

# e-Commerce meets WMS

m▲ntis



## White Paper

### E-Commerce challenges today + tomorrow Order fulfillment

Today e-commerce businesses face unforeseeable challenges. How much will they grow in the following months or years? How many more inventory goods and SKU's will they need to e-commerce? How can they accurately monitor their stock? How flawless will their order fulfillment be? How can they reduce costs from packing and parceling? How can returns not cause them headaches?

And most important when they grow will their WMS be flexible and adaptable to meet their ever-changing needs? [Will their WMS meet their E-commerce?](#)

E-commerce today and tomorrow needs an Enterprise scale WMS with true adaptability and flexibility ready to help: [Logistics Vision Suite by Mantis](#).

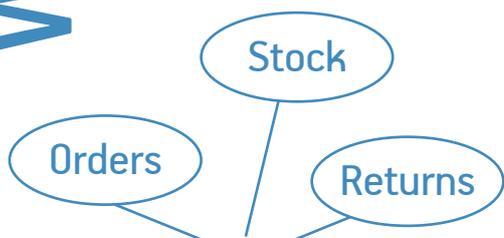
### Order Management

What e-commerce primarily needs to know, is that there is available inventory in SKU level before the order completion in the warehouse. It also needs to know, that the desired product and quantity is available for purchase in a timely manner.

Logistics Vision Suite offers a sophisticated approach to this major need called [soft allocation and is the answer to shopping basket](#). This method is performed by parameterizing items both in item level and optionally in conjunction with item inventory attributes like color, size etc. This ensures order fulfillment reliability by eliminating stock misallocations.

It is a common practice that e-commerce businesses offer [prioritization to special consumers](#) and accordingly e-commerce needs to prioritize consumer orders within their WMS.

Logistics vision suite is singularly adaptable to such an important demand offering [prioritization](#) and much more with the [use of Smart Logistics Attributes](#) on purchase orders. Such attributes can be: specific consumer priority, campaign priority, club membership or any other kind of priority the e-commerce business would like to name.



Enterprise scale WMS  
with True Adaptability  
and Flexibility

Smart Logistics  
Attributes  
for Order  
Prioritization

Soft Allocation  
is the answer  
to shopping basket

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WMS needs to be adaptable to e-commerce's ever-changing needs. It needs to be so flexible as to execute with speed and accuracy, and so robust to have great stock control in all the steps of ordering. Most of all it needs to offer proven solution to e-commerce's growth of business.

Logistics Vision Suite is exceptionally adaptable for e-commerce needs, in order execution. It offers advanced policy algorithms in picking. Multiple business scenarios can be applied for **single order picking** or **bulk order picking**. **Bulk picking** is used to minimize picking location visits and offer better resources allocation. **Single order picking** is performed in case of order prioritization, high SKU dispersion, limited warehouse capacity and more. **Advanced picking policy algorithm** provides the warehouse with the most appropriate stock records based on parameters in the algorithm such as stock allocation criteria, picking locations containing sales units and many more. **Manual order pickings** are also forecasted for order fulfillment efficiency.

Mantis' **affordable warehouse automation** solutions consist of a smart combination of proven and competitively priced 3rd party middleware / hardware warehouse automation systems and technologies that have been significantly enhanced by Mantis and are tightly integrated under its leadin **Logistics Vision Suite** umbrella.

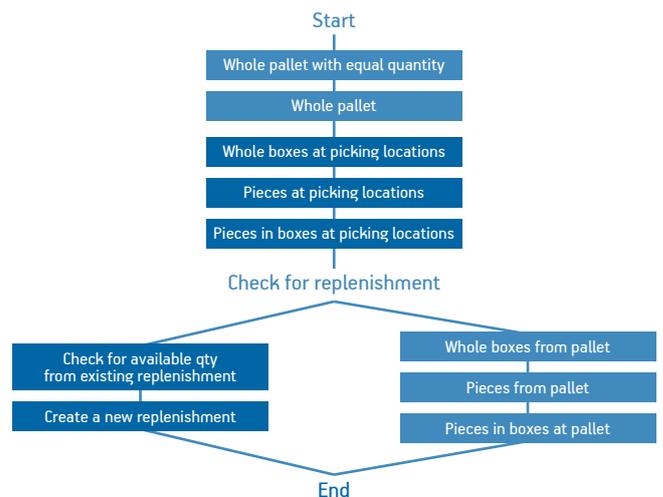
**Turn key** automations such as **Pick-to-Light / Pick-to-Cart**, and other warehouse activities through "light-directed" applications that have been designed, developed and supported by Mantis on top of selected relevant technology platforms are what a WMS for e-commerce needs to outperform demand.

**Pick by-Voice** automating picking and other distribution center activities through "voice-directed" applications that have been designed, developed and supported by Mantis on top of Vocollect's leading voice technology platform.

**RFID** automating various distribution center activities through specialized applications that have been designed, developed and supported by Mantis on top of selected RFID technology platforms.

