
OAUTH
2
OAUTH

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What is Oauth2

- Authorization framework
- HTTP service
- All applications

Differences Oauth1 and Oauth2

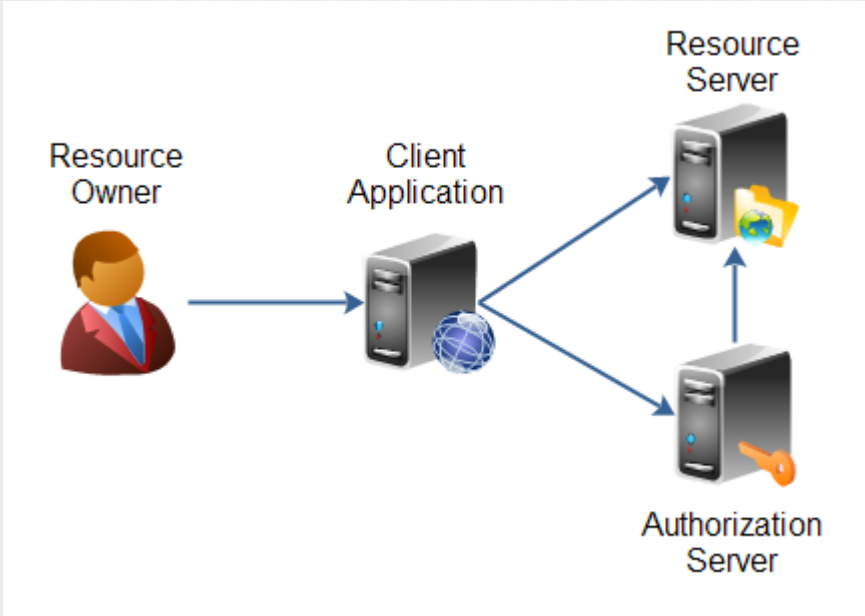
- Security
- Token life span
- Flows
- Roles

Oauth2 roles

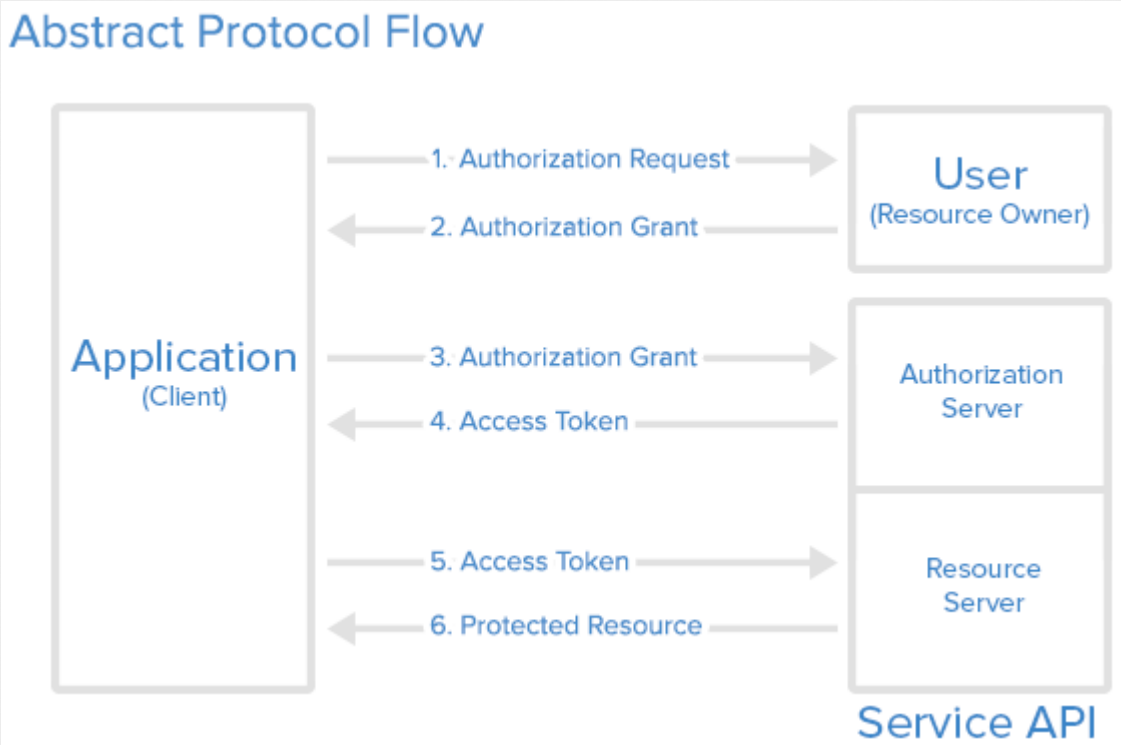
- Resource owner
- Resource server
- Client Application
- Authorization Server
- User Agent

