

WEBCONTAINER

SEA, LAND and AIR transportation tracking and security suite

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- Benefits

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- Air tracking sources

Introduction

Webcontainer is the most advanced web based platform dedicated to multimodal transport tracking. Webcontainer interconnect internal company system to multiple sources of information for a real tracking of goods.

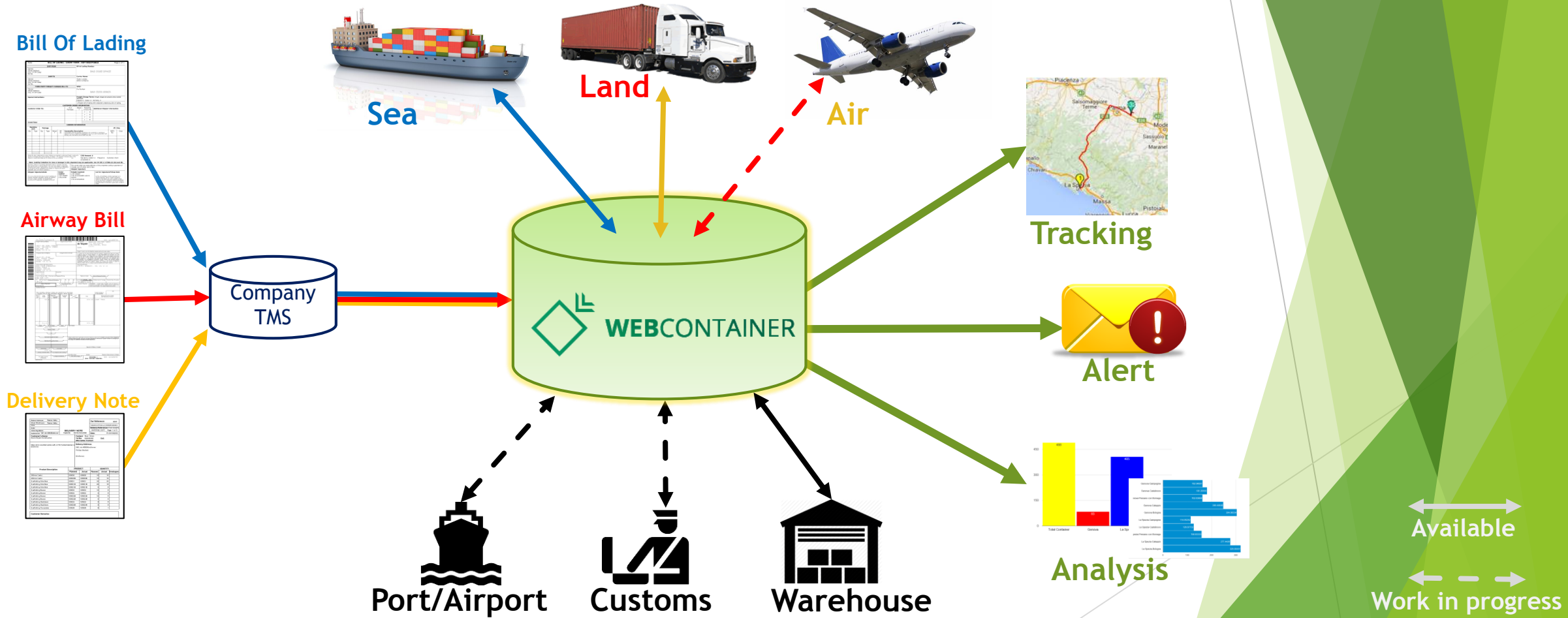
The main target of this suite is:

Improve the security of transport process!

How do that?

- 1. Analyzing the shipments flow for a deep knowledge all the transport process**
- 2. Giving exact and detailed information to prevent exceptions on transport process**
- 3. Giving real-time alerts to speed up every problem solution process**

Webcontainer Scenario



SEA Tracking

Port to Port vessel and container geolocalization

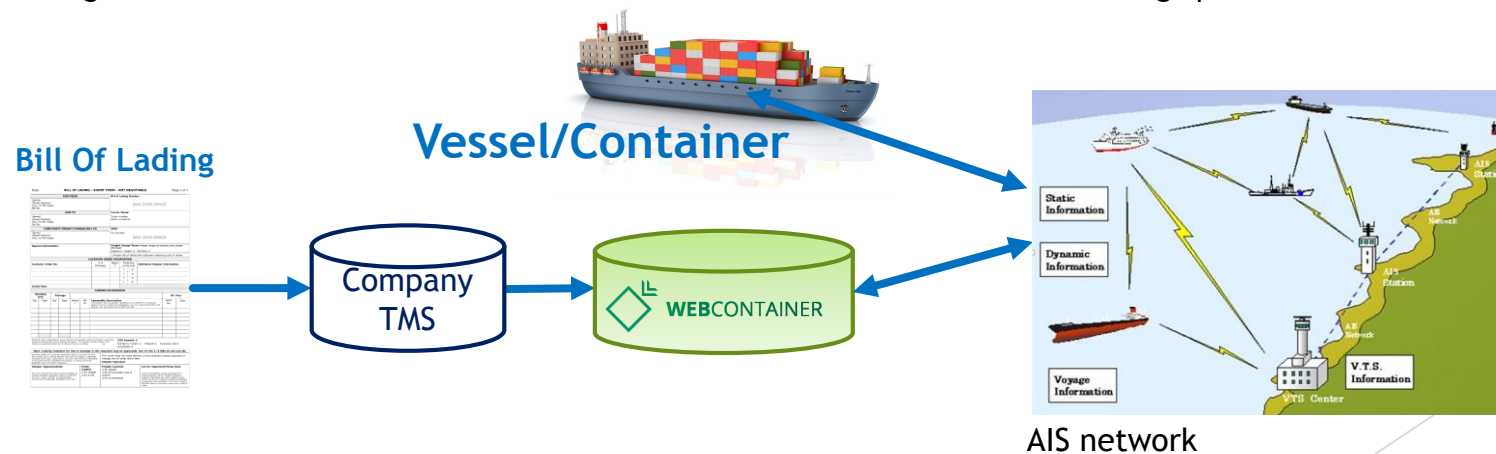


SEA TRACKING - Sources

The Sea traffic tracking is based on multiple information source.

