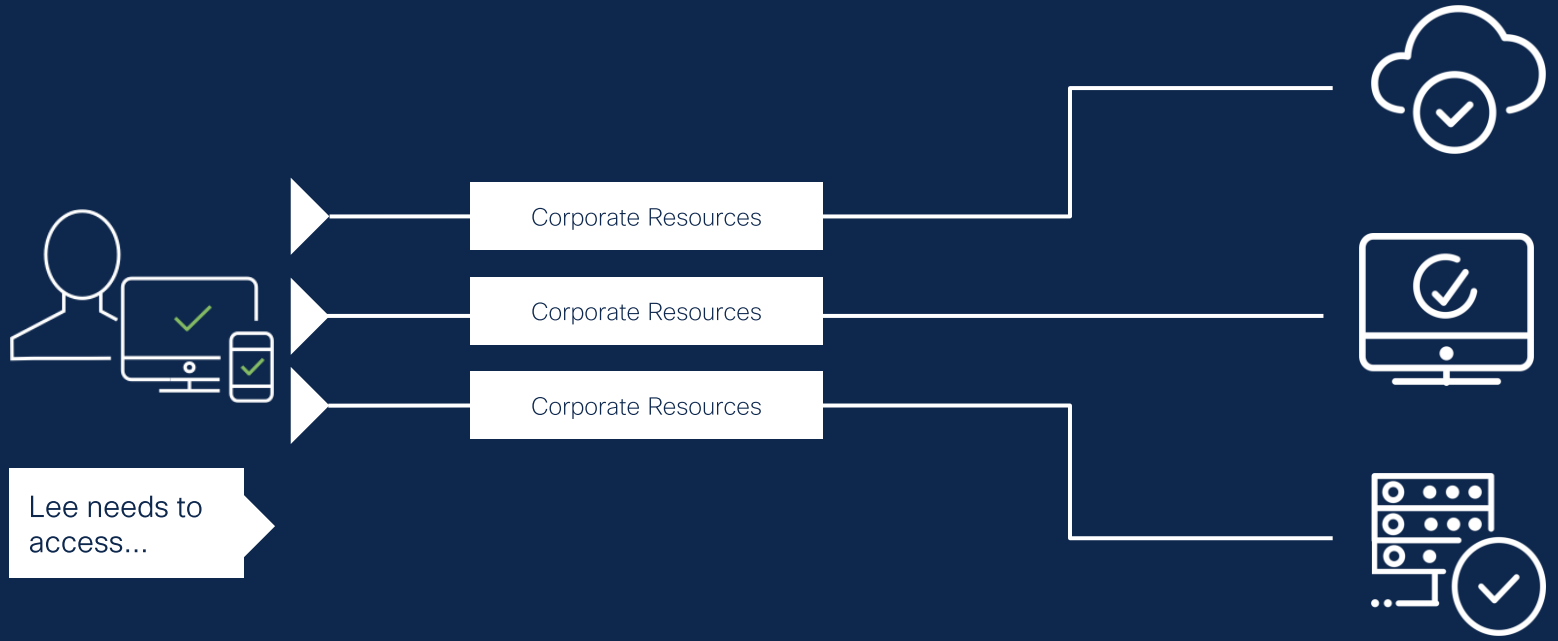

Duo Login
https://acme.login.duosec.com
Windows Security
Making sure it's you
Please sign in as lee@acme.com to duosec.com.
This request comes from MicrosoftEdge, published by Microsoft Corporation.
Hello, Lee!
Select OK to continue.
More Choices
OK
Cancel
Type here to search
1:07 PM
7/2/2020


Duo Login
https://acme.login.duosec.com
ACME
Success!
logging you in...
Type here to search
1:07 PM
7/2/2020

But, improving access security requires more than just passwordless.