OAuth2 roles/structure

- Resource owner(User)
- Resource/Authorization Server: API
- Client: Application



Abstract protocol flow



Authorization grant

- Authorization code
- Implicit
- Resource Owner Password Credentials
- Client credentials
- Refresh token

Grant type: authorization code

- Most common
- Used for server side applications
- 5 steps
  - Authorization code link
  - User Authorizes application
  - Application receives authorization code
  - Application requests access token
  - Application receives access token

Grant type: authorization code

- Link components

code - Indicates that your server expects to receive an authorization code
client_id - The client ID you received when you first created the application
redirect_uri - Indicates the URI to return the user to after authorization is complete
scope - One or more scope values indicating which parts of the user's account you wish to access
state - A random string generated by your application, which you'll verify later

```
@Bean
@ConfigurationProperties("facebook.client")
public AuthorizationCodeResourceDetails
```

```
@Bean
@ConfigurationProperties("facebook.resource")
public ResourceServerProperties
```

Implicit grant

- Used for mobile/web applications
- Running resource in browser
- Simplicity

Grant type: Resource owner password credentials

- Username and password
- Only on authorization server
- Depending on trust

Grant type: Client credentials

- Own service accounts
- Updating registered description
- Access other data

Refreshing your token

Token

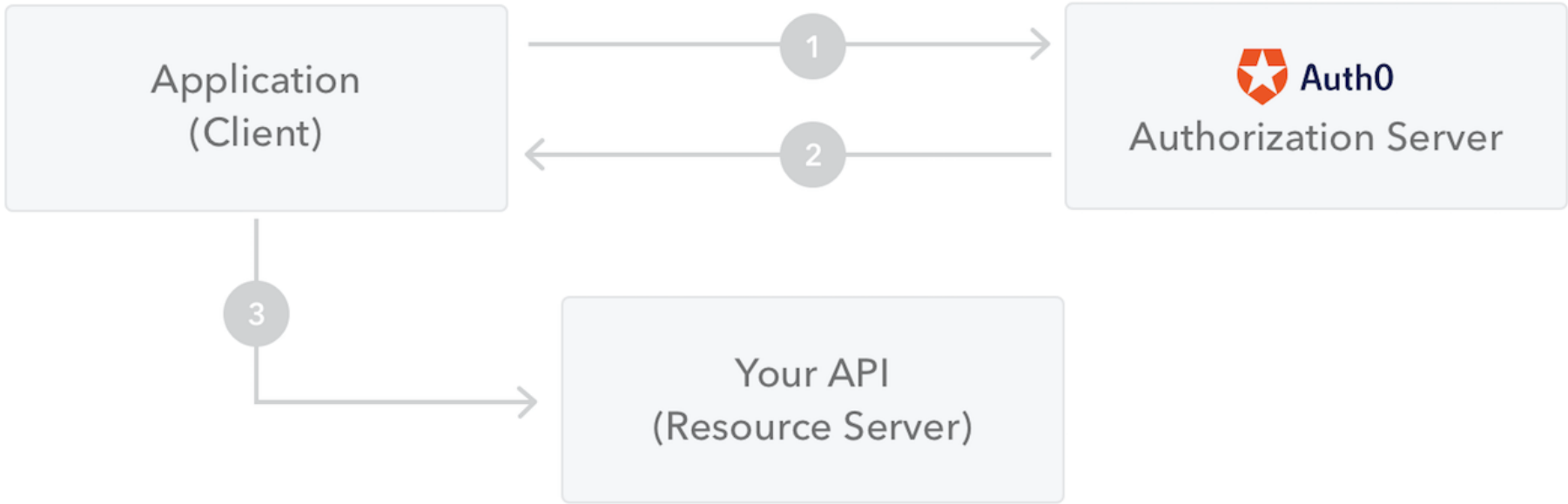
- Request:

client_id =CLIENT_ID
client_secret =CLIENT_SECRET
grant_type=authorization_code
Code =AUTHORIZATION_CODE
redirect_uri =CALLBACK_URL

