Rudi Vander Eyken, Head IT & Innovation

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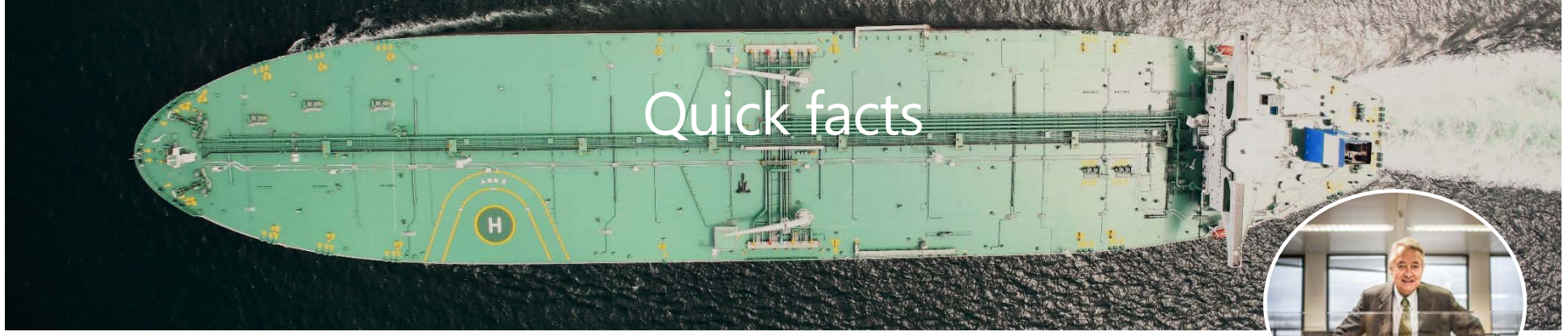

Quick facts

The world's largest, independent quoted crude tanker platform

71 VESSELS*

2 FSO
3 million barrels

2 V-Plus
3 million barrels

42 VLCC
2 million barrels

25 Suezmax
1 million barrels

*Average age on 30 June 2019: 8.5 years

International company

Founded by the Saverys family

EURN LISTED EURONEXT

EURN LISTED NYSE

2,900 EMPLOYEES

- Approx. 2,700 seafarers of many different nationalities
- Approx. 200 shore employees

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“DIGITAL TRANSFORMATION” 2020

Euronav has the ambition to invest in Digital Transformation :

- And become the leader (front runner) in adopting/embracing digitization within the “Maritime Industry”
- So “Digital Transformation” and “Innovation” becomes part of our DNA

Our future challenges & opportunities in the market

- IMO 2020 & Zero Emission targets by 2050
- Fuel prices (LFSO)
- Reduce Fleet OPEX
- Improve overall efficiency

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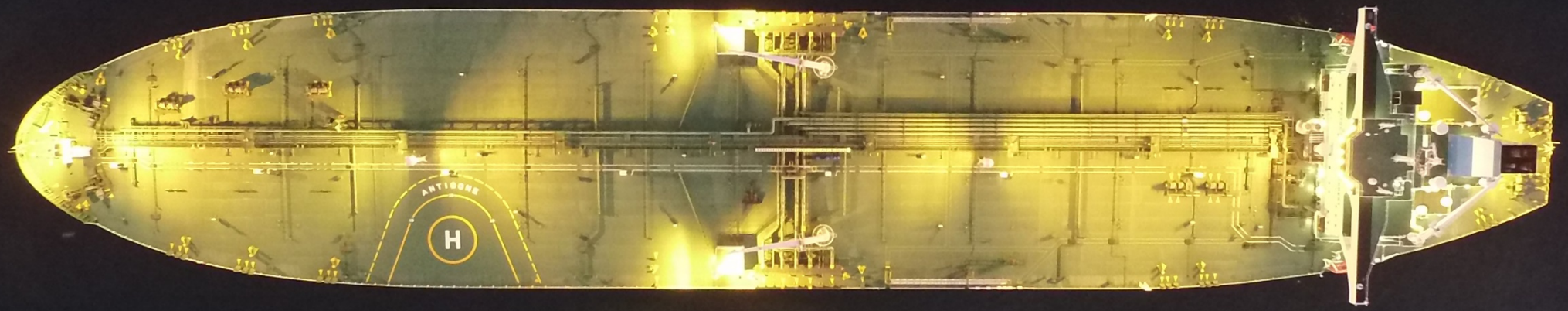
The ocean is our environment

