



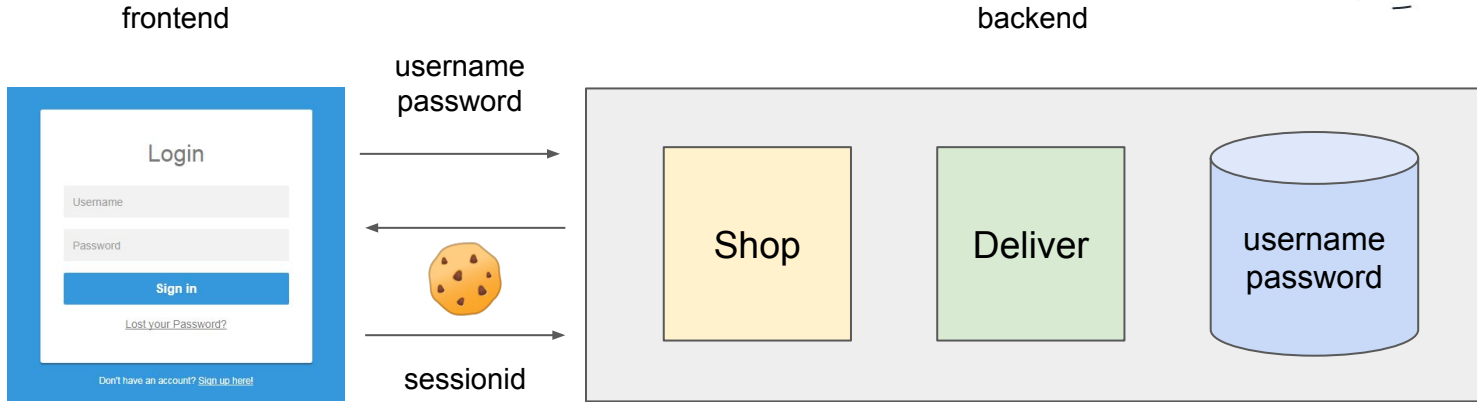
OAuth + Cognito

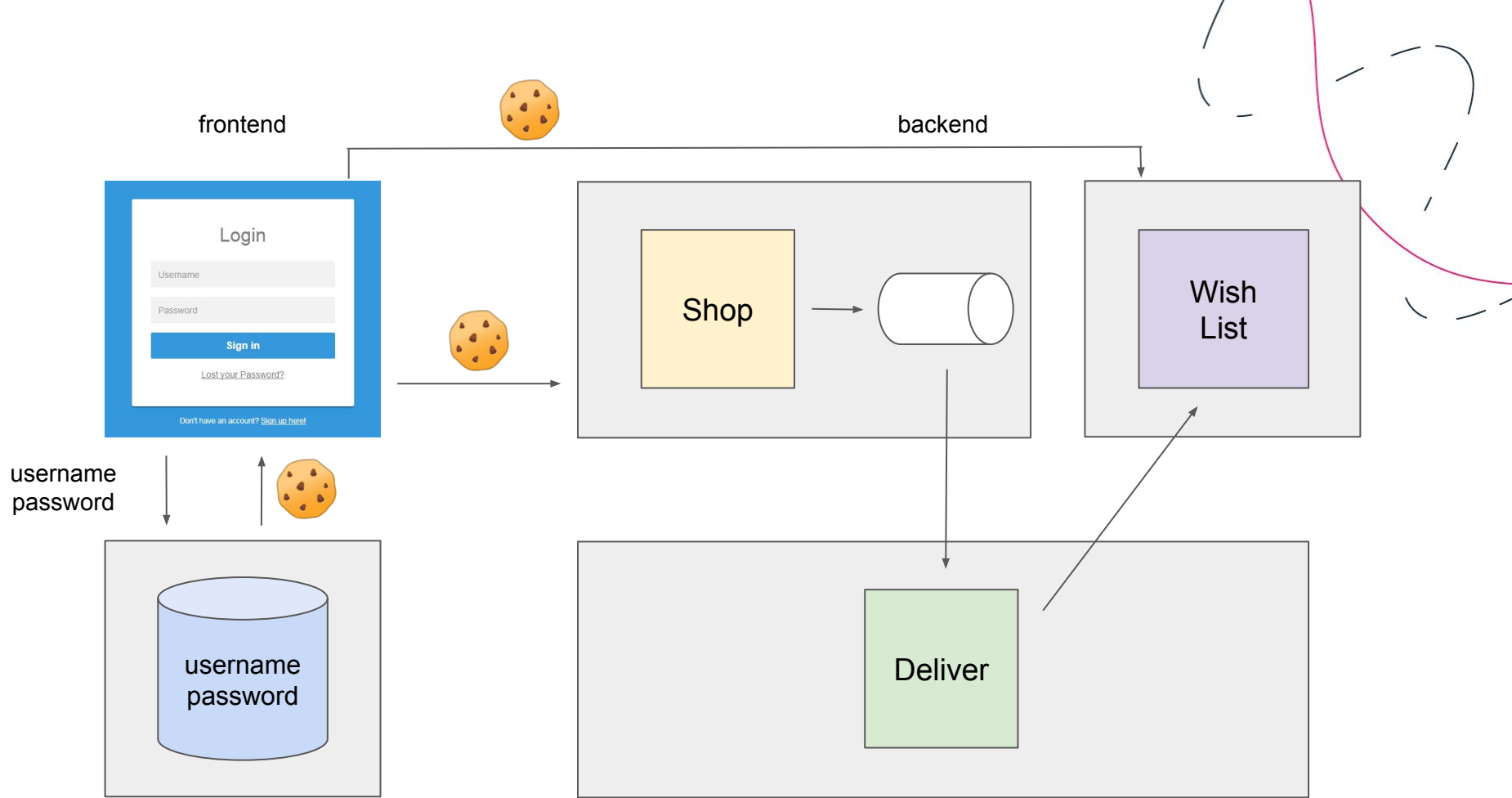
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gergely.nagy@vacuumlabs.com

