



Where did it come from? Where did it go? What the heck is an OAuth Flow?

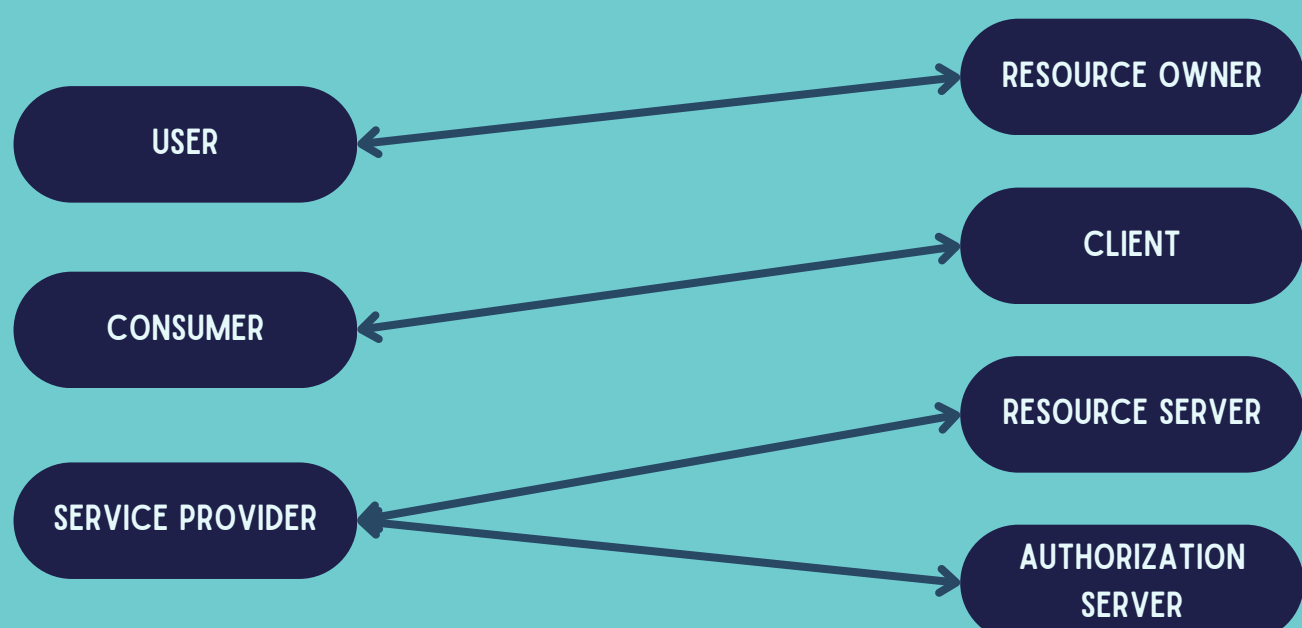


Terminology

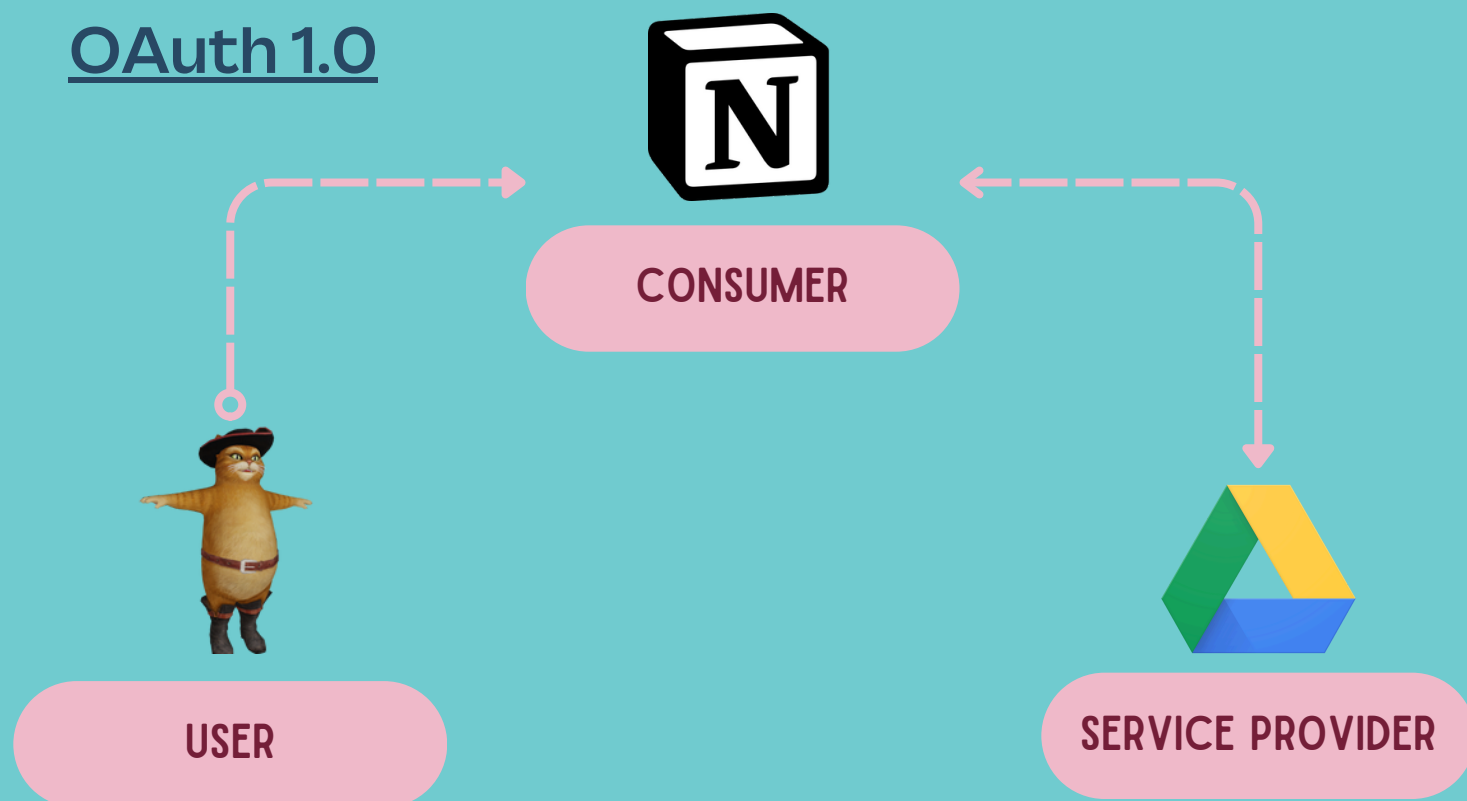
OAUTH 1.0	OAUTH 2.0	MEANING
USER	RESOURCE OWNER	WANTS TO GIVE PERMISSION FOR AN APP TO ACCESS RESOURCES IN ANOTHER APP
CONSUMER	CLIENT	AN APP REQUESTING ACCESS TO STUFF ON A USERS BEHALF
SERVICE PROVIDER	AUTHORIZATION SERVER	HANDLES GETTING PERMISSION FROM THE USER TO GIVE AN APP PERMISSION
ALSO THE SERVICE PROVIDER	RESOURCE SERVER	IN OAUTH 2.0 CAN HOLD USER RESOURCES WITHOUT GRANTING ACCESS TO IT



