

Modern Comprehensive IT Solutions for Managing and Optimizing Handling Operations **with Different** **Cargo Types** at Marine and Railway Terminal

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About Solvo

30+

**years
experience**



24/7/365 support



400+ projects

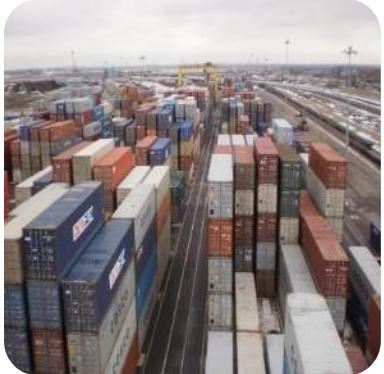


5 offices worldwide



SOLVO is successfully certified on ISO 9001:2000 certification, compliant with ISO 27001. SOLVO.TOS and SOLVO.WMS systems are included in the widely acclaimed international Fraunhofer IML and CML directories, undergoing regular re-validation process.

Business core areas



Solutions for ports and terminals

A leading Terminal Operating System for ports and terminals. An ultimate set of solutions for managing just any type of cargo: container, break bulk, Ro-Ro, general cargo, etc., including extra solutions as the VBS, AGMS, VGM.



Solutions for managing yard

YMS helps to manage all the operations at the yards, including allocation and storage of different types of cargo, housekeeping, reefer and empty containers management, CFS management etc. Providing procurement of gate-entry/cargo pick-up permits for truck-drivers, trucks and cargo forwarders/transport companies.

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Solutions for warehouse logistics

One of the leading software providers of SCE software. Solutions range from WMS to WCS, Yard, Billing, KPI and more for all verticals: production, retail and distribution, 3PL and pharmaceuticals.

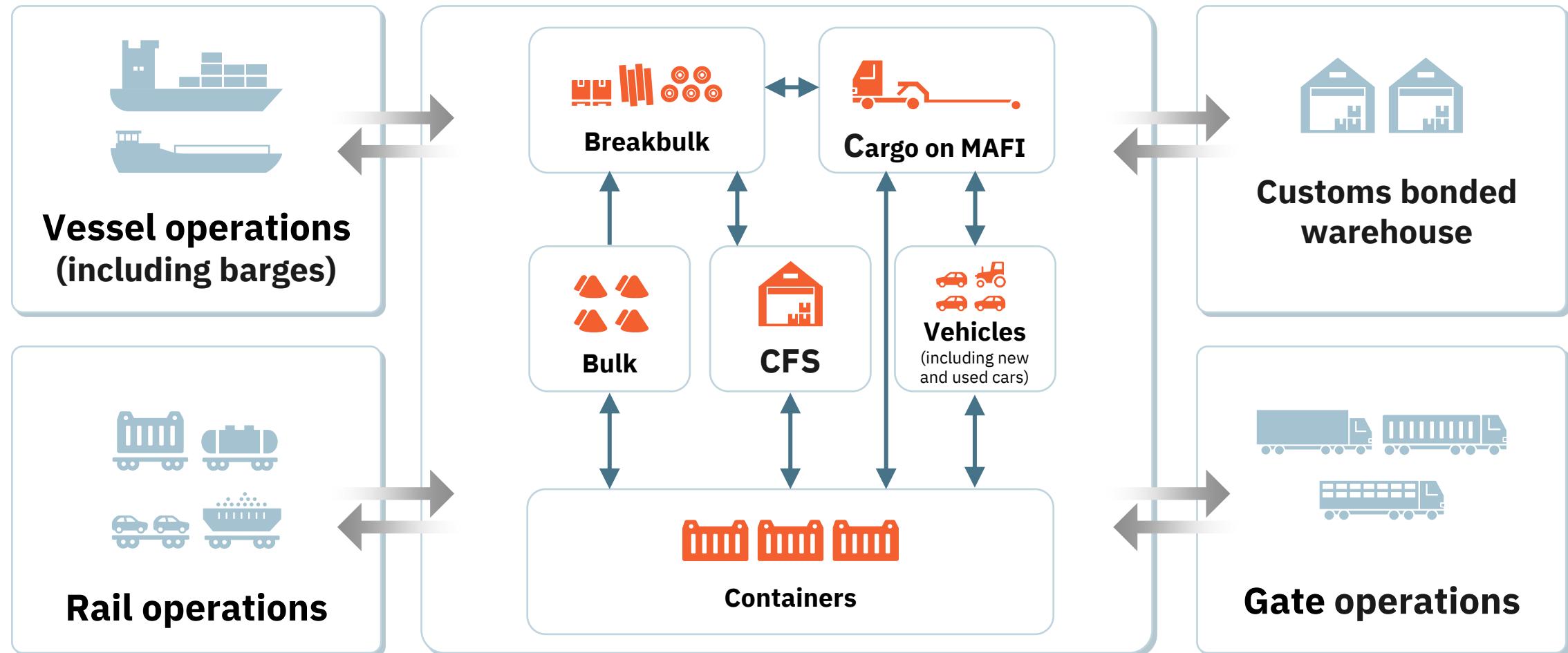


Consultancy in logistics and system integration

Logistics and Management consultants, including specializations for Project Management, Optimization, Engineering, Design and Procurement.