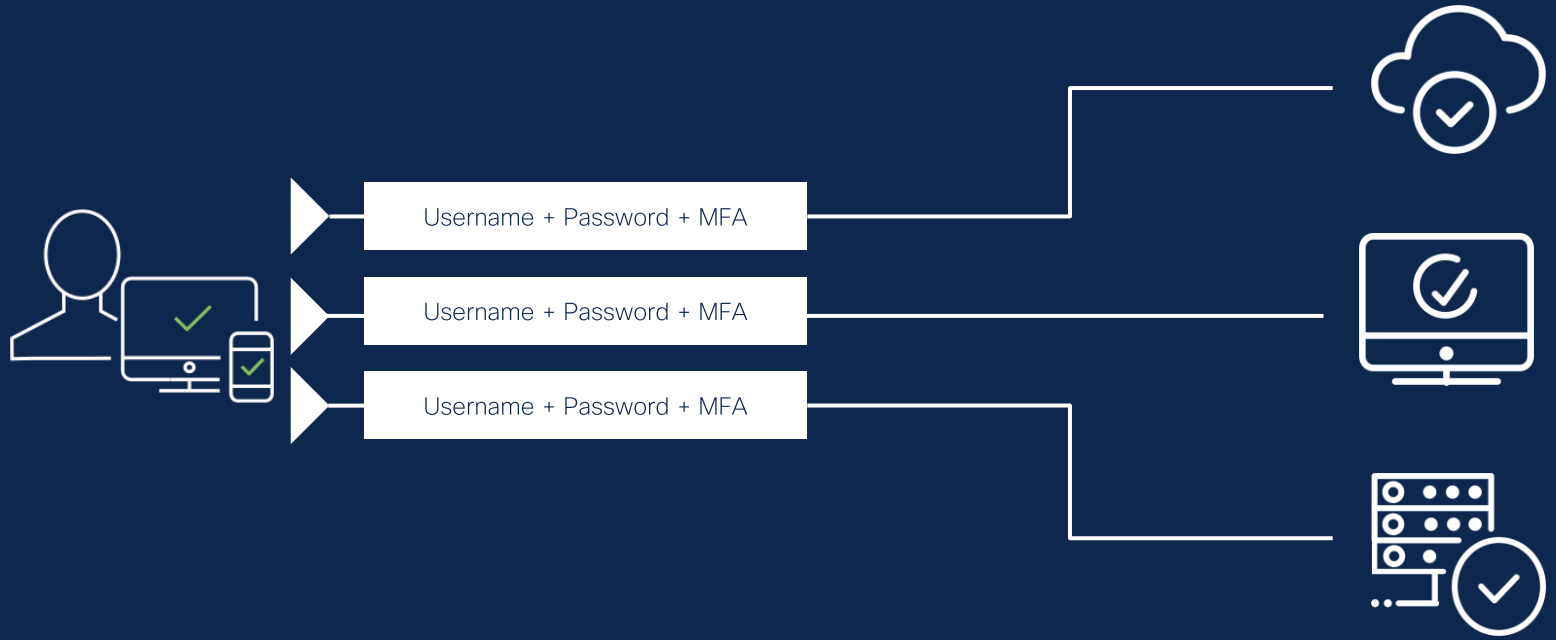
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Picture this...



