



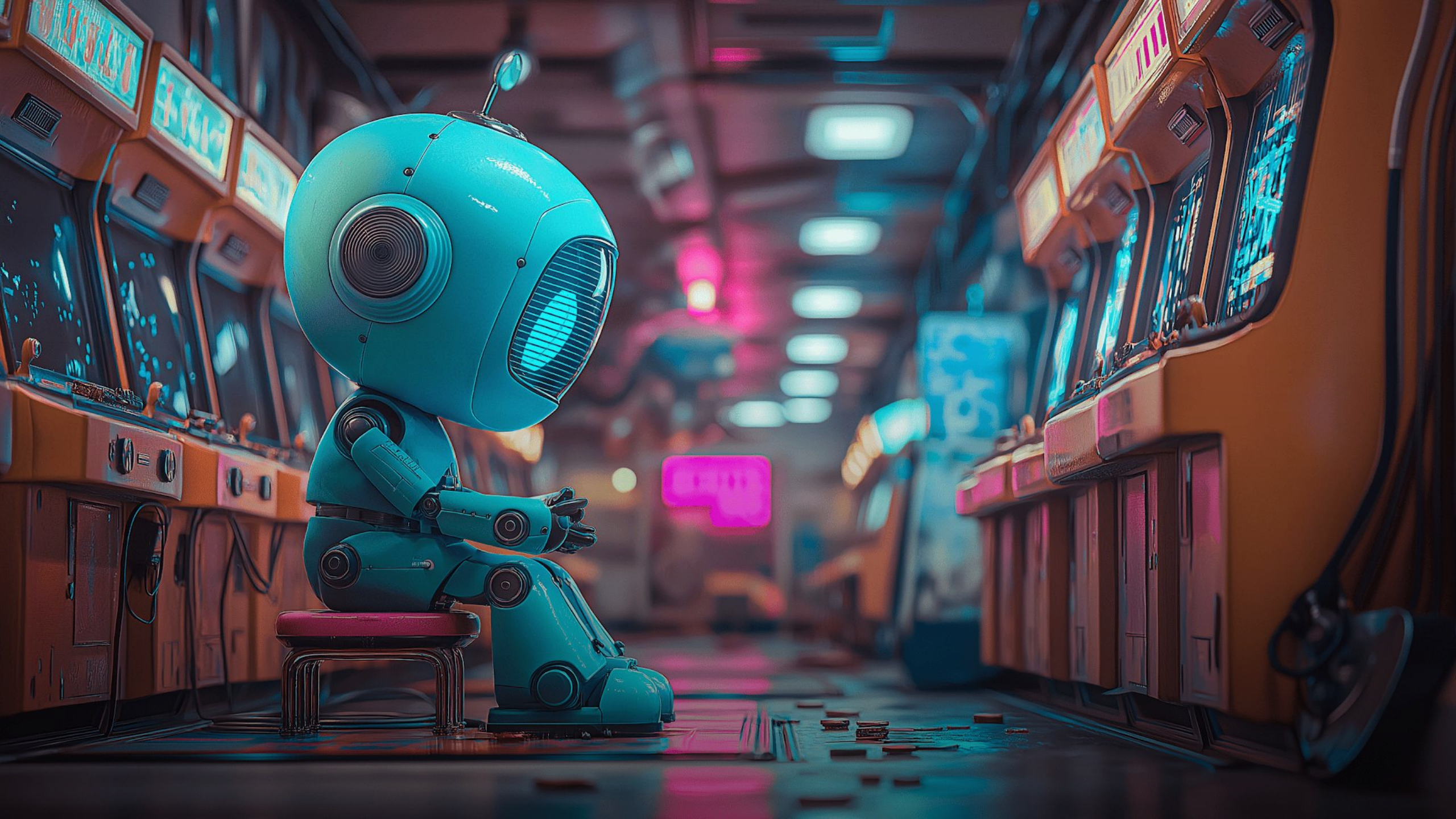
Cloud Nord

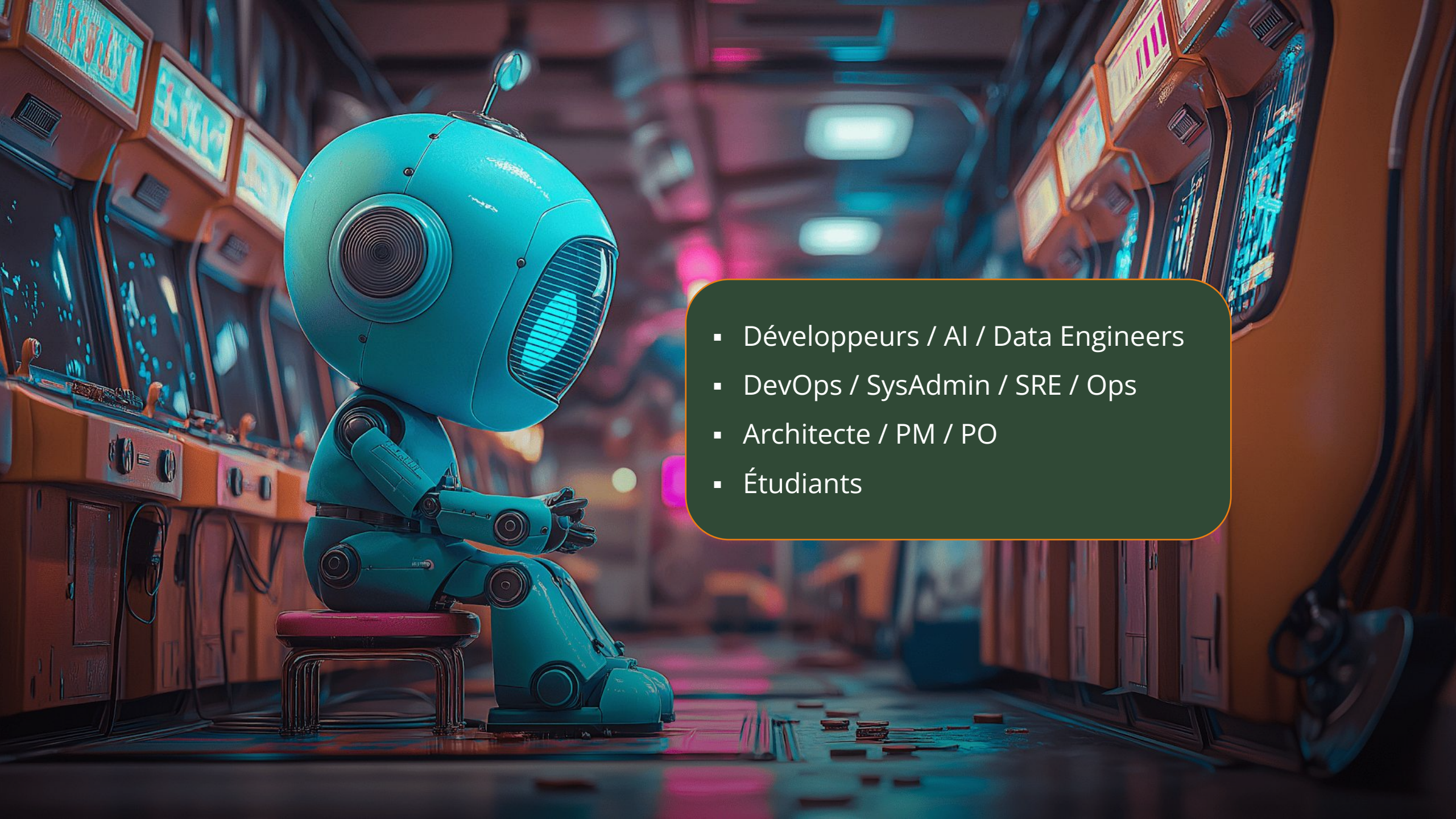
SÉCURISEZ VOS
PROTOTYPES AVEC
OAUTH2-PROXY ET
ANUBIS



DAVID APARICIO

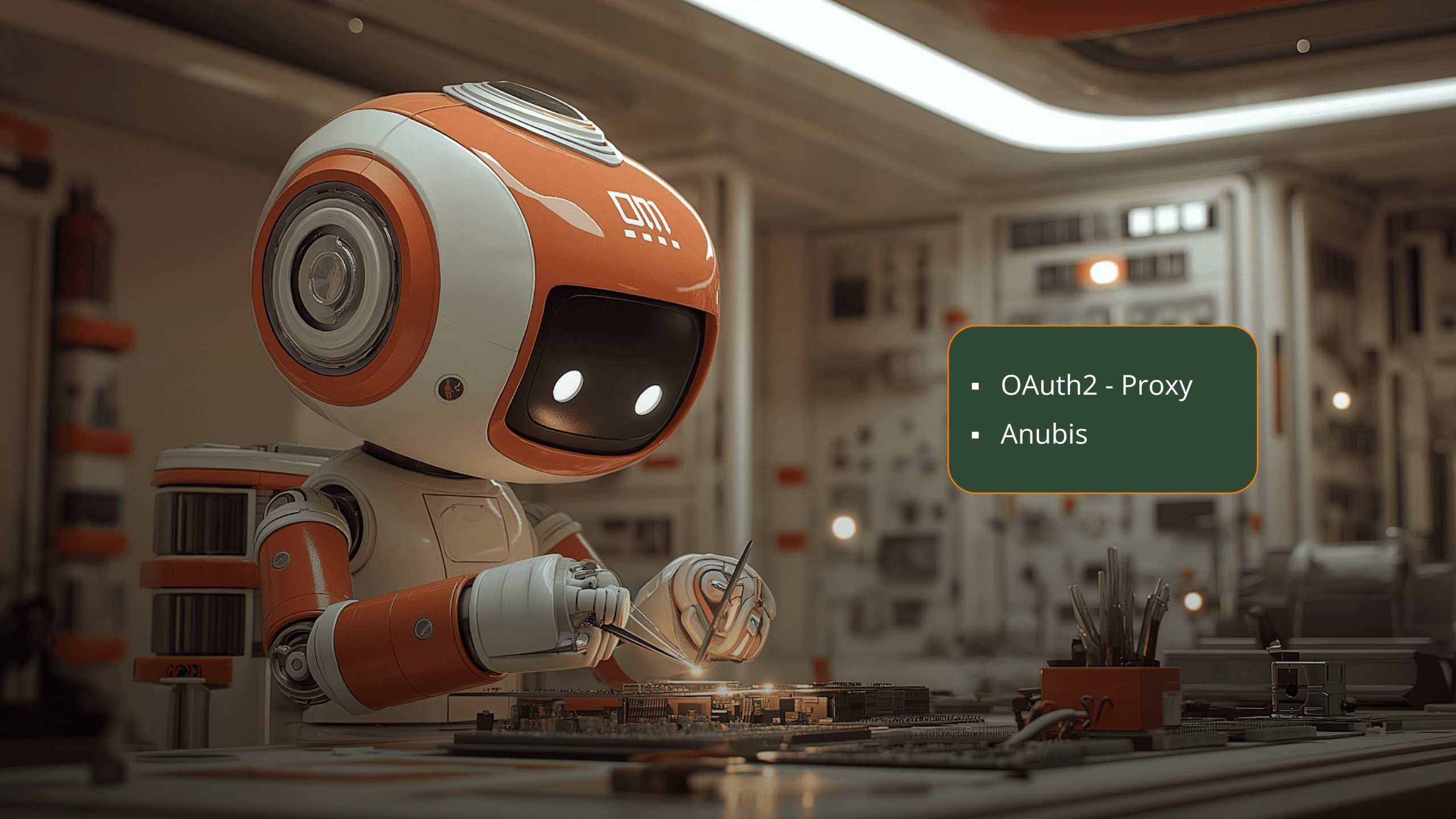
EUDONET





- Développeurs / AI / Data Engineers
- DevOps / SysAdmin / SRE / Ops
- Architecte / PM / PO
- Étudiants

