



# Geoportal

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**FOSS4G 2021**  
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# Provita Geoportal:

a serverless GIS portal using the Jamstack

<https://geoportal.provita.org.ve/en/>

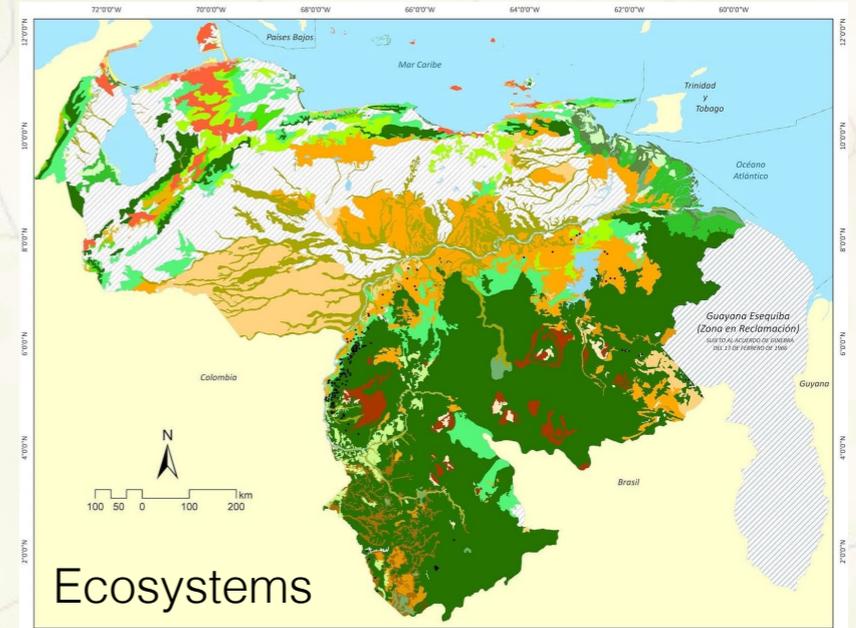
# Agenda

- Provita
- Demo
- Jamstack, frameworks, services and tools
- Design overview
- Serverless functionality
- Recap