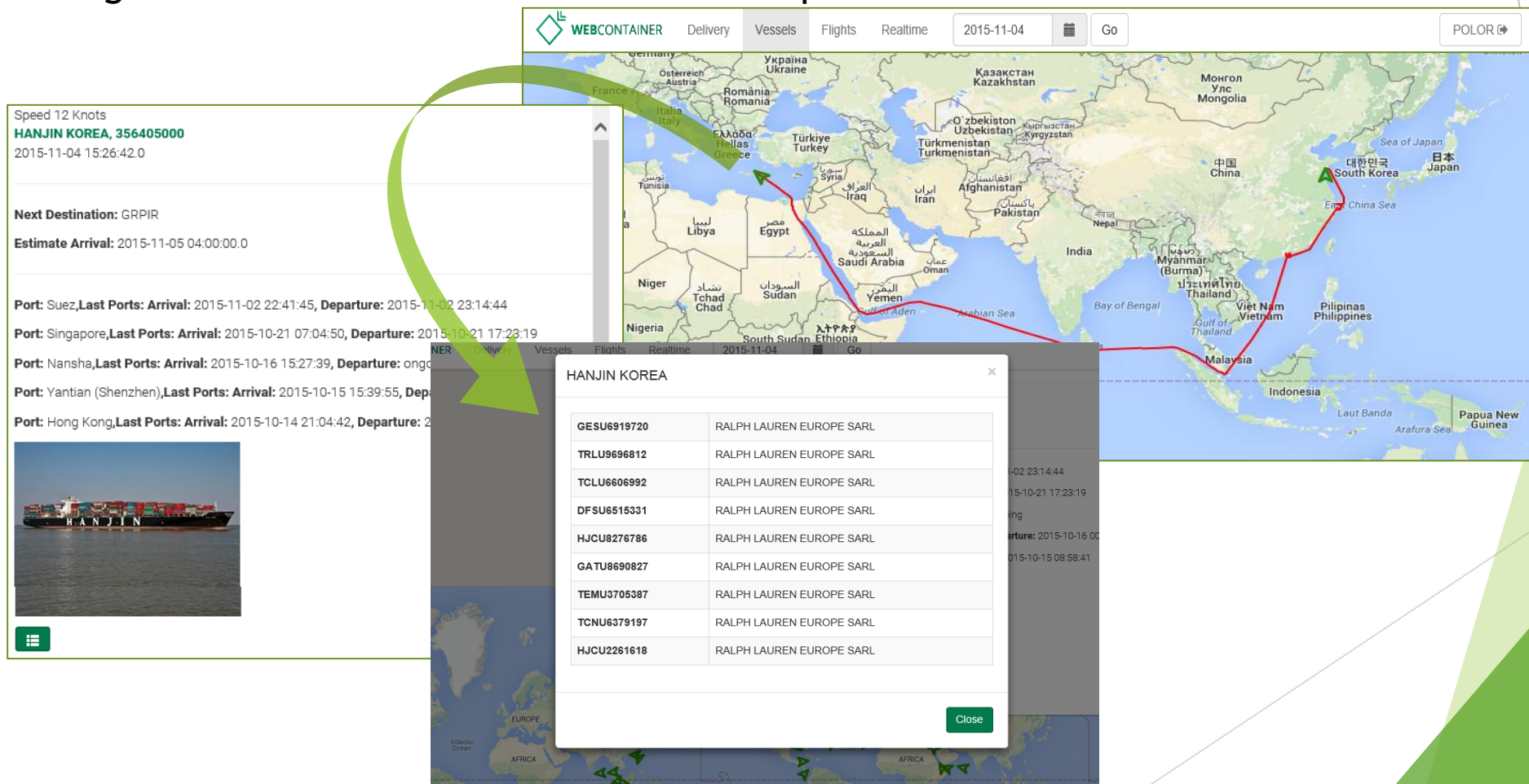
Web container is able to get the Vessels and Containers informations and GPS position using:

- **Transport Management Systems company**
The TMS provide Carrier, container and goods detail coming from B/L
- **Carrier (Shipping Line)**
Carrier provide detailed information about the lading information
- **GPS information**
Using the Carrier information WebContainer start to track Vessel and Container through professional nautical tracking services AIS/GPS.



SEA TRACKING - Vessel and Container tracking

Combining the information coming from Carriers and the Nautical tracking services, Webcontainer is able to show the exact situation about all the steps of sea transport, with high level detail from vessels to the transported container .



