PROACT®
GLOBAL SOLUTIONS

Global Finished Vehicles Logistics Software Solutions

Global Factory to Consumer Control Towers

Sophisticated Network Yard Management

PROACT®
GLOBAL SOLUTIONS

SOLUTIONS DRIVEN BY PROACT
FUELED BY YOUR IMAGINATION

ISO 27001 ISO 9001

A new dawn of

The finished vehicle logistics market is evolving like never before, fueled by the increased pace of adoption of technologies such as Electric and Hydrogen, the changing way we buy and use vehicles, the entry of many new players into the market and of course, the cultural changes that have been accelerated rapidly by climate concerns and pandemic. We are in the midst of probably one of the most prolific periods of change in the automotive industry for generations. Disruption is everywhere, often unpredictable and impacting every facet of automotive, not least the vehicle supply chain. Furthermore, the pandemic has shone a bright light on the supply chain and elevated its profile and importance to new heights within our global economy. 'Supply chain' is now is no longer just an industry term, but a term now in the everyday vocabulary of the consumer. The pandemic has etched into all our minds the realization that the best products are nothing without reliable, dynamic supply chains.

This realization has in turn elevated the importance of supply chain software and technologies to a new high in every industry and especially in the finished vehicle logistics. Without advanced, highly flexible, dynamic and configurable software and technologies, managing complex, global, multi-modal vehicle supply chains is already incredibly difficult. If we consider the future of vehicle logistics, then not having sophisticated, process oriented software will make its management almost impossible.

Be it manufacturer or logistics service provider, the consequence of not adapting to this new reality now, could well ultimately be terminal. Transformation is coming at us from all angles;

Production

With many governments now placing hard deadlines on the banning of fossil fuel car production, it is only a matter of time before the majority of factories are producing predominantly electric, hydrogen or other non-fossil fuel-based vehicles. The impact of this is huge. Electric vehicles for example, have far less parts and components, are easier to assemble, require far less of a factory footprint. This in turn lends itself to more, smaller regional factories or to the assembly of modular components in country (much like the CKD/SKD model). Ultimately, this impacts on the supply chain, by fragmenting traditional high volume, global factory production into more, lower volume, faster, regional supply chains.

Intelligent Connected Vehicles

Vehicle technology is clearly undergoing a fundamental transformation. Not only are production techniques moving more towards those of the electronics industry, but vehicles are becoming more heuristic, autonomous and possess huge amounts of data about itself and its environment. With enhanced connectivity and a greater positional and environmental awareness, the vehicle itself is now a powerful source of real-time information. Much of this data is intrinsically valuable to the supply chain. GPS positional data, battery status and a whole host of diagnostic data has the potential to greatly enhance the management and visibility of the supply chain. Such 'telematic' data is today rather limited, but as manufacturers recognize its real logistical value, the availability of such data will become prevalent in the industry.

New Brands

Just about every major manufacturer either has an electric car range or is planning one. Few will argue with the fact that Electric will be the predominant power base for most future vehicles. There is now also a new generation of manufacturers, that come with little or no industry baggage. Whilst they may not have the experience and heritage of the big brands, neither do they have many of the technical barriers and bureaucracy that is sometimes present in the well-established brands.

vehicle logistics

Consumer Purchasing Models

The way we buy cars is most definitely changing. With each new generation, comes a greater awareness of their social responsibility. Environmentally friendly transportation is therefore already a focal point in most large economies. The expectations of consumers have also changed with many now familiar and comfortable with ordering their products online and with an expectation of fast delivery.

Vehicle Handling & Storage

With vehicle technologies such as electric and hydrogen, the handling of the vehicle changes, across all activities including storage, maintenance and servicing. Such things as battery condition become even more critical. Vehicle telematics will in future provide much more real-time information about the status and location of the vehicle and enable a more dynamic streamlined management of storage and processing yards.

Vehicle Delivery

With a move to increased direct consumer deliveries, the profile of equipment needed for delivery will change as will the driver interaction. Consumer deliveries require more, smaller delivery vehicles and driver training will need to be enhanced in order to interact with and handover to the end consumer. Transport planning and coordination will therefore change significantly with not only deliveries made on a transporter vehicle, but also driven deliveries where the delivery driver drives the vehicle itself to its destination. The role of many yards will expand to become regional collection centers in addition to or instead of traditional dealers.

