Description of Afinidata's software and hardware
(Last updated 05.2022)

Here we provide a brief description of the software and hardware that we are currently using. If you have specific questions you can contact us by sending an email at tech@afinidata.com.

Software

Code:

Our code is stored on a private repository in GitHub

Infrastructure:

We are using Kubernetes to manage the deployment of all our services. We have a structure of microservices, each in a Docker container.

Backend:

The backend is written in Django. Here we have our APIs that are consumed by the frontend and the different channels like FB and the Mobile App. We also have some views written in Django for internal configurations.

Databases:

We are using AWS Aurora databases with MySQL as our databases.

Frontend:

We use React for most of our frontend, but we also have some views written with Django as mentioned before.

Mobile App:

For the Mobile App we use React Native to develop for all the platforms (Android, IOS). We also use Expo to deploy and send push notifications to the App.

Hardware

We use [AWS cloud services](#) as our provider.

Databases:

The database that we use for the bot and the dashboard for partners in production is a [RDS instance](#) *t4g.medium* (size may change over time), located at US East N. Virginia. Additionally we use two *RDS t4g.medium* instances for reports in Metabase and our own development environment, located at N. Virginia and Ohio respectively.

Servers:

We use [EC2 instances](#) to allocate the nodes of the cluster. For production we are currently using 16 *t3a.medium* (may change over time) instances to deploy the master and worker nodes, located at US East N. Virginia. For the development environment, we use 12 *t3a.medium* instances located in Ohio.