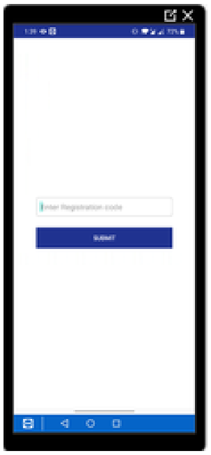
Proximity Tracing App: ANDROID VERSION

Installation Process:

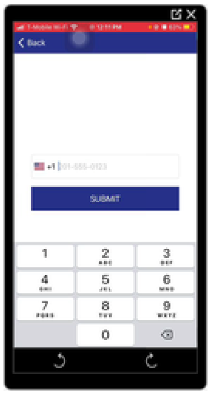
Install the app "CERTIFY.me" from the Play Store.
https://play.google.com/store/apps/details?id=com.certify.me.

- **Workflow of the Application:**

1. Once the app is installed, you will be directed to the **"Registration Code"** page. The code will be available in the Certify Portal under **Settings** → **Contact Tracing Settings** → **"Registration Code".**

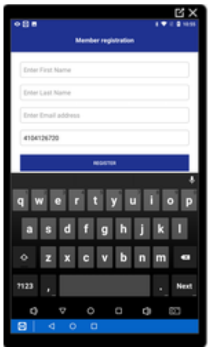


2. After entering the registration code, you will be asked to enter your **Contact Number**.



After entering the contact information, you will be directed to the "**Registration Page**" which has the following sections to be filled:
Enter First Name
Enter Last Name

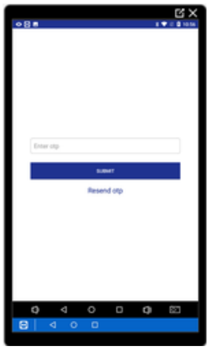
Enter Email-id
Phone Number



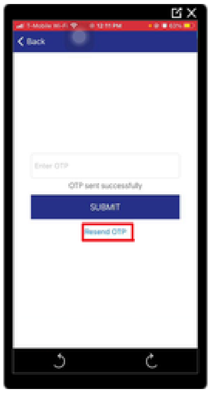
4104126720

Fill all the details and click on the **SUBMIT** button found at the bottom.

3. After filling the details in the registration page, you will get the Enter OTP page where you will receive a 4-digit One Time Password to your given contact number. Enter the OTP and click SUBMIT found in the bottom of the page.



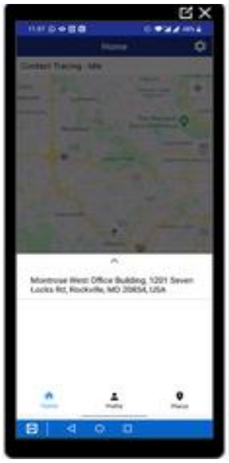
If you do not receive an OTP in the first attempt, then click “Resend OTP” where an OTP will be re-attempted to your contact information.



OTP sent successfully

4. After Submitting the OTP, you will see the map screen which includes three sections found at the bottom of the page - Home, Profile and Places.

<u>Home:</u> In this page, you will find the current the location you are in. You will also see the section for Contact Tracing.
The process of Contact Tracing is **Contact Tracing: Idle→ Scanning → Advertising → Data Complete.**
The Contact Tracing status will initially be in Idle state and then update to Scanning phase, where it will start scanning for data. After scanning it will move to advertising and once the data is received it will show data completed.



Contact Tracing : Idle

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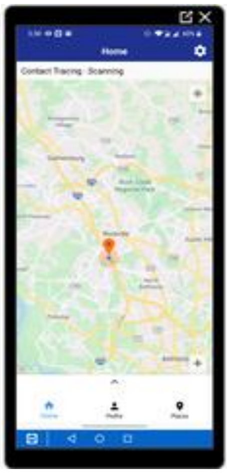
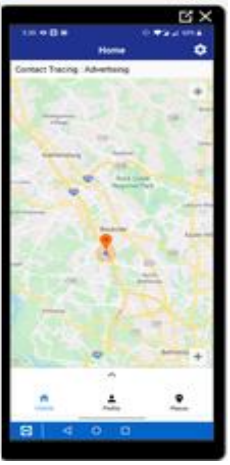
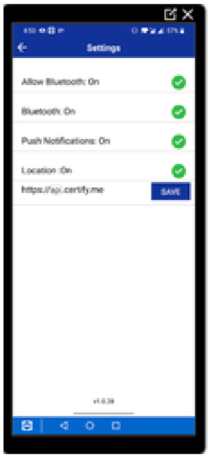


Contact Tracing : Scanning



Contact Tracing : Advertising

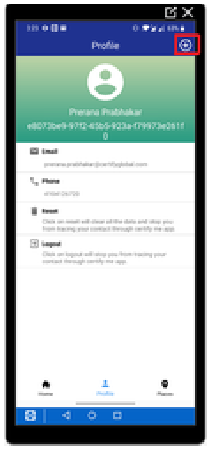
Home page has another section called **Settings** In the top right corner of the home page**.**
Make sure the parameters present in the settings are checked-in.
Allow Bluetooth: On
Bluetooth: On
Push Notifications: On
Locations: On
https://api.certify.me → this is the default environment in which the app will be present.