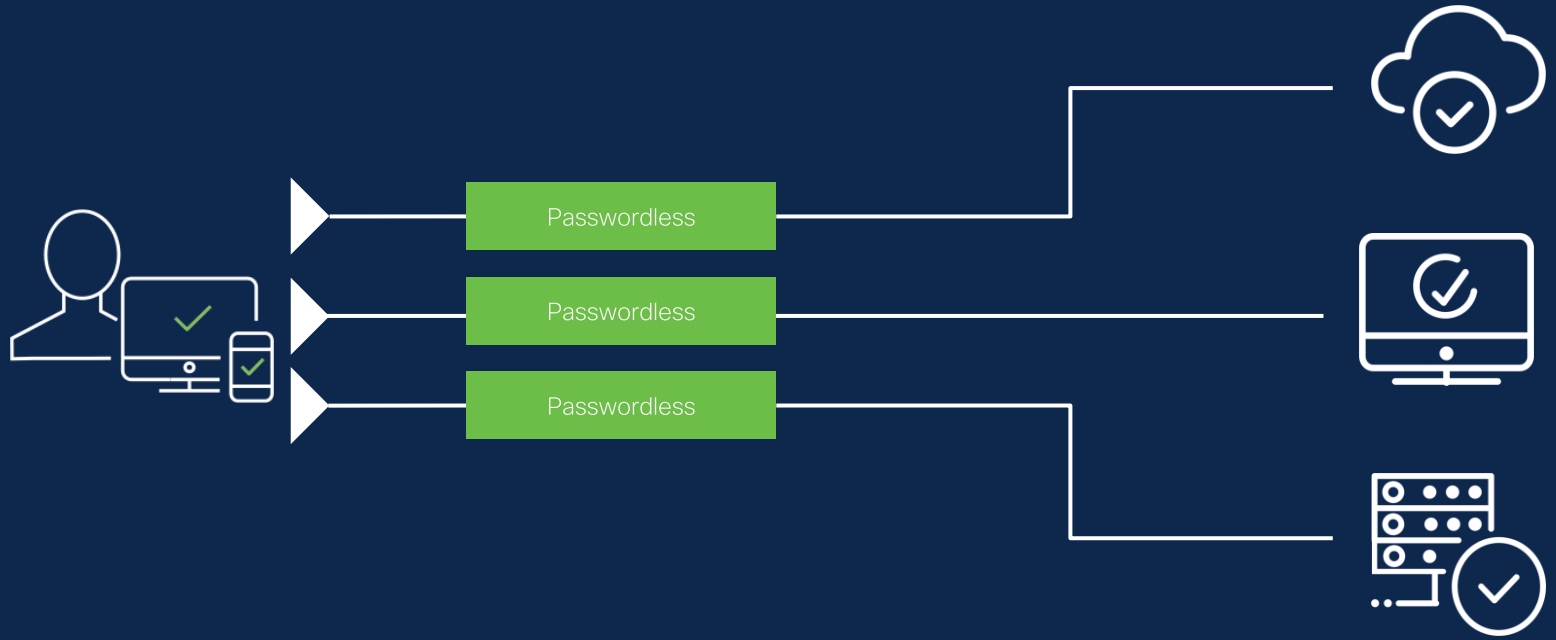
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

The current situation



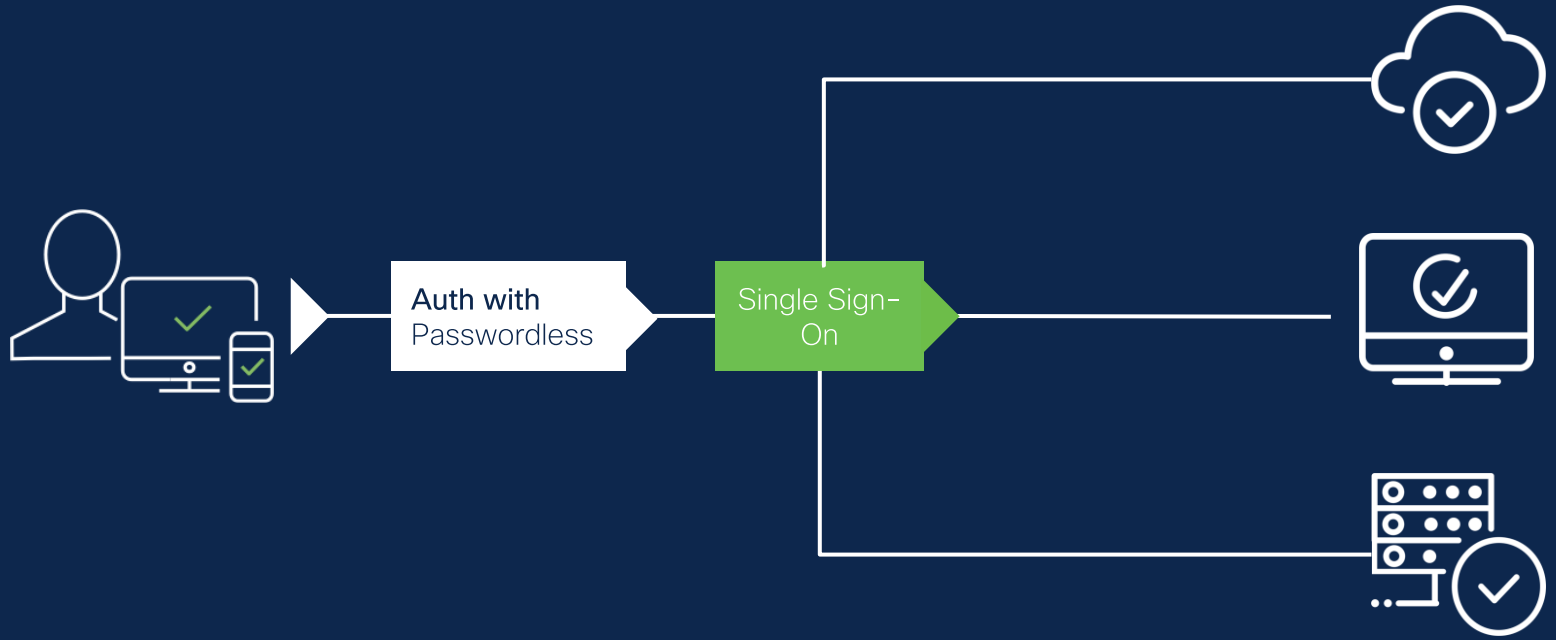
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

