

IoT GENERIC ASSET MANAGEMENT SYSTEM

IoT refers to the tracking and management of individual network-connected assets via a sensor(s) that will capture and report detailed asset information such as status, classification, location, usage, and more.

Process - ONBOARD ASSETS & DEVICES

This IoT application is a web application and is developed to integrate all IoT devices to track its data and to report device current status & activities.

It allows to onboard any asset in one platform. The agenda is to focus on all IoT devices in one platform where we can control & monitor those devices.

The application has two roles such as ADMIN and LEVEL1 user.

- Admin has the features to write/read/and delete option.
- Admin can onboard clients, users, sensors, assets, devices, parameters & able to configure those assets.
- Admin role has the access to create new widget, will have options to map different kind of charts/maps/cards etc.
- Whereas Normal user (LEVEL1) only can view dashboard.

ACCESS RIGHTS FOR ADMIN ROLE

1, Admin Panel- Onboarding

- USERS
- CLIENTS

2, Configuration panel – Onboarding & Configuration

- PROTOCOL
- SENSORS,
- ASSET
- ASSET CONFIGURATION

3, Configure Alert

- Create Alert with Threshold value.

4, Reports

- Here admin can able to get the data logs.

5, My Profile

- This page allows admin to edit main application profile such as Company name, application solution name, logo etc.

ADMIN MODULE

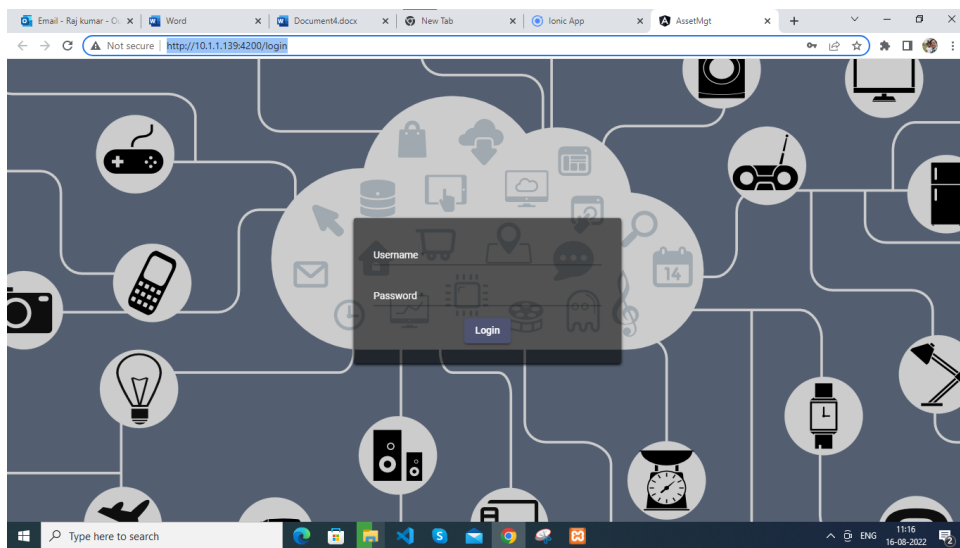
The below is the work flow of Admin module:

Admin Role:

Login Credentials

Username: admin

Password: admin

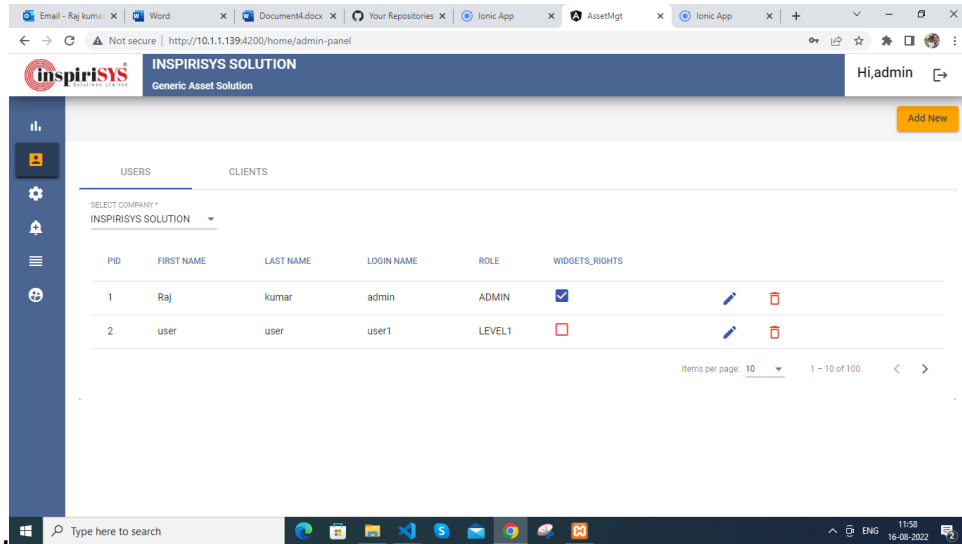


Login success will lead to dashboard page where widget create button visible on the top right panel.

