











Warehouse Logistics Solutions





It's our business to support yours.

At Sunrise[®] we help suppliers, manufacturers, wholesalers, distributors and dealers to gain an advantage in the global consumer goods business by supporting them to adapt to the business trends they face.

Many businesses use Enterprise Resource Planning (ERP) software, which includes components for forecasting product life cycle, payroll, accounting, supply chain management (purchasing, manufacturing and distribution), employee data, customer relationship management and product sales. Some ERPs include a Warehouse Management System (WMS), but they do not necessarily control the movement of materials. Most ERPs allow WMS or Warehouse Control System (WCS) add-on functionality as a separate subsystem.

Our WMS focuses on inventory from the time it arrives at the receiving dock to the time it leaves from the shipping dock. The software knows where inventory is, orders it when needed and tracks its movement. Our WCS schedules, monitors and commands movement of inventory and tends to connect to some kind of automated equipment control.

Sunrise® WMS and WCS building blocks are:

ERP INTERFACE	Item Master / Aliases	Sales Orders / Expected Receipts	Receiving / Storing	Shipping & Order Completion	Inventory Adjustments / Reconciliation
SCREEN INFORMATION	User Roles & Authorization	Inventory Tracking	Order & Activity Visibility	History / User Productivity	Equipment Setup & Status ⁽¹⁾
PRIMARY FUNCTIONS	Receiving / Putaway	Allocation ⁽²⁾	Retrieval / Operator Scheduling ⁽³⁾	Picking / Transfer / Cycle Count	Consolidation / Shipping
ERROR HANDLING	Inventory Adjustments	Inventory Qurantine (4)	Equipment Errors	Data Transmission Errors	Operator Errors
EQUIPMENT HANDLING	PC's	Handhelds / VMU's	Scanners / RFID (5)	Pick-to-Light / Pick-to-Voice ⁽⁶⁾	Printers / Labels
AUTOMATED EQUIPMENT HANDLING	Automated Storage / Retrieval ⁽⁶⁾	Conveyors / Sorters ⁽⁶⁾	AGV's / STV's ⁽⁶⁾	Carousels / A- Frames ⁽⁶⁾	Robotics ⁽⁶⁾



We understand the challenges you face.

Building block remarks:

- User Authorization Logins limit access and simplify displays by removing unnecessary data.
- Putaway Directs users to available storage locations or keeps track of user-selected locations.
- Allocation Reserves inventory for picking based on privilege markings, FIFO, lot requests, product expiration, available dock space or custom rules⁽¹⁾.
- Work scheduling Assigns work to available barcode handhelds or workstations when a workstation finishes its former work, based on order priority, location of the user, required sequence of orders to the dock, etc. Stores/Retrievals are done by a WCS which is tasked with keeping the equipment busy (Storage/Retrieval machines, vertical or horizontal carousels, A-Frames, Automated Guided Vehicles (AGV), etc.)⁽⁷⁾.
- Picking Validates loads and items by scanning barcodes.
- Consolidation / pre-picking Allows pallet building/ shipping container building considering like orders, customers, destinations, carriers, etc. It may track product in box ID's within other boxes or on pallets.
- Shipping Relieves inventory and confirms quantities to host when the container is shipped or when a shipping system has assigned a tracking number, etc.
- History and inventory analysis The data mining part of the system. It provides stock reports and robotized purchase proposals. It gives detailed historical feedback for products, loads, locations, people, equipment, etc.

Building block notes:

- (1) Additional functionality under planned development;
- (2) Physical location in a matrix available;
- (3) Semi-automated based on zone, picker and driver;
- (4) Based on order Quality Control status;
- (5) RFID functionality is not planned currently;
- (6) PLC 3rd party software and Sunrise[®] eConnector Framework;
- (7) Additional bespoke functionality.

Warehouse Logistics Solutions, designed for the way you do business.

Supported warehouse processes

Sunrise[®] supported warehouse processes based on the Sunrise[®] Cloud Platform and the Sunrise[®] eConnector Framework are:

- Goods-In & Storage, connecting to 3rd party:
 - Shuttle and/or storage systems
 - De-trashing pallet storage systems
 - Optimized retrieval movement
 - Returns handling
- Order Start, connecting to 3rd party

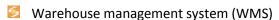


- Stacking & de-stacking container systems
- Carton systems & carton recycling systems
- Labelling station systems
- Document insert station systems
- Order Picking, connecting to 3rd party
 - Automatic, semi-automatic & manual picking systems
 - Goods to Person picking systems
- Dispatch preparation & Dispatch, connecting to 3rd party
 - Container & carton handling systems
 - Dispatch sorting & labelling systems
 - Weight and/or barcode checking systems
- Conveying & Sorting, connecting to 3rd party
 - Conveying systems
 - Sorting systems

Sunrise[®] WMS key features

Sunrise[®] has a range of products to support intra-logistics solutions and warehouse logistics software, resulting in tailored systems for major customers that meet every demand for more efficient logistics solutions, and the servicing and maintenance of existing warehouses.