**AMHS** middleware (WCS) tightly integrating Mantis' LVS with various Automated Material Handling Systems (such as Miniloads, Shuttles / Carousels, Pallet Stacker Cranes, Sorters, Cutting Machines, etc.).

It is worth to mention that all these automations are integrated in such a way so that **human and machine resources communicate easily**, with agility and outstanding results.



Affordable  
Warehouse Automations

Visual Logistics Scenario Builder

# White Paper



Packing can be a profit maker or breaker for e-commerce. This is what consumer sees at the end of the day, while packing volume and sizing can change e-commerce shipping costs dramatically.

Mantis offers affordable automations as [put-wall /sort to light](#), [touch screen packing stations](#) and various processes to utilize such automations in the most efficient way based on diverse needs of each e-commerce business.

[Logistics Vision Suite](#) offers various methods for packing such as:

Picked SKUs are put to totes which in their turn feed Put wall cells.

On the other side of put-wall operators perform order packing utilizing Touch screen packing functionality. Single order packing is performed on the orders side of put-wall allowing fast and accurate packing.

[Multiple order packing](#) to container with pre-cubing proposal. Containers then are transferred to packing stations where sorting and packing is performed utilizing [touch screen packing stations](#).

Volumetric + Weighing system middleware facilitates best package selection during pre-cubing process leading to lower costs.



Packing cost are reduced with Put-Wall by Mantis

Volumetric + Weighing system for best package selection

Pre-cubing proposals for efficient packing

# White Paper

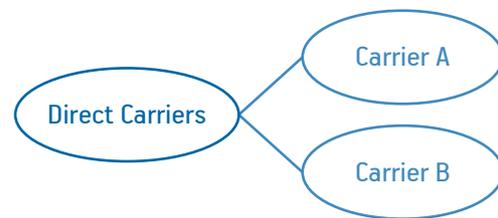
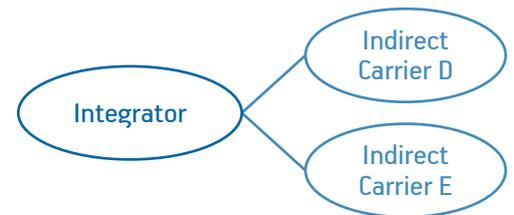
## Parcel + LTL Management

It is known to all e-commerce businesses that transportation costs can diminish profit. To lower transportation costs, logistics service providers utilize shipping carriers to undertake the transportation effort and provide lower costs resulting to economy of scale.

This trend becomes common practice worldwide especially with the growth of e-commerce. It's mandatory to have a software to facilitate the shipping process of goods to final consignees via shipping carriers.

Parcel + Less Than truck Load (LTL) Management by Mantis provides the integration of the shipping-through-carriers process with warehouse operations, thus order fulfilment and shipping blend together as one process to leverage cost reduction, improved control and better customer services.

Direct and indirect integration is accommodated, direct with a shipping carrier and indirect through an integrator. Application's key features are: management of domestic and international shipping, multi-carrier and multi-integrator support, routing tables, rate shopping, shipment document and label printing functionality, shipment manifestation, track and trace capabilities and more.



Integration of the shipping-through-carriers process with warehouse operations

Improved control and better customer service

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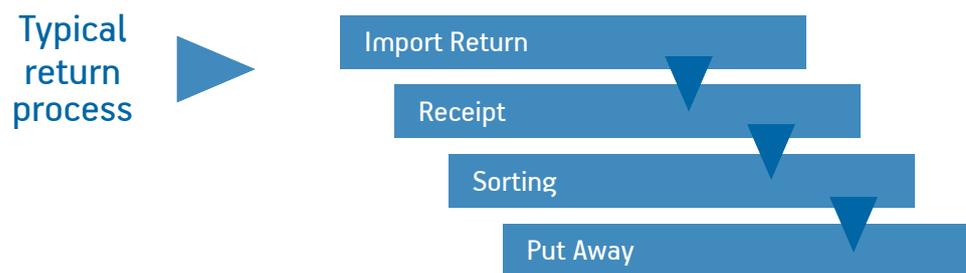
Returns in the e-commerce world can cause headaches. In the fashion retail industry for every 2 items purchased online, one is returned. Acknowledging returns as a fact, e-commerce needs a WMS that can track returns with efficiency.

With **Logistics Vision Suite** all order shipments are linked to the corresponding sales orders, generating them, through a **1:1 relationship**. When a consumer initiates a return request, this triggers a return order in the application. At this point the return order is linked to the corresponding order shipment. **Smart Logistics Attributes** have already been inherited both in header and return items of the return order.

Returns are also accompanied by **return reasons** that lead to further activities in the warehouse such as handling damaged goods or wrong size, color etc.

**Return Labels** can be printed, included in or attached on the shipping package to facilitate the consumer with the return process. Carriers are aware of both shipment and return data when goods need to be returned.

All the above-mentioned features adapt reverse logistics operations. Reverse Logistics operations are performed with accuracy, and efficiency resulting in cost reduction and trouble free e-commerce operations.



