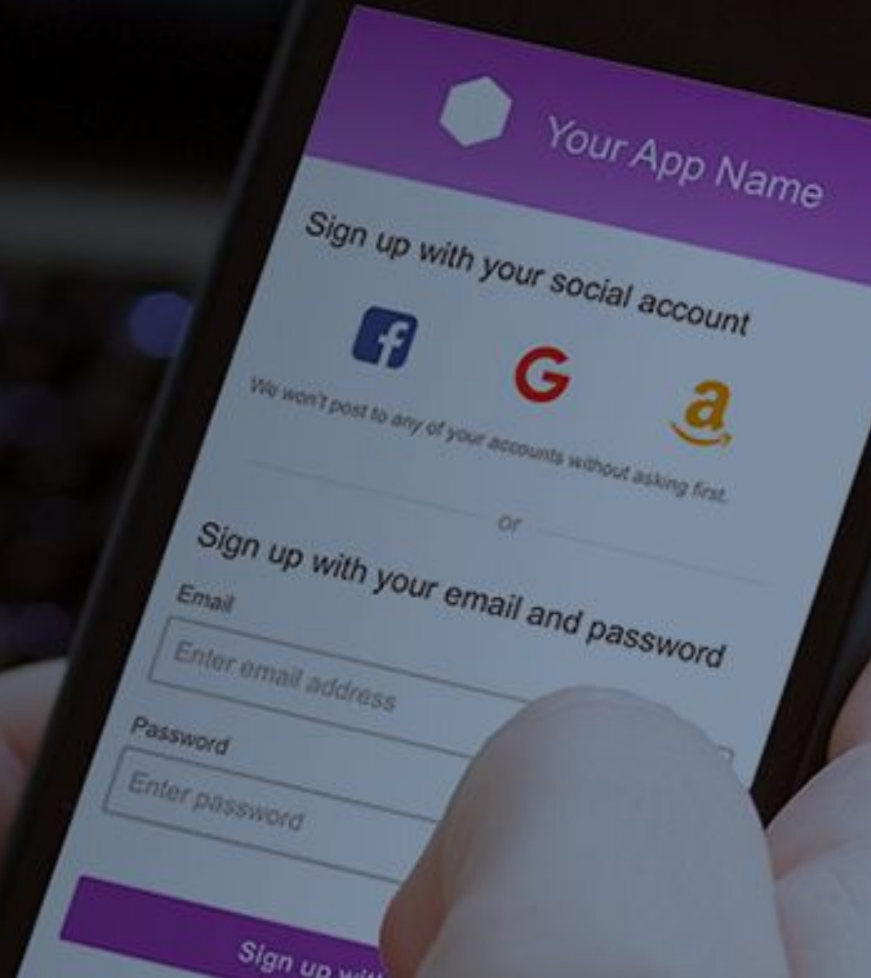
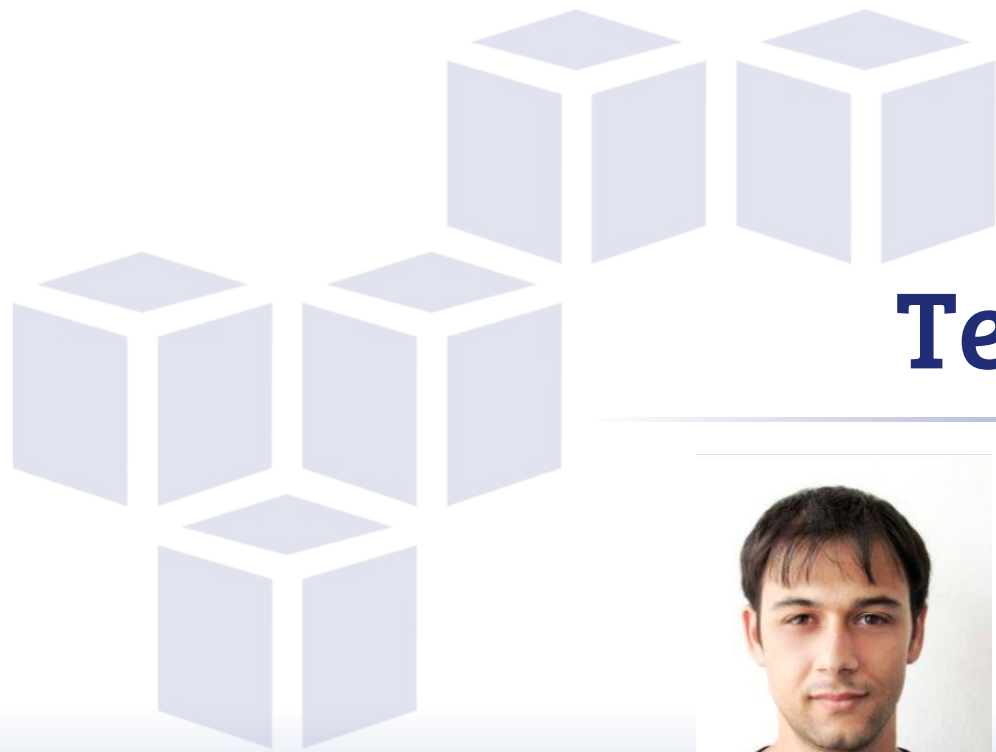




