

I DON'T CARE ABOUT SECURITY
(AND NEITHER SHOULD YOU)

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ABOUT ME

Bruno Krebs

Twitter: @brunoskrebs

GitHub: /brunokrebs



Auth0
R&D Content Architect



QUAL O PROBLEMA?



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**EU POSSO FAZER HASHING E
SALTING**



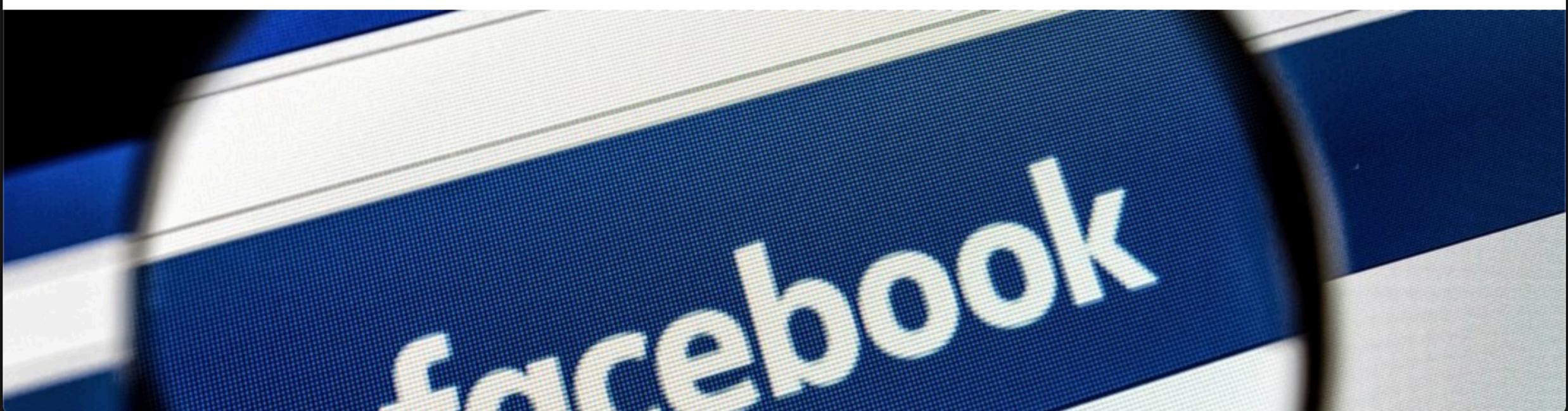
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Milhões de senhas de Facebook e Instagram ficaram expostas
funcionários

POR DOUGLAS CIRIACO | @dciriaco - EM REDES SOCIAIS - 21 MAR 2019 – 14H52

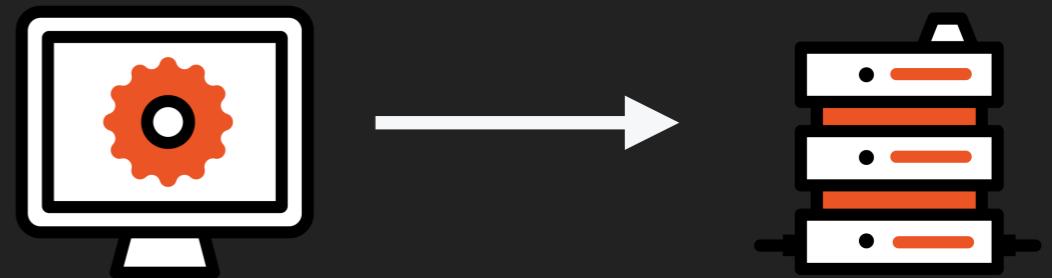
[COMPARAR CELULARES](#) [CUPONS DE DESCONTO](#) [VOXEL](#) [TECMUNDO TV](#) [TECMUNDO DESCONTOS](#)

[COMPARTILHAR](#) [TWITTER](#) [G+](#) [LINKEDIN](#) [8](#) 234 compartilhamentos



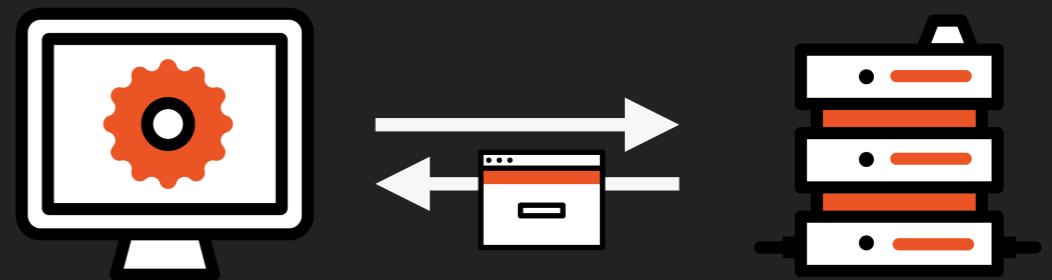
APLICAÇÕES TRADICIONAIS

- Browser acessa página de login



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- Browser acessa página de login



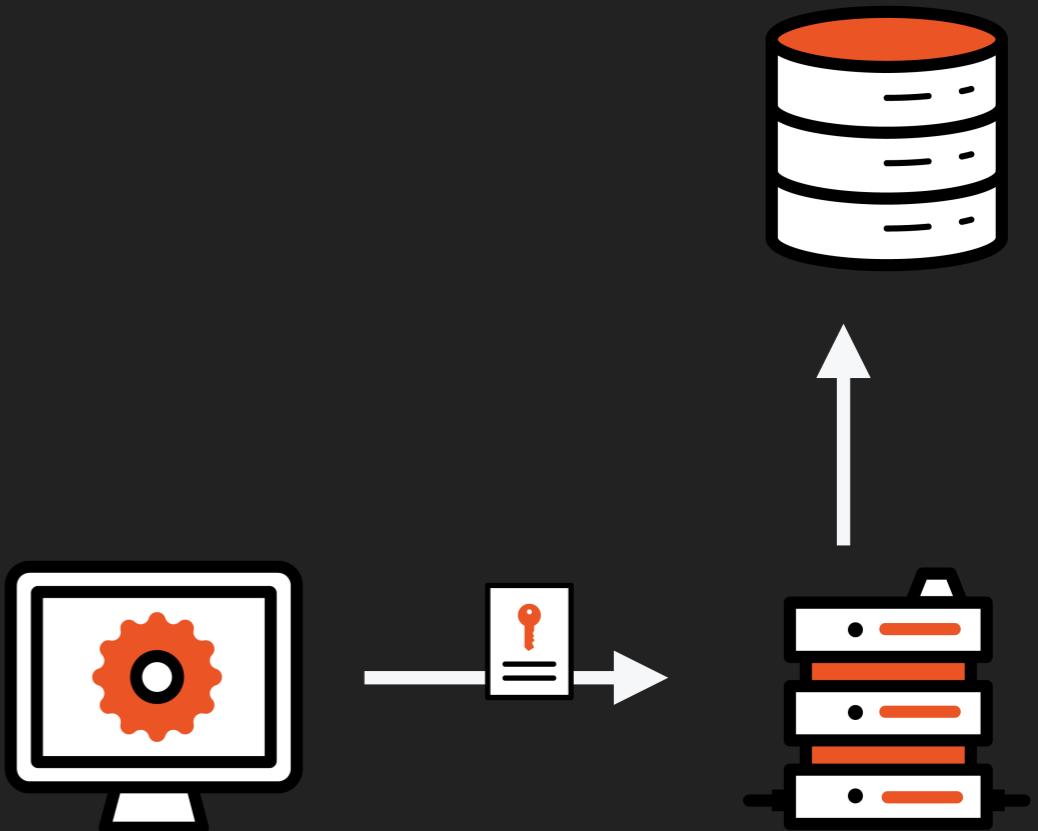
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- Browser acessa página de login