<https://vacuumlabs.com/jobs>

- **OAuthról általában**
- **Congitóról konkrétan**
- **Demó alkalmazás**





OAuth 2.0

Resource Owner



Resource



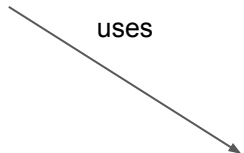
Client



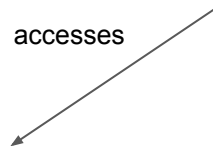
knows



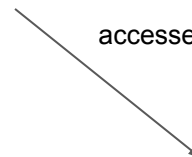
uses



accesses



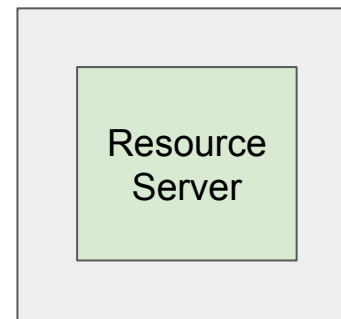
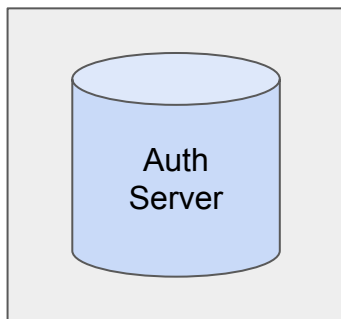
accesses



hosts



trusts



Resource Owner



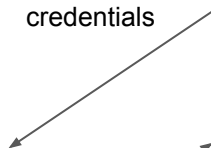
Resource



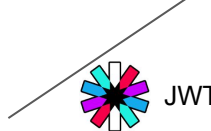
Client



credentials



JWT



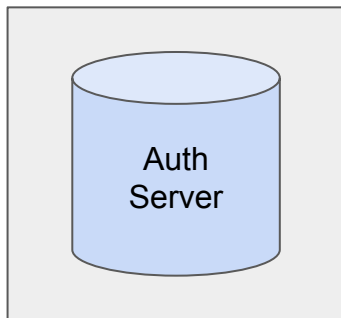
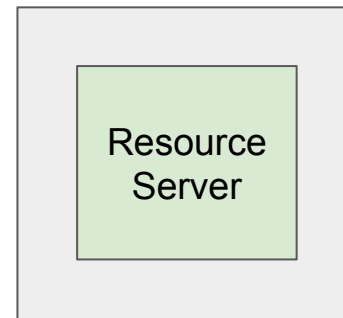
OpenID configuration