Allow Bluetooth: On ✓
Bluetooth: On ✓
Push Notifications: On ✓
Location :On ✓
https://api.certify.me

v1.0.38

Profile:



Profile

Prerana Prabhakar

e8073be9-97f2-45b5-923a-f79973e261f0

Email

prerana.prabhakar@certifyglobal.com

Phone

[illegible]

Reset

Click on reset will clear all the data and stop you from tracing your contact through certify me app

Logout

Click on logout will stop you from tracing your contact through certify me app

Profile also has the following sections

Email: This will display the email you have provided in the registration page.

Phone: This will display the mobile number that you would have provided.

Reset: This feature will clear all the data and stop you from tracing your contact through certify me app. If you wish to reset, click the reset option and this will take you back to the registration page.

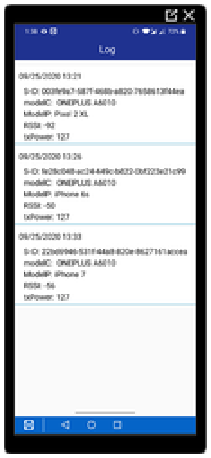
Logout: Click on logout will stop you from tracing your contact through certify me app

After you get the Contact Tracing status as "Data Complete", the data (logs) will start appearing in the profile section at the top-right corner by clicking the "+" sign as highlighted in the above figure.

The logs will appear as shown in the below image. It will disply the following data:

Date and time any device appeared in the given radius.

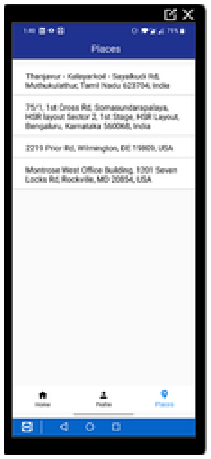
ModelC of the device



Log

```
09/25/2020 13:21
  S-ID: 003fe9a7-587f-4686-a820-7b58613f44ea
  modelC: ONEPLUS A6010
  ModelP: Pixel 2 XL
  RSSI: -92
  txPower: 127
09/25/2020 13:26
  S-ID: fe28c048-ac24-449c-b822-0bf223e21c99
  modelC: ONEPLUS A6010
  ModelP: iPhone 6s
  RSSI: -50
  txPower: 127
09/25/2020 13:33
  S-ID: 22b69946-531f-44a8-820e-862716 1aecea
  modelC: ONEPLUS A6010
  ModelP: iPhone 7
  RSSI: -56
  txPower: 127
```

Places: This section will display the location that you update in the portal.



Thanjavur - Kallayarkoil - Sayalkudi Rd, Muthukulathur, Tamil Nadu 623704, India

75/1, 1st Cross Rd, Somasundarapalaya, HSR layout Sector 2, 1st Stage, HSR Layout, Bengaluru, Karnataka 560068, India

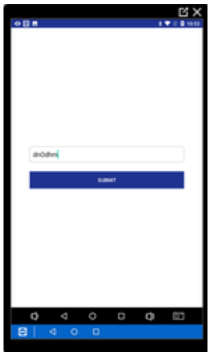
2219 Prior Rd, Wilmington, DE 19809, USA

Montrose West Office Building, 1301 Seven Locks Rd, Rockville, MD 20854, USA

Proximity Tracing App: IOS VERSION

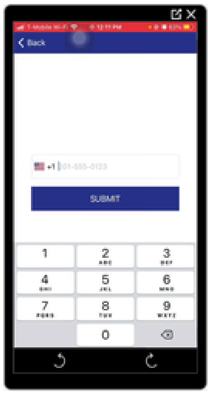
Installation Process:

1. Work - flow of the application:
   Once the app is installed, you will get the **"Registration Code"** page. The code will be available in the Certify Portal under **Settings** → **Contact Tracing Settings** → **"Registration Code".**

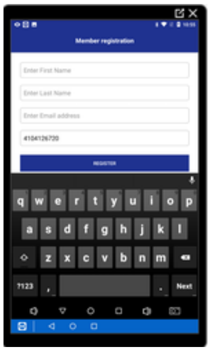


dn0dhm

2. After giving the registration code, you will be asked to enter your **Contact Number.**



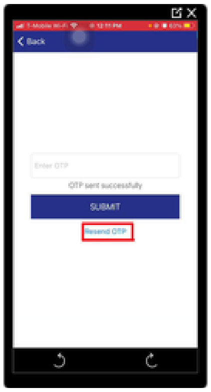
3. After entering the contact information, you will be directed to the “**Registration Page**” which has the following sections to be filled:
   Enter First Name
   Enter Last Name
   Enter Email-id
   Phone Number



4104126720

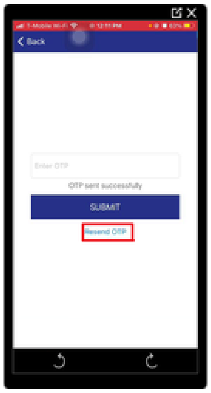
Fill all the details and click on the **SUBMIT** button found at the bottom.

4. After filling the details in the registration page, you will get the Enter OTP page where you will receive a 4-digit One Time Password to your given contact number. When you receive the OTP, it will display “**OTP sent successfully**”. Enter the OTP and click **SUBMIT** found in the bottom of the page.