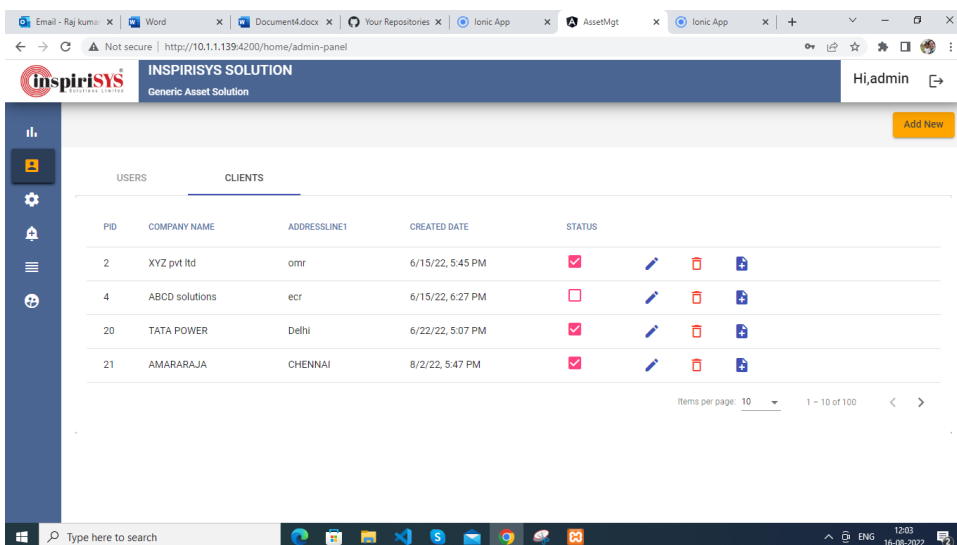
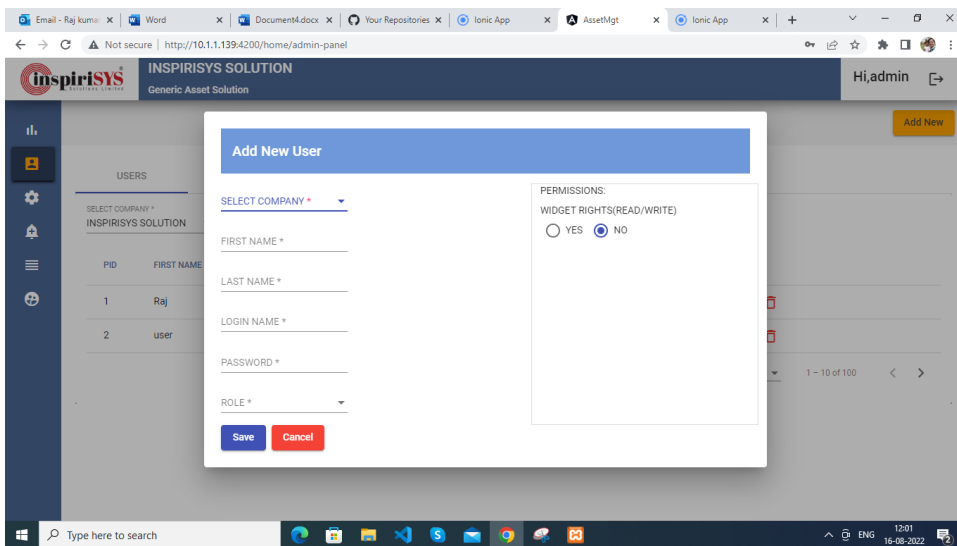
Before creating widgets, we see the process of onboard users & devices.

Admin Panel- Onboarding USERS

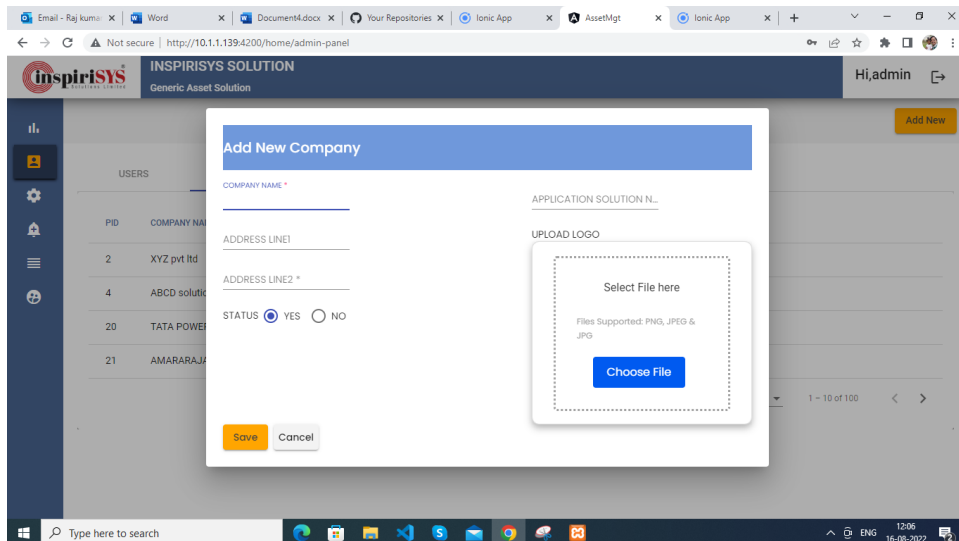
1. Listing the users – rights to add/edit/remove user
2. Add Users to respective company



Admin Panel- Onboarding CIENTS



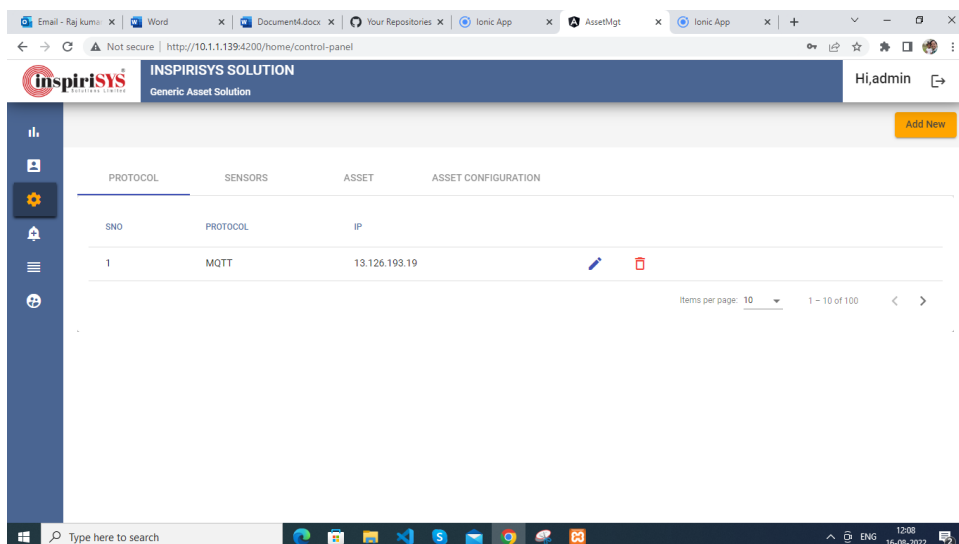
1. Listing all Companies
2. Add client details such as name, address, logo etc.
3. Status means make the client active or not.