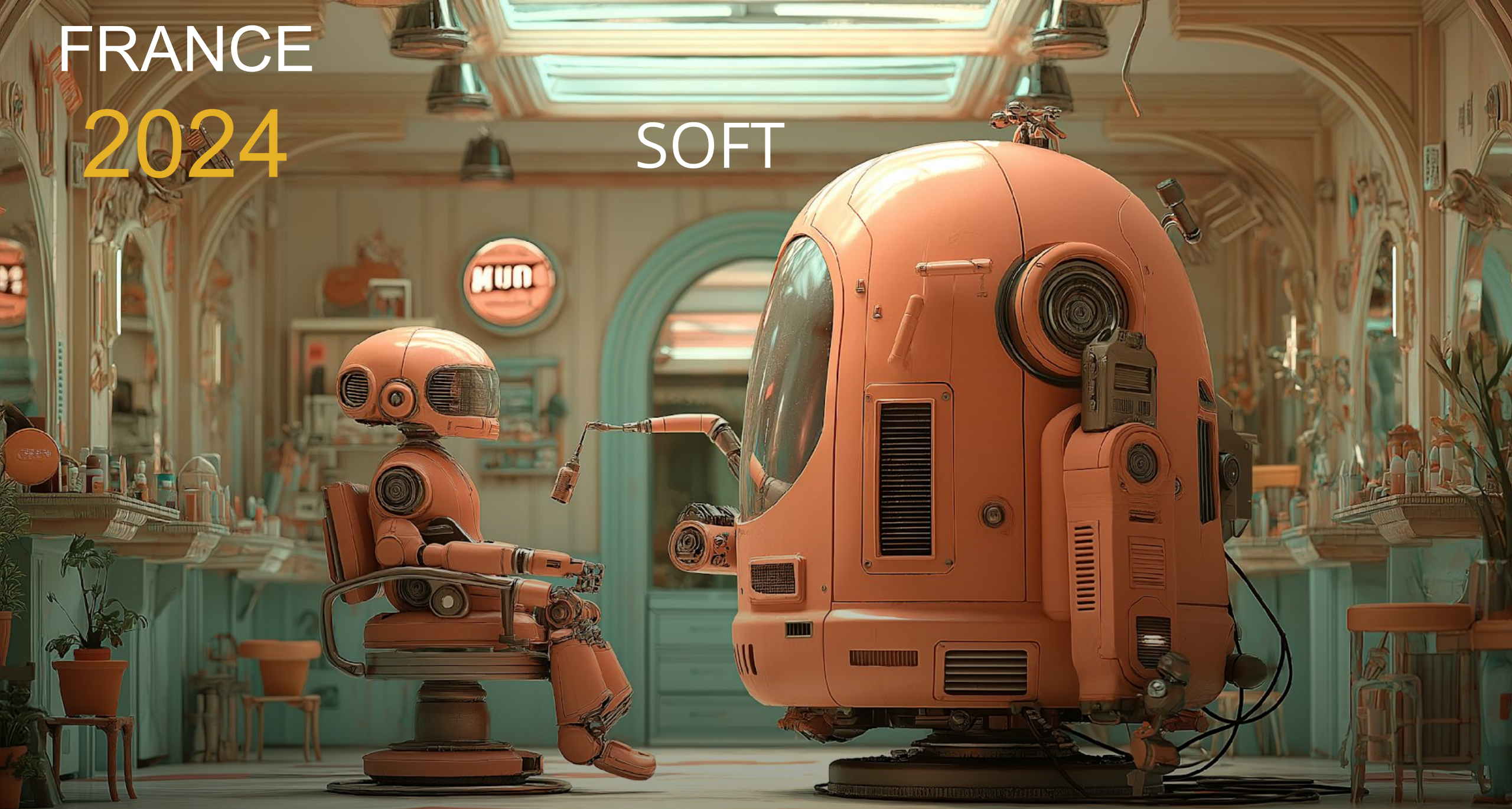




- OAuth2 - Proxy
- Anubis

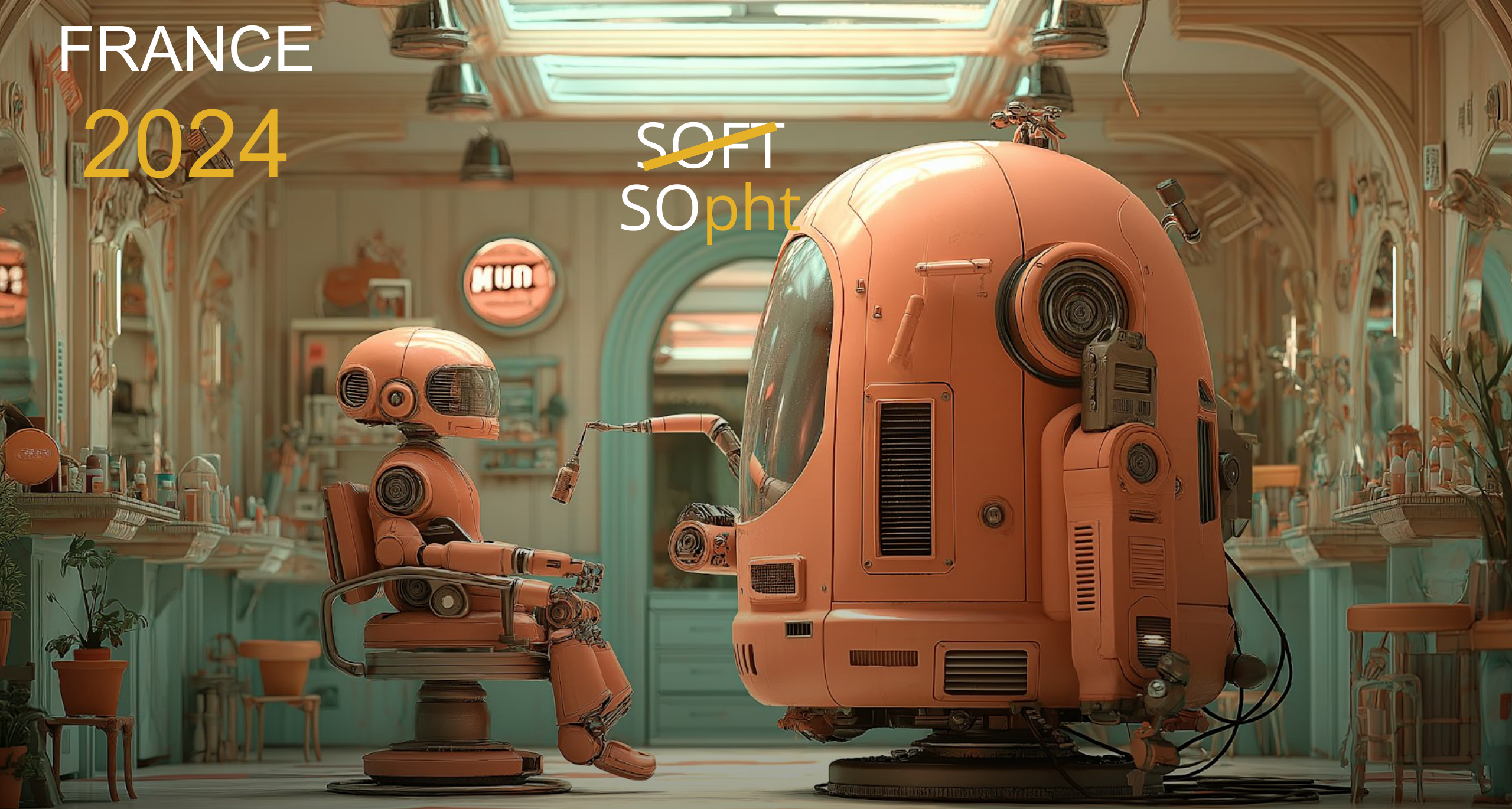
FRANCE
2024

SOFT



FRANCE
2024

~~SOFT~~
SOphT



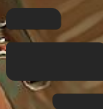
FRANCE 2024

~~SOFT~~
SOphT



FRANCE 2024

~~SOFT~~
SOphT

 Retool



The background image shows a retro-style robot sitting in a chair, holding a tool, with a large monitor displaying the Sopht Greenapp interface. The robot is orange and has a friendly, rounded design. The monitor shows a dashboard with various charts, tables, and settings. The interface is dark-themed with orange and green accents.

sopht Greenapp

Overview

- Decarbonize
 - Trajectories
 - Simulators
- Modules
 - Cloud & On-prem
 - Cloud
 - On-prem
 - Workplace
 - Devices
 - Digital Workplace
 - Web
- GreenApp

Business applications (3 entities)

Business application	Criticality	Score	Total emissions
[PRODUCTION] Stormy Pine stormy-pine	Critical	C-	216.8 gCO2eq
[PRODUCTION] Silent Zeppelin silent-zeppelin	Medium criticality	C-	105.3 gCO2eq
[PRODUCTION] Eager Tiger eager-tiger	Very critical	C-	1.6K gCO2eq

Showing 1-3 of 3

[PRODUCTION] Stormy Pine architecture

STORMY PINE

Applications

PROCESS GROUP: 9

PROCESS PROC PRO

Process groups

Explore 5 process groups

Recommendations on [PRODUCTION] Stormy Pine

- CPU Host Downsizing by 50%
 - 16.0 kgCO2eq/y
 - 84.5% Trust Score ①
 - See 10 options
- RAM Host Downsizing by 50%
 - 43.7 kgCO2eq/y
 - 81.3% Trust Score ①
 - See 10 options
- Possible shutdown during weekends
 - 504 kgCO2eq/y
 - 74.7% Trust Score ①
 - Scheduling full shutdowns during weekend hours for low-traffic workloads reduces runtime and energy use (Scope 2). Turning these savings into real

[PRODUCTION] Stormy Pine

Domain(s): Sopht Squad(s): Infra source(s): Kubernetes

C- Global EcoScore

EcoScore ②

⚡ Critical

CPU E

RAM E

STORAGE B-

NETWORK D+

SERVER A-

PUE A

Settings

BackOffice

Log Out

Admin tools

Demo

FRANCE 2024

~~SOFT~~
SOphT

 Streamlit



FRANCE
2024

pypi.org/project/streamlit-oauth/#history

4★

streamlit-oauth 0.1.14

✓

Latest release

`pip install streamlit-oauth`

Released: Oct 10, 2024

Simple OAuth2 authorization code flow for Streamlit

Navigation

Project description

Release history

Download files

Verified details ✓

These details have been [verified by PyPI](#)

Maintainers

dnplus

Unverified details

These details have **not** been verified by PyPI

Project links

Homepage

Meta

- Author: [Dylan Lu](#) ✉
- Requires: Python >=3.9

Report project as malware

Release history

[Release notifications](#) | [RSS feed](#)

THIS VERSION

0.1.14
Oct 10, 2024

0.1.13
Jul 13, 2024

0.1.11
Jul 12, 2024

0.1.9
Jun 5, 2024

0.1.8
Feb 13, 2024

0.1.7
Feb 1, 2024

FRANCE

2024

streamlit-auth 0.1.7.1

A Python package for creating oauth protected Streamlit apps

```
pip install streamlit-auth
```

[Description](#)[Release files](#)[Security](#)[Release history](#)

streamlit-auth

Streamlit module for creating oauth protected Stramlit apps.

[Upload Python Package](#) no status[pypi](#) v0.1.7.1[Open in Streamlit](#)

Packaging

为了将此模块打包并上传到PyPI，请遵循以下步骤：

```
python3 -m pip install build
python3 -m build
python3 -m pip install --user --upgrade twine
python3 -m twine upload --repository pypi dist/*
```

Local Installation

要在本地安装此模块，可以使用以下命令：

FRANCE

2024

streamlit-auth 0.1.7.1

A Python package for creating oauth protected Streamlit apps

```
pip install streamlit-auth
```



Description

Release files

Security

Release history

Release history

THIS RELEASE



0.1.7.1

Oct 1, 2023

2 release files

No provenance



0.1.7

Sep 26, 2023

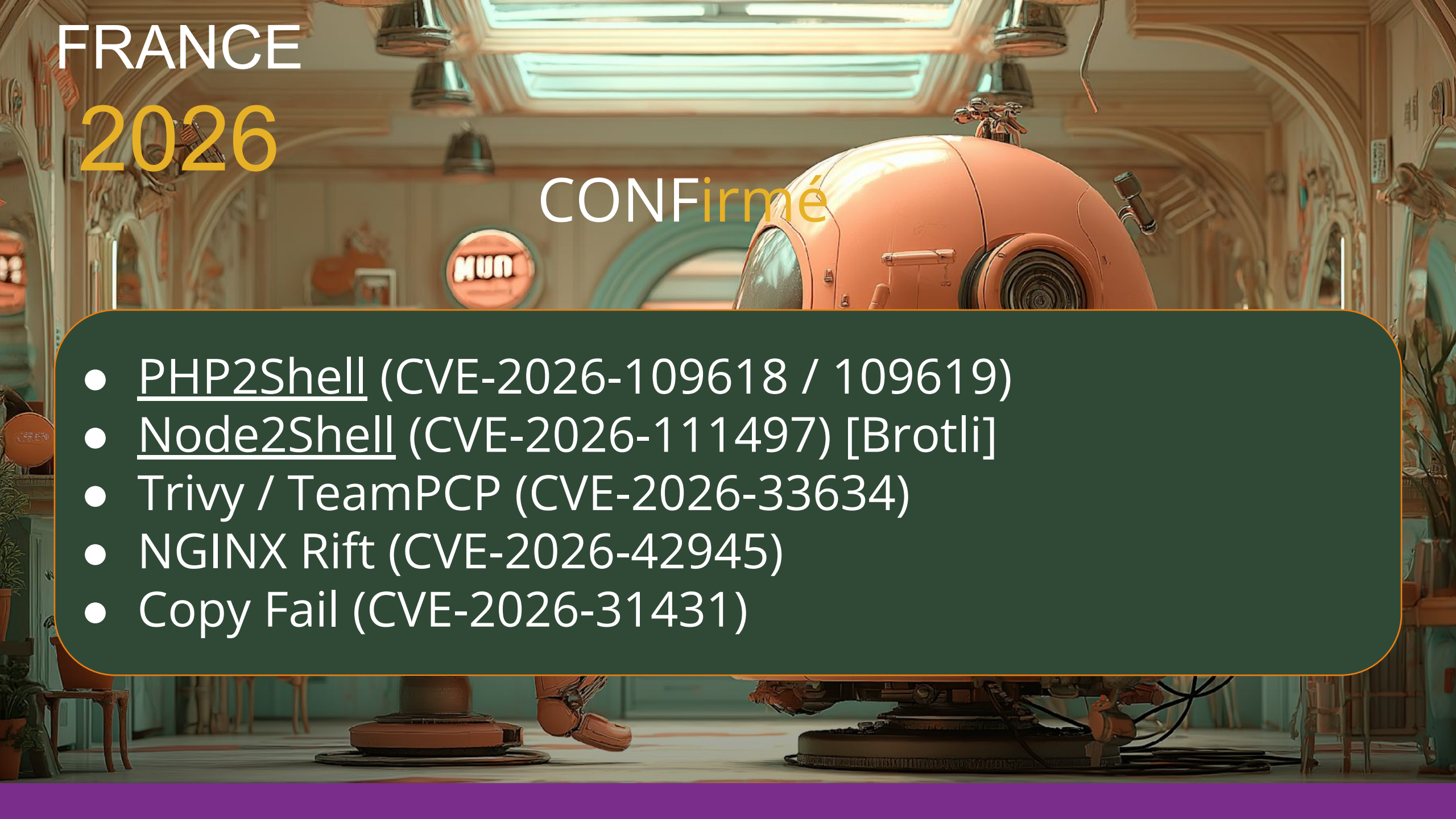
2 release files

No provenance

FRANCE
2024

SOphie

Comment sécuriser notre appli., facilement,
sans modification du code du DEV, ou une
installation d'une librairie peu maintenue ?



FRANCE

2026

CONFirmé

- PHP2Shell (CVE-2026-109618 / 109619)
- Node2Shell (CVE-2026-111497) [Brotli]
- Trivy / TeamPCP (CVE-2026-33634)
- NGINX Rift (CVE-2026-42945)
- Copy Fail (CVE-2026-31431)



/ SECURITY GUIDE

Summary Plan

1 / LE PROBLÈME

2 / LE PROTOCOLE

3 / OAUTH2-PROXY

4 / LIVE DEMO

5 / LES DIFFICULTÉS

6 / ANUBIS

7 / LIVE DEMO

8 / CONCLUSION

9 / Q&A



OAuth2 quèsaco

À quel problème répond-il ?



/ OAUTH2 - LE PROBLÈME

Facebook

Dans un temps, pas si lointain...

Step 1
Find Your Friends

Are your friends already on Facebook?

Many of your friends may already be here. Searching your email account is the fastest way to find your friends on Facebook. [See how it works.](#)



Outlook.com (Hotmail)

Find Friends



AOL

Find Friends



Comcast

Find Friends



Other Email Service

Please enter a valid username and password

Your Email

Email Password

Find Friends

Facebook won't store your password.

Next

©Facebook



Facebook stores your contact list for you so that we can help you reach more people and connect friends.
[Learn more.](#)



/ OAUTH2 - LE PROBLÈME

Phishing

.. les problèmes sont vite arrivés

Confirm Your Email

To continue using Facebook, you'll need to confirm your email. Since you signed up with **fakemanjenkins@yandex.com**, you can do that automatically through yandex.com.

Your Email **fakemanjenkins@yandex.com**

Email Password

🔒 Facebook won't store your password.

