



## ORTEC Load Optimization

- ⊕ **Efficient Load Planning using mathematical optimization**
- ⊕ **Easy access and integration with Software-as-a-Service**

## General

ORTEC Load Optimization is a software for planning the loading of package items in means of transport. The software uses mathematical procedures to optimize the loading of packages into different means of transport, with the aim of improving load planning productivity by automating load planning, improve the execution, and increase the efficiency of the means of transport by selecting the optimal number and types, considering the defined rules, strategies and objectives.

The software is operated and offered by ORTEC as Software-as-a-Service (SaaS) in the public cloud in B2B business. Both web services are available for the connection and use of selected functions with third-party software as well as web applications for the interactive use of users. The software can be ordered for use in different subscriptions depending on the usage scenario.

ORTEC Load Optimization is available in multiple variants (subscriptions), specifically designed to support certain business usage scenarios, such as

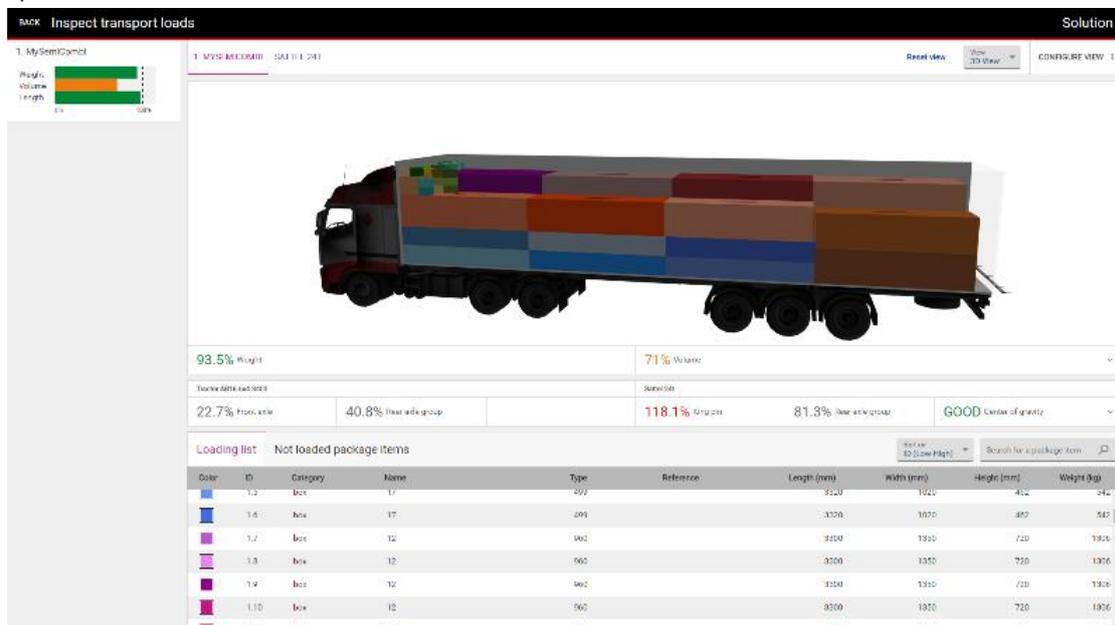
- ORTEC Load Optimization for Sales  
Enable Sales Representatives to see immediately the optimally required shipping and transportation capacity for a sales order in form of pallets and truck loads – right with order entry
- ORTEC Load Optimization for Replenishment  
Enable Replenishment Planners to maximize the truck utilization by having the optimization propose to fill up unused capacity with demands of lower priority ('pull forward')

## Main features

- Using mathematical optimization to assign and position package items into different means of transport, e.g. Truck, Trailer (Center-axle, Drawbar), Truck-Trailer combinations, Tractor-Semitrailer combinations, ISO Container (20', 40' etc.)
- Consider typical loading rules such as stacking requirements and allowed orientations of package items, maximum permissible axle weights for means of transport etc.
- Manage and maintain planning relevant master data for packages and means of transport such as loading rules, capacities etc. and use it automatically when performing a load optimization
- Easy check of the solutions with the interactive 3-dimensional load graphics
- Fast and secure data and process integration of any third-party business software (e.g. CRM, ERP, TMS, WMS) via standard web interface (REST) for data synchronization and in 'Black Box' operation mode.

## ORTEC Load Optimization for Sales

If your Sales department is struggling to determine for customer quotations or orders the estimated, optimal shipping and transportation capacity needed, because your products and packages are very different in dimensions, weights and their loading guidelines, you can support them with ORTEC Load Optimization for Sales. Use ORTEC's state-of-the-art system to system integration API to link your order management system or ERP with the web services for automatically optimizing the loading of packages and receive immediately an accurate information about the needed transportation capacity. The software automatically considers all loading rules you maintained for packages and means of transport in the user-friendly and easy to learn web applications. In order to evaluate the solution, you can easily access a sophisticated, interactive 3-dimensional load plan via a hyperlink so that your Sales employee can easily understand the solution. Use the hyperlink of a solution to easily share with your warehouse, carrier or even customer to show them your excellent service to support an optimal shipping and transport of their order.



## ORTEC Load Optimization for Replenishment

In a demand-driven supply chain, inventory management and the planning of the physical movement of products between plants and distribution centers or distribution centers and customers should work hand in hand. The focus on the 'optimal' inventory movements could lead easily to inefficient use of transportation capacity. Enable your Replenishment planners with ORTEC Load Optimization for Replenishment to optimize the filling of available transportation capacity. The algorithm assures the optimal assignment of 'must-go' packages and optimizes the utilization of those transport units by positioning additional 'can-go' packages with a lower priority. The planner has always the visibility of the load with the interactive 3-dimensional load plan to see the load distribution per unit by priority to make their decision to actually ship the truck or wait to go with the next replenishment cycle.

## Why ORTEC Load Optimization?

- ⊕ Best-in-class optimization algorithms with ORTEC's more than 35 years of experience in packing and loading optimization
- ⊕ Achieve a better productivity in planning and realize freight cost reductions by better utilization from the first use of the software
- ⊕ No investments in software licenses or additional IT infrastructure required, low operational costs – Flexible subscriptions either with fixed monthly fees or in the 'pay-as-you-go' plan as Software-as-a-Service managed by ORTEC
- ⊕ All web applications are designed to optimize the workflow of the typical user and can run at any PC without additional installations in the most commonly used internet browsers.

Contact your ORTEC office today for more information:

ORTEC B.V.  
Houtsingel 5  
2719 EA Zoetermeer, Netherlands  
+31 88 678 3265  
info@ortec.com