



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

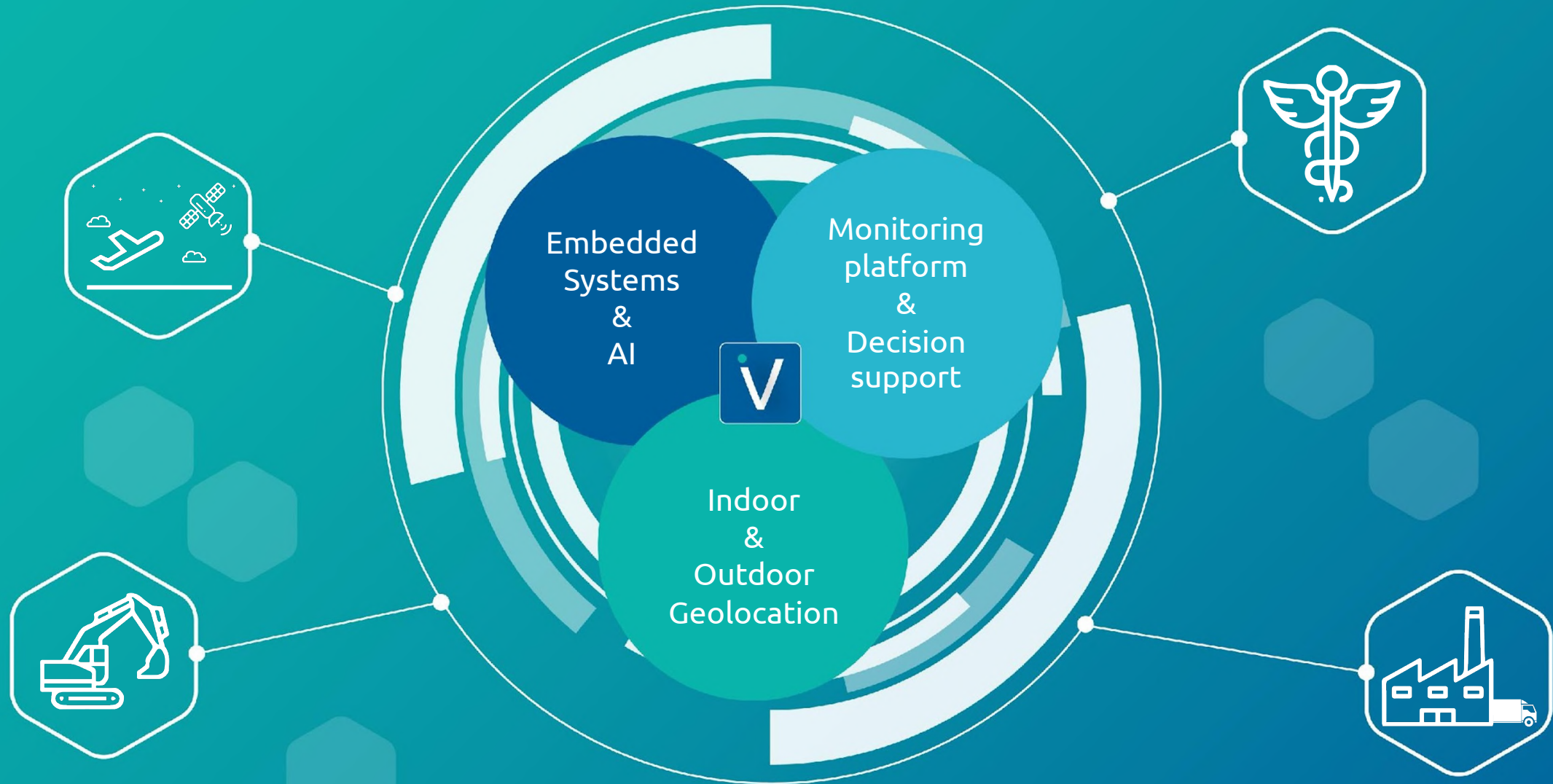

LA POSTE


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™



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.

ivScan™



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



Storage area



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.

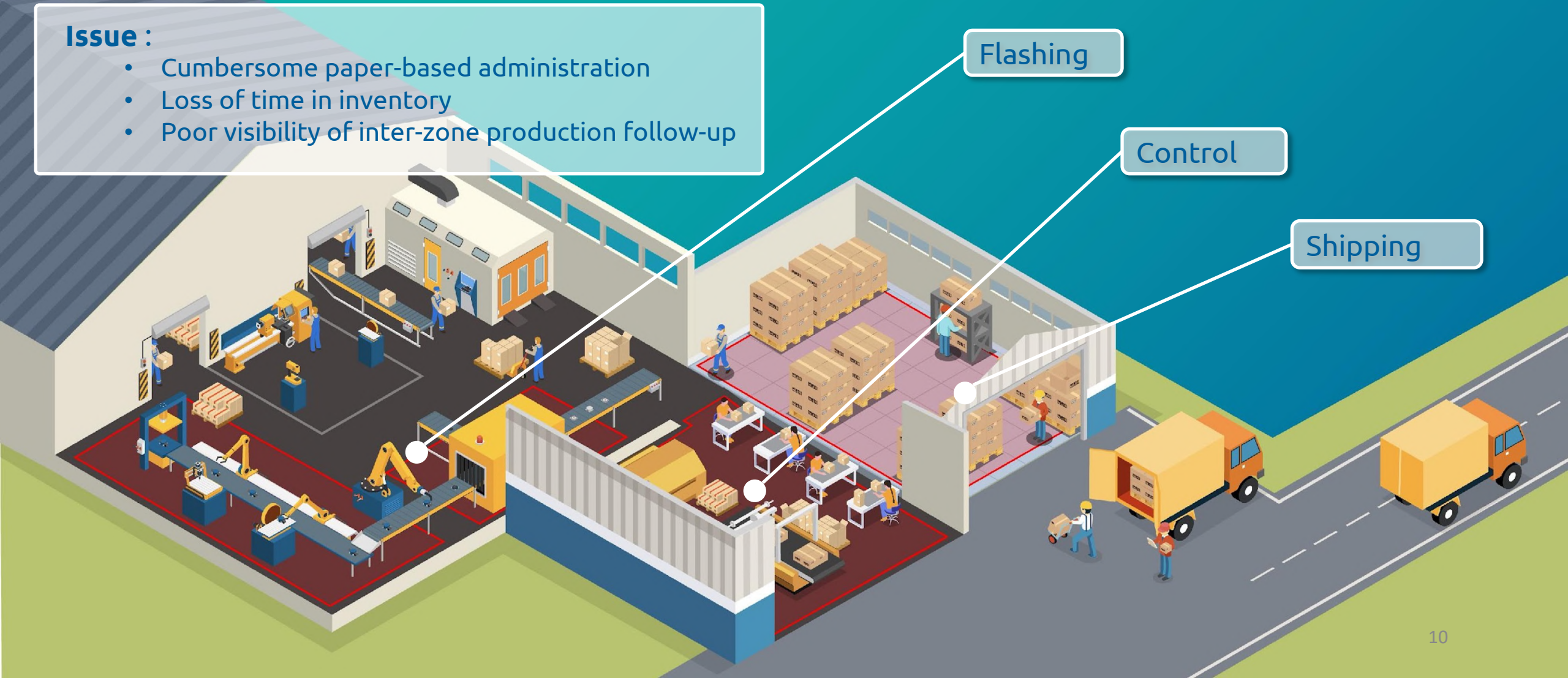
Issue :