Euronav embarks for the future of data intelligence through optimized IoT connectivity …

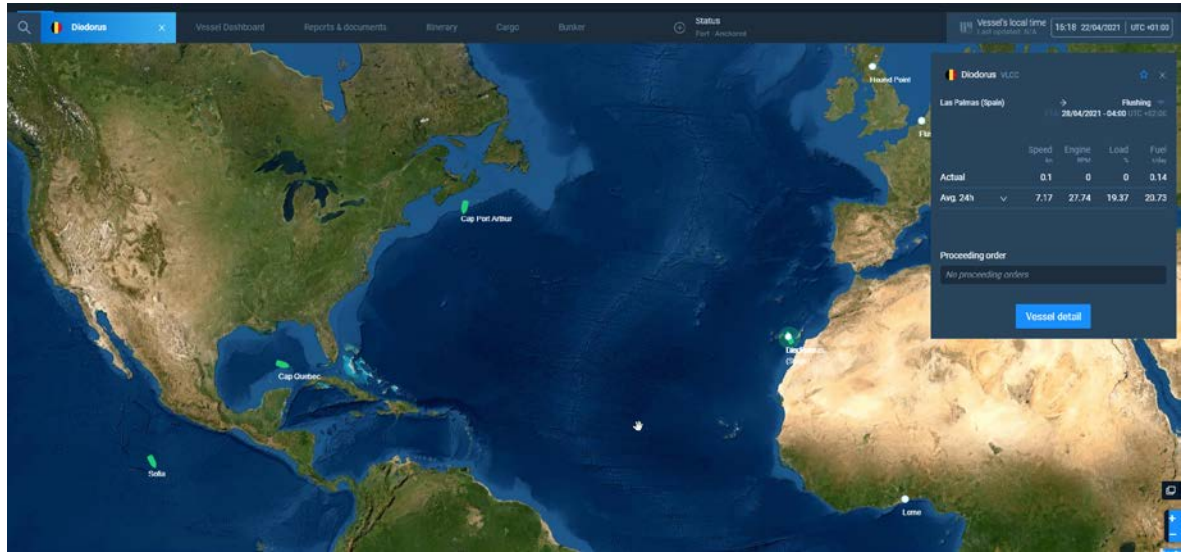
FAST (Fleet Automatic Statistics & Tracking)

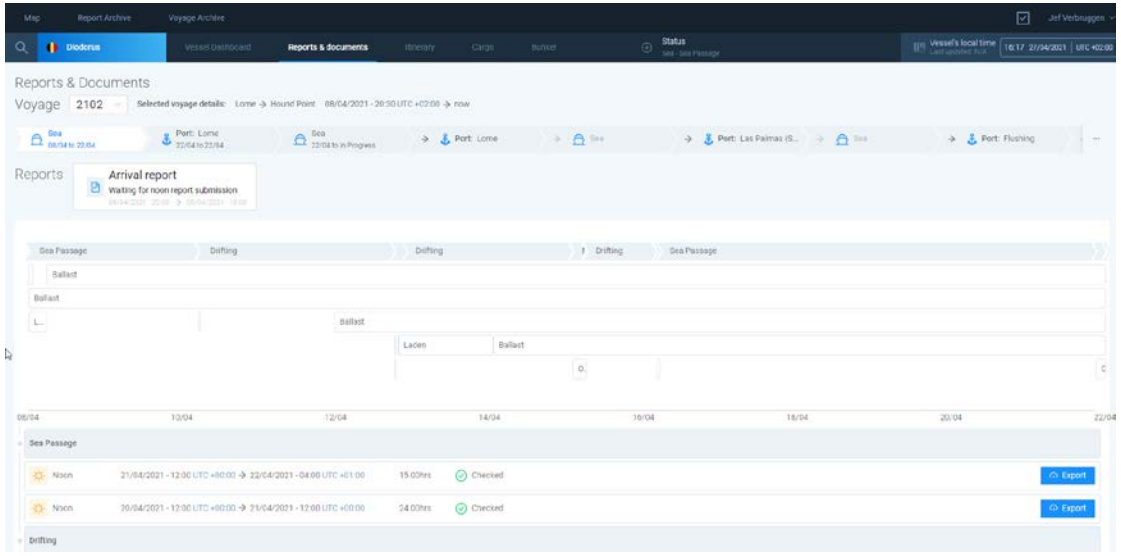
Why?