Speed 12 Knots
HANJIN KOREA, 356405000
 2015-11-04 15:26:42.0

Next Destination: GRPIR
Estimate Arrival: 2015-11-05 04:00:00.0

Port: Suez, **Last Ports:** Arrival: 2015-11-02 22:41:45, Departure: 2015-11-02 23:14:44
Port: Singapore, **Last Ports:** Arrival: 2015-10-21 07:04:50, Departure: 2015-10-21 17:23:19
Port: Nansha, **Last Ports:** Arrival: 2015-10-16 15:27:39, Departure: ongo
Port: Yantian (Shenzhen), **Last Ports:** Arrival: 2015-10-15 15:39:55, Dep
Port: Hong Kong, **Last Ports:** Arrival: 2015-10-14 21:04:42, Departure: 2

HANJIN KOREA

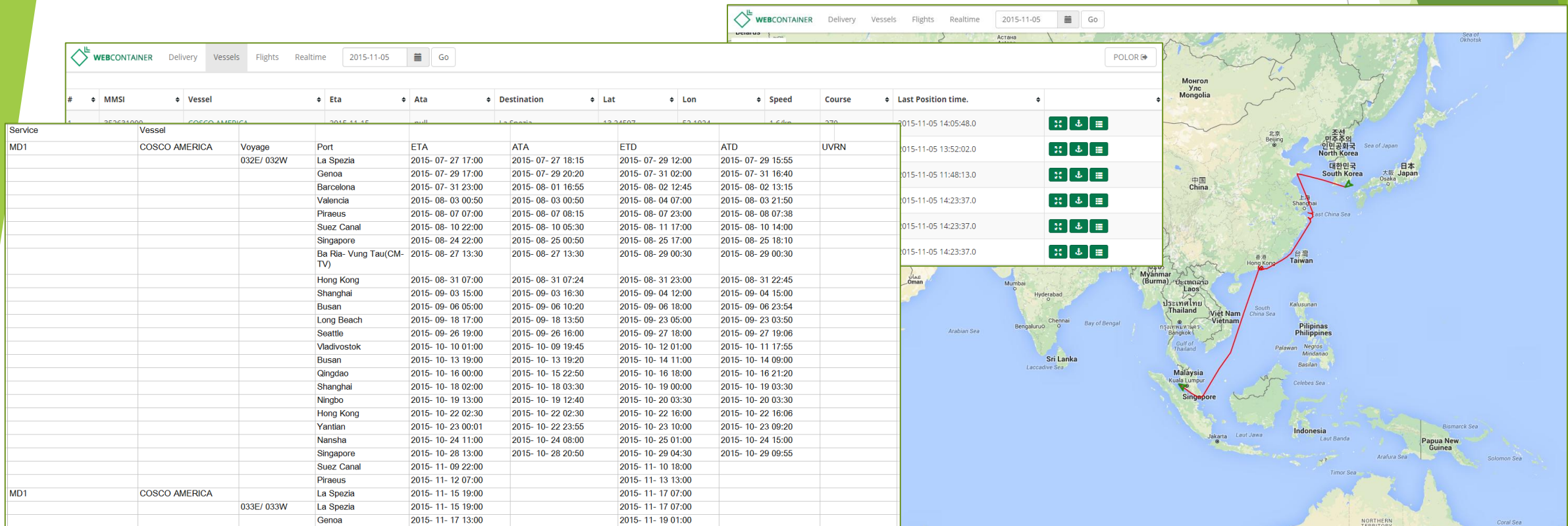
GESU6919720	RALPH LAUREN EUROPE SARL
TRLU9696812	RALPH LAUREN EUROPE SARL
TCLU6606992	RALPH LAUREN EUROPE SARL
DFSU6515331	RALPH LAUREN EUROPE SARL
HJCU8276786	RALPH LAUREN EUROPE SARL
GATU8690827	RALPH LAUREN EUROPE SARL
TEMU3705387	RALPH LAUREN EUROPE SARL
TCNU6379197	RALPH LAUREN EUROPE SARL
HJCU2261618	RALPH LAUREN EUROPE SARL

Close

SEA TRACKING - Alert and security

The alerts generated for sea traffic are:

- Delay on vessel Estimate Time of Arrival for final destination and intermediate ports
- Exceeding of medium time vessel and containers stay in port before discharge and transport to warehouse



The screenshot displays the WEBCONTAINER interface for vessel tracking. The top navigation bar includes 'Delivery', 'Vessels', 'Flights', and 'Realtime', with a date filter set to '2015-11-05'. The main content is divided into a table on the left and a map on the right.

