



inVirtus  
TECHNOLOGIES

# Who we are

Developper and integrator of IoT solutions dedicated to indoor & outdoor asset tracking.

End-to-end turnkey solution

1- Tracking device

2- open and scalable supervision software suite.

They trust us :

**stryker**

**THALES**

CHANTIERS  
DE L'ATLANTIQUE

**IDÉA**  
GROUPE



**VOLVO TRUCKS**

**naotic**  
technologies utiles

**AIRBUS**

**ALSTOM**

**Novatech  
Industries**

**NAVAL**  
GROUP



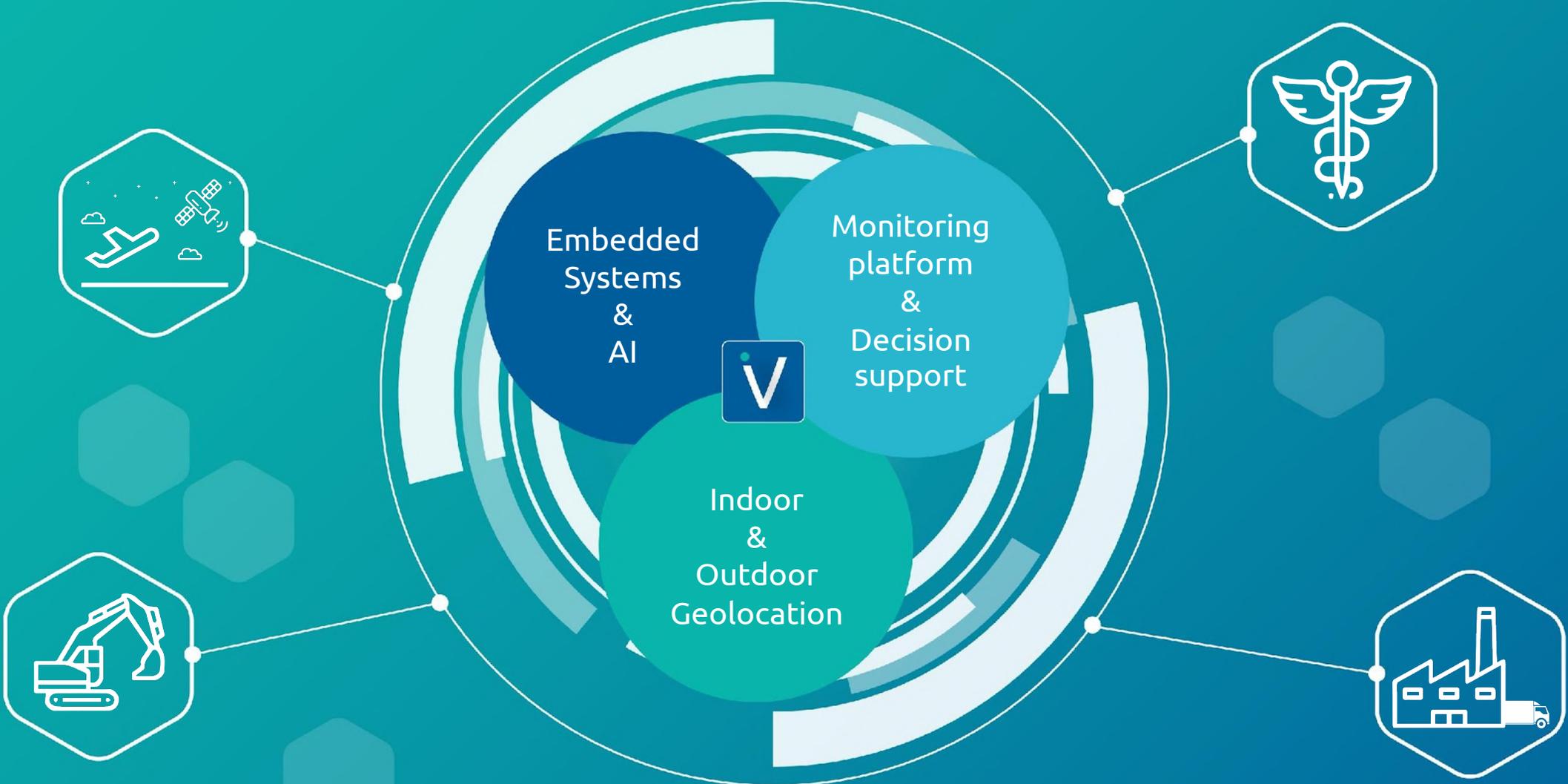
LA POSTE

**ENGIE**

**SNCF**

**Gifi**  
des idées de Génie !

# inVirtus : Skills & Sectors



# Issues addressed :

The needs in traceability are increasing everyday, whether to optimize your production flow or to monitor your asset movements on different plants. These kind of pains can easily be resolved with IoT solutions.

## Lost or stolen Assets

- Waste of time searching
- Unnecessary investments

## Low visibility of Assets' movements

- Poor optimization of asset uptime
- Double investment in containers



# Issues addressed :

## Painful inventories

- Long-lasting inventory
- No real-time stock assessment

## Non-optimized maintenance

- Distance covered by the asset is unknown
- Maintenance cycles not linked to real usage time



# An extended offer : A large device offer, for a versatile platform.

INDOOR



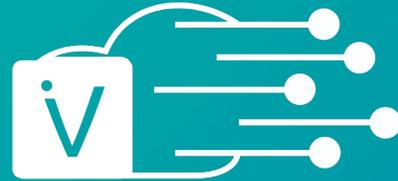
Your Assets



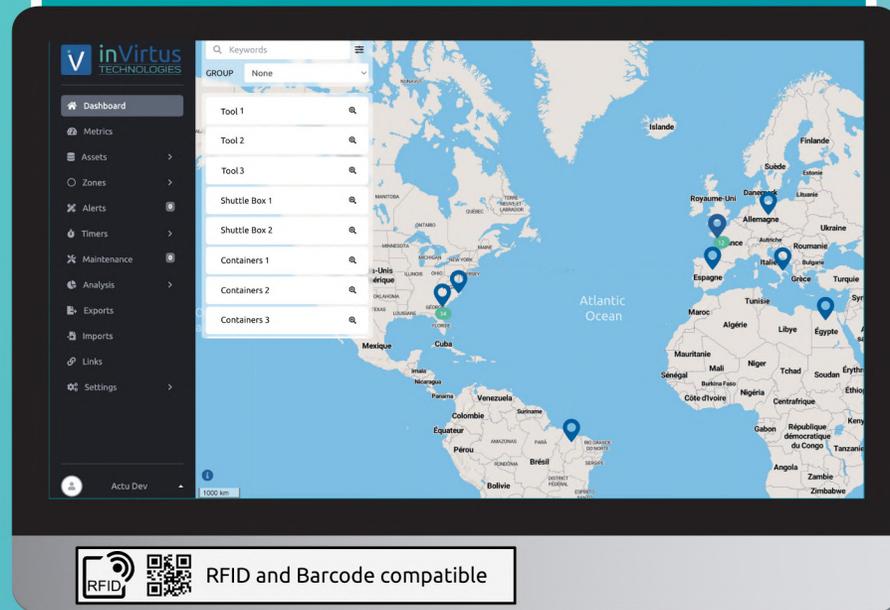
BLE Tags



InVirtus™ anchors



inVirtus Cloud™



RFID and Barcode compatible

INDOOR & OUTDOOR



Your Assets



inVirtus™ Tracker

# The inVirtus™ solution

## 1. Use case INDOOR

- Automatic inventories (e.g. for tools in a warehouse factory).
- Production monitoring (e.g. parts tracing on a production line).
- Outdoor & Indoor geolocation of valuable company assets.