# Amazon Cognito

Simple and Secure User Sign-Up, Sign-In, and Access Control





# Team InCognito



Georgi  
Findulov



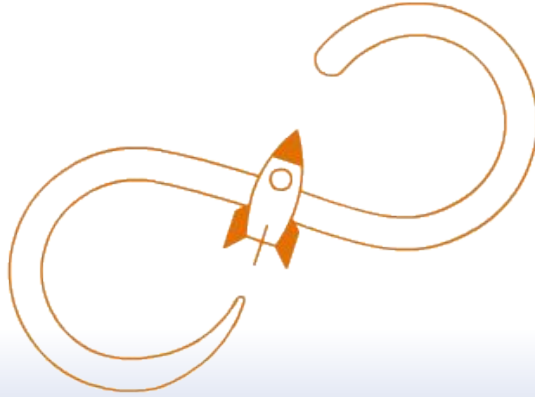
Yulia  
Tenincheva



# Agenda



Overview



Features



Demo

# Authentication

Trivial or tedious?





# Authentication

---

- Database
- Identificators
- Passwords
- Hashes
- Stronger hashes
- Salt
- DB Encryption
- SRP?
- Passwordless ?
- Sending emails
- MFA
- Adaptive authentication
- UI & UX
- Social media identity
- Single Sign-On
- Data Synchronization...

# Amazon Cognito

A Silver bullet or too much complexity?



# Getting Started



## Amazon Cognito

Amazon Cognito offers user pools and identity pools. User pools are user directories that provide sign-up and sign-in options for your app users. Identity pools provide AWS credentials to grant your users access to other AWS services.

[Manage User Pools](#)

[Manage Identity Pools](#)



Add Sign-up and Sign-in

With Cognito User Pools, you can easily and securely add sign-up and sign-in functionality to your mobile and web apps with a fully-managed service that scales to support hundreds of millions of users.



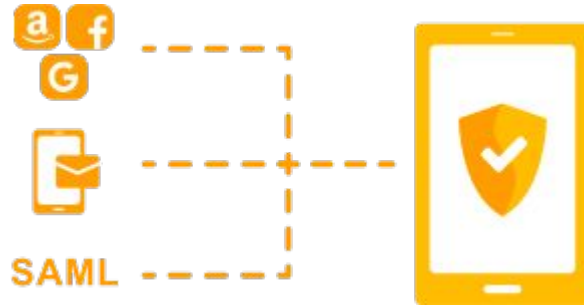
Grant your users access to AWS services

With Cognito Identity Pools, your app can get temporary credentials to access AWS services for anonymous guest users or for users who have signed in.

# Services



User Pools



Identity Pools



Sync



## General settings

Users and groups  
Attributes  
Policies  
MFA and verifications  
Advanced security  
Message customizations  
Tags  
Devices  
App clients  
Triggers  
Analytics