[Need Help?](#)

[Update Contact Info](#)

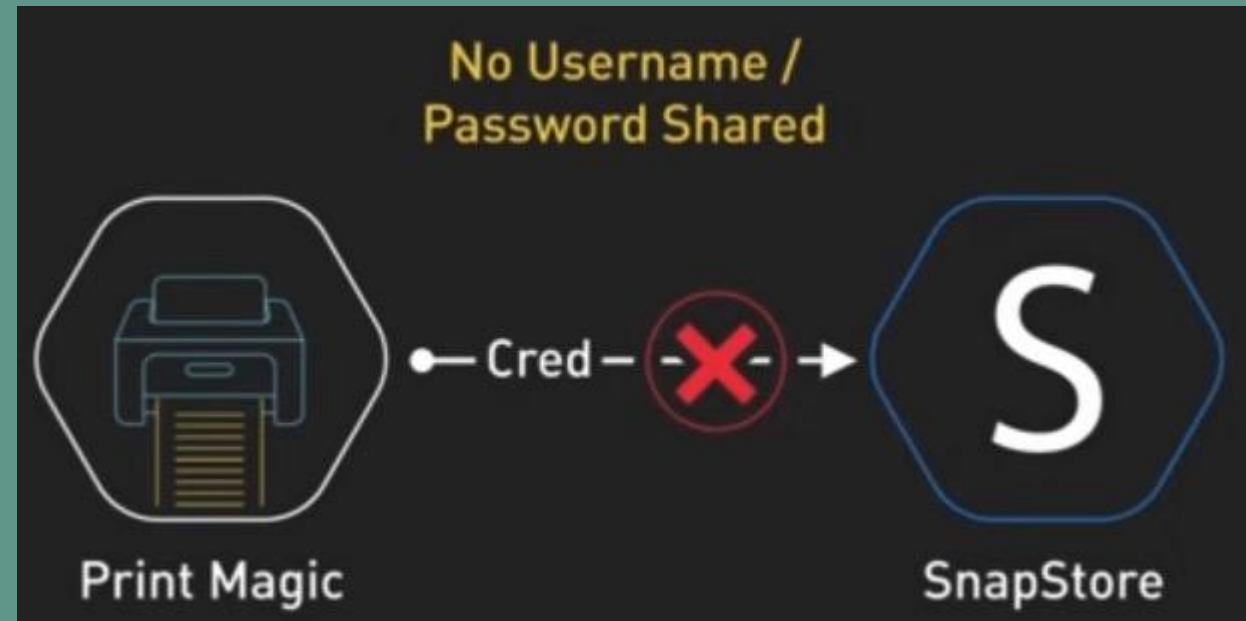
[Connect to yandex.com](#)

©EFF.org

Comment se connecter alors ?

/ OAUTH2 - LE PROBLÈME

Objectif



©ByteByteGo

La naissance du protocole

datatracker.ietf.org/doc/html/rfc6749

Internet Engineering Task Force (IETF)
Request for Comments: 6749
Obsoletes: [5849](#)
Category: Standards Track
ISSN: 2070-1721

D. Hardt, Ed.
Microsoft
October 2012

The OAuth 2.0 Authorization Framework

Abstract

The OAuth 2.0 authorization framework enables a third-party application to obtain limited access to an HTTP service, either on behalf of a resource owner by orchestrating an approval interaction between the resource owner and the HTTP service, or by allowing the third-party application to obtain access on its own behalf. This specification replaces and obsoletes the OAuth 1.0 protocol described in [RFC 5849](#).

/ OAUTH2 - LE PROTOCOLE

RFC 6749



/ OAUTH2 - LE PROTOCOLE

Language

Tout un vocabulaire

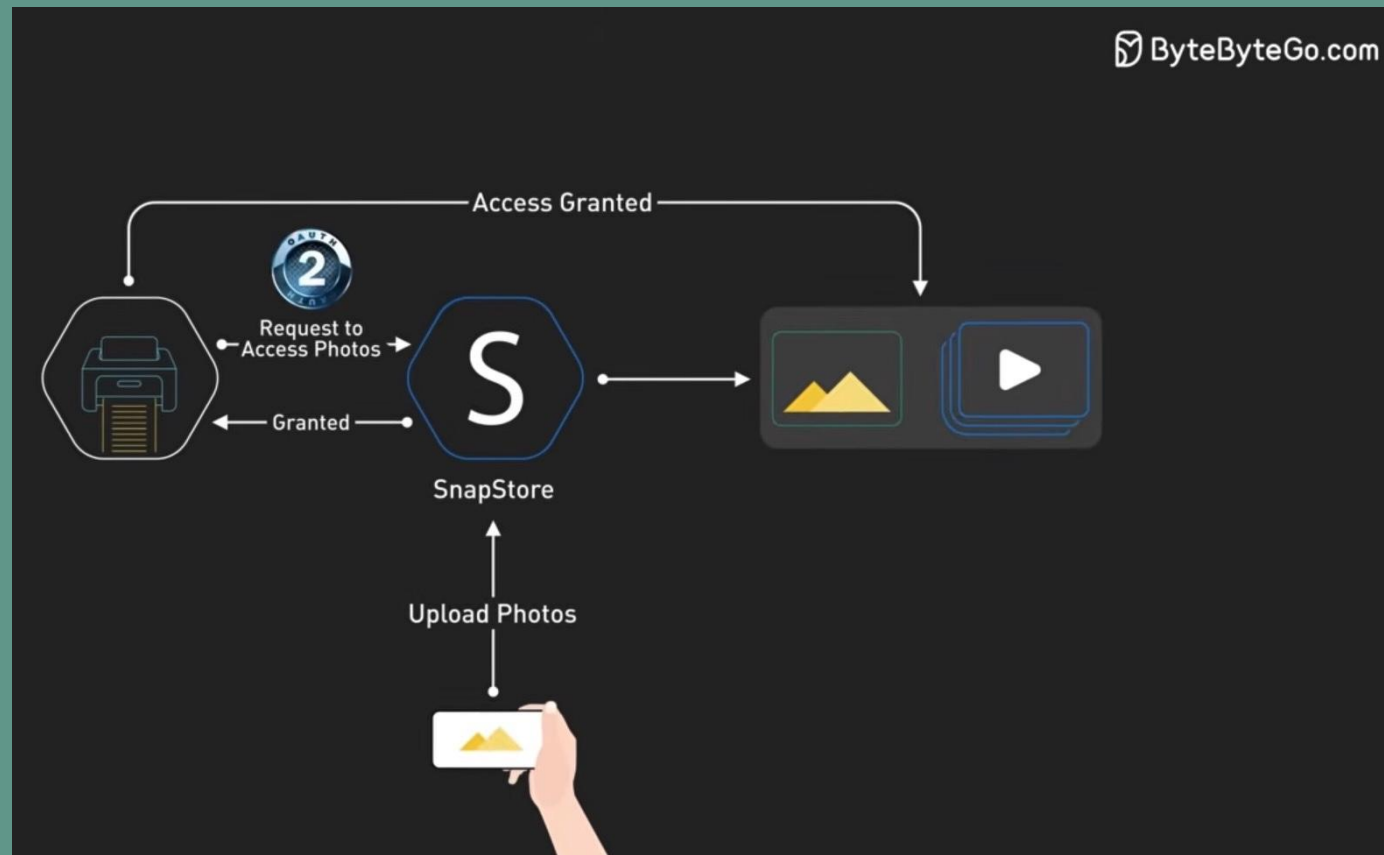




/ OAUTH2 - LE PROTOCOLE

Architecture

Exemple





/ OAUTH2 - LE PROTOCOLE

VIDÉO

OAUTH 2.1 expliqué simplement (même si tu n'es pas dev) !

OAUTH 2.1 expliqué simplement (même si tu n'es pas dev) ! (Julien Topçu)

Devoxx France videos
39.3K subscribers

24K views · 3 years ago · PARIS

Pour rester informé sur l'actualité de Devoxx France, suivez nous sur twitter : [/ devoxxfr](https://twitter.com/devoxxfr) ou consultez notre site web <https://www.devoxx.fr/>

Il est très difficile aujourd'hui de déployer une application sur le web sans se frotter à OAuth2. Conçu pour mieux protéger les utilisateurs et les utilisatrices, ce standard de délégation d'autorisation s'est totalement im...

438 likes · Share · Save · Clip

From your search · From the series · From the channel

OAuth 2 Explained In Simple Terms
ByteByteGo · 753K views · 2 years ago

Trump : un président sain d'esprit ?

/ OAUTH2-PROXY

Historique

- Créé par Bitly / Décembre 2012
- Protocole [OIDC](#) (OpenID Connect)
- Proxy
- Intégration facile

☆ 15.3k stars

👁 103 watching

🔗 2.3k forks

Report repository

Releases 44

🏷 v7.15.5 **Latest**

28 days ago

+ 43 releases



/ OAUTH2-PROXY

Historique

 bitly / oauth2_proxy 

[Code](#) [Issues](#) [146](#) [Pull requests](#) [97](#) [Actions](#) [More](#) ▾

This repository was archived by the owner on Jan 24, 2019. It is now read-only.

Commits

 master ▾

 All users ▾

 All time ▾

 Commits on Dec 11, 2012

initial import

 jehiah committed on Dec 11, 2012

c6f07d5

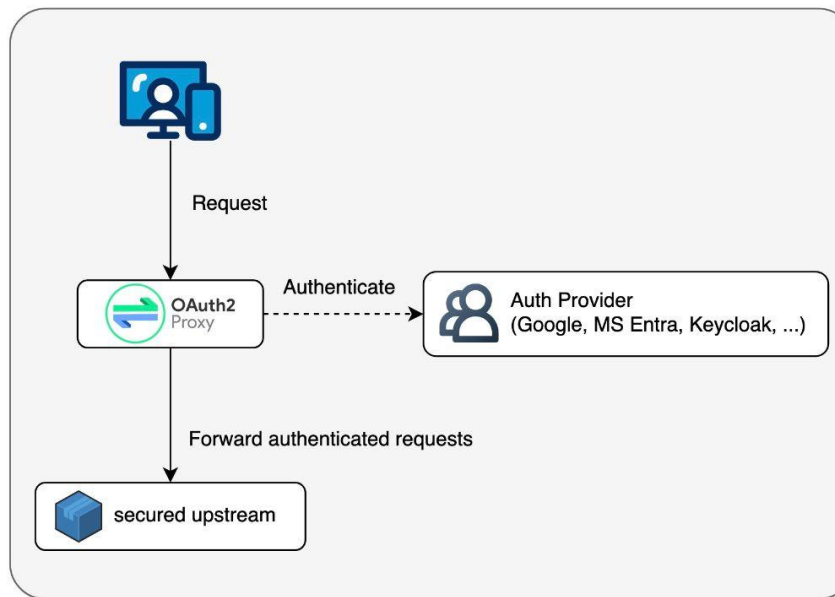
 

[< Previous](#) [Next](#)

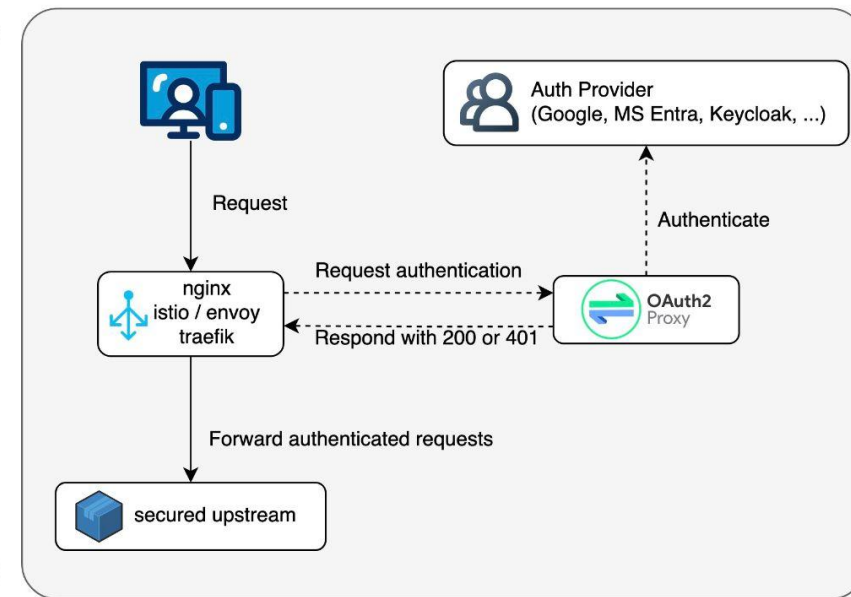
/ OAUTH2-PROXY

Proxy

OAuth2 Proxy as a standalone **reverse-proxy**



OAuth2 Proxy as a authentication **middleware**



Pourquoi Keycloak ?

 **authentik**

[Features](#)

[Integrations](#)

[Documentation](#)

[Pricing](#)

[Blog](#)



Do more with authentik

Core Capabilities	authentik	Okta	Microsoft ADFS	Azure/Entra ID	Keycloak	Duo	Authelia
Self-host Anywhere	✓	✗	⚠	✗	✓	✗	✓
MFA ⓘ	✓	✓	✗	✓	✓	✓	✓
Conditional Access	✓	✓	✓	⚠	✓	⚠	✓
Open-source/Source Available	✓	✗	✗	✗	✓	✗	✓
Application Proxy	✓	✗	⚠	✓	⚠	✗	✗
FIPS Compliance	✓	⚠	✓	✓	✓	⚠	✗
Enterprise Support	✓	✓	✗	✓	⚠	✓	✗
WebAuthn (Passkeys)	✓	✓	✓	✓	✓	✓	✓

/KEYCLOAK

Concurrency

Claude Fable 5.5 — Benchmark Comparison (Cloud Nord 2026 Exclusive) 🚀

[Under NDA] Fable 5.5 sets a new frontier across every capability — outperforming Opus 5.5, GPT-6 Astra, and GPT-5.6 Sol

⚠️ Note: Whatever you do, don't leak this information. 'I will not pursue you... but if you don't, I will look for you, I will find you... and I will kill you.' — Taken (2008) ⚠️

Capability	Benchmark	Fable 5.5	Opus 5.5	Fable 5.1	Opus 5	GPT-6 Astra	GPT-5.6 Sol
Agentic coding	Terminal-Bench 4.0	71.2%	66.4%	55.8%	52.3%	57.9%	37.3%
Agentic coding	FrontierCode v1.1 (Main)	58.9%	54.4%	50.3%	48.0%	53.3%	47.5%
Agentic coding	CursorBench 4.0	62.5%	57.8%	51.8%	46.6%	—	41.7%
Knowledge work	GDPval-AA v2.1	1912	1846	1735	1708	1542	1588
Business workflows	AutomationBench	45.3%	40.0%	31.4%	26.9%	41.4%	28.8%
Multidisciplinary reasoning	Humanity's Last Exam (with tools)	70.4%	67.7%	65.6%	63.6%	57.2%	—
Agentic scientific research	Terminal-Bench-Science 0.1	66.8%	58.7%	52.6%	29.0%	64.6%	22.4%
Computer use	OSWorld 2.1 (partial)	84.6%	81.8%	80.7%	74.0%	—	—
Visual chart recognition	Chartography (with tools)	91.7%	89.0%	88.4%	83.4%	—	—

Agentic coding performance by effort level

Anthropic internal autonomous agentic coding evaluation



CONFIDENTIEL
à sécuriser !!