As well as training, seminars, webinars and other educational events.

Support of complex technological chains



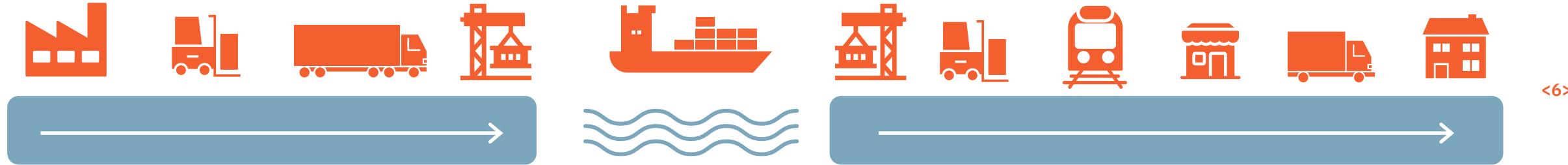
Solvo.TOS overview

Solvo.TOS



Modern ports are moving to Extended Supply Chain

INTERNATIONAL TRADE SUMMARY



- Moving to Global Supply Chain
- Global Information Environment Connecting All the Elements of the Supply Chain
- End to End visibility – to final customer



Modern TOS as a full Supply Chain solution and an integration platform

Ready-made solutions for the Middle East



Electronic data exchange between terminals

Data on containers, vessel calls and bills of lading is transmitted automatically via web services in XML format.



A full-fledged Billing system

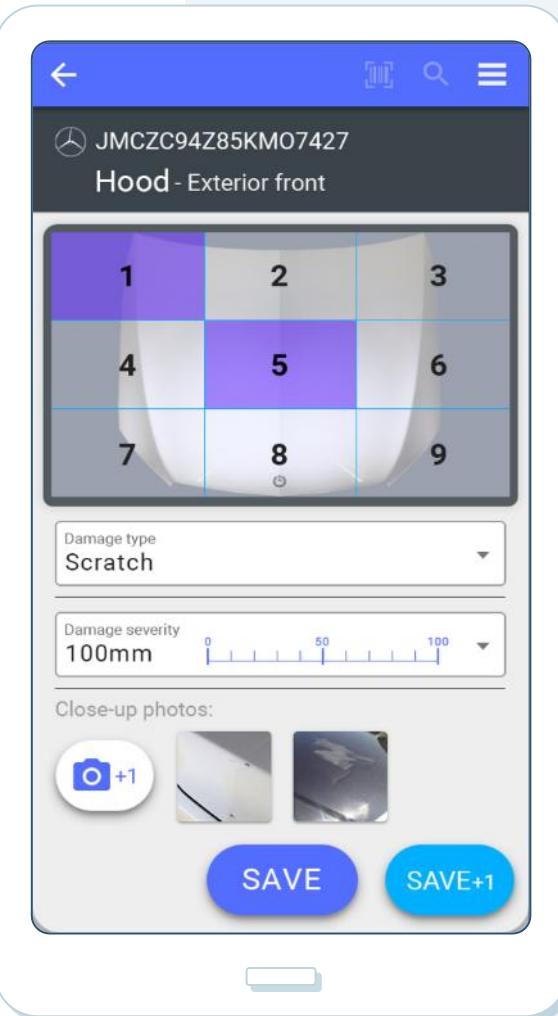
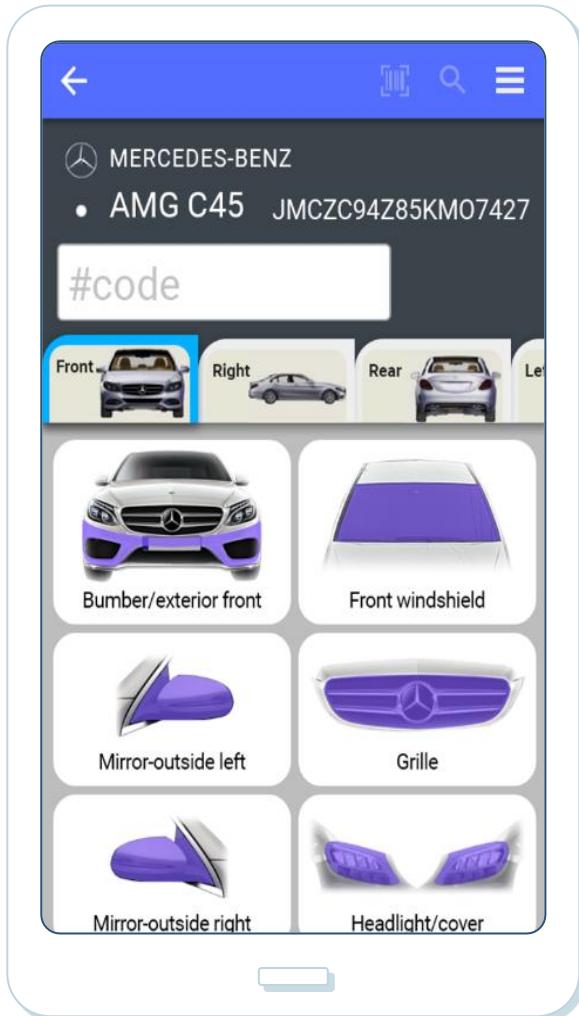
Module allows to keep records of mutual payments with counterparties, generate invoices for services rendered and other related documents, and automatically send invoices and reminders of debts to counterparties.