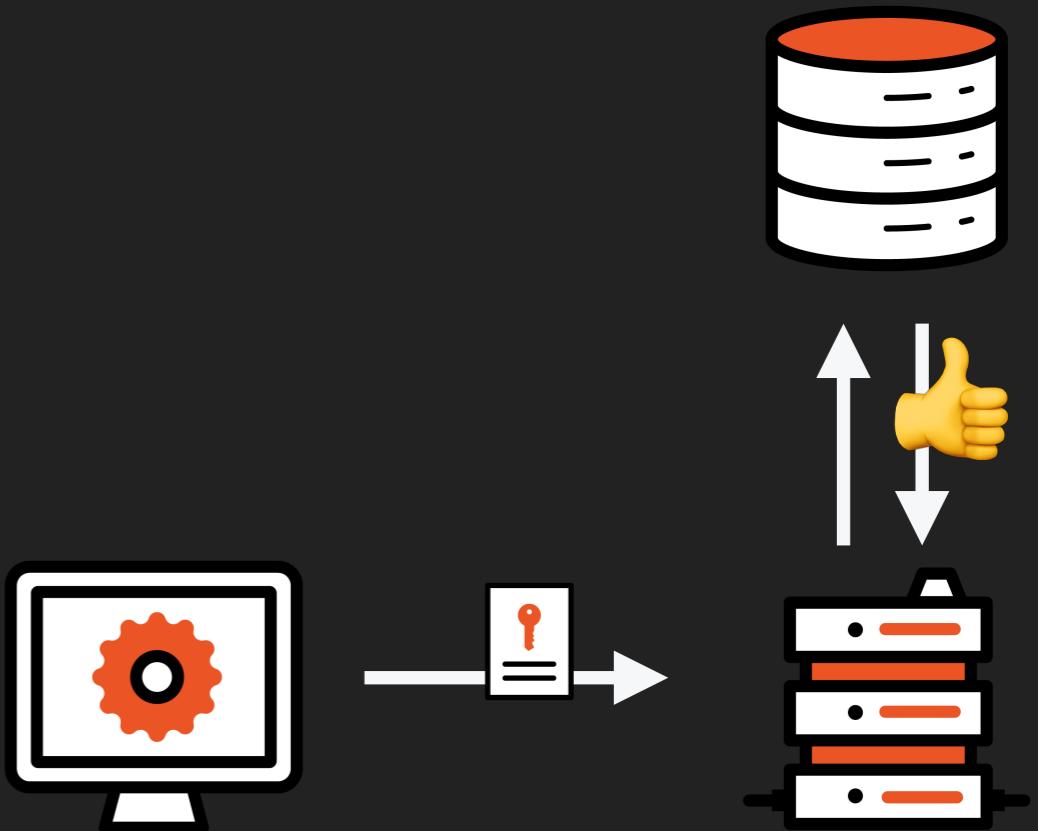
APLICAÇÕES TRADICIONAIS

- ▶ Browser acessa página de login
- ▶ Servidor valida as credenciais



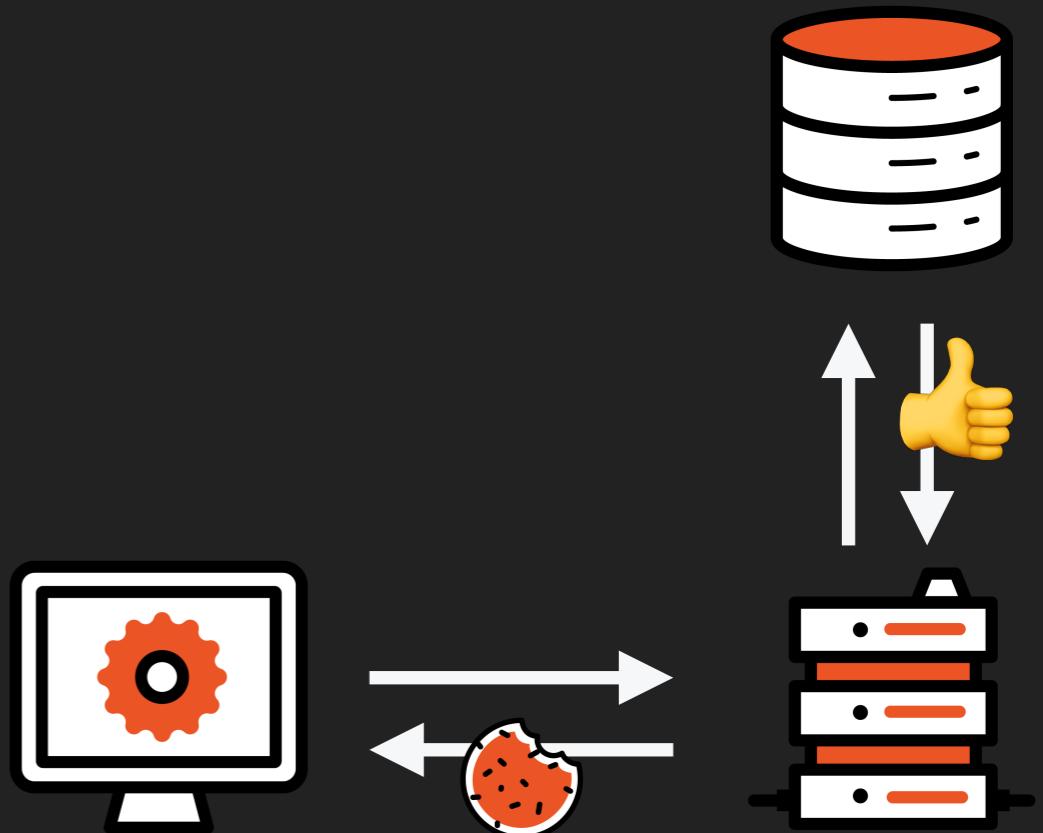
APLICAÇÕES TRADICIONAIS

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APLICAÇÕES TRADICIONAIS

- ▶ Browser acessa página de login
- ▶ Servidor valida as credenciais
- ▶ Uma sessão é estabelecida e um cookie gerado



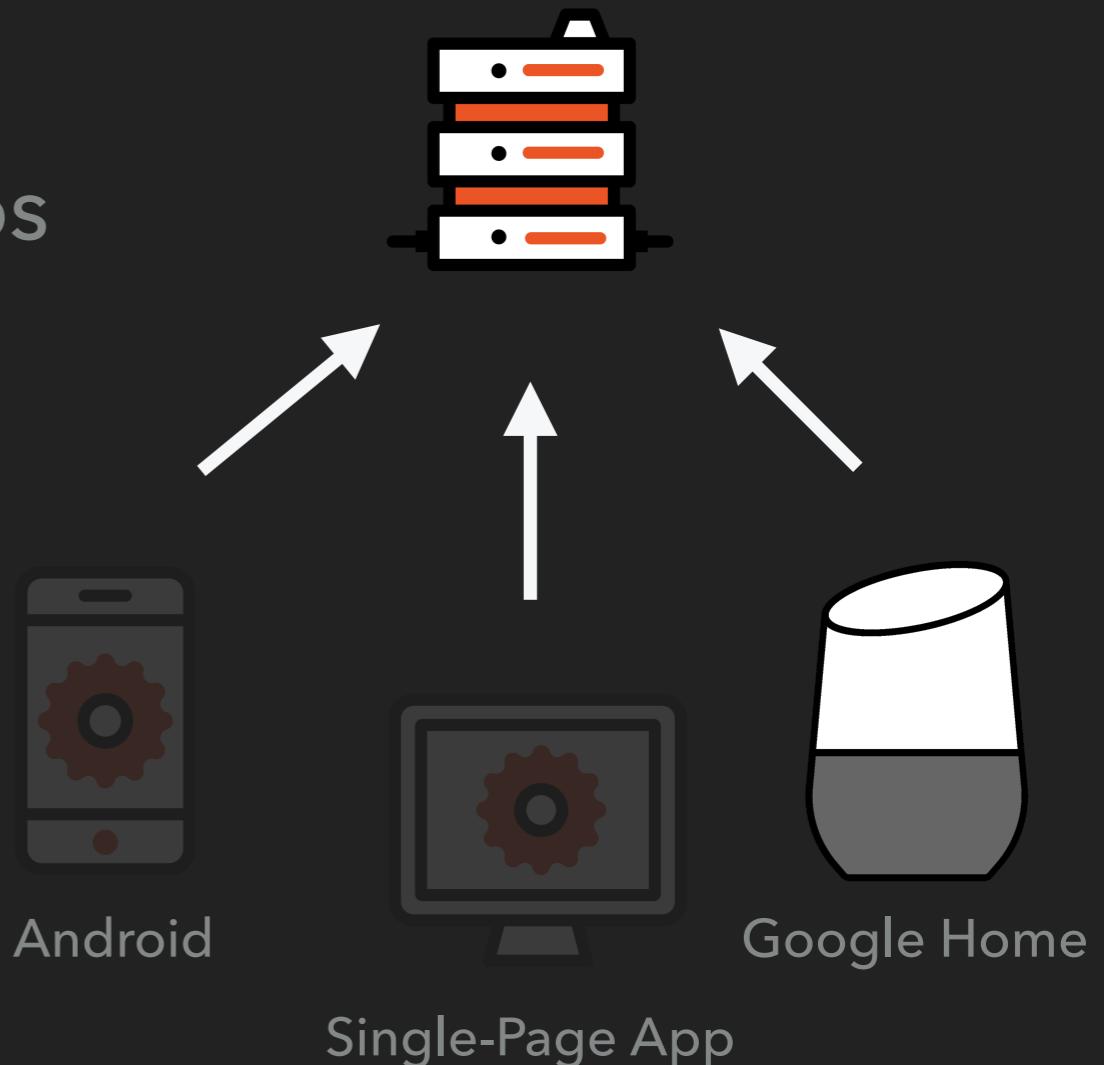
SIM, FUNCIONA. MAS . . .



