When you want to choose an IoT Software platform, it is essential to ensure its flexible to integrate with the outside world.

We believe, especially in the Internet of Things space, to be able to integrate other back-office systems, other IOT networks, other IOT sensors and other Network Servers.

The ThinxView platform has been designed to be totally Open. Whatever the integration you wish to achieve, whatever the protocol used, our IOT platform and our IOT solutions are Open to integration, which you can do yourself, or ask us to do it for you. And, most importantly we have designed our platform to scale it up at ease.
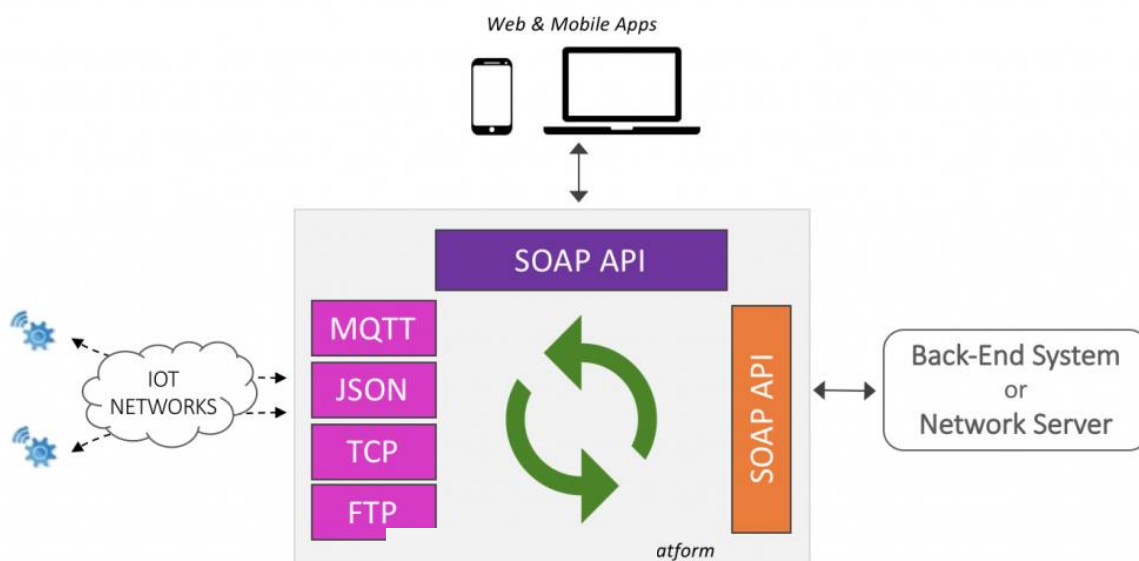
Different ways to Integrate with our platform:

- Integration of IoT sensors/Hubs in JSON or via a TCP/IP protocol
- Integration of IoT sensors/Hubs via the MQTT protocol
- Integration of IoT sensors/Hubs using custom protocol
- Integration of sensor data through Standard LPWAN Network Server (LORA, SIGFOX)
- Open APIs for the development of third-party web or mobile applications
- Open APIs for integration with back-end software (ERP, BAM, CRM ...)

Different use cases our platform can cater to:

- Asset tracking and monitoring
- cold chain monitoring
- Ware house management
- Smart Cities
- Smart Homes
- Smart Factories
- Our architecture is highly flexible in adopting to new use cases

Integration of IOT devices into JSON or TCP / IP protocol

For IOT sensors communicating over TCP / IP, the IOT platform provides a set of fully documented (JavaScript Object Notation) JSON APIs (with code examples) that can be called through HTTPS

queries.

IOT device integrations via the MQTT protocol

The ThinxView software platform supports both modes of communication. The Message Queuing Telemetry Transport (MQTT) protocol is an ISO standard for message communications based on a publish-subscribe model. It is optimised for remote communications especially for low data rate networks.

MQTT is a natural choice for the Internet of Things. It is often described as the M2M connectivity protocol of the Internet of Things.
The operating principle is based on an architecture where a "Client" (a sensor for example) publishes (Publish) its data, by defining a "Topic", with a Broker. Other Clients may subscribe (Subscribe) to receive data published on a particular "Topic".

The ThinxView software platform supports both modes of communication:

ThinxView as MQTT Broker: As a Broker, our platform can receive data from sensors that publish their measurement results (Publish). And dispatcher them to "Subscribers" who wish to receive them.

ThinxView as Subscriber: As a Subscriber, our platform can subscribe to different "Topics" on sensors, or from other Brokers, and feed dashboards, advanced analytics and Alerts.

Integration of IOT devices into JSON or TCP / IP protocol

We also understand the fact that various users might want to continue with custom protocols that they might be using across product lines, in which case it is also possible to support a proprietary TCP protocol.