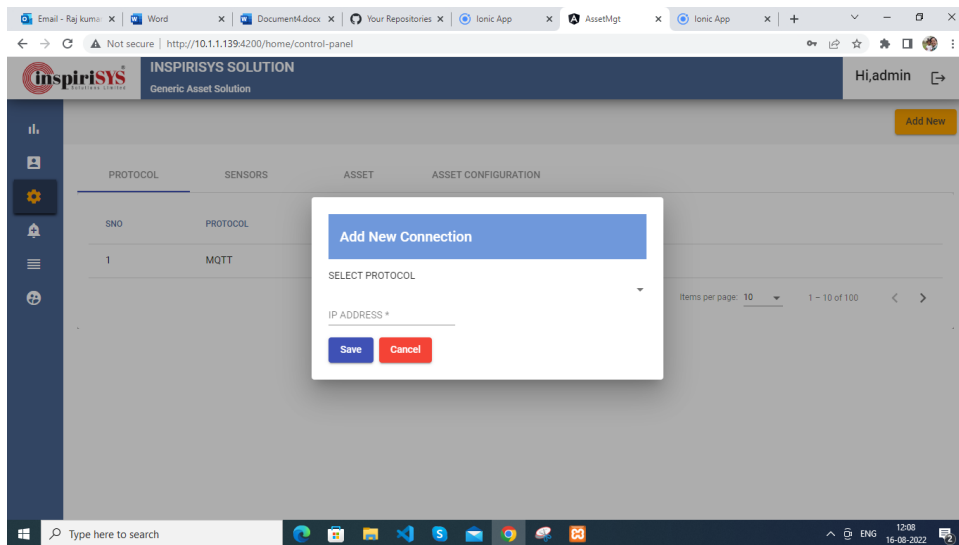


Configuration panel

Protocol Creation

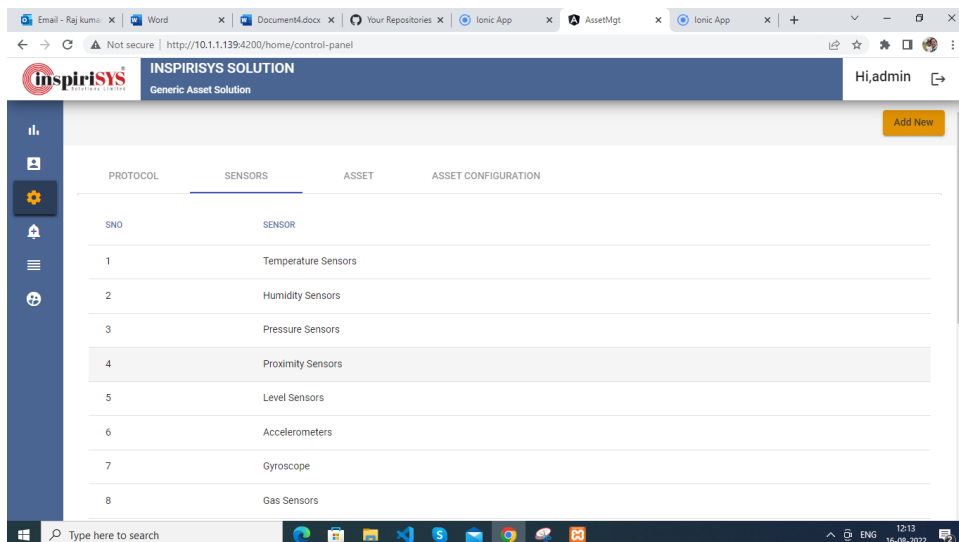
- Admin can add/edit/remove protocol



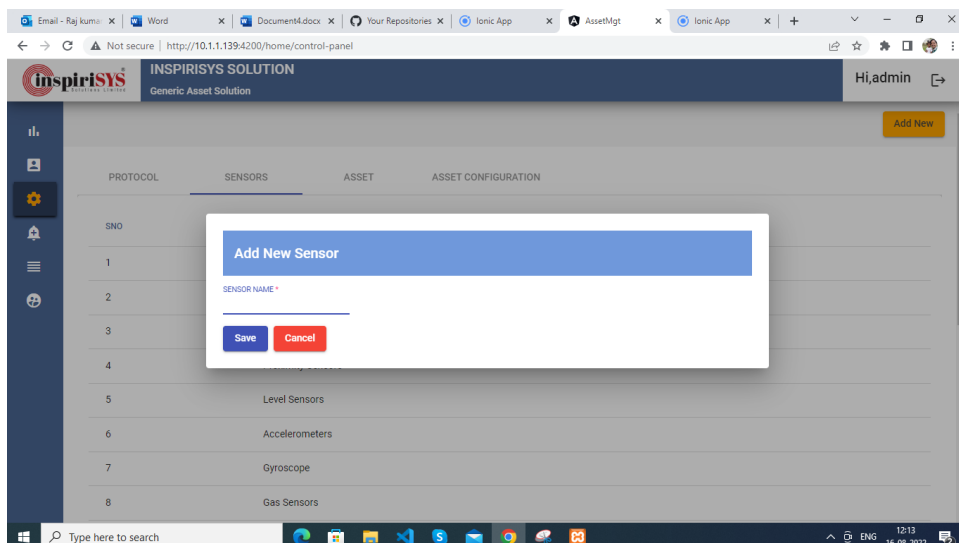


Sensor Creation

- Those below listed sensors are the availabilities .It can be added also.