OTP sent successfully

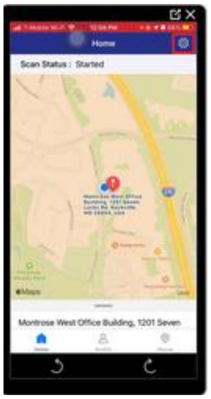
If you do not receive an OTP in the first attempt, then click “Resend OTP” where an OTP will be re-attempted to your contact information.



OTP sent successfully

5. After Submitting the OTP, you will have a Map screen that includes three sections found at the bottom of the page - Home, Profile and Places.

Home: In this page, you will find the current the location you are in. There is an option at the bottom of the Home icon at the top saying Contact Tracing.
In Contact Tracing, status will initially be in idle. When you open the app it starts and when the status is in started, the logs will get collected in the profile section.

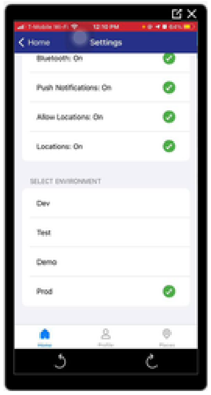


Scan Status : Started

Montrose West Office Building, 1201 Seven

Settings: This section is present in the right-hand corner of the Home page. It has two sections:

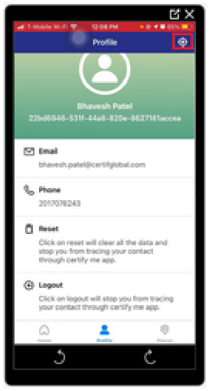
- **PERMISSION STATUS:** Make sure all the permission status parameters are given permissions.
  Allow Bluetooth: On (Checked)
  Bluetooth: On (Checked)
  Push Notification: On (Checked)
  Allow locations: On (Checked)
  Locations: On (Checked)



Bluetooth: On ✓
Push Notifications: On ✓
Allow Locations: On ✓
Locations: On ✓

SELECT ENVIRONMENT
Dev
Test
Demo
Prod ✓

Profile: Profile also has the following sections
Email: This will display the email you have provided in the registration page.
Phone: This will display the mobile number that you would have provided.
Reset: This feature will clear all the data and stop you from tracing your contact through certify me app. If you wish to reset, click the reset option and this will take you back to the registration page.
Logout: Click on logout will stop you from tracing your contact through certify me app.



Bhavesh Patel
22bd6946-531f-44a8-820e-8627161accea

Email
bhavesh.patel@certifiglobal.com

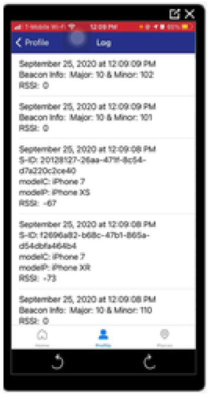
Phone
2017076243

Reset
Click on reset will clear all the data and stop you from tracing your contact through certify me app.

Logout
Click on logout will stop you from tracing your contact through certify me app.

Once the app is open and starts scanning, data (logs) will start appearing in the profile section at the top-right corner by clicking the "+" sign as highlighted in the above image. The logs will appear as shown in the below image. It will displace the following data:

Date and time any device appeared in the given radius.
ModelC of the device



September 25, 2020 at 12:09:09 PM
Beacon Info: Major: 10 & Minor: 102
RSSI: 0

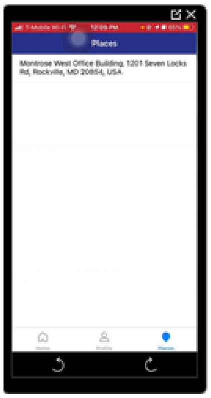
September 25, 2020 at 12:09:09 PM
Beacon Info: Major: 10 & Minor: 101
RSSI: 0

September 25, 2020 at 12:09:08 PM
S-ID: 20128127-26aa-471f-8c54-d7a220c2ce40
modelC: iPhone 7
modelP: iPhone XS
RSSI: -67

September 25, 2020 at 12:09:08 PM
S-ID: f2696a82-b68c-47b1-865a-d54dbfa464b4
modelC: iPhone 7
modelP: iPhone XR
RSSI: -73

September 25, 2020 at 12:09:08 PM
Beacon Info: Major: 10 & Minor: 110
RSSI: 0

Places: This section will display the location that you update in the portal.



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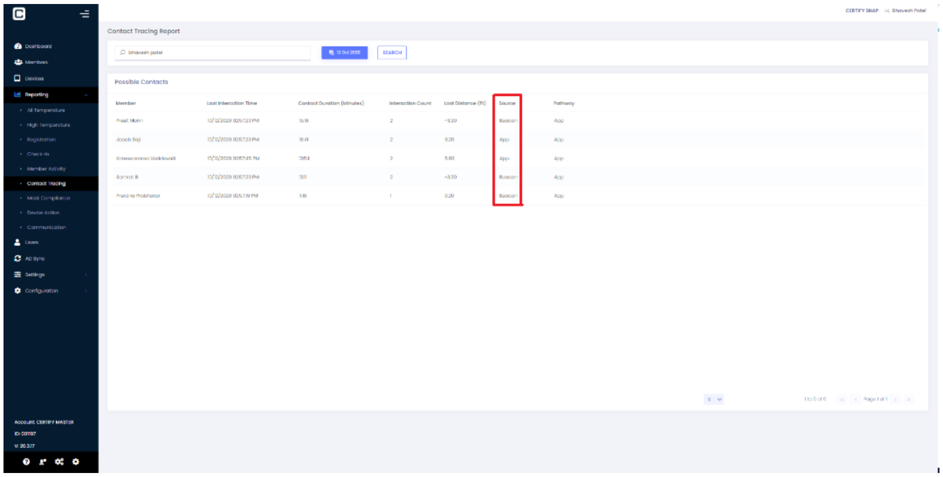
Proximity Tracing App – Report

Proximity Tracing App report under reporting shows the data of the "CERTIFY.me" app.

