

20<sup>TH</sup> ANNIVERSARY EDITION

**WSO2CONASIA**

PLATFORMLESS MODERNIZATION

# CIAM: Building Secure Experiences for Your Customers



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WSO2 - IAM



A sunlit forest path with a wooden signpost and a pedestrian sign. The scene is a lush, green forest with tall trees and a dirt path leading into the distance. A wooden signpost stands in the center, with several directional signs. To the right, a yellow pedestrian sign is visible. The overall atmosphere is peaceful and natural.

# Customer IAM Is a Make-or-Break Experience



The image features a top-down view of various mechanical components and tools scattered across a dark, starry space background. In the upper left, there are several interlocking gears of different sizes and colors (gold, silver, blue). To their right are various tools like wrenches, screwdrivers, and sockets. In the center, there are colorful geometric shapes, including a large multi-colored cube and several smaller blocks in red, blue, and yellow. The lower half of the image shows more tools, including keys, a large gear with a textured surface, and various bolts and nuts. The overall composition is dense and detailed, suggesting a complex mechanical or engineering theme.

**There's No One-Size-Fit!**



# Considerations When Building Customer IAM Journeys

- **Context matters:** Industry, product, demographics, and regulatory requirements
- **Streamline the journey:** Reduced steps and omni-channel consistency
- **Adjust by risk:** High trust vs. low trust scenarios
- **Be agile:** Rapidly test and adapt identity flows
- **Maintain visibility:** Measure success with insights at critical points



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# Security vs Convenience – Striking the Balance



# Key IAM Touchpoints of your Customers



## Registration

Where your customer journey begins. Make it simple and welcoming



## Login

The everyday interaction  
- where usability and security collide



## Recovery

A critical rescue moment  
- fast, safe access when it matters most





# Registration

## Create Account

<b>PERSONAL INFO (REQUIRED!)</b> <b>First Name *</b> First <b>Last Name *</b> Last <b>Email *</b> email@domain.com <b>Phone *</b> +1 (555) 123-4567	<b>ADDRESS DETAILS</b> <b>Street Address *</b> 123 Main Street <b>City *</b> <b>ZIP *</b> City 12345 <b>Country *</b> Select
<b>PERSONAL DETAILS</b> <b>Date of Birth *</b> yyyy-mm-dd <b>Gender</b> Select <b>Occupation</b> Job title	<b>SECURITY SETUP</b> <b>Password *</b> 16+ chars required <b>Confirm Password *</b> Retype password <b>Security Question *</b> Choose
<b>LEGAL AGREEMENTS</b> <input type="checkbox"/> Terms of Service (Required) <input type="checkbox"/> Marketing emails (Required) <input type="checkbox"/> Privacy Policy (Required) <input type="checkbox"/> SMS marketing (Required) <input type="checkbox"/> Accept cookies (Required) <input type="checkbox"/> Phone calls (Required)	
<a href="#">Register</a> <a href="#">Reset</a> <a href="#">Cancel</a>	





## Registration

### Minimal Data Collection

- Collect **only essential info** at signup
- Use **progressive profiling**
  - On later logins or privileged actions
- Capture **explicit consent**

**Create Account**  
Get started in seconds

**Username**  
Choose a unique username

**Password**  
Create a strong password

**Confirm Password**  
Confirm your password

**First Name**  
Enter your first name

**Last Name**  
Enter your last name

**Email**  
Enter your email

**Birth Date**  
yyyy-mm-dd

I agree to the [Terms of Service](#) and [Privacy Policy](#)

I would like to receive marketing emails and updates about new features (optional)

[Continue](#)

Already have an account? [Sign In](#)





## Registration

## Leverage Existing Accounts

- Enable **social sign up**
  - Google OneTap, Sign in with Apple
- Choose providers based on **audience & region**
  - User base - Github for devs
  - Region - WeChat, VK, Gov IDs

