

BuildFund Deployment Guide

This short guide walks you through unpacking and launching the BuildFund platform on a MongoDB backend. Follow each step in order to set up both the back-end (Django) and front-end (React) services and make them ready for production use.

Prerequisites

- A running **MongoDB** instance (local or hosted) with a database created for BuildFund.
- **Python 3.10+** and **Node.js with npm** installed.
- Access to **OpenAI** and **Google Maps Platform** API keys. These will be added to your environment configuration and must never be exposed in client code
【637421499612537†L23-L31】 【422390506697459†L266-L276】 .

1. Unpack the Project

- Download `buildfund_mongo.zip` and extract its contents into a working directory.
- The archive contains two main folders:
 - `buildfund_webapp/` – Django back-end code.
 - `new_website/` – React front-end code.

2. Configure the Back-end

- Open a terminal and navigate to the `buildfund_webapp/` directory.
- Create and activate a virtual environment:

```
python3 -m venv venv
source venv/bin/activate
```

- Install the Python dependencies:

```
pip install -r requirements.txt
```

- Copy the environment template and set your configuration:

```
cp .env.example .env
```

Edit `.env` to provide:

- `D_! "#$_%&'(&)_*&+ -` – a unique secret string.
- `D, _&"#- "&.d/ongo, D, _"!0&, D, _1$%), D, _2$(),` and optional `D, _3%&(/D, _2!%%4$(D` matching your MongoDB instance.
- `$2&"! - _!2- _*&+ -` your OpenAI secret key for AI underwriting.
- `##$#5&_!2- _*&+ -` your Google Maps/Places API key with proper restrictions `【422390506697459†L266-L276】` .
- `'$(%_!55$4&D_$(-#- "% -` – the URL of your front-end (e.g. `ht tp6//l oca lhost63777`).
- Set up the database schema using the provided script:

```
chmod 8x scripts/setup_mongo.sh
./scripts/setup_mongo.sh
```

- Create an administrative user:

```
python manage.py createsuperuser
```

- Start the Django server:

```
python manage.py runserver 7.7.7.769777
```

The API will be available at `ht tp6//l oca lhost69777/ap i/`.

3. Configure the Front-end

- In a new terminal, navigate to `new_webs i t e/`.
- Install the JavaScript dependencies:

```
npm install
```

- If your API is not running on `ht tp6//l oca lhost69777`, create a `.env` file with:

```
(&!')_!22_!2-_,!%&_3(5.ht tp6//your-api-host69777
```

- Start the development server:

```
npm start
```

This will serve the front-end on `ht tp6//l oca lhost63777` by default.

- For production, build the static site:

```
npm run build
```

and serve the contents of the `build/` directory using a web server such as Nginx.

4. First-time Setup

- Log in to the back-end admin interface at `/admin/` using the superuser credentials.
- Use the admin pages to add borrower and lender roles to users, approve products and projects, and manage underwriting reports.
- When users sign in through the front-end, their role determines which dashboard they see (Borrower, Lender or Admin).

5. Security and Best Practices

- Always keep your API keys out of client code. Both OpenAI and Google require keys to be stored server-side and passed only in back-end requests `【637421499612537†L23-L31】` .
- Restrict your Google Maps API key to the domains and IP addresses of your servers `【422390506697459†L266-L276】` .
- Use HTTPS in production and configure secure cookies (`SESSION_COOKIE_SECURE`, `CSRF_COOKIE_SECURE`).
- Configure proper CORS rules in the `.env` to allow only your front-end domain.

6. Troubleshooting

- If migrations fail, ensure the MongoDB server is running and credentials are correct. Django requires MongoDB version 4.0+.
- Check that the `.env`` file is loaded—missing keys will cause the API to return errors when generating underwriting reports or geocoding addresses.
- Review the server logs for more detailed error messages.

Once the back-end and front-end are running, your BuildFund platform will be available locally. Deploy the API and UI to production servers as you would any Django/React application, ensuring environment variables and keys are set appropriately.