#	MMSI	Vessel	Eta	Ata	Destination	Lat	Lon	Speed	Course	Last Position time.	
Service		Vessel									
MD1		COSCO AMERICA	Voyage 032E/ 032W	Port La Spezia	ETA 2015-07-27 17:00	ATA 2015-07-27 18:15	ETD 2015-07-29 12:00	ATD 2015-07-29 15:55	UVRN	2015-11-05 14:05:48.0	⚙️ ⬇️ 📄
				Genoa	2015-07-29 17:00	2015-07-29 20:20	2015-07-31 02:00	2015-07-31 16:40		2015-11-05 11:48:13.0	⚙️ ⬇️ 📄
				Barcelona	2015-07-31 23:00	2015-08-01 16:55	2015-08-02 12:45	2015-08-02 13:15		2015-11-05 14:23:37.0	⚙️ ⬇️ 📄
				Valencia	2015-08-03 00:50	2015-08-03 00:50	2015-08-04 07:00	2015-08-03 21:50		2015-11-05 14:23:37.0	⚙️ ⬇️ 📄
				Piraeus	2015-08-07 07:00	2015-08-07 08:15	2015-08-07 23:00	2015-08-08 07:38		2015-11-05 14:23:37.0	⚙️ ⬇️ 📄
				Suez Canal	2015-08-10 22:00	2015-08-10 05:30	2015-08-11 17:00	2015-08-10 14:00		2015-11-05 14:23:37.0	⚙️ ⬇️ 📄
				Singapore	2015-08-24 22:00	2015-08-25 00:50	2015-08-25 17:00	2015-08-25 18:10		2015-11-05 14:23:37.0	⚙️ ⬇️ 📄
				Ba Ria- Vung Tau(CM-TV)	2015-08-27 13:30	2015-08-27 13:30	2015-08-29 00:30	2015-08-29 00:30			
				Hong Kong	2015-08-31 07:00	2015-08-31 07:24	2015-08-31 23:00	2015-08-31 22:45			
				Shanghai	2015-09-03 15:00	2015-09-03 16:30	2015-09-04 12:00	2015-09-04 15:00			
				Busan	2015-09-06 05:00	2015-09-06 10:20	2015-09-06 18:00	2015-09-06 23:54			
				Long Beach	2015-09-18 17:00	2015-09-18 13:50	2015-09-23 05:00	2015-09-23 03:50			
				Seattle	2015-09-26 19:00	2015-09-26 16:00	2015-09-27 18:00	2015-09-27 19:06			
				Vladivostok	2015-10-10 01:00	2015-10-09 19:45	2015-10-12 01:00	2015-10-11 17:55			
				Busan	2015-10-13 19:00	2015-10-13 19:20	2015-10-14 11:00	2015-10-14 09:00			
				Qingdao	2015-10-16 00:00	2015-10-15 22:50	2015-10-16 18:00	2015-10-16 21:20			
				Shanghai	2015-10-18 02:00	2015-10-18 03:30	2015-10-19 00:00	2015-10-19 03:30			
				Ningbo	2015-10-19 13:00	2015-10-19 12:40	2015-10-20 03:30	2015-10-20 03:30			
				Hong Kong	2015-10-22 02:30	2015-10-22 02:30	2015-10-22 16:00	2015-10-22 16:06			
				Yantian	2015-10-23 00:01	2015-10-22 23:55	2015-10-23 10:00	2015-10-23 09:20			
				Nansha	2015-10-24 11:00	2015-10-24 08:00	2015-10-25 01:00	2015-10-24 15:00			
				Singapore	2015-10-28 13:00	2015-10-28 20:50	2015-10-29 04:30	2015-10-29 09:55			
				Suez Canal	2015-11-09 22:00		2015-11-10 18:00				
				Piraeus	2015-11-12 07:00		2015-11-13 13:00				
MD1		COSCO AMERICA	033E/ 033W	La Spezia	2015-11-15 19:00	2015-11-15 19:00	2015-11-17 07:00				
				La Spezia	2015-11-15 19:00	2015-11-15 19:00	2015-11-17 07:00				
				Genoa	2015-11-17 13:00	2015-11-17 13:00	2015-11-19 01:00				

The map on the right shows the shipping route of the vessel COSCO AMERICA, starting from the East Coast of North America, passing through the Suez Canal, and ending in the East Asia region. Key locations marked include North Korea, South Korea, Japan, China, Taiwan, Singapore, and various Southeast Asian and Pacific islands.

LAND TRACKING - Benefits

- ✓ Giving the availability of information about the sea shipment to give in advance information about the arrival and eventual trip problem.
- ✓ Improve the delivery plan giving in advance the prediction of delay on ETA.
- ✓ Reduce the port's stockage surcharge and deadtime on multimodal transport operation.

Land Tracking

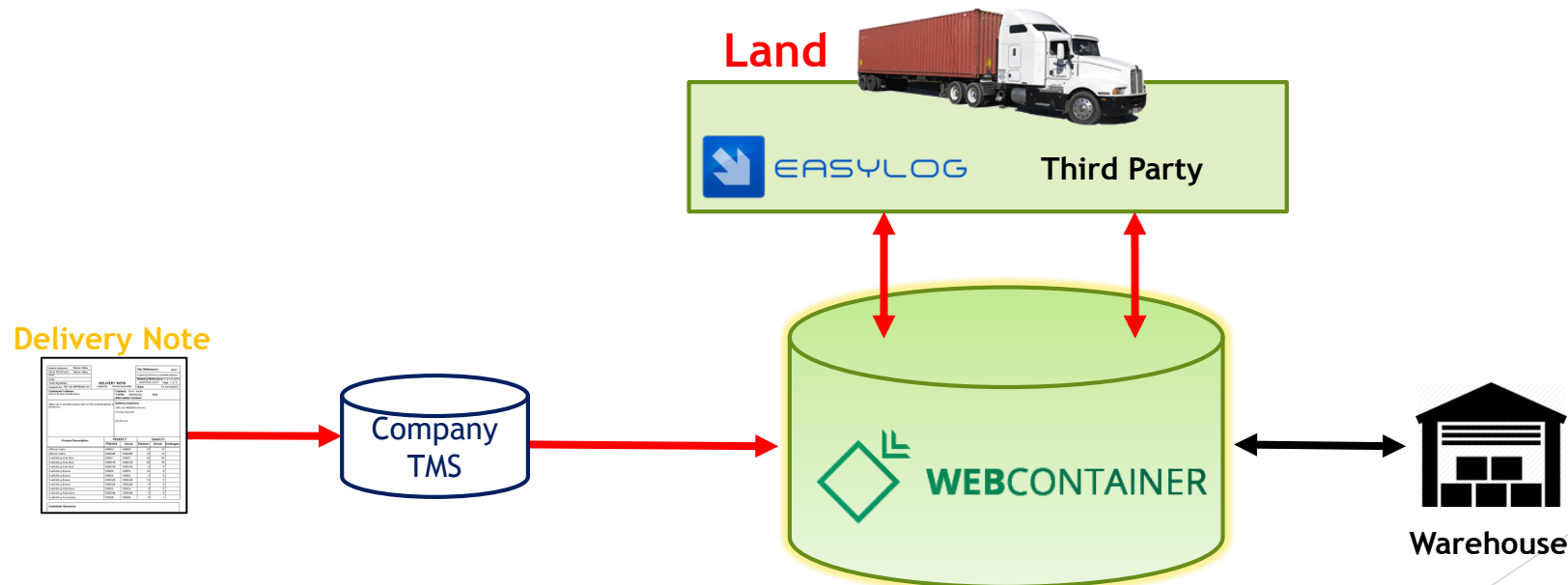
From Port/airport to warehouse container geolocalization