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

Flashing

Control

Shipping



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

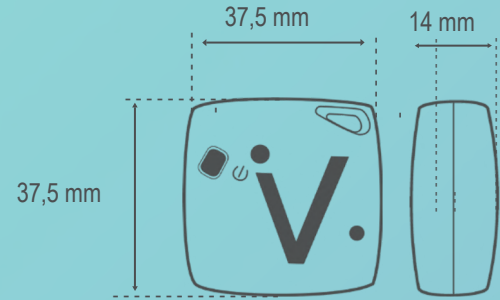


Battery life
4 Y



Waterproof
IP67

Classic BLE TAG



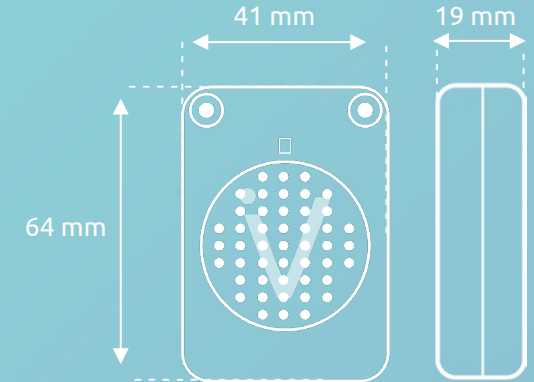
Bluetooth Low : EddyStone &
Energy (BLE) iBeacon compatible

Battery life : 4 years
One signal every 4s

Button / LED : On / Off

Reach : Max. 120 m

Premium BLE TAG



Bluetooth Low : iBeacon &
Energy (BLE) Eddystone compatible

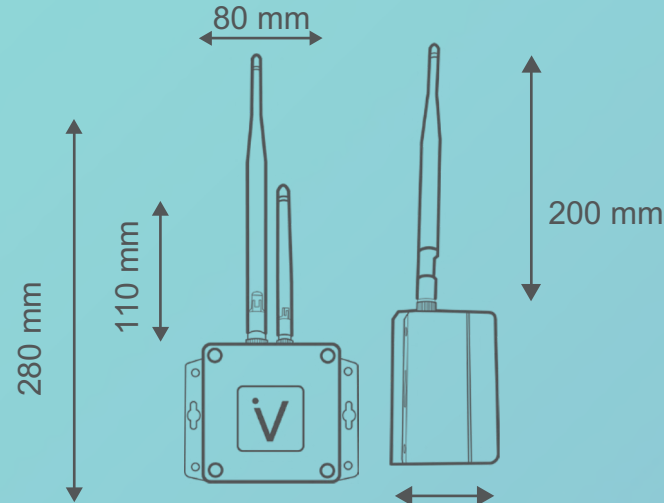
Battery life : 4 years

Advantages :