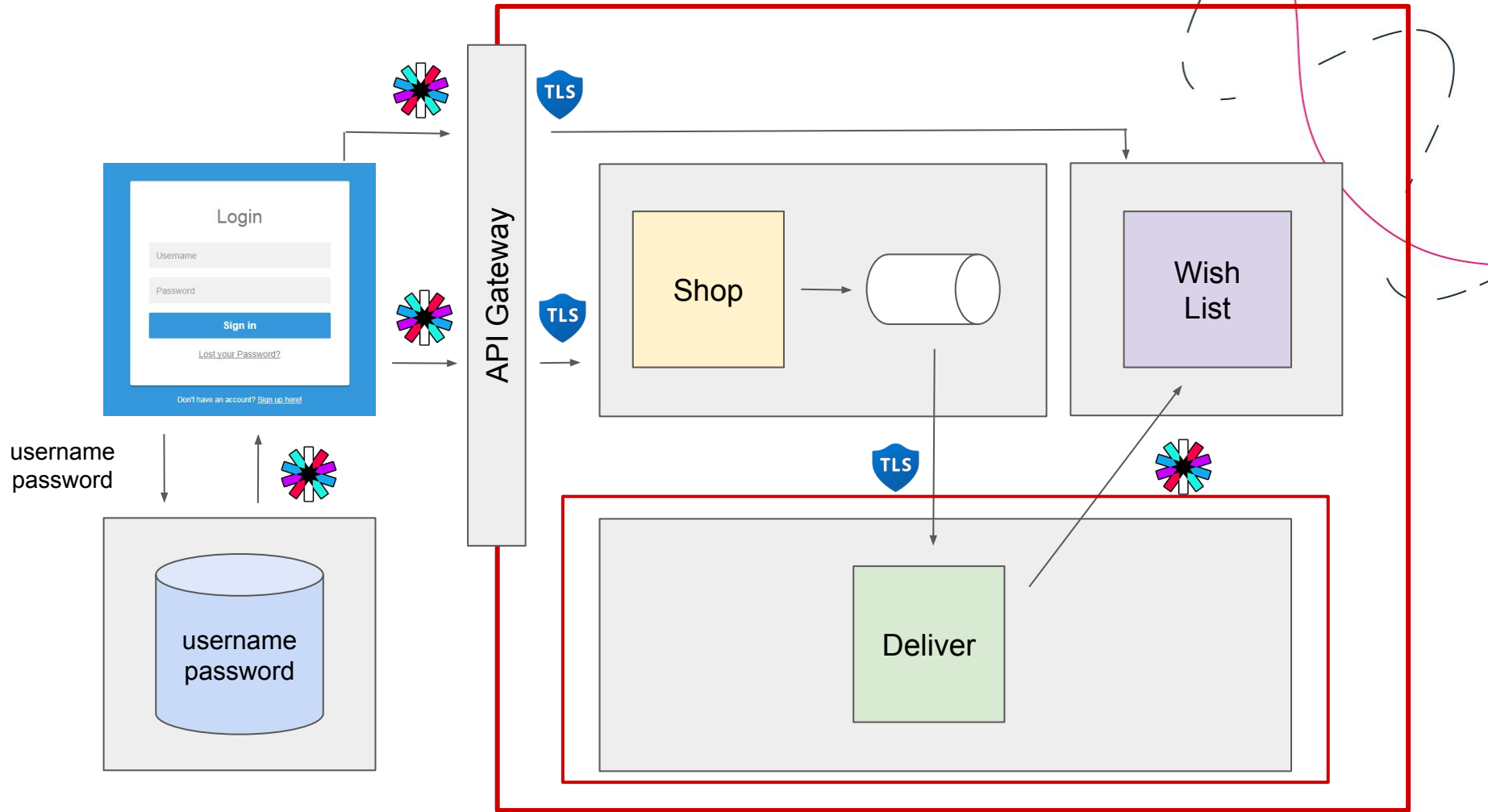


hosts



Resource Server





Tokenek

(zsetonok? :)