OAuth 1.0 ↔ OAuth 2.0



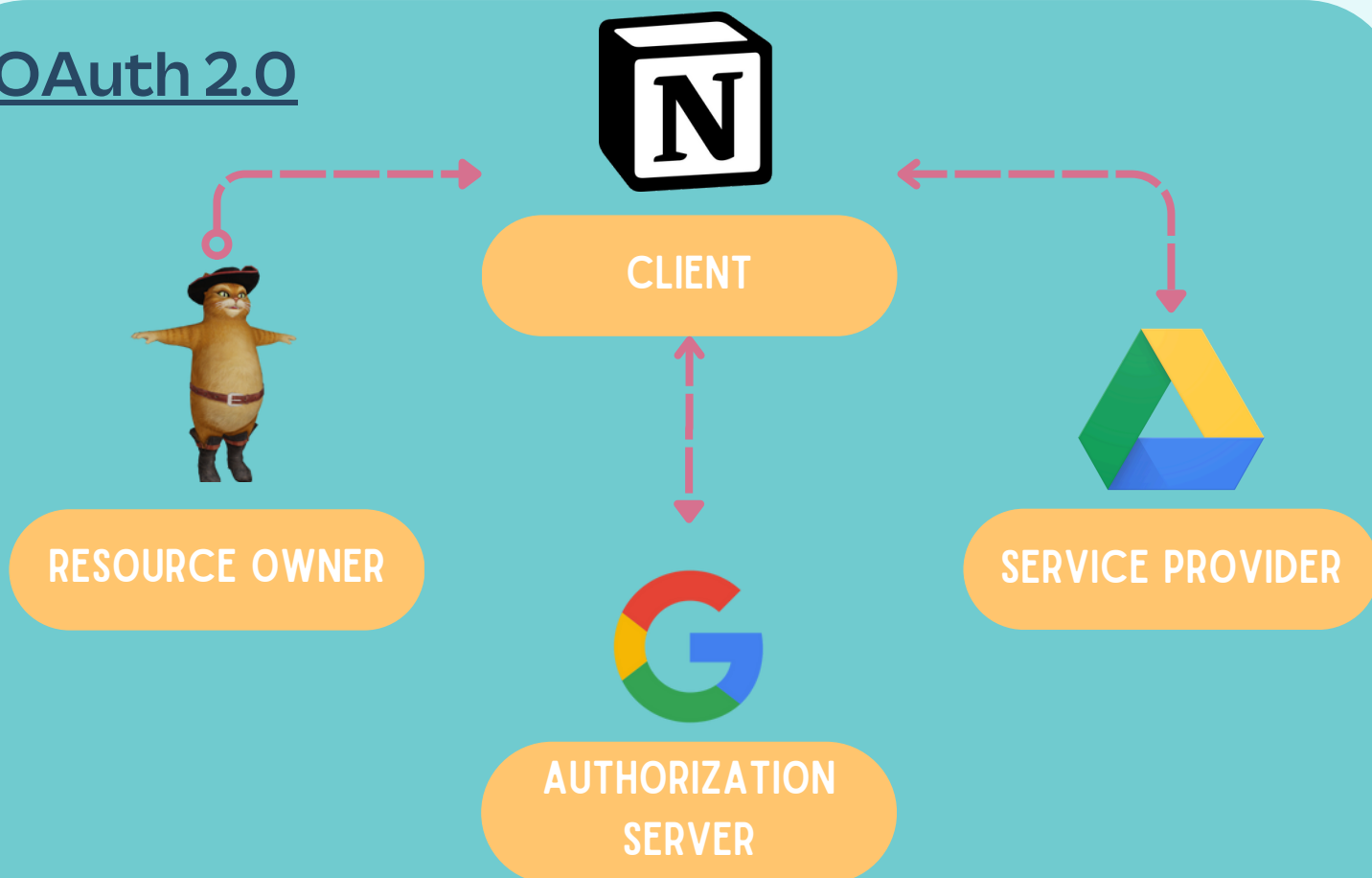
OAuth 1.0



Key Steps

- CONSUMER REGISTRATION**: THE CONSUMER REGISTERS WITH THE SERVICE PROVIDER (VIA A FORM ETC)
- OBTAIN REQUEST TOKEN**: THE CONSUMER GETS A REQUEST TOKEN FROM THE SERVICE PROVIDER
- USER AUTHORIZATION**: USER LOGS INTO SERVICE PROVIDER AND ACCEPTS PERMISSIONS
- TOKEN EXCHANGE**: THE CONSUMER EXCHANGES REQUEST TOKEN FOR ACCESS TOKEN

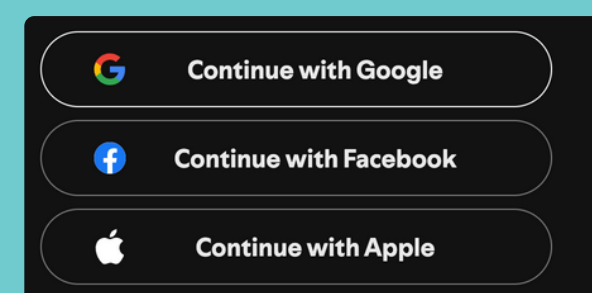
OAuth 2.0



Key Steps

- CLIENT REGISTRATION**: CLIENT REGISTERS WITH SERVICE PROVIDER
- USER AUTHORIZATION**: THE CONSUMER GETS A REQUEST TOKEN FROM THE SERVICE PROVIDER
- VALIDATE YA STATE**: RESOURCE OWNER IS REDIRECTED BACK TO CLIENT AND STATE IS VALIDATED
- TOKEN EXCHANGE**: THE CLIENT EXCHANGES REQUEST TOKEN FOR ACCESS TOKEN

Open ID Connect (OIDC)



ID_TOKEN

```

EYJHBGCI0IUZ11NISINR5CCI6IKPXVCJ9.EYJZDWIIOIXMJ
MONTY3ODKWIIWIBMFTZSI6IKPVAG4GRG9LIWIAWFOIJO
XNTE2MJM5MDIYFQ.SFLKXWRJSMKFF2QT4FWPMEJF36P
OK6YJV_ADQSSW5C
  
```



CREATE ACCOUNT

YOINK'

```

{
  "sub": "puss@gmail.com",
  "name": "puss in boots",