- Buzzer 90db
- LED

Autonomous anchor

Wired anchor

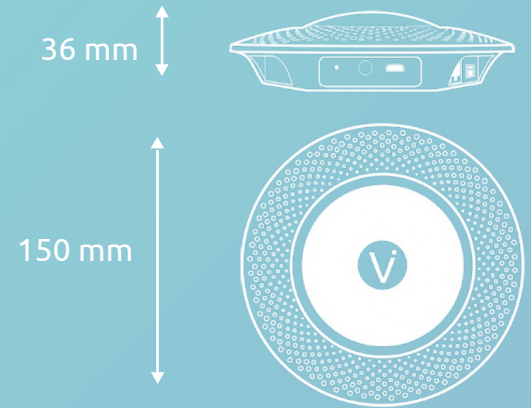


Weight : 288g
 Battery life : 5 years
 Communication : MQTTs
 protocole

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

50 mm



93 mm



35 mm

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

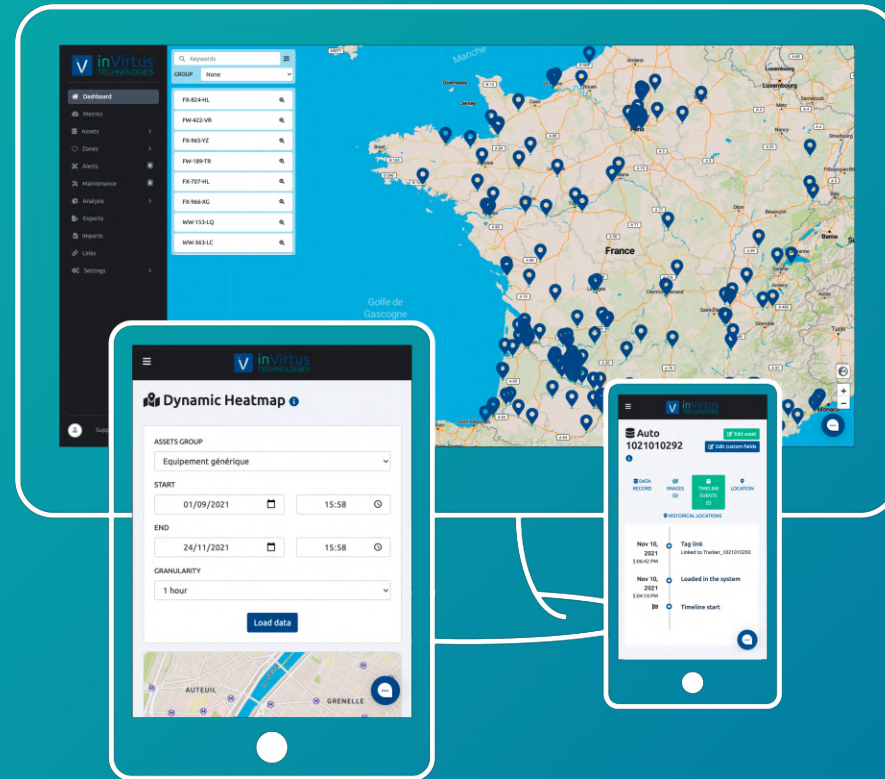
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* in optimal conditions

InVirtus™ platform :