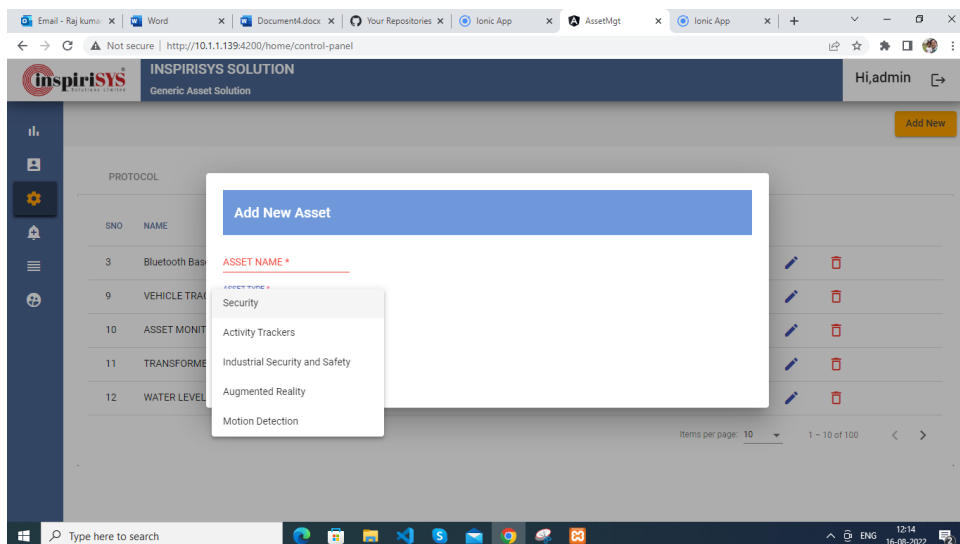
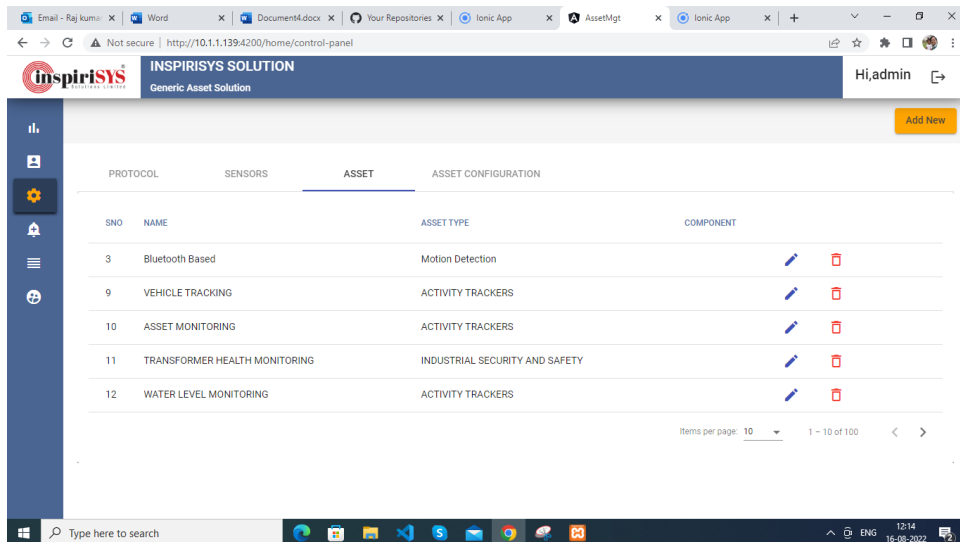


- Add New button will open popup for adding sensor option.