Handling of all types of cargo

The ability to manage all types of cargo within a single system: Containers, General Cargo, RoRo, Bulk, and Livestock

Survey Mobile application



The application is based on the AIAG international standard.

The application has flexible settings and according to the weather conditions of the surveyor: before starting the shift it is necessary to set such parameters as time of day, weather conditions and vehicle condition: soiled, clean, snow/ice covered.

Rail management

The system can perform automatic scheduling on the railroad, operating such data as:

Cargo information

Various types of documents, based on which loading and unloading of railcars is carried out

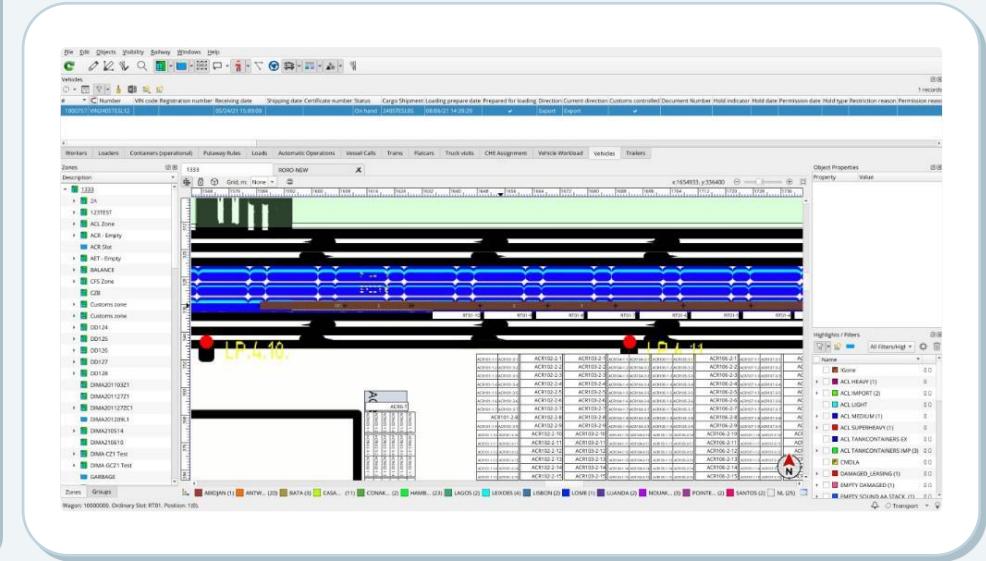
Railcars parameters

- Railcar Reference — Determines railcar length, owner, time to scheduled repair, etc.
- Railcar parameters: loaded from an external system, or filled in by the tallyman via RDT during registration
- Cargo putaway specifications

Planning, managing and monitoring the progress of loading / unloading trains based on ETA / ETD (estimated time of arrival / departure).