# LIBRO ROJO DE LA FLORA VENEZOLANA

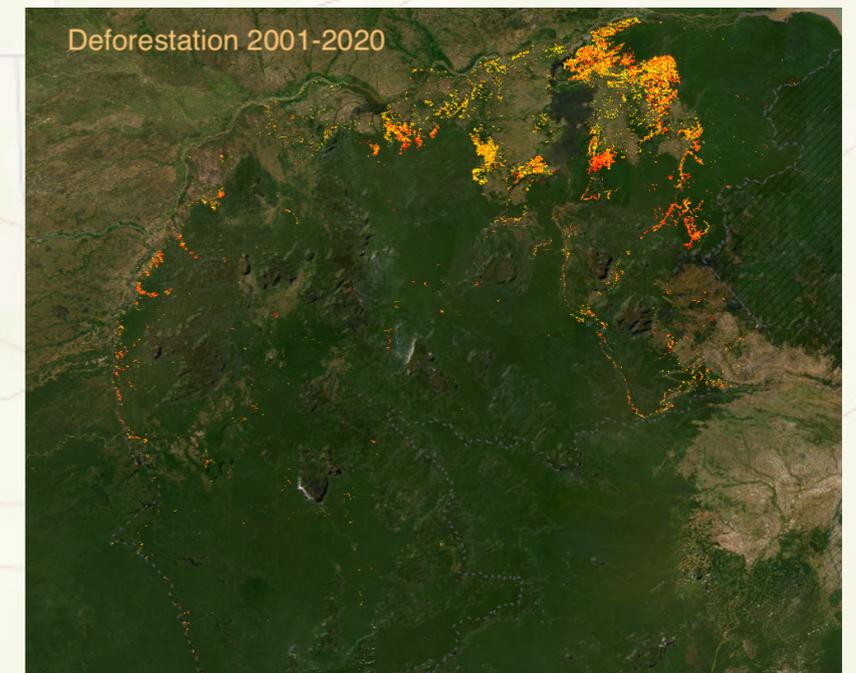
SEGUNDA EDICIÓN



NF-2430

# Libro Rojo

de la Fauna Venezolana



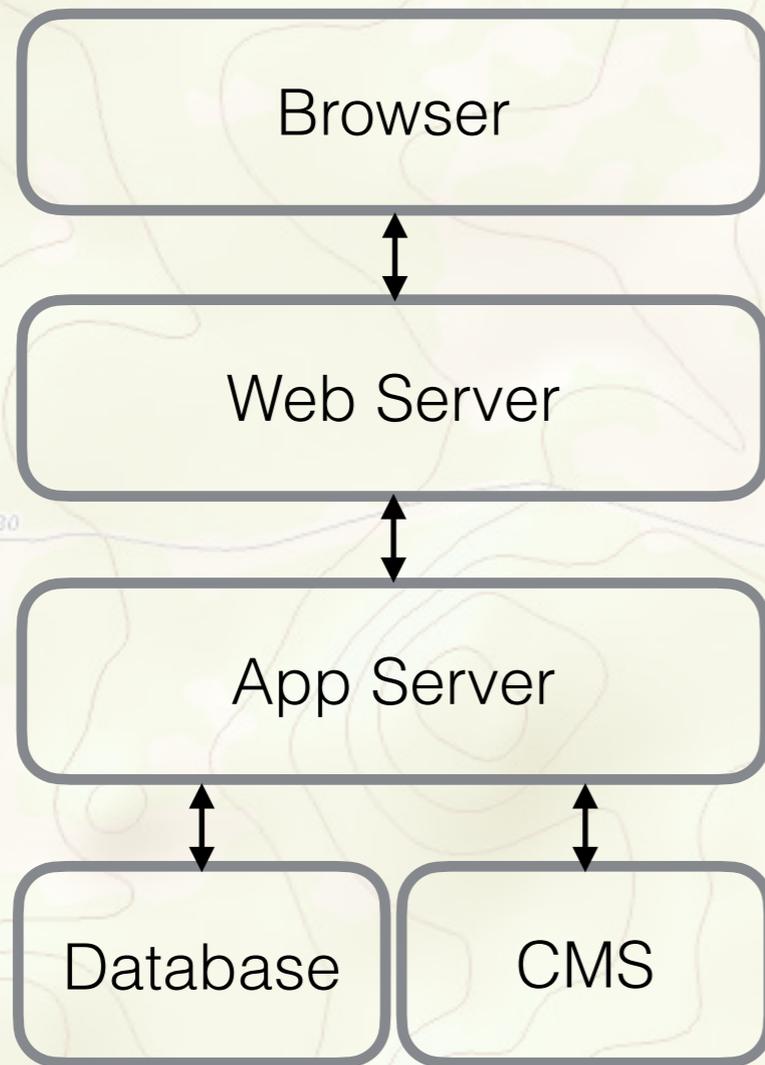


# Geoportal

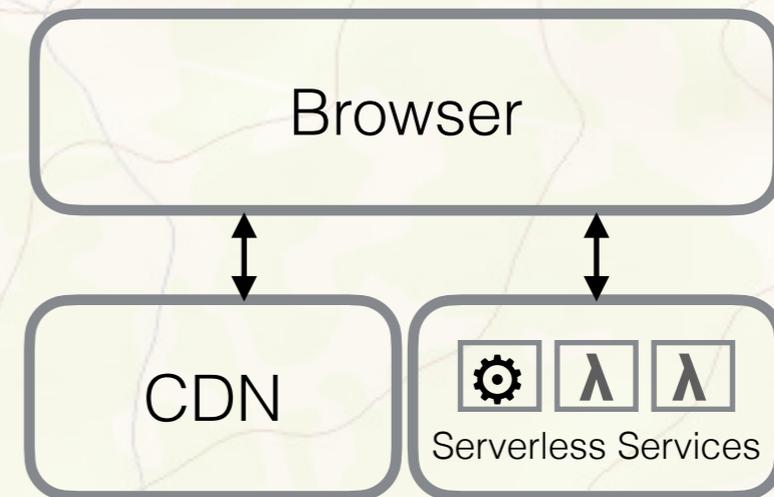
## DEMO

# Jamstack

## Traditional Web



## The Jamstack



- **Pre-rendered content**
- **Dynamic content via**
  - **Javascript**
  - **APIs**
  - **Serverless Services**