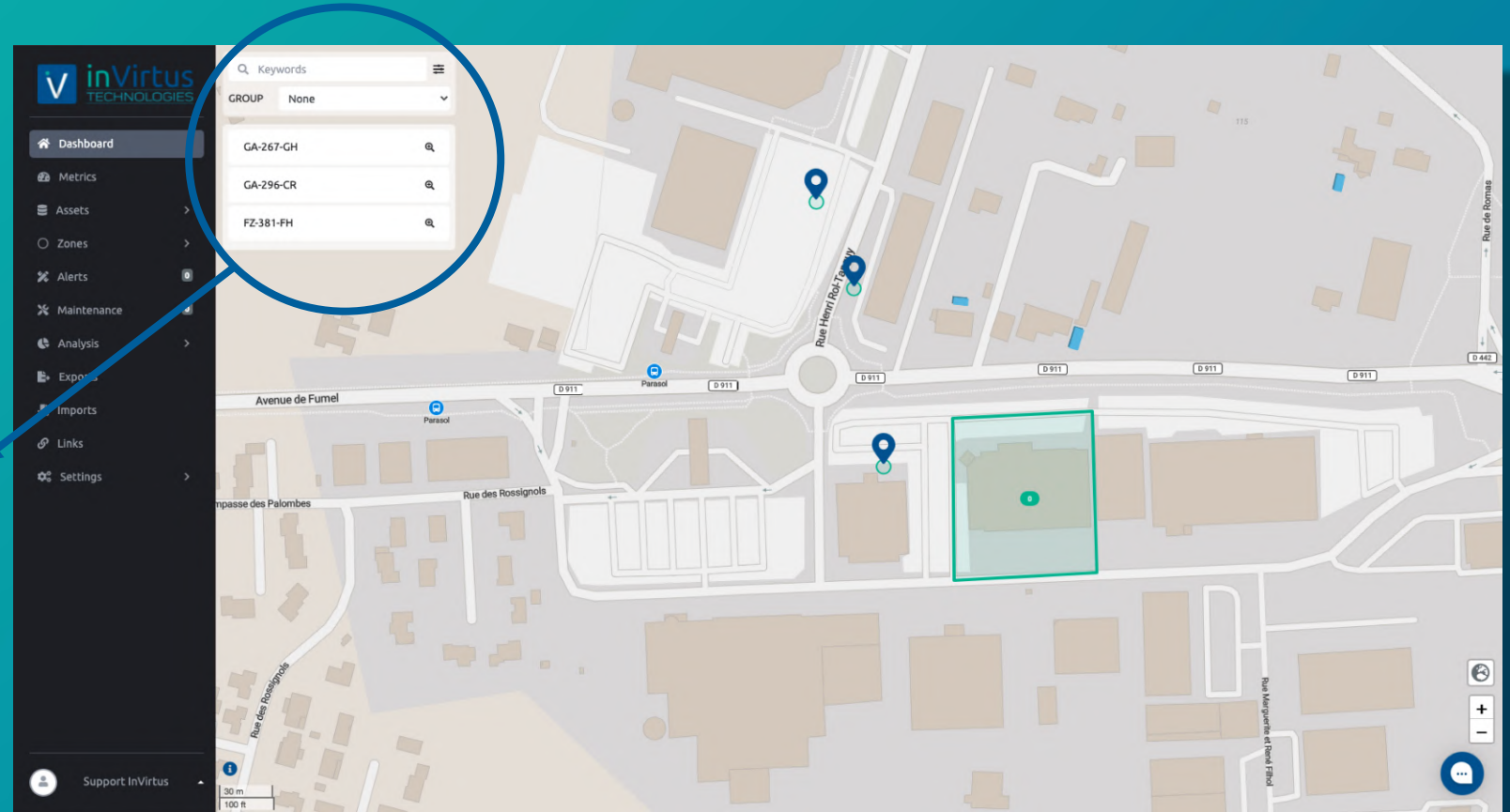
inVirtus™ Cloud



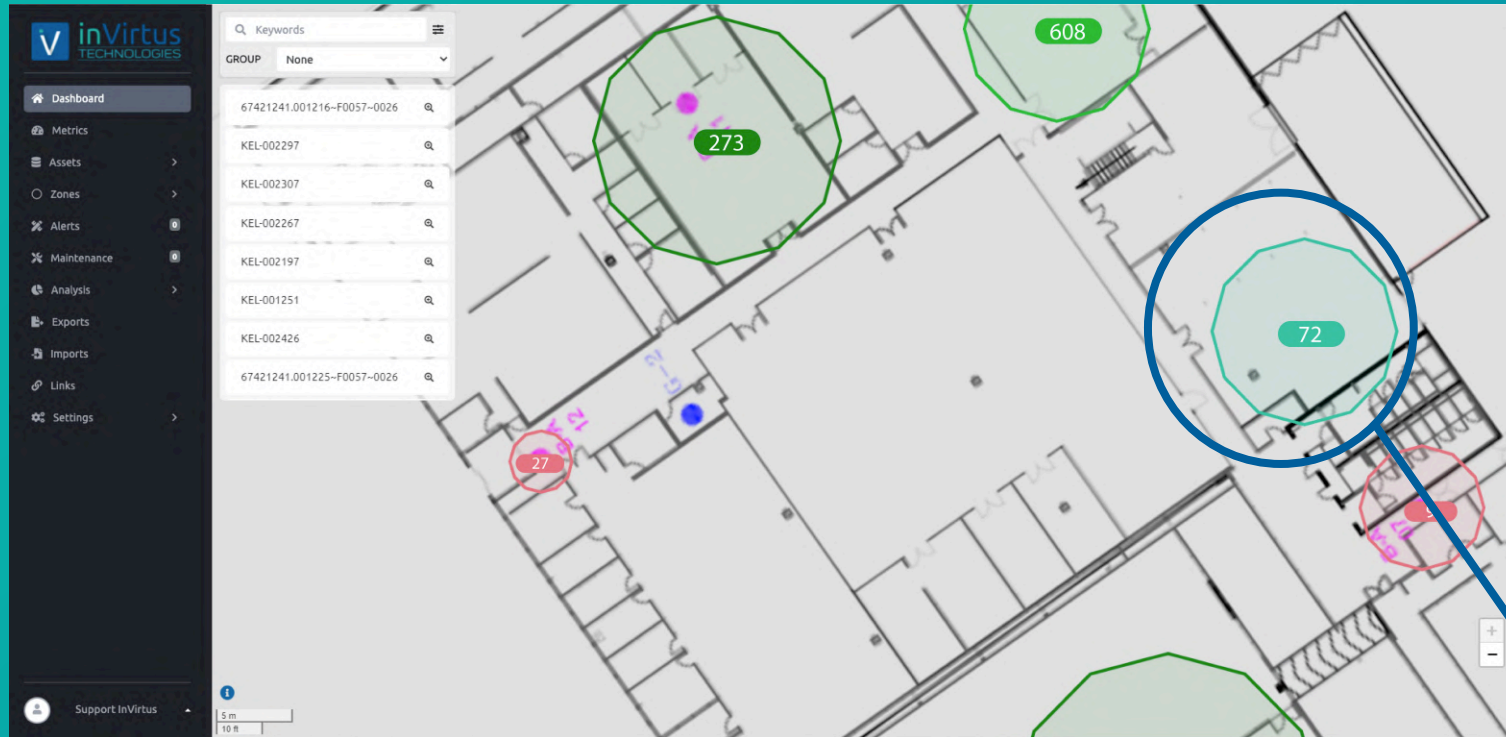
InVirtus™ platform : a selective menu in your Dashboard

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

The screenshot displays the InVirtus mobile application interface. On the left is a dark sidebar with navigation options: Dashboard, Metrics, Assets (highlighted), Zones, Alerts (with a red notification badge), Timers, Maintenance (with a red notification badge), Analysis, Exports, Imports, Links, and Settings. The main content area is titled 'Cobot mobile' and features four tabs: DATA RECORD (active), BARCODE, IMAGES (1), and TIMELINE EVENTS (1577). Below the tabs, the 'DATA RECORD' section lists: Created at: 9/2/21, 4:16 PM; Enabled: Yes; Comment: None; Groups: None. The 'Affiliation' section lists: Container: Disabled; Contained: Disabled. The 'Exhibition' section lists: Year: 9/13/21; Company: E-Cobot; Website: http://www.e-cobot.com. The 'Characteristics' section lists: Serial number: 0015; Purchase date: 3/10/20; Operational: Yes; Distance (km): 2480. A blue circle highlights the 'Exhibition' and 'Characteristics' sections, with an arrow pointing to a text box on the right.