# 1- Indoor Use case : Multi-site logistics

**Objective :** Real-time monitoring of parts/persons on a production line.

**ivBeacon™**



The BLE tag provides a real time location of your asset and allows you to study the incoming and outgoing flows.



**Storage area**

**ivScan™**



Generate zones allowing you to set up your equipment and transmit information in real time.



**Shipping & receiving area**

# 1- Indoor Use case : Multi-site logistics

## Objective : Traceability of sample letters

No more need for GPS to geolocate your tools on several industrial sites.

**ivScan™**

Positioned indoor and/or outdoor (IP67),  
it does not require any additional wiring.

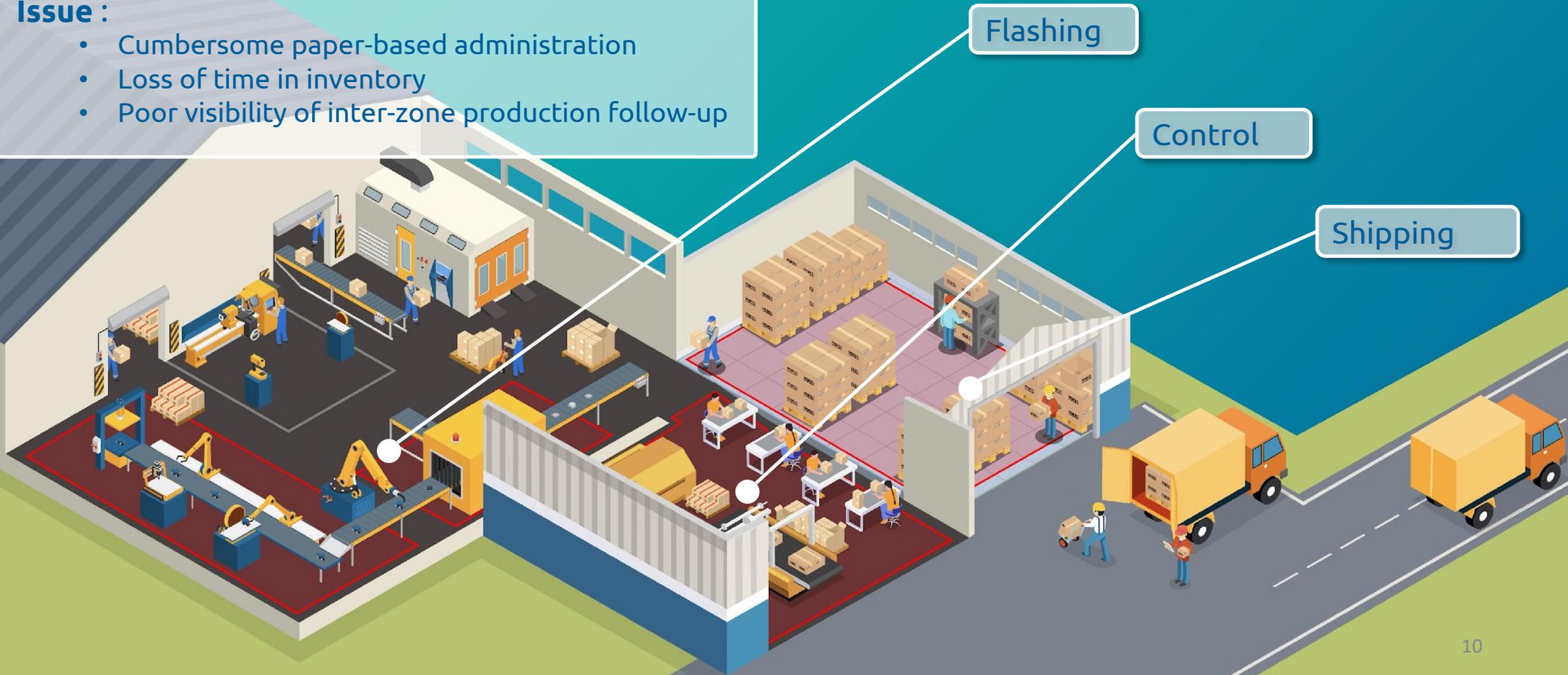


# 1- Indoor Use case : Industry

**Objective :** Follow-up of the production of parts at the end of the line.

**Issue :**

- Cumbersome paper-based administration
- Loss of time in inventory
- Poor visibility of inter-zone production follow-up



# 1- Indoor Use case : Industry

**Objective :** Follow-up of the production of parts at the end of the line.

## Benefits :

- Measurement of real tack time VS theoretical tack time
- Highlighting bottlenecks
- Better visibility of production capacity

The anchors are calibrated to pick up tags at a specific distance.



BLE tags are attached to each piece of equipment to be tracked.



The inVirtus™ platform can be accessed by anyone from a computer or mobile/tablet.





(BLE)



Temperature  
- 25°C / +70°C

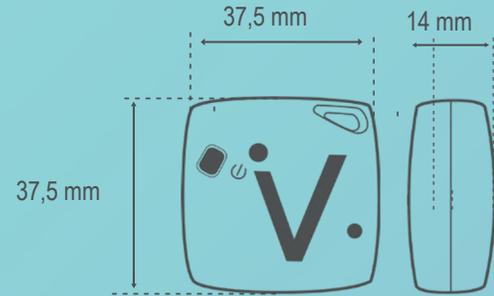


Battery life  
4 Y



Waterproof  
IP67

## Classic BLE TAG



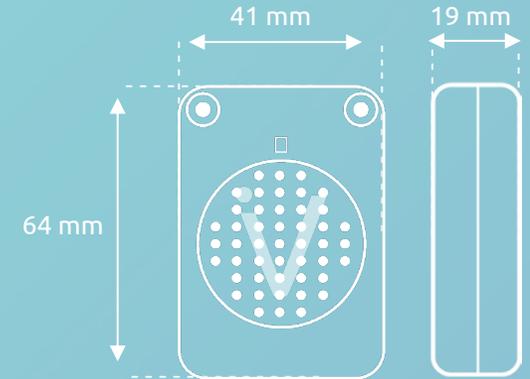
Bluetooth Low Energy (BLE) : EddyStone & iBeacon compatible