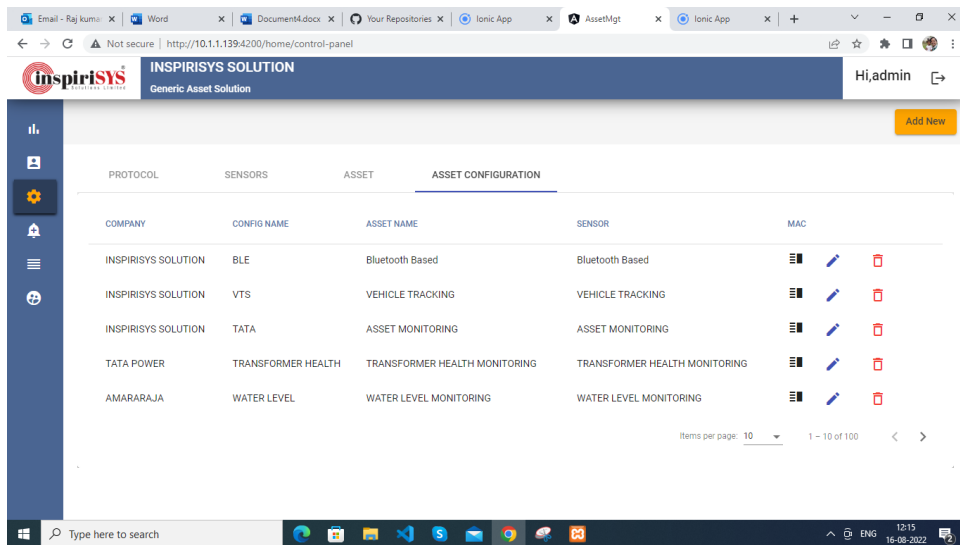


Asset Header Naming

- During add/edit asset name, type can be selected from dropdown



Asset Configuration Control

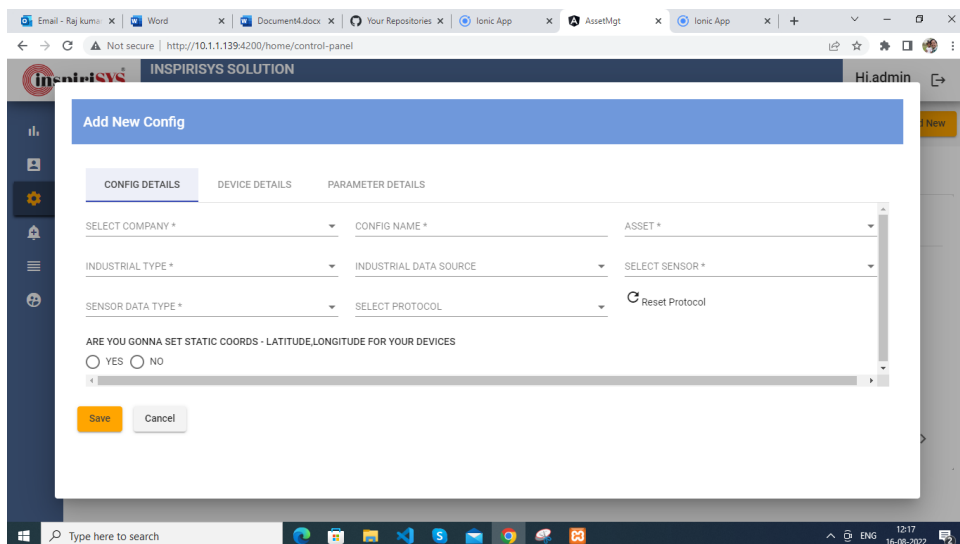


- Admin able to add/edit/remove asset config from list.
- during add/edit config –allows to enter config details, device & parameter details

Asset Configuration Settings

- Config details
- Device details
- Parameter details

Config details



- Device latitude & longitude can be set statically by choosing “yes”
- If “YES” then device latitude /longitude details to be added compulsory in Device Tab.

- If “No” then latitude /longitude will be taken from API Cal, only provided in the external API.

Device details

Add New Config

CONFIG DETAILS | **DEVICE DETAILS** | PARAMETER DETAILS

NAME * ADDRESS *

LOCATION * LATITUDE

LONGITUDE

STATUS
☒ Active ☐ In Active

Save Cancel

- Device Name dropdown list as mapped on Frontend hard coded.