LPWAN Servers Standard Integrations

We very well acknowledge the fact that most of today's IoT Solutions will be based on standard LPWAN protocols, which is why we carry out standardized integrations with different LWPAN Network Servers (LORAWAN, SIGFOX, RPMA, Weightless…).
We are open to other integrations that we might not be aware of.

Open APIs for developing third-party web or mobile applications

It is also possible to use our platform APIs to develop dedicated web or mobile applications. ThinxView has developed its entire platform based on APIs, which it makes available.

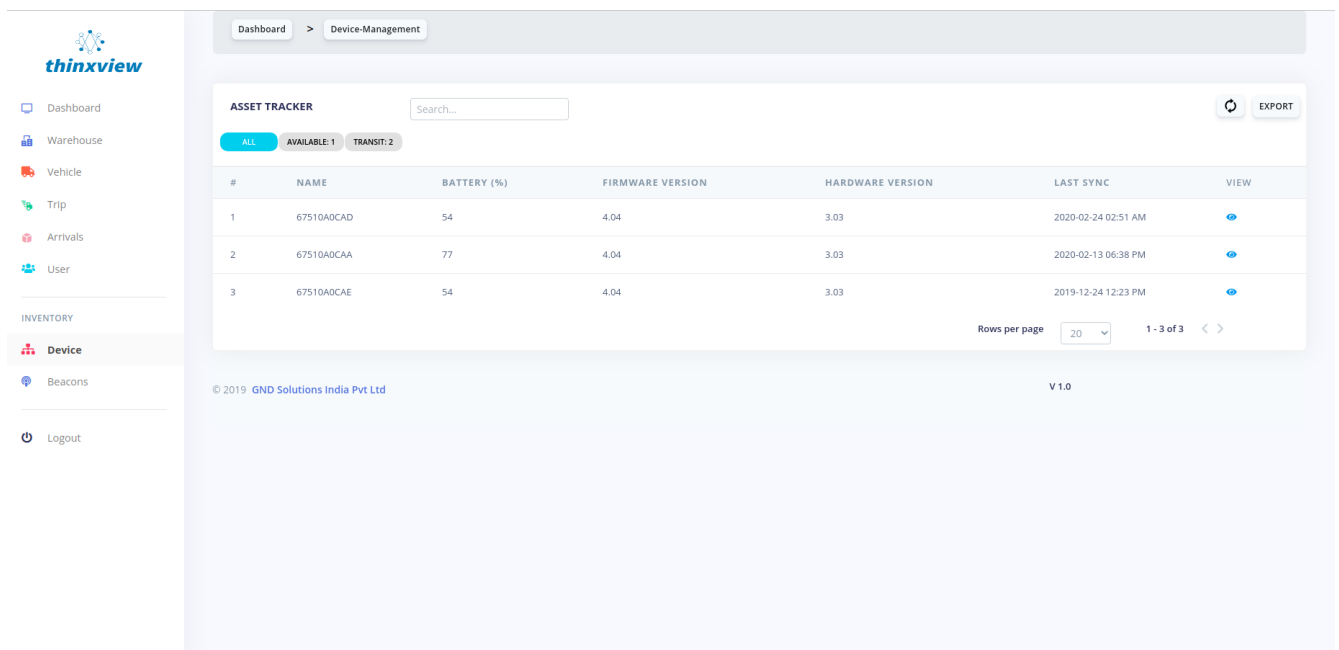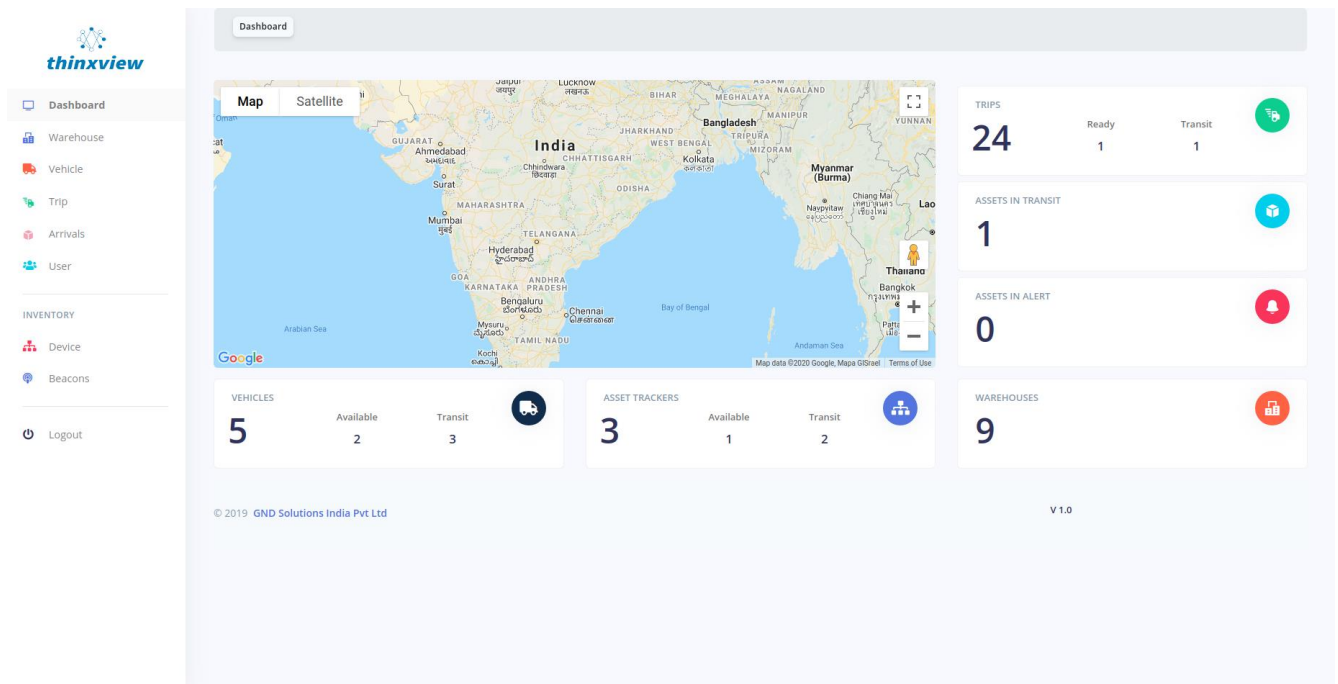## Open APIs for integration with back-end software (ERP, BMS, WMS etc.,)

