

# Deployment Instructions

## Server Deployment:

### 1. Server Requirements:

- a. **NodeJS**: Latest LTS Version
- b. **MongoDB**: Latest Version
- c. **PM2** installation: To handle node processes
- d. **NGINX** installation: To serve client side files
- e. **Unzip** tool: Extract zip file in linux
- f. **Python2.7**: To read all uploaded files

### 2. Server Production Deployment:

- a. Login to server using SFTP/FTP client with SSH access (Putty, WinSCP, Filezilla)
- b. Create zip file of all server files mentioned in project structure in server-documentations and **SAVREADER** Directory.
- c. Upload both the zip files to the server
- d. Open SSH terminal of server, follow instructions:
  - i. **Sudo mkdir /app** (create a project folder)
  - ii. **Sudo mv /home/<Homefolder>/server.zip /app/** (Copy uploaded server.zip to project directory)
  - iii. **Sudo mv /home/<homefolder>/savreader.zip /app** (Copy uploaded savreader zip to project directory)
  - iv. **Sudo unzip savreader.zip /app** (Extract zip to project directory)
  - v. **Cd savreader** (traverse to savreader folder)
  - vi. Run **pip install requirements.txt** (Install python dependencies)
  - vii. **Sudo unzip server.zip /app/server** (Extract zip file to project directory/server folder)
  - viii. **Cd server** (get inside server directory)
  - ix. Run **NPM INSTALL** (To install required modules)
  - x. **Pm2 start main.js** (Run main.js file using PM2)

### 3. Server Development Deployment:

- a. **Extract server.zip** to local directory
- b. Open **cmd or terminal** in server directory
- c. Run **npm install** in cmd or terminal
- d. **Npm start** in cmd or terminal

## Client Deployment:

### 1. Client Production Deployment:

- a. Open command line in client folder, follow below commands to build a production copy:
  - i. Npm install (Install required modules)
  - ii. Npm build (Build production dist copy)
- b. **A DIST folder** will be created in client structure, archive the **dist folder** in a **zip** file and upload to the server.
- c. After uploading zip file, follow below instructions:
  - i. **Mv /home/<userfolder>/dist.zip /app/** (Copy client zip to project directory)
  - ii. **Unzip /app/dist.zip /app** (Extract client zip file to project directory)
  - iii. Add **/app/dist/** path to **NGINX**

### 2. Development Deployment:

- a. **Extract client zip** to local path
- b. **Open terminal in client** folder
- c. **Run npm install** command to install all modules
- d. **Run npm start** to start the client in development

## Note:

- Server requires SWAP size of minimum 1 GB to run python script of reading large files.
- The NGINX requires proxy URL to be added inside its configuration:  
localhost/server/

Refer below links of installing dependencies if stuck:

- <https://www.digitalocean.com/community/tutorials/how-to-use-pm2-to-setup-a-node-js-production-environment-on-an-ubuntu-vps>
- <https://www.digitalocean.com/community/tutorials/how-to-add-swap-space-on-ubuntu-16-04>