Battery life : 4 years  
*One signal every 4s*

Button / LED : On / Off

Reach : Max. 120 m

## Premium BLE TAG



Bluetooth Low Energy (BLE) : iBeacon & Eddystone compatible

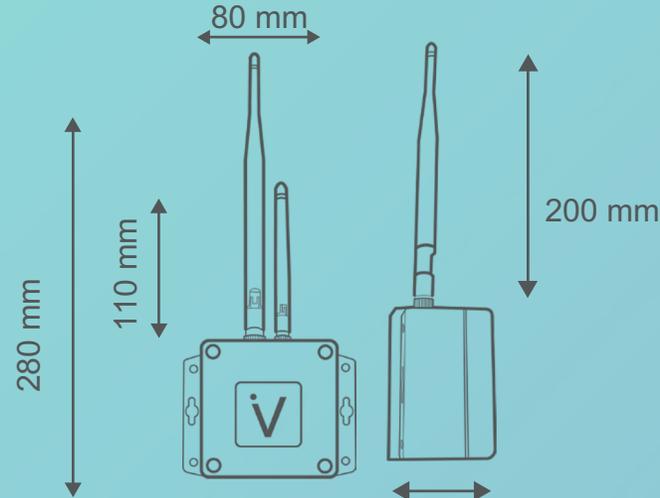
Battery life : 4 years

Advantages :

- Buzzer 90db
- LED

## Autonomous anchor

## Wired anchor

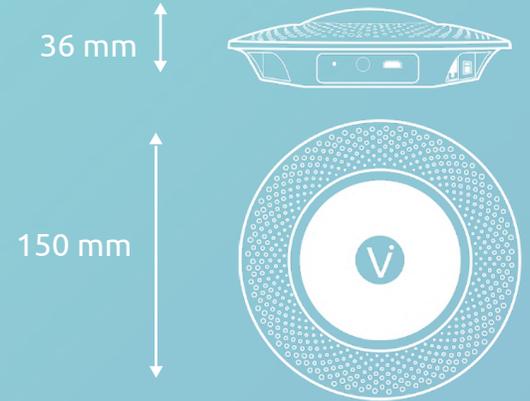


Weight : 288g  
 Battery life : 5 years  
 Communication : MQTTs  
 protocole

LORAWAN classe A : 868 Mhz  
 BLE / LoRa antenna : Omnidirectionnal

Advantages :

- IP67
- Temperature : -40°C / +85°C



Weight : 155g  
 Set-up : Automatic  
 Power Supply : - DC 5V  
 - micro-USB  
 - PoE  
 Communication : MQTTs  
 protocole

LORAWAN Class A : Omnidirectionnal

Advantages :

- Ethernet / Wifi connexion
- Temperature : -25°C / +85°C



Reach  
50 m



Wall Fixing  
Velcro adhesive  
Clamping Collar  
Screws



Plug & Play



(BLE)  
Bluetooth  
Low Energy

## 2. Use case OUTDOOR

- Automatic in-situ & ex-situ inventories (e.g. shuttle boxes).
- Monitoring of rolling stock (e.g. monitoring of a fleet of trailers).
- Outdoor geolocation of valuable objects.



# 2- Use case Outdoor : Multi-site logistics

**Objective :** Traceability of shuttle cases

## Issue :

- Administrative burden to validate the delivery on customer site
- Waste of time in inventory
- Poor visibility on the quantities in stock at the customers



# 2- Use case Outdoor / Indoor (mixed) : Multi-site logistics

**Objective :** Traceability of shuttle cases

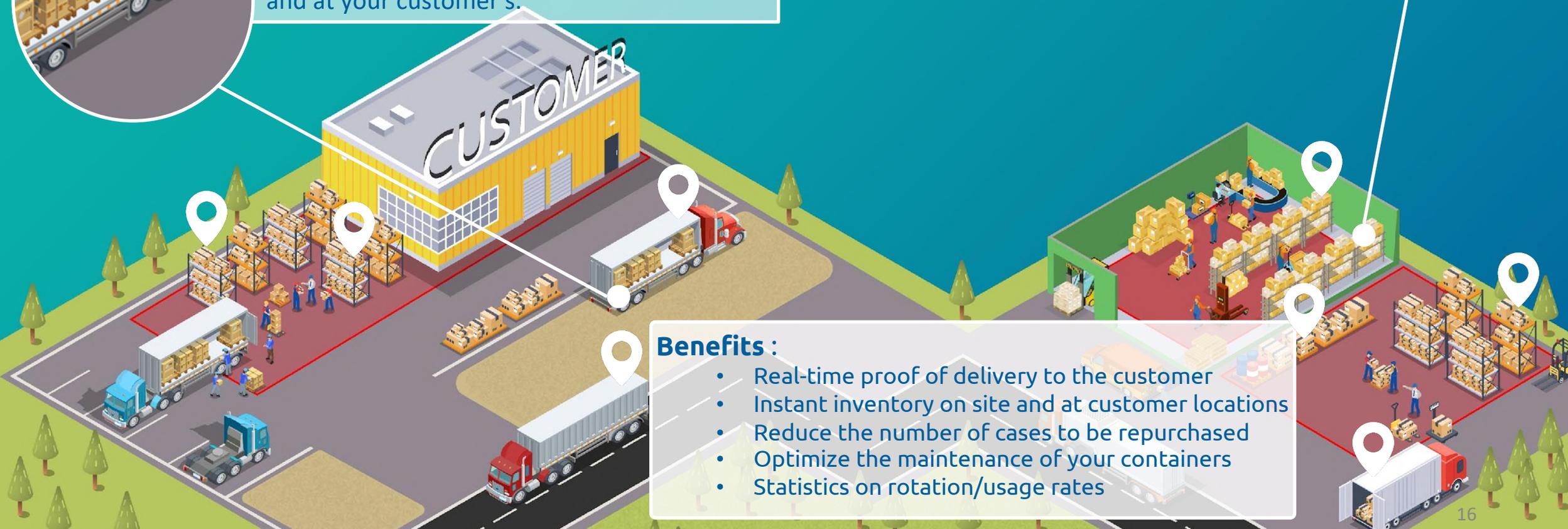


**ivtrack™**

Fixed on each container.  
Follow in real time your equipment at home  
and at your customer's.

**ivScan™**

Set up to detect incoming and outgoing  
flows in and out of a zone on your site.



**Benefits :**

- Real-time proof of delivery to the customer
- Instant inventory on site and at customer locations
- Reduce the number of cases to be repurchased
- Optimize the maintenance of your containers
- Statistics on rotation/usage rates

# ivTrackLite™ / ivTrackEvo™ :



Battery life :  
Up to 5 years



Functioning Temperature :  
-40°C / +85°C



Shock-resistant  
IK09



Waterproof  
IP67



Anti-Vandalism



## Install

Plug & Play and World Wide

## Hybrid technologies

LoRa / Smart GSM (2G, LTE-M, NB IoT)

## Omni-directional GNSS

Accuracy < 5 m\*

## Multi-GNSS fix mod

Normal, Dynamic, S&S

## BLE Bi directional

BLE Transmitter & Receiver

## Data recovery

160 GNSS fixes in memory

## Configurable indicator

Activation of the LED following an event  
(e.g.: maintenance date reached, last phase of the OF validated...)