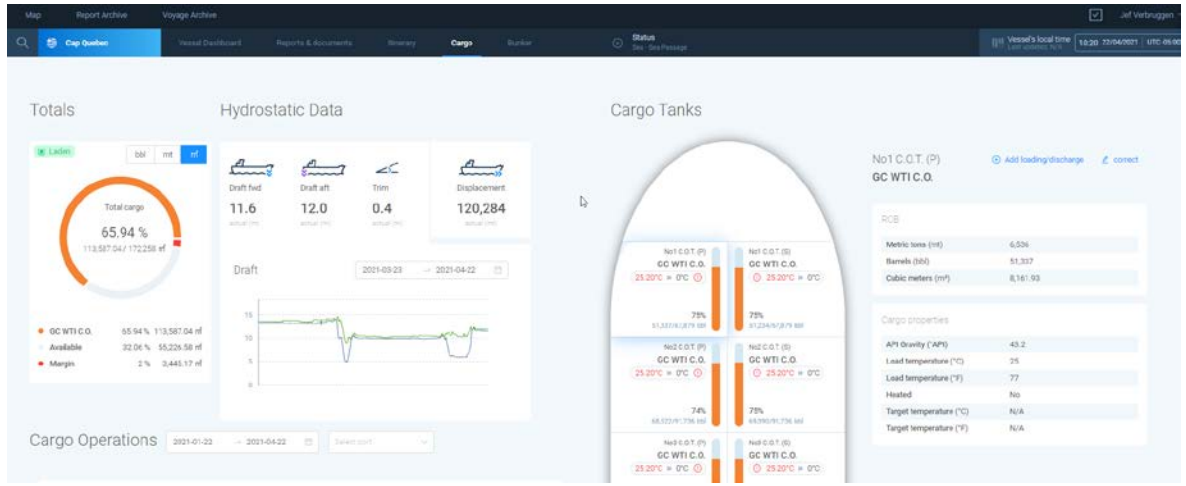


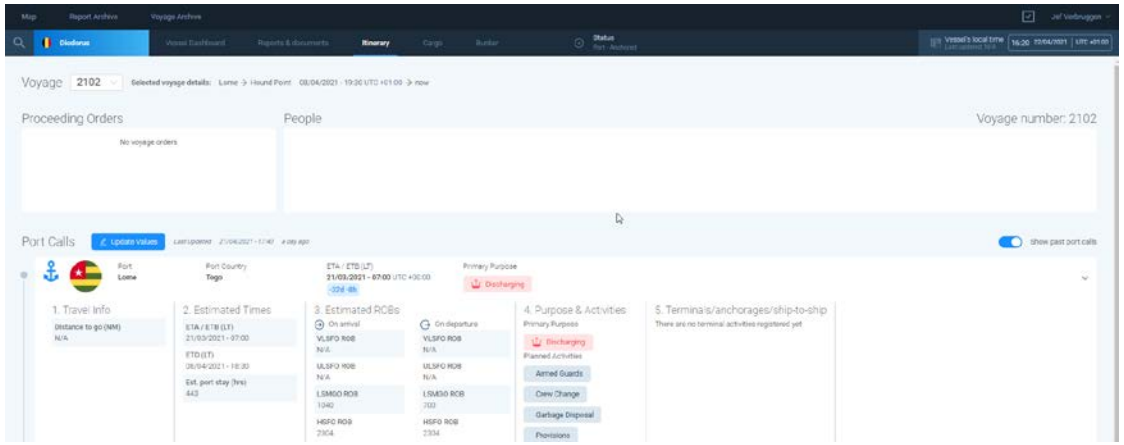
- Fuel savings
- Claims Management
- Predictive Maintenance
- Communication & Collaboration

