V2-Ref

Moving Legacy RPI to v2-ref RPI

This is about when we need to move a legacy(v1) firmware RPI to the v2-ref environment remotely.

1. Connect to RPI.
2. Install nvm version 19

```
$ nvm install 19
$ nvm alias default 19.x.x
$ nvm uninstall 14
```

3. Install yarn and pm2.

```
npm install -g yarn pm2
```

4. Move legacy files (docker setup)

```
mv client old.client
```

5. Create folder for v2 setup

```
mkdir v2Client
```

6. Edit **cron table**

```
crontab -e
```

Comment out the last line (sedn cron) and change the "client" to "old.client" in first line.
 Crontab
7. install pm2 as a service.

```
pm2 start up
```

If above command didn't work, use the below command.

```
pm2 startup
```

Proceed with displayed steps.

8. Start Ngrok.

```
ngrok tcp 22
```

Get the **address** and **port**.

9. Remote connect from [**WinSCP**}(/docs/essentials#using-ngrok-and-winscp).
10. Get the **V2-ref Firmaware** and extract its content. Paste the files in `/v2Client`

WinSCP v2Client
11. Get the IoT Credentials and paste in `v2Client/creds/`.
12. Terminate **Ngrok** session and exit **WinSCP**.
13. `cd` to `/v2Client`.
14. Edit `.env` file. (Can do this with WinSCP as well.)
    - `CLIENT_ID` - IoT Thing name (*A396_3lxwHVymlR*)
    - Change `TIMEZOTNE` to correct spellings `TIMEZONE`. Add the Correct time zone. (*Europe/London*)
    - `TZX` - timezone (*Europe/London*)
    - `CLIENT` - Add the client name.
    - `Project` - Add the site name.
15. Install dependencies and build project.

```
$ yarn
$ yarn build
```

Build will take few minutes.

16. Install Python dependencies.

```
python3 -m pip install Flask python-dotenv
```

17. Delete `src` folder.

```
rm -r src
```

18. Start pm2 service.

```
pm2 start ecosystem.config.js
```

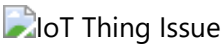
19. Save this pm2 instance so it will start automatically after a reboot.

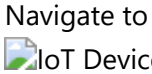
```
pm2 save
```

Check again after RPI reboot to ensure the pm2 running automatically.

```
pm2 logs
```

<span style={{ color:"red"}}>**Due to an issue in REF environment, The IoT Things will not connect correctly. In that case follow below steps.**



1. Go to **AWS IoT Core** console. (link). The region must be set to **Asia Pacific (Mumbai)**.
2. Under the "Manage", `All devices` >> `Things` . This will display all the IoT Things created accross platform. Selec the relevant thing.
3. Navigate to `Device shadows`. There should be a shadow named `CONFIG`. Select it and go to edit.
   
4. Add the following key and value.

   ```
   "tenant": "DtVd"
   ```

   
5. The restart the service in RPI.

   ```
   pm2 restart all
   ```

If couldn't find the `CONFIG` shadow there, Restart the **pm2** and wait few seconds and it should be available then.