

Comment nous avons fait gagner les équipes tech en productivité

tout en libérant du temps aux SRE

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@_mcorbin



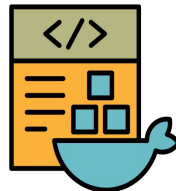
500k clients, 8 pays



1600+ Qontoers



> 150 déploiements en prod
par jour



145 microservices
440 deployments Kubernetes

Waste

Hello @sreduty, I have a 401 when pulling docker images:

Hello @sreduty 🙋

Even if I successfully logged in aws on my machine, if I want to pull any staging docker image, I'm getting the authorization error:

Hello, could you please delete the following consumer group?

Hello team,

could you please delete the `card-` topic from staging and prod?

The application still doesn't have any traffic in prod, so it's safe to delete it.



Who can help me out with [setting out new microservice](#) on staging/prod? cc @sreduty

L'autonomie des équipes dans leur travail quotidien

Une obligation

Janvier 2022

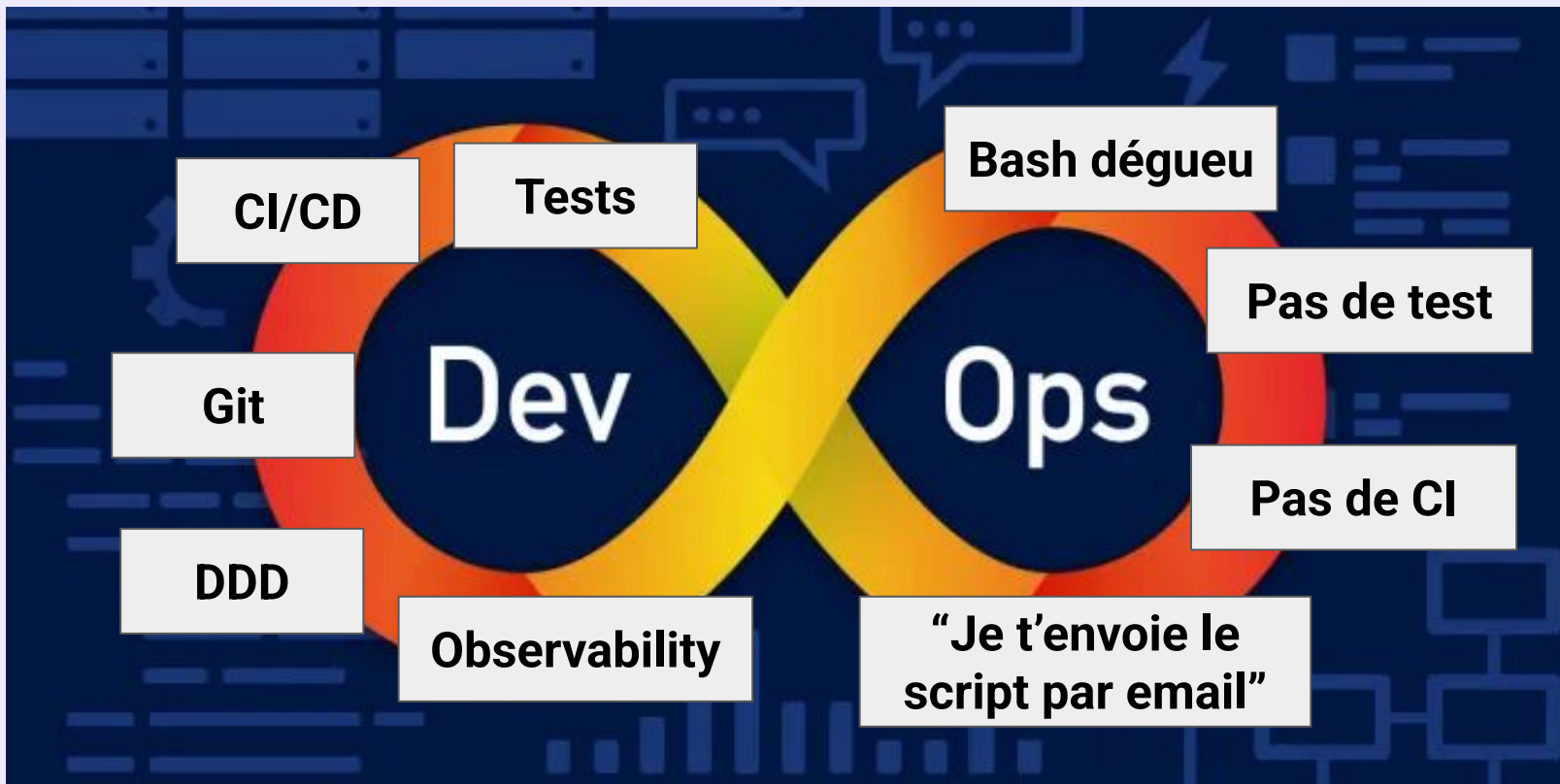
API First + qontoctl

- Centraliser tout l'**outillage existant** SRE & sécurité
- L'infrastructure comme un **produit** consommable par les équipes
- Extensible (tout le monde peut contribuer)