## App integration

App client settings  
Domain name  
UI customization  
Resource servers

## Federation

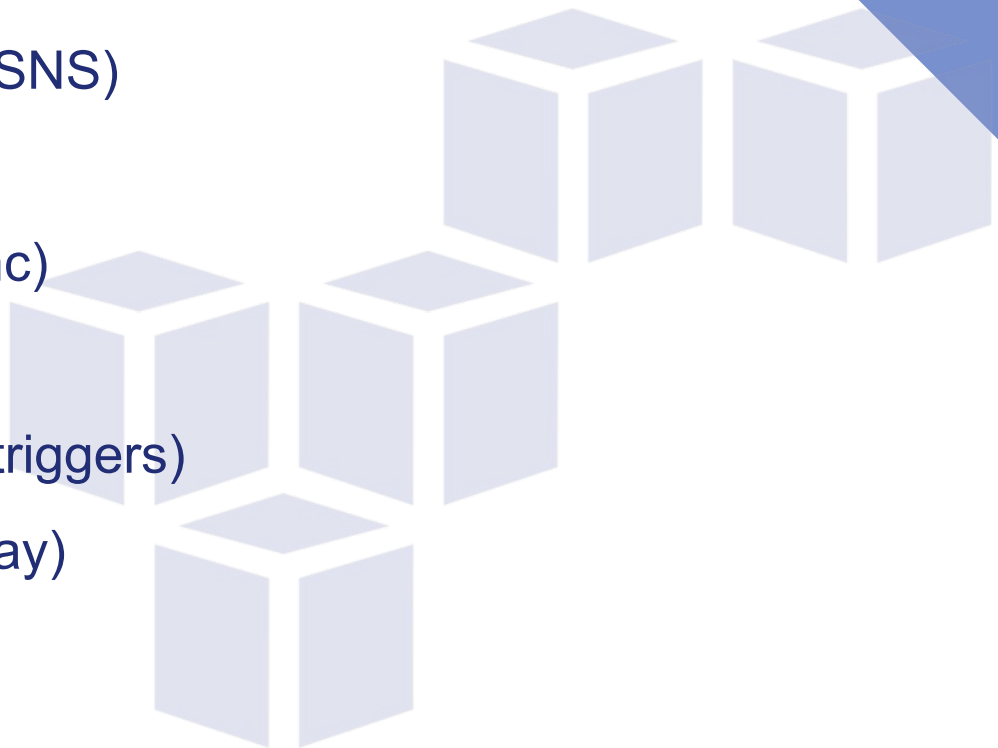
Identity providers  
Attribute mapping

# User Pools

- Sign-up and sign-in services
- A built-in, customizable web UI
- Social sign-in
- User directory management and user profiles
- Security features
- Customized workflows and user migration through AWS Lambda triggers.

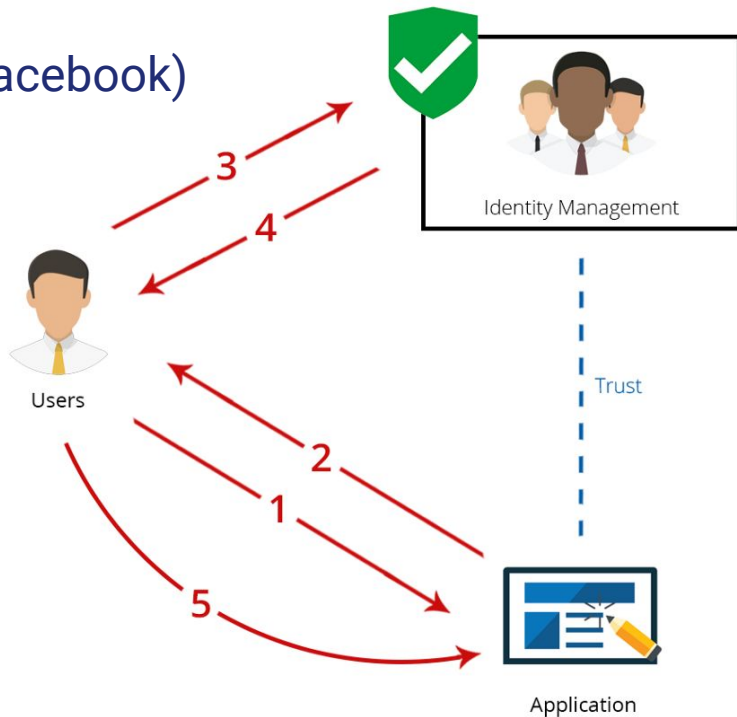
# AWS Symbiosis

- Email Verification, MFA (SES, SNS)
- Analytics (Pinpoint)
- Data Synchronization (AppSync)
- Customized workflows and user migration (AWS Lambda triggers)
- Resource Servers (API Gateway)
- Permissions (IAM)