# Frameworks, services & tools

4600 Client

Services

Utils

 Gridsome

 Vue.js



Vue I18n

*Buefy*  BULMA

 MapLibre

 GitHub

 netlify

 amazon  
web services

mapshaper

 mapbox  
TIPPECANOE

 GDAL



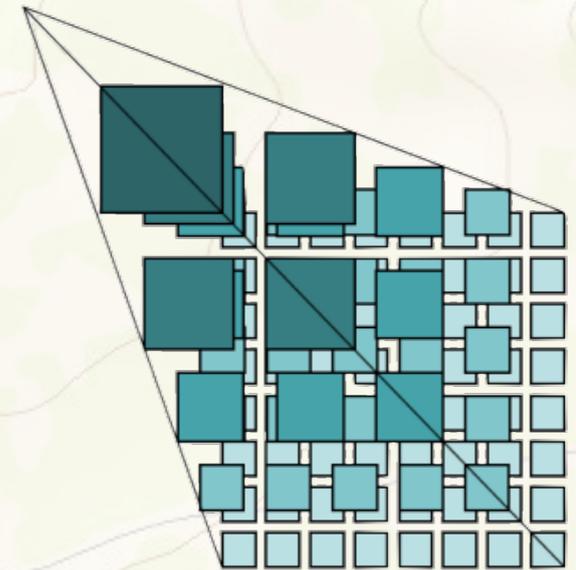
# Serverless functionality



**Admin  
Authorization**

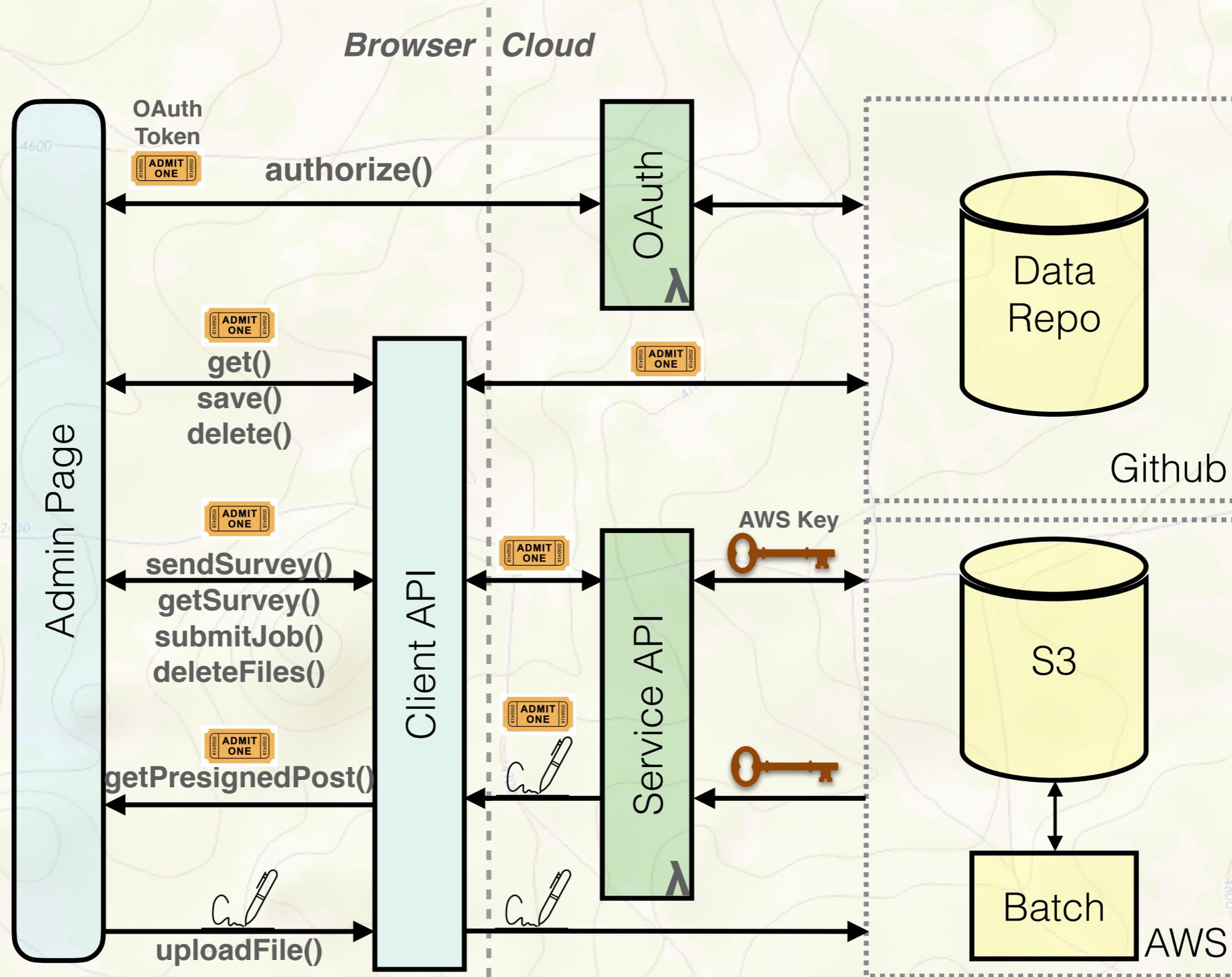