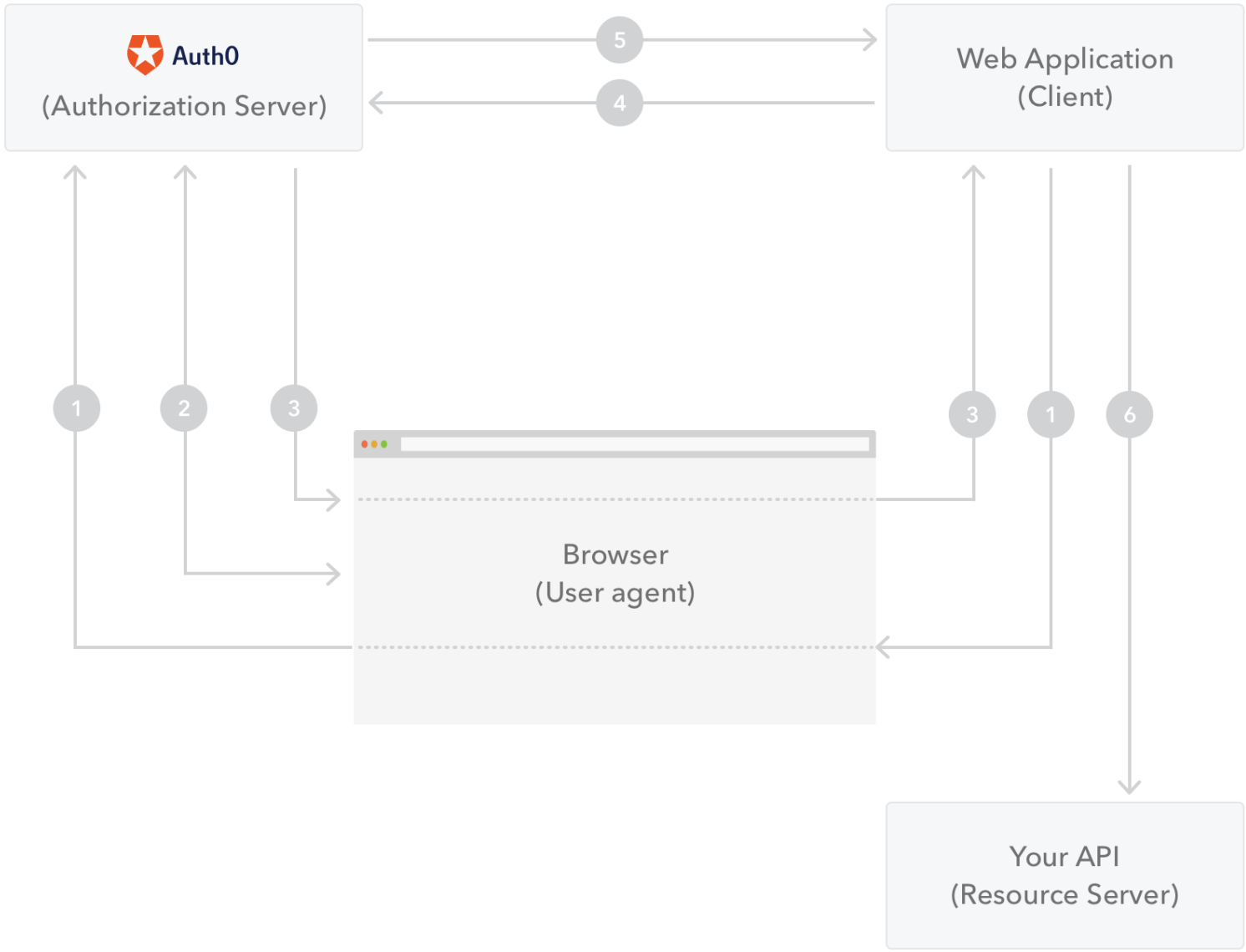
- Receive:

access_token:"ACCESS_TOKEN“
token_type":"bearer“
expires_in":2592000
refresh_token":"REFRESH_TOKEN“
scope":"read“
uid":100101
info":{"name":"Mark E. Mark","email":"mark@thefunkybunch.com"}}