DEMO TIME



OAuth2
Proxy

Keycloak

Users

Users are the users in the current realm. [Learn more](#)

User list

Default search



Search user



Add user



Refresh

1 - 2

☐	Username	Email	Last name	First name
☐	demo	demo@example.com	User	Demo
☐	demo2	demo2@example.com	Beta User	Demo2

< Groups > Group details

beta-users

Child groups

Members

Attributes

Add member

☐

Include sub-group users

☐

Name

Email

☐

demo2

demo2@example.com



streamlit

Current realm

Manage realms

Manage

Clients

Client scopes

Realm roles

Users

Groups

Sessions

Events

Configure

Realm settings

Authentication

Identity providers

User federation

keycloak.127.0.0.1.nip.io:30443/admin/master/console/#/streamlit/clients/68e150f

You are logged in as a temporary admin user. To harden security, create a permanent admin account and delete the temporary one.

KEYCLOAK

Clients > Client details

oauth2-proxy

OpenID Connect

Clients are applications and services that can request authentication of a user.

SettingsKeysCredentialsRolesClient scopesSessionsAdvancedEvents

General settings

Client ID *

oauth2-proxy

Name

OAuth2 Proxy

Description

Always display in UI

Off

Access settings

Root URL

Home URL

Valid redirect URIs

https://streamlit.127.0.0.1.nip.io:30443/oauth2/callback

+ Add valid redirect URIs

Valid post logout redirect URIs

+ Add valid post logout redirect URIs

Web origins

https://streamlit.127.0.0.1.nip.io:30443



keycloak.127.0.0.1.nip.io:30443/admin/master/console/#/streamlit/clients/68e150f

You are logged in as a temporary admin user. To harden security, create a permanent admin account and delete the temporary one.

KEYCLOAK

streamlit Current realm

Manage realms

Manage

Clients

Client scopes

Realm roles

Users

Groups

Sessions

Events

Configure

Realm settings

Authentication

Identity providers

User federation

Clients > Client details

oauth2-proxy OpenID Connect

Clients are applications and services that can request aut

Settings

Keys

Credentials

Roles

Cli

Client Authenticator

?

Client Id and Secret

Save

Client Secret

oauth2-proxy-client-secret

Avant, sans la sécu.

```
apiVersion: networking.k8s.io/v1
kind: Ingress
metadata:
  name: streamlit
  annotations:
    nginx.ingress.kubernetes.io/ssl-redirect: "true"
    cert-manager.io/cluster-issuer: "selfsigned-issuer"
spec:
  ingressClassName: nginx
  tls:
    - hosts: streamlit.127.0.0.1.nip.io
      secretName: streamlit-tls
  rules:
    - host: streamlit.127.0.0.1.nip.io
      http:
        paths:
          - path: /
            pathType: Prefix
            backend:
              service:
                name: streamlit
                port:
                  number: 80
```

Après, avec la sécu.

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: streamlit

annotations:

nginx.ingress.kubernetes.io/ssl-redirect: "true"

cert-manager.io/cluster-issuer: "selfsigned-issuer"

nginx.ingress.kubernetes.io/auth-url:

"http://oauth2-proxy.oauth2-proxy.svc.cluster.local/oauth2/auth"

nginx.ingress.kubernetes.io/auth-signin:

"https://streamlit.127.0.0.1.nip.io:30443/oauth2/start?rd=\$escaped_request_uri"

spec:

ingressClassName: nginx

[...]

Restriction à un groupe

```
COOKIE_SECRET=$(kubectl get secret -n oauth2-proxy oauth2-proxy -o  
jsonpath='{.data.cookie-secret}' | base64 -d 2>/dev/null || openssl rand -base64 32 | tr -- '+/' '-')
```

```
helm upgrade --install oauth2-proxy oauth2-proxy \  
--repo https://oauth2-proxy.github.io/manifests \  
--version "${OAUTH2_PROXY_CHART_VERSION}" \  
--namespace oauth2-proxy \  
--values k8s/oauth2-proxy-values.yaml \  
--set "config.cookieSecret=${COOKIE_SECRET}" \  
--set "extraArgs.allowed-group=/beta-users" \  
--wait
```

Automatique via Kyverno

```
apiVersion: kyverno.io/v1
```

```
kind: ClusterPolicy
```

```
metadata:
```

```
  name: add-oauth2-proxy-auth
```

```
  annotations:
```

```
    +
```

```
    policies.kyverno.io/title: Add OAuth2 Proxy Authentication
```

```
    policies.kyverno.io/category: Security
```

```
    policies.kyverno.io/description: >-
```

```
    Automatically adds oauth2-proxy authentication annotations to EVERY Ingress  
    resources in the default namespace.
```

```
spec:
```

```
  rules:
```

```
    - name: add-oauth2-annotations
```

```
      match:
```

```
        any:
```

ou semi-automatique

```
[...] - resources:
```

```
  kinds:
```

```
    - Ingress
```

```
  namespaces:
```

```
    - default
```

```
    selector:
```

```
      matchLabels:
```

```
        oauth2-proxy: enabled
```

```
  mutate:
```

```
    patchStrategicMerge:
```

```
    metadata:
```

```
      annotations:
```

```
        nginx.ingress.kubernetes.io/auth-url:
```

```
"http://oauth2-proxy.oauth2-proxy.svc.cluster.local/oauth2/auth"
```

```
        nginx.ingress.kubernetes.io/auth-signin:
```

```
"https://streamlit.127.0.0.1.nip.io:30443/oauth2/start?rd=$escaped_request_uri"
```

(en semi-automatique)

apiVersion: networking.k8s.io/v1

kind: Ingress

metadata:

name: streamlit

labels:

oauth2-proxy: enabled

+

annotations:

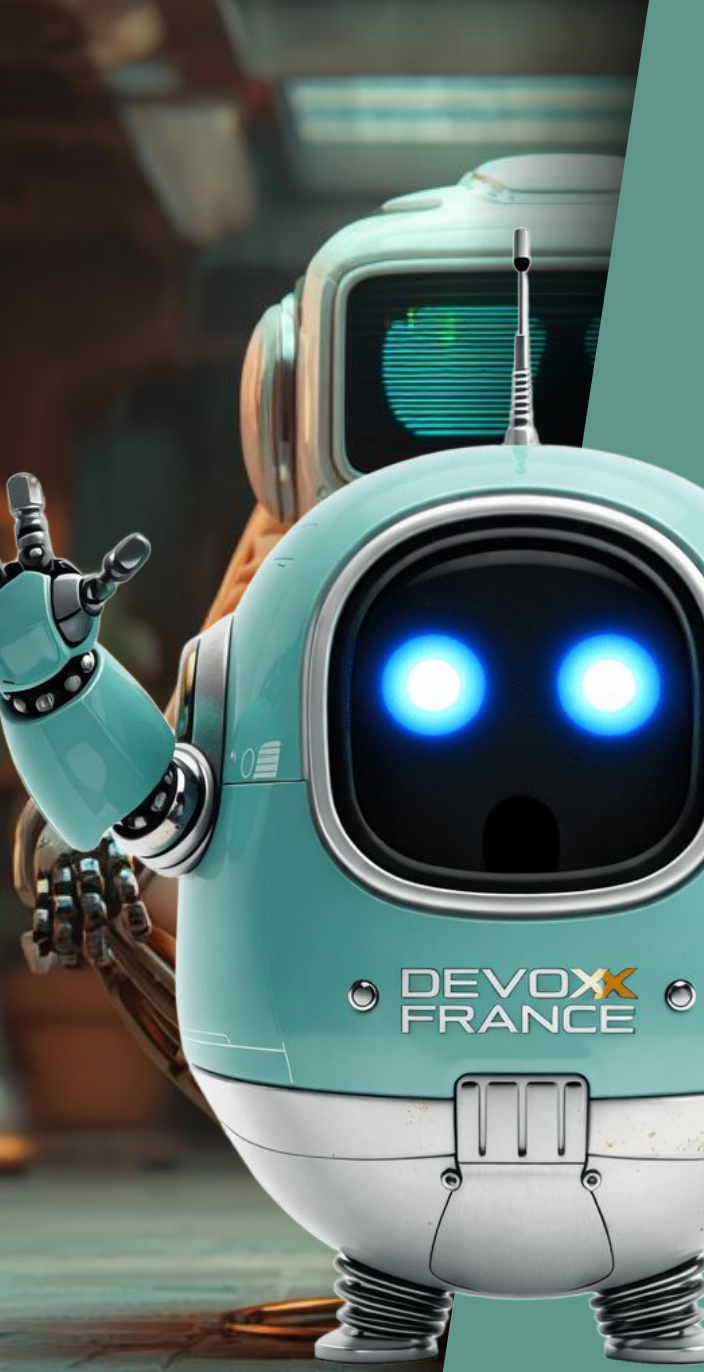
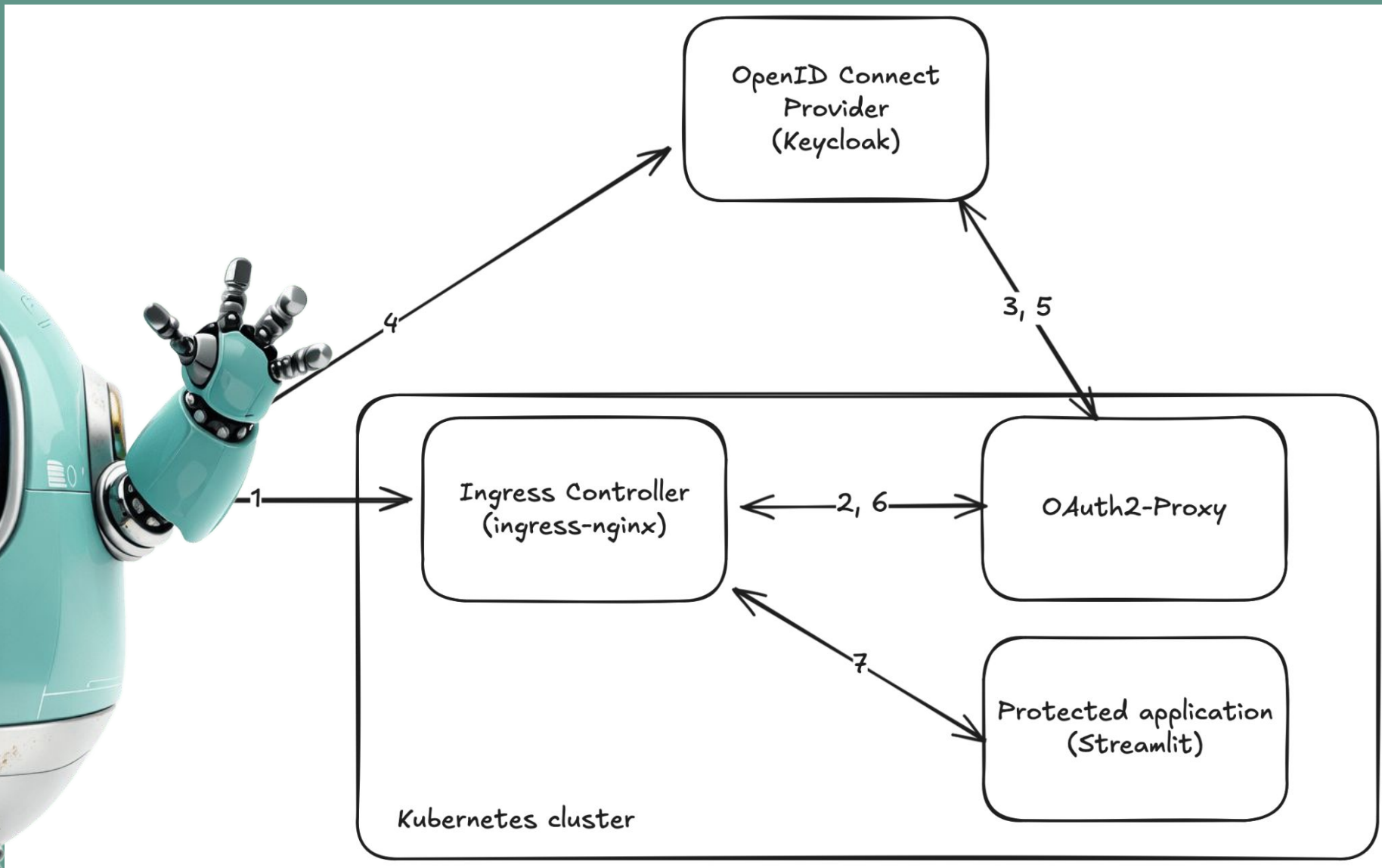
nginx.ingress.kubernetes.io/ssl-redirect: "true"

cert-manager.io/cluster-issuer: "selfsigned-issuer"

spec:

ingressClassName: nginx

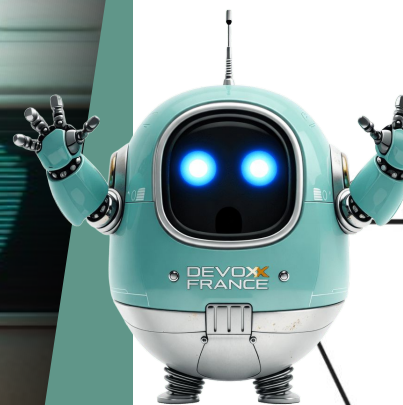
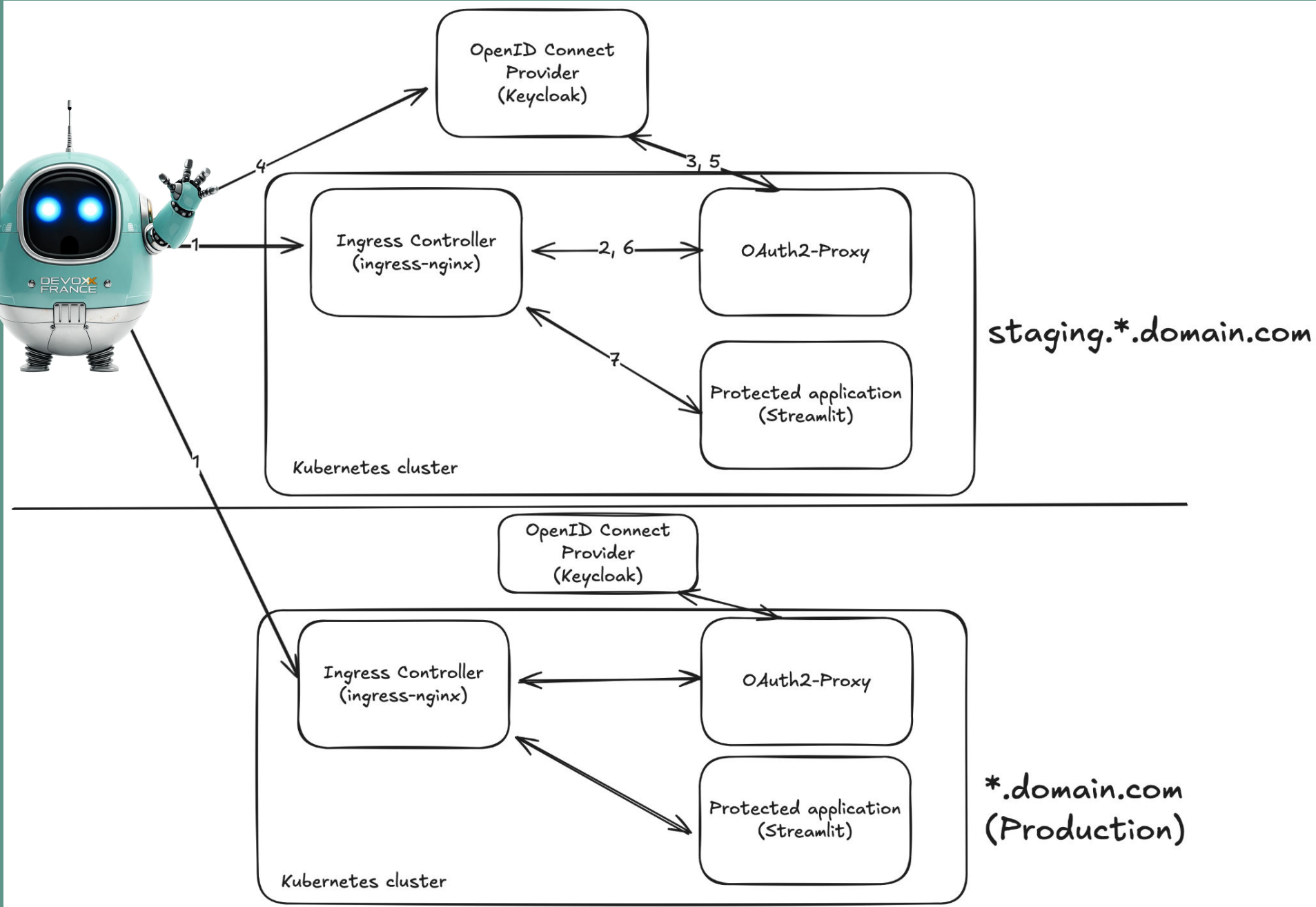
[...]



Race condition



```
cookie_csrf_per_request = true  
cookie_csrf_expire = "5m"
```





Un nouveau domaine ou de la config. ?



Staging	Production
<code>cookie_domains = [".staging.127.0.0.1.nip.io"]</code>	<code>".127.0.0.1.nip.io"</code>
<code>cookie_name = "_oauth2_proxy_staging"</code>	<code>"_oauth2_proxy_prod"</code>
<code>cookie_secret</code> différent	
Cpdt: Cookie de PRD -> STG	

OAUTH 2, déjà une "tech" ubiquitaire



We will take you to your default web browser to sign in and bring you back when it's complete...

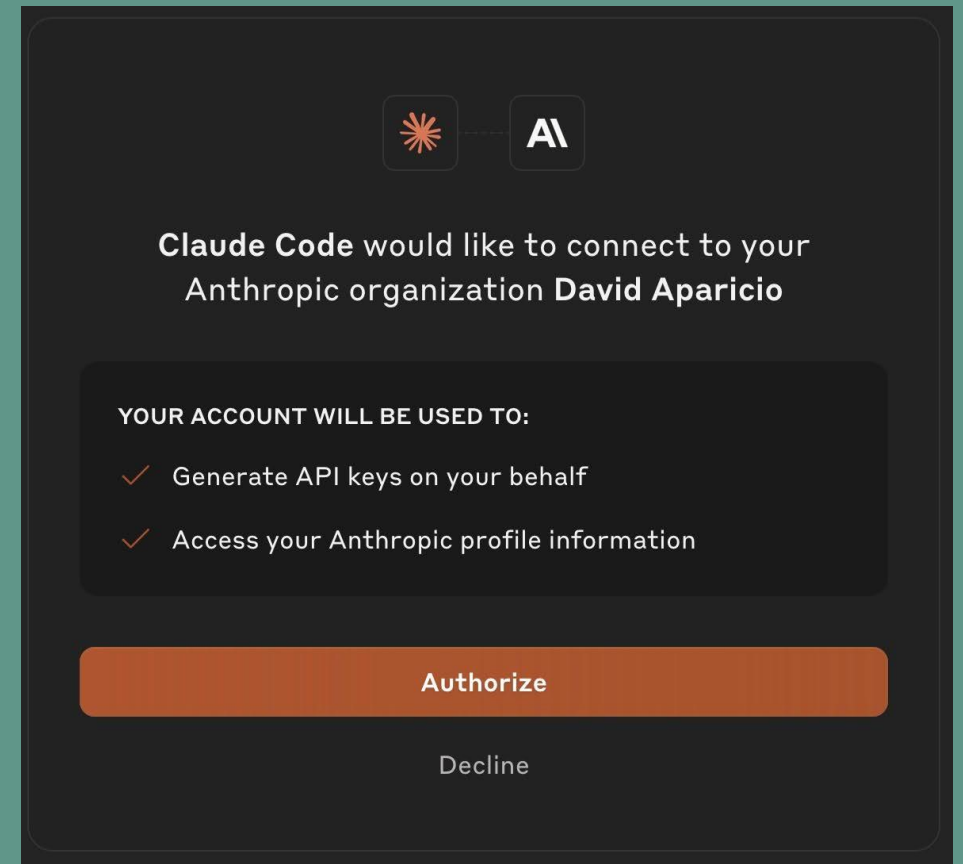
Or open this link in your browser:

```
https://app.kiro.dev/signin?state=2c6491f4-a0e2-440e-9fb5-737d2d4b5787&code_challenge=_IH99ym1ojlKKqrtKPM122ZVbvsvfPeH5dIQz2AAlp6w&code_challenge_method=S256&redirect_uri=http%3A%2F%2Flocalhost%3A3128&redirect_from=KiroIDE
```

Cancel

By signing in, you agree to the [AWS Customer Agreement](#), [Service Terms](#), and [Privacy Notice](#).

OAUTH 2, déjà une "tech" ubiquitaire



OAuth 2 un standard de l'industrie



oauth2.creditmutuel.fr/fr/logon.html

Connexion



Crédit Mutuel

Identifiant / Mot de passe Certificat Électronique SAFETRANS

Identifiant

Mot de passe

[Retour](#) [Se connecter](#)

iam.esalia.com/connect/XUI?realm=sg_ws&locale=fr&goto=https://iam.esalia.com:443/connect/oauth2/authorize?response_type%3Dcode%26client_id%3D6

SOCIÉTÉ GÉNÉRALE

CHANGER DE LANGUE AIDE À LA CONNEXION

CONNEXION À VOTRE COMPTE ÉPARGNE SALARIALE ET RETRAITE

Número de compte

Oublié ?

☐ Mémoriser mon numéro de compte

Mot de passe

Oublié ?

6

7

4

3

2

1

8

9

5

0

Effacer

[Se connecter](#)

Bienvenue sur Esalia

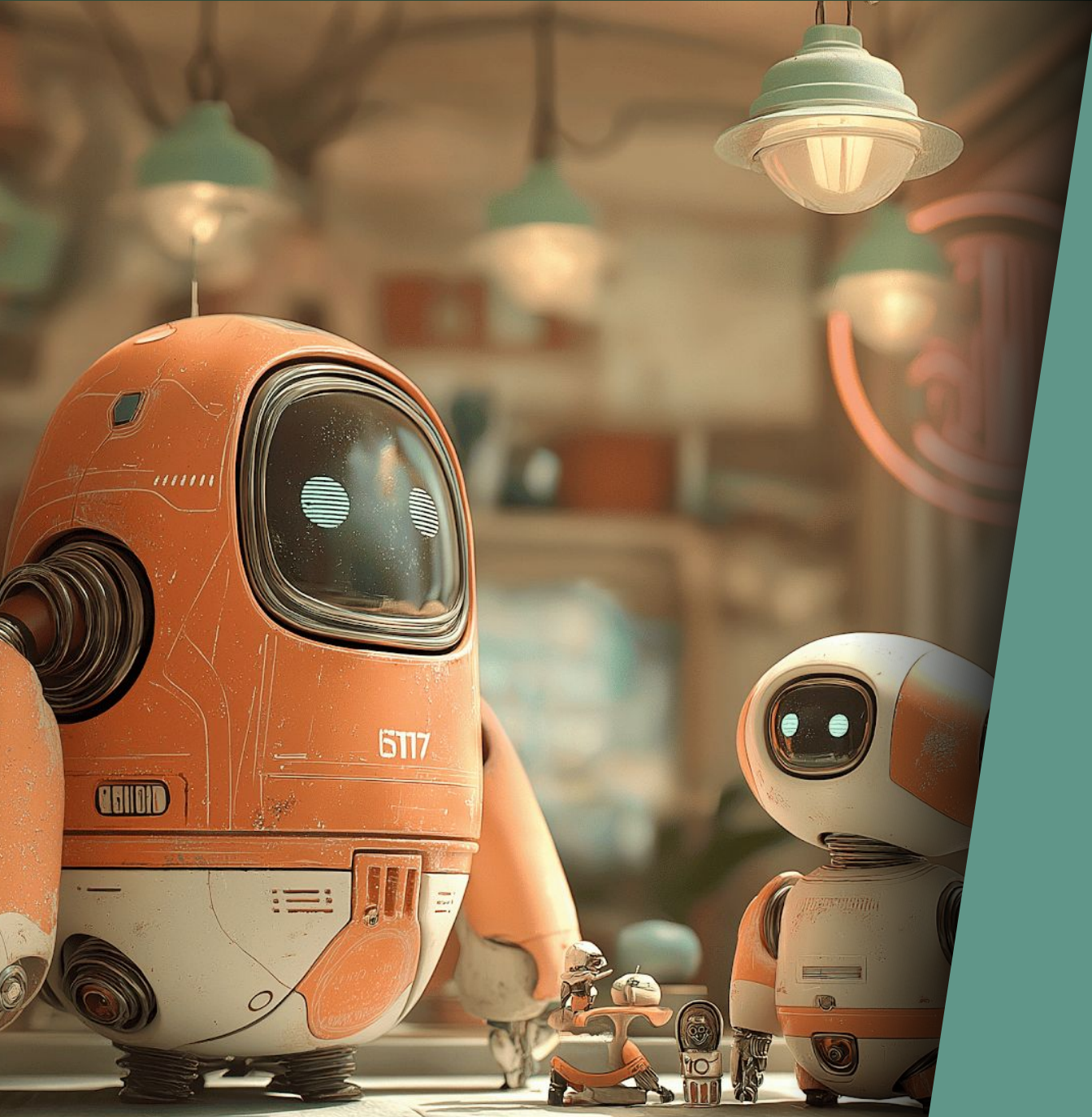
Vivez différemment l'épargne salariale et retraite



Vous souhaitez gérer votre épargne où que vous soyez ?

Téléchargez l'Appli Esalia !

[Télécharger sur l'App Store](#) [Télécharger sur Google Play](#)



Avantages

- Rapide à mettre en place
- Simple à utiliser (annotations)
 - Mais pas d'équivalent Gateway API [gep-1494](#)
- Transparent pour les développeurs
- Automatique avec une policy Kyverno



github.com/davidaparcio/devoxxfr26-oauth2



Anubis

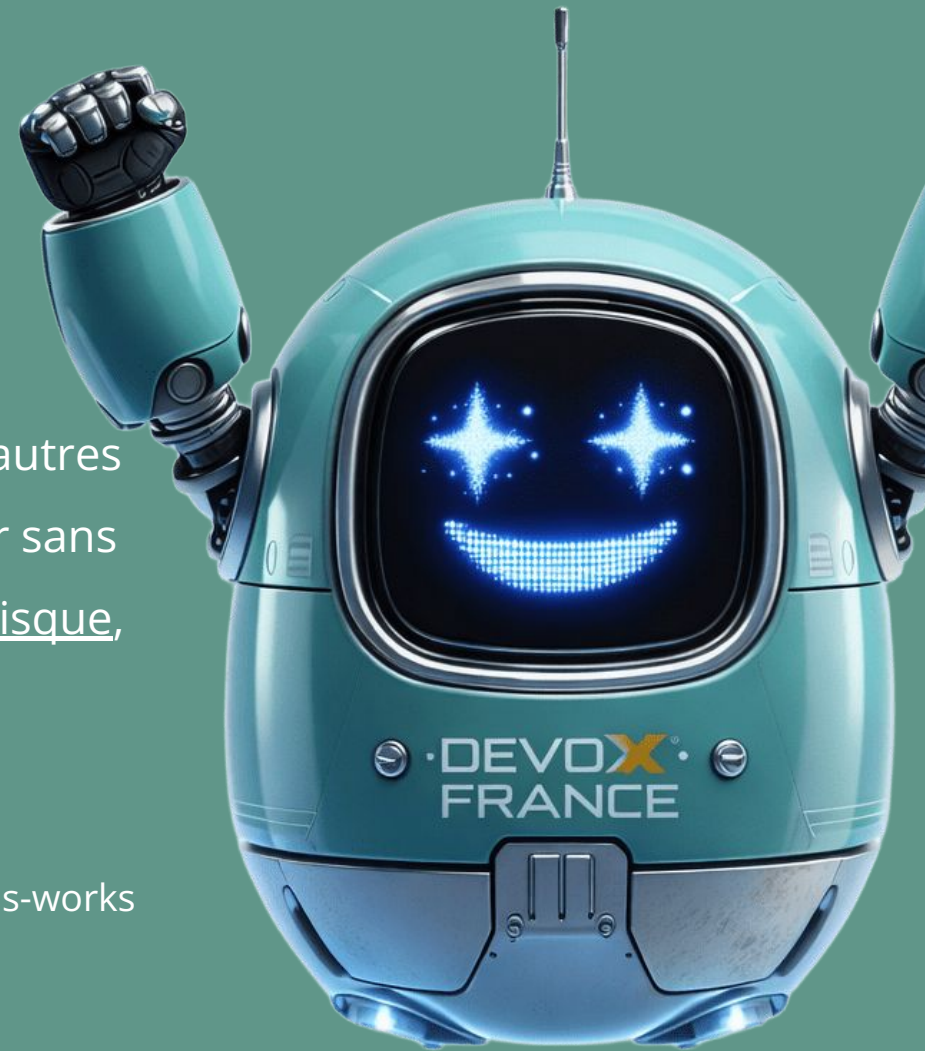
Laissez les agents AI loin de votre site

Et faites des réductions FinOps, au passage



Anubis permet aux lecteurs RSS et aux autres clients à faible risque (type git) de passer sans problème, tandis que les clients à haut risque, tels que les navigateurs et "scraper IA", seront bloqués, par un challenge PoW.