**File  
Uploads**

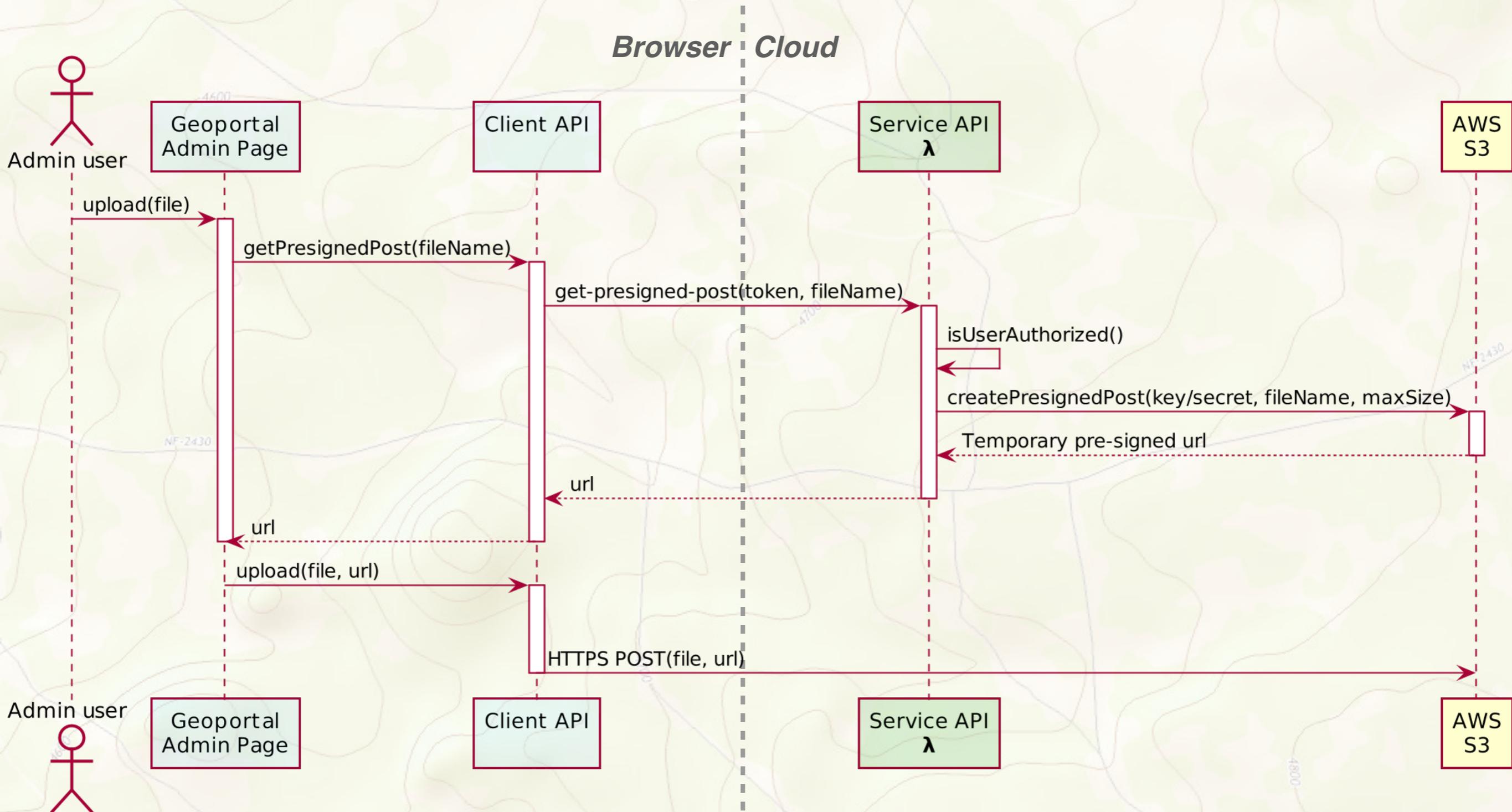


**Tile  
Generation**

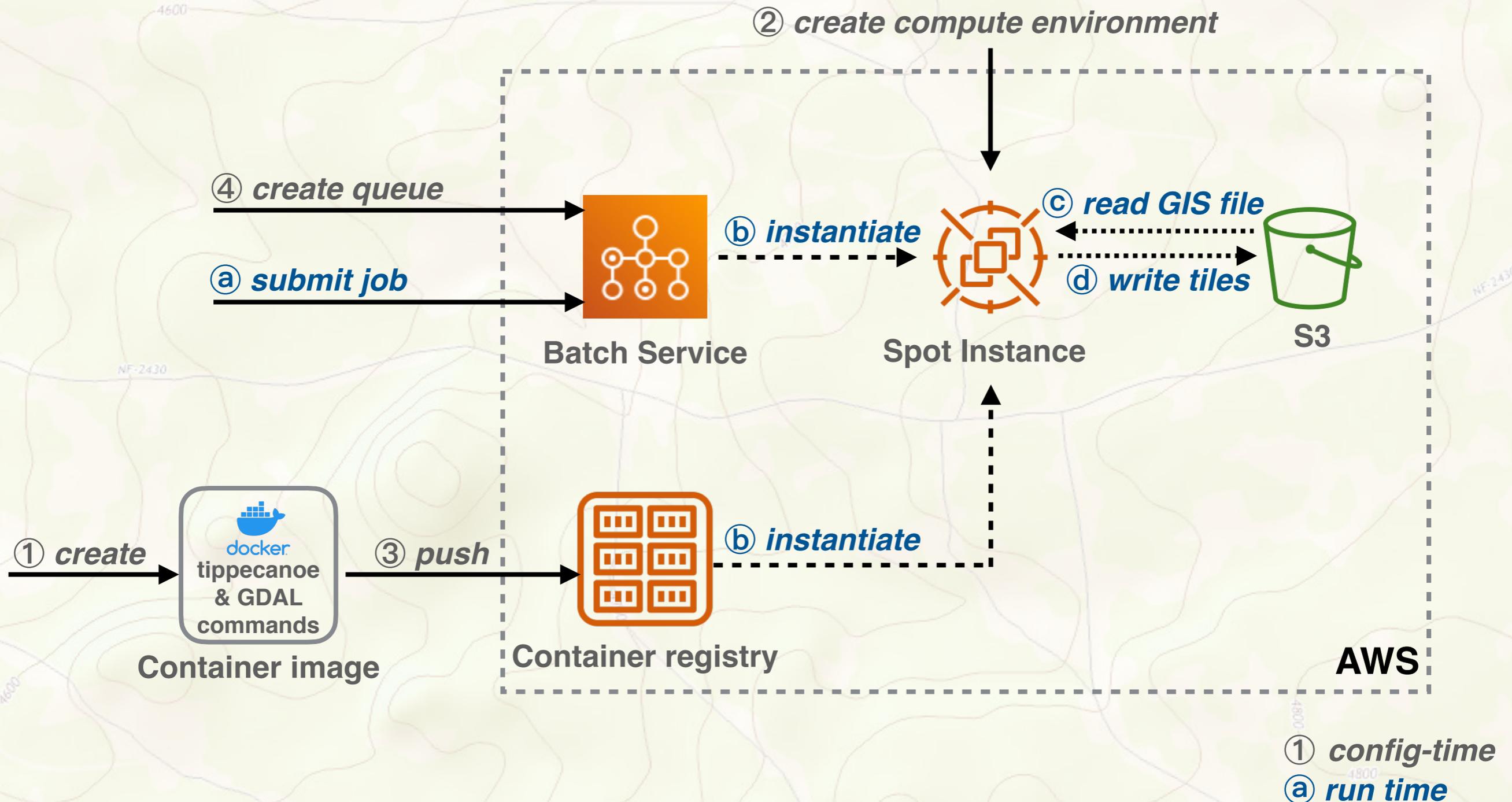
# Admin authorization



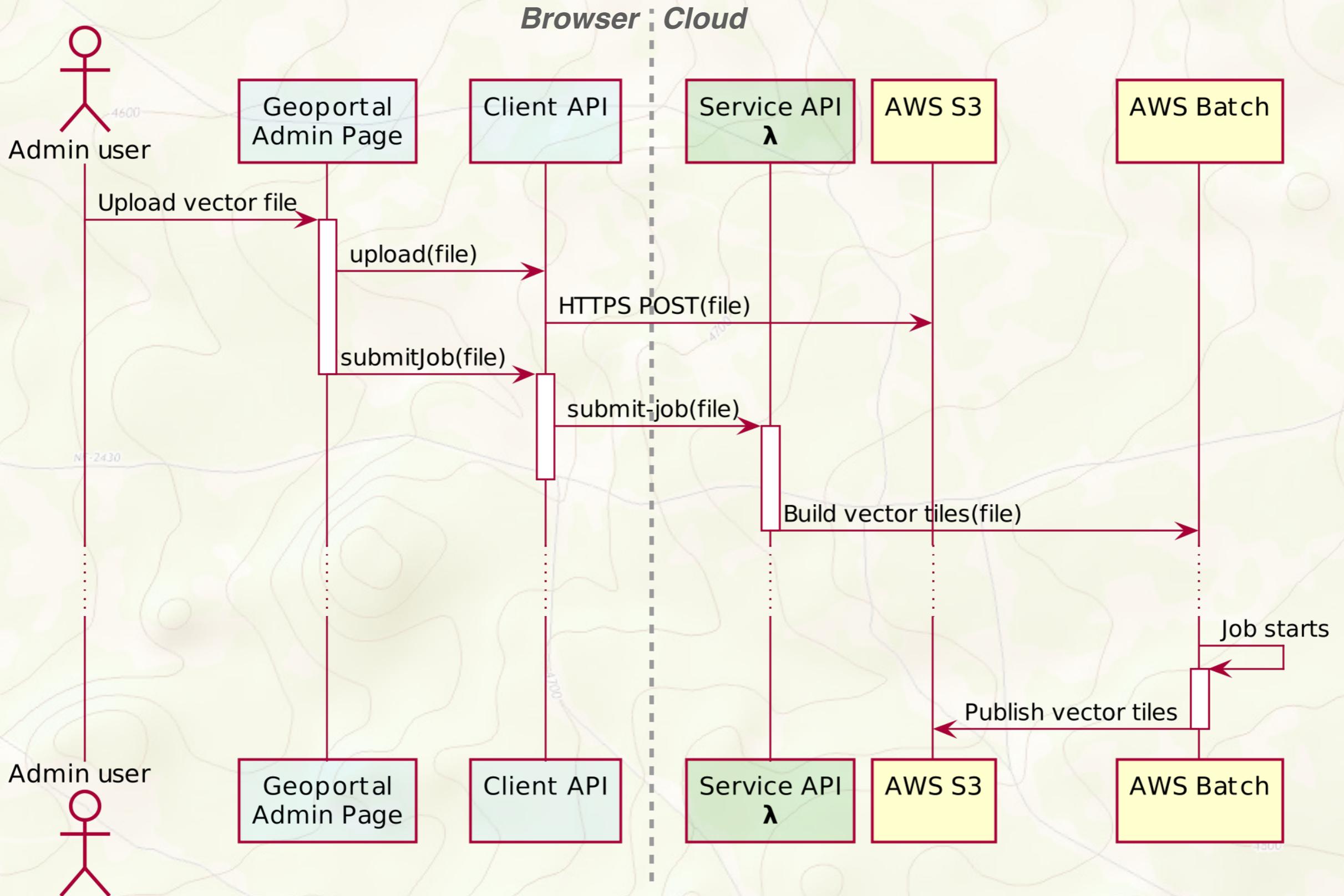
# File upload using S3 pre-signed post



# Executing tile generation commands with AWS Batch



# Vector tile generation



# Recap: Low-cost & Low-touch



Open Source

 Gridsome  MapLibre



*Buefy*



GitHub



netlify



S3



Lambda



Batch

# Contributions welcome!

|   |   |
|---|---|
| <i>I want to see and download the files</i>                   | Go to <a href="https://geoportal.provita.org.ve">geoportal.provita.org.ve</a>   |
| <i>I want to learn implementation details</i>                 | Go to the blog series:<br><a href="https://morinricardo.com/post/2021-09-27-foss4g2021">morinricardo.com/post/2021-09-27-foss4g2021</a> |
| <i>I want the author to fix bugs</i>                          | Create issues on Github:<br><a href="https://github.com/Provitaonline/geoportal/issues">github.com/Provitaonline/geoportal/issues</a>   |
| <i>I want the author to consider and work on new features</i> | Comment on the blog:<br><a href="https://morinricardo.com">morinricardo.com</a>   |
| <i>I want to create my own and/or contribute code</i>         | Fork & PR repos:<br><a href="https://github.com/Provitaonline/geoportal">github.com/Provitaonline/geoportal</a>                         |