**Create Account**  
Get started in seconds

Username  
Choose a unique username

Password  
Create a strong password

Continue

OR

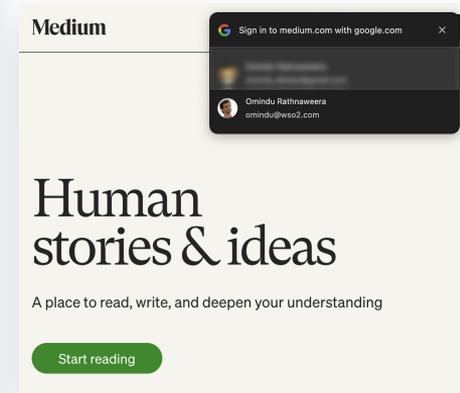
Sign Up With Google

Sign Up With Facebook

Sign Up With Passkeys

Already have an account? [Sign In](#)

By creating an account, you agree to our [Terms of Service](#) and [Privacy Policy](#)

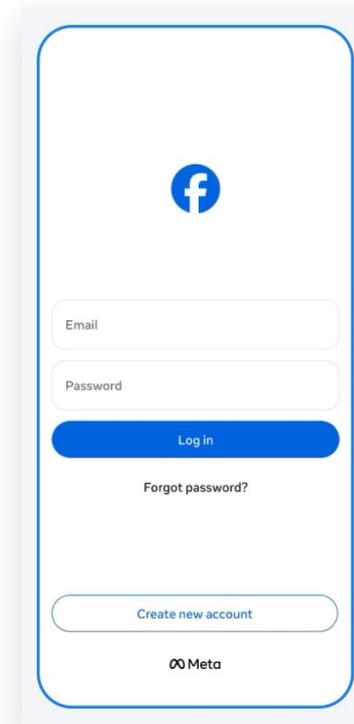
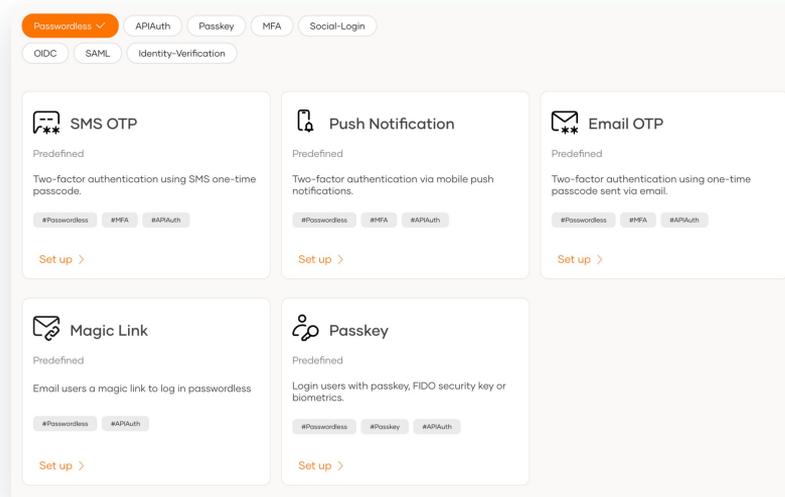




## Registration

## Credentials Beyond Passwords

- Offer **passwordless options**
  - Passkeys, magic links, SMS OTP
- Reduce reliance on traditional passwords



Source: [fb.com](https://www.facebook.com)

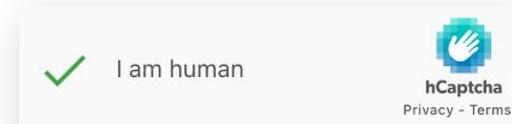
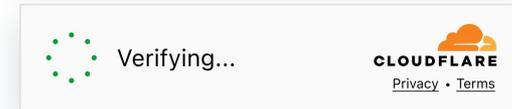
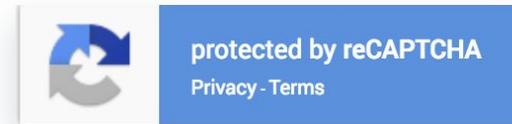