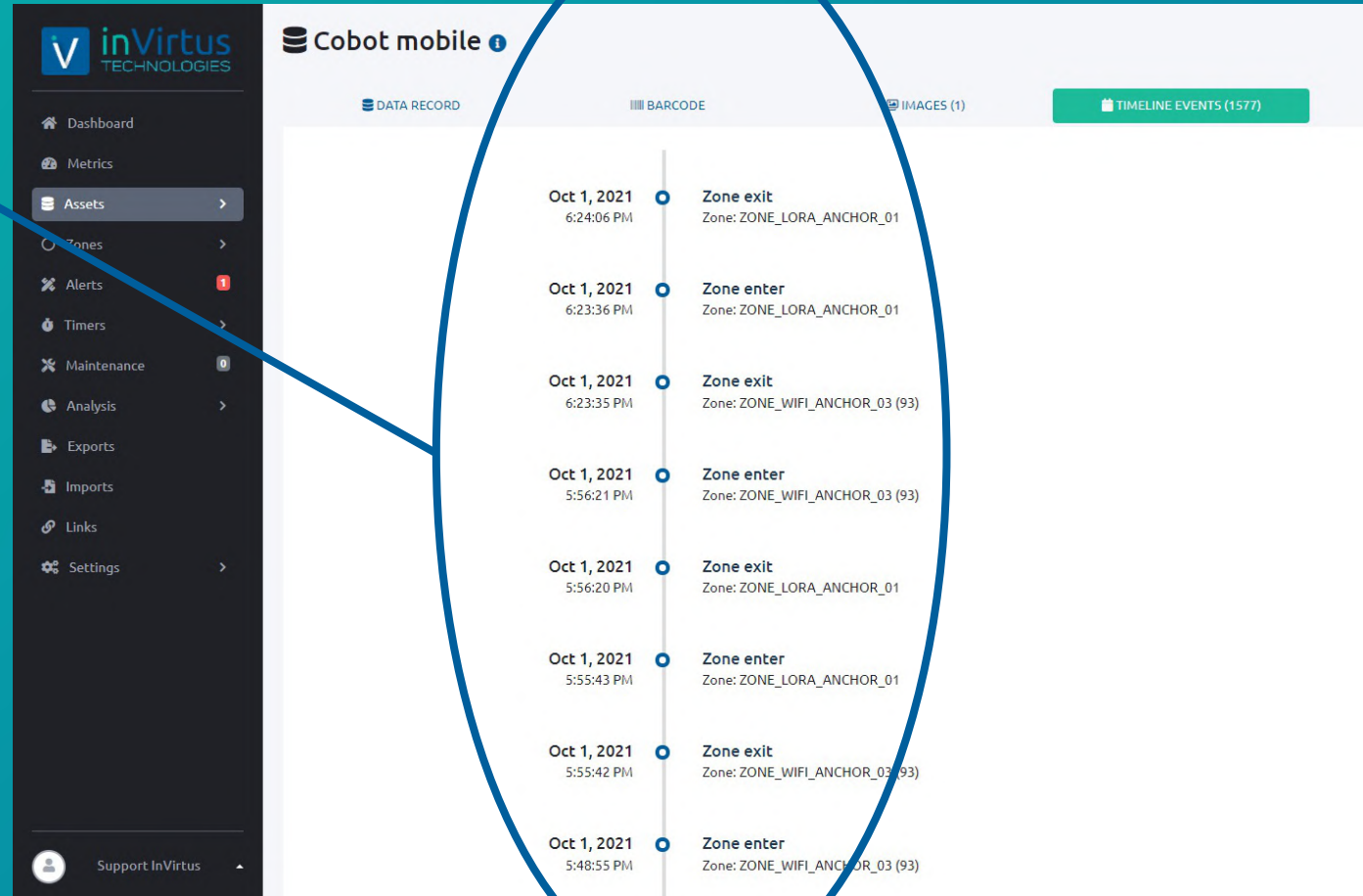
Define precisely your tracked equipment in order to get the best out of it later on :

- 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 :