After-market Vehicle Management

The absence of, or reduction in dealer sites, many of their traditional activities will need to be moved elsewhere in the supply chain. Vehicle registration, insurance, warranty, preparation, handover, accessorizing, service plans, servicing, manufacture recalls etc. Some of these will move to order end of the supply chain, others (eg. Registration) will need to be dealt with at later stages of the supply chain and also post-delivery.

Massive changes are therefore already upon us within the finished vehicle logistics industry and will only further accelerate. Adapting to such change requires software and technology that will embrace and capitalize on the complexity and dynamism of such a fluid environment.

ProAct Global Solutions

Multi - tiered

ProAct® Global Solutions Process

Control Tower

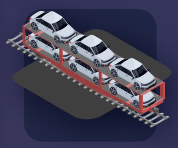
Road

Container

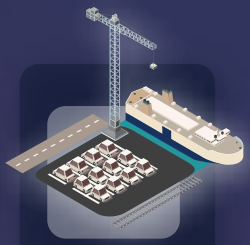
Production

Gate out

Factory Compound

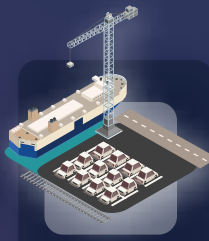


Rail



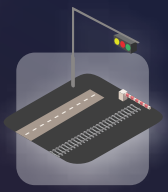
Port of load

Ocean



Port of discharge

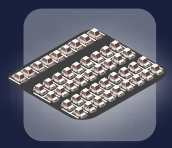
Operations Layer



Gate in

Inspection

CKD



Parking & Storage

Workshop, Repair & Maintenance

VIN Assignment

Global Control Tower

End-to-end, multi-modal process and route planning and projection

Real time re-projection and alert management

Global service provider collaboration & orchestration

Process & job management

Contract rate management & cost accrual

Seamless visibility & audit

Integration and collaboration platform

Digital Integration Layer

Radio Frequency

Telematics

GPS

API & Web Services

POWERED BY PROACT FUELED BY YOUR IMAGINATION

FVL Solution

Digitalization Layer

Road

Container

Road

Dealer

Road

Rail

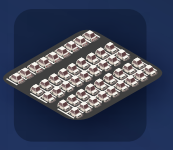
V.P.C.