## Registration

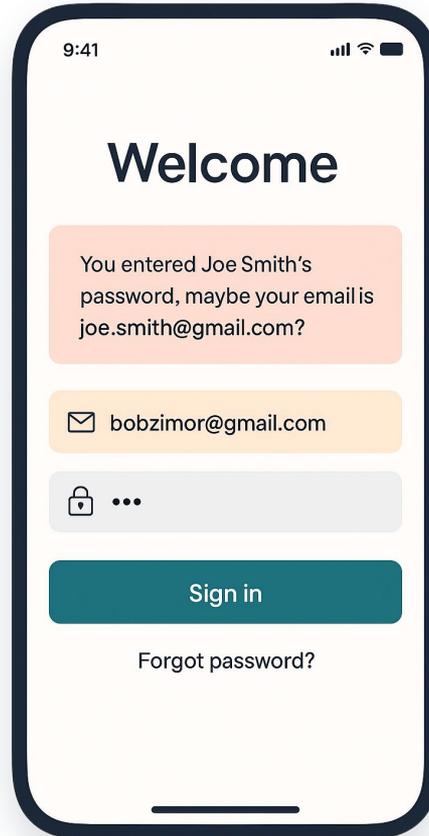
## Automated Abuse & Fraud Prevention

- Use **invisible/passive captcha**
  - reCAPTCHA, hCaptcha, Turnstile
- Integrate **Bot & Fraud detection systems**
  - IP & Device fingerprinting
  - Rate Limiting & Throttling





# Login





Login

## Multiple MFA Options

- Allow **multiple MFA** methods
- Provide **backup codes** for fallback

### Additional Authentication

Configure additional authentications to sign in easily or to add an extra layer of security to your account.

 **Passkey**  
You can use a `passkey`, `FIDO security key` or `biometrics` in your device to sign in to your account. +

 You don't have any passkeys enrolled yet.

 **TOTP Authenticator**  
You can use the authenticator app to get verification codes for two-factor authentication. 👁️ 🗑️

 **Push Authenticator**  
You can use the push authenticator app to get login prompts as push notifications for two-factor authentication. +

**Recovery Options**

 **Backup Codes**  
Use backup codes to access your account in the event you cannot receive multi-factor authentication codes. You can regenerate new codes if required. +