FAST Platform









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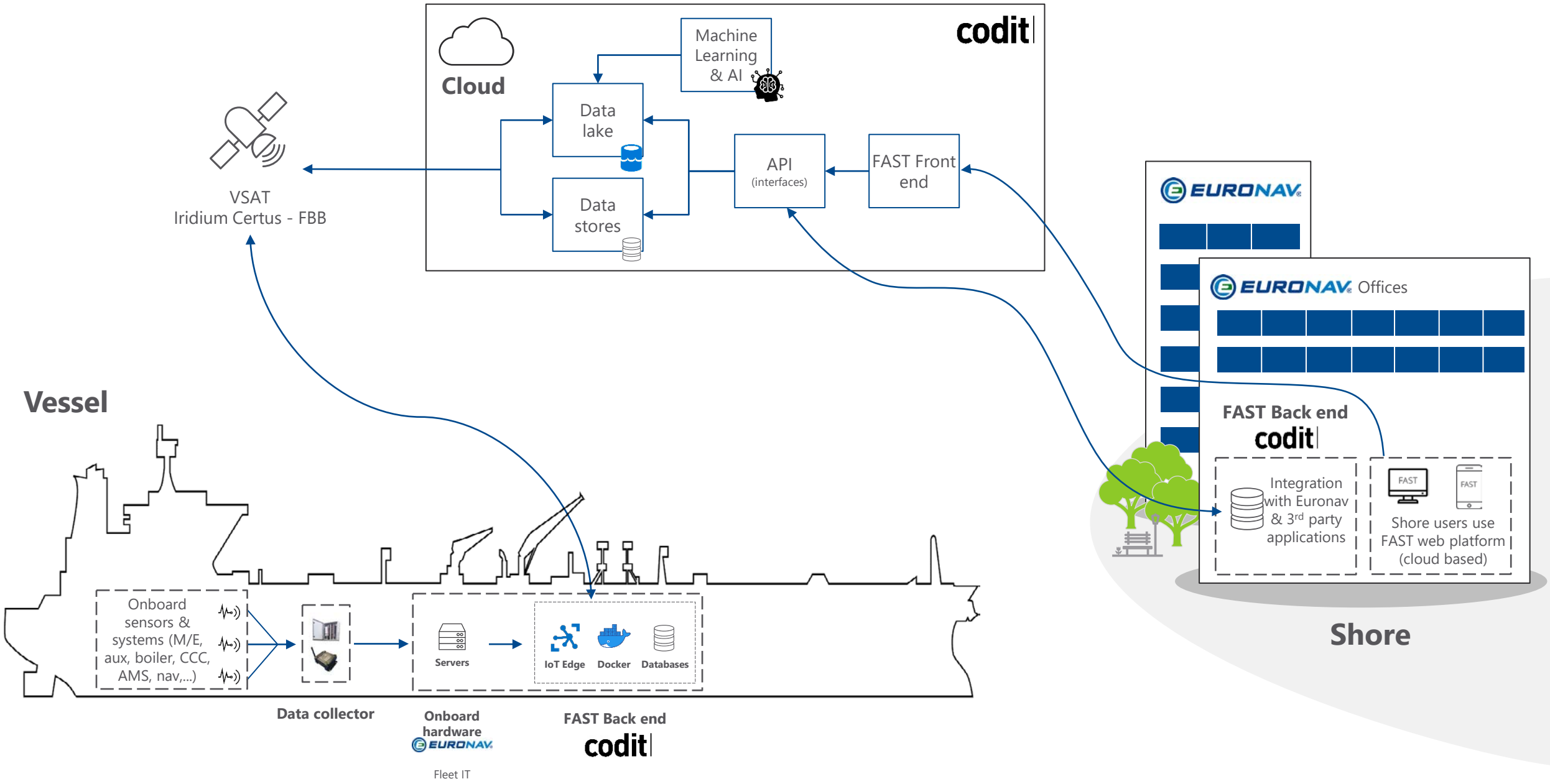
codit
Cloud
Machine Learning & AI
Data lake
Data stores
API (interfaces)
FAST Front end
VSAT
Iridium Certus - FBB
EURONAV
EURONAV Offices
FAST Back end
codit
Integration with Euronav & 3rd party applications
FAST
FAST
Shore users use FAST web platform (cloud based)
Shore
Vessel
Onboard sensors & systems (M/E, aux, boiler, CCC, AMS, nav,...)
Servers
IoT Edge
Docker
Databases
Data collector
Onboard hardware
EURONAV
Fleet IT
FAST Back end
codit

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Phased strategy

with full focus on generating insights on Fuel Oil Consumption

FDM Vessel

Swiftly giving insights in FDM data, alerts and data analytics (43 vessels)

Analytics based on noon report which contain certain sensor values.
Focus on Fuel Oil Consumption

Connected Vessel

Implement the FAST Platform
FAST VESSEL & SHORE (Cloud)
Installation of new Data collector

Replacement of Eurovessel
Installation of new Data collector
(Semi-) autogenerated reports
Vessel overview
Vessel Dashboard
Voyage Dashboard
…