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Optimization of container placement on the platform

The screenshot displays a software application for managing wagon specifications and loading configurations. On the left, a table lists various wagons with columns for Name, Status, Additional..., Date approved, Registry railway, Waggon class, and Waggon model. The 'Status' column shows 'Ready' for most wagons. The 'Waggon class' column shows values like 40, 80, and 200002. The 'Waggon model' column shows values like 0400040, 2020202, and 2004002. On the right, a 'Specification Detail Properties #1592' window is open, showing 'Specification #1068 of 06.11.2012 for MTU 13-9781' and a 'Location of containers on the wagon' diagram. The diagram shows a wagon with four positions (1, 2, 3, 4) each containing a '1C.1CC.1CX' 20' container. The containers are represented by brown rectangles with 'F' and '20'' markings. The wagon base is shown as a black horizontal bar with coupler icons at the ends. Below the diagram, a 'Rules for distribution on the platform' section is visible.

The system generates a list of containers for loading, allows to plan the loading of cargo on the wagon, taking into account different characteristics and parameters.

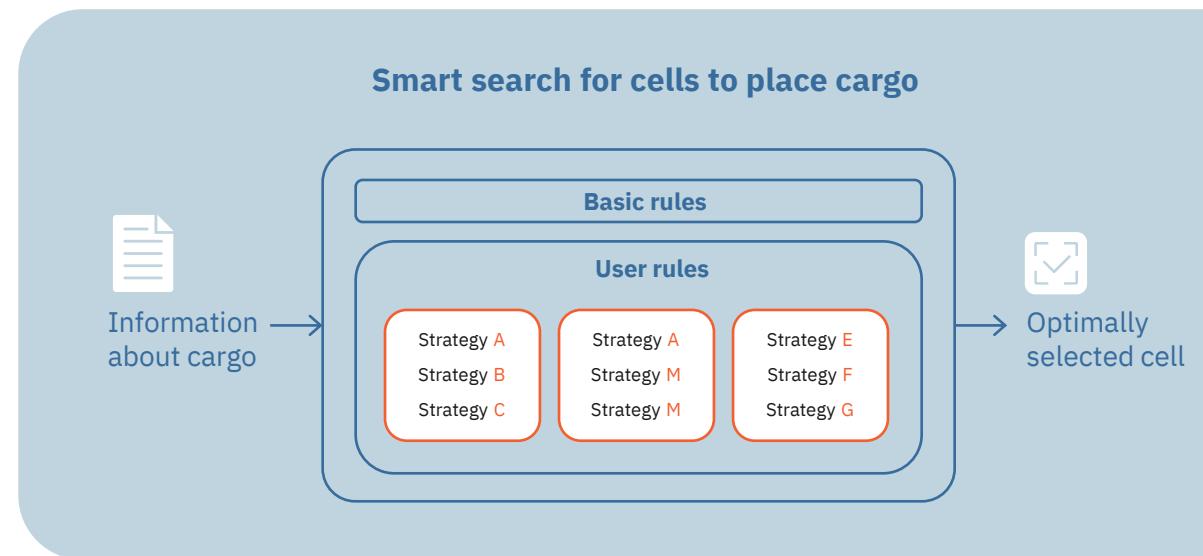
Solvo.TOS Intelligent Algorithms

Solvo.TOS includes the following intelligent tools:

- Container placement rules and strategies
- Unnumbered container scheduling rules
- Trailer loading and unloading priority rules
- Priorities and work assignment configuration for handling equipment
- And much more

When searching for cells to accommodate cargo, the system automatically selects a cell with the required parameters: its compatibility, size, type, filling order, and accessibility are taken into account.