Dev et Ops, même vision du développement?

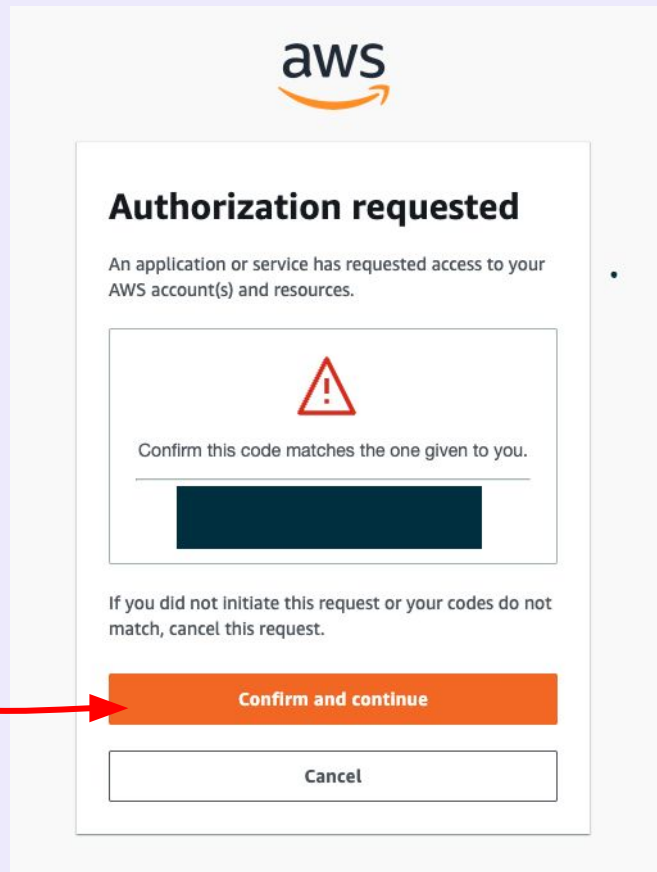


Traditionnellement...



Ça marche pas!

```
→ ~ qontoctl aws login --reset
First configuration or config reset. Files that will be modified:
- ~/.aws/config
Onelogin username (ex: firstname.lastname): mathieu.corbin
Search: █
? Team:
↑  it-automation
   compliance
  ▶ sre
   frontend
   data-engineering
```



Ça marche pas!

```
→ ~ qontoctl troubleshoot
```

```
Start analyzing your system to find potential known issues:
```

```
💡 Your team is 'sre'. If you need to reconfigure your team, run: `qontoctl aws login --reset`
```