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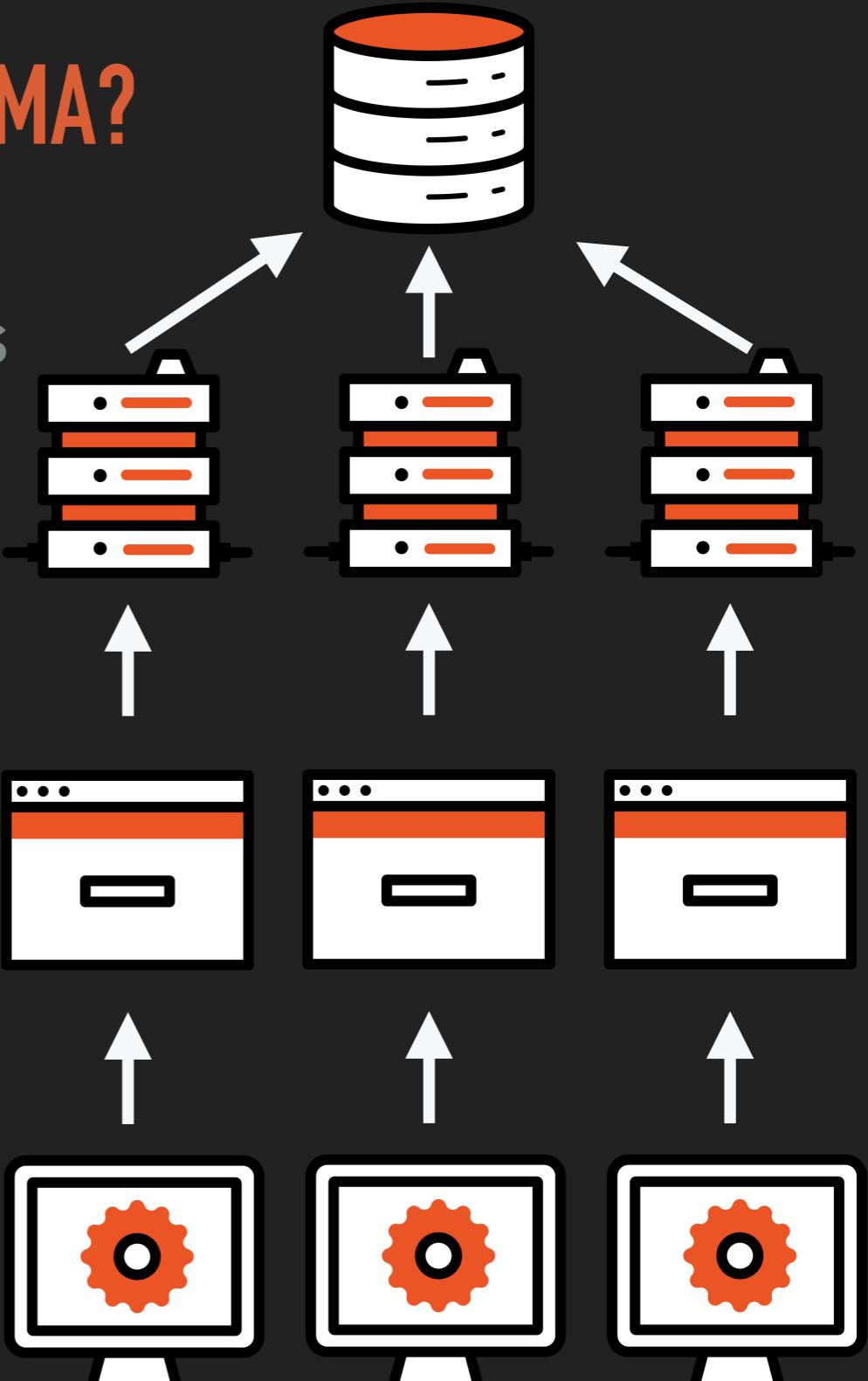
APLICAÇÕES TRADICIONAIS – PROBLEMA?

- ▶ Sim, quando diferentes aparelhos precisam se conectar



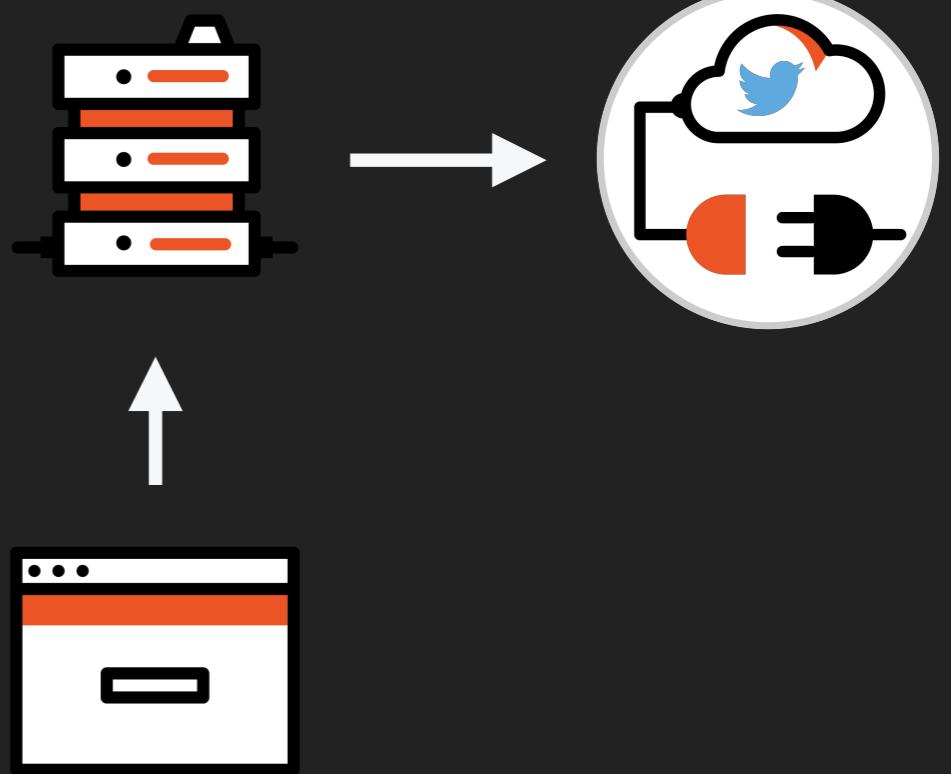
APLICAÇÕES TRADICIONAIS - PROBLEMA?

- ▶ Sim, quando diferentes aparelhos precisam se conectar
- ▶ Sim, fortemente acoplado



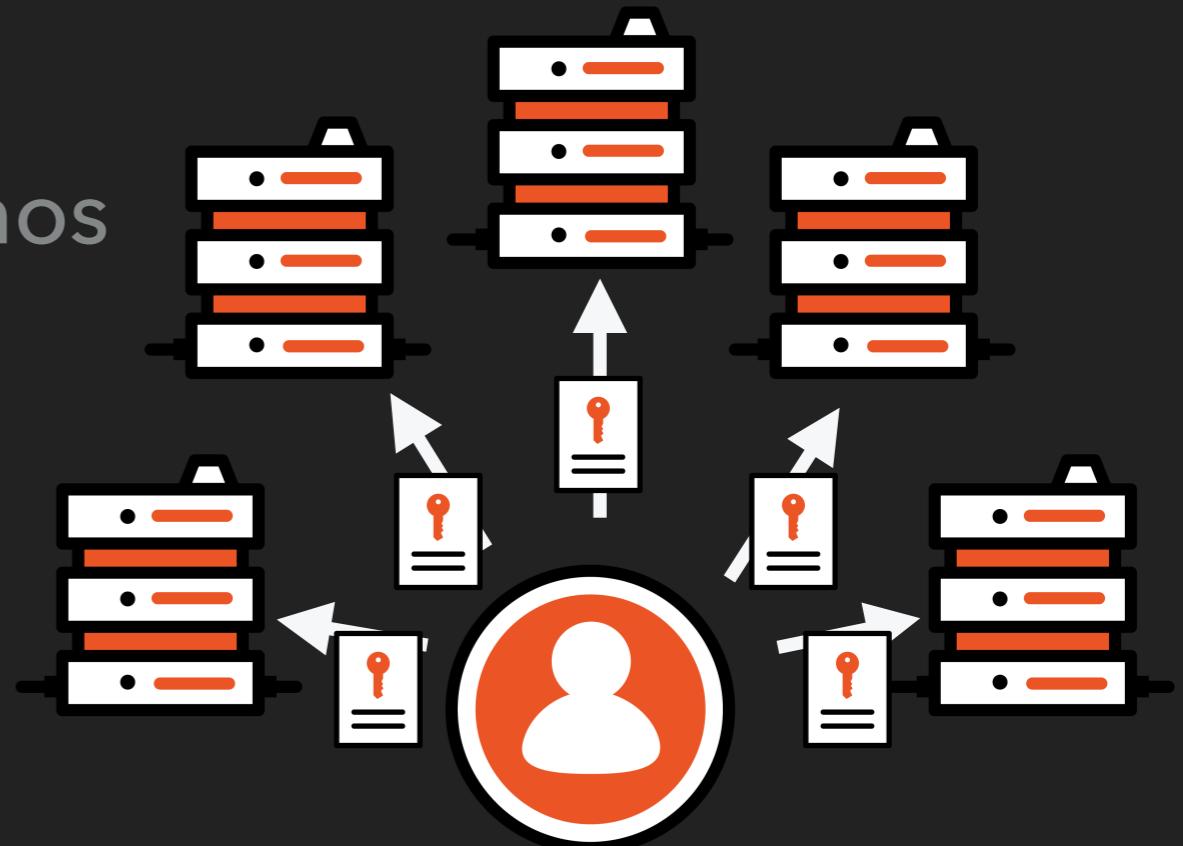
APLICAÇÕES TRADICIONAIS - PROBLEMA?

- ▶ Sim, quando diferentes aparelhos precisam se conectar
- ▶ Sim, fortemente acoplado
- ▶ Sim, se a aplicação precisar acessar algo em seu nome



APLICAÇÕES TRADICIONAIS - PROBLEMA?

- ▶ Sim, quando diferentes aparelhos precisam se conectar
- ▶ Sim, fortemente acoplado
- ▶ Sim, se a aplicação precisar acessar algo em seu nome
- ▶ Sim, dezenas de usuário e senha, ou reutilização de credenciais e senhas fracas



SOLUÇÃO?

