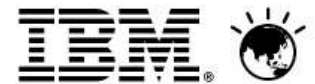


Pulse

IBM SolutionsConnect 2013

Transportation Industry Solution

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Agenda

- Managing fleet and transportation assets with Maximo for Transportation
- Key features for fleet and transportation users
- Client Examples
- Product Direction
- Adding and Upgrading
- Questions



The Transportation Landscape



Fleet



Seaports



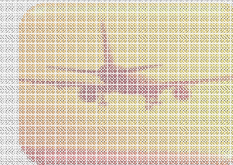
Airports



Metro & Rail



Shipping



Aviation

Maximo For Transportation

Maximo Asset Management

Maximo Asset Configuration Manager

Maximo Linear

Maximo Add-ons: Scheduler, Mobility, Spatial, HSE, etc.

Tririga IWMS

Smart Cloud Control Desk

Solutions



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Key Features of Maximo for Transportation

Mechanics Clipboard

Meter Change Out

Maintenance and PM Alerts

Move History

Life Cycle Costing and Depreciation

Position Codes

Equipment Status

Recent and Repeat Repairs

Drivers/Operators Log

Telematics Integration

Consist Management and Married Pairs

Warranty Tracking and Recovery

Campaign Management

Wheel Management Module



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Maher Terminals LLC

Smarter Port and Marine Terminal Asset Management



Maher Terminals LLC is one of the largest multi user container terminal operators in the world, serving North America from Port of Prince Rupert in British Columbia and at the Port of New York / New Jersey.



Business Challenges	IBM Solution	Business Benefits
<ul style="list-style-type: none"> ▪ Single solution to support container crane and equipment/straddle carrier maintenance, as well inventory and procurement. ▪ Replace a combination of a paper based system and in-house developed systems ▪ Meet work management, inventory control and procurement objectives for cost control, integration and mobility 	<ul style="list-style-type: none"> ▪ IBM Maximo Asset Management to support facilities, inventory and procurement ▪ IBM Maximo for Transportation to support crane and straddle carrier maintenance 	<ul style="list-style-type: none"> ▪ Better real-time cost reporting ▪ Electronic work management system providing effective labor cost tracking and analysis ▪ Budget analysis for parts ▪ Availability of critical data for KPI measurement & analysis ▪ Integrated finance, inventory and procurement system, with real time Purchase Requisition, RFQ and PO tracking





Denver International Airport

Managing terminal, airport facility and support fleet assets with Maximo

Located in extreme northeastern Denver, Colorado, and operated by the City and County of Denver, the Denver International Airport is the largest international airport in the USA, and the third largest in the world. DIA was voted Best Airport in North America 6 years in a row

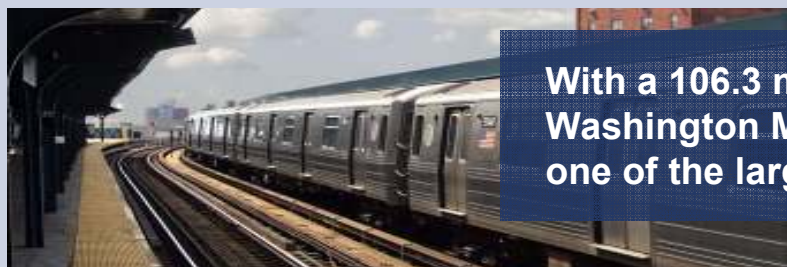


Business Challenges	IBM Solution	Business Benefits
<ul style="list-style-type: none"> ▪ Single strategic asset management solution for terminal and airport facilities ▪ Manage nearly 2,000 ground support fleet assets ▪ Improve work order monitoring for FAA certifications ▪ Create a centralize maintenance planning function across all maintenance departments 	<ul style="list-style-type: none"> ▪ IBM Maximo Asset Management supporting asset, work and inventory management ▪ IBM Maximo for Transportation to maintain ground support fleet ▪ Integration to Oracle ERP system to support financial and cost management ▪ Developed Purchasing Card (PCard) process with data integrated to Maximo 	<ul style="list-style-type: none"> ▪ Provides a consistent approach to maintenance management ▪ Maximo provides job assignments based on the strength of information available and according to the AOC agreements. ▪ Maximo provides the means to deploy available resources in a smart way so that we can improve our overall effectiveness. ▪ Maximo helps ensure a more multi-skilled job workforce



Washington Metro

Managing multiple asset classes in the United States' Capital



With a 106.3 mile rail network and more than 12,300 bus stops, Washington Metropolitan Area Transit Authority (WMATA) is one of the largest North American Transit Systems.