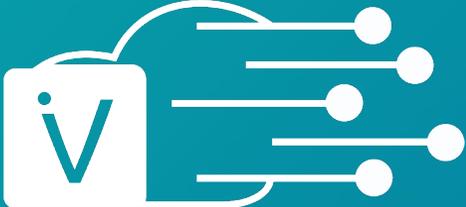


- 3D accelerometer
- Buzzer
- Temperature sensor
- Remotely configurable
- Color panel



InVirtus™ platform :

# inVirtus™ Cloud

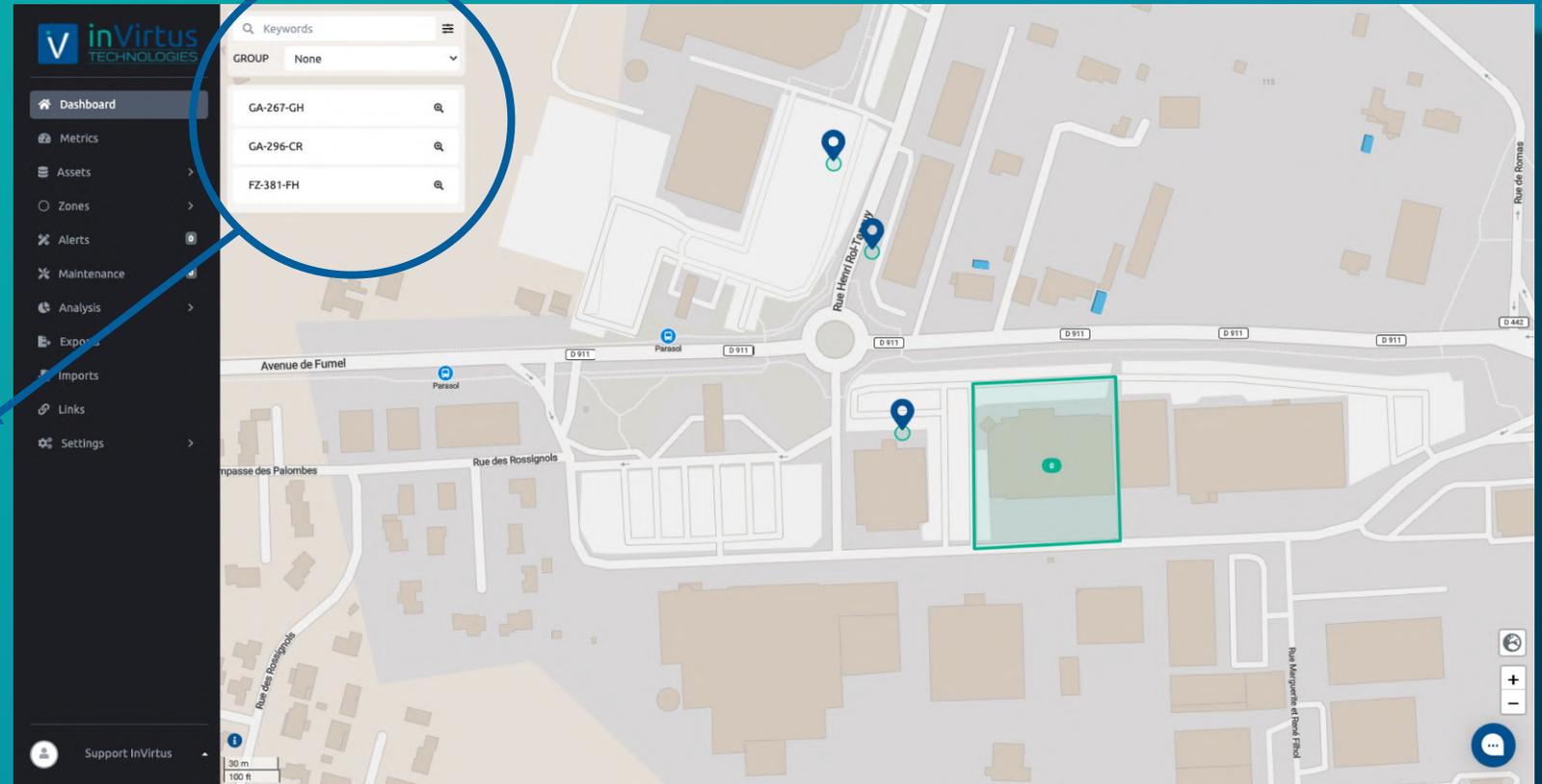


The image displays the inVirtus platform interface across three devices: a desktop monitor, a tablet, and a smartphone. The desktop monitor shows a dashboard with a sidebar menu, a search bar, and a map of France with numerous blue location pins. The tablet shows a 'Dynamic Heatmap' screen with filters for 'ASSETS GROUP' (Equipment générique), 'START' (01/09/2021 15:58), 'END' (24/11/2021 15:58), and 'GRANULARITY' (1 hour), with a 'Load data' button. The smartphone shows a detailed view of an asset 'Auto 1021010292' with a 'Historical Locations' section listing events like 'Tag link' and 'Loaded in the system'.

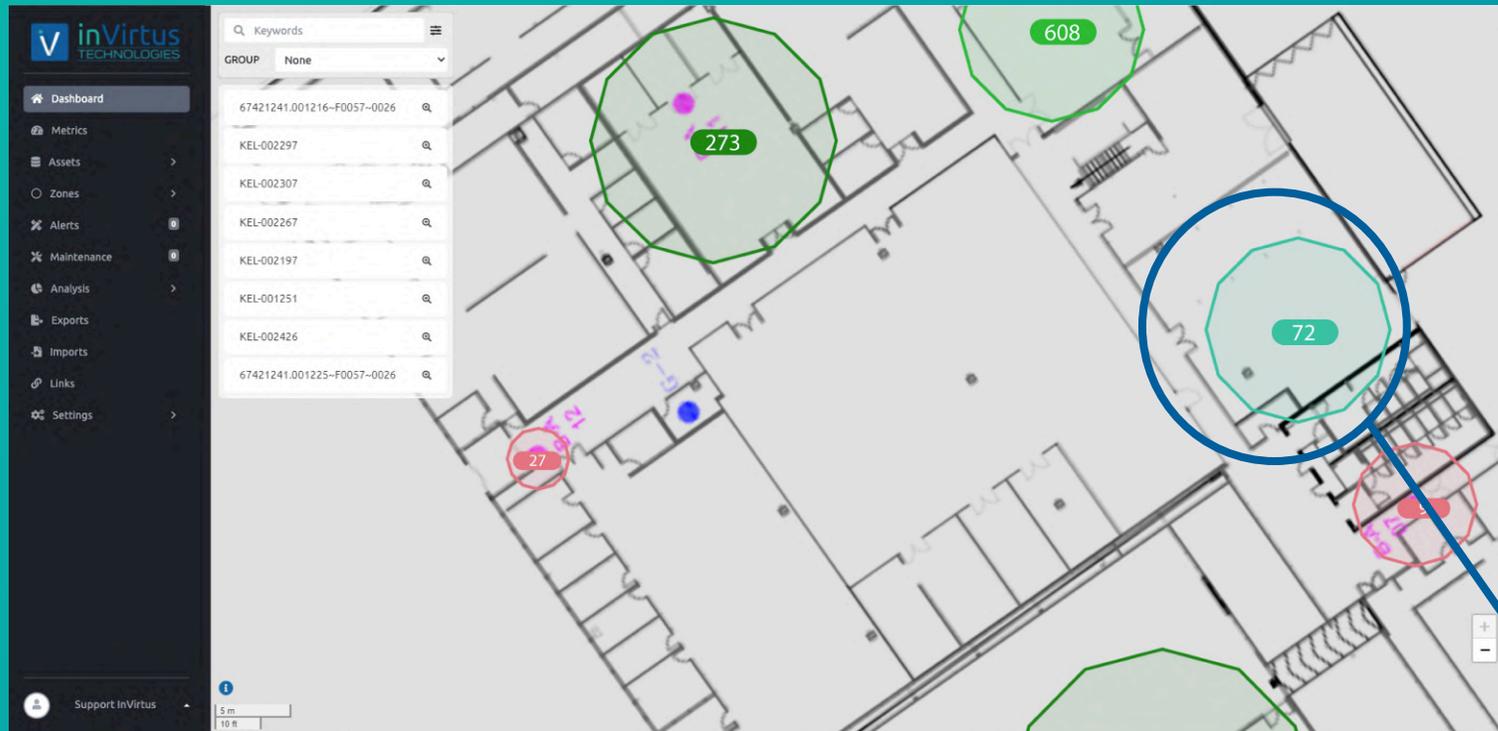
# InVirtus™ platform : a selective menu in your Dashboard

