Manhattan Active® Yard Management Unification

Manhattan Active Yard Management revolutionizes the way businesses manage their yard operations by unifying warehouse and transportation networks through the power of the Manhattan Active Supply Chain application. This product brief will provide an overview of our innovative Yard Management solution, the key features, and the benefits it offers.
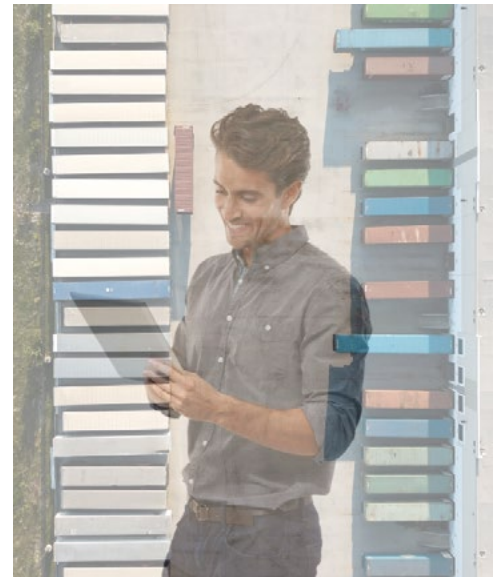
Revolutionary Digital Twin Yard Visibility UI

The groundbreaking Yard Visibility UI presents a detailed, digital representation of dock and yard spaces, providing real-time insights into warehouse execution at each dock door, yard position, trailer location or arrival ETA, and trailer contents. This comprehensive view allows for seamless warehouse and transportation execution by delivering enhanced visibility into inbound and outbound processes, transportation ETA information, and yard move details. Unification between distribution, transportation, and yard enables Manhattan Active Yard Management to deliver an unparalleled level of insights, coupled with the command and control required to make agile adjustments on the fly.

– Advanced digital representation of dock and yard space

– Visibility of each dock door, yard position, and trailer content

– Yard UI infused with important warehouse and transportation data

– Detailed progress visibility for warehouse activity at each door

– Transportation ETA information and yard move details provided for live load/unload scenarios

– Dynamic status updates like arrival times, alerting, intra-yard moves, and operational progress insights

– Digital real-time view of the yard helps teams identify risks and opportunities immediately

– Actionable insights mean the ability to drill down into visual elements like loads, shipments, and labor

YARD MANAGEMENT SOLUTION

Our Yard Management solution has been meticulously designed to provide a comprehensive, intuitive platform for optimizing your yard operations. It focuses on increasing productivity, reducing costs, and improving accuracy and visibility across your supply chain.

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Optimized Trailer Selection

Manhattan Active Yard Management offers a unique set of advanced capabilities, which can only be unlocked when platform unification exists between distribution, transportation, and yard operations. Manhattan Active Yard Management introduces five advanced trailer determination mechanisms that prioritize and assign trailers to dock doors for execution:

1. Optimized Putaway Travel

– Selects optimal dock door with minimal travel required for putaway

– Evaluates trailer contents against warehouse putaway strategy and warehouse map

2. Live Trailer Interleaving

– Dynamic integration of live trailers into door selection planning

– Utilizes real-time insights from transportation planning as well as third-party visibility providers

– No more dedicated doors that lead to over- or under-utilized receiving and shipping locations and increases overall throughput

3. Detention and Demurrage

– Automatically prioritizes trailers at risk for incurring detention and demurrage fees

– Monitors scheduled arrival variance as well as actual arrival and duration of stay to limit charges

– Eliminates manual selections that are based on strict SLAs or on historical trends like carrier reputation than actual insights in real time

4. Optimal Cross Dock Execution

– Automatic prioritization of trailers optimizes cross-dock and flow-through operations and efficiency

– Access to real-time outbound demand enables optimization to reduce temporary stock staging

– Human inventory touches are decreased by ensuring trailers ready for disposition are correctly prioritized

5. Out-of-Stock Focused Utilization

– Automatic prioritization of trailers minimizes out-of-stock risks when warehouse management cannot fulfill orders due to lack of inventory

– Eliminates human intervention requirements when identifying and prioritizing trailers with urgent inventory

– Drives down order cycle times and boosts order fill rates

Key Features & Automation Capabilities

Manhattan Active Yard Management offers a range of key features and automation capabilities to streamline operations:

Automated Door & Trailer Assignment

Our advanced automation features synchronized door and trailer assignments with warehouse activities, ensuring optimal yard moves and trailer utilization.