1:1 relationships between order shipments and sales orders

Return reasoning

Return labels in packages

# White Paper

E-commerce businesses need integrations with their ERP, market places and WMS, for inventory visibility and fast order fulfillment. To achieve this, it is essential to have an adaptable interfacing tool for efficient and rapid interconnectivity.

Logistics Vision Suite provides a build in data interchange module, called **Link Manager**, which consists of a series of software tools that facilitate the ability to design and implement interfaces between market place e-commerce, Logistics Vision Suite and ERP. An interface can either import data from an external source or export data to an external source with given prearranged interface types such as XML, flat files, web services etc. and a well-defined content such as OAGIS schemas, RosettaNET, EDI XML or custom defined content. Both Restful and SOAP Application Programming Interfaces are supported offering a rapid integration with any marketplace.

XLSX

TXT

XML

PDF

EDI

UN/EDIFACT

CLOUD

WEB SERVICES

Link Manager connects your e-commerce with Logistics Vision Suite

Restful API and SOAP API supported

## Data Warehouse



Wide knowledge of Inventory is key to any e-commerce success. Such knowledge empowers decisions that may increase profit, decrease cost and even change the e-commerce business roadmap.

Logistics Vision Suite provides the tools for easy data consumption to empower the inventory knowledge.

**Report Builder** integrates custom Crystal Reports to enhance reporting capabilities.

Application dashboard with user defined gauges.

Data Visualization exploiting Qlik Sense with powerful BI capabilities and easy creation of personalized reports or dashboards from everywhere.



crystal reports  
Custom Report Builder



Application Dashboard



Qlik Sense  
Data Visualization

Self Service Data Visualization

Report Builder

Dashboards



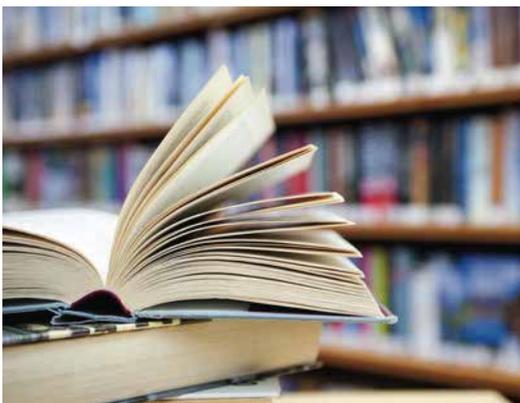
"For a dynamic and fast-growing company like X-KOM the **continuous re-engineering** of its logistics processes is the key to success. This was the main reason we decided to go with Mantis."

**Mateusz Kapusta**, Managing Director, X-KOM



"After analyzing the presented solutions in the market, we chose **Logistics Vision Suite**, an international system offering broad functionality and the ability to customize the system to individual needs."

**Sergei Kudryavtsev**, Project Manager, Narva Logistics



"Libris's activity has been growing organically in the past few years and, as a natural development, we have built the **largest book warehouse in the country**, with a total area of 5,000 square meters. With our infrastructure investment, we chose **Mantis Logistics Vision Suite** to increase speed deliveries. Thus, the new logistics streams will allow us to keep all the promises of our online bookstore, and also make room for new commitments."

**Laura Teposu**, General Manager, Libris.ro

Our customers speak for us...



## About Mantis

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Mantis, is a leading international WMS / logistics software and solutions vendor, addressing the demanding requirements of large enterprises in more than 20 countries in Europe and Russia-CIS and recently in USA/Canada and Middle East.

Mantis' platform's design represents a great leap in WMS / logistics technology, offering true adaptability + flexibility that is unique world-wide. It meets the needs of even the most demanding large enterprises with ease and helps them to achieve an unbeatably fast ROI + low TCO. The company makes this claim, after having successfully outperformed some of the best competitive WMS on the market.

More than 400 enterprises, many of them leading multinationals, representing all major market sectors (3PLs / 4PLs, retailers, distributors / wholesalers, etc.) and selling channels (traditional and e-commerce) rely on Mantis' software and solutions to run and optimize their warehousing and logistics operations. The system has been successfully integrated with most major ERPs (SAP, Oracle / JDE, Microsoft Dynamics, INFOR, Epicore / Scala, etc.).

Mantis complements its software suite with affordable warehouse automation solutions consisting of a smart combination of proven competitively priced systems and technologies (Voice Picking, Pick/Sort-to-Light, Pick-to-Cart, RFID, etc) that have been significantly enhanced by Mantis and offered as turn-key solutions. Furthermore, the company's platform includes middleware (WCS) allowing its painless integration with material handling equipment such as ASRS, Miniloads, Shuttles, Carousels, Sorters, etc.

Finally the company provides its customers with sophisticated specialized Supply Chain Management solutions per case such as Inventory Planning + Optimization, Manufacturing Execution, Quality / Safety Planning + Execution (for the Food + Beverage industries), Vehicle Routing-Scheduling + Fleet Management, Container Terminal Management + CFS and Physical Documents Archiving.

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