Smart Vessel

Extend dashboards
Route optimization
Cargo Heating Optimization
Extended API integrations

Extended API integrations
Route optimization
Cargo Heating Optimization

Continuous improvement

Agile development

Continuous improvement of FAST Platform (Agile development)
e.g. Data exchange between vessels
B2B Portal
Additional API integrations

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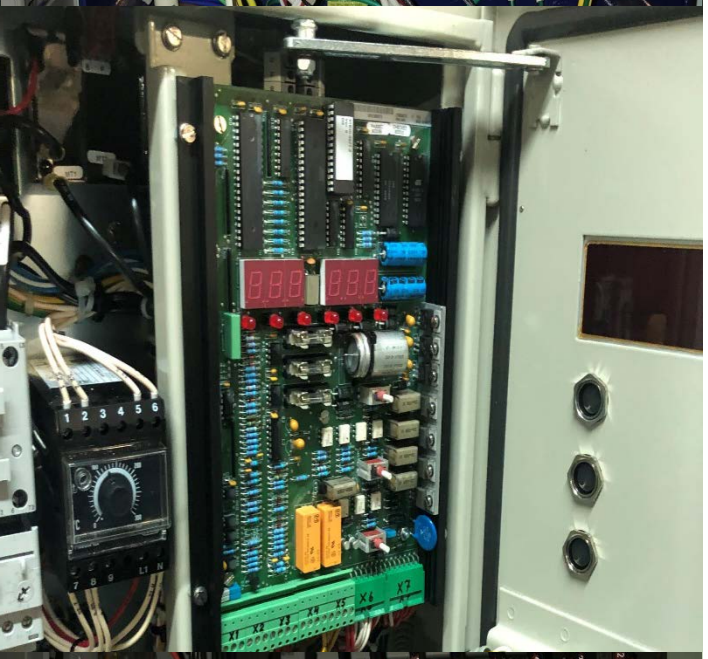
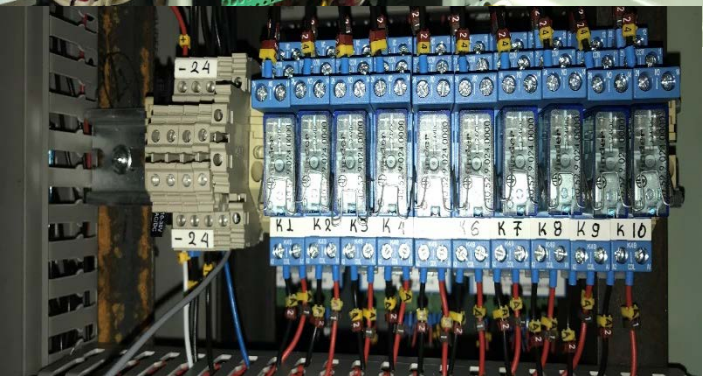
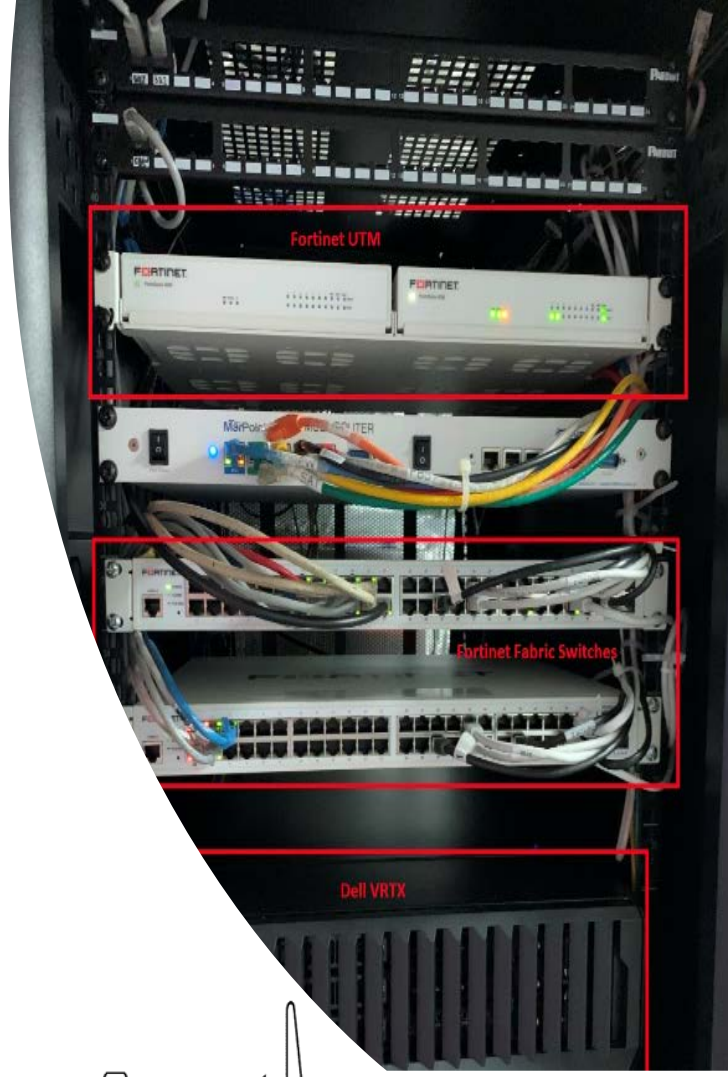