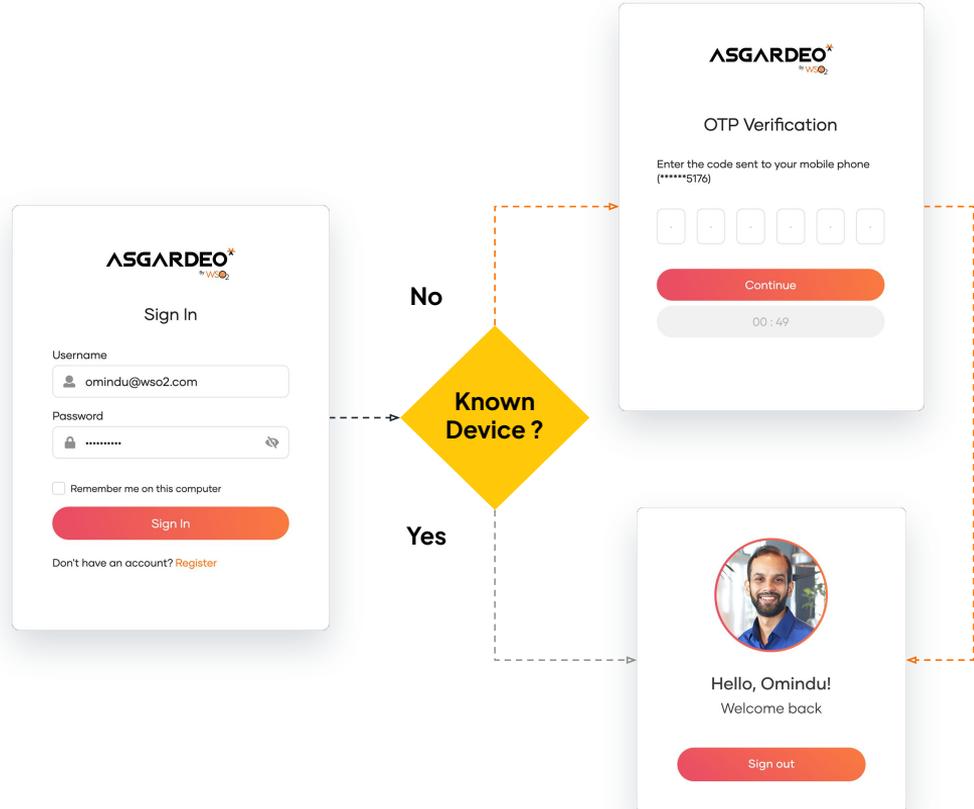


## Adaptive MFA

- Use **context-aware MFA**
- **Step-up** only when needed
  - Suspicious login
  - High impact actions



### Login

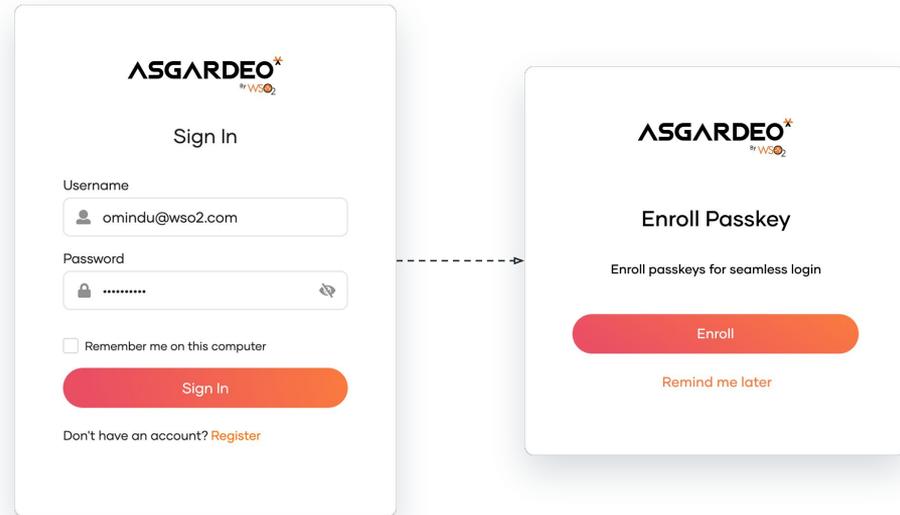




Login

## Progressive Credential Enrollment

- Promote **stronger login options**
  - Phishing resistant methods
- **Consider credential availability** for better UX





Login

## Account Linking

- Prompt users to **link similar accounts**
- **Verify credentials** before linking

**ASGARDEO**<sup>\*</sup>  
by WSO<sub>2</sub>

We found an Asgardeo account with this email!

Looks like you are signing in with **GitHub** for the first time!

You already have a Asgardeo account signed up via different option that uses this email address **omindu@wso2.com**.

Click **Next** to link the Asgardeo account to your GitHub account.