## Time savings :

- Direct access to the location of one piece of equipment, or a group of Assets
- Integrated filters to view only what you are interested in



# InVirtus™ platform : OF (Production Order) Search on your own site map



## Information in 1 click :

- Visualization of the number of OF present in a zone
- Identify your bottlenecks
- Indicate the state of progress of a particular OF

# InVirtus™ platform : customizable fields, linked to your ERP

**inVirtus TECHNOLOGIES**

Dashboard  
Metrics  
Assets  
Zones  
Alerts  
Timers  
Maintenance  
Analysis  
Exports  
Imports  
Links  
Settings

Support InVirtus

## Cobot mobile

DATA RECORD | BARCODE | IMAGES (1) | TIMELINE EVENTS (1577)

- Created at: 9/2/21, 4:16 PM
- Enabled: Yes
- Comment: None
- Groups: None

### Affiliation

- Container: Disabled
- Contained: Disabled

### Exhibition

- Year: 9/13/21
- Company: E-Cobot
- Website: <http://www.e-cobot.com>

### Characteristics

- Serial number: 0015
- Purchase date: 3/10/20
- Operational: Yes
- Distance (km): 2480

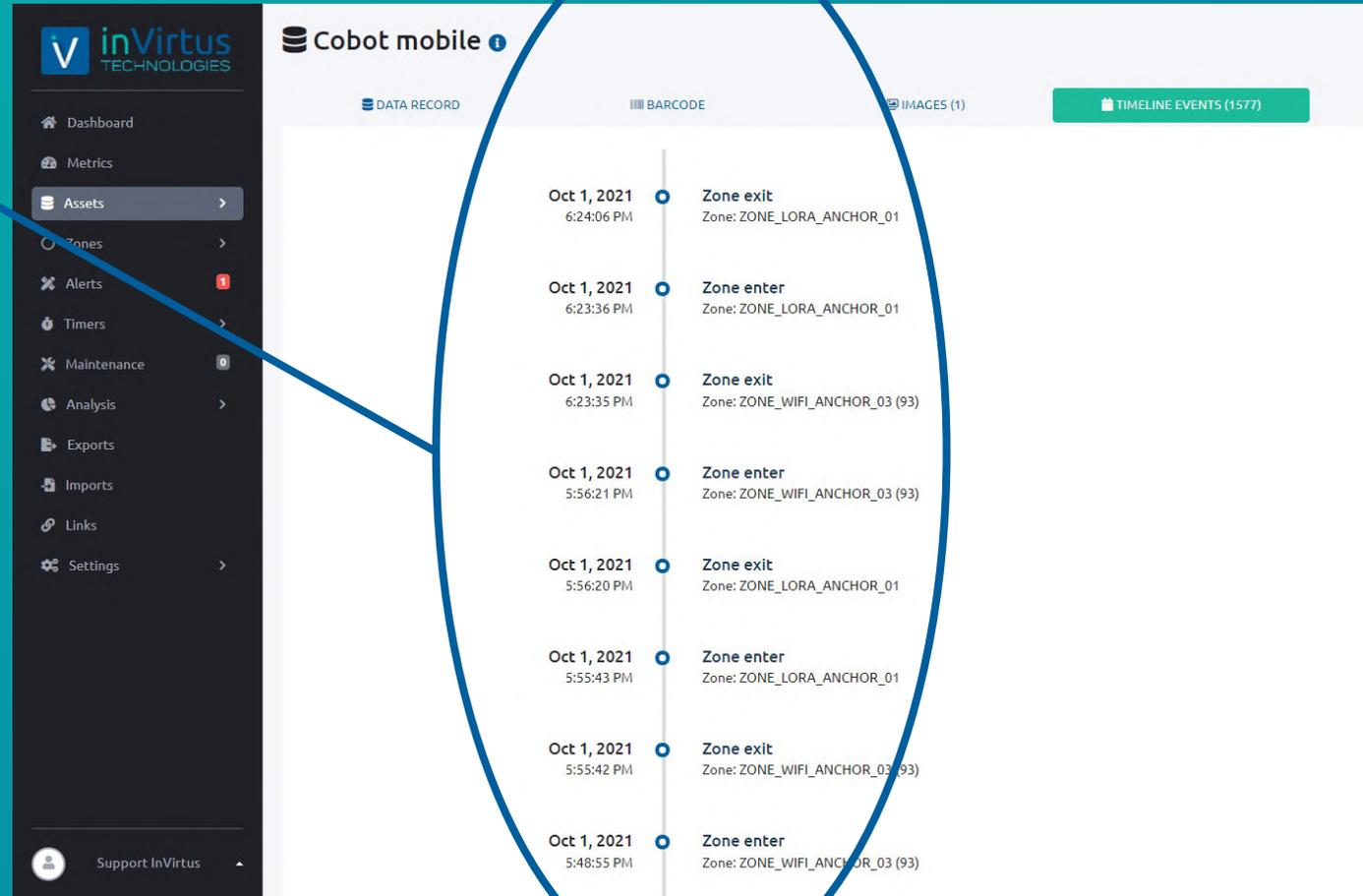
Define precisely your tracked equipment in order to get the best out of it later on :

- Searches via a custom field (serial number, type, customer...)
- Alerts on an upcoming maintenance date for example