cCl6IkpX

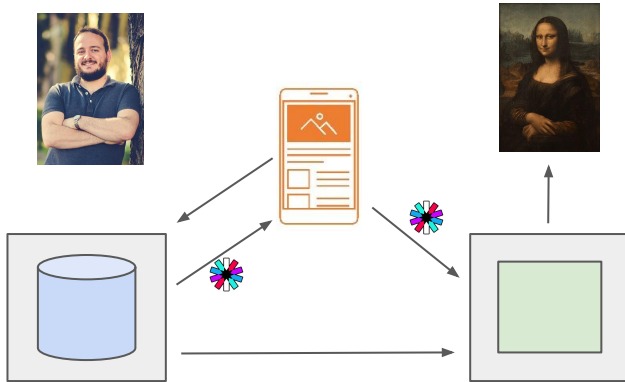
eyJhbGciOiJIUzI1NiIsInR5cGU6ImNpdGUiLCJ0eXBlbm9udGVkaWV0eS

JSON Web Token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJzdWUiOiIxMjM0NTY3ODkwIiwibmFtZSI6IkpvaG4gRG9lIiwiaWF0IjoxNTE2MjM5MDIyfQ.SflKxwRJSMeKKF2QT4fwpMeJf36POk6yJV_adQssw5c

Bearer Token

eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXLTJlbnNlbn



JSON Web Token

```
{  
  "alg": "HS256",  
  "typ": "JWT"  
}  
  
{  
  "sub": "1234567890",  
  "name": "John Doe",  
  "iat": 1516239022  
}
```

```
HMACSHA256(  
  base64UrlEncode(header) + "." +  
  base64UrlEncode(payload),  
  your-256-bit-secret  
)
```

AWS Cognito



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.

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

Pool Id

eu-west-2-

Pool ARN

arn:aws:cognito-idp:eu-west-2:

Estimated number of users

46

Required attributes

none

Alias attributes

none

Username attributes

phone_number, email

Enable case insensitivity?

Yes

Custom attributes

Choose custom attributes...

Minimum password length

8

Password policy

no requirements

User sign ups allowed?

Users can sign themselves up

FROM email address

arn:aws:ses:eu-west-1:

Email Delivery through Amazon SES

Yes

MFA

optional

Verifications

Email

stage

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

Users

Groups

Import users

Create user

User name

Search for value...

Username	Enabled	Account status	Email	Email verified	Phone number verified	Updated	Created
10793c73-c3c7-4b8d-b4ab-241b7c208068	Enabled	UNCONFIRMED	test+1@test.test	false	-	Sep 30, 2021 12:51:01 PM	Sep 30, 2021 12:51:01 PM
10bacbd8-1690-4903-8907-f867f36f4f2c	Enabled	UNCONFIRMED	test+2@test.test	false	-	Sep 30, 2021 12:51:52 PM	Sep 30, 2021 12:51:52 PM
	Enabled	CONFIRMED		true	-	Sep 13, 2021 9:56:11 AM	Sep 13, 2021 9:51:53 AM
	Enabled	CONFIRMED		true	-	Jul 9, 2021 3:21:17 PM	Jul 9, 2021 3:20:28 PM
	Enabled	UNCONFIRMED		false	-	Oct 1, 2021 9:11:00 AM	Oct 1, 2021 9:11:00 AM
	Enabled	CONFIRMED		true	-	Sep 10, 2021 8:14:50 PM	Sep 10, 2021 8:14:28 PM
	Enabled	UNCONFIRMED		false	-	Sep 30, 2021 1:37:43 PM	Sep 30, 2021 1:37:43 PM
	Enabled	CONFIRMED		true	-	Oct 1, 2021 7:14:28 PM	Oct 1, 2021 7:12:00 PM



- General settings
- Users and groups
- Attributes
- Policies
- MFA and verifications
- Advanced security
- Message customizations
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- Attribute mapping

Which app clients will have access to this user pool?

