

# Messages

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How a French government agency broke free of IMAP

FOSDEM 2026 - Modern Email devroom

Sylvain Zimmer - January 31, 2026



# About me

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## Sylvain Zimmer - CTO @ La Suite territoriale

- Co-founder: Jamendo, dotConferences, TEDxParis, Pricing Assistant
- 20 years of development, conferences & free software advocacy
- Hired by DINUM in 2025 as [Entrepreneur d'Intérêt Général](#), sent to ANCT
- Languages: Python, Go, TypeScript, Markdown?!

GitHub: [sylvinus](#)

Blog: [sylvainzimmer.com](#)

Présentation

Services numériques

Présence Numérique des Territoires

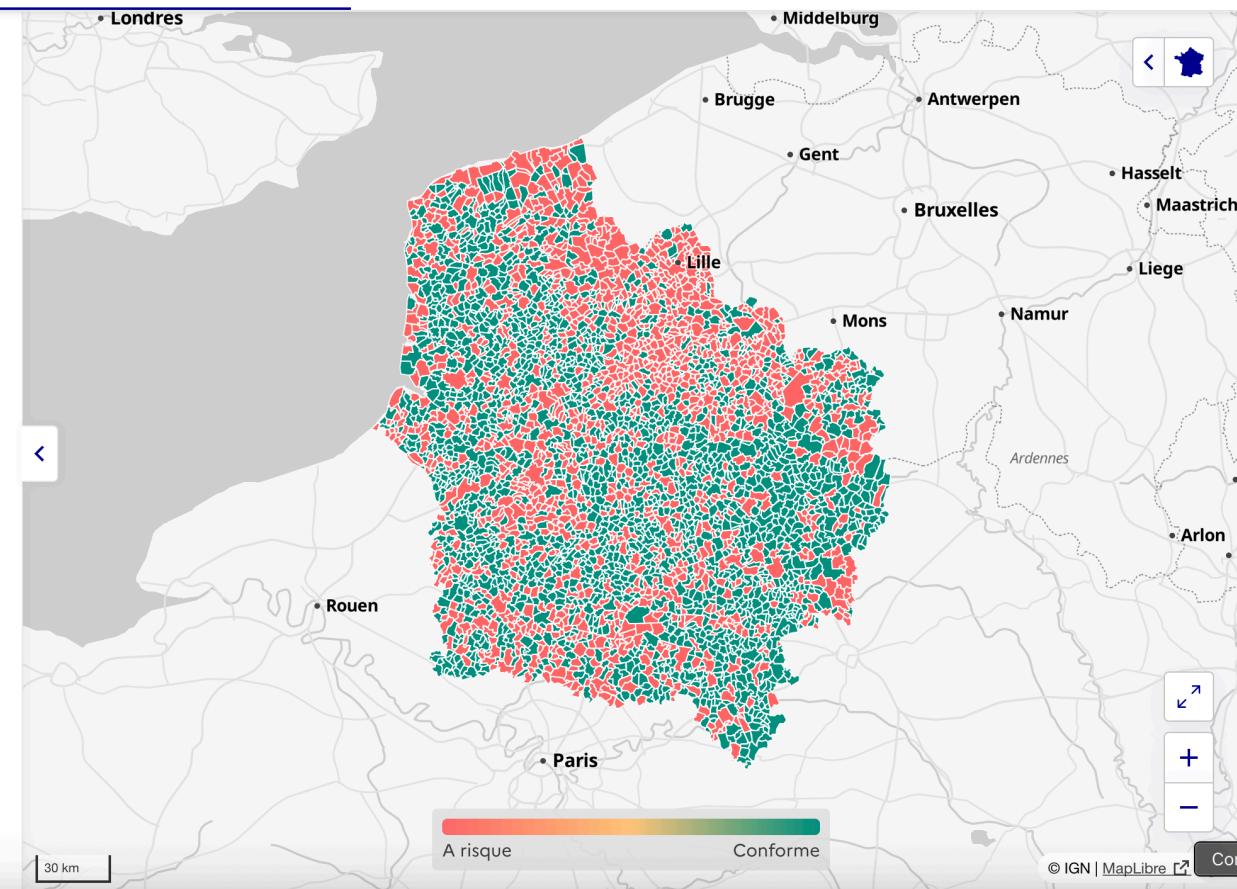
Actualités

Certificat SSL valide

- 1.6 Déclaration et redirection identiques
- 1.7 Redirection fonctionnelle
- 1.8 Déclaré en HTTPS sur Service-Public.gouv.fr