OAUTH 2.0 E OPEN ID CONNECT



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PROCESSO DE COMPRA



Restaurante



Comprador



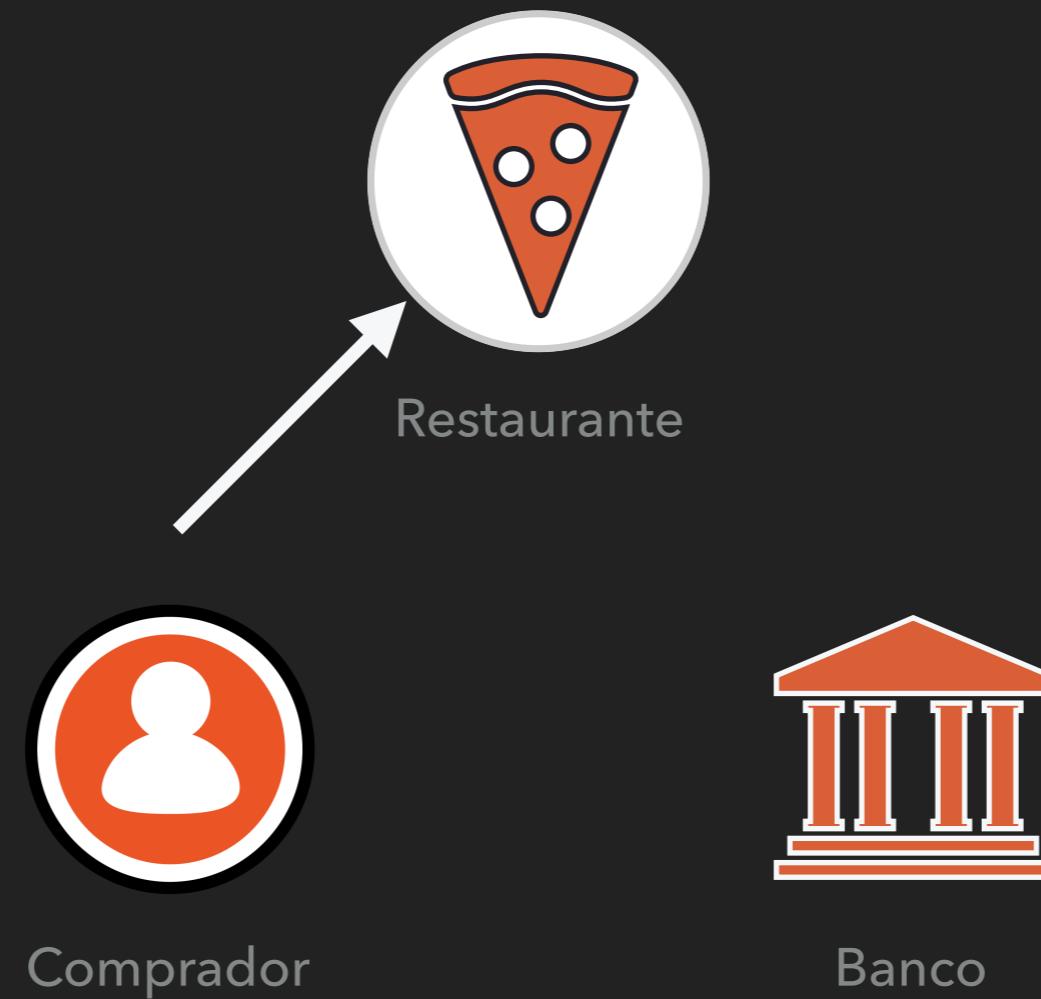
Banco



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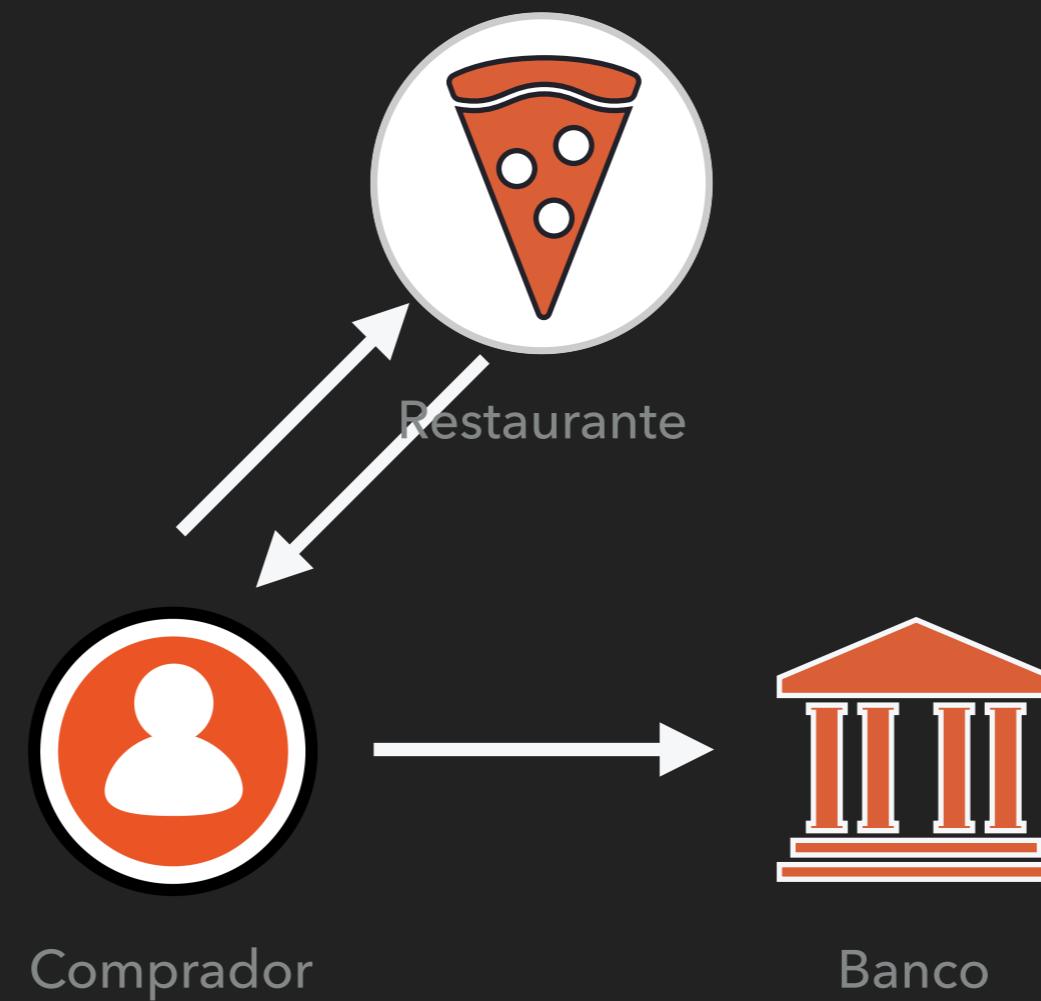
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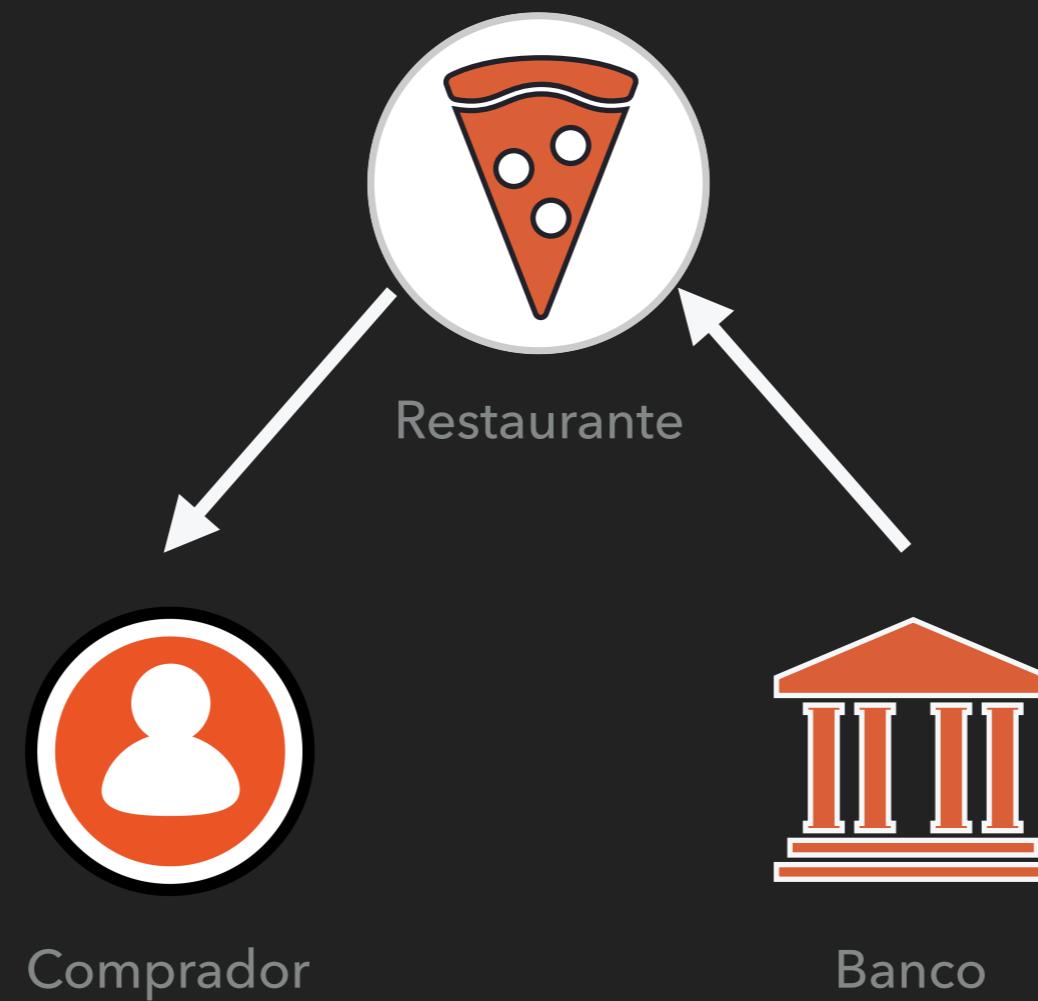
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PROCESSO DE COMPRA



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PROCESSO DE COMPRA



BASICAMENTE OAUTH 2.0!



