

Solution Brief

Smart Customers Make Informed Buying Decisions.

ADVANCED YARD MANAGEMENT

The opportunity for real-time location systems (RTLS) in Yard Management.

Recent developments in Real Time Location Systems (RTLS) enable efficiencies in yard management that legacy yard management systems can never achieve. Current RTLS platforms have the capability to eliminate the inefficiencies and associated costs of dated practices. Existing yard management implementations rely heavily on error prone human information collection. They also frequently rely on time consuming, static (not real time) yard management software that requires manual input of collected data. Through automation, RTLS eliminates errors in information collection and, because it is a true real time system, RTLS eliminates the need for time-inefficient, static yard management software.

RTLS determines the location of assets on a constant and recurrent basis. RTLS is a system comprised of Radio Frequency Identification (RFID) tags attached to trailers and associated computing software which determines the position of an RFID device (tag) on a trailer. The system is capable of reporting the position of the RFID tag within seconds.

Not only does RTLS reduce costs by eliminating inefficiencies, it also substantially improves yard productivity by creating new efficiencies. Because it is a real time system and not a static one, RTLS can significantly increase moves per hour in the yard, reduce or eliminate yard checks, reduce demurrage and detention charges, and lower labor and fuel costs. PINC Solutions' advanced yard management system average payback period is 6 to 9 months.

PINC Solutions developed the first passive RFID based RTLS for yard management. The solution is now widely deployed in yards across North America where the productivity gains and cost reductions enabled by PINC have been proven and confirmed. This solution brief explains how PINC RTLS platforms accomplish these efficiencies in yard management. This brief also addresses the three cost centers in yard management: activities in the yard itself, yard administration, and yard gate activities.

TRAILER TRACKING IN THE YARD

PINC's advanced yard management system, called Yard Hound, uses cost-effective passive Radio Frequency Identification (RFID) tags. These tags are applied to individual trailers in a yard. Since they do not require batteries to operate, passive RFID tags significantly lower overall system costs. GPS enabled RFID readers are attached to yard trucks. The reader on the yard truck detects the location of each RFID tagged trailer as the yard truck moves about the yard. This trailer location information is transmitted in real time to the Yard Hound asset visibility and management platform. The Yard Hound system automatically updates as new location information is acquired. Because it is a real time, automated system, Yard Hound is the most accurate trailer tracking system available today.

YARD GATE ADMINISTRATION

The gate is equipped with an RFID reader. As a trailer with an RFID tag passes through the gate, the trailer's information is transmitted in real time to the Yard Hound asset visibility and management platform, eliminating the need for paper forms and human error. This automatic process streamlines gate procedures and increases the speed of gate entries and exits. Alternatively, temporary RFID tags can be affixed to trailers as they enter the gate by the gate operator, providing location tracking of the trailer while it is in the yard.

YARD ADMINISTRATION

All real time truck, trailer, and shipment information from the gate and the yard is collected by the Yard Hound platform where it is accessed online 24/7 by users and managers. With this information, administrators can manage assets throughout the yard. The system also allows administrators to communicate moves and other directions to yard truck drivers via a wireless-enabled data terminal, eliminating the need for radios or paper instructions. In place of paper, Yard Hound creates a permanent record for all communicated activities. Managers also have the ability to manage shipments and appointments, and automate yard move scheduling.

REDUCING COSTS AND INCREASING PRODUCTIVITY IN THE YARDS.



Yard Hound easy-to-use user interface.

ELIMINATING GATE BOTTLENECKS

Gates have the potential to be bottlenecks at yards. When trailers back up into overflow lots, the possibility of demurrage and detention charges increases. Eliminating paper log-ins and log-outs can reduce time spent at the gate by as much as 100%. With Yard Hound, a paper process that takes up to five minutes can be reduced to approximately 30 seconds, eliminating backups at peak traffic periods. A temporary RFID tag is attached to the trailer at the gate entrance and the operator enters asset information into a four field electronic form. For trailers with permanently affixed RFID tags, no interaction with a gate operator is required. When the trailer passes an RFID reader attached to the gate through a fast-track lane, all asset information is read and updated in the Yard Hound database.

REAL-TIME LOCATIONING

Tracks the status and location of the mobile assets and personnel in the yard in real- time. Information such as trailer and yard truck movement history are collected continuously, and presented in an intuitive, map-based view. Performance analysis, reports, and dashboards such as yard truck and lane utilization, moves per hour, and average distance per move are generated automatically based on custom metrics.

YARD TRUCK DRIVER TASKING

Through an in-cab touch screen monitor, Yard Hound facilitates two-way communication between the traffic managers and the yard truck drivers to assign, prioritize, and confirm trailer move tasks. Leveraging real-time visibility data, the system is a powerful tool for streamlining yard management processes and optimizing tasks executions. With result, Yard truck drivers are more productive, spending the majority of their time moving trailers rather than searching for them.

APPOINTMENT SCHEDULING AND MANAGEMENT

The user-friendly appointment scheduling function allows dock appointment requests to be made and confirmed automatically through matching the information submitted by carriers with pre-defined parameters according to customer's specifications. As in the warehouse, on time performance is critical to avoiding losses. Yard Hound's appointment and scheduling tools allow a manager to avoid and/or manage detention and demurrage charges, reduce administrative overhead, and improve communications throughout the scheduling process.

COLLABORATIVE PORTALS

Yard Hound Collaborative Portals are also a web-based application for carriers and trading partners working with shippers and facility operators who have installed Yard Hound at their sites. Eliminating the need for frequent phone calls and faxes to exchange information, these portals allow carriers and trading partners to access current information and manage their fleet assets at the customers' facilities online, 24/7, on site or remotely. By sharing the real-time visibility about carrier and partners' assets through Yard Hound, communications among operations managers, transportation planners and carriers can be streamlined while vendor service is improved. Users can also perform live inventory checks, view current load status, obtain historical records of asset activities, and set/receive notifications for asset related events based on custom criteria. With the real-time visibility to their fleet assets at customers' sites, carrier vendors and business partners can cut service time to improve cycle time for the shippers and shippers' customers.

CORPORATE NETWORK VISIBILITY

For enterprise customers deploying Yard Hound at multiple facilities, the Yard Hound Network Visibility application provides a comprehensive view of all of the Yard Hound sites within the corporate supply chain network. Gain insights into the efficiency, trends and other customizable metrics for the utilization of all the yard assets across the locations. Best practices based on quantifiable KPIs can be established, and all the service providers can be held accountable for meeting specific performance targets.

PINCSolutions

PINC Solutions is North America's leading supplier of supply chain visibility and advanced yard management solutions with Fortune-500 customers in the manufacturing, retail, logistics, and transportation sectors. PINC has pioneered the development of cost- effective RTLS using passive RFID technology that minimizes capital investment required in the infrastructure. PINC's award-winning products are designed with a scalable architecture for businesses of any size, and are expandable with modular components as customers needs grow. Available as turnkey solutions and delivered through a Software-as-a- Service (SaaS) model, these systems have proven their value through immediate efficiency improvements in customers daily operations, typically generating positive ROIs in less than a year. To learn more about PINC Solutions, please visit www.pincsolutions.com.

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