  "email": "puss@gmail.com",
  "iss":
  "idk.somegoogledomain/oauth",
  "iat": 1337,
  "exp": 13371337
}
  
```

Resources (We Used and You can too)

What	What it's about
<u>The OAuth 2.0 Playground</u>	Lets you try the various OAuth flows step by step interactively!!!
<u>OAuth 2.0 Core (RFC 6749)</u>	The og OAuth2 RFC doc
<u>Threat Model and Security Considerations (RFC 6819)</u>	A great place to start for thinking about oauth2 security
<u>OAuth 2.0 for Native Apps (RFC 8252)</u>	Doc for native apps oauth2 (mobile and co)
<u>OpenID Connect</u>	Website/docs for OIDC and how it works
<u>OAuth 1.0</u>	The very first oauth spec!! (OAuth 1.0)
<u>OAuth 1.0 Security Advisory</u>	The OAuth1.0 session fixation attack
<u>OAuth 1.0a</u>	The final revision of OAuth1 (evolving from the session fixation attack above)
<u>Differences in OAuth1 and 2</u>	Quick summary of OAuth1 and 2 key differences
<u>OAuth2.0 and the Road to Hell</u>	A scathing review of OAuth2.0 from its prior chief editor and key contributor to OAuth1 (read if you want to know about oauth drama).

