

Setting up the server environment.

Note: The following instructions are targeted for Linux and macOS environments. If you are using a Windows environment, adjust the CLI commands accordingly.

Prerequisites:

1. Docker
 - a. To install docker, go to <https://docs.docker.com/install/> and choose the appropriate installation instructions.
 - b. Select the Community Edition.
2. Node and npm
 - a. Go to <https://docs.npmjs.com/downloading-and-installing-node-js-and-npm> and follow the instructions for your environment.
 - b. It is also recommended to install NVM which can be found on the same page. NVM is for managing node versions.
3. Git
 - a. Go to <https://git-scm.com/downloads> and follow the instructions for installing git in your environment.

Clone:

1. Open a terminal in you preferred directory, such as home. `cd ~`
2. Clone the repository: `git clone https://github.com/kenbonilla/irondb.git`

Automatically install and launch containers:

Note: This automatic method assumes you are running Linux or macOS. If you are using Windows, follow the instructions for running manually.

1. Open the root directory: `cd ~/irondb`
2. (Optional - do this if the next step does not work) Set permissions: `chmod a+x dockerup.sh`
3. Run the setup script: `./dockerup.sh` It should ask for your password as it will be installing some files globally. The setup process will take several minutes. The shell is running in an attached state and must remain open.

```
ken@monolith: ~/git/irondb 65x7
(base) ken@monolith:~ » cd git/irondb
(base) ken@monolith:~/git/irondb(us179) » chmod a+x dockerup.sh
(base) ken@monolith:~/git/irondb(us179) » ./dockerup.sh
```

4. Go to your browser and navigate to <http://localhost:3001/> . This should bring you to the landing page.

Manually install and launch the containers:

1. Enter the root directory: `cd ~/irondb`
2. Install the npm dependencies:
 - a. `npm install`
 - b. `sudo npm install -g gulp-cli`
 - c. `sudo npm install -g jest-cli`
 - d. `gulp sass`
 - e. `gulp js`
3. **Warning!** *This will delete the local copy of the postgres database, backup important files before continuing.* If the root directory has a folder name **pg-data** then: `sudo rm -rf pg-data`
4. Make the postgres folder: `mkdir pg-data`
5. Build and launch the containers: `docker-compose up --build` The `--build` argument is important for ensuring that you are not trying to run an outdated container.
6. The shell is running in an attached state and must remain open. Navigate to <http://localhost:3001/> which will take you to the landing page.

(instructions continue on next page)

Shutdown procedures:

1. Press **Ctrl + C** to shutdown the servers.

```
ken@monolith: ~/git/irondb 65x11
rabbitmq_1 | 2018-11-14 20:24:39.266 [info] <0.5.0> Server start
up complete; 3 plugins started.
rabbitmq_1 | * rabbitmq_management
rabbitmq_1 | * rabbitmq_web_dispatch
rabbitmq_1 | * rabbitmq_management_agent
^CGracefully stopping... (press Ctrl+C again to force)
Stopping irondb_web_1      ... done
Stopping python            ... done
Stopping irondb_rabbitmq_1 ... done
Stopping postgres         ... done
(base) ken@monolith:~/git/irondb(us179 ⚡) »
```

2. Then enter: `docker-compose down` This ensures that the networks are properly closed and will prevent issues with launching the containers in the future.

```
ken@monolith: ~/git/irondb 65x11
Stopping irondb_web_1      ... done
Stopping python            ... done
Stopping irondb_rabbitmq_1 ... done
Stopping postgres         ... done
(base) ken@monolith:~/git/irondb(us179 ⚡) » docker-compose down
Removing irondb_web_1      ... done
Removing python            ... done
Removing irondb_rabbitmq_1 ... done
Removing postgres         ... done
Removing network irondb_default
(base) ken@monolith:~/git/irondb(us179 ⚡) »
```

Restart the servers:

1. Running `dockerup.sh` re-installs dependencies and rebuilds the containers. To avoid this, enter: `docker-compose up` - Optionally, you may rebuild the containers before launching: `docker-compose up --build`

```
docker-compose up 65x11
(base) ken@monolith:~/git/irondb(us179 ⚡) » docker-compose up
Creating network "irondb_default" with the default driver
Creating postgres          ... done
Creating irondb_rabbitmq_1 ... done
Creating python            ... done
Creating irondb_web_1      ... done
Attaching to irondb_rabbitmq_1, postgres, python, irondb_web_1
postgres | 2018-11-14 20:33:31.570 UTC [1] LOG:  listening on
IPv4 address "0.0.0.0", port 5432
postgres | 2018-11-14 20:33:31.570 UTC [1] LOG:  listening on
IPv6 address "::", port 5432
postgres | 2018-11-14 20:33:31.586 UTC [1] LOG:  listening on
```

In case of docker errors:

Note: When docker is shut down improperly, it may result in errors launching containers in the future. Attempt this before launch in case of docker errors. If using Windows, instead of `./dockerup.sh` follow the manual instructions.

```
docker-compose down
docker stop $(docker ps -aq)
docker rm $(docker ps -aq)
./dockerup.sh
```

(EOF)