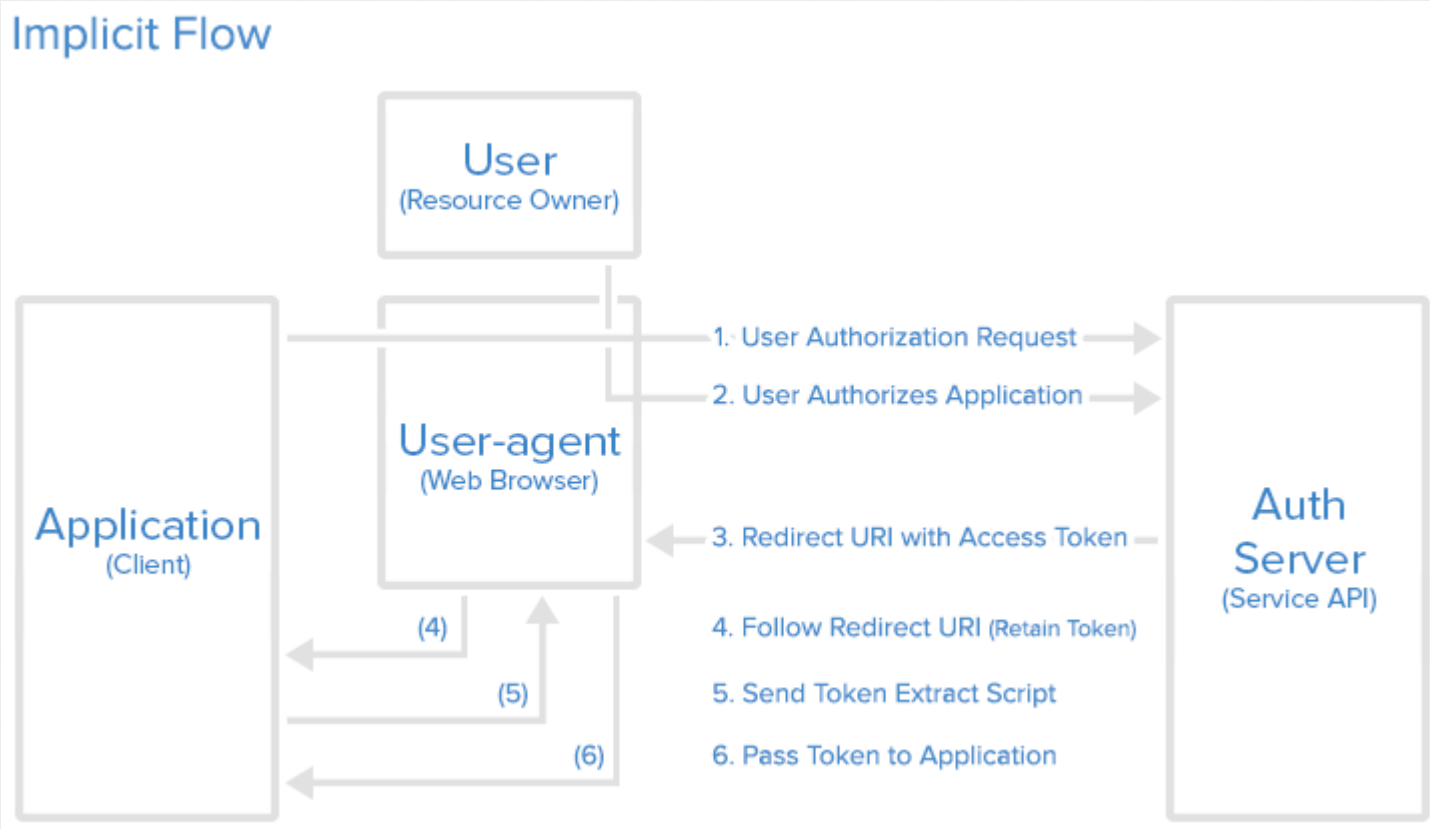
Client Credentials Grant



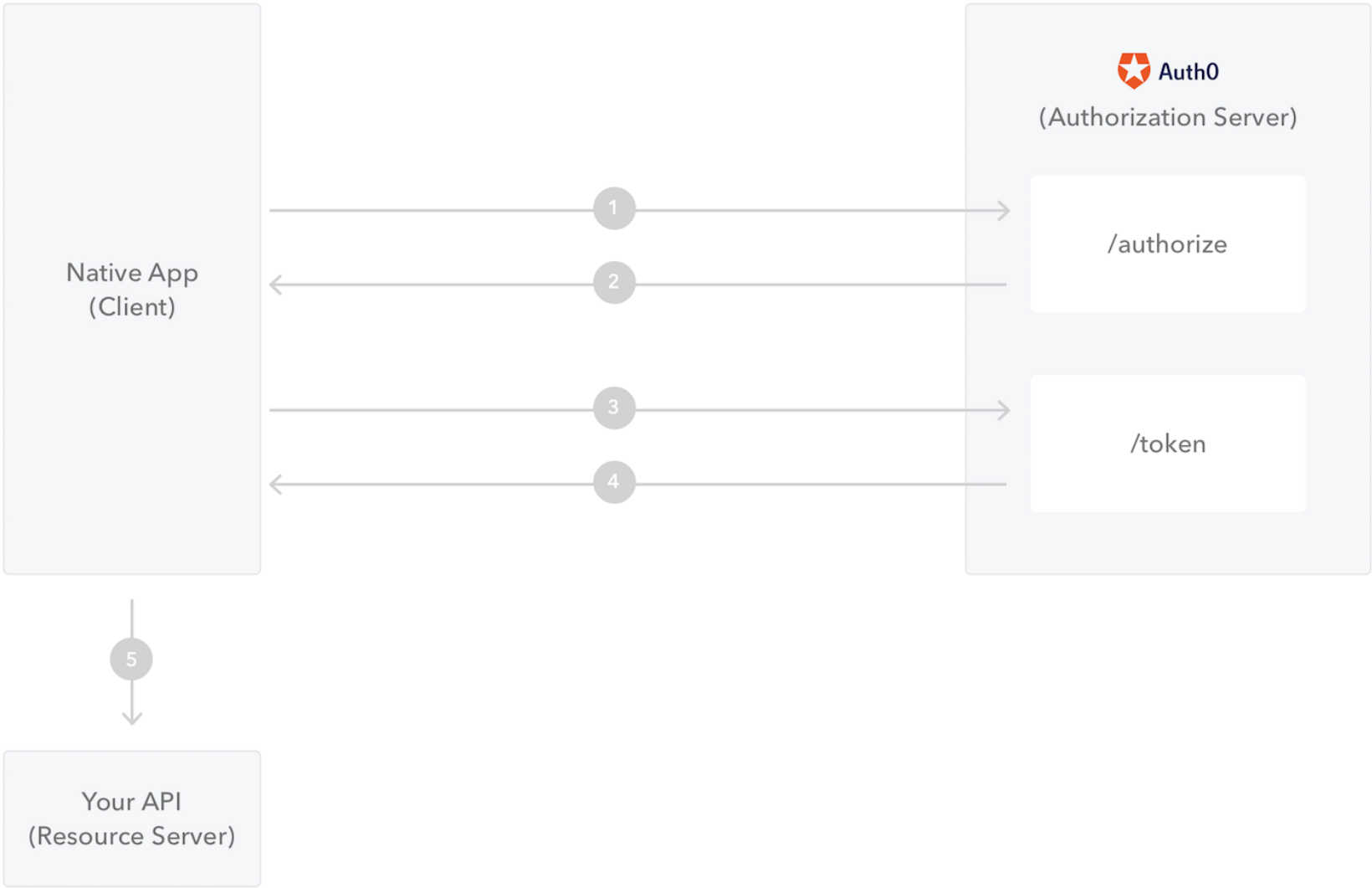
Authorization Code Grant

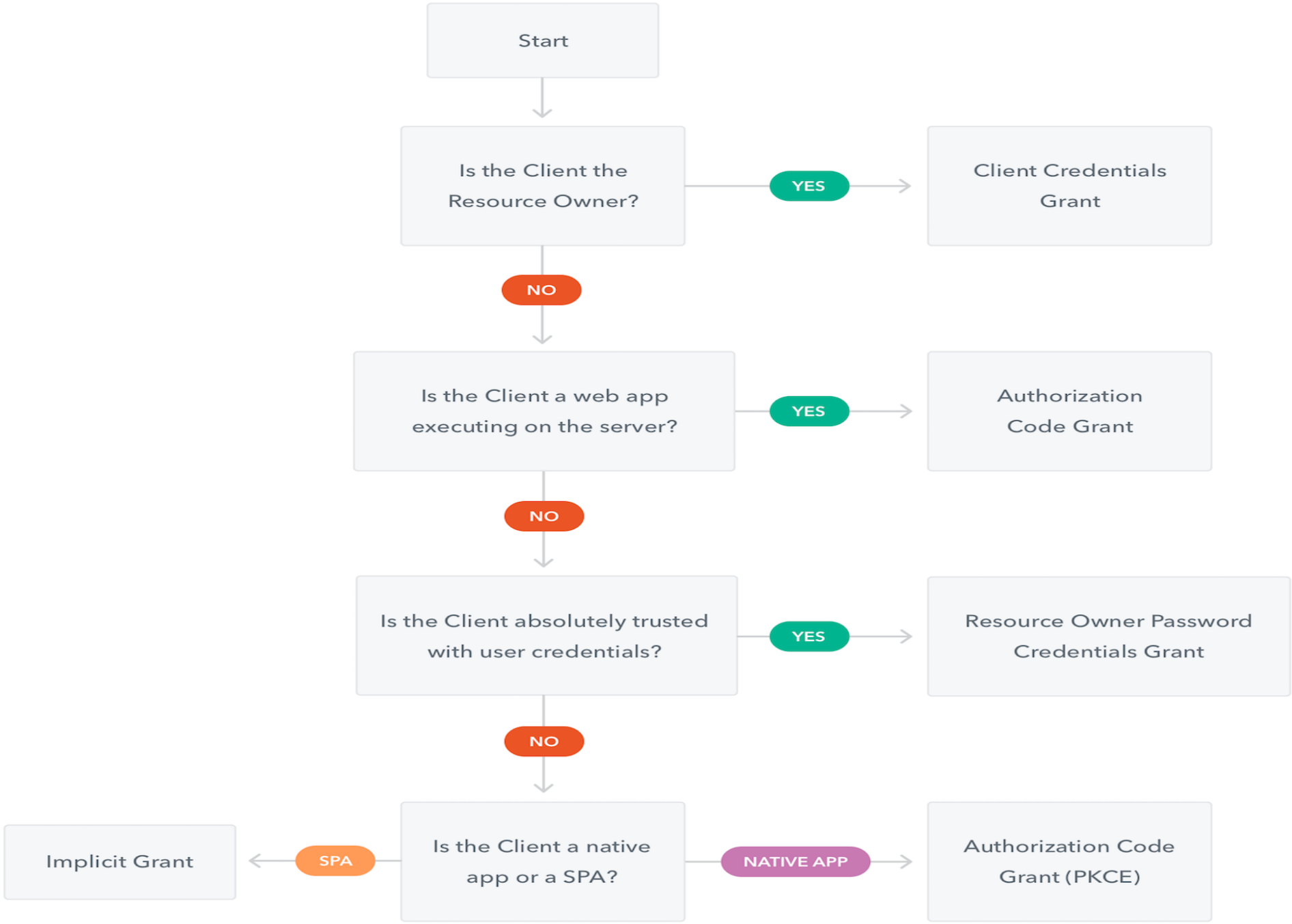


Implicit grant



Authorization Code Grant (PKCE)




Start
Is the Client the Resource Owner?
YES
Client Credentials Grant
NO
Is the Client a web app executing on the server?
YES
Authorization Code Grant
NO
Is the Client absolutely trusted with user credentials?
YES
Resource Owner Password Credentials Grant
NO
Is the Client a native app or a SPA?
SPA
Implicit Grant
NATIVE APP
Authorization Code Grant (PKCE)

Workshop registration

Workshop client

Workshop Client

```
facebook:
  client:
    clientId: 233668646673605
    clientSecret: 33b17e044ee6a4fa383f46ec6e28eald
    accessTokenUri: https://graph.facebook.com/oauth/access_token
    userAuthorizationUri: https://www.facebook.com/dialog/oauth
    tokenName: oauth_token
    authenticationScheme: query
    clientAuthenticationScheme: form
  resource:
    userInfoUri: https://graph.facebook.com/me
```

Workshop client

```
facebook:
  client:
    clientId: 233668646673605
    clientSecret: 33b17e044ee6a4fa383f46ec6e28eald
    accessTokenUri: https://graph.facebook.com/oauth/access_token
    userAuthorizationUri: https://www.facebook.com/dialog/oauth
    tokenName: oauth_token
    authenticationScheme: query
    clientAuthenticationScheme: form
    scope: email
  resource:
    userInfoUri: https://graph.facebook.com/me?fields=id,name,email
```