

Messages

How a French government agency broke free of IMAP

FOSDEM 2026 - Modern Email devroom

Sylvain Zimmer - January 31, 2026

About me

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

1.5 Certificat de validité

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

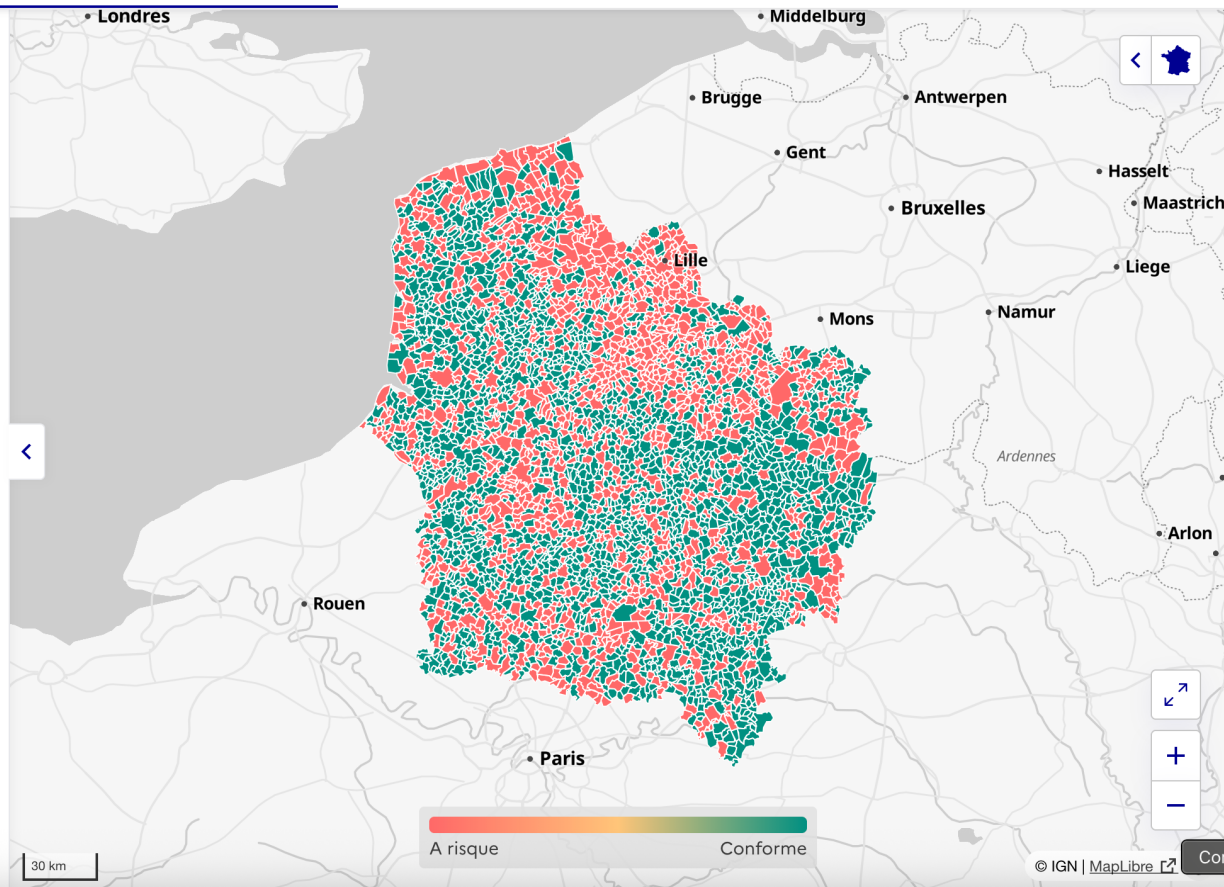
2.4 Enregistrement MX configuré

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

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

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?

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
 Produits/ Messages
- Eric XYZ, Suite territoriale** 10:33
 Demande d'information
 Produits Structures/Coll Terr
- Fabrice XYZ, Suite territoriale** 10:33
 Demande d'informations
 Produits Régions/Occitanie
- Alexandre XYZ via Contact Deveco, Suite territ...** 10:27
 FWD: Mairie de XYZ - Séance d'information sur "DEVECO...
 Produits/Deveco Régions/PACA - Corse
- aide** 10:25
 Re: RE: Administrateur
 Régions/Nouvelle Aquitaine Structures/Hors scope
- Alexandre XYZ via Contact Deveco, Suite territ...** 10:25
 FWD: Présentation Deveco - Direction éco Eurométropol...
 Produits/Deveco Régions/Grand Est
- Kevin XYZ, Suite territoriale** 10:22
 Suite territoriale - éligibilité et modalités pour notre colle...
 Produits Régions/Hauts-de-France
- Samuel. Suite territoriale** 10:05

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

Dropping IMAP

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

JMAP Mail's [RFC 8621](#) was invaluable!