Road

Driven

Consumer

Driven

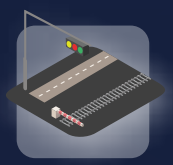


V.P.C. / Service Centre

Washing & Protection

Insurance / Registration / License Tax

Load Planning



Gate out

Final Delivery

Service, Repair & Warranty

Exchange / Upgrade

Operation Management

Process orientated, compound operations management

Automated compound location management

Plant, rail, port or VPC processes

Mobile device driven job management

Mantainence and upfitting management

Multi-modal load planning & management

Inspection/Damage management

Telematics and IoT ready

EDI

4 / 5G Mobile

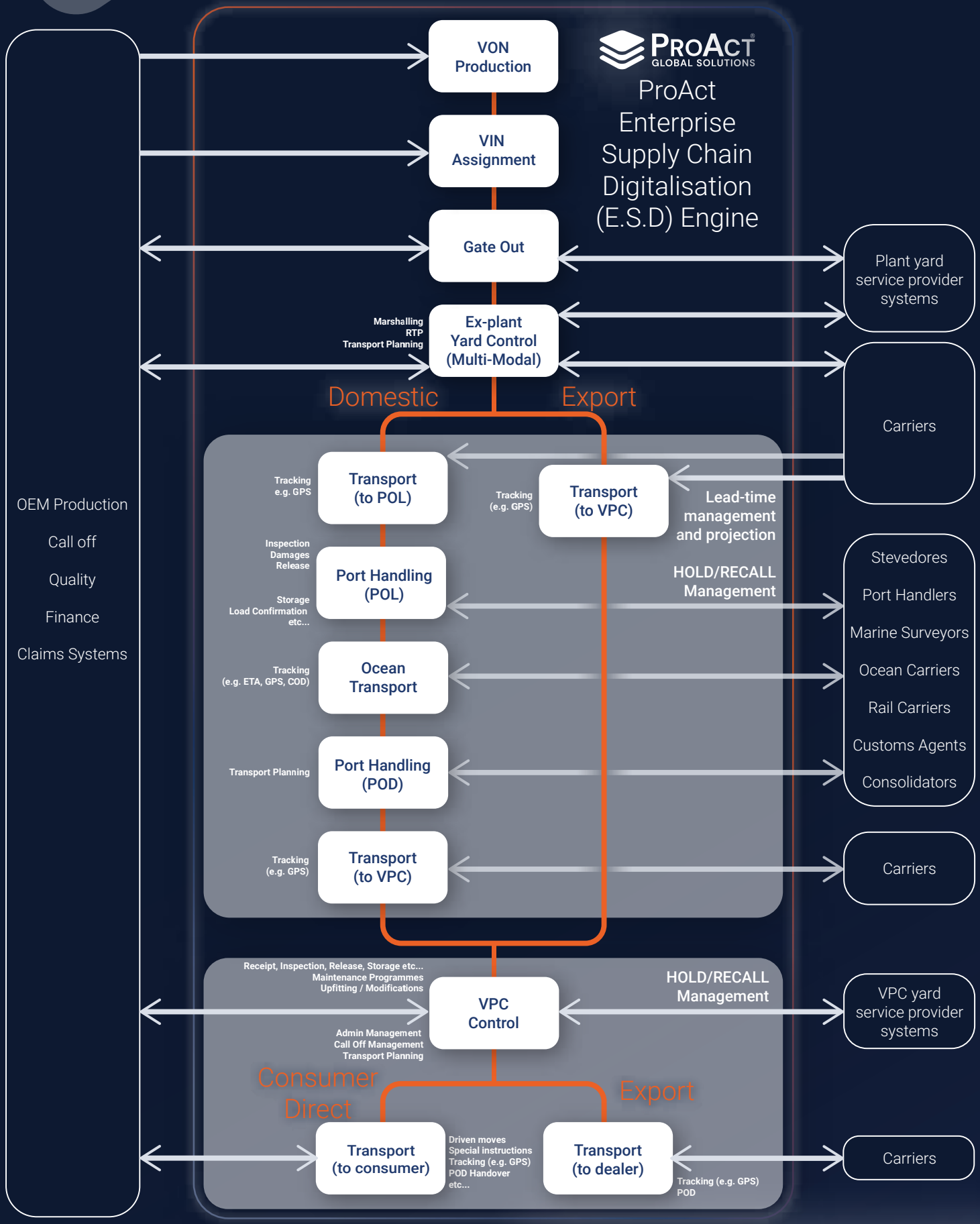
Devices

Bluetooth

RFID

ISO 27001 ISO 9001

Example Process Configuration



Let ProAct drive you to where

Capability Summary

Multi-Brand/Contract

- Multi-Language/Terminology
- Multi-Time Zone
- Multi-Yard/Site/Location
- Multi-Currency
- Multi-Unit Of Measures (UOM)
- Multi-Modal (Transport)
- Factory-to-consumer planning and execution
- End-to-end control tower visibility
- Dealer/Consumer visibility & collaboration
- Aftermarket VIN activity management
- Network Yard Management
- Yard Setup & Configuration
- Yard Graphical real-time visualization
- Multi-modal route and process planning
- Dynamic multi-modal Itinerary projection
- Sophisticated yard process/activity management
- Multi-modal manifest management
- Perpetually configurable events & triggers
- Service provider allocation and collaboration
- Service and Job allocation management
- Route capacity constraints
- Job resource capacity constraints
- Yard Location Maintenance (Bays, Tracks, Lanes, Berths, Sectors, Workshops etc)
- Location assignment rules
- Parking & movement optimization
- Route/Ramp code allocation
- Movement/Proximity optimization
- Rail car & train load optimization
- Rail Car 'Spotting' and Switching support
- Barcode Scanning
- Storage duration management