Business Challenges	IBM Solution	Business Benefits
<ul style="list-style-type: none"> ▪ A complex operating environment with 1,141 rail cars, 1,500 active buses, 1,686 service vehicles and other equipment ▪ Deploy a single asset management solution across the enterprise to manage all assets ▪ Replace antiquated financial, HR, maintenance, inventory control and purchasing systems 	<ul style="list-style-type: none"> ▪ IBM Maximo for Transportation to manage rolling stock and support fleet ▪ IBM Maximo Asset Management to manage linear assets and facilities ▪ Integration to corporate financial, HR & dispatching systems 	<ul style="list-style-type: none"> ▪ Increased labor utilization and asset reliability ▪ Inventory fully visible to Maintenance Staff ▪ Real time access to up to date asset information, enabling efficient job scheduling to minimize passenger impact ▪ Able to accurately capture assets maintenance costs ▪ Standardized business process across the enterprise



Royal Boskalis Westminster nv

Using Maximo for Global Maritime Operations



Royal Boskalis Westminster N.V. is a leading global services provider operating in the dredging, maritime infrastructure and maritime services sectors, providing creative and innovative all-round solutions to infrastructural challenges.



Business Challenges	IBM Solution	Business Benefits
<ul style="list-style-type: none"> ▪ Drive long term economic growth in supporting dredging facilities for: <ul style="list-style-type: none"> – Harbors and waterways – Creation of land in sea – Coastal and riverbank protection ▪ Manage a versatile fleet of vessels, operating in multiple countries and continents ▪ Implement an EAM solution to support engineering of dredging under complex environmental circumstances 	<ul style="list-style-type: none"> ▪ IBM Maximo Asset Management to support four “home markets” and 50 vessels ▪ Configuration to support unique requirements for item management, metering, certificate management and accident/incident reporting ▪ Data synchronization from office to vessels using IBM Business Partner SRO Solutions’ Data Replicator; each vessel to have its own instance ▪ Integration with BAAN ERP 	<ul style="list-style-type: none"> ▪ One set of Master Data “Boskalis wide” ▪ Able to use multi-site and multi-currency to manage the locations in the Netherlands, UK, Mexico, USA and Abu Dhabi ▪ Standardized Preventive Maintenance ▪ Captain and Certificate Manager able to monitor timely completion of critical inspections ▪ Able to meet requirements to manage consumption of Fuel Lubricants Grease Oil (FLGO)



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Product Direction

- Maximo ACM/Transportation

- ACM - Aviation
 - Spec 2000, Flight Log Book
- Progressive Inspections
- Functional Synchronization
 - Example: ACM Warranty, when using Maximo for Transportation
- Enhancements to Motor Pool, Assets, Asset Templates
- Allow 'location only' PMs in the Transportation clone of PM application



- Location Based Services

- Leveraging Linear EAM, GIS and Mobility
- Maximo Linear, Maximo Spatial and Maximo mobility solutions
- Development Partner Meeting following Europe Rail Summit



- Maximo for Transportation

- Expand into Operations, Module Enhancements, additional Service Management capabilities





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Adding and Upgrading

- Adding Maximo for Transportation to an existing Maximo Asset Management install
 - Acquire “Trade Up” Licenses
 - Upgrade to the most current version of Maximo (v7.5)
 - Maximo for Transportation installs over Maximo Asset Management and with any industry solution or add-on
- Upgrading from earlier versions of Maximo for Transportation
 - Use Maximo upgrade tools
 - If upgrading from v5.x, then you can also consider data migration



Questions



Pulse

IBM SolutionsConnect 2013

Backup Slides





Maximo for Transportation 7.5 Features

Asset Alias	Provides flexibility for asset numbering, allowing customers to define an unlimited number of different asset numbers (aliases) for each asset.
Asset History	Quick access to full work order history, PM history, all charges (labor, material, tools, and services), warranty work history, meter readings, status, condition changes, moves, and usage history are all displayed in one place as a single, chronological view.
Campaigns	Define a Campaign as a set of Job Plans for a group of Equipment. Create a Work Order hierarchy with work orders for each job plan and asset, then track campaign's progress.
Consist Management and Married Pairs	Supports asset management of a entire consist, a group of rail assets such as locomotives and cars, and records the equipment in each consist
Drivers Log	Capability to record problems identified by drivers and provide follow up
Equipment Groups	Templates for Equipment Warranty, PM, Specifications and Meters. Define groups of new equipment, warranty, PM, specifications and meters for multiple entry and quickly create multiple records with similar information
Equipment Status	Tracks out of service, available and operational status of assets