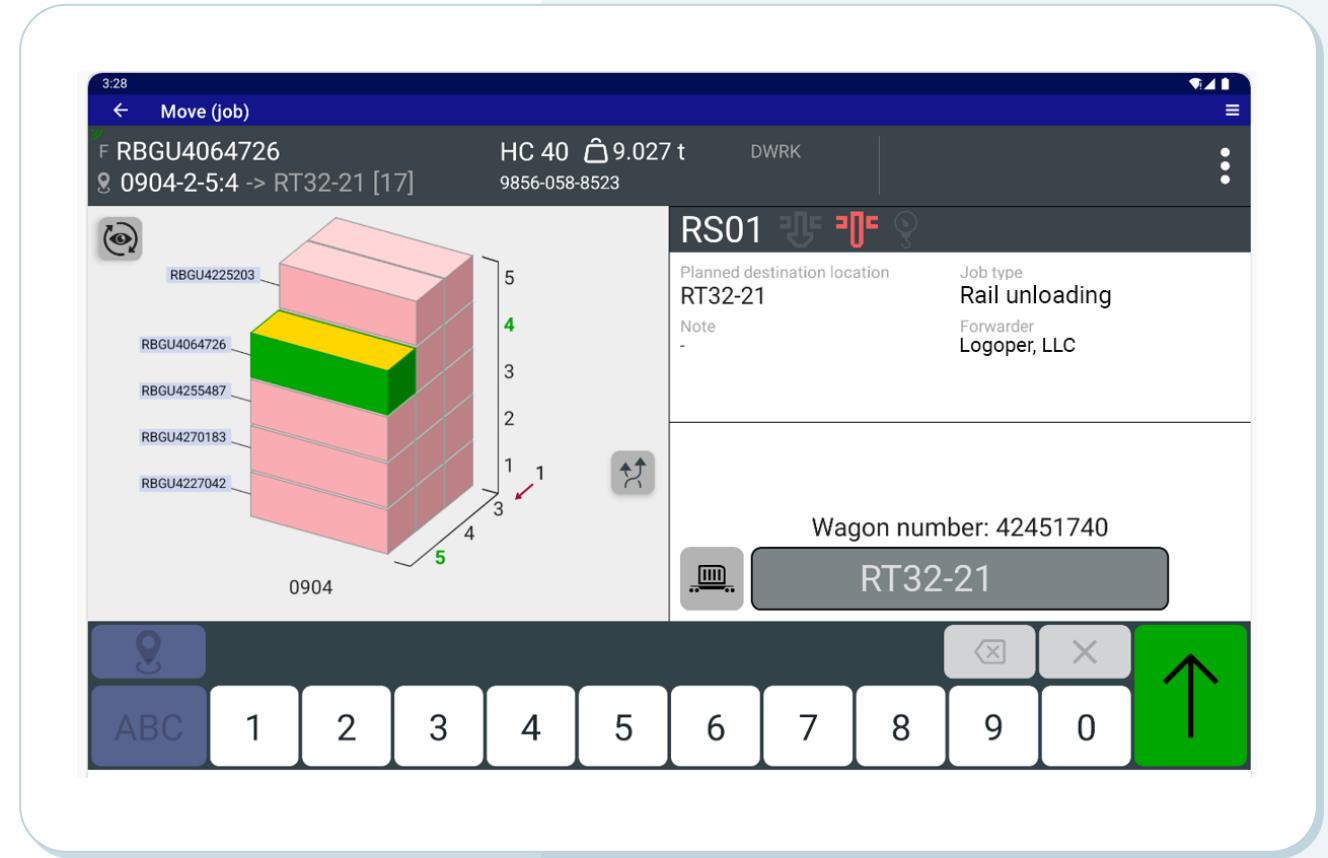
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3D Stack Visualization

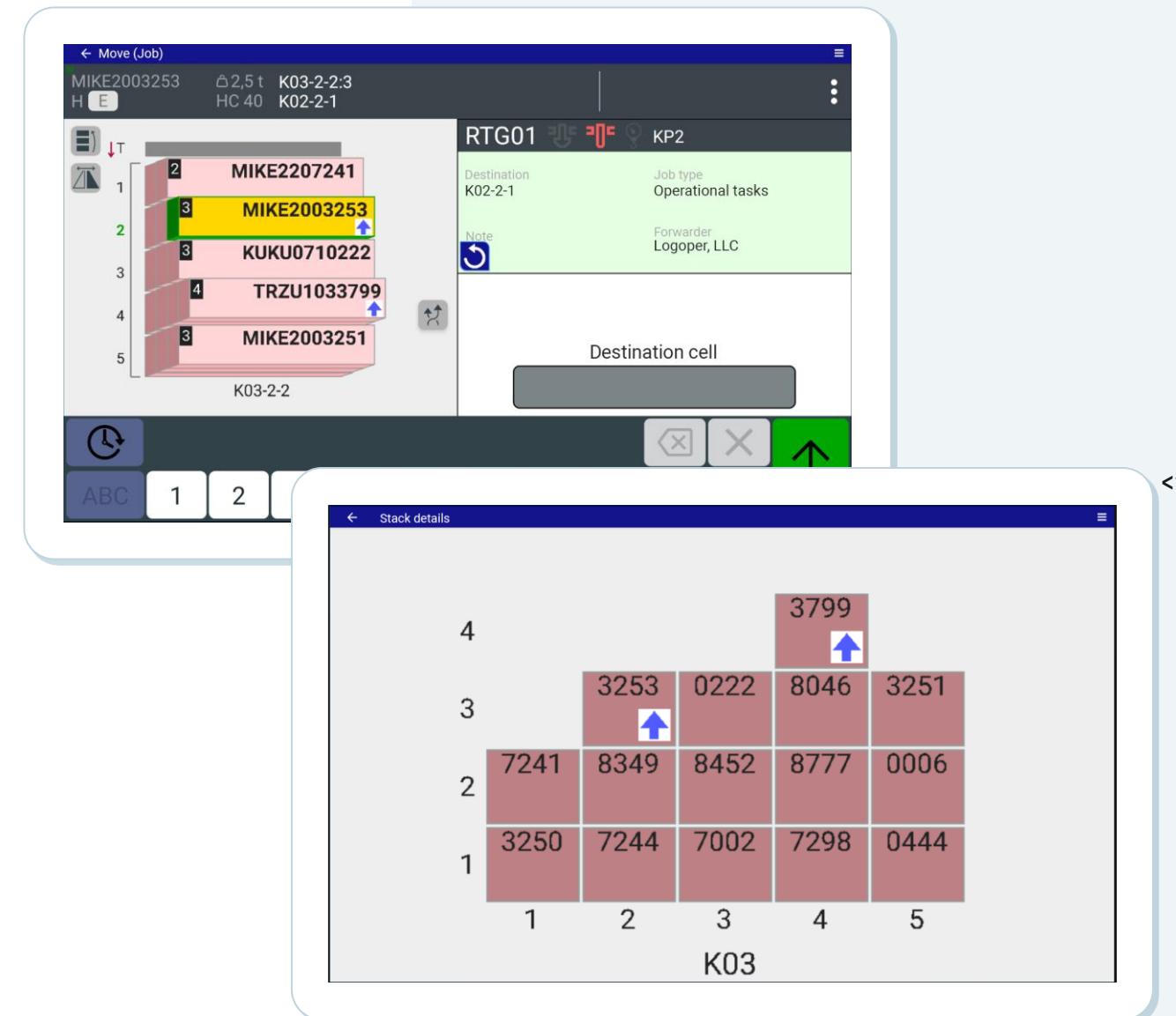
- Intuitive interface
- SMART search
- Customization options
- Push notifications