LAND TRACKING - GPS Sources

Webcontainer get the land traffic position information coming from different sources to cover the 100% of shipment, in detail the system use:

- The  **EASYLOG**, webcontainer proprietary solution
Using the Easylog own GPS device with advanced tracking function.
- All the GPS tracking provider
Using standard protocol based on secure XML.



LAND TRACKING - Alert and security

The WebContainer land tracking, is equipped of advanced alert system that provide in real time information about the transfer status from port to warehouse. The alert are automatically send, by email SMS and web interface, every time an event alter the standard transport procedure.

Procedure standard alert are defined when a vehicle:

1. Exit from port area (exiting from the port geo-zone).
2. Entering and exiting from warehouse area (warehouse geo-zone).
3. Confirmation of container delivery to the warehouse (human confirmation by email).

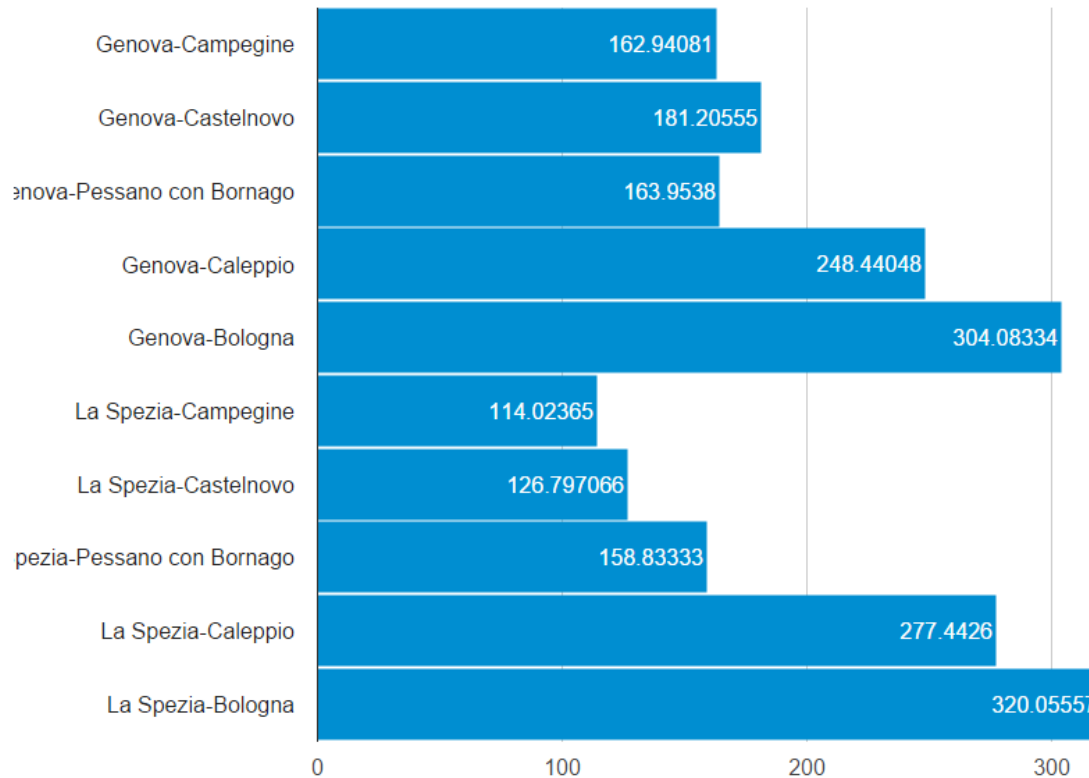
In detail the critical alert status start when the vehicle:

1. Has a delay in transit from port to warehouse.
2. Is stopped or parked for a long time during the transport to warehouse.
3. During the transport the tracking signal is interrupted, and no GPS data is arriving to the system.
4. Goes out from the standard route defined to arrive in DC.