Add New Config

CONFIG DETAILS | **DEVICE DETAILS** | PARAMETER DETAILS

NAME * ADDRESS *

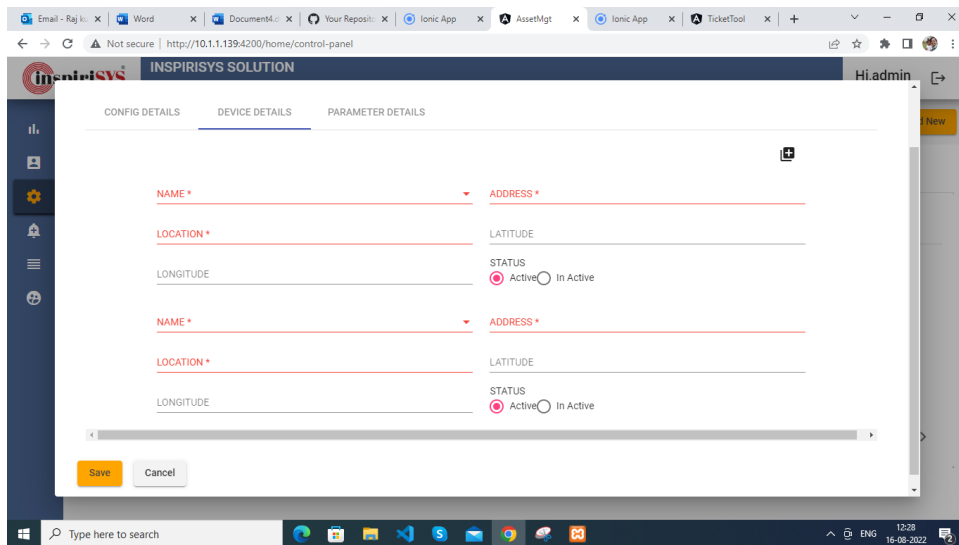
LOCATION * LATITUDE

LONGITUDE

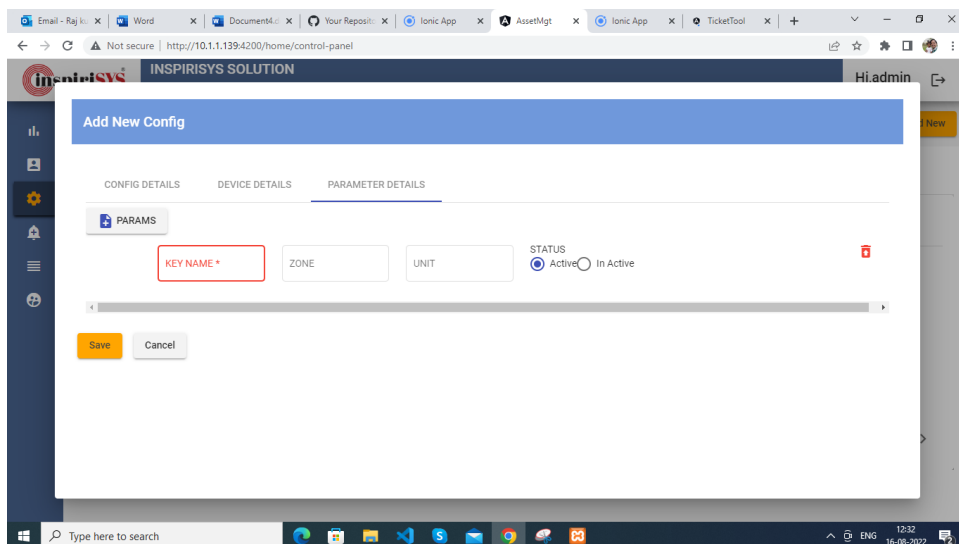
STATUS
☒ Active ☐ In Active

Save Cancel

- Multi Device Addition provision given. Click add button to get new input row



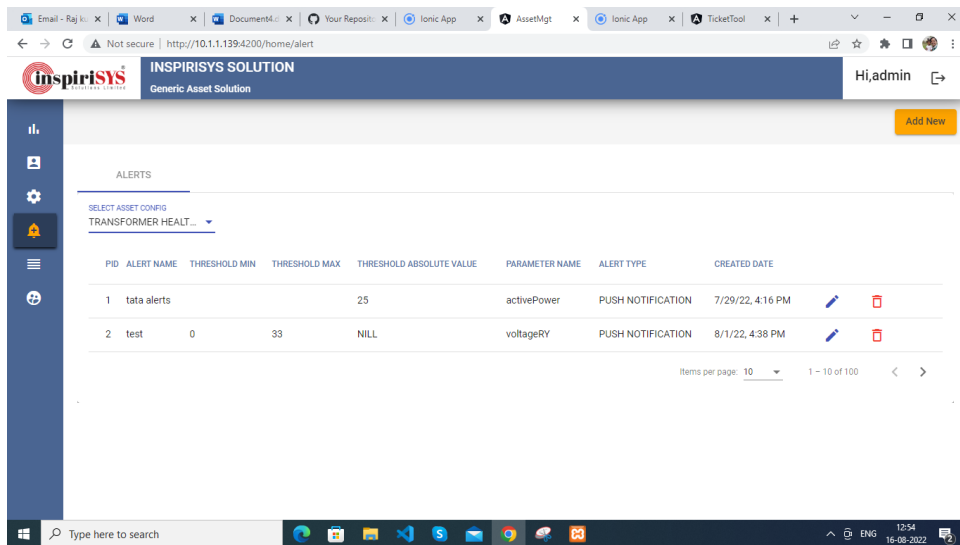
Parameter details



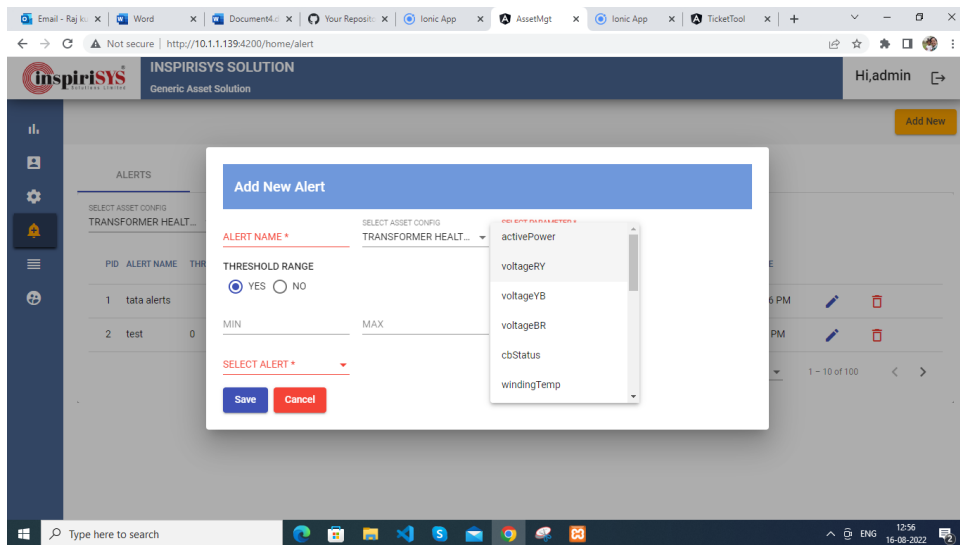
- If predefined parameter names can be onboarded.
- Click add button to get new input row

Alert Config

- List shows the existing alert created respective to the asset configuration
- Admin has option to add/edit/remove alerts



- Allows to select asset config & its parameter option given.
- Based on asset config selection, parameter list will show, if parameter onboarded done.
- Threshold min, max (Range) or absolute (exact value) value with colour also option given.
- Alerts such as Email, SMS & push notification dropdown mapped (hard coded in front end)



Reports Menu

- It gives us the log list of device data which comes from random generation Api call

INSPIRISYS SOLUTION
Generic Asset Solution

Hi,admin

Reports

DEVICE DETAILS

| DEVICE ID | CONFIGURED ASSET | VALUE | STATUS | LAST UPDATE DATE |
|-----------------|------------------|----------------------------------|--------|------------------|
| 494990805790206 | VTs | '(\speed';31,\odometer';17807)' | OFF | 6/9/22, 1:29 PM |
| 442893517734160 | VTs | '(\speed';55,\odometer';17832)' | ON | 6/9/22, 1:29 PM |
| 540065144825007 | VTs | '(\speed';27,\odometer';17789)' | OFF | 6/9/22, 1:29 PM |
| 985163031210995 | VTs | '(\speed';12,\odometer';17776)' | ON | 6/9/22, 1:29 PM |
| 539013698096289 | VTs | '(\speed';131,\odometer';17880)' | OFF | 6/9/22, 1:29 PM |
| 539013698096289 | VTs | '(\speed';86,\odometer';17808)' | ON | 6/9/22, 1:29 PM |
| 494990805790206 | VTs | '(\speed';86,\odometer';17768)' | ON | 6/9/22, 1:29 PM |
| 492276079564168 | VTs | '(\speed';121,\odometer';17771)' | OFF | 6/9/22, 1:29 PM |