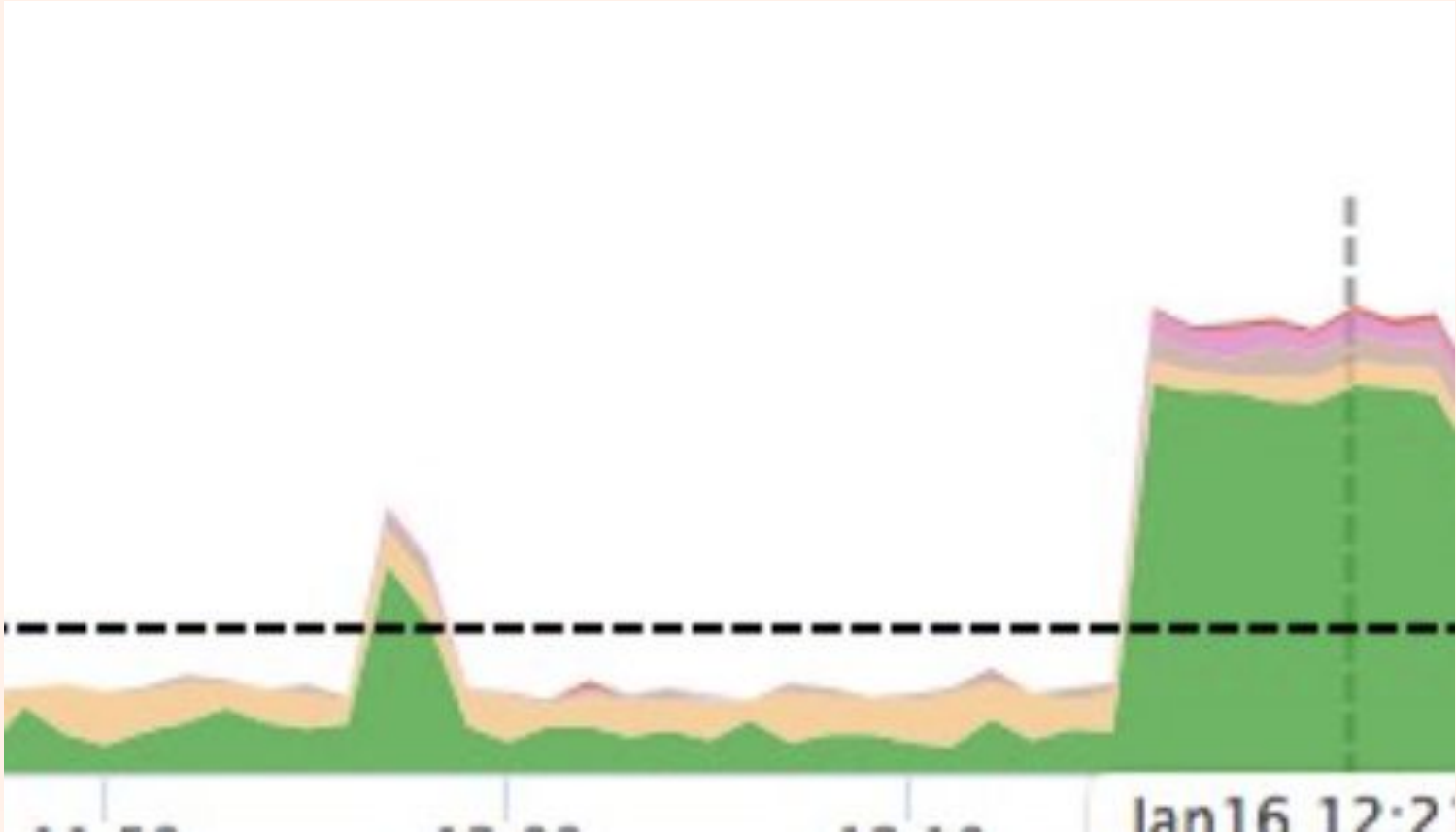
- ✓ Shell environment, no issue found
- ✓ Qonto VPN is enabled
- ✓ Qontoctl latest version.
- ✓ AWS Local Configuration
- ✓ Kubectl Local Configuration, no issue found
- ✓ kubectl version (1.30.1)
- ✓ aws version (2.17.19)
- ✓ Helm + s3 plugin
- ✓ docker-credential-helper-ecr version (0.8.0)
- ✓ Docker Local Configuration, no issue found

Comment je me connecte?