Next

[Back to Sign In](#)





Login

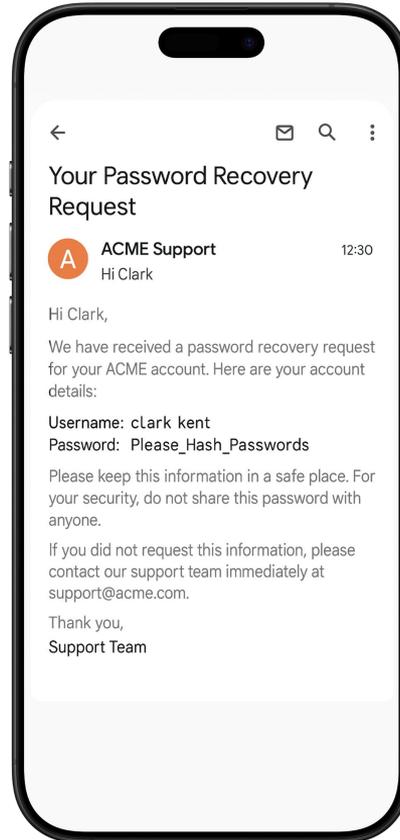
## Passive Authentication

- Use **behavioral signals**
  - Typing patterns, touch gestures
- **No extra steps** for users





# Recovery





Recovery

## Recovery Without Knowledge Factors

- Avoid **challenge questions** as a sole factor
- Use **OTPs, push notifications, backup codes**
- For high risk case - use advance **identity verification**
  - Document based
  - Facial biometrics

### Challenge Questions

What is the name of your first pet?

What is your mother's maiden name?

Submit





## Recovery

## Credential & Profile Recovery

- Support **resetting** other **credentials**
  - Re-enroll passkeys, TOTP
- Support for **username recovery**

WSO<sub>2</sub> IDENTITY SERVER

### Recover Username

Enter below details to recover your username.

Name

Email or mobile \*

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[Privacy Policy](#)