An interface that is clear at first glance and convenient from the first day of work

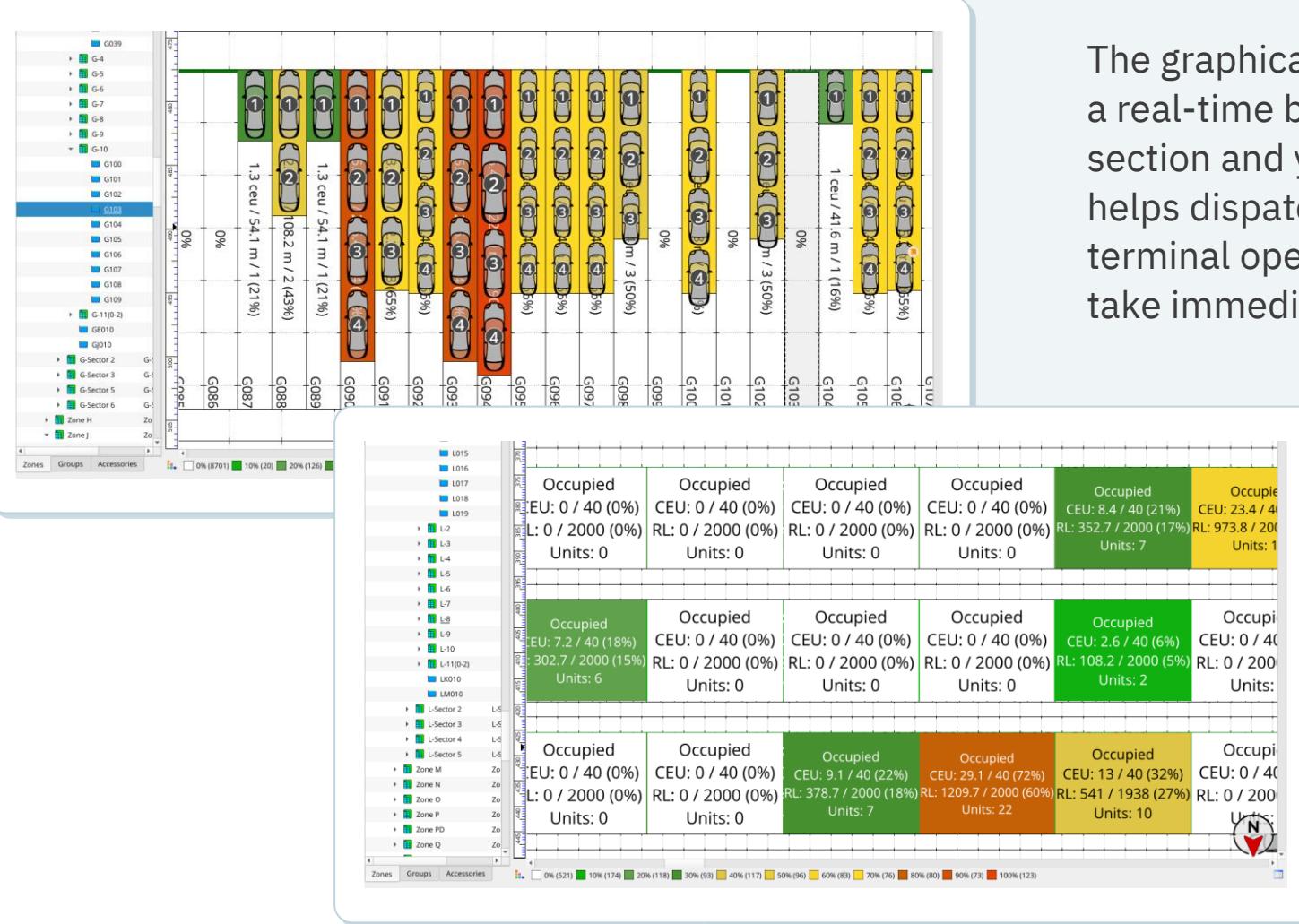


RTG|RMG operator mobile application

- 3D visualization
- The stack can be rotated relative to the operator.
- Additional information about the top-row containers can be displayed.
- The ability to obtain an alternative cross-sectional view of the stack has been added.