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

Threads: first-class object, not reconstructed from headers

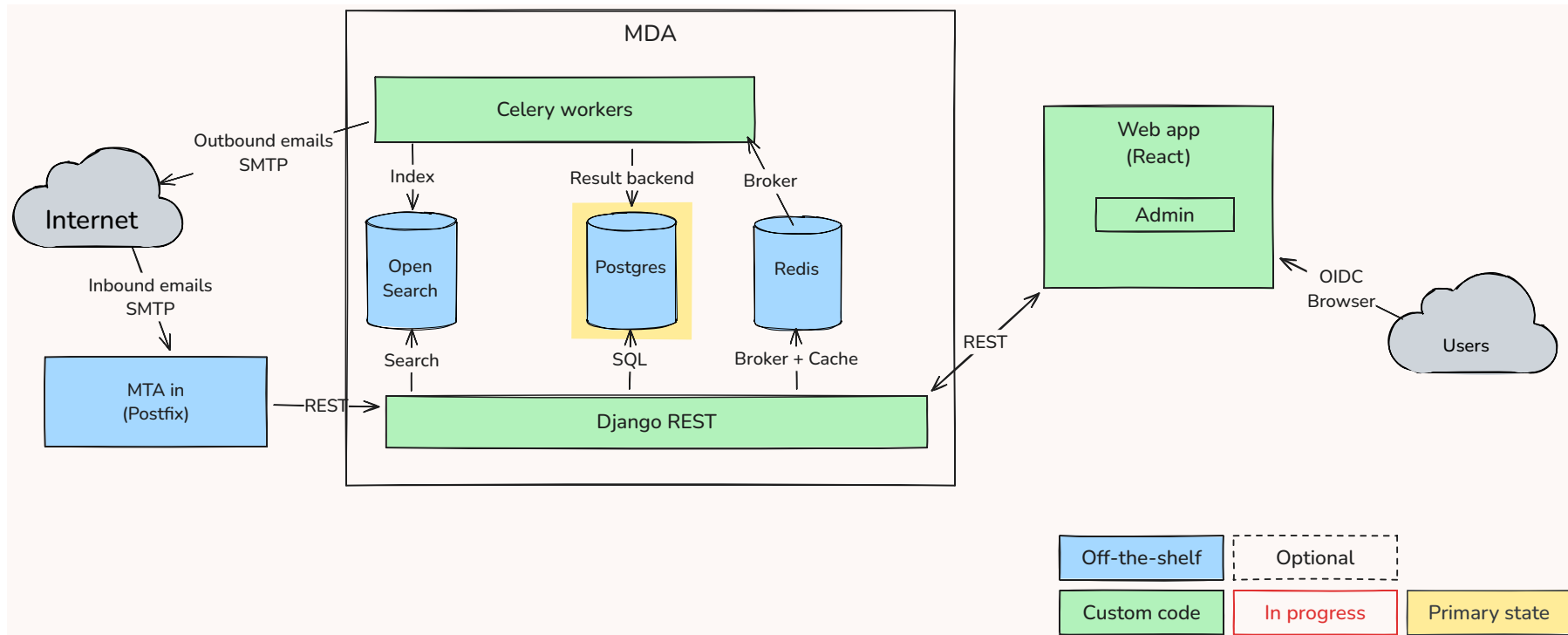
Body structure: use the spec's multipart algorithm for `textBody[]` / `htmlBody[]` / `attachments[]`