Widget Creation

INSPIRISYS SOLUTION
Generic Asset Solution

Hi,admin

Create Widget

AVAILABLE WIDGETS (2)

BLE-CHARTS
Created:16/08

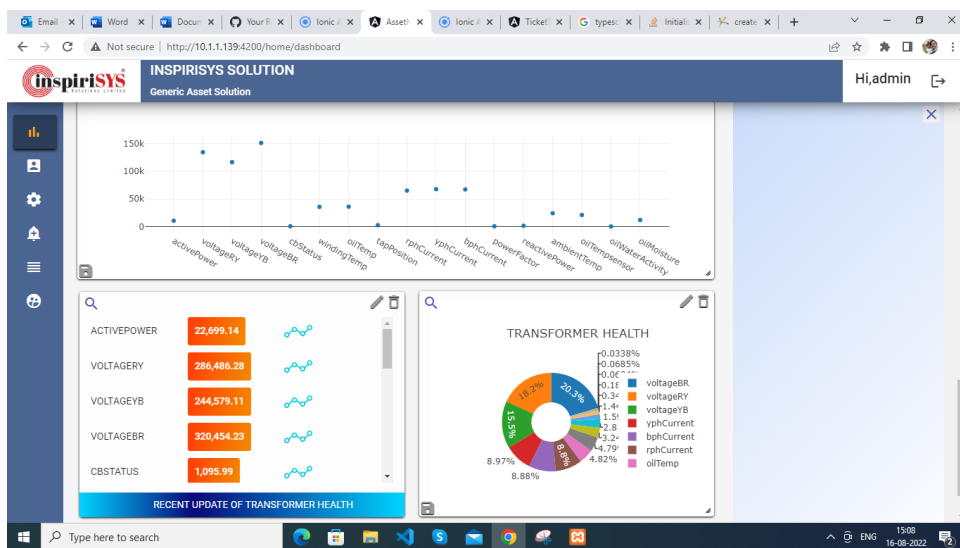
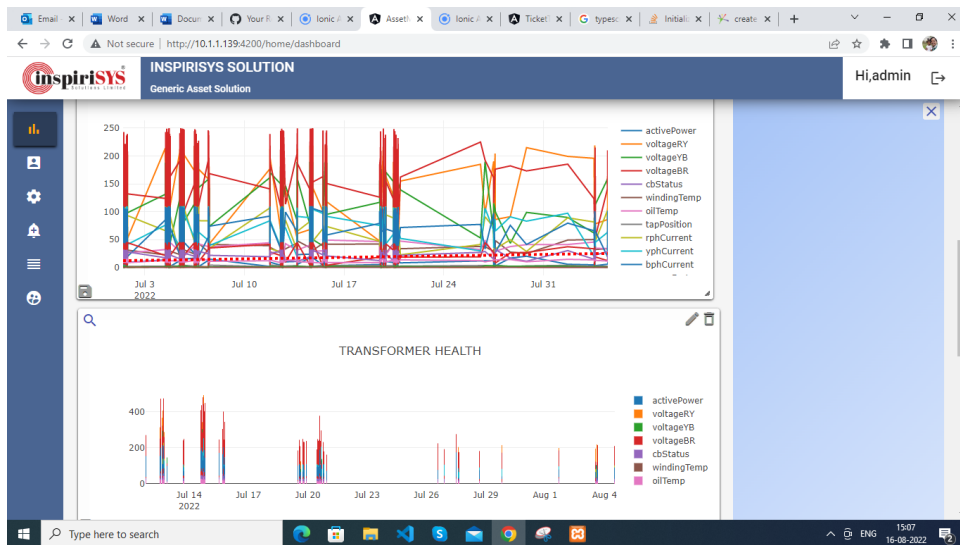
VTIS-TABLE
Created:16/08

ACTIVE DEVICE 4

INACTIVE DEVICE 0

TOTAL DEVICE COUNT 4

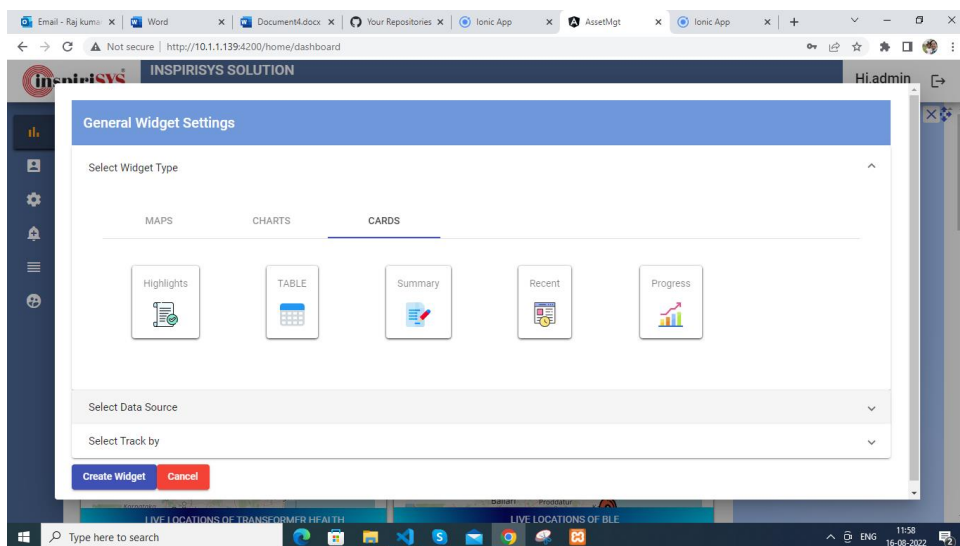
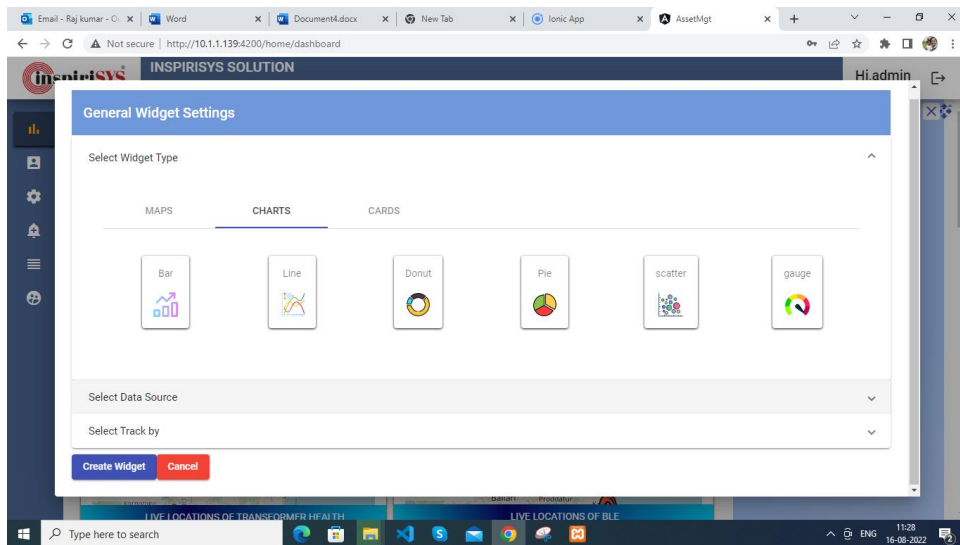
LIVE LOCATIONS OF BLE