– Warehouse outbound operations trigger automatic door and trailer assignment based on warehouse-assigned outbound staging and execution

– Yard evaluates staging assignments and associates them with dock doors

– Automatically selects appropriate available trailers based on the shipment being staged and associated SCAC

– Generates yard move to system-direct yard jockey execution and allows for business-defined prioritization of moves

Automated Pre-Receipt Allocation

Experience a new level of efficiency in inbound cross dock and flow-through processing with our configurable pre-receipt allocation automation.

– Automate allocation processes based on yard execution identifying imminent trailer receipts

– Expedite processing of receipts, improving disposition performance of flow-through and cross dock

– Configurable automation approaches for live vs. drop loads

– Improve workforce experiences by reducing the number of clicks and streamline inbound processing

Transportation Aware Check-in

– Expedited check-in enabled from insights and data available from transportation management

– Eliminate manual paperwork and redundant procedures during the check-in process

– Scan and go check-in / check-out with a single barcode with TM mobile

Complex & Composite Yards

– Support for complex yard relationships, including temporary, seasonal, shared, and permanent

– Tracked inventory movement to and from offsite locations and between facilities

– Simplified modeling of any variety or combination of complex or composite yard configurations
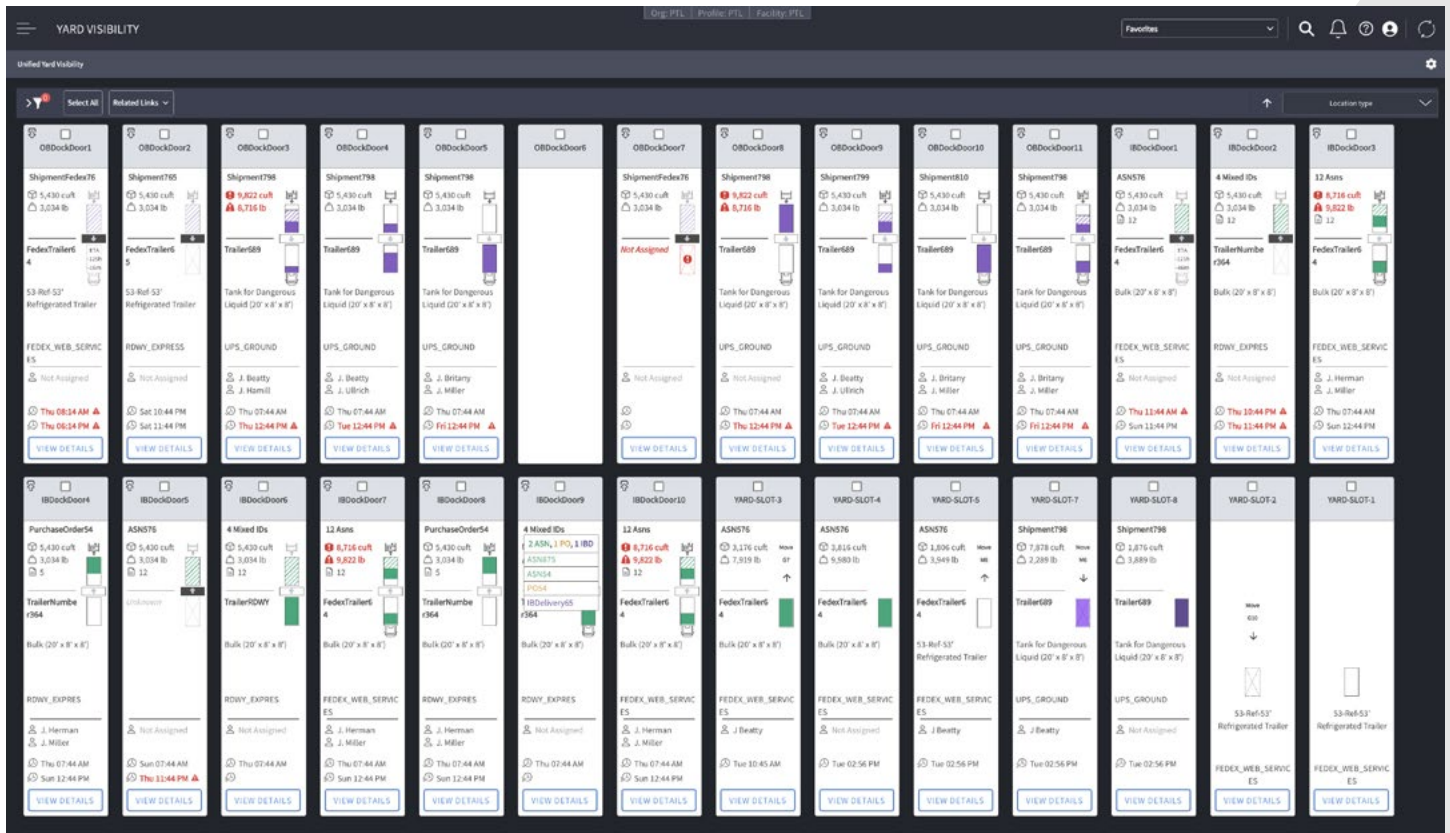
Benefits and Conclusion