A step in the right direction…



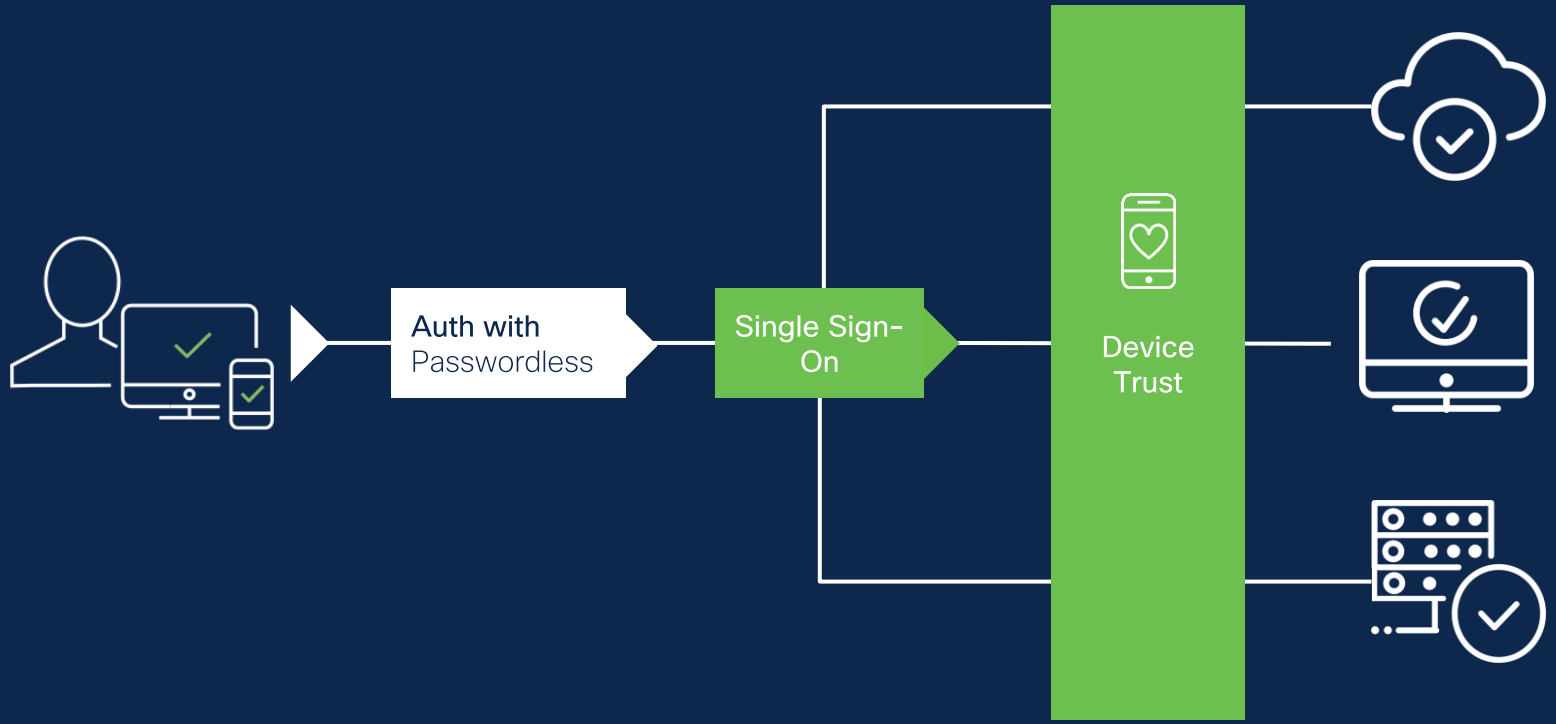
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Reduce Authentications