## 2. Messagerie

- Tous les critères **ESSENTIEL** **RECOMMANDÉ**
- 2.1 Déclaré sur Service-Public.gouv.fr
- 2.2 Pas de nom de domaine générique
- 2.3 Domaine messagerie et site identiques
- 2.4 Enregistrement MX configuré
- 2.5 Enregistrement SPF configuré
- 2.6 Enregistrement DMARC configuré
- 2.7 Enregistrement DMARC avec quarantaine
- 2.8 Serveur de messagerie dans l'UE



# ANCT & La Suite territoriale

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**ANCT** = Agence Nationale de la Cohésion des Territoires

We help **35,000+ local governments** go digital, mostly small towns below 3,500 inhabitants.

**La Suite territoriale** is our open source workspace for their public workers:

- Part of a broader movement with DINUM's **LaSuite** (for State workers)
- Includes [SSO](#), [Messages](#), [Drive](#), [Projects](#), [Grist](#), [Visio](#), [Docs](#) & more!
- Self-hosting strongly encouraged at regional level.
- MIT licensed

*Let's just take a moment to celebrate OSS becoming the default for EU public digital services!*

New message



## Inbox

220 messages

**Youssra XYZ** 11:11  
Demande de renseignements **XYZ - Accueil Mairie** 10:41  
Importer un calendrier outlook dans l'espace de réservation**aide, Suite territoriale** 10:34  
Fwd: Au sujet du module messages  
**Eric XYZ, Suite territoriale** 10:33  
Demande d'information  
**Fabrice XYZ, Suite territoriale** 10:33  
Demande d'informations   
**Alexandre XYZ via Contact Deveco, Suite territ...** 10:27  
FWD: Mairie de XYZ - Séance d'information sur "DEVECO..."   
 **aide** 10:25  
Re: RE: Administrateur  
 **Alexandre XYZ via Contact Deveco, Suite territ...** 10:25  
FWD: Présentation Devco - Direction éco Eurométropol...   
 **Kevin XYZ, Suite territoriale** 10:22  
Suite territoriale - éligibilité et modalités pour notre colle...   
**Samuel. Suite territoriale** 10:05

contact@suite.anct.gouv.fr

**Inbox** 4 **All messages** 5 **Drafts** 20 **Sent** 2 **Archives** 1 **Spam** **Trash** **Labels** > **Produits**> **Régions** **Réponse à apporter** **Feedback?**

## Demande d'informations

**Fabrice XYZ** <f.xyz@xyz.fr>

Wednesday at 03:06 PM

To: contact@suite.anct.gouv.fr

**You** <contact@suite.anct.gouv.fr>

Today at 10:33 AM

To: f.xyz@xyz.fr

Copy: sandra.xyz@ext.anct.gouv.fr

Bonjour,

Je vous remercie de l'intérêt porté à la Suite territoriale et aux services qui la composent. Afin de mieux comprendre votre besoin et vous présenter les modalités d'accès de la Suite territoriale, Sandra, en copie de ce mail, reviendra vers vous.

Je vous souhaite une bonne journée

Bien cordialement

**Claire XYZ**

Responsable de déploiement

**ANCT - La Suite territoriale**[Découvrir la Suite territoriale](#)

Reply all

Reply

Forward

# Design choices for Messages

Functional need	Technical solution
Zero passwords	<b>OIDC-only</b> , no IMAP, no client SMTP
Shared mailboxes	Collaboration-ready <b>data model</b>
LaSuite UI Kit	Build <b>custom frontend</b>
Cost efficiency	S3-compatible <b>object storage</b> for emails (#486)
Easy self-hosting	Minimize <b>stateful</b> components, make most others optional
OSS community	Accept different choices behind <b>config flags</b> , when relevant

# Dropping IMAP

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Legacy auth weakens security. Protocol constrains data models.

Dropping IMAP was a foundational step. It meant:

- No folders, no flags, fewer MIME quirks, no persistent connections, no dialects
- Freedom to build a collaboration-first data model, with **Threads** as native objects
- Strong argument to migrate users off **proprietary** clients (you know which one)
- Ability to build a **tightly coupled frontend** with unique features:
  - [Blocknote.js](#) composer, shared with Docs from LaSuite
  - LLMs for summaries, auto-labels, assistant in composer (#309)
  - Rich threads with private messages & custom metadata (#383)
  - Realtime collaboration (?)

# JMAP shaped our data model

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JMAP Mail's RFC 8621 was invaluable!

