

# P-trak Warehouse Management System

- ✓ Drastically Reduced Discrepancies.
- ✓ Improved Redundancy & Security.
- ✓ Easy Discrepancy Resolution.
- ✓ Tracking Beyond the Warehouse.
- ✓ Individual Item Tracking.
- ✓ Simple User Interface.
- ✓ Fast Response.
- ✓ Flexible, Modular Architecture.
- ✓ Wide Platform Support.



Level 1,1 Gardner Close  
PO Box 1486  
Milton 4064, Queensland Australia  
Phone: +617 3367 1388  
Fax: +617 3367 1295  
E-mail: sales@vrt.com.au  
Web: www.vrt.com.au

## Executive Summary

P-trak is a Warehouse Management System (WMS) designed from the ground up around bar coding and RF technology. It is intended as a companion to corporate Enterprise Resource Planning (ERP) systems such as SAP and Mincom's MIMS, rather than acting as a standalone WMS. P-trak is not a middleware solution that simply maps the ERP user interface to a mobile wireless device, and is consequently not constrained by the performance, responsiveness or reliability of the host system.

## Benefits

P-trak is designed specifically for the needs of warehouse operations, so does not suffer from compromises inherent in a one-size-fits-all user interface found on most ERP systems. This approach results in a number of key benefits –

- **Fast Response:** P-trak's efficient real-time transaction engine has been designed to provide very fast responses to user requests (picking, put away and stock query response times on a 50,000 line item database typically measure in the order of tenths of a second, even on moderate PC server hardware).
- **Simple User Interface:** The mobile barcode user interface has been specially designed to suit the simple and repetitive operations usually performed by warehouse staff, requiring an absolute minimum of keyboard interaction. For example, an operator can scan an item once to find out about it, or scan it twice to take it out (pick or transfer) – no keystrokes required.
- **Redundancy & Security:** By implementing a local database coupled with a persistent queuing mechanism that guarantees message delivery, P-trak can operate independently during ERP host outages or link failures and then transfer details of stock changes to the host when it becomes available again.
- **Easy Discrepancy Resolution:** Buffering warehouse operations from the Enterprise system allows stock discrepancies to be investigated and resolved, before committing adjustments to a system with financial accounting consequences.



## Designed for the people who'll use it most...

We don't believe it's enough to simply provide mobile access to warehouse data: to be really effective, a warehouse management system must allow warehouse floor staff to work efficiently.

P-trak's smart scanner client uses knowledge of the different barcode label formats and symbologies to determine what is being scanned, and uses this information to act intuitively. It can recognise when a storage location is scanned and automatically provide an inventory of the stock that is stored there. If a stock item is scanned, P-trak will provide details of the product and prompt the user to scan it again if they would like to transfer the item to another location.

This allows many common warehouse operations to be carried out with little or no keyboard interaction. In a very short space of time, your operators can be working efficiently, without having to learn to navigate complex menus or screen displays.



# P-trak

## Warehouse Management System

### Features

- Support for unlimited warehouses/areas and locations within each area. Areas can be used to define any location inside or outside the warehouse – expansion is limited only by server capacity.
- Unique stock serial numbers (SSN) can be used to track individual stock item movements for audit purposes. For example, rotatable spares can be traced through their whole lifecycle, in the warehouse or out in the plant.
- Product descriptions in the P-trak database inventory are continuously updated from the host system – whenever a requisition or issue is generated by the ERP system, P-trak checks and updates the locally stored product description if required.
- Warehouse location metrics can be used by P-trak to recommend put away locations based on the size, weight, access requirements, or turnover rate of a product.
- All basic warehouse floor functions accessible from mobile devices – Receiving & Put away, Transfers, Stock take, Queries, Picking and Dispatch.
- Windows PC client software allows a supervisor to administer the P-trak warehouse configuration and user profiles, oversee stock takes, query the database, track products through an audit trail etc.
- Data is stored in an easily accessible database format, providing the opportunity to create a wide range of reports using tools like Impromptu or Crystal Reports.

### Architecture

P-trak is a modular system centred on a high capacity real-time messaging subsystem. A separate module manages each of the core application functions, and each can be hosted on any combination of local or remote systems. This allows a wide range of solutions to be delivered, from a single PC based Linux server running PostgreSQL, to a distributed heterogeneous server environment where database, P-trak server, and host interfaces are distributed.

### Platforms

- **Server:** Microsoft Windows NT4/2000, Linux or Unix running on Intel PC or RISC hardware.
- **Database:** Oracle 7/8, or PostgreSQL.
- **ERP System:** Current support for SAP and MIMS, with support added for additional systems as required.
- **Network:** Open TCP/IP communications operating over standard LAN and wireless networks.



Level 1,1 Gardner Close  
PO Box 1486  
Milton 4064, Queensland Australia  
Phone: +617 3367 1388  
Fax: +617 3367 1295  
E-mail: sales@vrt.com.au  
Web: www.vrt.com.au