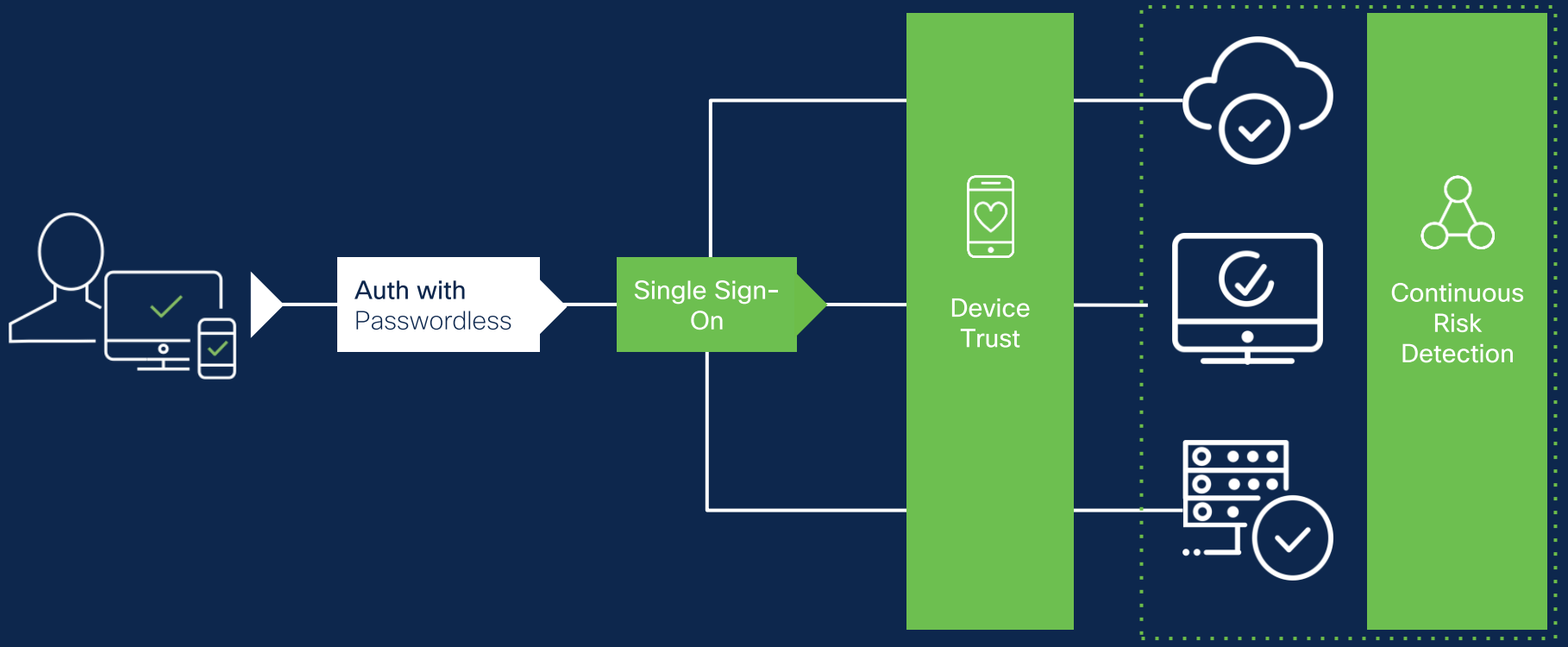
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Increase device trust