LAND TRACKING - Alert delay in transit

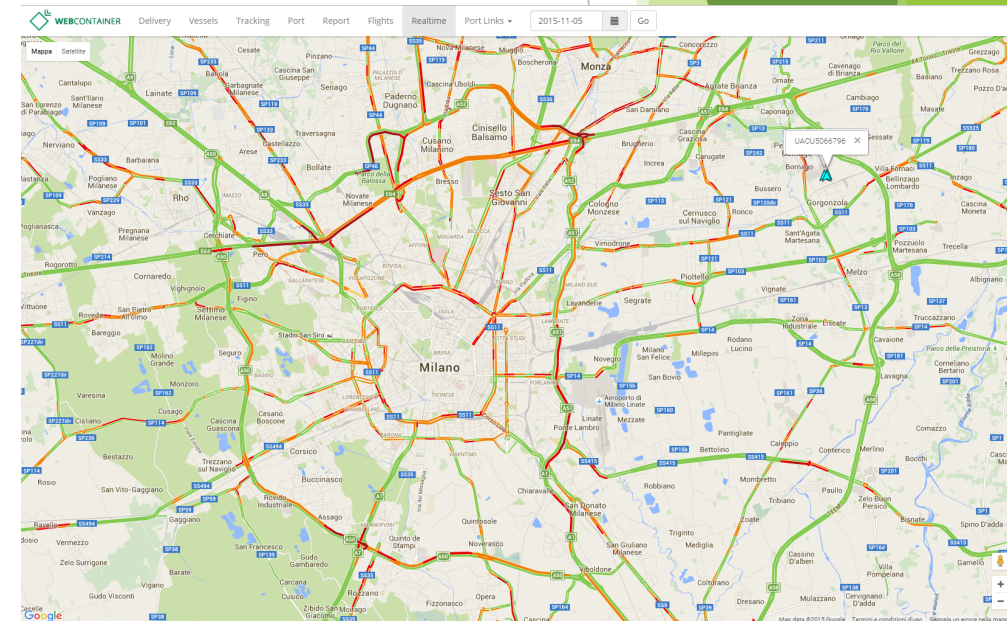
The delay in transit from port to warehouse is calculated starting from the analysis of historical data related to the transit time on the main route from the port to the warehouse.

