# PORTSTREAM





### SEASTREAM





# Master your fleet with our advanced Maritime solutions

With the Fifth Industrial Revolution looming, Sync Lab meets the needs of the Maritime Market by leveraging the over twenty years of experience as a System Integrator and operating in the sector through a specialized Division with a decade of expertise that offers advanced solutions for the Maritime industry. Sync Lab solutions lead towards the adoption of new technologies and are designed to transform production systems and guide industry companies towards Digital Transformation. Through the use of network data and analytics, we support maximum efficiency for administrative, logistics, naval, terminal and port operations.

#### SATSTREAM



### **PORTSTREAM**

PortStream comes from Sync Lab depth Port Operation Center (POC) to support service platform for port operators inspired by IMO's Maritime Service Portfolios (MSP), the integrated web service platform for Port Operators is specifically designed for the Maritime sector and integrates multiple web services to support operators in the port industry.

The web services provided by PortStream, properly integrated, aim to implement a

experience in the shipping sector. As a the daily operations of service providers operating in the port industry: tug companies, mooring operators, pilots, port authorities, and harbor masters.

> As a cloud-based web services platform for the maritime sector, Portstream is designed to improve and make operational activities more efficient for ship management companies and other stakeholders involved.

Svnc Lab Maritime Port

Port is the web application implementig the main services to support operators in the port industry: monitoring of ship traffic in transit through the use of AIS systems both on land and on board; marine weather forecasts; representation on electronic nautical charts; Port Index with detailed information on ports and services offered, and much more.





Managing reports in the port sector is a complex process that requires the use of advanced technological tools, collaboration among different parties involved, and continuous attention to safety and efficiency of port operations.



Port Insight is the vendor-free telemetric application of the PortStream Suite, which allows real-time monitoring and storage of data detected on board, and can be used to build reports and statistics.





The concept of "Smart Port" is an increasingly relevant topic in the maritime sector, as port activities require ever greater efficiency and safety. A Smart Port is a port that uses advanced technologies to optimize port operations, improve management of maritime traffic, and reduce the environmental impact of port activities. One of the main aspects of a Smart Port is data management. Port is the web application that implements the main services to support operators in the port sector, such as tugboat operators, mooring companies, port authorities, and terminals. The services implemented in Port are inspired by the Maritime Service Portfolios (MSP) of IMO, which represent a tool to identify a common language for the digitization of ship-to-shore and shore-to-ship communications and are in line with the concepts of e-navigation and connected port.

Select the harbor you're interested in Visualize ship traffic on the map 3 Visualize weather parameters dashboard Visualize harbor statistics 



### **Vessel Traffic System**



### **Tug Scenario**



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### RePort

The management of reports in the maritime sector is a fundamental aspect to ensure safety and efficiency of operations, even in port areas. Reports can concern various aspects such as safety of loading and unloading operations, management of maritime traffic, management of personnel and transport means. Among the tools for the report management there are monitoring control systems, information and specific systems, and software applications for report management.

RePort is the Report Management application of the PortStream Suite, customizable, which accepts various types of data as input, offering tools for their visualization and the composition of ad hoc charts, useful for performing checks and comparisons.

In this context, RePort provides the following functionalities:

#### Onboard:

Drafting and sending reports to the onshore operational departments. It is planned to have the possibility of automatically filling in some report fields by drawing information directly from automation and navigation equipment; **Onshore:** 

Storing reports sent from the ships for later consultation, and using the information contained in them to perform Data Analysis and provide statistics to Decision Support Centers (DSS).







### Ship list









## **Port Insight**

Maritime companies use telemetry systems to collect and analyze a wide range of data on their vehicles, including information on weather conditions, engine performance, speed, location, fuel consumption, and navigation. These data can be used to monitor and optimize navigation, improve fuel efficiency, prevent potential mechanical failures, and work in terms of safety.

PortInstight is the tool that allows companies to constantly monitor their fleets in real-time, collecting data on the performance of ships, fuel consumption, weather conditions, maritime traffic, and other factors that can affect navigation operations. Through custom-built dashboards, PortInsight allows you to visualize:

- Navigation data
- Generator parameters
- Automation data
- Fuel tank levels

The data is obtained directly on board using the Stream Box, an IoT gateway engineered by Sync Lab capable of receiving signals in NMEA, MODBUS, and IP protocols, interfacing with Navigation equipment and Onboard automation Sensors.







**Tug Engines** 

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