Manhattan Active Yard Management unification delivers a range of benefits to businesses across various industries:

Increased Productivity: Intelligent planning, trailer selection, and door assignments ensure that your workforce operates at peak efficiency.

Reduced Costs: Streamlined operations and proactive detention cost management help keep costs in check and maximize profitability.

Improved Yard Accuracy & Visibility: Real-time insights and automated inventory tracking enable businesses to make informed decisions and maintain accurate control over yard operations.

Manhattan Active Yard Management is an all-encompassing solution that drives productivity, optimizes costs, and enhances visibility throughout your supply chain. By unifying warehouse and transportation networks, Manhattan Active Yard Management provides businesses with the tools and insights needed to streamline their operations and achieve success in today's dynamic supply chain landscape.

Manhattan Active Yard Management Features

	MATM	MAWM	MASC	Description
Optimized Putaway Travel		✓	✓	– Optimizes door selection based on minimized total travel – Combines yard trailer content with MAWM locations and putaway strategy – Invokes MAWM putaway logic to determine destination zones and travel requirements
Live Trailer Interleaving	✓		✓	– Yard Management dynamically integrates live trailers into door planning – Leverages MATM live ETA for inbound and outbound loads
Detention & Demurrage	✓		✓	– Automatic prioritization of at-risk trailers – Systemic identification of trailers at risk – Detailed tracking of yard inventory and actions – Unified MATM configured carrier requirements
Trailer Inventory Utilization – Order Short		✓	✓	– Automatically prioritizes trailers based on out-of-stock exceptions – Leverages MATM knowledge of the shipment details within the trailer – Leverages MAWM demand pool and on-hand inventory levels
Trailer Inventory Utilization – Cross Dock	✓	✓	✓	– Automatically prioritizes trailers based on cross-dock/flowthrough opportunities – Leverages MATM knowledge of the shipment details within the trailer – Leverages MAWM demand pool and on-hand inventory levels
Graphical Yard	✓	✓	✓	– Real-time progress visibility – Embedded alerting to proactively address issues – Multiple levels of zoom based on desired level of detail
Complex & Composite Yards	✓	✓	✓	– MAYM supports modeling all varieties of complex and composite yards. Users can manage multiple yard types within a single system, facilitating efficient operation across various yard configurations. – This feature allows for seamless coordination between primary yards, secondary yards, and composite yards, enhancing overall operational efficiency and visibility. – Seamless sharing of resources and workers across facilities for composite yards – Tracked inventory and movements to and from offsite yard locations and between facilities
Automate Pre-Receipt Process		✓	✓	Automate pre-receipt based on yard execution or MATM ETA
Automate Trailer & Door Assignment		✓	✓	Automate door assignment and trailer moves based on MAWM staging assignments
MATM Informed Check-In	✓		✓	– Leverages MATM routing and shipping details and optionally MATM Carrier Mobile – Yard Management expedites check in by auto populating MATM details into the appointment
Unified Task Optimization	✓	✓	✓	A comprehensive approach that synchronizes and prioritizes tasks across the yard, warehouse, and transportation network for maximum efficiency. This feature streamlines operations by ensuring that all activities are harmonized and optimally sequenced, reducing bottlenecks and enhancing productivity across the entire supply chain.
Uninterrupted Shipment Planning	✓	✓	✓	This capability ensures optimal efficiency, enabling organizations to adjust to real-time changes in demand or supply conditions, thus maintaining the fluidity of operations and reducing potential downtime.
View Facility Pass	✓	✓	✓	Facility Pass is a system-generated permit, allowing approved carriers or vehicles access to specific areas within a facility during their designated appointment times. It ensures secure, controlled entry and exit, enhancing security measures and managing traffic flow within the premises, thus contributing to overall operational efficiency and safety.