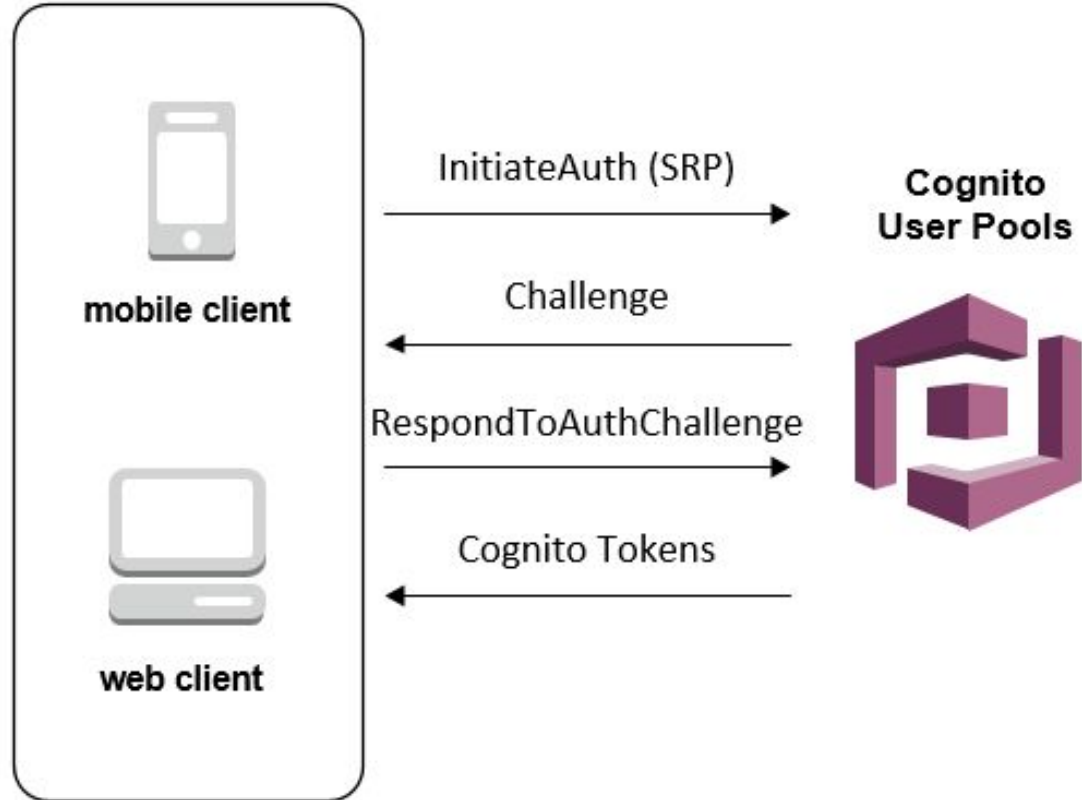


# Federated Identities

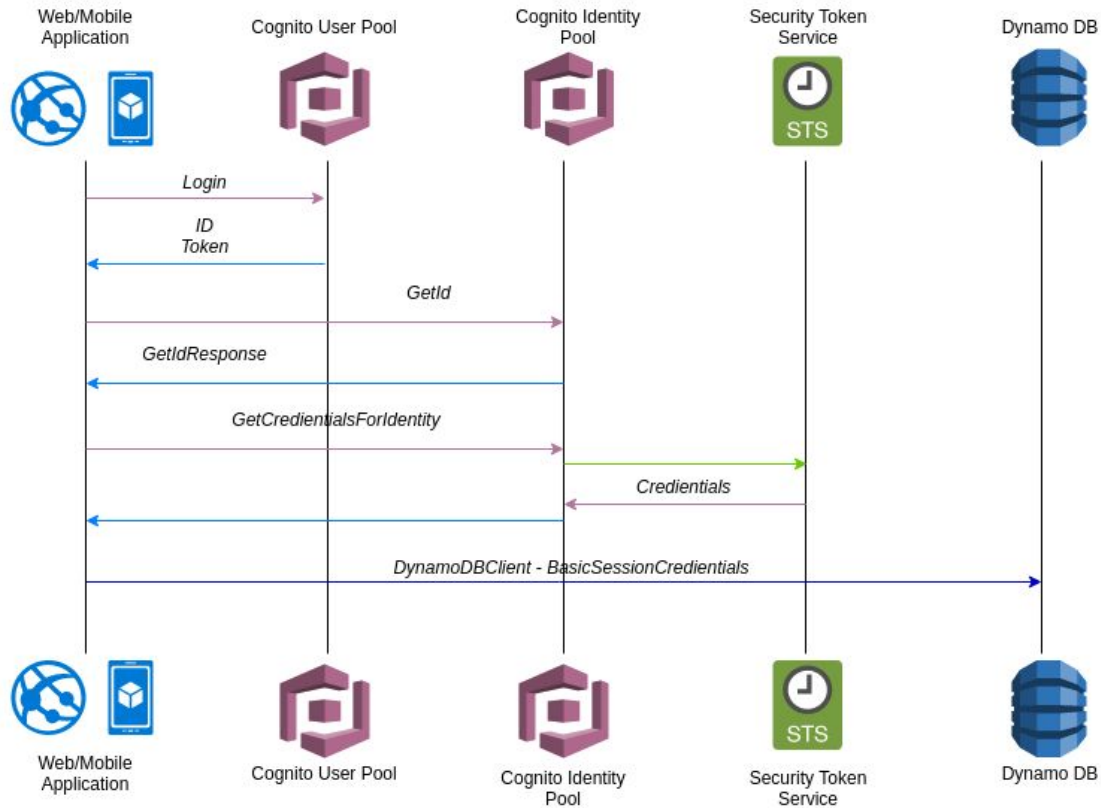
- Public Providers (Amazon, Google, Facebook)
- Amazon Cognito User Pools
- Open ID Connect
- SAML Identity
- Developer Authenticated Identities