Average Distances in Minutes



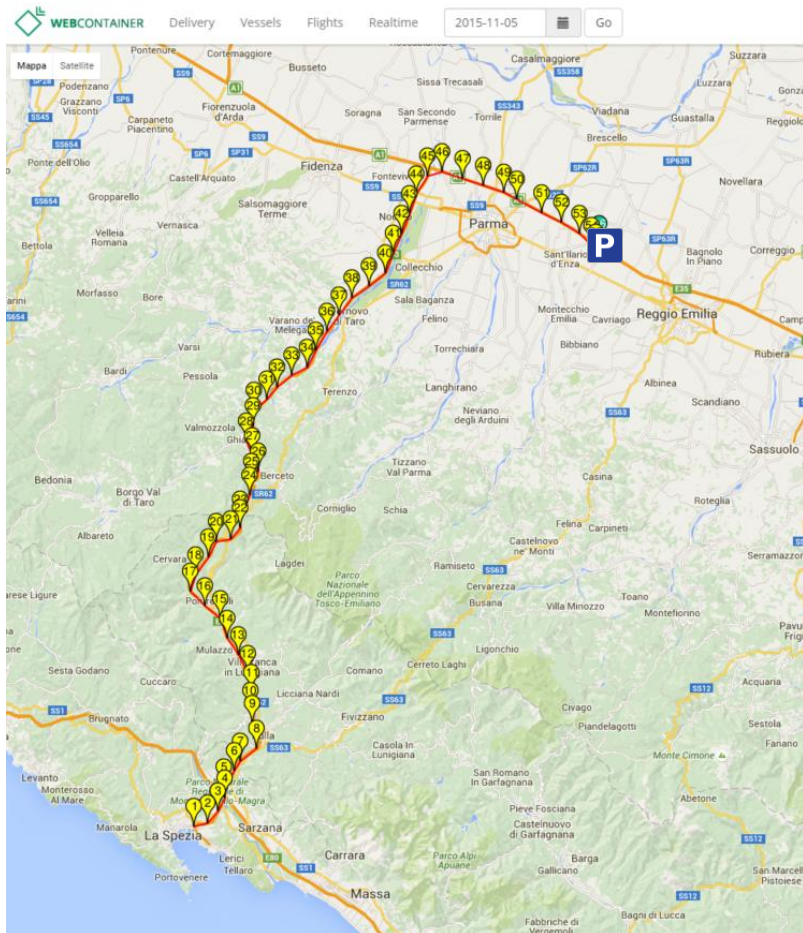
Minutes

It consider also traffic condition as delay causes

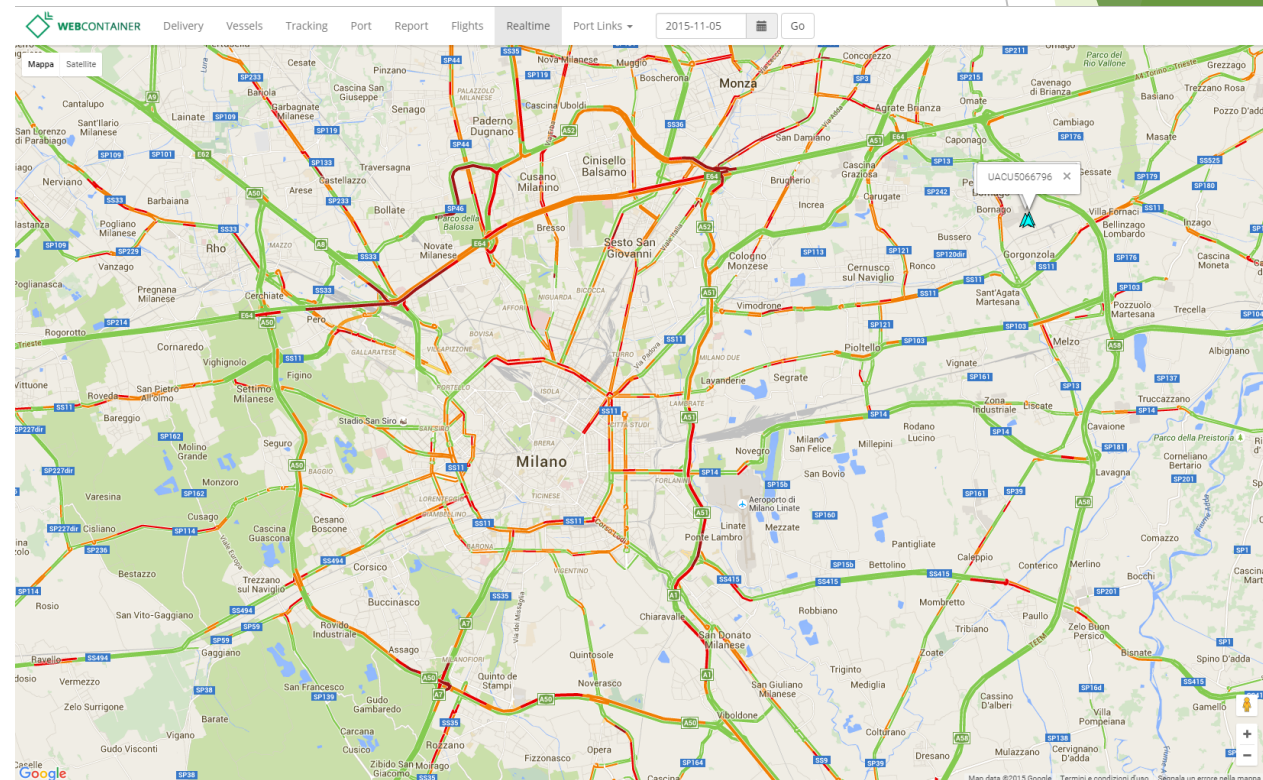


LAND TRACKING - Stop and Park or no GPS signal is arrived

This alert goes on when a vehicle is continuing to communicate the same GPS position for more than 20 minutes, or no GPS data is arriving to the webcontainer for more than 15 minutes.

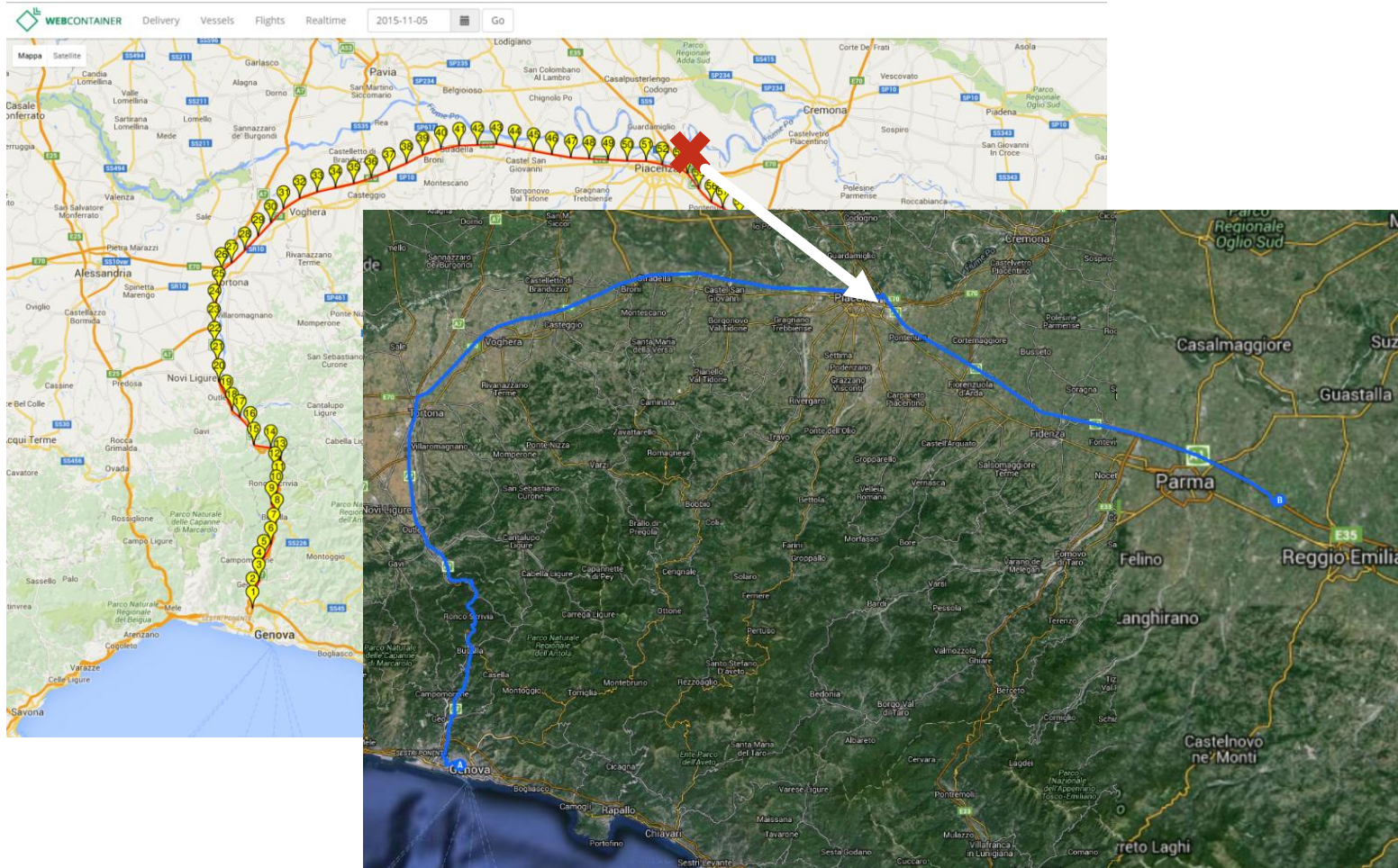


It consider also traffic condition as STOP causes



LAND TRACKING - Alert out from the standard route

This alert notify that a vehicle is not using the standard route defined to arrive to the warehouse.
If the GPS position is out of 1 Km from the standard route automatically the system catch the event and notify to the operator