# Measuring Success of your CIAM Journeys



**Sign-up  
Abandonment**



**Password  
Resets**



**Help desk  
Calls**



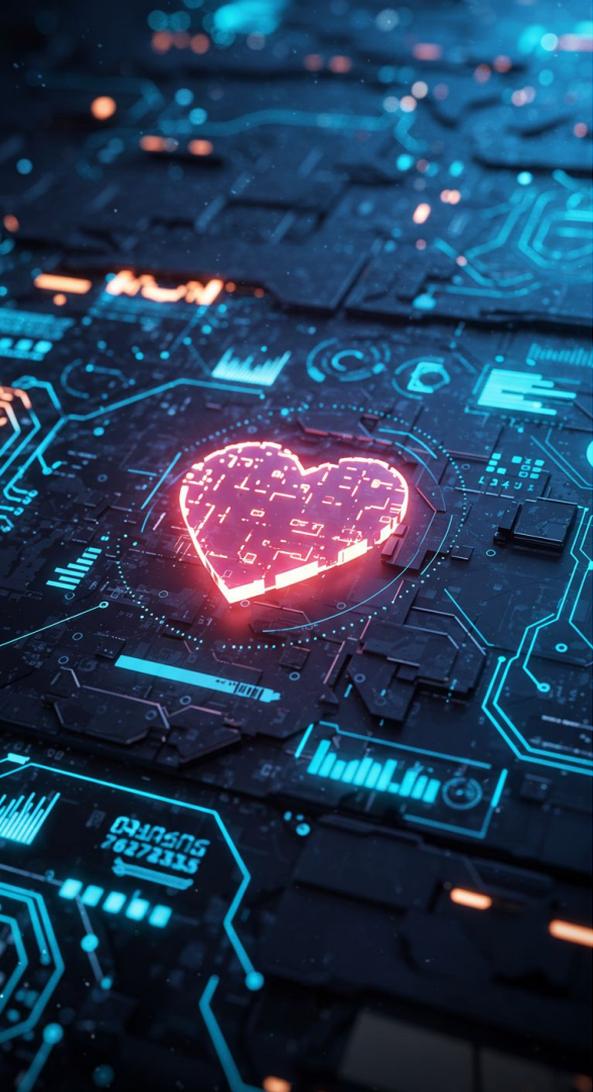
**Average  
Sign up/Signin  
Time**





# Thinking CIAM Beyond Security



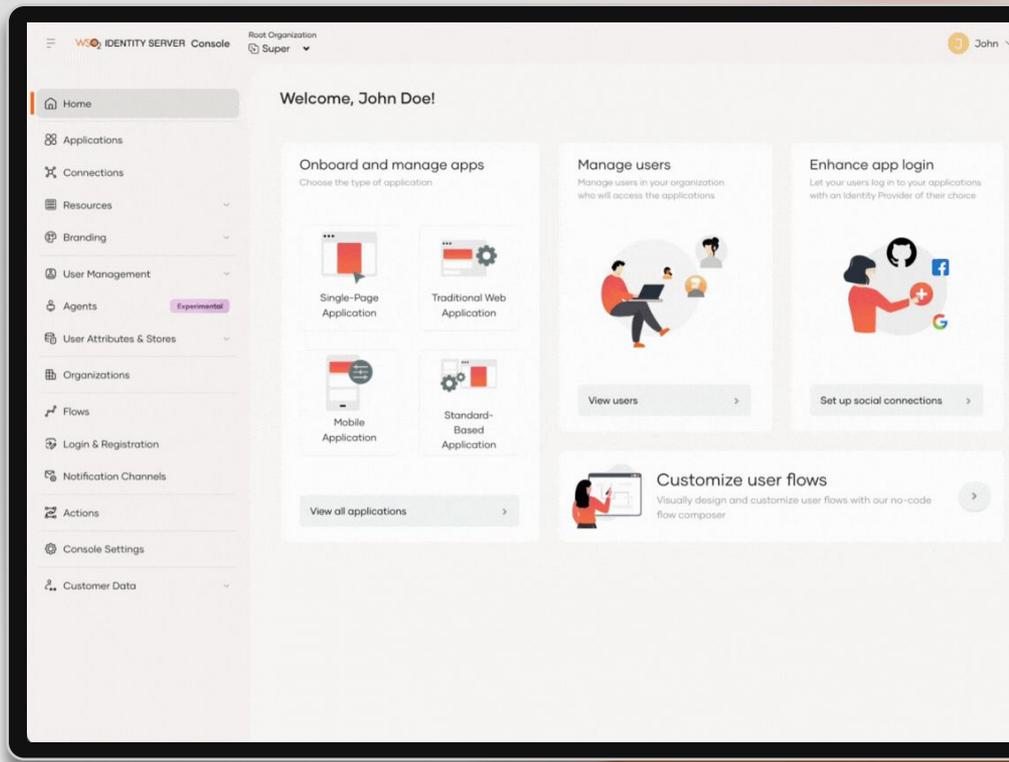


## Identity at the Heart of Personalization

- Personalization starts with the question “Who is the user ?”
  - ⦿ Know the customer regardless of the product or service
- Identity as a foundation for delivering contextual, adaptive, and secure experiences
  - ⦿ Move beyond just managing access to truly understanding the individual

# Our Vision for Intelligent Personalization

- Unify customer identity and data
  - Manage **anonymous profiles**
  - **Link anonymous and permanent profiles**
  - **Empower developers** to build personalized experiences
  - **Privacy centric data** capturing and sharing
  - **Enrich profiles** through **integrations**





## Final Thoughts

- **CIAM = Security + UX + Personalization**
- **Design the journeys that suits your business and customer**
- **Make it secure, make it seamless, make it forgettable**
- **Visibility is key**
- **Look out for new trends**
- **Rely on a CIAM product for user journeys**



Thank you!

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# Learn more about IAM

Stop by the O2 Bar!



**Next Up**

**Johann Nallathamby**  
Director - Solutions Architecture  
WSO2 - IAM

Today at 2.30pm

**3.00pm**

**Break**



**After Break**

**Janak Amarasena**  
Technical Lead  
WSO2 - IAM  
Today at 3.30pm



**Ayesha Dissanayaka**  
Associate Director & Architect  
WSO2 - IAM  
Today at 4.00pm



**Customer Panel**  
How Enterprises Are Modernizing  
with IAM