- Search Name: You can enter the members name who has logged into the device by editing the date and time. Click "SEARCH" tab.
- After clicking the search tab, other members who have logged into the device within the given radius will be seen. The following fields will be displayed:
  - Member
  This displays the members who comes in proximity within the same given radius.
  - Last Interaction Time
  This displays the recent interaction time
  - Proximity Duration (in minutes)
  This displays the total time duration the members are near each other.
  - Interaction Count
  This displays the number of times the members have come in proximity.
  - Last Distance (Ft)
  This display the distance between the members.

- Source
It displays the source type, APP or Beacon
- Pathway
This displays the pathway in which the data is coming from.



Contact Tracing Report

bhavesh patel 12 Oct 2020 SEARCH

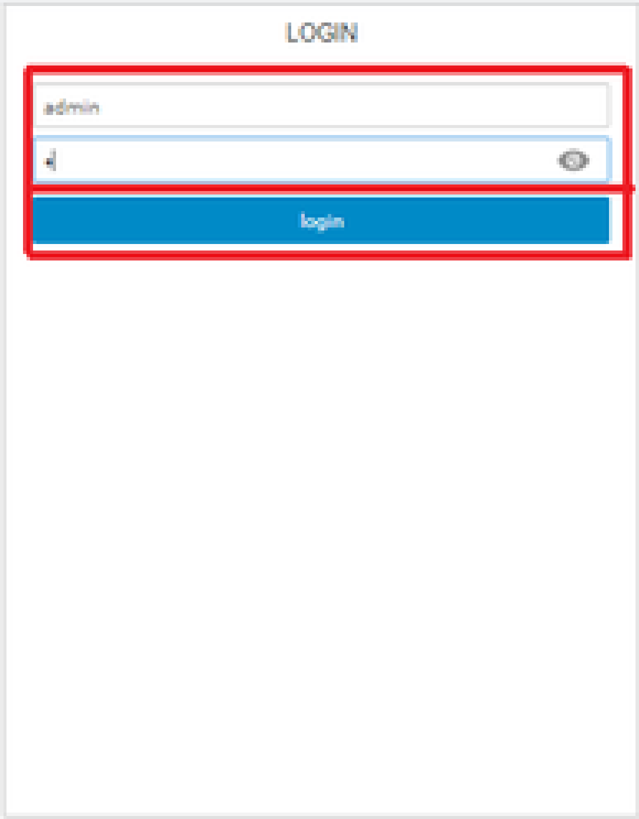
Possible Contacts

Member	Last Interaction Time	Contact Duration (Minutes)	Interaction Count	Last Distance (Ft)	Source	Pathway
Preet Mann	10/12/2020 02:57:23 PM	15.18	2	-3.30	Beacon	App
Jacob Saji	10/12/2020 02:57:23 PM	18.41	2	9.20	App	App
Koteswararao Vaddavalli	10/12/2020 02:57:45 PM	13.54	2	5.80	App	App
Samrat B	10/12/2020 02:57:23 PM	13.11	2	-3.30	Beacon	App
Prerana Prabhakar	10/12/2020 02:57:19 PM	11.8	1	0.20	Beacon	App

Beacon Gateway Setup

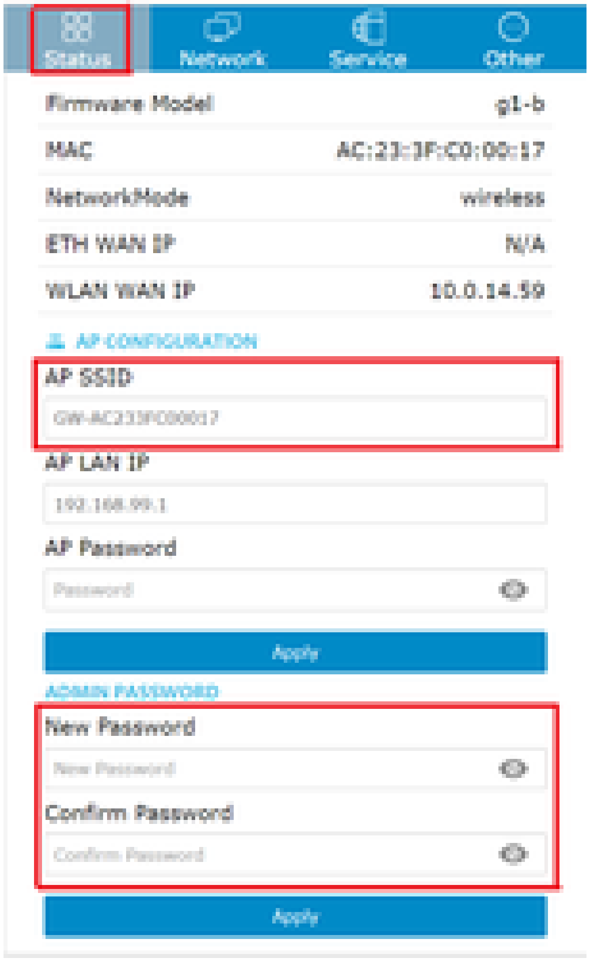
Configuration Of the device:

1. Connect the **BLE & WiFi Gateway** to the respective device using USB to USB connector. Once it is connected, rainbow lights flickering constantly will be visible. This is the indication that the connection is through the USB to USB is done successfully.
2. Connect the Gateway to the device by disabling your respective WiFi connection and connecting it to the Gateway WiFi. The details of the connection is given below
Gateway Name Pattern: **GW-'MAC address for the gateway present behind the device'**
Sample Gateway: GW-AC233FC00017.
3. After the WiFi connection is successfully done, go to **chrome browser** and type the following URL: http://192.168.99.1/.
4. The **Login** Page will be displayed as shown in the image. For the first set up, the Username will be **“Admin”** by default and the Password can be given as anything.



admin

5. Once you are redirected to the gateway dashboard, in the in the four-squared box **“Status”** section, create you own password in **“New Password”** and click on **“Apply”**.



Firmware Model	g1-b
MAC	AC:23:3F:C0:00:17
NetworkMode	wireless
ETH WAN IP	N/A
WLAN WAN IP	10.0.14.59

AP CONFIGURATION

AP SSID: GW-AC233FC00017

AP LAN IP: 192.168.99.1

AP Password: Password

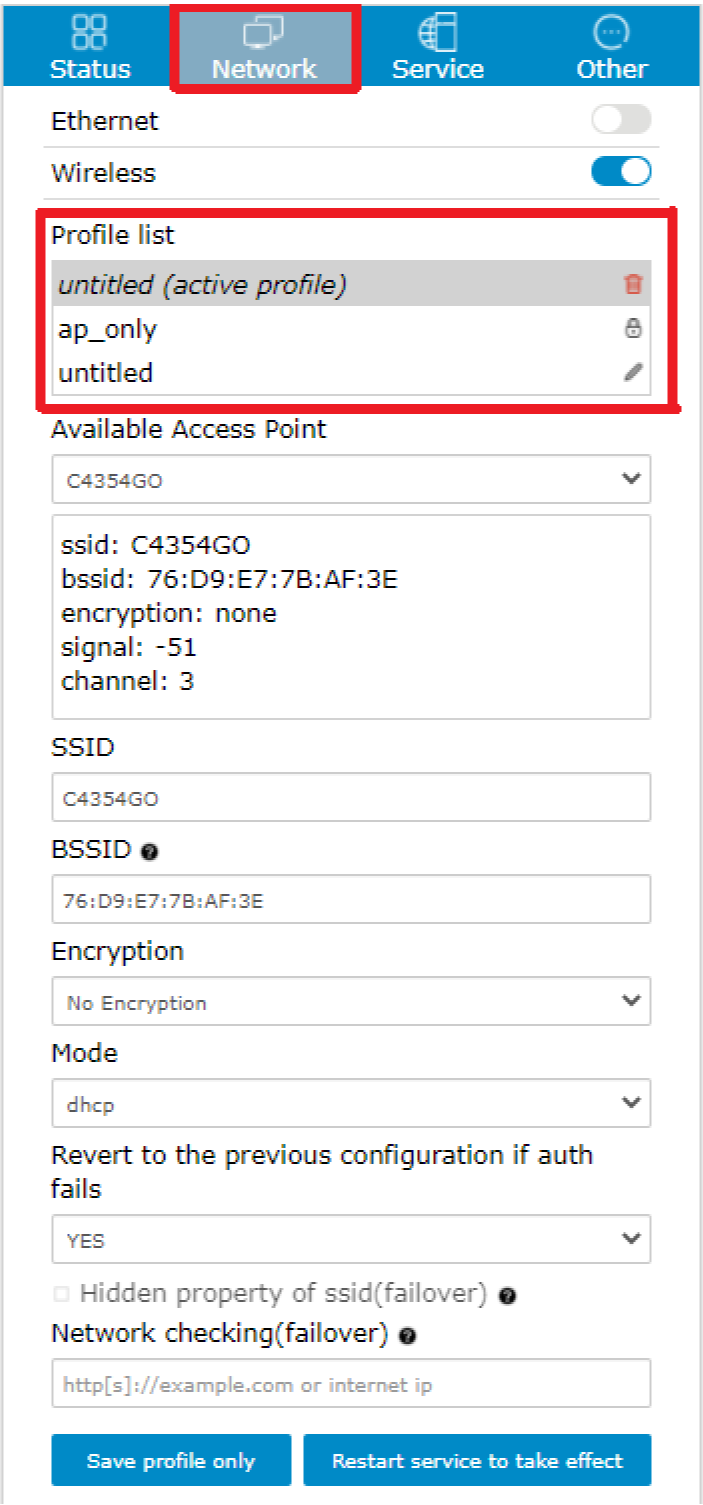
ADMIN PASSWORD

New Password: New Password

Confirm Password: Confirm Password

APP SSID: This section displays the WiFi name to which you are connected.