# Simple Authentication

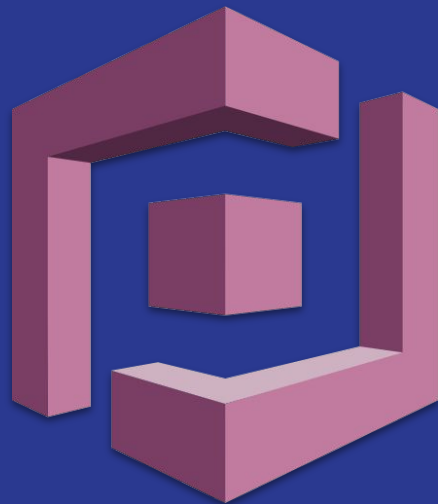


# Federated Identities



# Getting Started

'Cause no one loves reading documentation

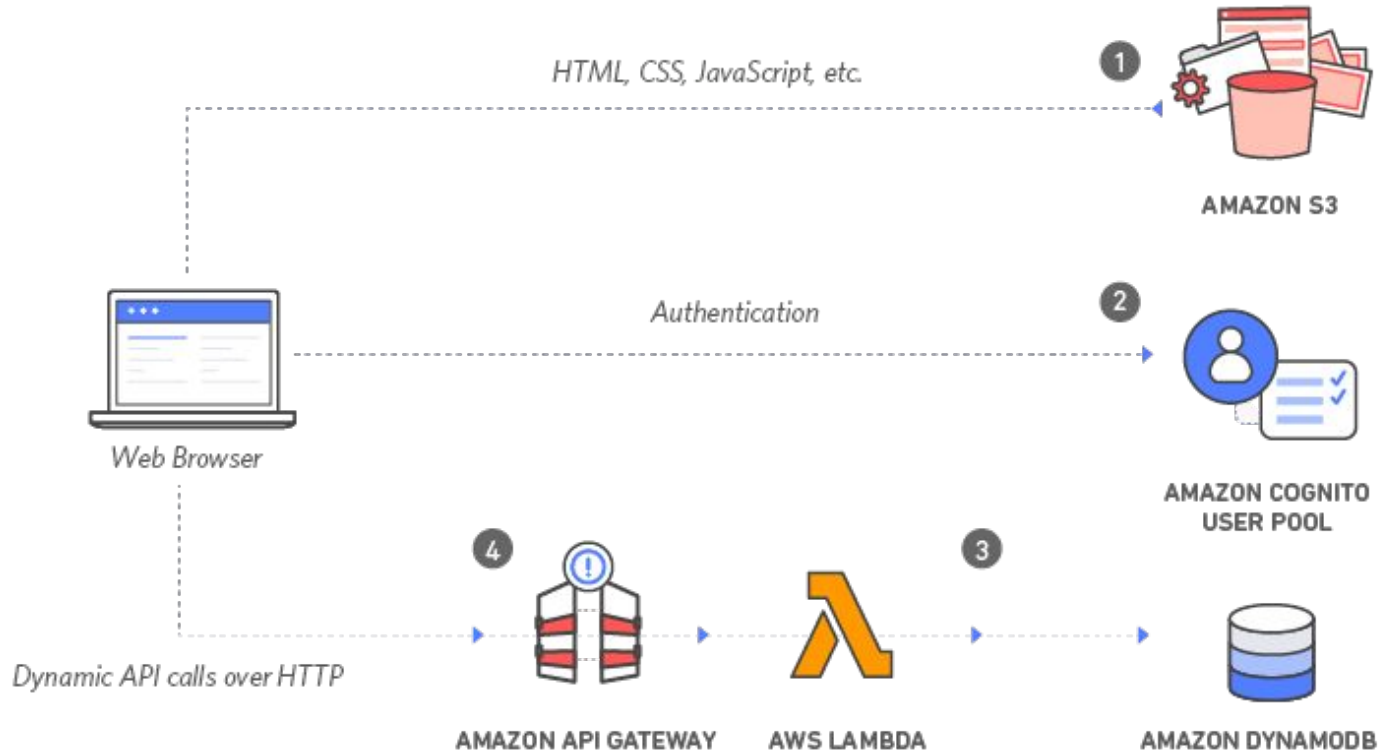




Demo




# Demo - Serverless





Sign In with your social account

 Continue with Google

We won't post to any of your accounts without asking first

Sign in with your username and password

Username

Password

or

[Forgot your password?](#)

[Sign in](#)

Need an account? [Sign up](#)