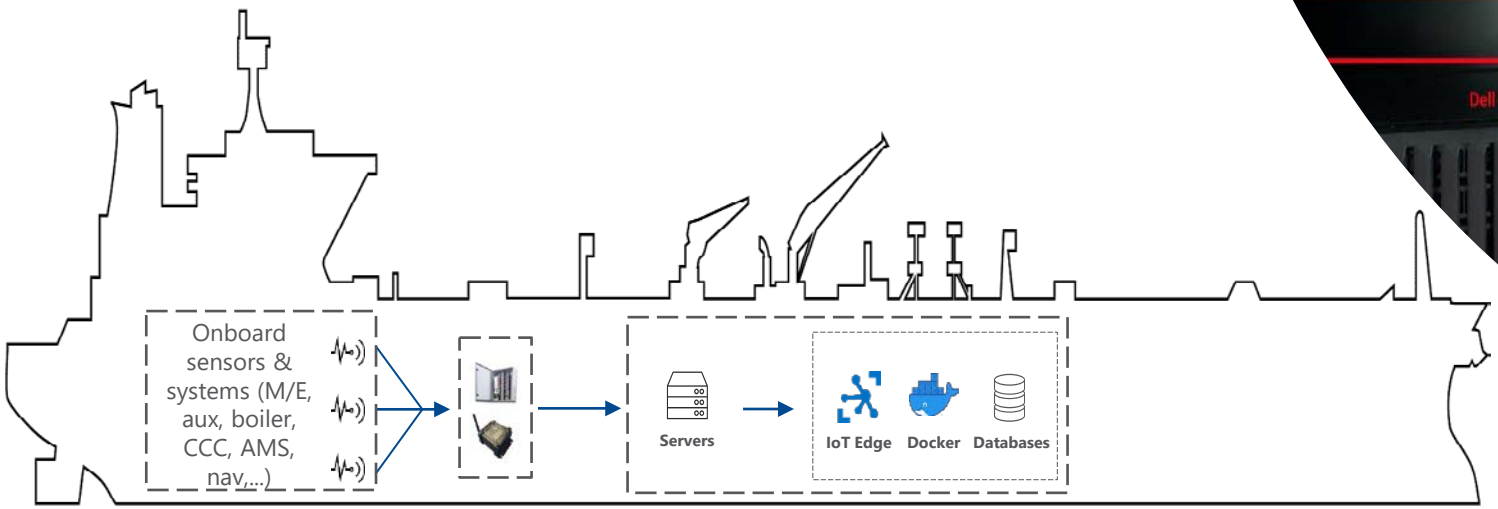


Technological Risks & Resilience

Cybersecurity OT/IT Network

- Network Segmentation
- Firewalling
- Secured Access Control
- Improve overall efficiency





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Technological Risks
Limited Internet Capabilities

- VSAT Internet capacity is very expensive
- All vessel applications and innovation runs over 1 pipeline
- 1GB office line vs 2Mbps/500kbps internet is a big difference

- Backup systems (Iridium/FBB) have less capacity i.e. 128 Kbps
- On backup only e-mail / voice active

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Euronav's Resilience

Projects that enable innovation

- Cybersecurity is top priority !!
- Data / File Compression techniques
- Quality of Service on the internet line
- Optimized Secure remote connectivity for Support
- Segmentation IT/OT network environment
- A professional D/R process needs to be in place … as last solution !!
- Close collaboration with our peers to find appropriate solutions

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