6. Go to **“Network”** section and select the option **“Wireless”** for the WiFi. Once selected, the page will be displayed as shown below:



Ethernet

Wireless

Profile list

untitled (active profile)

ap_only

untitled

Available Access Point

C4354GO

ssid: C4354GO
bssid: 76:D9:E7:7B:AF:3E
encryption: none
signal: -51
channel: 3

SSID

C4354GO

BSSID

76:D9:E7:7B:AF:3E

Encryption

No Encryption

Mode

dhcp

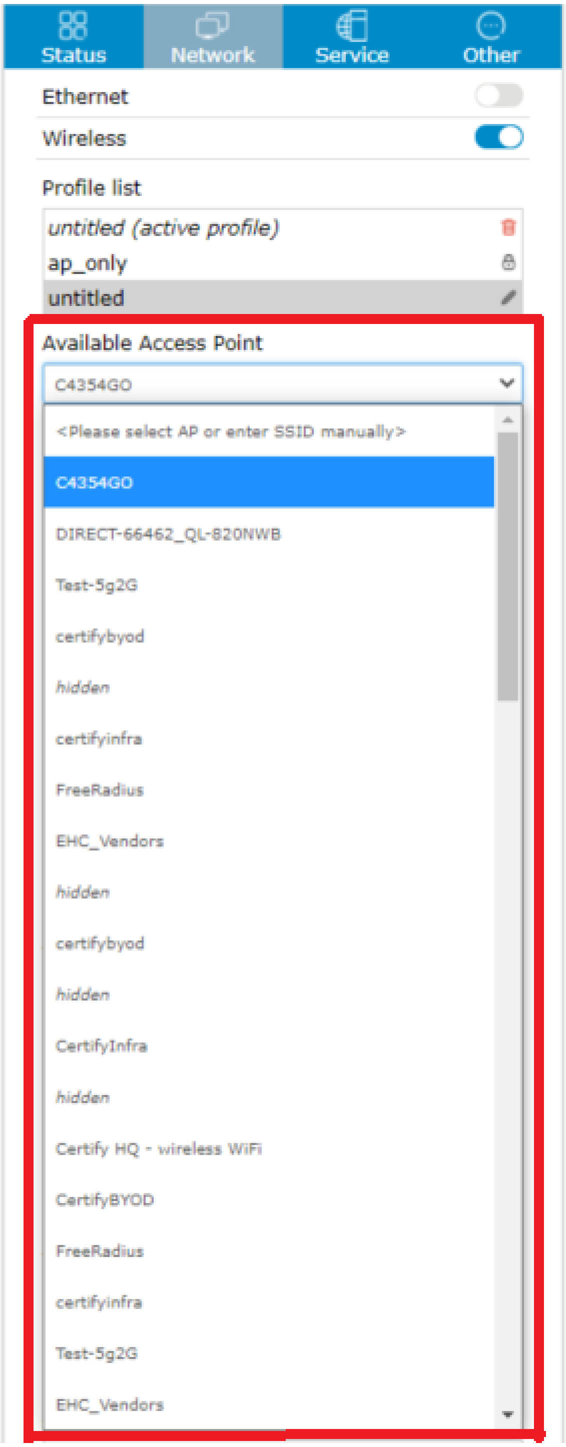
Revert to the previous configuration if auth fails

YES

□ Hidden property of ssid(failover)

Network checking(failover)

http[s]://example.com or internet ip



Ethernet

Wireless

Profile list

untitled (active profile)
ap_only
untitled

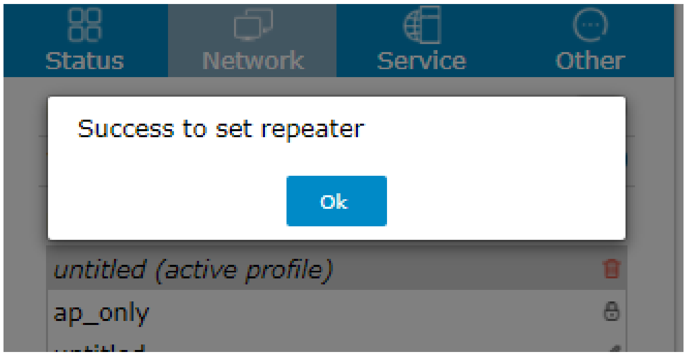
Available Access Point

C4354GO

<Please select AP or enter SSID manually>
C4354GO
DIRECT-66462_QL-820NWB
Test-5g2G
certifybyod
hidden
certifyinfra
FreeRadius
EHC_Vendors
hidden
certifybyod
hidden
CertifyInfra
hidden
Certify HQ - wireless WiFi
CertifyBYOD
FreeRadius
certifyinfra
Test-5g2G
EHC_Vendors

In this section, the profile can be created by selecting the respective network connection from the drop-down list in **“Available Access Point”** as shown in the image. Once the connection name is selected, a profile gets created and can be seen in the “Profile list”.

Then click on the following:
”Save profile only” and you will receive a pop-up as shown below, click on OK box.

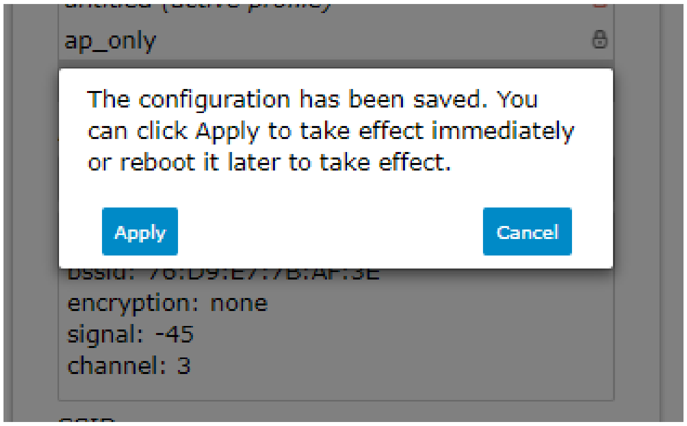


Success to set repeater

untitled (active profile)

ap_only

This will restart the gateway device and you will receive another pop-up as shown below, click on **Apply** box.