The app clients that you add below will be given a unique ID and an optional secret key to access this user pool.

client-backend

App client id

Show Details

client-ios

App client id

Show Details

client-android

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

App client · client-backend

ID :

Enabled Identity Providers

☒ Select all☒ Cognito User Pool

Sign in and sign out URLs

Enter your callback URLs below that you will include in your sign in and sign out requests. Each field can contain multiple URLs by entering a comma after each URL.

Callback URL(s)

http://localhost:8080/login/oauth2/code/cognito, https://oauth.pstmn.io/v1/callback

Sign out URL(s)

OAuth 2.0

Select the OAuth flows and scopes enabled for this app. [Learn more about flows and scopes.](#)

Allowed OAuth Flows

☒ Authorization code grant ☐ Implicit grant ☐ Client credentials

Allowed OAuth Scopes

☐ phone ☒ email ☒ openid ☐ aws.cognito.signin.user.admin ☐ profile

Hosted UI

The hosted UI provides an OAuth 2.0 authorization server with built-in webpages that can be used to sign up and sign in users using the domain you created. [Learn more about the hosted UI](#)

[Launch Hosted UI](#)

Demo App

Sign in with your email or phone number and password

Email or Phone number

gergely.nagy@vacuumlabs.com

Password

[Forgot your password?](#)

Sign in

Need an account? [Sign up](#)

```
spring:
  security:
    oauth2:
      resourceserver:
        jwt:
          issuer-uri: https://cognito-idp.eu-west-2.amazonaws.com/eu-west-*****
```

```
spring:
  security:
    oauth2:
      resourceserver:
        jwt:
          issuer-uri: https://cognito-idp.eu-west-2.amazonaws.com/eu-west-*****
client:
  registration:
    cognito:
      provider: cognito
      client-id: *****
      client-authentication-method: none
      authorization-grant-type: authorization_code
      redirect-uri: "{baseUrl}/login/oauth2/code/{registrationId}"
      scope: openid
  provider:
    cognito:
      issuer-uri: https://cognito-idp.eu-west-2.amazonaws.com/eu-west-2_*****
      user-name-attribute: cognito:username
```

```
// https://cognito-idp.eu-west-2.amazonaws.com/eu-west-2_***/.well-known/openid-configuration
{
  "authorization_endpoint": "https://auth.***.com/oauth2/authorize",
  "id_token_signing_alg_values_supported": [
    "RS256"
  ],
  "issuer": "https://cognito-idp.eu-west-2.amazonaws.com/eu-west-2_***",
  "jwks_uri": "https://cognito-idp.eu-west-2.amazonaws.com/eu-west-2_***/.well-known/jwks.json",
  "response_types_supported": [
    "code",
    "token"
  ],
  "scopes_supported": [
    "openid",
    "email",
    "phone",
    "profile"
  ],
  "subject_types_supported": [
    "public"
  ],
  "token_endpoint": "https://auth.***.com/oauth2/token",
  "token_endpoint_auth_methods_supported": [
    "client_secret_basic",
    "client_secret_post"
  ],
  "userinfo_endpoint": "https://auth.***.com/oauth2/userInfo"
}
```

```
// https://cognito-idp.eu-west-2.amazonaws.com/eu-west-2_***/.well-known/jwks.json
{
  "keys": [
    {
      "alg": "RS256",
      "e": "AQAB",
      "kid": "*****=",
      "kty": "RSA",
      "n": "*****...",
      "use": "sig"
    },
    {
      "alg": "RS256",
      "e": "AQAB",
      "kid": "*****=",
      "kty": "RSA",
      "n": "*****...",
      "use": "sig"
    }
  ]
}
```

Cognito Pro / Contra

- + Egyszerű fellőni (főleg ha már használunk AWS-t)
- + Barátságos árazás
- Kicsit fapad



Q&A

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