# Green Learning App - Demo

<https://greenlearning.findulov.com>



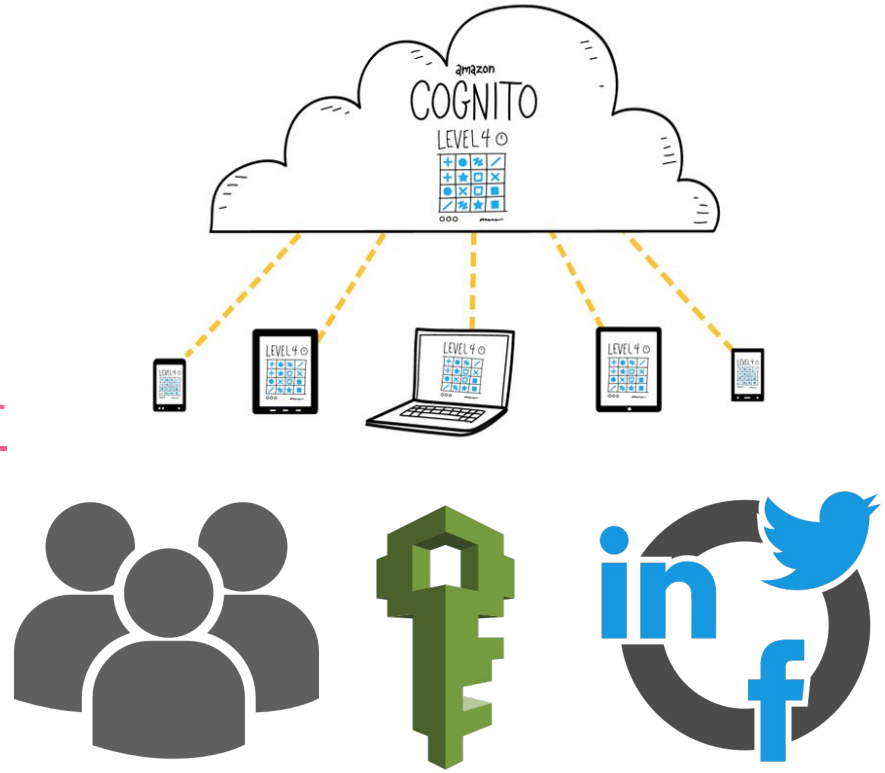
- Free Tier
- User Pools & Social identity providers
- SAML Federation
- Advanced Security Features
- MFA
- Cognito Sync



## Pricing Criteria



- [AWS Decoumentation](#)
- [Wild Rydes Tutorial](#)
- [SRP Explained](#)
- [Cognito Identity as a service in .NET](#)
- [Understanding user and identity pools for serverless apps](#)



# Resources

That were useful to us



**Questions?**

---