# InVirtus™ platform : Lifecycle and path-tracking

Find the whole course of your OF in order to :

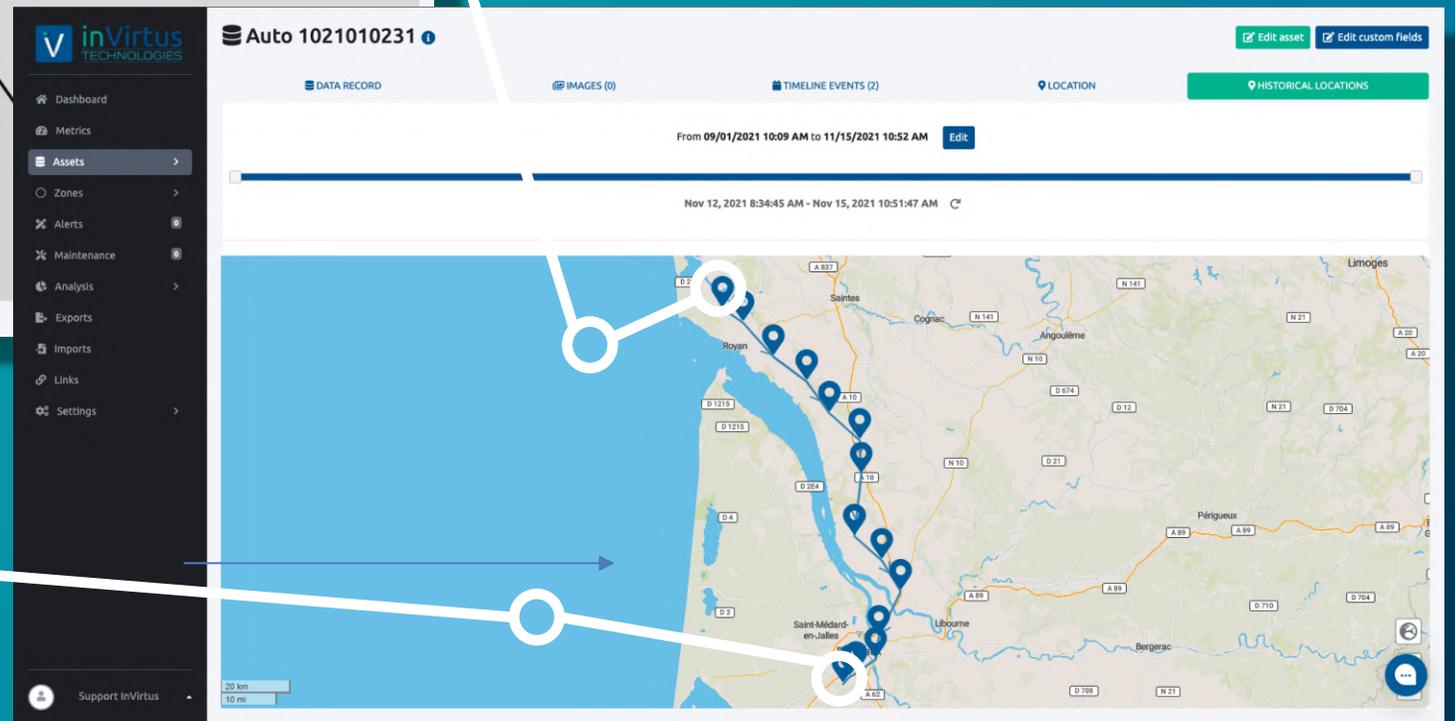
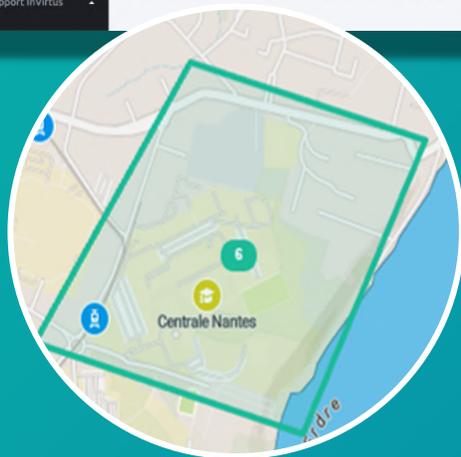
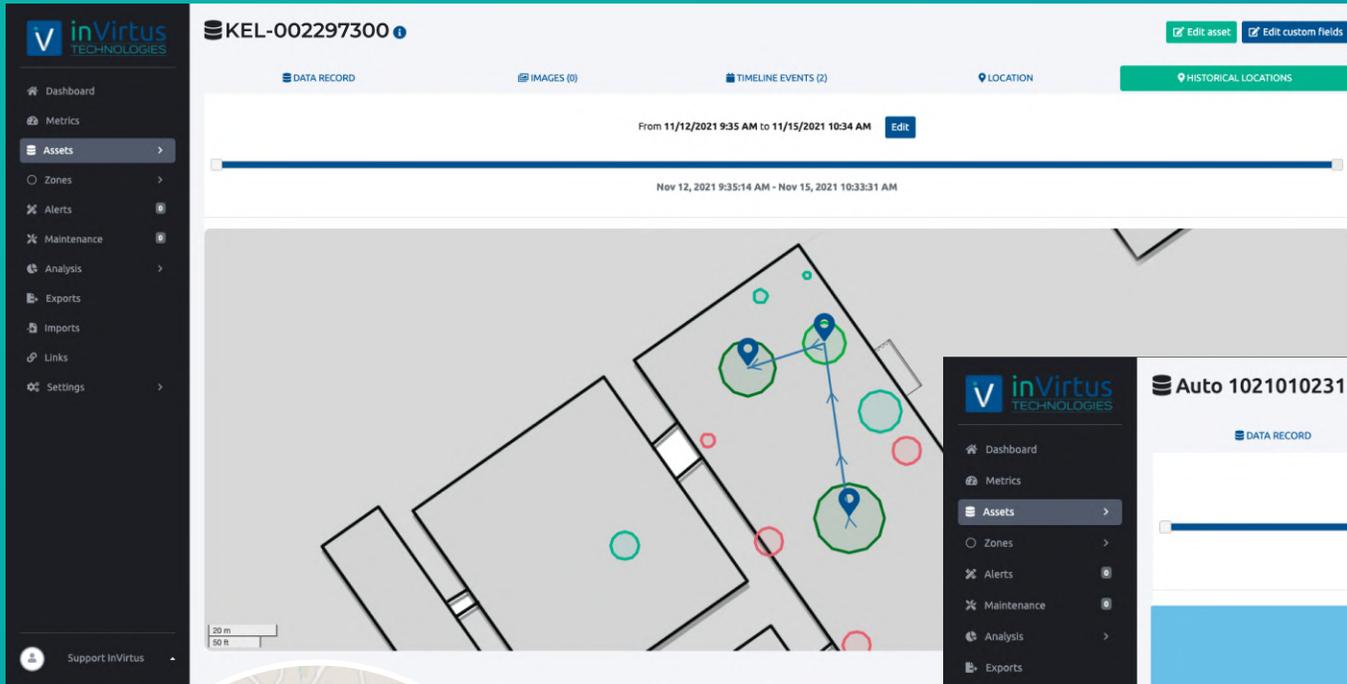
- Measure the real VS theoretical takt time
- Optimize time-consuming jobs
- Validate flows