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**Blobs:** raw data is content-addressed, deduplicated, stored separately

**Threads:** first-class object, not reconstructed from headers

**Body structure:** use the spec's multipart algorithm for `textBody[]` / `htmlBody[]` / `attachments[]`

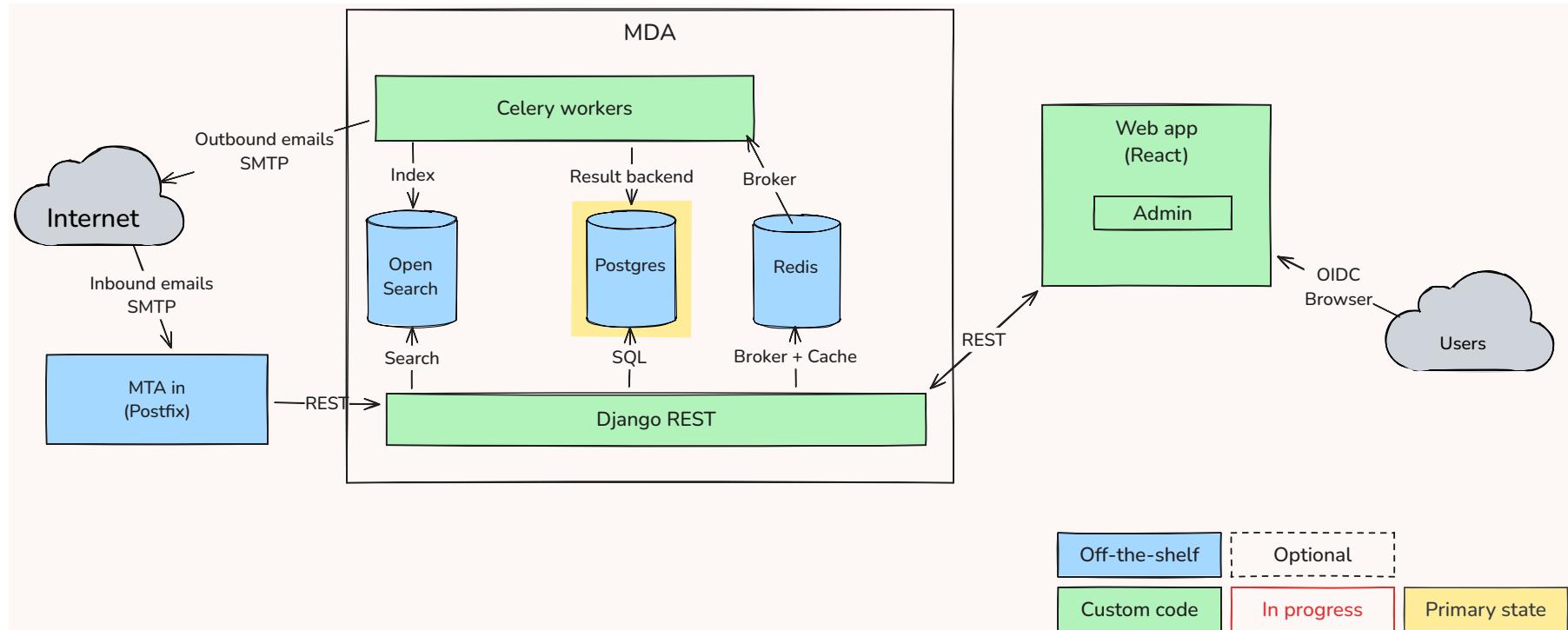
**Recipients:** structured `to` / `cc` / `bcc` with contact references