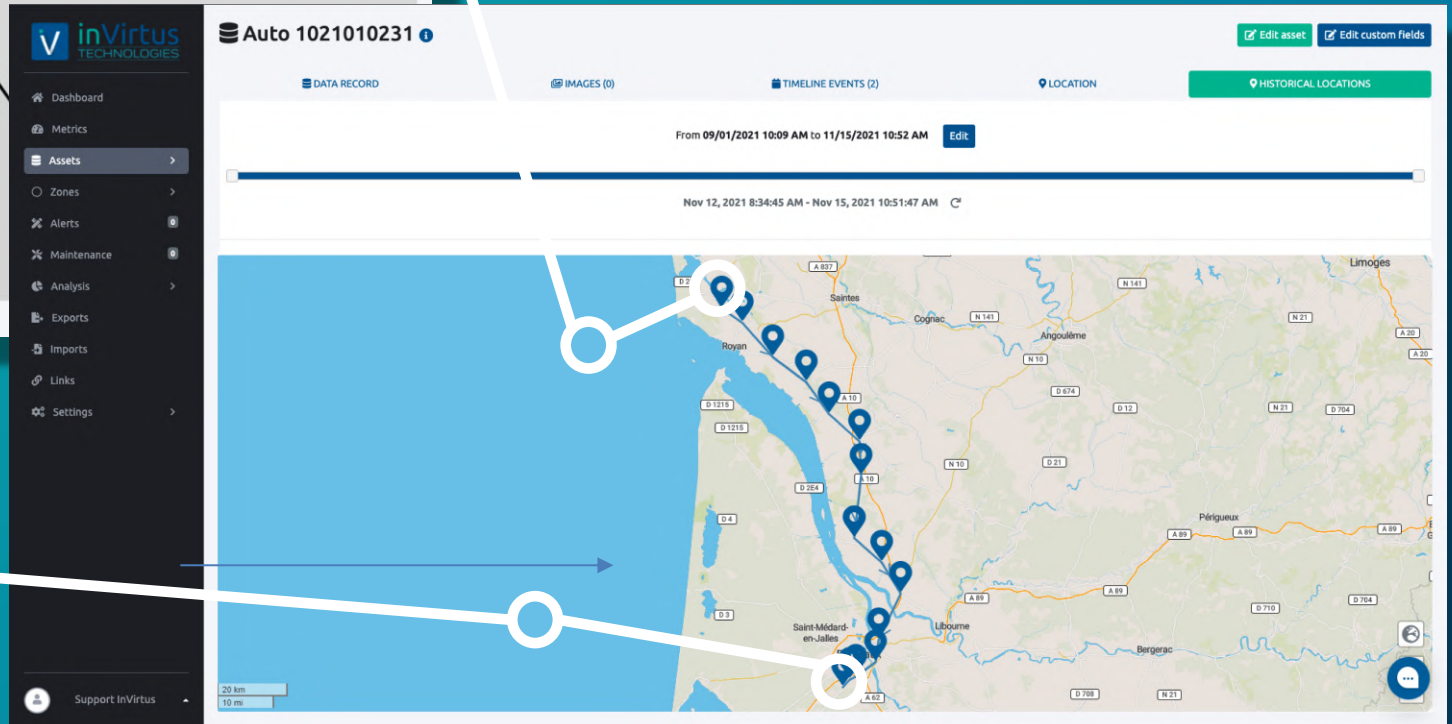
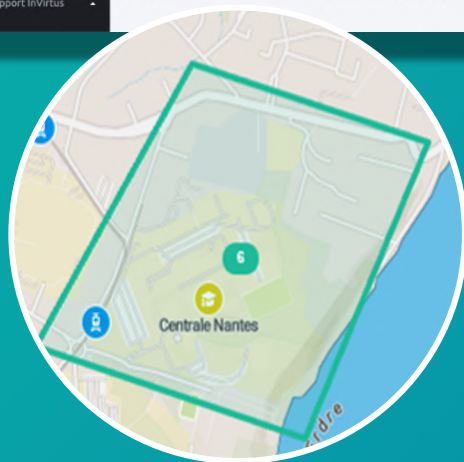
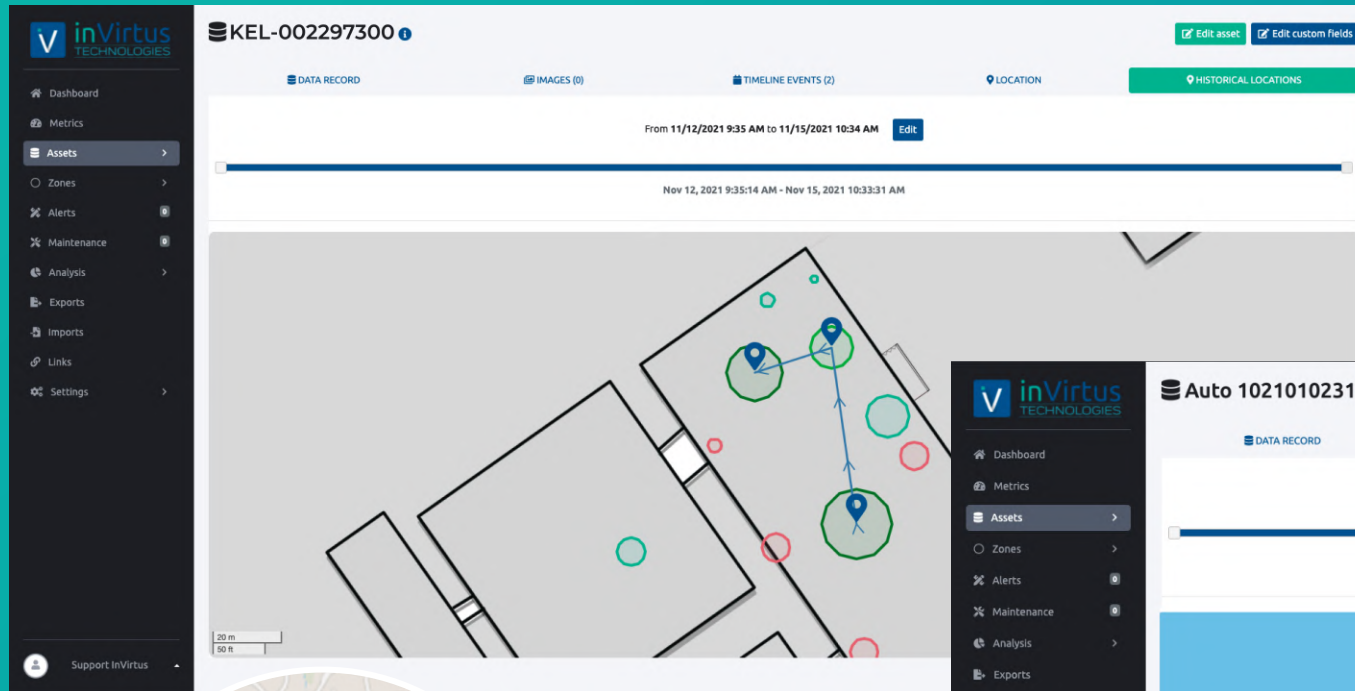
- Measure the real VS theoretical takt time
- Optimize time-consuming jobs
- Validate flows