Mobile Collaboration

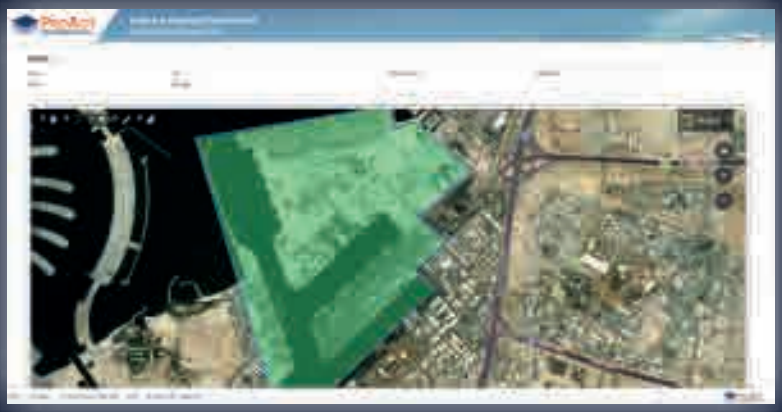
- Android native online/offline App Secure device authorization
- Local operational data storage (offline)
- Inspection/Survey Management
- Automatic Job allocation
- Photo, annotation and signature capture
- GPS tracking & Geofencing
- Business process management
- Job location mapping and orientation
- Yard inventory enquiry

General Capabilities

- QR Label generation
- Document Management
- Equipment Loading / Unloading (rail, road, ocean)
- Automated workflow & task allocation
- Workflow & task allocation duration tracking
- Parts Inventory allocation
- Activity duration tracking
- Rail car management & tracking
- Truck management & tracking
- Vessel management & tracking
- Vessel schedule management
- Inbound/Outbound manifest management
- Factory process visibility
- KPI Tracking & MIS dashboarding
- Vehicle or Equipment Inspections & surveys
- Photographic and document support
- Storage duration management
- Ruled based 'Hold' management & release
- AIAG format damage recording
- Repair tracking
- Upfitting management (PIO,DIO,FIO)
- Inspection capture & management
- VIN decoding
- Equipment asset Register
- Equipment compartment/Deck Configuration
- Equipment load planning restrictions
- Cost And revenue tariff management
- Automatic charge Matching
- Billing creation
- Extensive EDI, Web Services and API support
- EDI error handling and management tools
- EDI activity history & auditing

Telematics

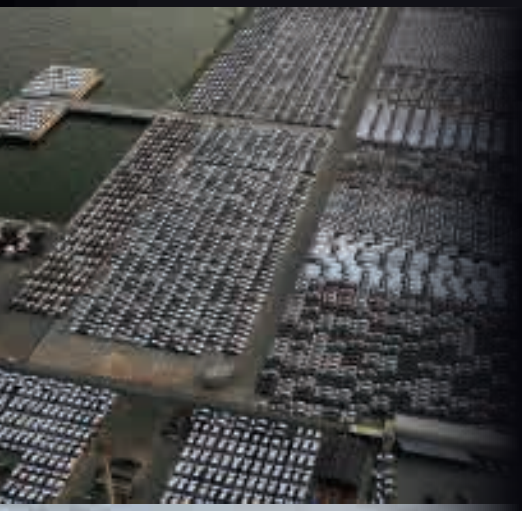
- VIN originating data capture/request
- Status recording (battery, tire, GPS etc)
- Status based rules and task triggers
- Automatic assignment of yard tasks
- Resolution verification
- RFID integration available on request

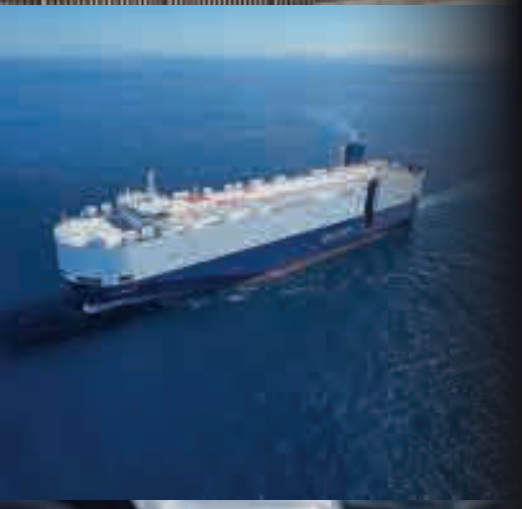


your imagination takes you.

ISO 27001 ISO 9001

FINISHED VEHICLE LOGISTICS SOFTWARE SOLUTIONS





PROACT®
GLOBAL SOLUTIONS

Highly Configurable, Process Orientated Solutions

- Global Digital Twin for the entire FVL Supply Chain
- Solutions Orientated to all Stakeholders
- Multi-modal Planning & Orchestration
- Factory to Consumer Orchestration
- Vehicle Work Order Management
- Sophisticated Yard Management
- Mobile Device Collaboration
- Inventory & Warehousing

For more information please contact:

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