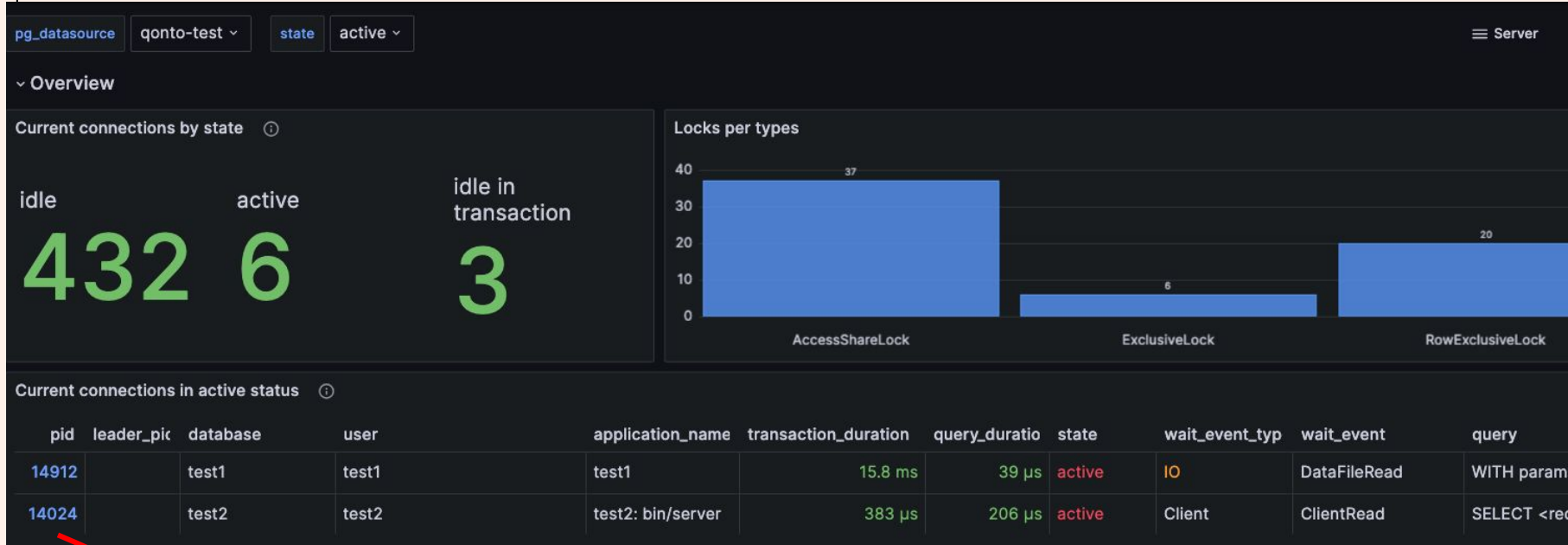
```
→ ~ qontoctl aws ssh pack
Searching for instance pack
Search: █
? EC2 Instances matching pack:
  > package-registry 10.█
Instance ID: i-█
```

```
→ ~ qontoctl rds connect
Search: █
RDS instances?
  > pg1
    pg1-replica1
```

Une requête bloque la base, help!



Une requête bloque la base, help!



```
→ ~ qontoctl rds cancel-query \  
--context test \  
--identifiant qonto-test \  
--pid 14024
```

Je dois faire des actions sur Kafka

```
→ ~ qontoctl kafka topics delete \  
--cluster default \  
--topic master.monthly_invoices \  
--approval-description "deleting topic 'monthly_invoices' in staging"
```



Approval System APP 6:30 PM

Description:

deleting topic 'monthly_invoices' in staging

Command for **kafka-management**:

```
Delete 'master.monthly_invoices' topics on 'default' Kafka cluster
```

Requested by @mathieu

Approved by @someone

Je dois créer un nouveau microservice

```
→ ~ qontoctl microservice create go --help
```

Create and deploy a Golang application

Usage:

```
qontoctl microservice create go <name> [flags]
```

Examples:

```
qontoctl microservice create go <name>
```

Flags:

```
--database          Set if the microservice needs a Postgres database
```

```
-h, --help          help for go
```

```
--internal-http-client Set to true to add an internal http client. E.g. for calling internal services with
```

Paseto token

```
--kafka-consumer    Set to true to consume messages from kafka
```

```
--kafka-producer    Set to true to produce messages to kafka
```

```
--launchdarkly      Set to true to add LaunchDarkly feature flags
```

```
--s3                 Set to true to create an S3 bucket
```

Global Flags:

```
--description string Description of the service
```

```
--gitlab-path string Gitlab group of the project. E.g. back, cbs, ...
```

```
--team string       Name of the team owning the service
```

```
--timeout duration  Timeout for the creation of the microservice (default 15m0s)
```

Je veux fournir sur mon service des actions "admin" prêtes à être consommées par les équipes tech

```
manualintervention.RegisterIntervention(  
  "my-action-name",  
  interventions.MyAction(deps),  
  manualintervention.WithApprovalRequired("my-team"),  
)
```

```
→ ~ qontoctl internal-action execute \  
  --action "my-action-name" \  
  --service "my-service" \  
  --comment "I need to... because ..." \  
  --payload '{"foo": "bar"}'
```



Approval System APP 11:39 AM

Environment: staging

Description:

I need to... because ...