We have a prototype read/write JMAP endpoint: #479

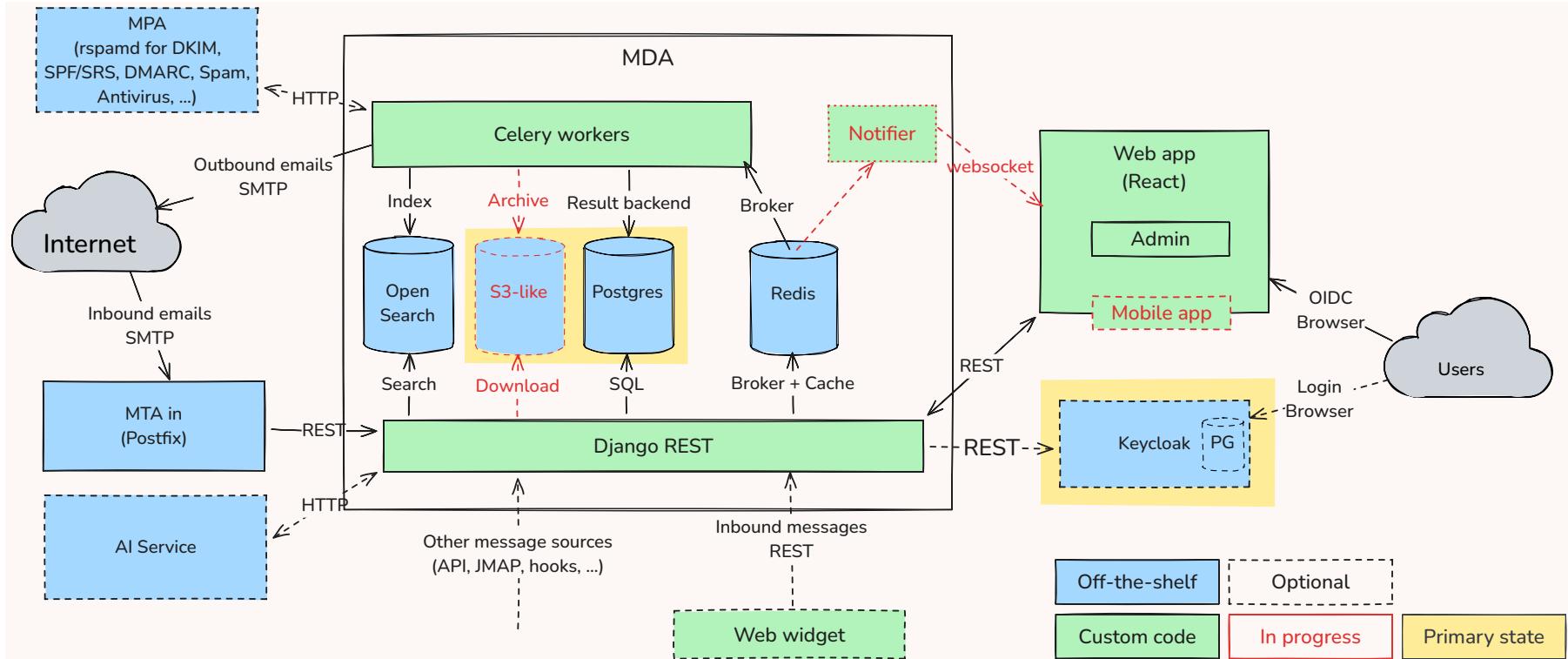
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It will be restricted to server-to-server API calls for our deployment, but others might find it useful!

# Architecture (simplified)



# Architecture (full)

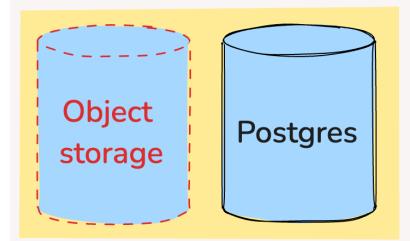


# Minimal state

PostgreSQL & Object Storage are the only **stateful** components.

It's a big deal for:

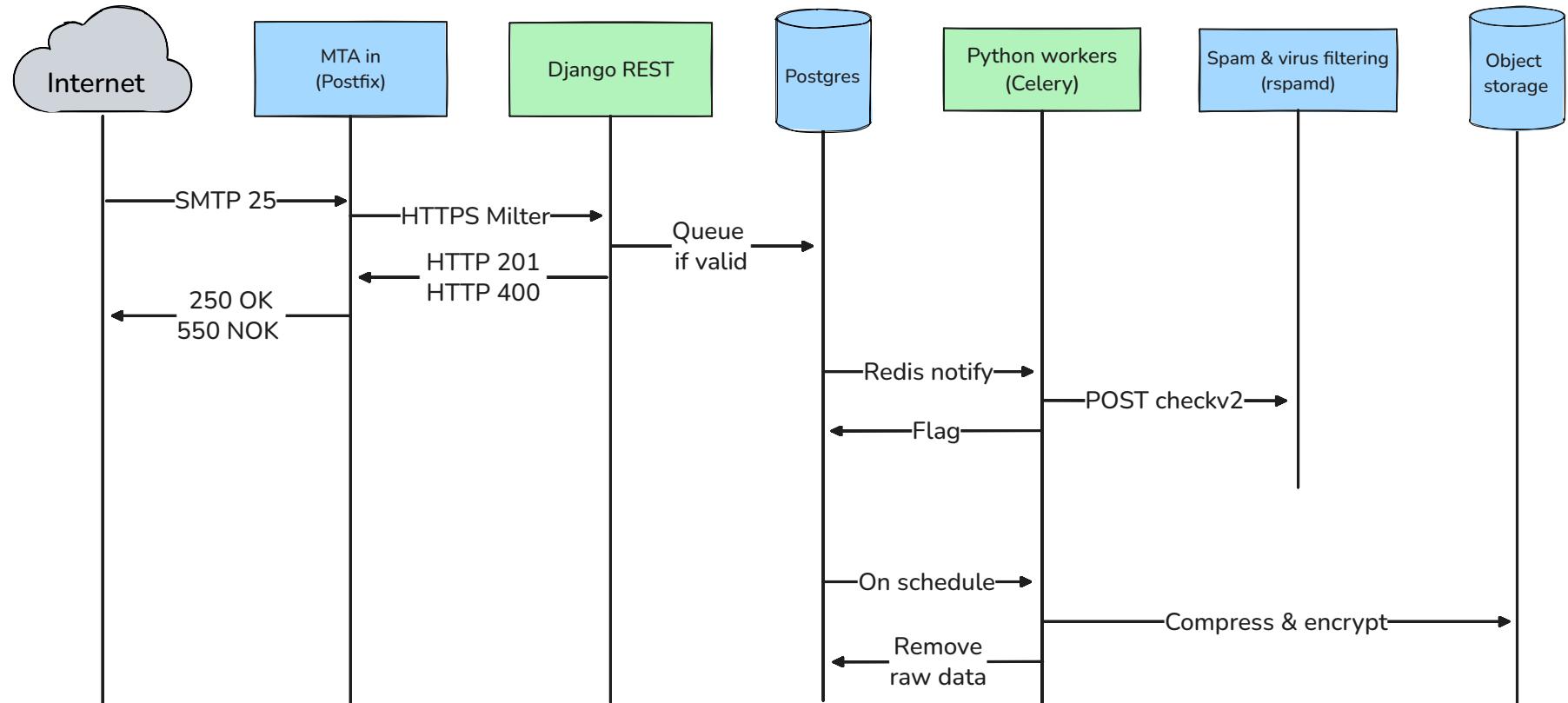
- **Self-hosting**: less to backup/manage, fewer filesystems involved
- **Scalability**: all the other components are *stateless* and scale horizontally
- **Reliability**: stateless components can crash and restart without data loss
- **Maintainability**: stateless components are easier to swap and refactor



*Note: Object storage is actually optional, the whole system can run on a single Postgres!*

# Stateless SMTP: inbound

In-session validation & delivery to Postgres queue.



# Stateless SMTP: outbound

Direct MX delivery (optional SOCKS proxy) to get per-recipient statuses

```
statuses = send_message_via_mx(envelope_from, recipients, mime_data)
# => {"alice@example.com": {"delivered": True},
#       "bob@invalid.test": {"delivered": False, "error": "550 User unknown"}}
```

We can then show statuses in the frontend and allow users to retry or dismiss selectively (#513)



Sorry, mailer-daemon!

# What's next

## Deploy, deploy, deploy

This talk only included features **in production** or in open **Pull Requests** so far!

We are **currently building**: Mobile app (React Native), Calendars, Contacts...

We are also helping partners like **mosa.cloud** self-host and contribute. Contact us if interested.

The future is bright!

The screenshot shows the European Commission's website for the "Digital Commons European Digital Infrastructure Consortium". The main headline reads: "Digital Commons EDIC launches to advance Europe's technological sovereignty". Below the headline, there is a paragraph about the launch in The Hague and the consortium's goal to strengthen European digital sovereignty. There is also a small image of a person interacting with a futuristic interface. At the bottom, there is a section titled "Related topics" with several categories like "eGovernment", "Trust services and eID", "Open Innovation", etc.

The New York Times

### No More Zoom for French Officials: France to Use Local Alternative to U.S. Tech

French officials will soon be expected to use new French-made video conferencing software as part of an effort to "regain digital independence," the government said.

Listen to this article • 3:19 min [Learn more](#)

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# Get involved

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[github.com/suitenumerique/messages](https://github.com/suitenumerique/messages) (MIT)

Matrix: [#messages-official:matrix.org](#)

Email: [contact@suite.anct.gouv.fr](mailto:contact@suite.anct.gouv.fr)

Feel free to share feedback...

Are we crazy? Anything we missed? A great feature idea? Want to self-host?

**Find me this weekend, I'll be happy to chat!**

Thanks!