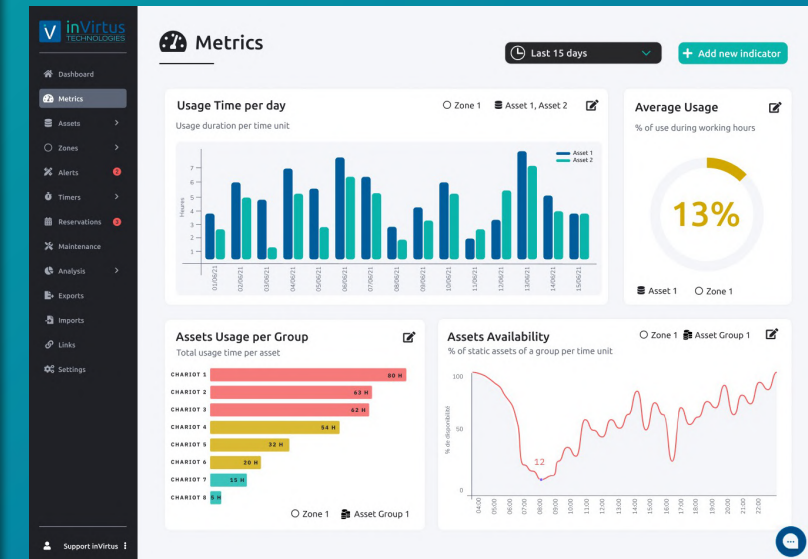
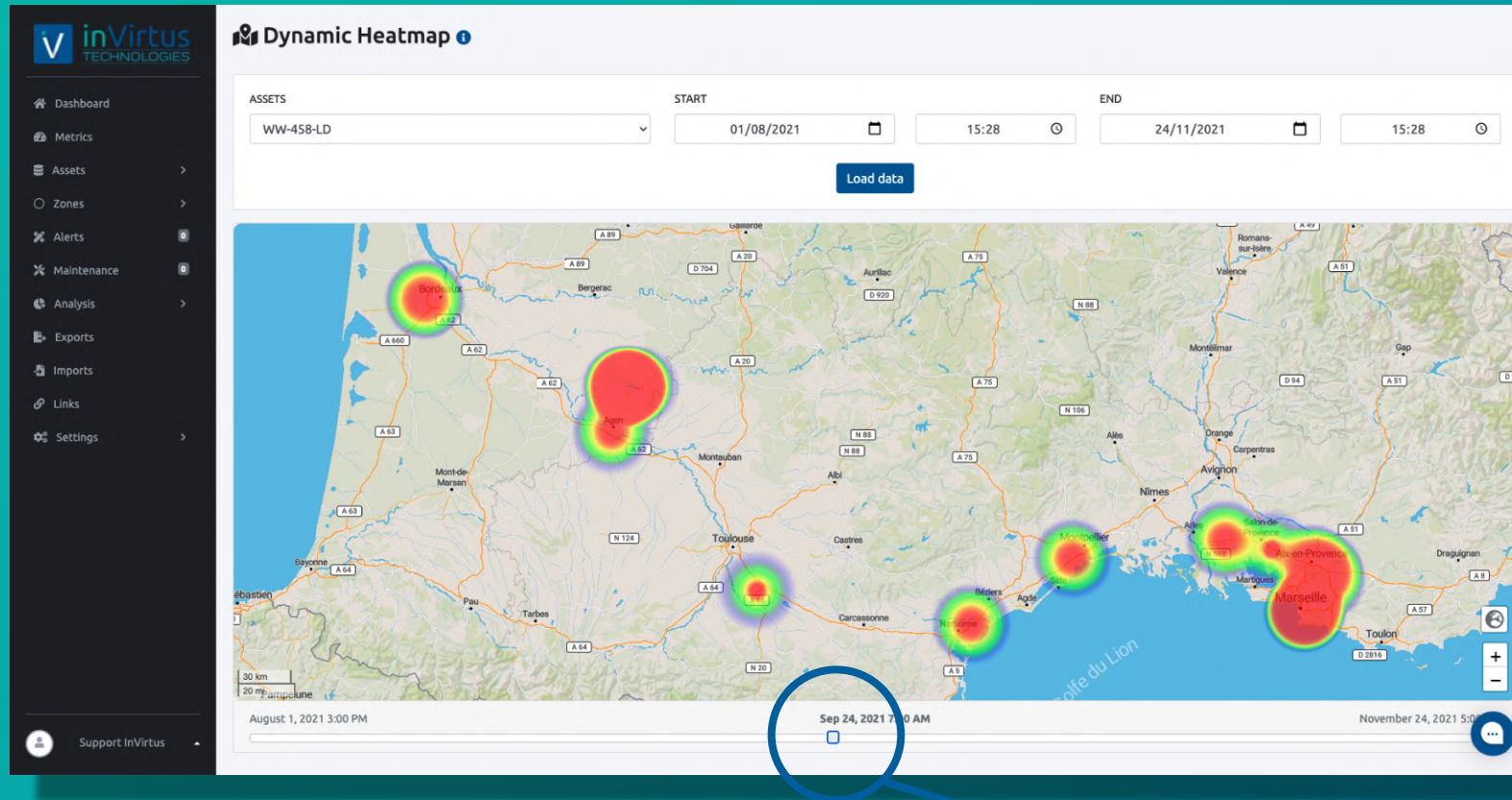
InVirtus™ platform : Historical Positions