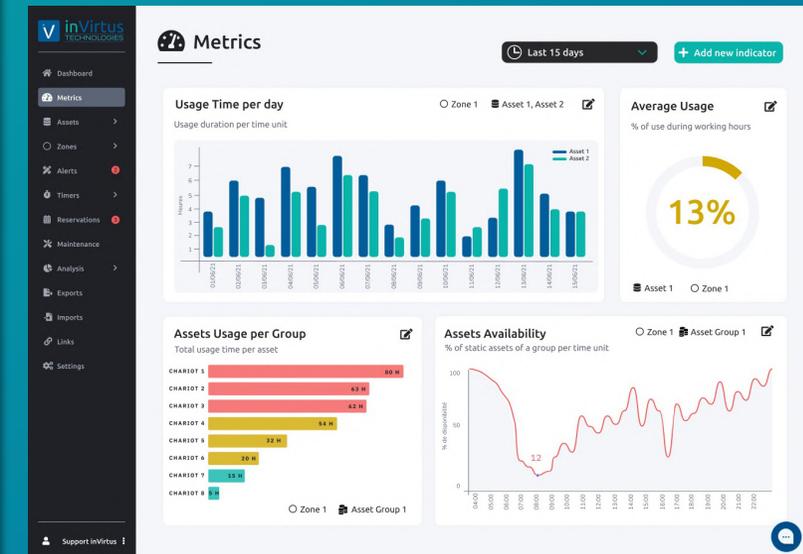
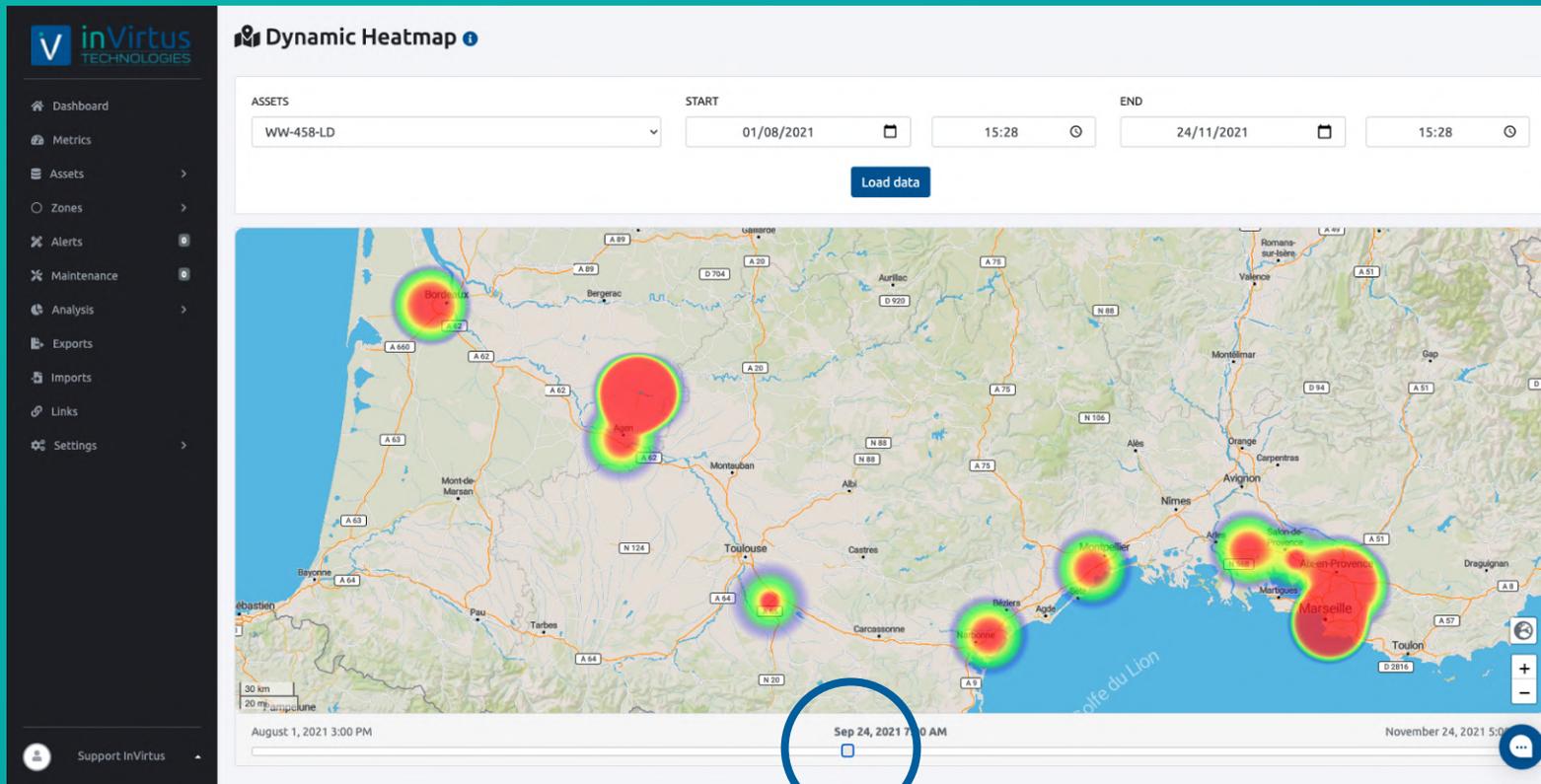
# InVirtus™ platform : Historical Positions

## Continuous indoor/outdoor tracking :

- Visualize the routes of your materials indoors and outdoors to optimize the routes.
- Monitor your suppliers' inventory without the help of any infrastructure.