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

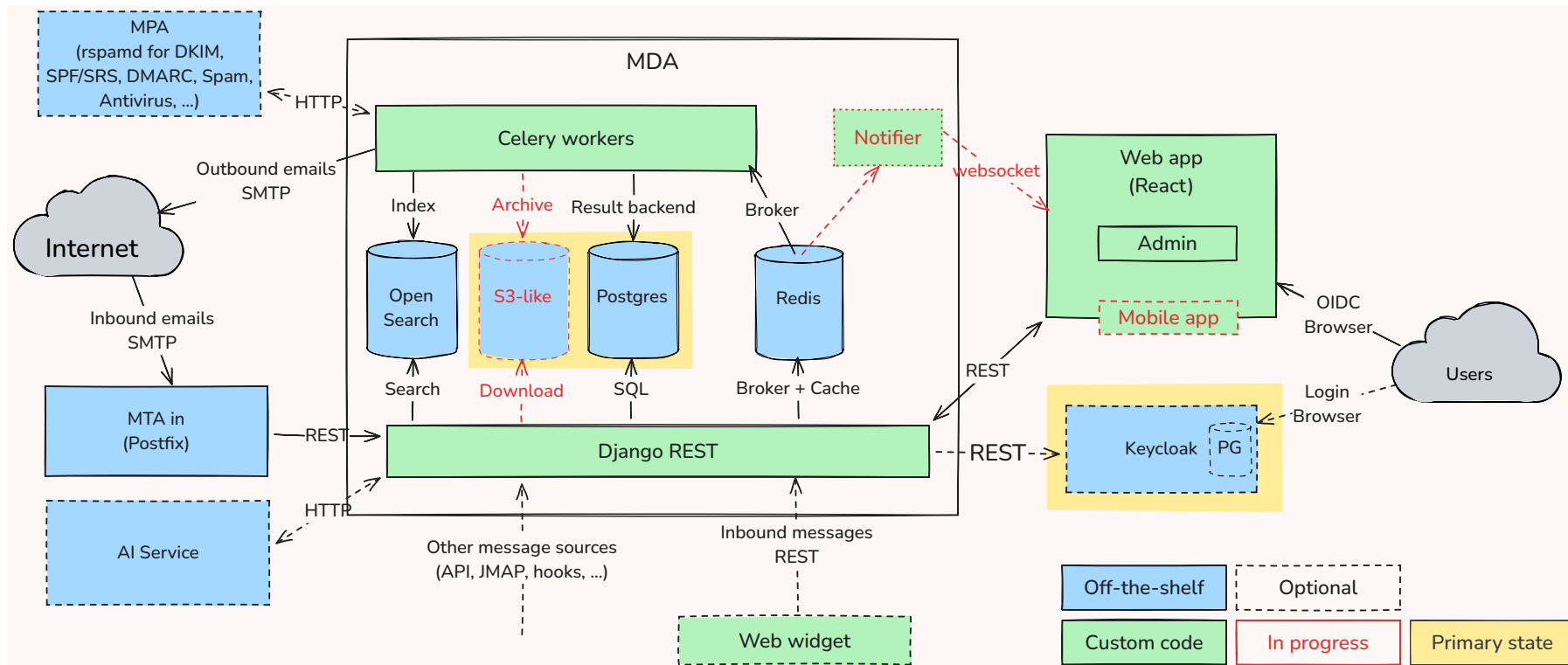
We have a prototype read/write JMAP endpoint: [#479](#)

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

Architecture (simplified)



Architecture (full)

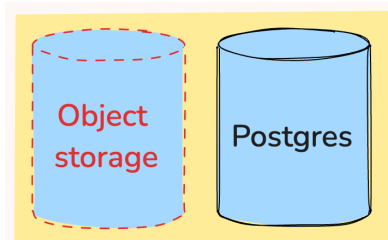


Minimal state

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

It's a big deal for:

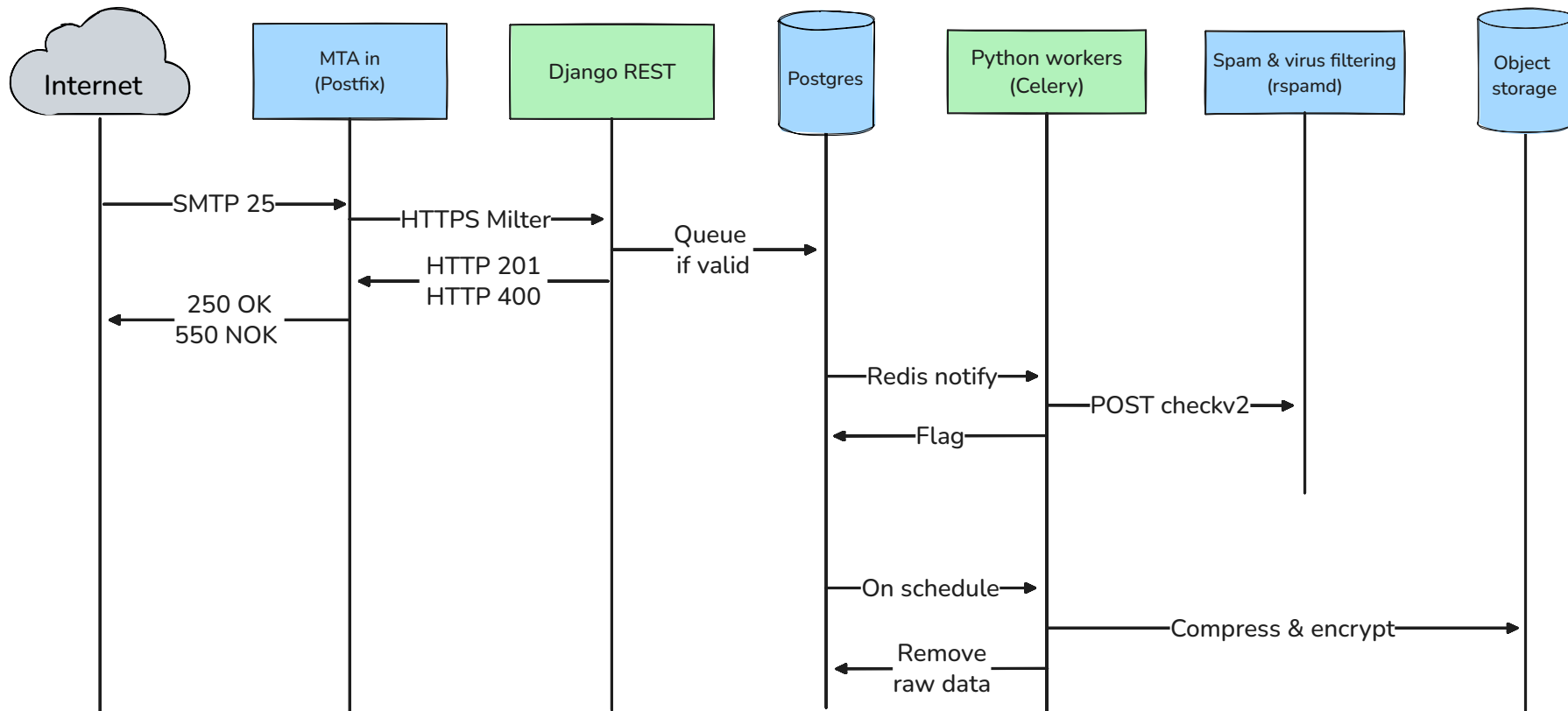
- **Self-hosting**: less to backup/manage, fewer filesystems involved
- **Scalability**: all the other components are *stateless* and scale horizontally
- **Reliability**: stateless components can crash and restart without data loss
- **Maintainability**: stateless components are easier to swap and refactor



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.

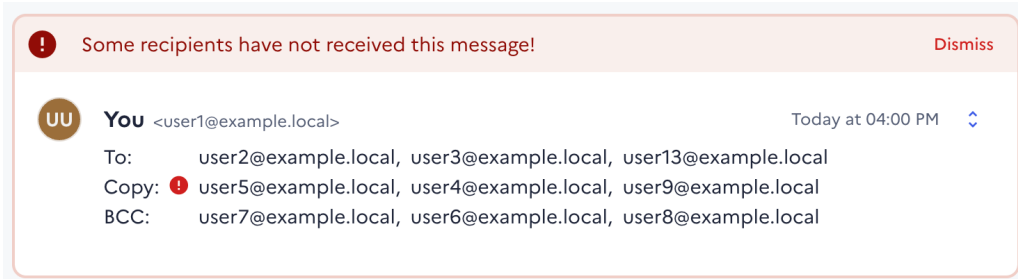
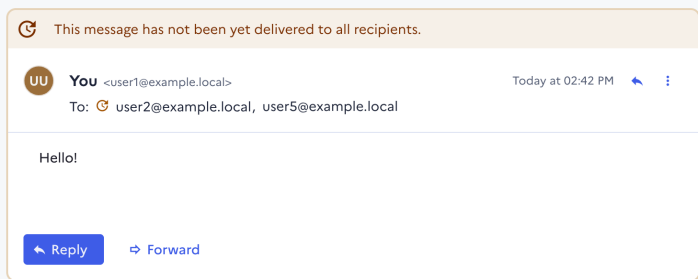


Stateless SMTP: outbound

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!



Get involved

github.com/suitenumerique/messages (MIT)

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

Email: 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!