<https://anubis.techaro.lol/docs/design/how-anubis-works>



PoW: Proof of Work, comme utilisé dans les cryptomonnaies

Making sure you're not a bot!



Loading...

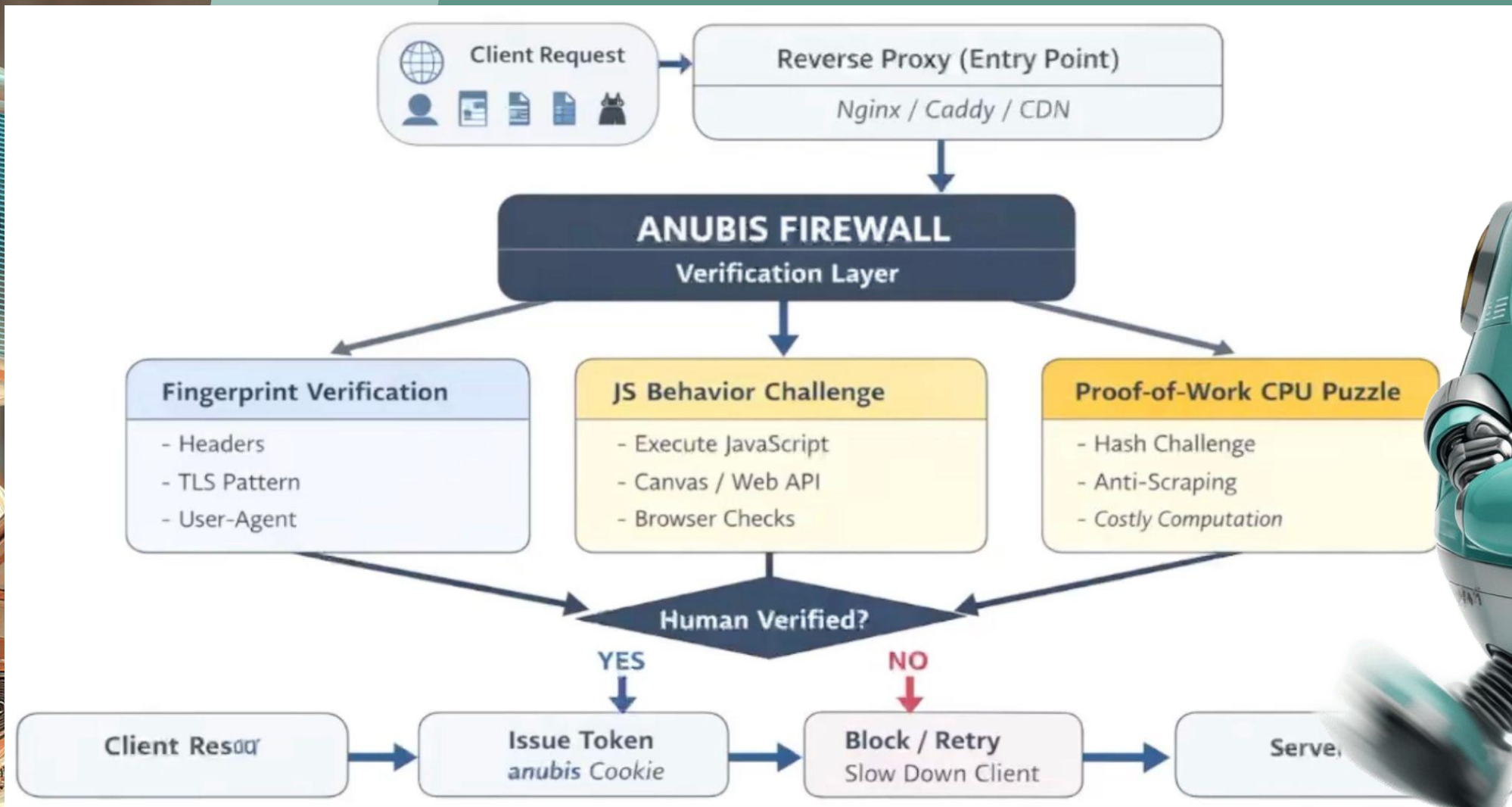
Please wait a moment while we ensure the security of your connection.

Protected by [Anubis](#) From [Techaro](#). Made with ❤️ in 🇨🇦.

Mascot design by [CELPULSE](#).

This website is hosted by Techaro. If you have any complaints or notes about the service, please contact support@techaro.lol and we will assist you as soon as possible. -- [Imprint](#)

This website is running Anubis version v1.25.0-37-g3a6e368.



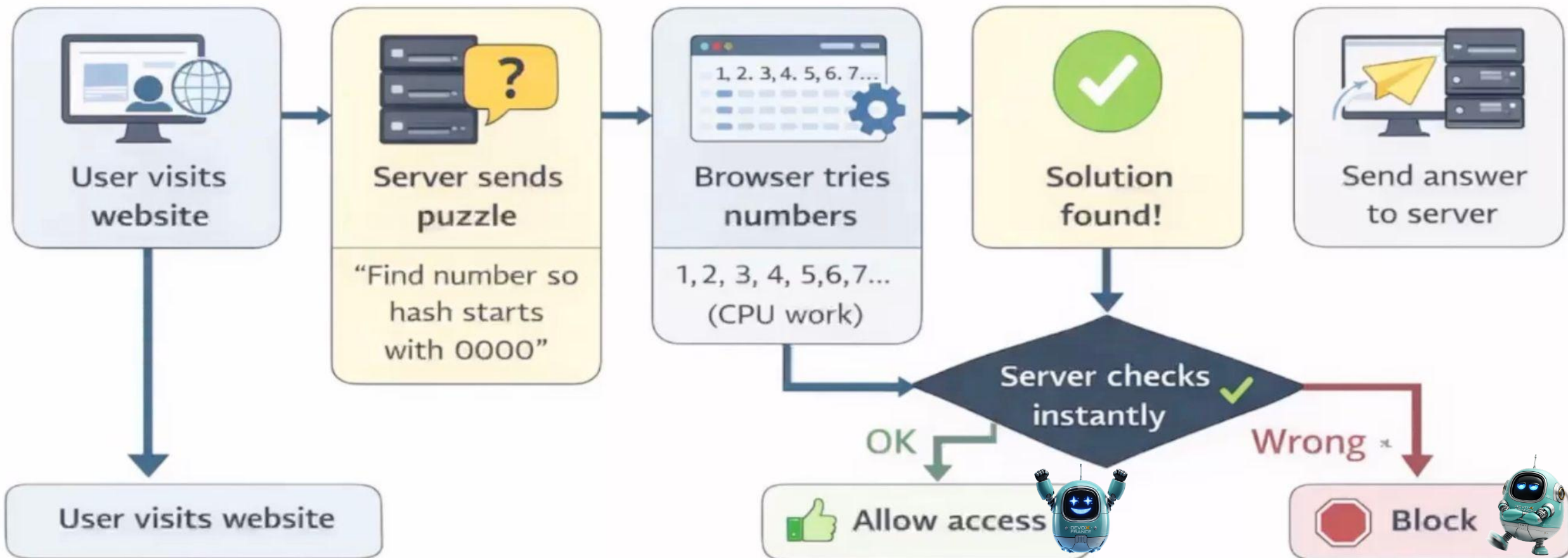
Anubis Will Judge You: AI-Powered Firewall Defending Web Traffic- DevConf.IN 2026
<https://xeiaso.net/blog/2025/anubis/>

hash(challenge + nonce) → random output

Nonce = "Number used once"

000000abc... ← rare → expensive to find

Try → Fail → Try → Fail → Try → WIN



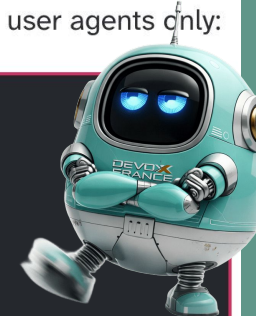
The math of difficulty

Difficulty in Anubis is measured in leading hexadecimal zero characters. Each hex character is 4 bits. The expected number of hashes you need to find a passing result is $16^{\text{difficulty}}$. The scaling is exponential, which is what makes the difficulty knob load-bearing.

Difficulty	Required leading zeros	Expected hashes	Median time, 4-worker laptop
3	000	~4,096	10 to 30 ms
4 (default)	0000	~65,536	100 to 250 ms
5	00000	~1,048,576	1.5 to 4 s
6	000000	~16,777,216	25 to 60 s
7	0000000	~268,435,456	7 to 15 minutes

Moving from difficulty 4 to difficulty 5 does not double the work. It increases it by sixteen times. From 4 to 6 is a 256x increase. This is what people mean when they say “just turn the difficulty up” and immediately regret it. Difficulty 6 is unusable as a default for any audience that includes phones. The Anubis bot policy ships with a deliberately mean rule that uses difficulty 16 and an algorithm explicitly named `slow`, intended for known-bot user agents only:

```
- name: generic-bot-catchall
  user_agent_regex: (?i:bot|crawler)
  action: CHALLENGE
  challenge:
    difficulty: 16 # impossible
    algorithm: slow # intentionally waste CPU cycles and time
```



16^{16} is approximately $1.8 * 10^{19}$. That is not a number any real client is supposed to finish in a human lifetime. It is a polite way to say “no” while still pretending to challenge.



Comparison with Proprietary Alternatives

While many users default to enterprise giants for bot protection, Anubis fills a specific niche for those who want to avoid vendor lock-in or centralized points of failure.

Feature	Anubis	Cloudflare (Bot Management)	Akamai Bot Manager / DataDome
Cost	Free / Open Source	High (Enterprise Tier)	Enterprise Pricing
Self-Hosted	✔ Yes	✘ No	✘ No
Philosophy	Protection for the Small Web	Enterprise Scale	Enterprise Scale
Weight	Extremely Lightweight	N/A (Cloud Managed)	N/A (Cloud Managed)
Transparency	Open Source Code	Black Box Algorithms	Black Box Algorithms
Setup Complexity	Simple Proxy	Complex Dashboard	Complex Enterprise Integration

<https://opensourcedaily.blog/anubis-the-lightweight-web-ai-firewall-for-the-small-internet>



```
- name: allow-api-requests
```

```
  action: ALLOW
```

```
  expression:
```

```
  all:
```

```
    - "'Accept' in headers'
```

```
    - 'headers["Accept"] == "application/json"'
```

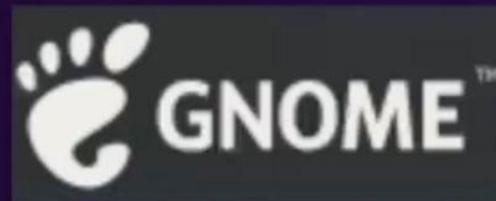
```
    - 'path.startsWith("/api/")'
```

```
- name: amazonbot
```

```
  user_agent_regex: Amazonbot
```

```
  action: DENY
```

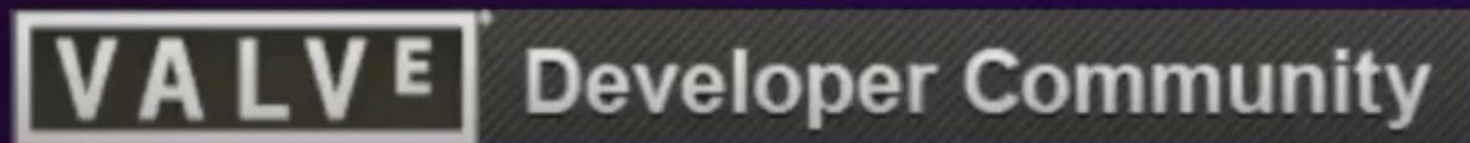
List of places where robots must suffer before downloading files



HACKLAB.TO



Many



More
DEVCONF.IN

DEMO TIME





thresholds:

- name: minimal-suspicion

expression: weight <= 0

action: ALLOW

- name: mild-suspicion

expression:

all:

- weight > 0

- weight < 10

action: CHALLENGE

challenge:

algorithm: metarefresh

difficulty: 1

- name: browser-proof-of-work

expression:

all:

- weight >= 10

- weight < 20

action: CHALLENGE

challenge:

algorithm: fast

difficulty: 5

- name: extreme-suspicion

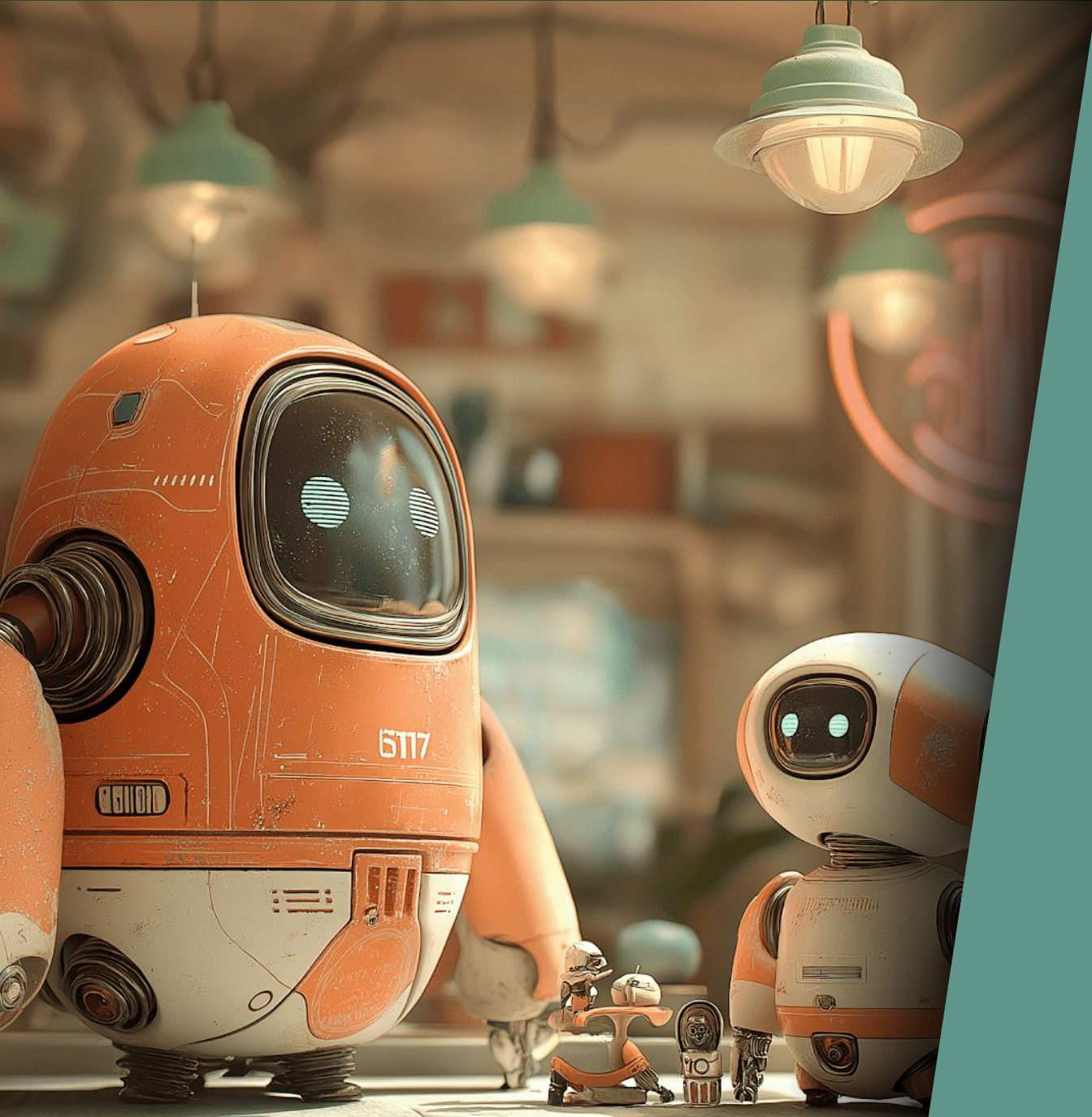
expression: weight >= 20

action: CHALLENGE

challenge:

algorithm: fast

difficulty: 7



Avantages

- Facile à mettre en place
- Robots.txt complet
- Écoconception (<128Mo RAM)
- Réduction des coûts (FinOps)
 - Impact important sur le GEO / SEO



github.com/davidapario/davoxfr26-anubis

— GET http://<URL>/robots.txt —:

User-agent: AddSearchBot

User-agent: ChatGPT Agent

User-agent: ChatGPT-User

User-agent: Claude-SearchBot

User-agent: Claude-User

User-agent: Claude-Web

User-agent: MistralAI-User

User-agent: MistralAI-User/1.0

... (94 User-agent entries total — full list snipped) ...

User-agent: YouBot

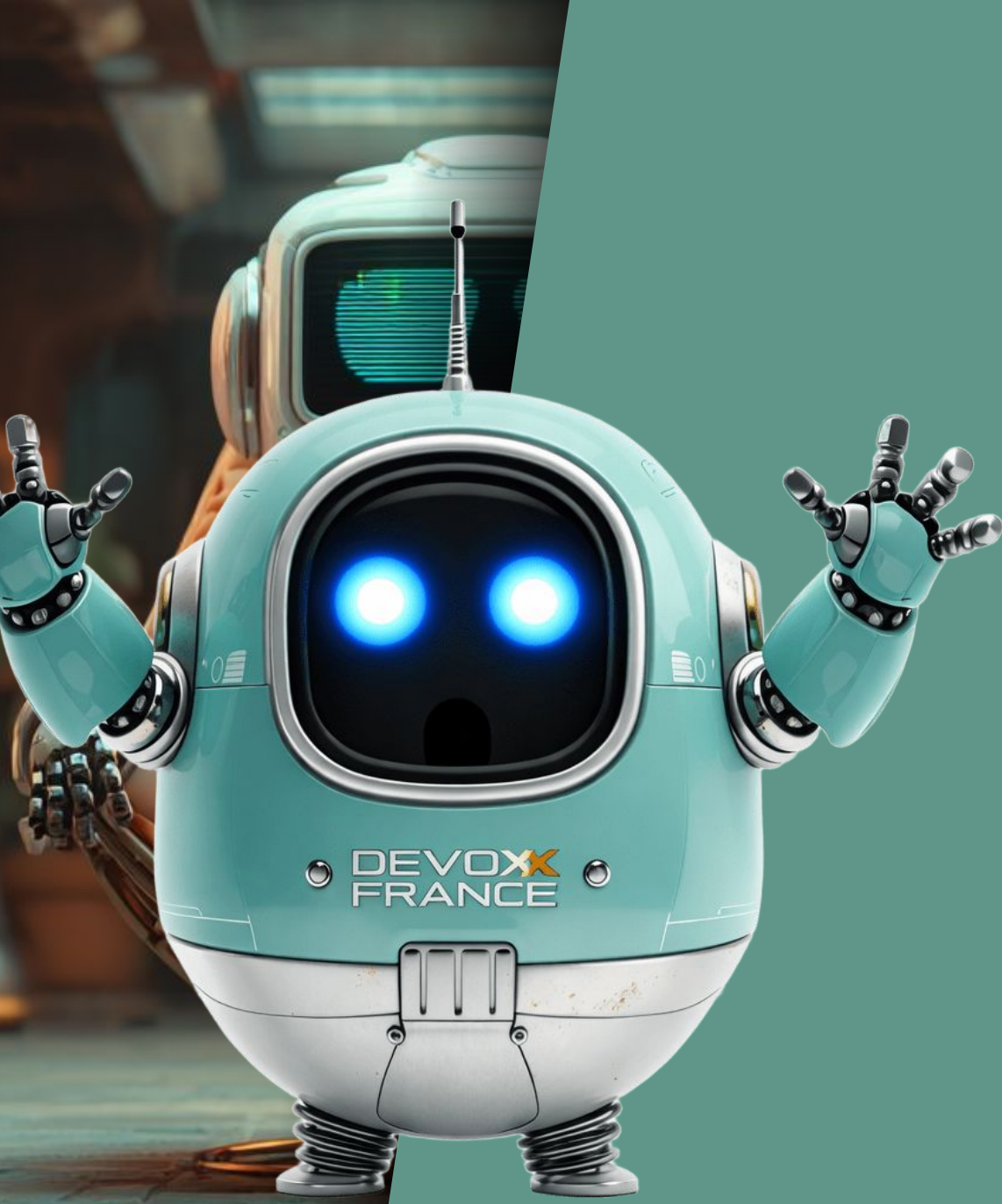
Disallow: /

User-agent: *

Disallow: /

```
http://localhost:8080/robots.txt

User-agent: AddSearchBot
User-agent: AI2Bot
User-agent: AI2Bot-Dolma
User-agent: aiHitBot
User-agent: Amazonbot
User-agent: Andibot
User-agent: anthropic-ai
User-agent: Applebot
User-agent: Applebot-Extended
User-agent: Awario
User-agent: bedrockbot
User-agent: bigsur.ai
User-agent: Brightbot 1.0
User-agent: Bytespider
User-agent: CCBot
User-agent: ChatGPT Agent
User-agent: ChatGPT-User
User-agent: Claude-SearchBot
User-agent: Claude-User
User-agent: Claude-Web
User-agent: ClaudeBot
User-agent: CloudVertexBot
User-agent: cohere-ai
User-agent: cohere-training-data-crawler
User-agent: Cotoyogi
User-agent: Crawlspice
User-agent: Datenbank Crawler
User-agent: Devin
User-agent: Diffbot
User-agent: DuckAssistBot
User-agent: Echobot Bot
User-agent: EchoboxBot
User-agent: FacebookBot
User-agent: facebookexternalhit
User-agent: Factset_spyderbot
User-agent: FirecrawlAgent
User-agent: FriendlyCrawler
User-agent: Gemini-Deep-Research
User-agent: Google-CloudVertexBot
User-agent: Google-Extended
User-agent: GoogleAgent-Mariner
User-agent: GoogleOther
User-agent: GoogleOther-Image
User-agent: GoogleOther-Video
User-agent: GPTBot
User-agent: iaskspider/2.0
User-agent: ICC-Crawler
User-agent: ImagesiftBot
User-agent: img2dataset
User-agent: ISSCyberRiskCrawler
User-agent: Kangaroo Bot
User-agent: LinerBot
User-agent: meta-externalagent
User-agent: Meta-ExternalAgent
User-agent: meta-externalfetcher
User-agent: Meta-ExternalFetcher
User-agent: MistralAI-User
User-agent: MistralAI-User/1.0
User-agent: MyCentralAIScraperBot
User-agent: netEstate Imprint Crawler
User-agent: NovaAct
User-agent: OAI-SearchBot
User-agent: omgili
```



DEVOPS · CYBER · SOUVERAINETÉ

SYSOPS

LINUX PRATIQUE

SERVEURS · OPEN SOURCE · CLOUD

MAI / JUIN 2026

FRANCE MÉTRO : 9,90 € BELUX : 10,90 € CH : 15,80 CHF
ESP/IT/PORT-CONT : 10,90 € DOM/S : 10,90 €
TUN : 23 TND MAR : 110 MAD CAN : 17,99 \$CAD

N°155

L 18864 - 155 - F: 9,90 € - RD



CPAP - N°8590

K8S / STOCKAGE DISTRIBUÉ

Longhorn : une solution simple de stockage redondant pour votre cluster Kubernetes p. 68

RÉSEAU / SDN / VRF

Introduction au Virtual Routing and Forwarding pour segmenter un routage en domaines étanches p. 56

DEVSECOPS / CI/CD

Repensez l'architecture de votre usine logicielle en créant un « hub » de sécurité p. 48

WEB SCRAPING / HAPROXY

Pesez l'âme des requêtes web entrantes pour éviter la surcharge de vos serveurs :

DÉBARRASSEZ-VOUS DES BOTS IA AVEC ANUBIS !

p. 42

- Présentation & fonctionnement des outils utilisés
- Configuration d'Anubis & de HAProxy
- Définition des critères & des règles

NOUVELLE RUBRIQUE : IA & AGENTS



LLM / TECHNO

IA, entre promesses et réalité : quels usages concrets pour les Ops ? p. 08



PUPPET / ANSIBLE

Automatisation : penser son infrastructure avant de choisir ses outils p. 18



SYSTEMD / GREEN IT

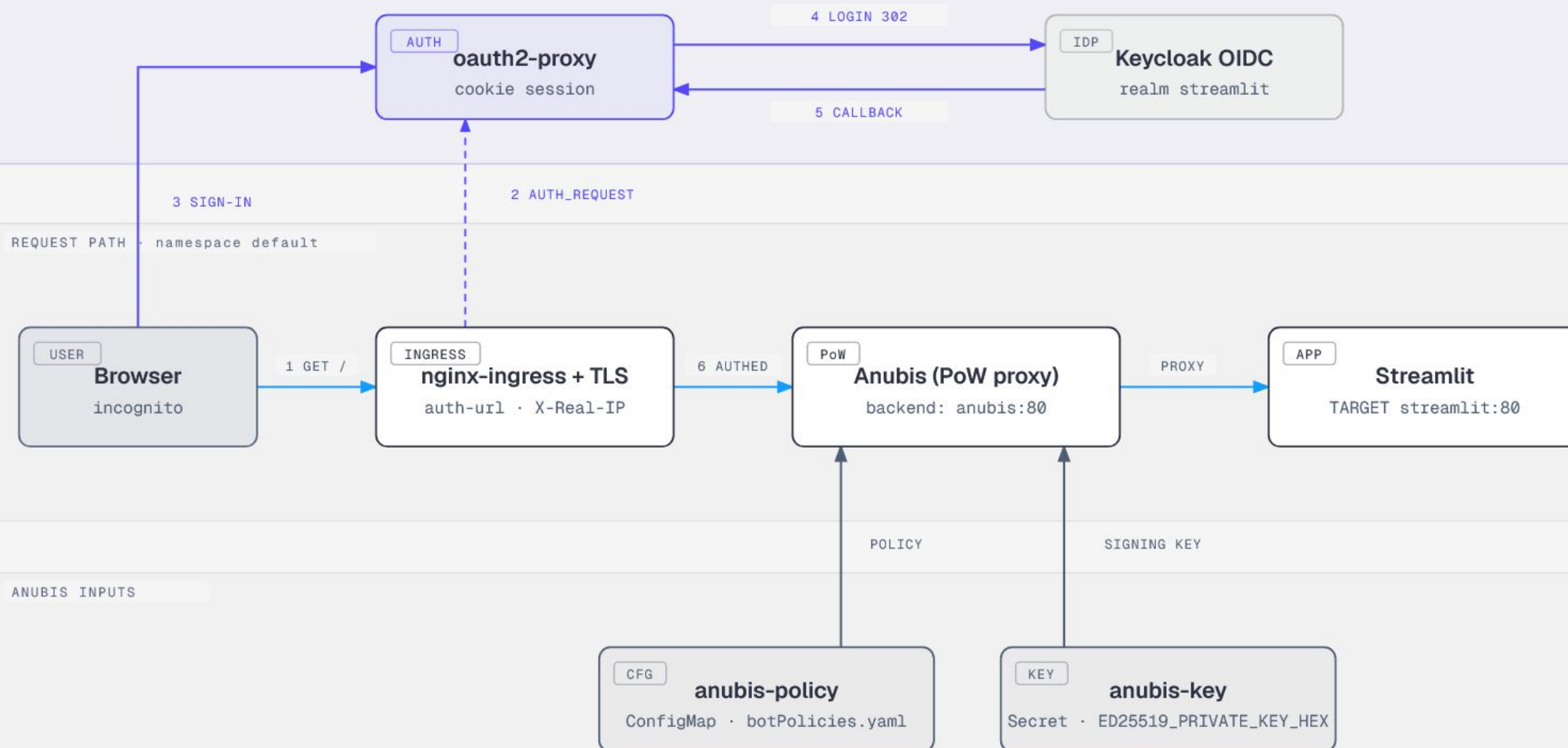
Réalisez des économies : démarrez vos serveurs et VM à la demande p. 30