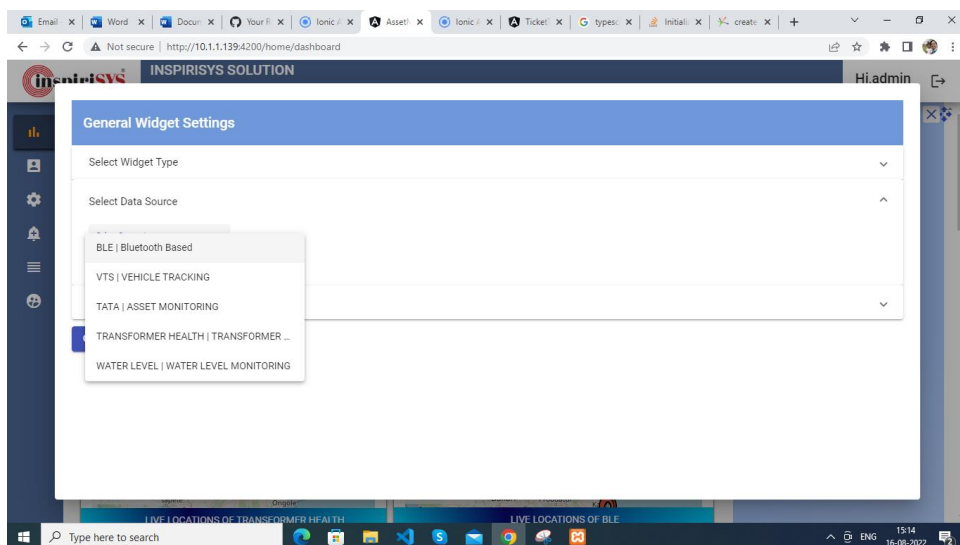
WIDGET ACCESS RIGHTS

Admin Role on Dashboard:

- 1, Having access to view/add/edit & deleted - dashboard widgets
- 2, Able to create widgets by clicking "create widget" button



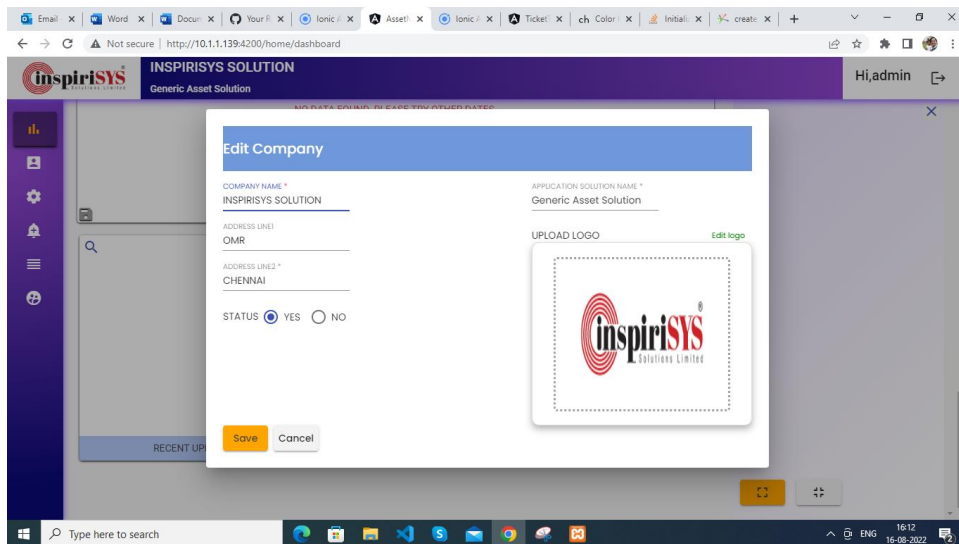
- **3, Once widget type chosen then to select asset config which we configured with devices & parameters.**



- The newly created widget would be listed out on the right panels as available for drag & drop option.
- Once the dropped the widget on the left panel will be shown by default height and weight.
- Admin can resize the widget & drag vertically and horizontally to the area where admin wants to display.

Admin Access - My Profile Access

Admin Role can change the Profile details such as company name, address, logo and application solution name.



LEVEL1 USER Access

Login Credentials

Username: user1

Password: user

1, Normal user can able to view the mapped dashboard widgets only.