Whether an ERP (Enterprise Resource Planning), a BMS (Building Management System), a CRM and WMS (WareHouse Management Software).We offer APIs to integrate information on machines, facilities, premises in which sensors are installed. The principle is that the data remains managed by the remote system, which communicates the necessary updates.

ThinxView Capabilities

If one wish to use our platform, here is the features list our platform can offer:

- Rich dashboard – where users can get snapshot of current happenings.
- Detailed view of data monitoring
- Device management – Like onboarding, editing, deleting, device firmware upgrades etc.,
- Reports generation & History view of data

screenshots

Dashboard > Device-Management > 3

← DEVICE DETAIL

Power Status ⬤

Name : 67510A0CAD   Hardware Version : 3.03   Last Update : 2020-02-24 02:51 AM

Battery : 54   Firmware Version : 4.04   Latest Device Mode :

Update

ALERT

GPS upload interval	5	Minutes
Sleep interval	53	Seconds
Alert Number	919500449967	

BLE

Storage interval	5	Minutes
Sampling interval	1	Seconds
Upload interval	5	Minutes

ACCELEROMETER

Status	⬤	
Hysteresis interval	10	Minutes
Sampling interval	60	Seconds

MAGNETOMETER

Status	⬤	
Hysteresis interval	10	Minutes
Sampling interval	60	Seconds

Sidebar menu:
- Dashboard
- Warehouse
- Vehicle
- Trip
- Arrivals
- User

INVENTORY
- Device
- Beacons

Logout

GND SOLUTIONS

Admin

Admin Dashboard
Digital View
Analog View
Gps
Reports
Alerts
Configurations
Settings
Logout