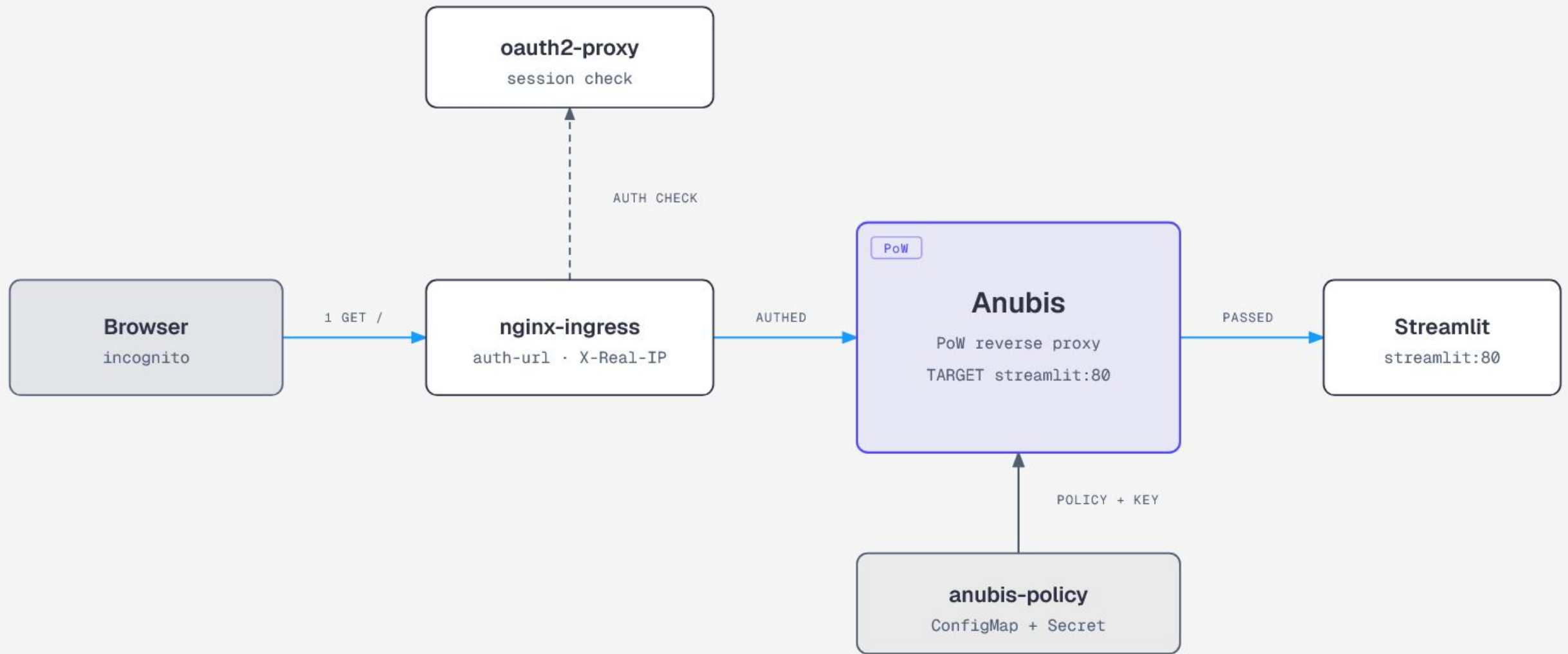
CONNECTED-DIAMOND.COM

DEMO TIME



AUTHENTICATION · oauth2-proxy + Keycloak (secure.sh)

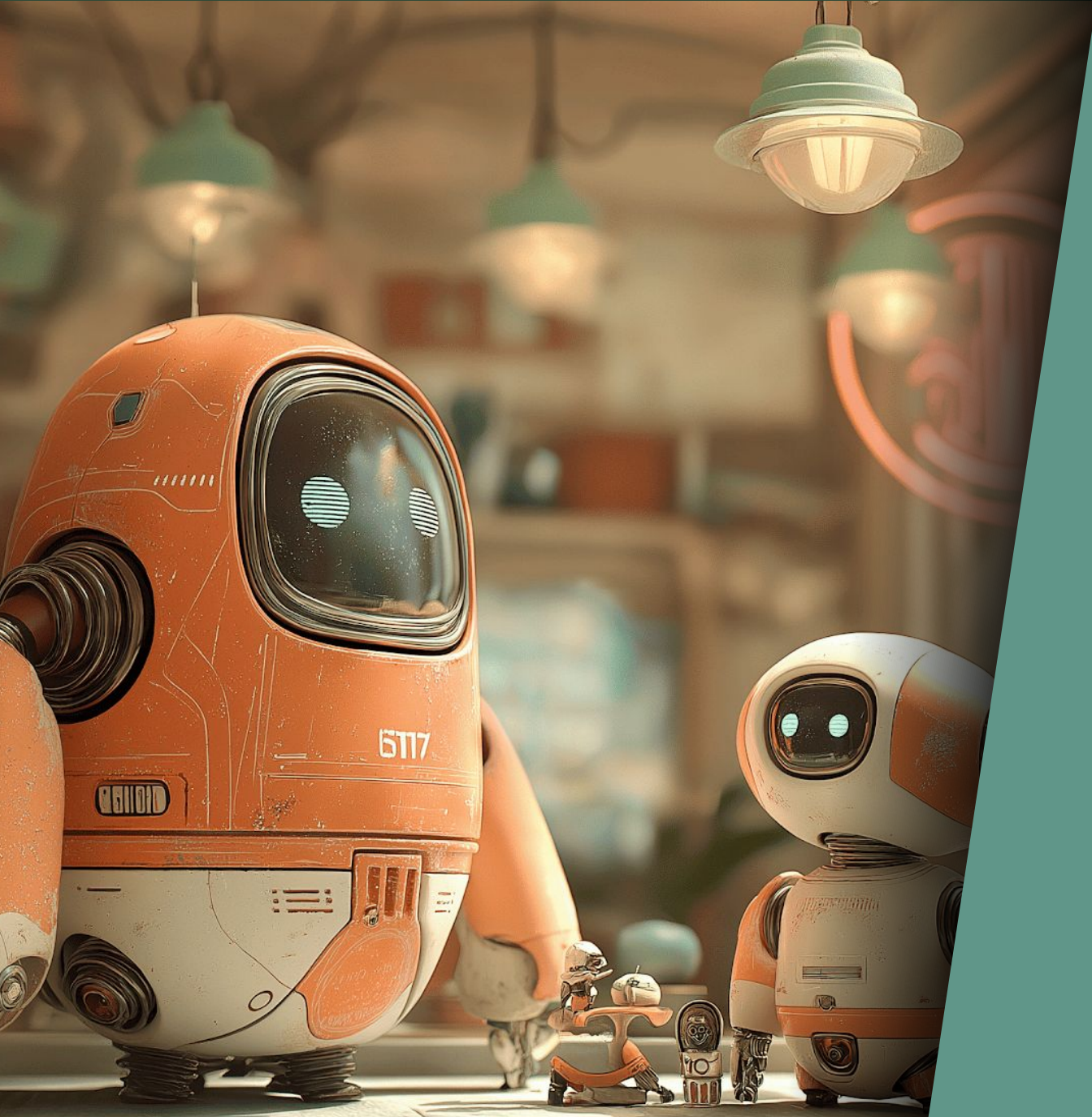




→ Request traffic

- - - - -> Auth check

□ Focal: Anubis



Conclusion: OAuth2-Proxy / Anubis

- Simplicité et Rapidité
- Écoconception
- Inconvénients à étudier au cas par cas



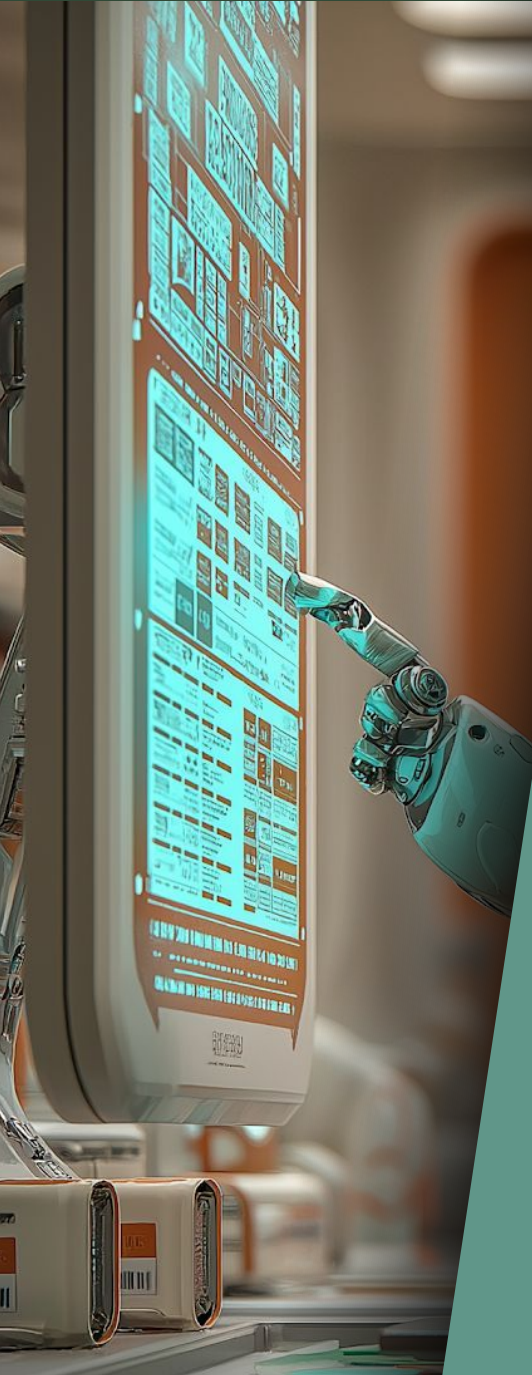
David Aparicio

15/ DD INSA de Lyon / UNICAMP (Brésil)
Facebook Open Academy / MIT AppInventor

17/ Dev(Sec)Ops @ AMADEUS (Nice, 2 ans)
19/ Data(Sec)Ops @ OVHcloud (Lyon, 5 ans)

24/ Senior Dev(Sec)Ops @ Sopht (Lyon, 1 an)
25/ Senior SRE @ Agicap (Lyon, 2 mois)
26/ Senior Dev(Sec)Ops @ Eudonet (Lyon, 1 an)

david.aparicio.eu / @ davidaparicio / @ dadideo



« Après 8 heures d'opération avec Eudonet, j'étais déjà plus efficace qu'après 8 ans avec mon ancien CRM. »

Jean Lamoureux, Directeur général, Fondation de l'Hôtel-Dieu d'Alma.



Migrer vos données pour gagner en efficacité

Le cas Fondation Hôtel-Dieu D'Alma



CONTEXTE

15 000

DONATEURS DANS LEUR BDD

+/- 8000

ENTRÉES TRAITÉES PAR AN

MAIS :

- Données dispersées
- Manque de suivi centralisé
- Environnement applicatif trop large

Centraliser l'information et l'historique des donateurs

UNE SOLUTION FLUIDE

Migration CRM fluide

Intégration complète des donateurs, campagnes et reçus.



“ L'équipe a rapidement pris le virage d'expertise et de détail, tout en nous simplifiant grandement la démarche. ”



JEAN LAMOUREUX
Directeur général FHDA

BÉNÉFICES



~300 heures
libérées par an



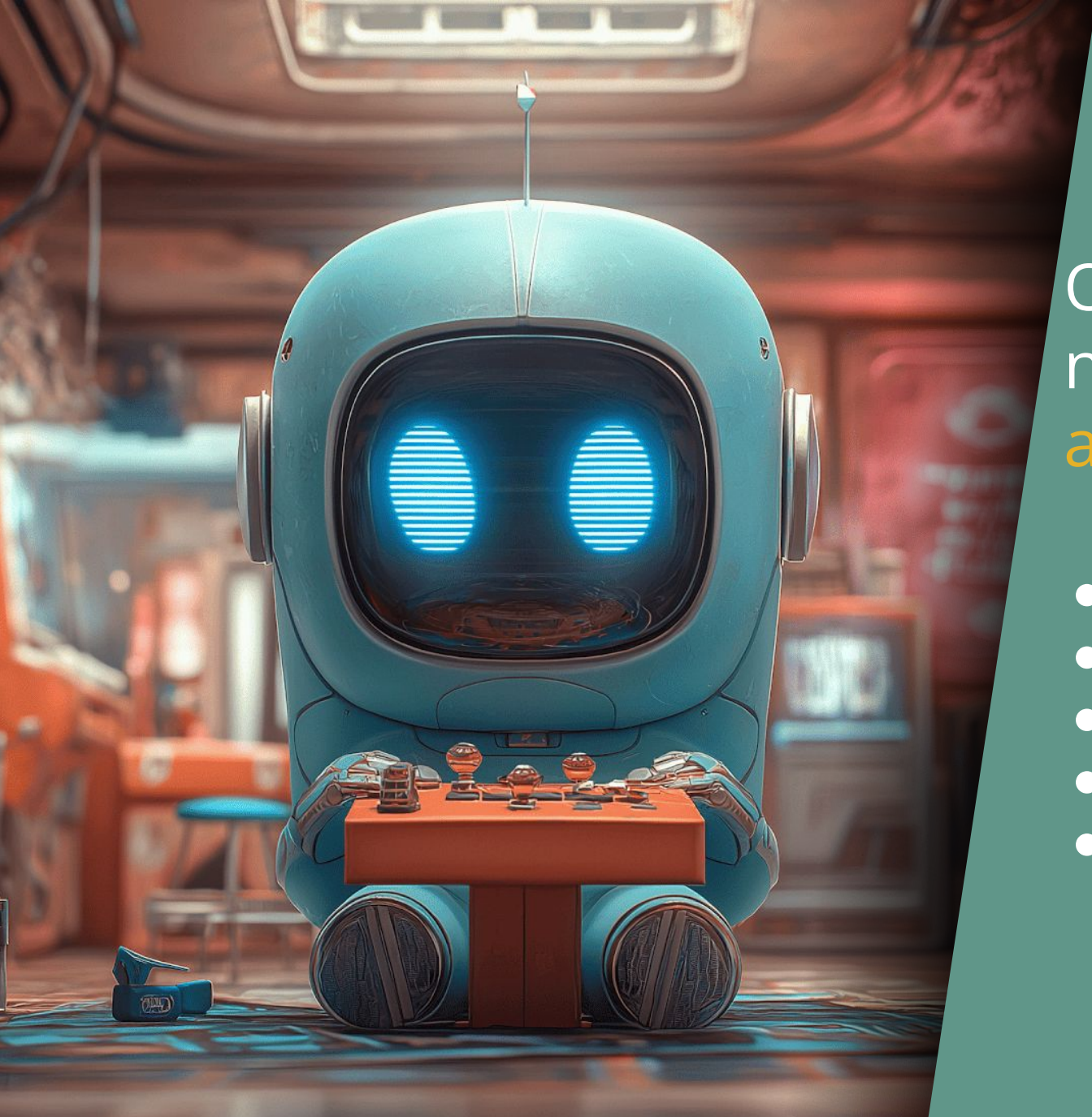
Meilleure gestion
des données



Passage à la
vitesse supérieure

Prêt à migrer votre CRM avec confiance ?

Échangeons ensemble



On recrute un **DevOps** dans
notre équipe (bonus si
appétence data) ;-)

- K8s / ArgoCD / Helm
- LGTM (OpenTelemetry)
- Petite équipe, Grand impact
- Env. éphémères, IA (Claude)
- Souveraineté (Scaleway/OVHcloud)

MERCI BEAUCOUP POUR
VOTRE ATTENTION AINSI QUE
POUR VOTRE FEEDBACK

Merci aussi aux sponsors, bénévoles et organisateurs
pour ce magnifique Cloud Nord 2026 !!!



QUESTIONS ?