Command for **my-service**:

```
manual-intervention:my-action-name
```

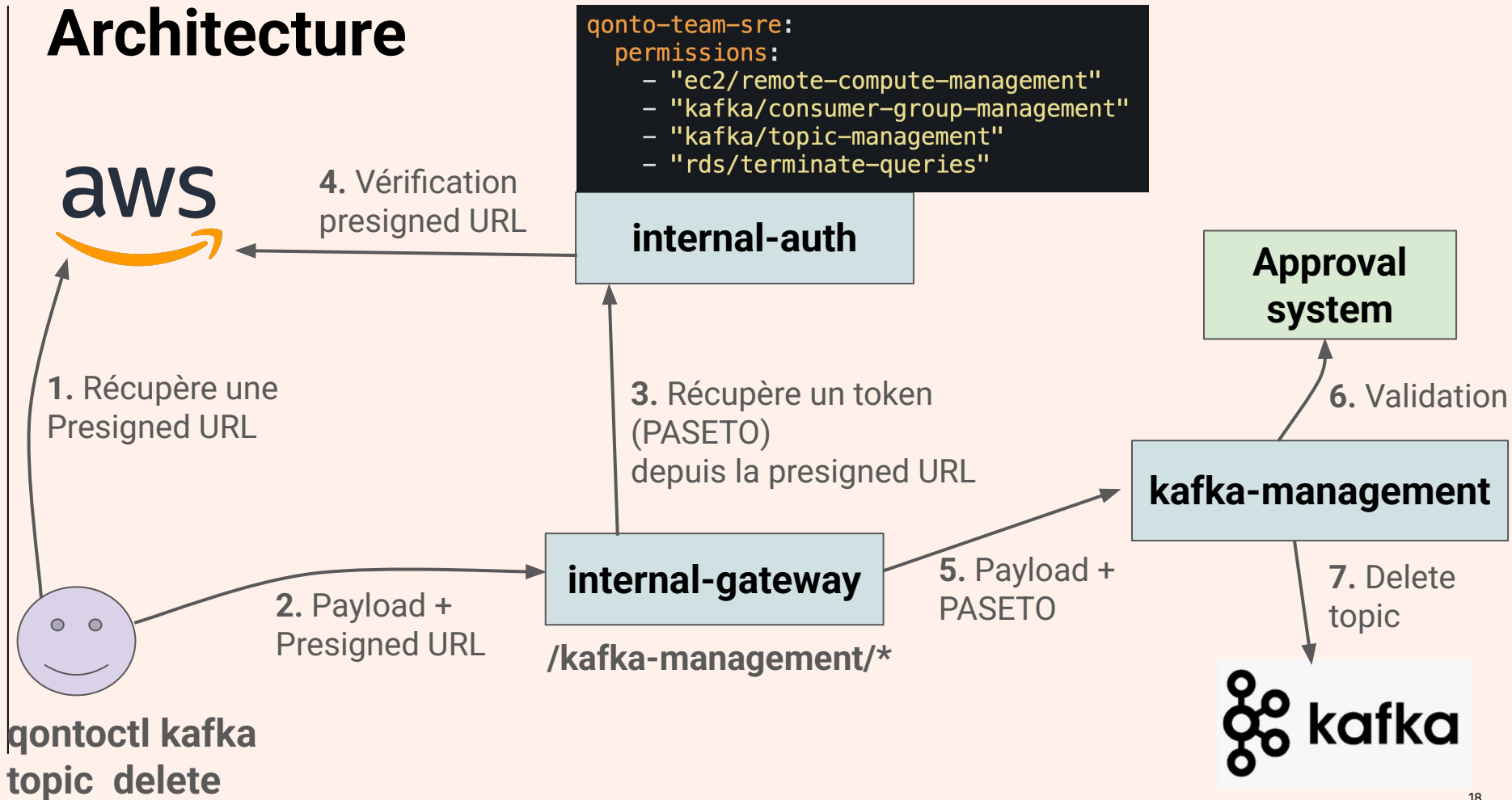
Requested by @mathieu

Approved by @someone

Et beaucoup d'autres fonctionnalités...

- Créer des read replicas RDS ou des instances EC2 à la demande
- Gérer les secrets de ses applications
- Déclarer son astreinte
- Accéder aux endpoints **/debug/pprof** des services Golang
- ...

Architecture



Décorrélation fournisseur de service / consommateur

Aujourd'hui, une CLI

Demain: un dev portal? Une UI maison? Un orchestrateur?

L'effet papillon du tooling

Les nouvelles implémentations s'accélèrent avec la mise à disposition de nouveaux "building blocks"

- De nouvelles fonctionnalités "self service" en un temps record
- De + en + de contributions externes à SRE
- Utilisations innovantes de la gateway



Merci