Temperature   Door   GPS

--Select Customer--   --Select Group--   **Filter**

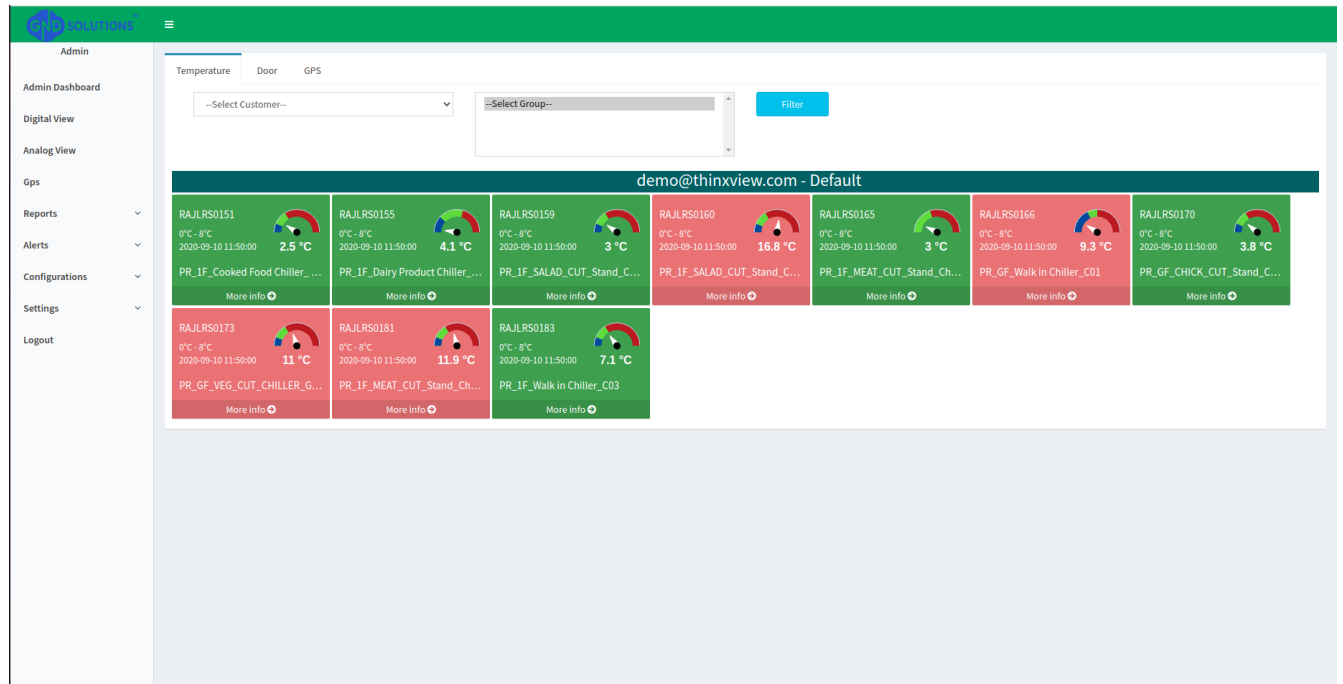**demo@thinxview.com - Default**

RAJLRS0151 PR_1F_Cooked Food Chiller...	RAJLRS0155 PR_1F_Dairy Product Chille...	RAJLRS0159 PR_1F_SALAD_CUT_Stand_...	RAJLRS0160 PR_1F_SALAD_CUT_Stand_...	RAJLRS0165 PR_1F_MEAT_CUT_Stand_C...	RAJLRS0166 PR_GF_Walk in Chiller_C01	RAJLRS0170 PR_GF_CHICK_CUT_Stand_...	RAJLRS0173 PR_GF_VEG_CUT_CHILLER_...
2.5 °C	**4.1 °C**	**3 °C**	**16.8 °C**	**3 °C**	**9.3 °C**	**3.8 °C**	**11 °C**
Range : 0°C - 8°C	Range : 0°C - 8°C	Range : 0°C - 8°C	Range : 0°C - 8°C	Range : 0°C - 8°C	Range : 0°C - 8°C	Range : 0°C - 8°C	Range : 0°C - 8°C
2020-09-10 11:50:00	2020-09-10 11:50:00	2020-09-10 11:50:00	2020-09-10 11:50:00	2020-09-10 11:50:00	2020-09-10 11:50:00	2020-09-10 11:50:00	2020-09-10 11:50:00

RAJLRS0181 PR_1F_MEAT_CUT_Stand_C...	RAJLRS0183 PR_1F_Walk in Chiller_C03
11.9 °C	**7.1 °C**
Range : 0°C - 8°C	Range : 0°C - 8°C
2020-09-10 11:50:00	2020-09-10 11:50:00

Admin

Admin Dashboard

Digital View

Analog View

Gps

Reports ⌄

Alerts ⌄

Configurations ⌄

Settings ⌄

Logout

Daily Report	Daily Summary	Monthly Report	Complete Report

demo@thinxview.com ▾ Default ▾ PR_1F_Cooked Food Chiller_ F00 ▾ 01/07/2019 10/09/2020

Filter

S.no	Equipement ID	Sensor Name	Temperature (°C)	Humidity (%)	Battery (%)	Date & Time
1	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	5.7	73	46	2020-03-11 10:35:44
2	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	5	72	46	2020-03-11 11:05:52
3	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	5.4	71	46	2020-03-11 11:35:59
4	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	6.6	74	46	2020-03-11 12:06:07
5	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	4.9	72	46	2020-03-11 12:36:15
6	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	4.1	71	46	2020-03-11 13:06:23
7	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	6.8	88	46	2020-03-11 13:36:31
8	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	3.9	71	46	2020-03-11 14:06:38
9	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	2.4	72	46	2020-03-11 14:36:46
10	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	3.7	73	46	2020-03-11 15:06:54
11	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	1.6	72	46	2020-03-11 15:37:02
12	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	0.6	73	46	2020-03-11 16:07:10
13	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	0.1	73	46	2020-03-11 16:37:17
14	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	-0.3	73	46	2020-03-11 17:07:25
15	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	-0.7	73	46	2020-03-11 18:07:41
16	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	-1.2	73	46	2020-03-11 18:37:49
17	AJV/KCB/F008	PR_1F_Cooked Food Chiller_ F008	-1.6	73	46	2020-03-11 19:07:56