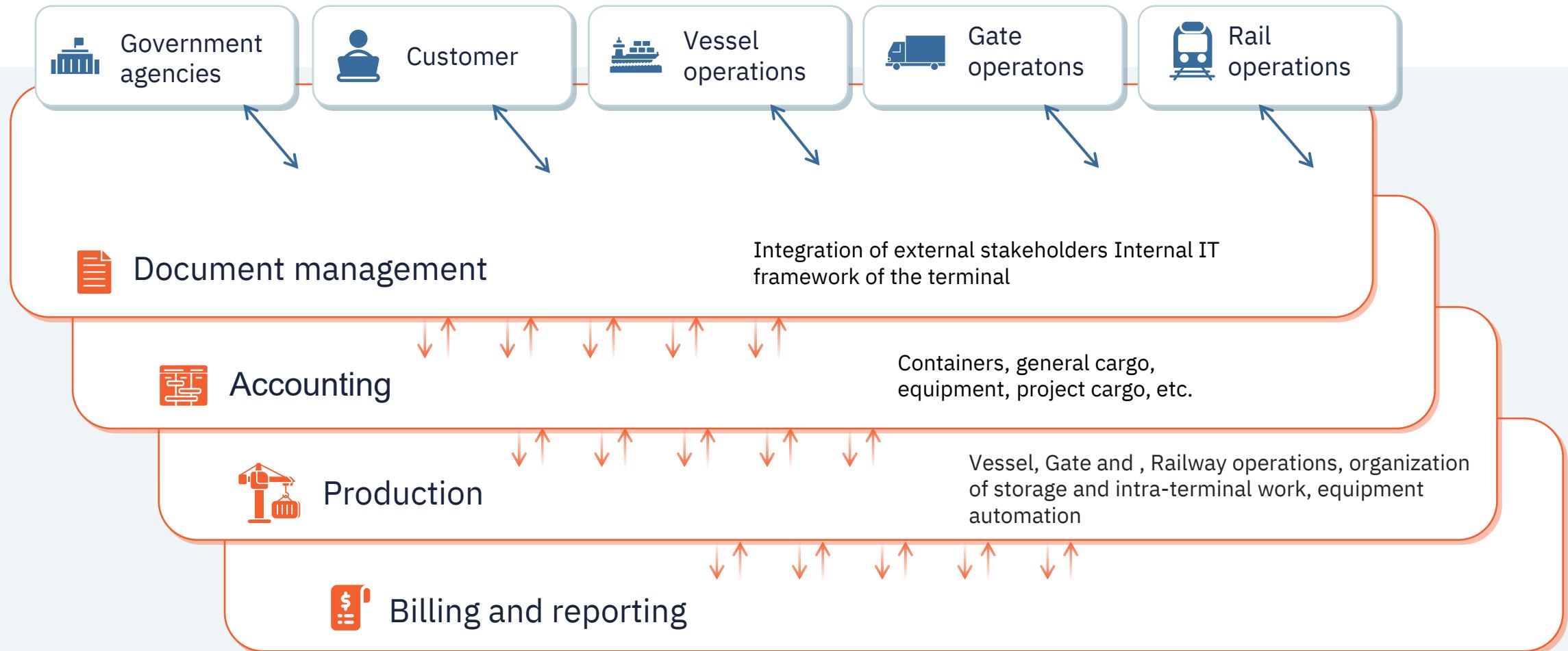
Realtime visibility – yard assets



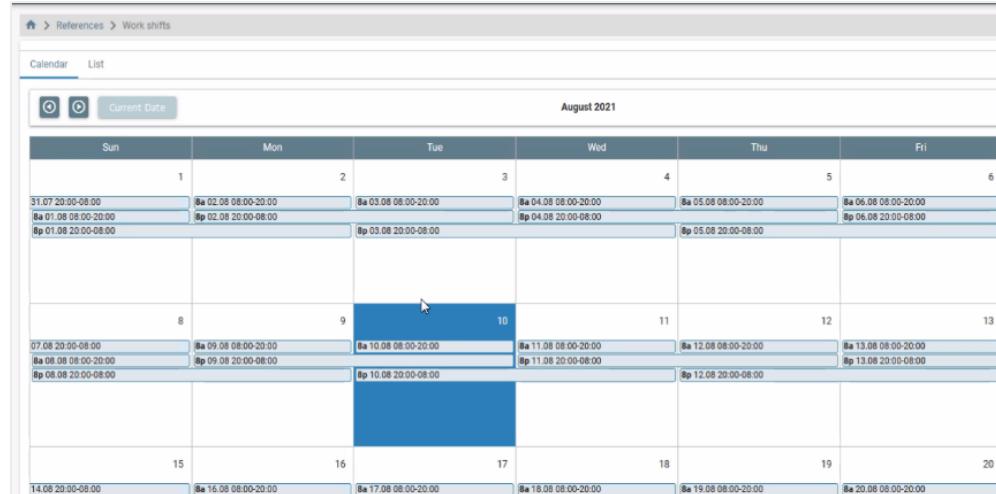
The graphical terminal layout offers a real-time bird's eye view, yard section and yard block views and helps dispatchers monitor all terminal operations in real time and take immediate action if needed.

This is especially effective whenever yard equipment units such as RTGs use GPS transmitters. In this case dispatchers can monitor all actions as they actually take place with no delay. The GUI is customizable with regard to displayed information and design

Solvo.TOS Integrates with all participants in the supply chain



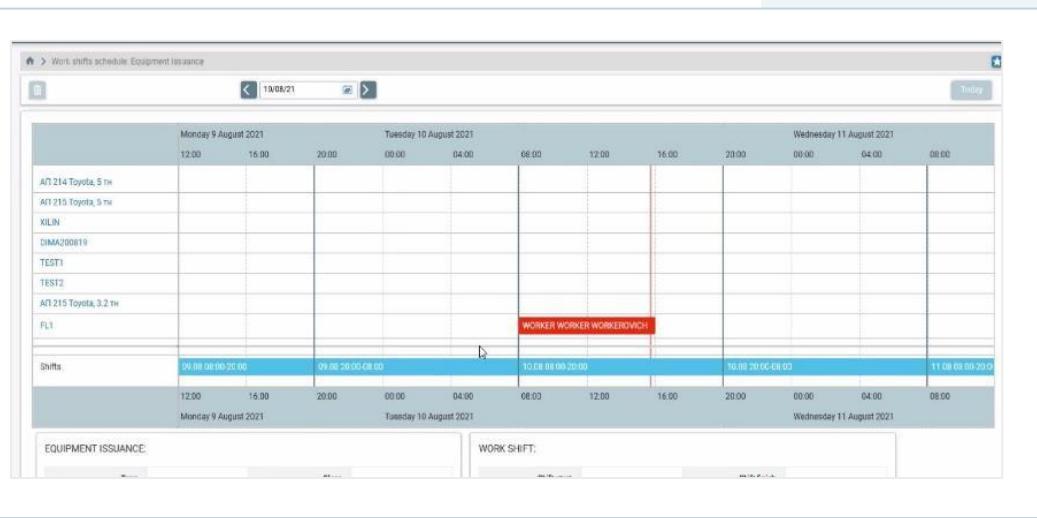
Personnel & Equipment productivity



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The dispatcher plan in advance and then controls the execution of the work-orders, using an interactive terminal map and data received in real time from RDT mounted on vehicles or held by tallymen.

Thanks to aggregating data and reports on employee productivity—either individually or for groups—the system provides visibility where terminals are allocating their labor budgets and help them to optimize human assets.





Solvo.TOS implementation results

40%

Reduction of unproductive operations

45%

Improving labor productivity

90%

Reduction of fines

30%

Reducing truck handling time



The solution is here!

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