Connecting to 3rd party (PLC) software is provided for by Sunrise[®] eConnector Framework, based on standards like web services, SOA, JMS, OData etc.



- Integrated with Sunrise[®] POS and Web Shop Orders;
- Goods-in;
- Storage;
- Order preparation;
- Internal transport via optimised routes, supported by modern technology;
- Replenishment control;
- Stock management and lot tracking;
- Dispatch;
- Inventory;
- Information supply and reporting.
- Warehouse control system (WCS)
 - Order release;
 - Order start;
 - Automatic optimized picking;
 - Semi-automatic picking;
 - Manual picking supported by RF, Pick-to-Light or Voice-Directed-Picking through 3rd party software;
 - Dispatch preparation;
 - Automatic invoice insertion;







- Control functions;
- Administration;
- Visualisation through 3rd party software.
- Supply chain execution (SCE)
 - Multiple warehouses
 - Order splitting;
 - Balancing stock;
 - Replenishments;
 - Cross-docking.
 - Control, statistics & analysis functions;
 - Track & trace
 - Delivery check;
 - Empties return notifications;
 - Returns notifications;
 - Vehicle tracking through 3rd party software.
- Workforce management system (WFMS), connecting to 3rd party
 - Warehouse modelling and real-time evaluation visualization tools;
 - Key performance indicators (KPI) analysis and reporting tools.



Choosing the right solution partner can help you compete successfully.

For more than 14 years, we've partnered with consumer goods companies across a wide range of industries to develop, implement and support collaborative supplier management (CSM) as a subsystem to our or other enterprise resource planning (ERP) and supply chain management (SCM) solutions designed specifically for the way you do business. Backed by our knowledgeable team and leading technologies, our industry tailored solutions are fully integrated and easy to use. Sunrise[®] is designed to help you:

- Streamline your operations;
- Reduce your costs;
- Gain improved business-wide performance visibility;
- Capitalize on revenue opportunities;
- Sustain a low total cost of ownership;
- Achieve a fast return on your investment.



Expertise to help, you succeed.



Your immediate and long term success depends on more than just finding the right cloud-based software solution. You need a business partner that understands your industry and unique business needs. A partner that will be there before and after the sale to ensure a successful implementation, support your user community on an ongoing basis, and meet your business requirements over the long haul — with a proven team that will be as adaptable as you are to your changing business needs.

Sunrise's team of knowledgeable professionals is here to support you — from pre-sale to post-implementation — to ensure your

immediate and ongoing success. Through our industry focus and expertise, we can provide advice and recommendations on business processes to help optimize the efficiencies of your supply chain, reduce your costs, improve your business performance and maximize your profitability. Working together, we can help you thrive in the competitive consumer goods market while attaining a quick and lasting return on your investment.

Around the clock, around the world, support that makes a difference.

Sunrise's multi-lingual, committed support professionals are available up to 12 hours a day through our Support operations in the Asia Pacific region and Europe. At customer request Sunrise[®] provides 24/7 support as part of the Premier Support. We'll work with you to identify, troubleshoot and resolve technical issues, provide advice and recommendations on business processes and best practices, and help tailor your solution to maximize your efficiencies and business benefits.

Behind the Sunrise[®] solution is standards-based, leading technologies that deliver rich functionality and solid reliability for your business:

- Interoperability leverage application programming interfaces (APIs) and our service oriented architecture (SOA) for a seamless, consistent view of data throughout your organization;
- Performance achieve optimal user responsiveness and data storage and retrieval results through our n-tier architecture;
- **Resiliency** ensure application availability with our inclusive basic monitoring services or our more advanced monitoring, database replication, and disaster recovery solutions;
- **Scalability** meet your needs today while easily scaling for future growth requirements without sacrificing system performance or response times;
- **Globalization** extend the reach and usability of your data through our system's built-in localization tools, backed by localized support.

Sunrise, more than a vendor,



rather your partner.

Sunrise's sole focus is on pure cloud based business solutions for consumer goods companies. Your

priorities are ours. We operate where you do. Our development strategy is driven by your needs — so we bring your industry specific requirements to market faster and in a more tightly integrated manner.

Our professional services teams, from project management to support, are specialists in the consumer goods industry. Unlike providers of more generalized applications, we don't have to learn your industry because we already know it. And we'll work with you to recommend industry best practices to improve your bottom line.





Through our beginning-to-end solutions, we eliminate your need to invest in add-on systems, allowing you to keep total costs down while improving business visibility. Industry specific requirements are integrated within the Sunrise[®] application. With less need for customizations, you can reduce start up and maintenance costs, improve solution time to deployment, simplify and lower the cost of upgrades, and speed and enhance your return on investment.

With Sunrise[®] as your partner, you can achieve tighter integration, better visibility and faster results.