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OAUTH 2.0 SIMPLIFICADO



Restaurante



Comprador



Banco



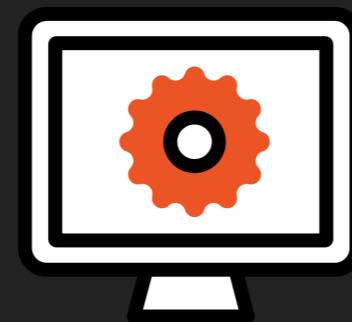
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OAUTH 2.0 SIMPLIFICADO



Restaurante



Aplicação



Banco



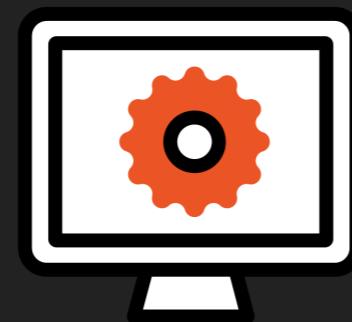
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OAUTH 2.0 SIMPLIFICADO



API



Aplicação



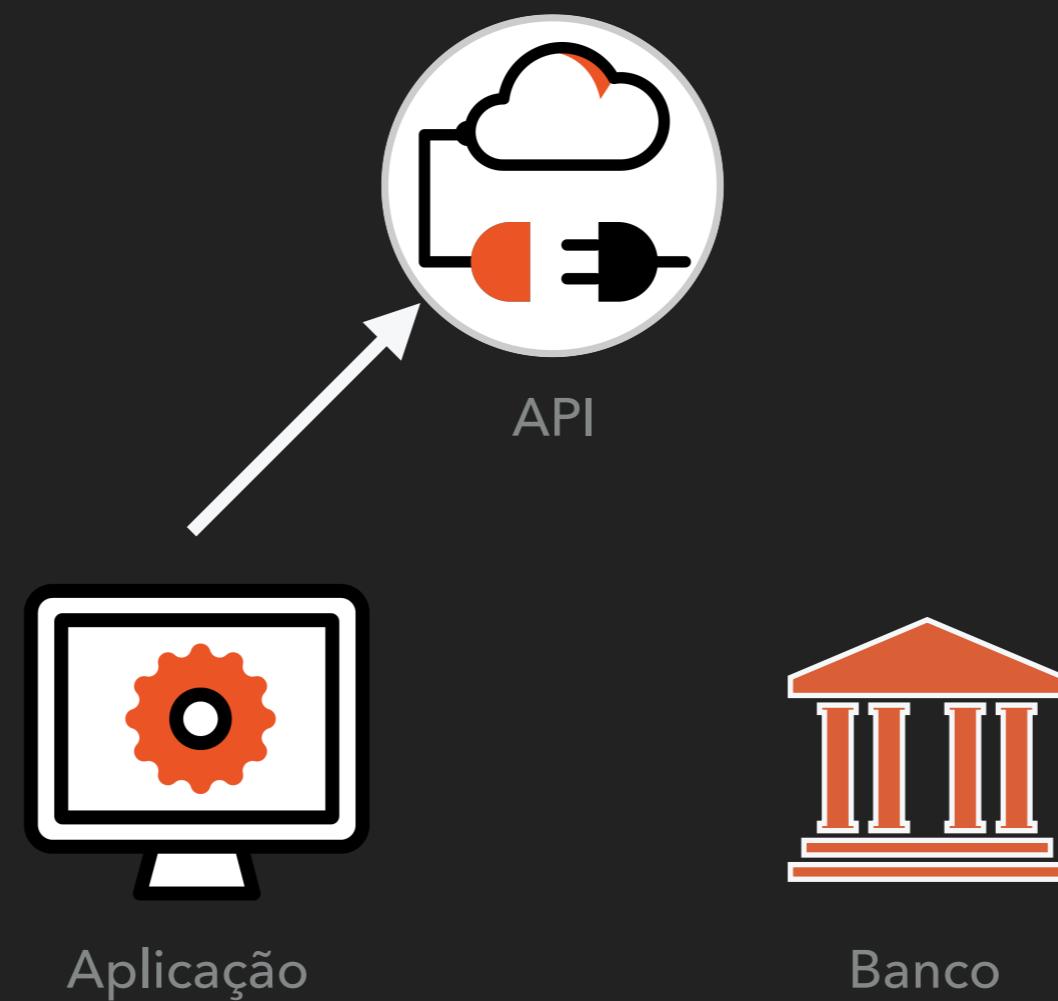
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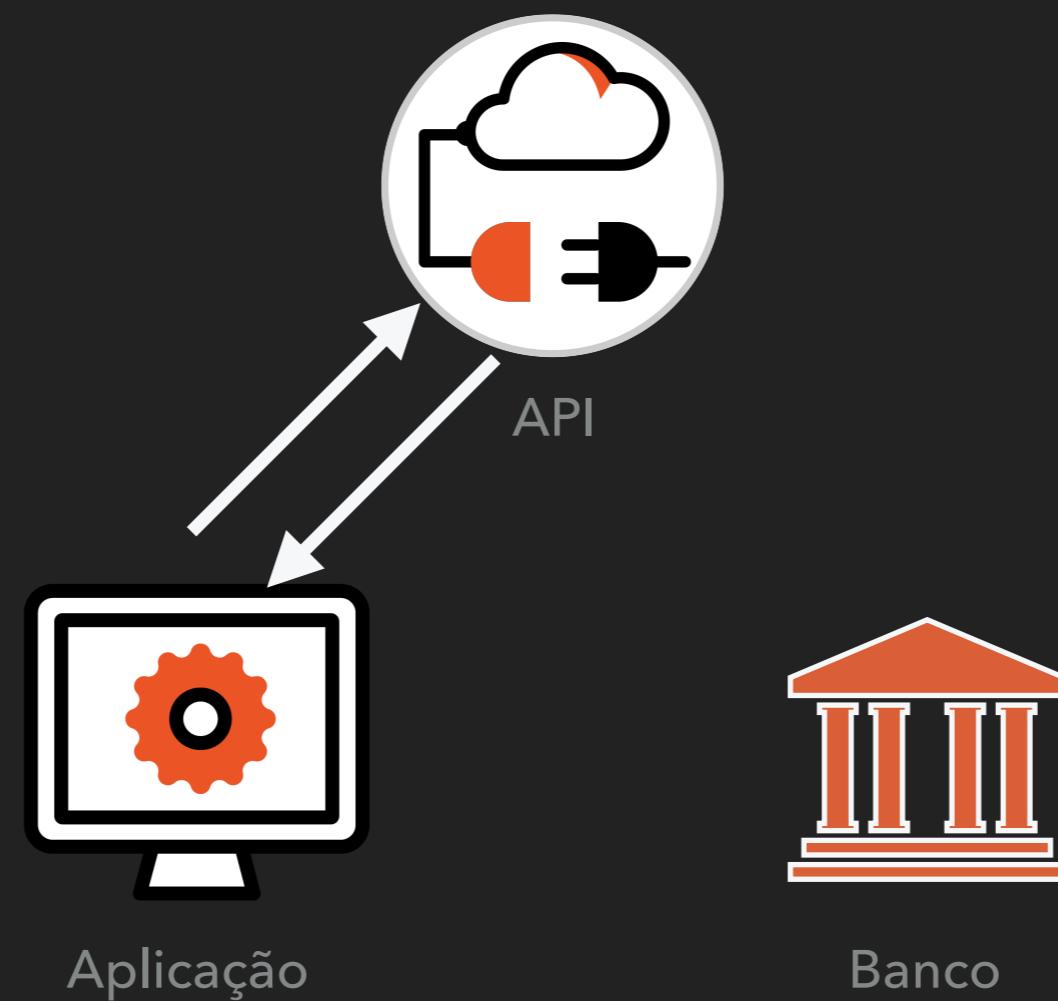
OAUTH 2.0 SIMPLIFICADO



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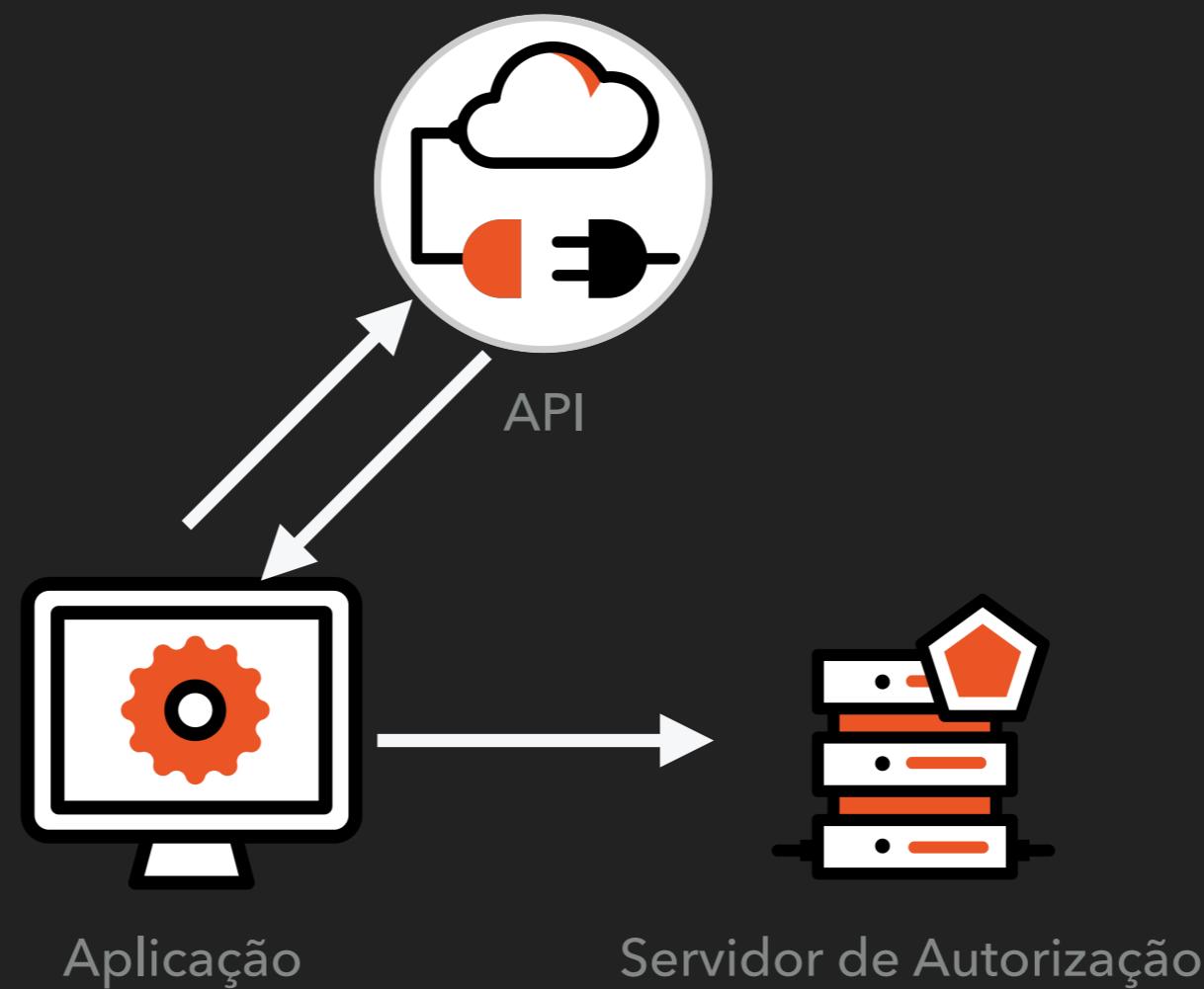
OAUTH 2.0 SIMPLIFICADO