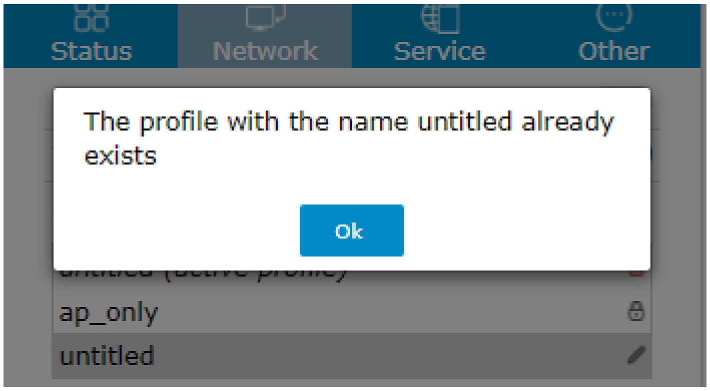


ap_only

The configuration has been saved. You can click Apply to take effect immediately or reboot it later to take effect.

```
bssid: 76:D9:E7:7B:AF:3E
encryption: none
signal: -45
channel: 3
```

NOTE: When another WiFi network is selected the second time, it will not allow you to **“Save profile only”** and displays an error - **“The profile with the name already exists”**.



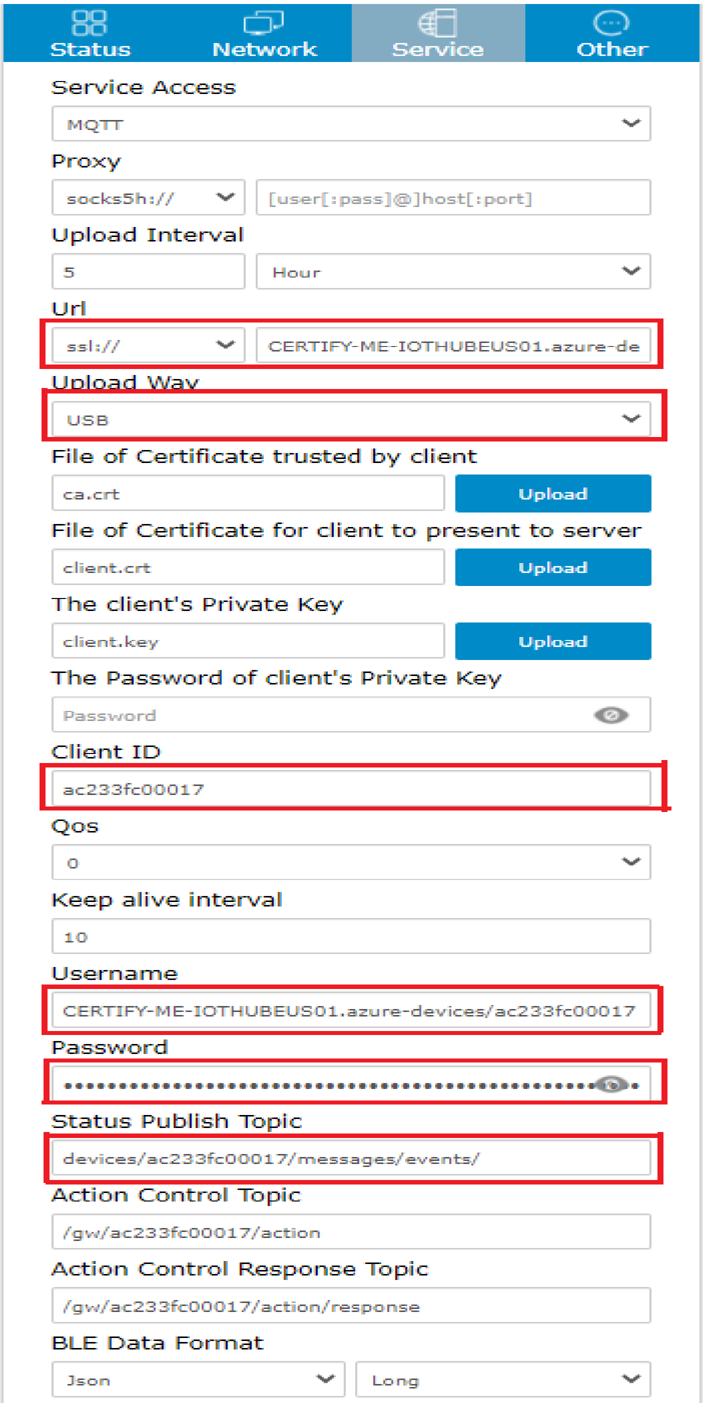
The profile with the name untitled already exists

ap_only

untitled

Hence it is recommended to delete the previous one and then follow the **step 6** again.