***Find me:***

***@jimmieangel on Twitter***

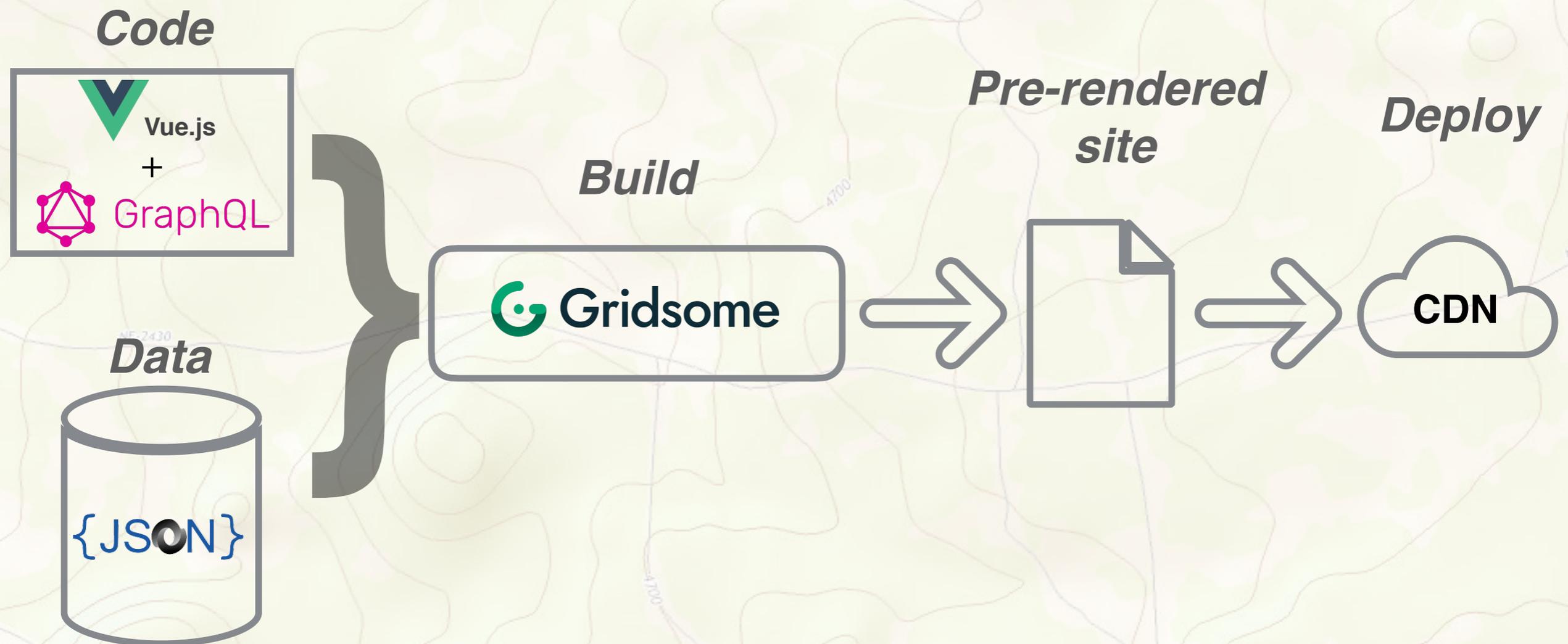
***My blog: morinricardo.com***

# Many thanks to...

- Provita NGO
- Juan Carlos Amilibia, Project Analyst, Provita
- Rodrigo Lazo, Technical Coordinator, Provita
- Irene Zager, Director of Research, Provita
- Open source communities: Gridsome, Vue, Buefy, Bulma, MapLibre, Mapshaper, Mapbox, GDAL

***Thank you!***

# Pre-rendering with Gridsome



# Example: About.vue

```
<template>
  <Layout :bannerImage="bannerImage">
    <template slot="banner">
      {{ $t('label.about') }}
    </template>
    <div
      class="container site-text"
      v-html="$page.aboutData.text[$i18n.locale.substr(0, 2)]">
    </div>
  </Layout>
</template>
```

```
<page-query>
  query About {
    aboutData: aboutData (id: "about") {
      text {
        en
        es
      }
    }
  }
</page-query>
```

```
{
  use: '@gridsome/source-filesystem',
  options: {
    path: 'data/about.json',
    typeName: 'AboutData'
  }
}
```

gridsome.config