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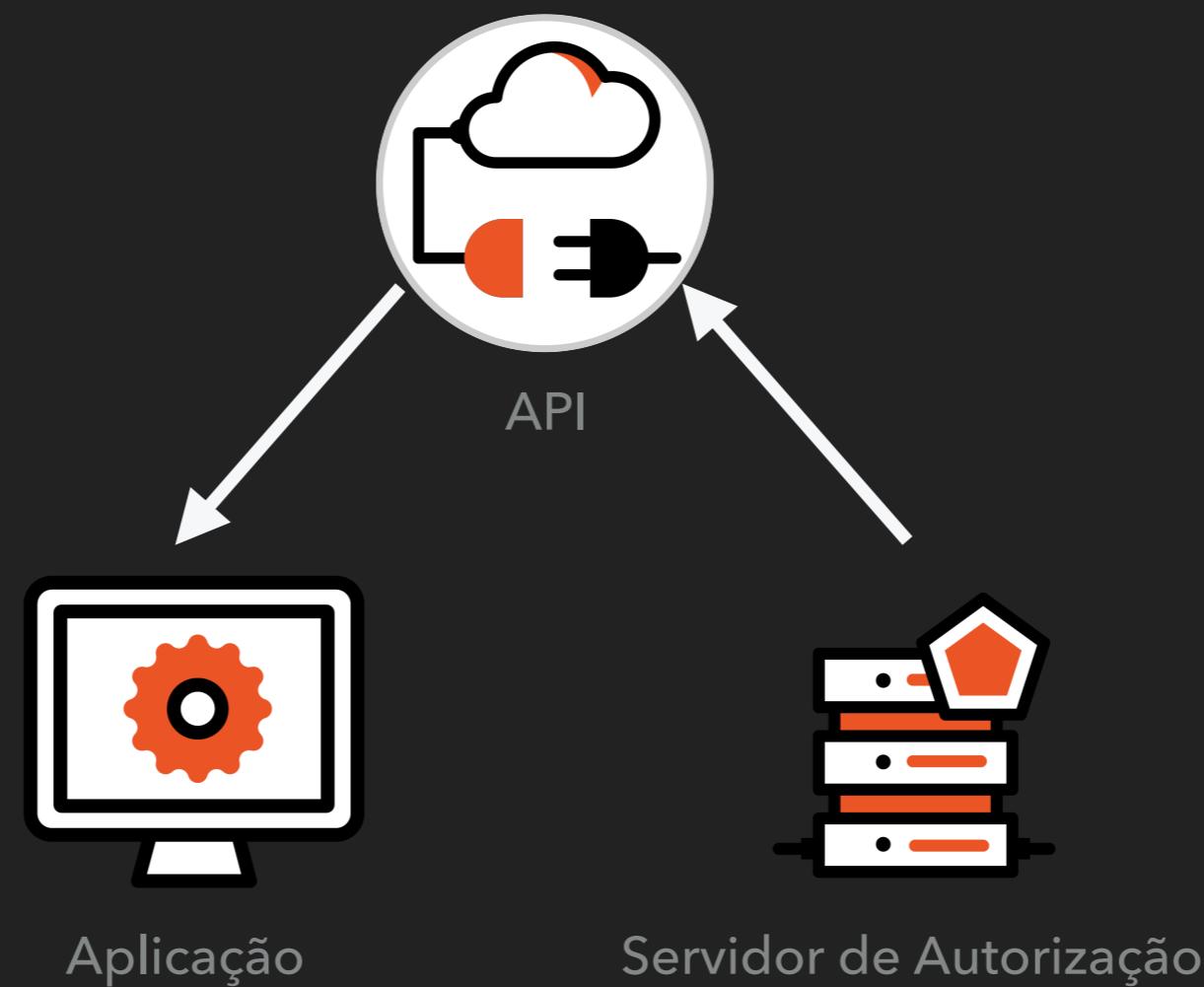
OAUTH 2.0 SIMPLIFICADO



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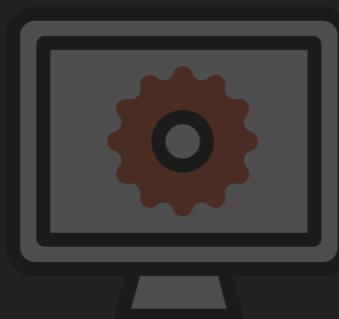
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OAUTH 2.0 - PARTES ENVOLVIDAS



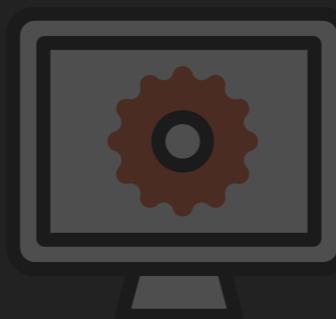
API



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OAUTH 2.0 - PARTES ENVOLVIDAS



Resource Server



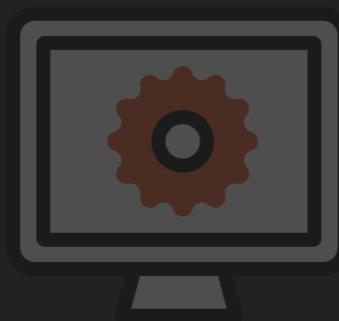
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OAUTH 2.0 - PARTES ENVOLVIDAS



Resource Server



Usuário



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OAUTH 2.0 - PARTES ENVOLVIDAS



Resource Server



Resource Owner



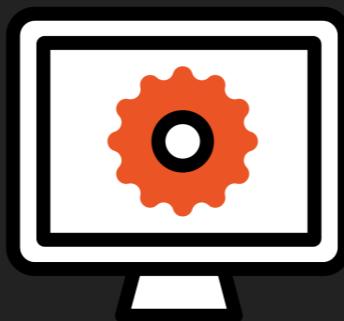
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OAUTH 2.0 - PARTES ENVOLVIDAS



Resource Server



Aplicação



Resource Owner



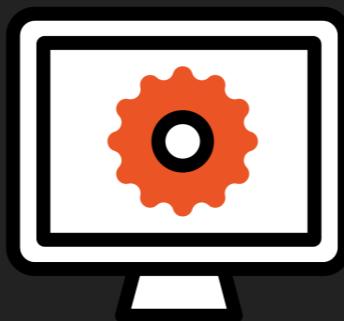
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OAUTH 2.0 - PARTES ENVOLVIDAS



Resource Server



Client



Resource Owner



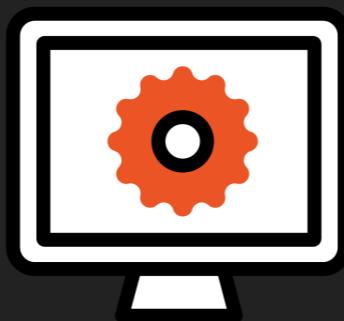
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Resource Server



Client



Resource Owner



Servidor Autorização



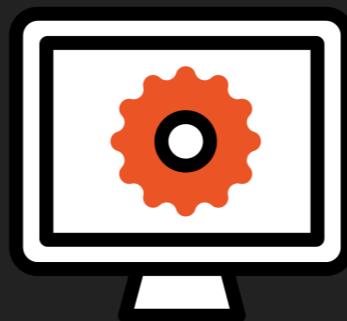
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OAUTH 2.0 - PARTES ENVOLVIDAS