LAND TRACKING - Benefits

- ❑ Correct control on operation's implementation and management of possible anomalies
- ❑ High security and real-time monitoring for problem prevention and fast solving, thanks to the alarm system.
- ❑ Low impact on usability of the service as it can be accessible from the Internet and Mobile
- ❑ Automatic feed from different systems to

AIR Tracking

Airport to Airport container geolocalization



AIR TRACKING - Flight tracking sources (On Testing)

Also the air traffic tracking is based on multiple information source.

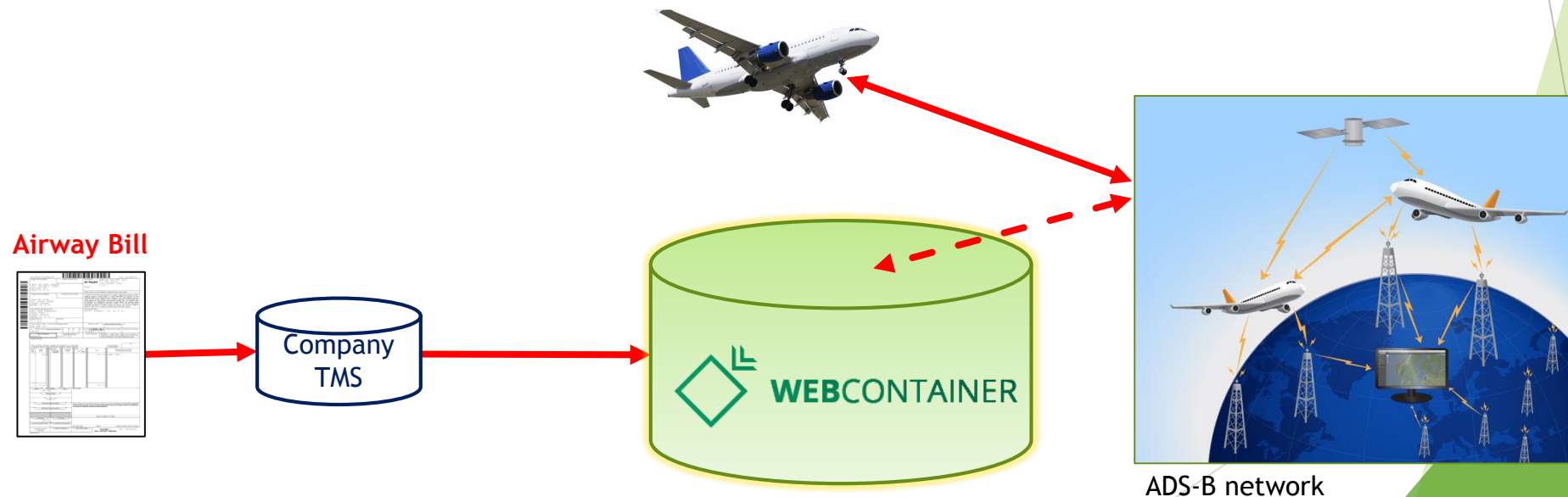
Web container is able to get the flying airplane GPS position informations using:

- Transport Management Systems company

The TMS provide Air Carrier informations coming from AWB

- GPS information

Using the TMS information WebContainer start to track airplane through professional flight tracking services based on ADS-B /GPS.





WEBCONTAINER

TRACKING BY AIR DEPARTURE TO ARRIVAL

AIR TRACKING - From Departure to Warehouse

Combining the information coming from ADS-B GPS flight provider and GPS land tracking provider
The webcontainer system is able to show the exact situation about all the steps of the air and land transport, with high level detail from departure airport to the warehouse.

The screenshot displays the Webcontainer tracking interface. At the top, there are navigation tabs: Delivery, Vessels, Tracking, Port, Report, Flights (selected), Realtime, and Port Links. A date filter is set to 2015-11-03. Below the navigation is a table with the following columns: #, Ident, Aircrafttype, Actualdeparturetime, Estimatedarrivaltime, Actualarrivaltime, Origin, Destination, OriginName, OriginCity, DestinationName, and DestinationCity. The table contains one entry for flight AZA608 on an A332 aircraft, departing on 2015-03-03 at 10:58:00.0 and arriving on 2015-03-03 at 20:43:00.0. Below the table, there are two map views. The left map shows a global view with a red line indicating the flight path from the United States to Europe. The right map is a detailed view of Northern Italy, showing the flight path from Milan to Parma and then to Bologna. The interface also includes a search bar with 'omlog' and a 'Go' button.

#	Ident	Aircrafttype	Actualdeparturetime	Estimatedarrivaltime	Actualarrivaltime	Origin	Destination	OriginName	OriginCity	DestinationName	DestinationCity
1	AZA608	A332	2015-03-03 10:58:00.0	2015-03-03 20:40:00.0	2015-03-03 20:43:00.0						

Thanks
for your attention