Manhattan Active Yard Management Features, continued

	MATM	MAWM	MASC	Description
Next Trailer Determination (NTD)	✓	✓	✓	Next Trailer Determination (NTD) is a powerful feature of a yard management system that intelligently prioritizes and assigns trailers to dock doors for processing based on various factors like content, demand, and warehouse strategy.
BackFill	✓	✓	✓	– The BackFill process finds a trailer in Secondary Yard and fills the slot in Primary Yard during the NTD process. – If BackFill is opted, the system finds a suitable trailer from Secondary Yard and creates an InterYard Appointment for both Secondary and Primary Yard for PickUp and Drop, respectively.
Trailer Activity Trail	✓	✓	✓	Trailer Activity Trail process captures all the activity performed on a trailer during its lifecycle within the yard.
Add Yard Task UI	✓	✓	✓	Provides an interactive and intuitive platform for users to create and manage specific yard tasks. This tool allows for precise control over yard operations, facilitating seamless task assignment, tracking, and completion, thus enhancing efficiency and productivity.
Unified Yard Visibility Alerts	✓	✓	✓	Serve as real-time notifications that signal critical events, changes, or exceptions occurring within the yard operations. These alerts greatly enhance operational transparency and enable timely decision-making by providing immediate information on issues such as trailer location changes, prolonged dwell times, or potential delays.
Trailer Nearing Demurrage Time Notifications	✓	✓	✓	Notifications related to trailers that are at risk for incurring detention and demurrage fees.
Edit/Lock/Close Trailer	✓	✓	✓	Edit/Lock/Close Trailer functionalities in yard management software allow for real-time control and adjustment of trailer status.
Automatic Performance Scaling	✓	✓	✓	Automatic Performance Scaling is a feature that dynamically adjusts system resources to match the demand, ensuring optimal performance even during peak load periods. This functionality enables a system to maintain its responsiveness and efficiency, providing consistent user experience and ensuring uninterrupted workflow regardless of the fluctuations in the workload.
Workflow Configuration Wizards	✓	✓	✓	Intuitive, user-friendly tools designed to simplify and streamline the process of setting up and modifying workflows in a system or application. They help in removing the complexity associated with workflow configuration, enabling users of varying technical proficiency to create, modify, and optimize their processes efficiently and effectively.
Campus Deployment	✓	✓	✓	For campus deployment scenarios, yard needs to be created and all configurations should be made for thee yard.
Trailer Check-in/out	✓	✓	✓	This UI provides the capability to check-in/out a trailer inside the yard to the guard house whenever a trailer/shipment has arrived at the gate.
Driver Check-in/out	✓	✓	✓	This UI provides the capability to check-in/out a driver to a yard for pickup load or pickup empty scenarios.
Mobile Check-in/out	✓	✓	✓	Ability to check-in/out a trailer using an rf/mobile device with or without an appointment.

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