Resource Server



Client



Resource Owner



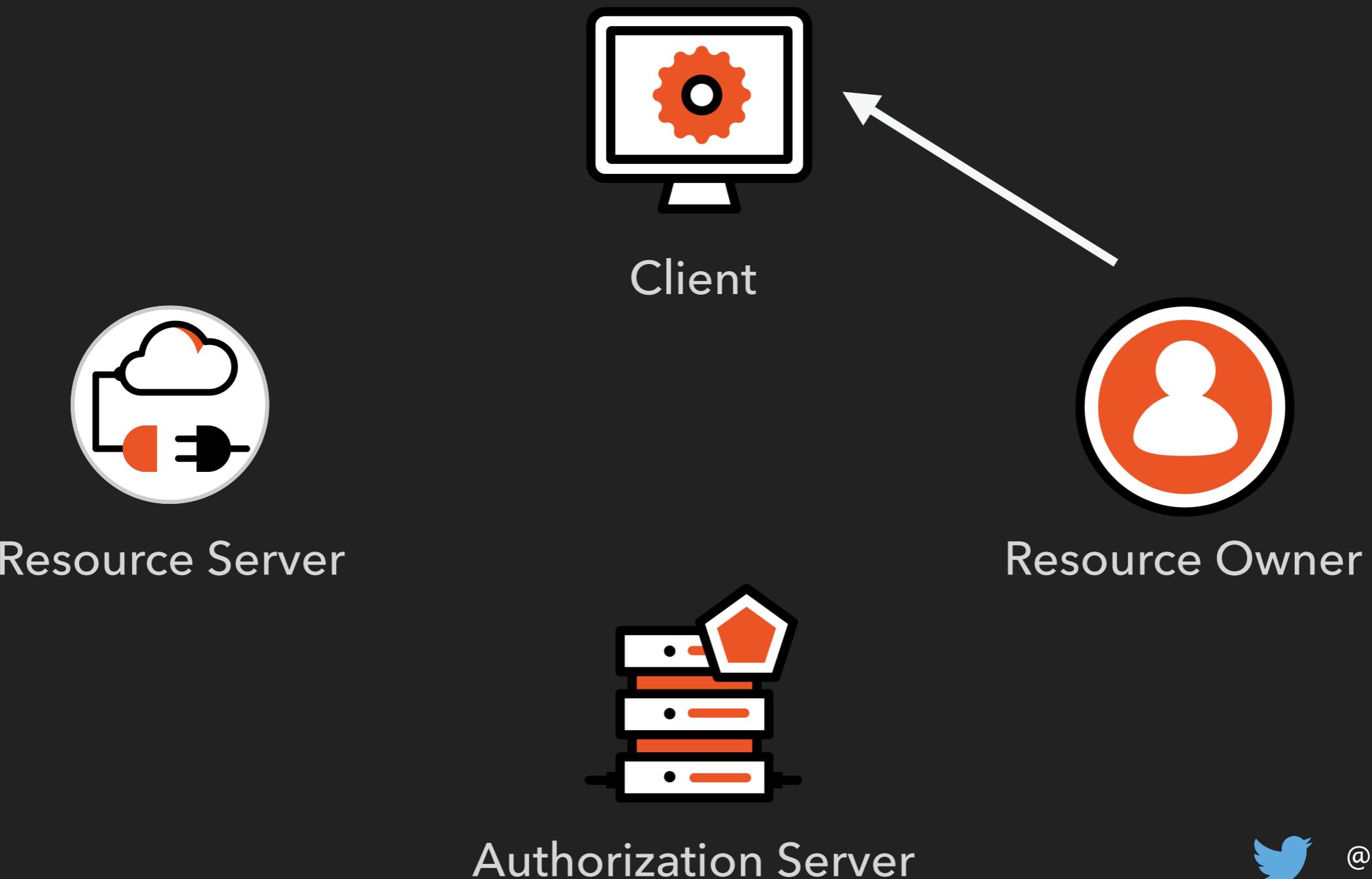
Authorization Server



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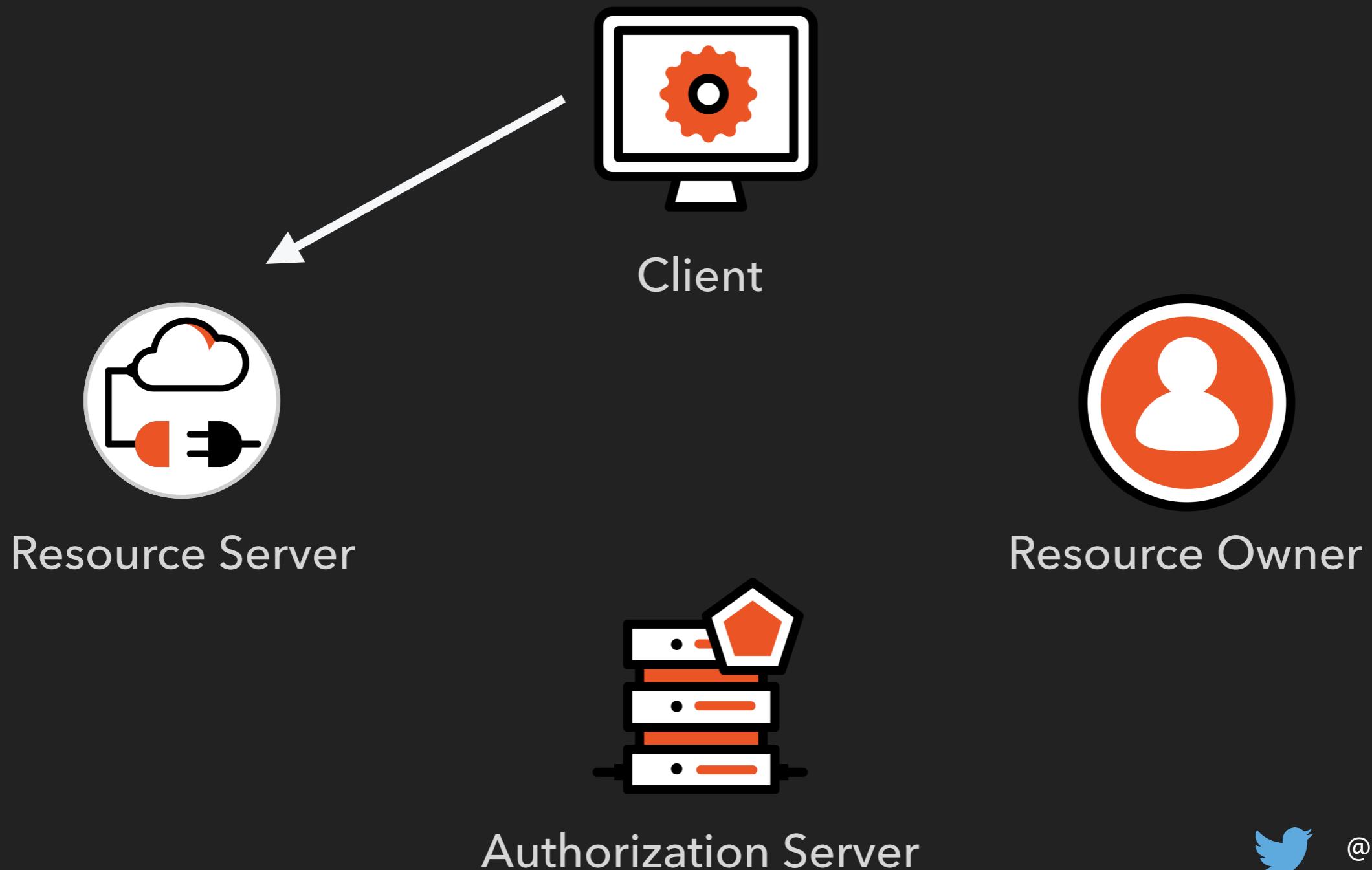
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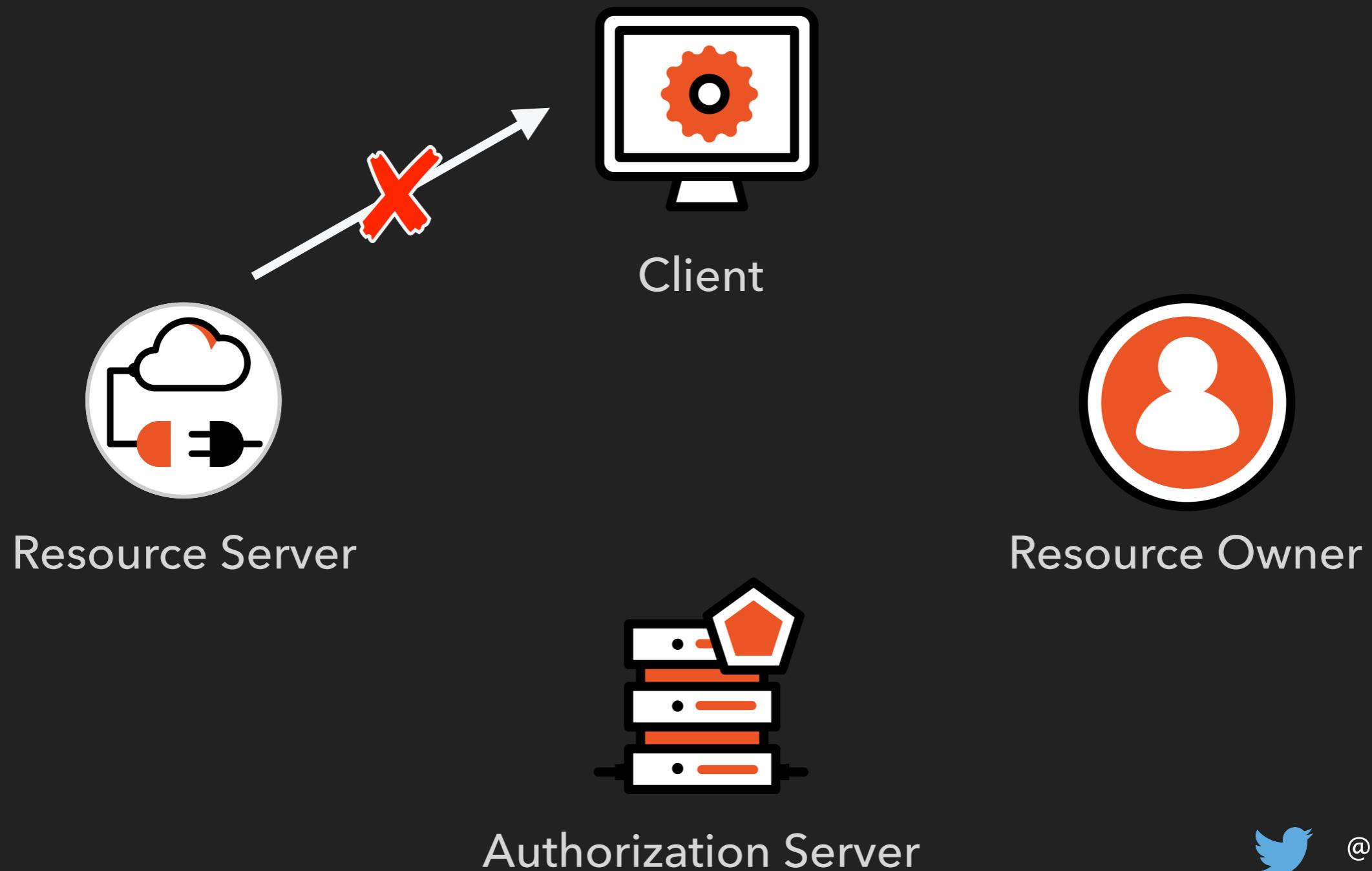
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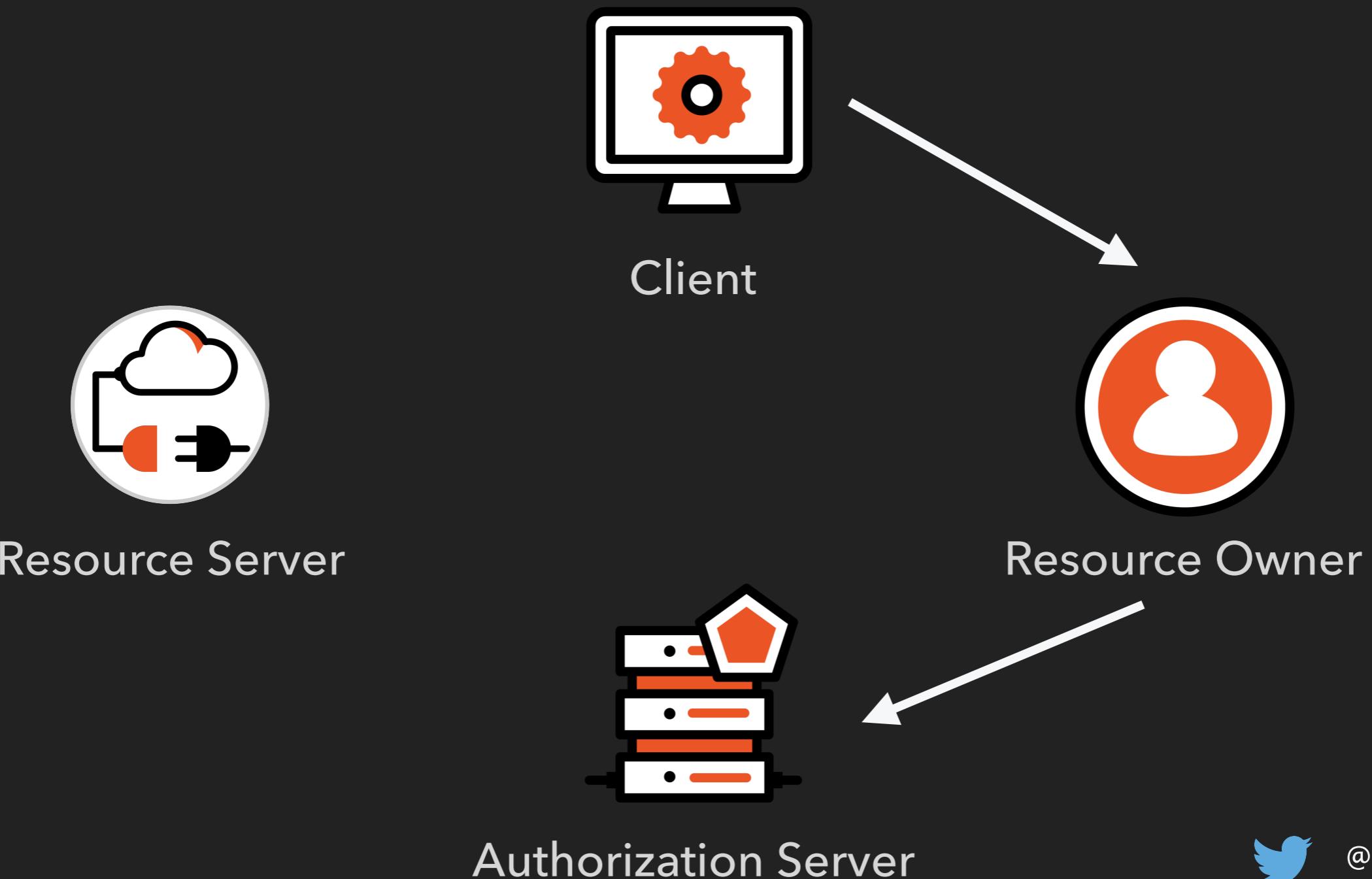
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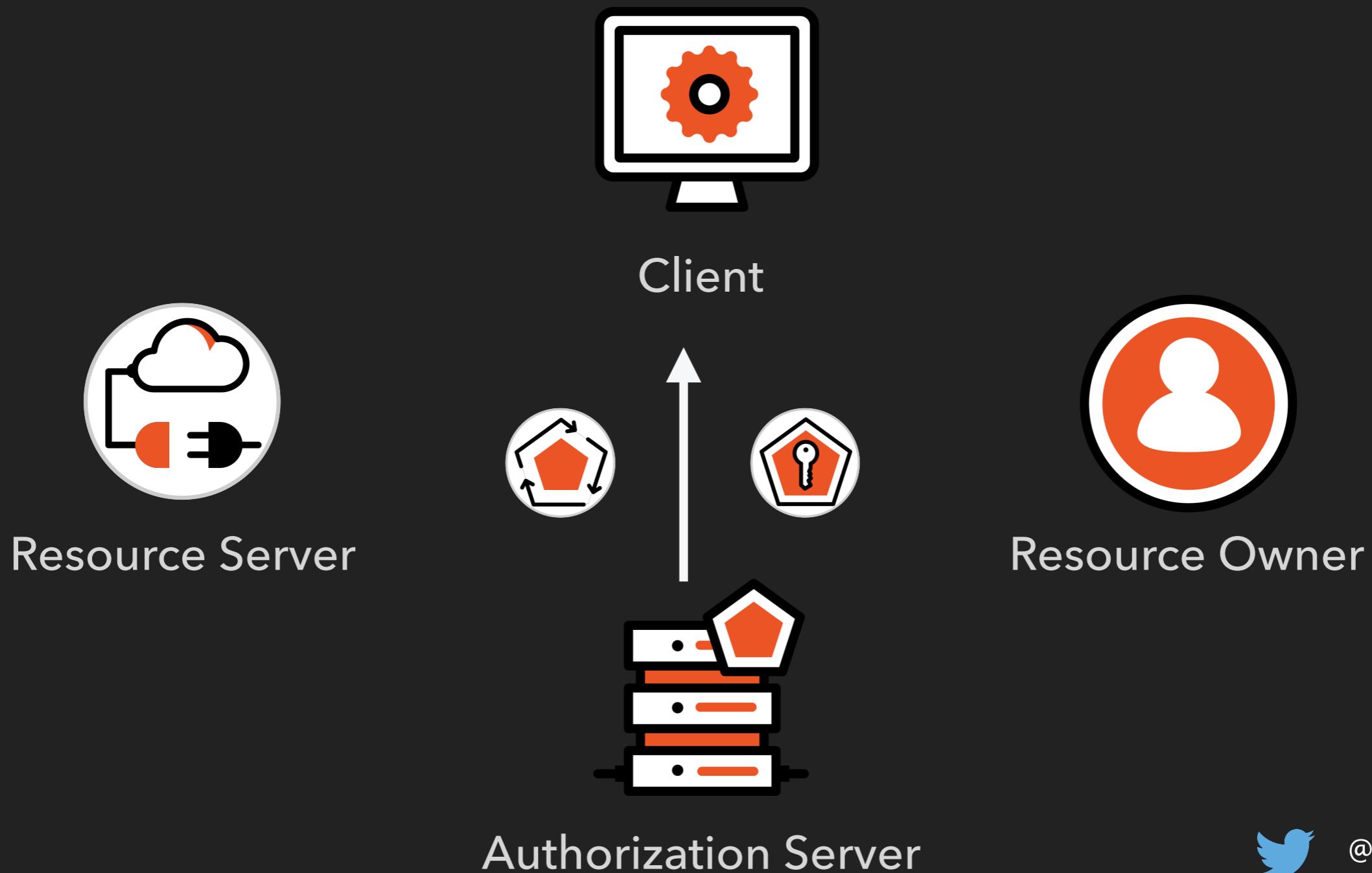
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OAUTH 2.0 - PARTES ENVOLVIDAS



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OAUTH 2.0 - TOKENS

► Access Tokens



- Dá acesso à um resource
- Serve como uma “procuração”
- Tempo de vida curto

► Refresh Tokens



- Permite que o AT seja renovado
- Tempo de vida longo
- Pode ser revogado



E O OPENID CONNECT?



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OPEN ID CONNECT

- ▶ Desenvolvido em cima do OAuth 2.0
- ▶ Não tem nada a ver com OpenID
- ▶ Prove informações sobre o usuário em um ID Token
- ▶ Define um endpoint no AS chamado /userinfo



OPEN ID CONNECT

- ▶ Uses the “scope” to fetch info
 - ▶ openid
 - ▶ Profile
 - ▶ email
 - ▶ address
 - ▶ phone



OPENID CONNECT DEMO



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OAUTH 2.0 - PARTES ENVOLVIDAS



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VANTAGENS

- ▶ Um usuário e senha a menos para lembrar
- ▶ Suporta diferentes tipos de aparelhos (móveis, SPAs, web apps, IoT, ...)
- ▶ Maior segurança (geralmente suportado por especialistas)
- ▶ Cloud Native
- ▶ Suporta Single Sing-On



SSO DEMO

???