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

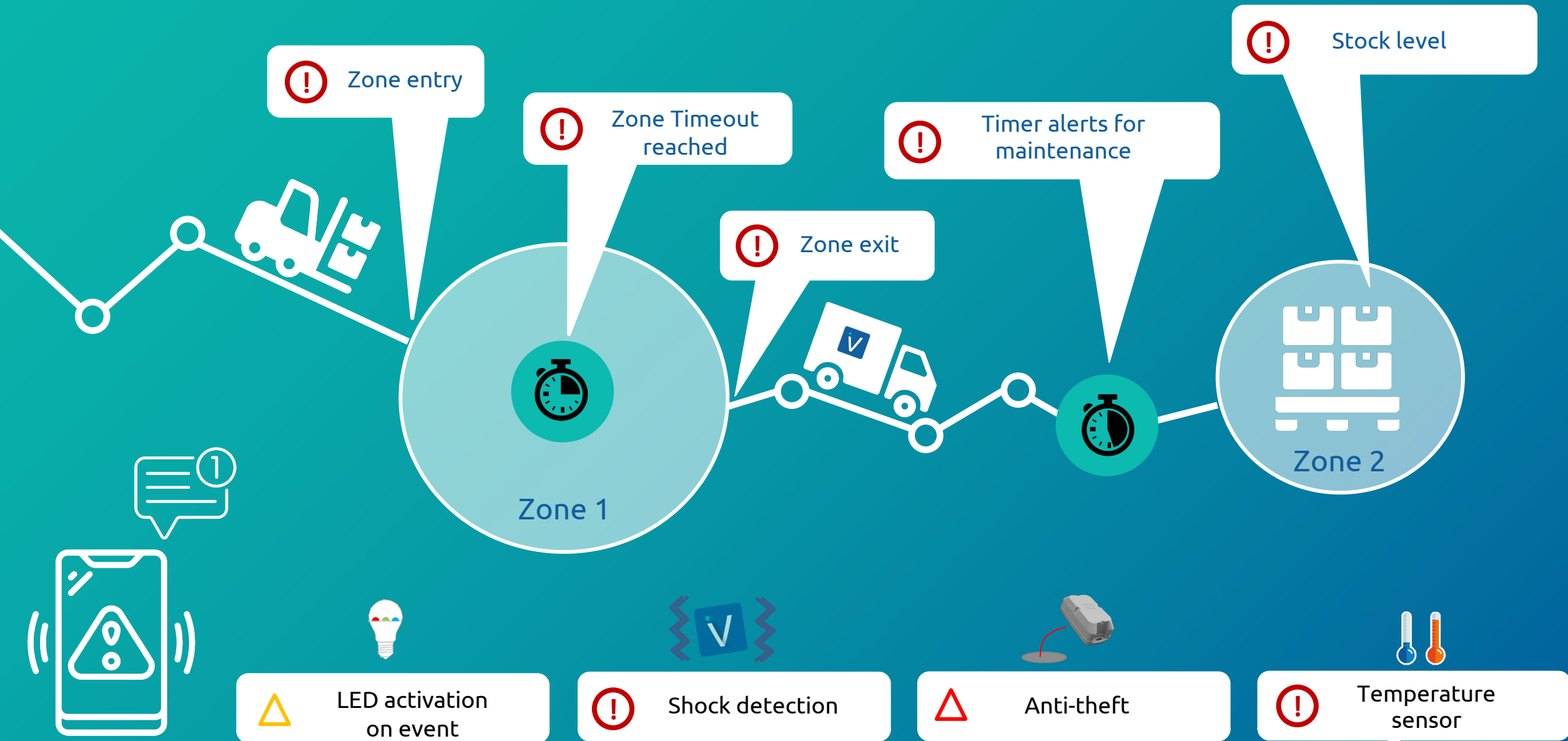


Business-oriented analysis tools :

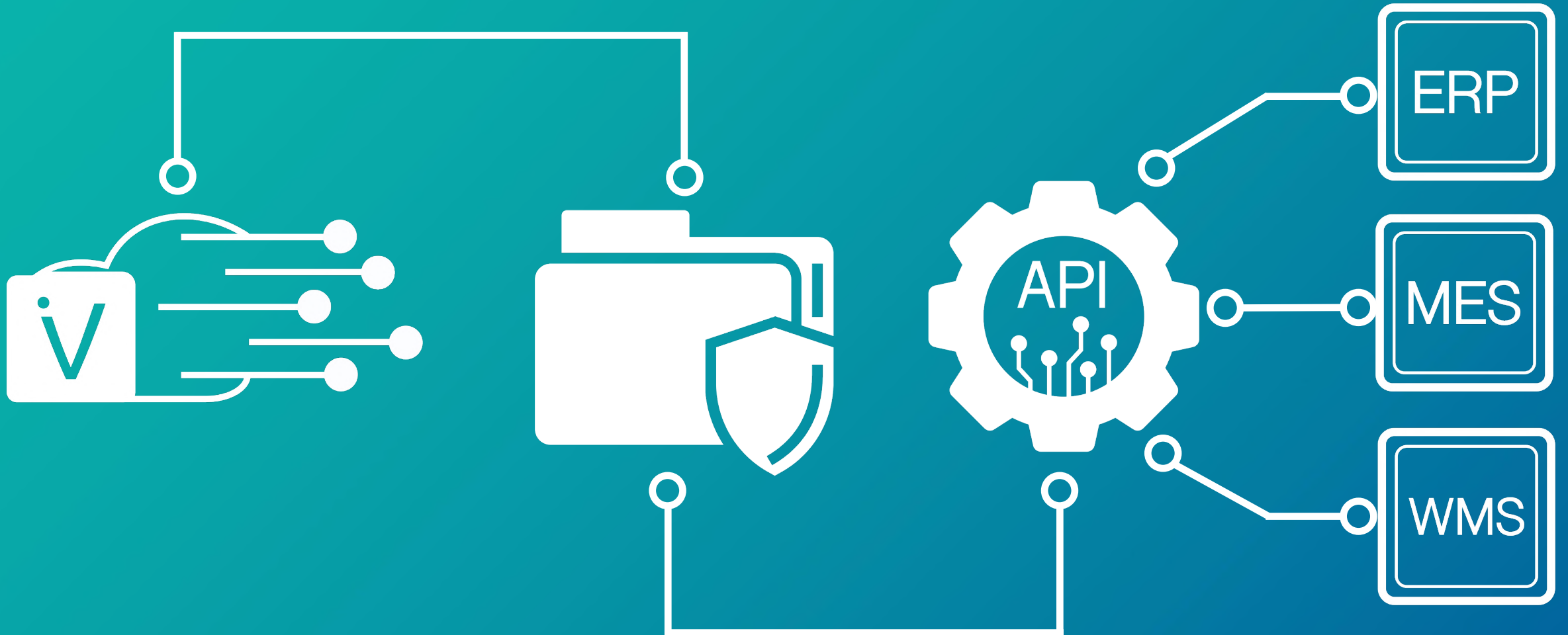
Business indicators and KPIs to track the utilization rate of a medium or packages that have been immobile for several days.

Time slider for replay

InVirtus™ platform : Personalized and taylor made alerts

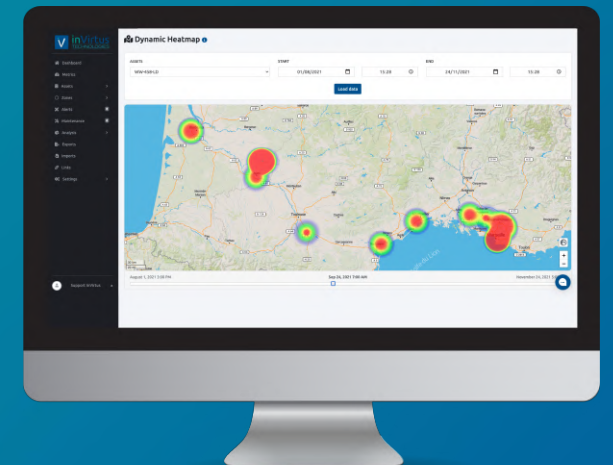


InVirtus™ platform : data transmission to your IT System



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

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



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inVirtus
TECHNOLOGIES

Switch to industry 4.0