7. Fill the following details in the **“Service”** section:



Service Access
MQTT

Proxy
socks5h:// | [user[:pass]@]host[:port]

Upload Interval
5 | Hour

Url
ssl:// | CERTIFY-ME-IOTHUBEUS01.azure-de

Upload Way
USB

File of Certificate trusted by client
ca.crt

File of Certificate for client to present to server
client.crt

The client's Private Key
client.key

The Password of client's Private Key
Password

Client ID
ac233fc00017

Qos
0

Keep alive interval
10

Username
CERTIFY-ME-IOTHUBEUS01.azure-devices/ac233fc00017

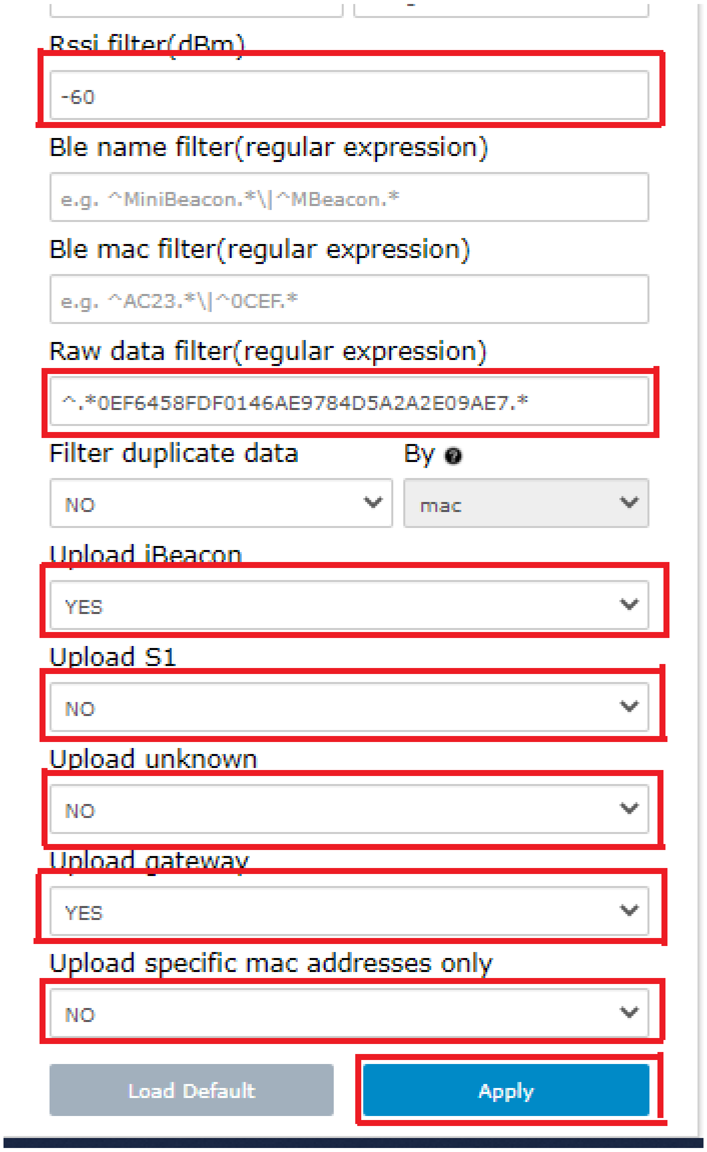
Password
•••

Status Publish Topic
devices/ac233fc00017/messages/events/

Action Control Topic
/gw/ac233fc00017/action

Action Control Response Topic
/gw/ac233fc00017/action/response

BLE Data Format
Json | Long



Rssi filter(dBm)

-60

Ble name filter(regular expression)

e.g. ^MiniBeacon.*\|^MBeacon.*

Ble mac filter(regular expression)

e.g. ^AC23.*\|^0CEF.*

Raw data filter(regular expression)

^.*0EF6458FDF0146AE9784D5A2A2E09AE7.*

Filter duplicate data: NO

By: mac

Upload iBeacon: YES

Upload S1: NO

Upload unknown: NO

Upload gateway: YES

Upload specific mac addresses only: NO

- **Url**: ssl:// and CERTIFY-ME-IOTHUBEUS01.azure-devices.net:8883
- **Upload Way:** USB
- **Client ID:** ac233fc00017 (This is the device ID and will be unique for every device).
- **Username:** CERTIFY-ME-IOTHUBEUS01.azure-devices/ac233fc00017 (Here ac233fc00017 is the device ID and it should match to the device ID, else it will not sync the data).
- **Password:** SharedAccessSignature sr=CERTIFY-ME-IOTHUBEUS01.azure-devices.net%2fdevices%2fac233fc00017&sig=7kByqcK28rT25p%2bKk5dW9bcuw5%2fl8eaXvlLI1a26DZg%3d&se=1633700910
  (The password should be updated every 365 days, when it expires provide the client ID to the customer care and they will generate a new key ID).
- **Status Publish Topic:** devices/ac233fc00017/messages/events/
  (Here ac233fc00017 is the device ID and it should match to the device ID, else it will not sync the data).

- **Rssi Filter:** -60
- **Raw data filter:** ^.*0EF6458FDF0146AE9784D5A2A2E09AE7.*
  (This is the UUID of the beacon)
- **Upload iBeacon:** YES
- **Upload S1:** NO
- **Upload Unknown:** NO
- **Upload Gateway:** YES
- **Upload specific mac addresses only:** NO
- After filling out all the sections as mentioned, click on **Apply**.