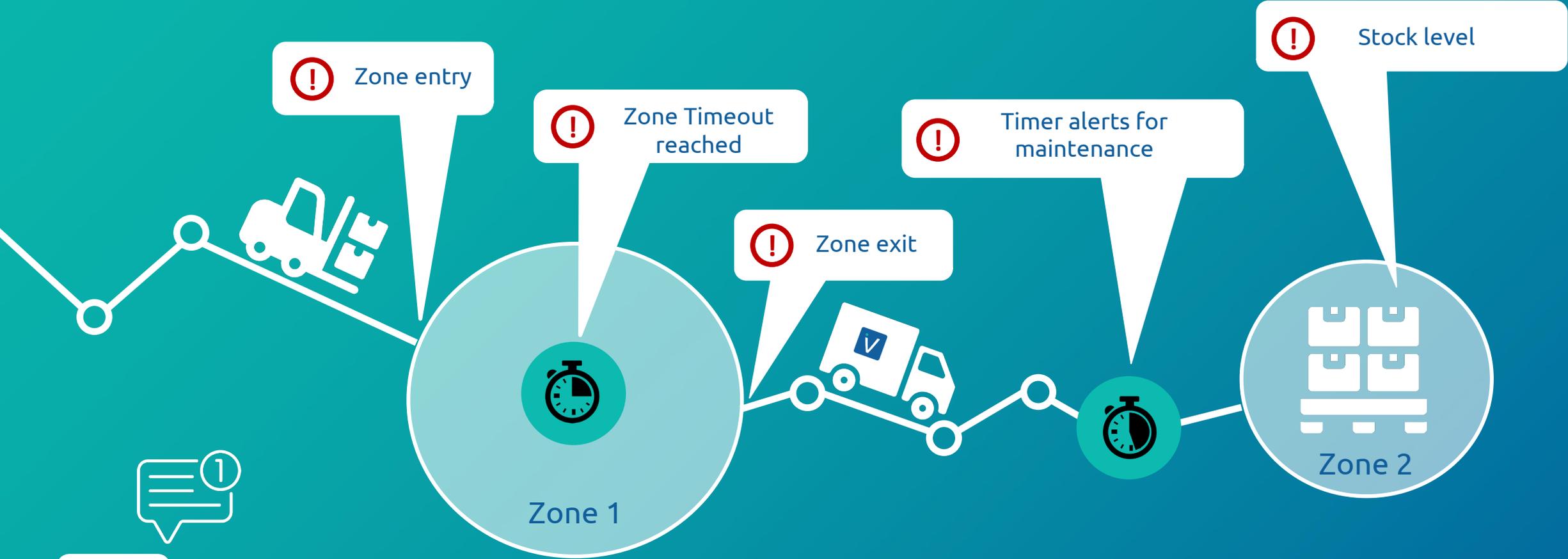
# InVirtus™ platform : evolutive Heat Map and Data Analysis



**Business-oriented analysis tools :**  
Business indicators and KPIs to track the utilization rate of a medium or packages that have been immobile for several days.

**Time slider for replay**

# InVirtus™ platform : Personalized and taylor made alerts



 LED activation on event



 Shock detection



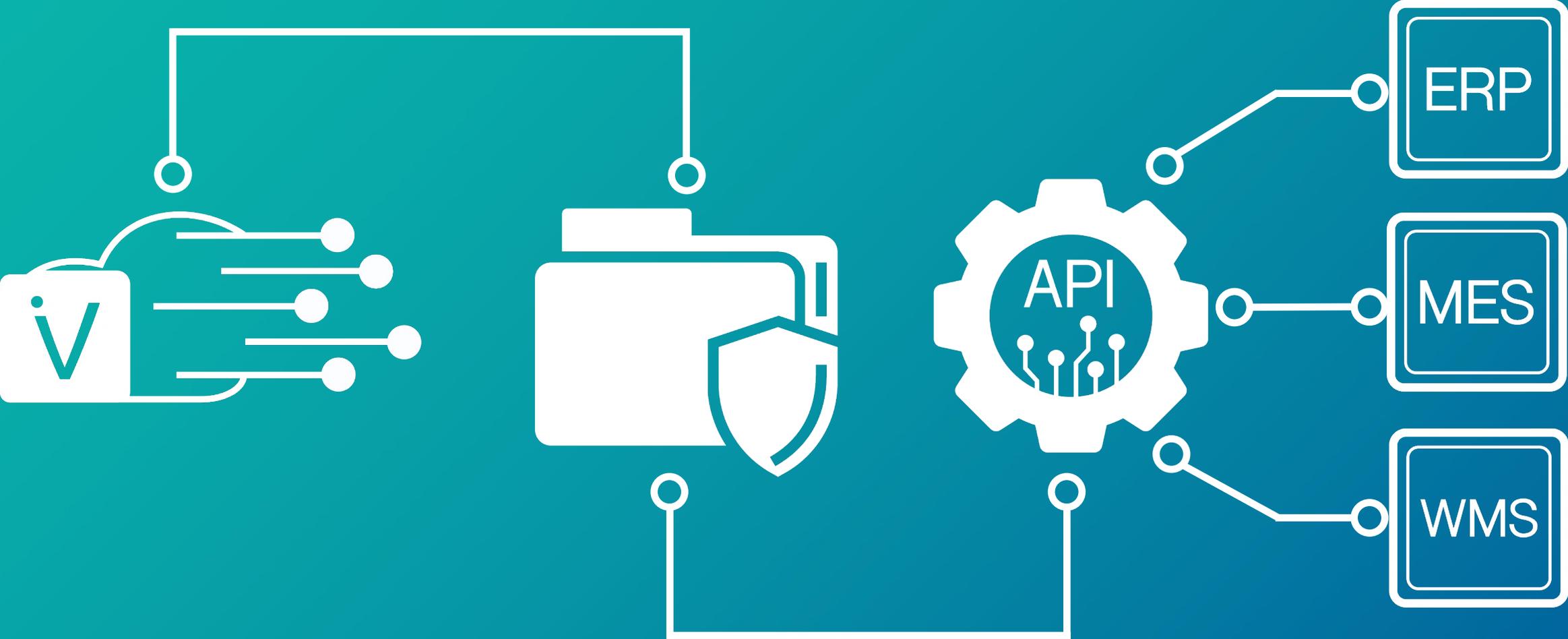
 Anti-theft



 Temperature sensor

# InVirtus™ platform : data transmission to your IT System

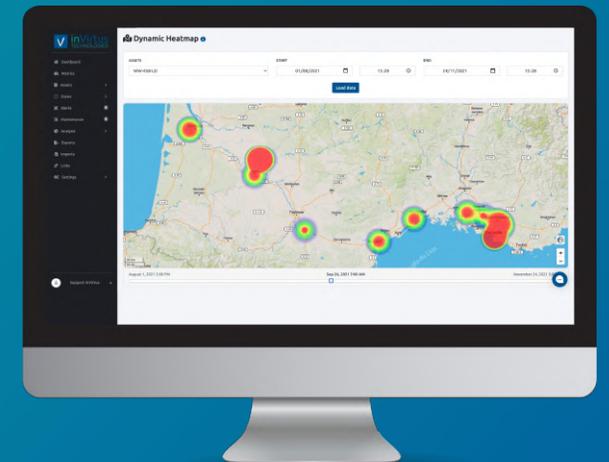
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# InVirtus™ Solution : 8 good reasons to consider InVirtus offer :

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1. Expertise in Asset and Production Order Tracking, with process optimization features
2. Evolutive and innovative solution (Tag buzzer, solar panel, software monthly releases,...)
3. Seamless Indoor & Outdoor geolocation
4. Easy integration with ERP and other 3rd-party systems
5. Easy plug & play installation : No infrastructure required
6. Hardware and Software simple adaptation to Customers' EON
7. On-premise installation possible with no flow going out of the site
8. Help our Customers keep one step ahead in Digital !...



# THANKS FOR YOUR ATTENTION



**To stay in touch :**

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**inVirtus**  
TECHNOLOGIES

Switch to industry 4.0