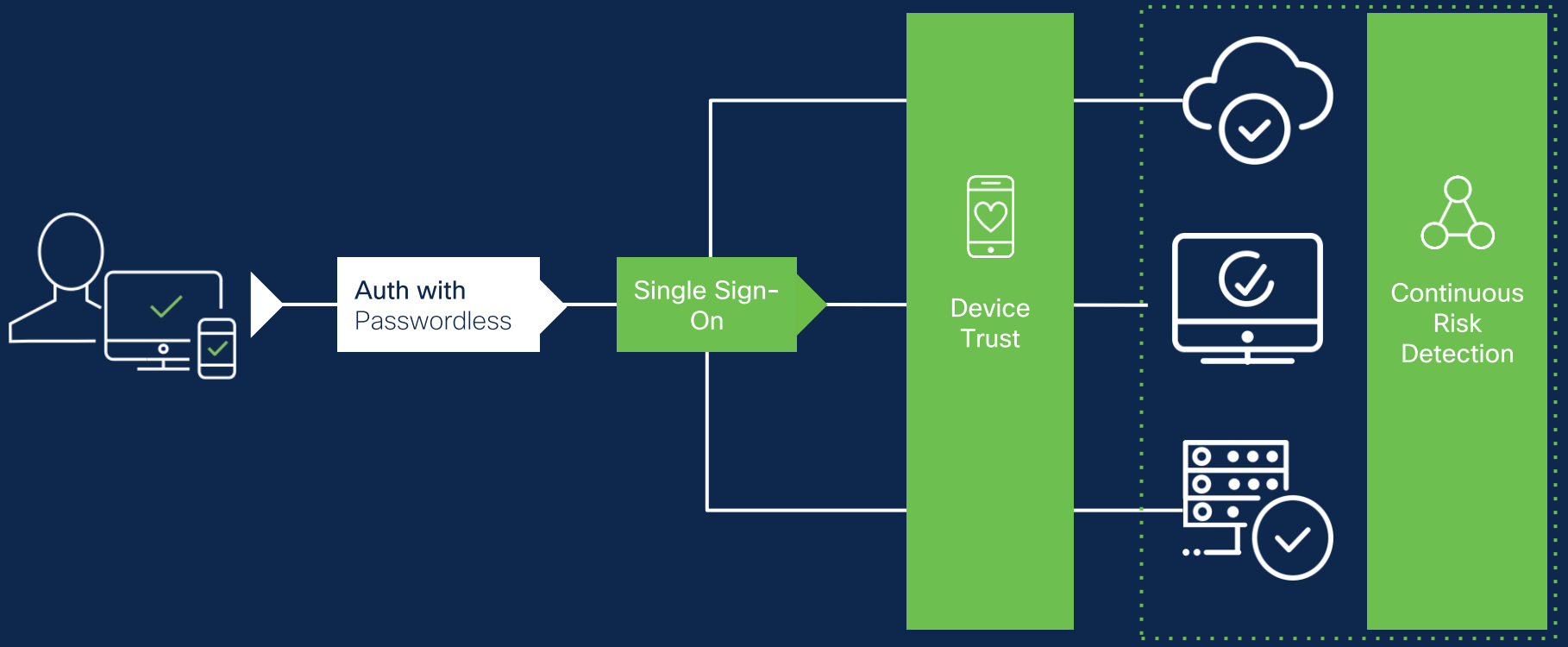
© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Monitor access risk



© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

Continuous trusted access



© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

What's Next?

Thick Clients

Expand Passwordless to applications accessed through **embedded browsers.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

What's Next?

Thick Clients

Expand Passwordless to applications accessed through **embedded browsers.**

Desktop Logins

Launch Passwordless for **OS authentication.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

What's Next?

Thick Clients

Expand Passwordless to applications accessed through **embedded browsers.**

Desktop Logins

Launch Passwordless for **OS authentication.**

Risk-Based Authentication

Adapt permitted authentication experience based on **contextual risk factors.**

© 2021 Cisco and/or its affiliates. All rights reserved. Cisco Public

cisco
SECURE