Maximo for Transportation 7.5 Features

Fuel Record	Define Fuel input, record fuel consumption, track consumption versus meter readings and provide statistical data
Fuel Tank Monitoring	Manage inventory control of fuel and fluid tanks
Fuel Transactions Import	Provides the ability to import transactions from external sources such as internal fuel dispensing systems, external fuel management providers (fuel cards), and meter readings to create inventory transactions, meter readings, purchase orders or invoices.
Industry Codes	Method for using industry standard codes, such as Vehicle Maintenance Reporting Standards (VMRS), in Maximo for Transportation
Inspections & Servicing (Activities)	Inspection and servicing activities can be recorded for multiple assets on a single work order
Inventory Count Books	Setup and manage inventory and cycle counting
Labor Certification	Manage training and certifications, and verify technicians are qualified for safety or special training assignments



Maximo for Transportation 7.5 Features

Licenses and Registration	Manages information on assets for licenses or registration, insurance, or permits. Issuing authority, cost, effective and end dates, and application date are some of the information captured. Advance notification of renewals.
Life Cycle Costing / Depreciation	Capability to define expected life, depreciation schedule, current condition & repair cost limits and Manage repair or replacement decisions
Line Codes	Record Industry Standard Codes for Labor and Materials at the Work Order Plan and Actual Tabs and Purchase Order
Log Segments and Problems	Log problems reported by operators & track status. Work Orders monitor back to the original problem
Maintenance and PM Alerts	Prompt to alert that PM and backlog work exist at work order creation. PM's & Work Orders can be selected as child work orders.
Manually Registering Item Warranties	Provides a method for manually entering the items for an asset that are under warranty in an asset record



Maximo for Transportation 7.5 Features

Measurement Points	Measurement points can be defined in a new an asset template, that will create a measurement tab in work orders for that assets to allow for multiple measurements to be recorded on the work order
Mechanic Work Order (Mechanic Clipboard)	Ability for a worker to see their assignments, start/pause/stop labor hours
Merged Work Order ACM-Transportation	For customers who are using both Maximo for Transportation and Maximo Asset Configuration Manager (ACM), this capability allows data from both solutions to appear on a single work order
Meter Change Out	Replace faulty meters and maintain proper counts and history
Meter History	Record meter history and make meter adjustments to previous readings
Meter Import	Import & validate multiple readings from external systems
Motor Pool	Uses vehicle request system to define class, passengers, mileage, purpose, date needed, days required, etc. Dispatchers can review requests and assign vehicles from available and alternate vehicle lists



Maximo for Transportation 7.5 Features

Motor Pool Billing	Supports usage tracking and internal billing for short term and long term assignments with rate schedules and rules, with scheduled transactions
Move History	Provides detailed history of component and asset movements based on parent-child relationships.
PM Event History	PM Event History tracking provides for a detailed view of the preventive maintenance (PM) events of the asset throughout the life of the PM.
PM Relationships	Relationships can be used to have one PM schedule activate, inactivate, or complete another PM.
Position Codes	Record and manage items and components by position
Primary Meter	Ability to enter a meter reading right on the main page of a work order for the Asset's Primary Meter, defined by asset type (mileage, hours, cycles, etc.).
Quick PMs	Quick PMs allow you to claim the completion of a PM on a work order without having to go through the PM generation process



Maximo for Transportation 7.5 Features

Recent and Repeat Repairs	Recent Repairs provides a dialog window that displays a user configurable recent history of the asset on the current work order, showing the last <i>n</i> work orders or all the work orders in the last <i>n</i> days. Repeat Repairs is a dialog window that display all work orders during last <i>n</i> days that contain work that is being repeated on the current work order, using industry standard maintenance and position codes. The user defines the <i>n</i> work orders & days.
Repair Orders	Manages outsourced maintenance work on components and assets
Serial # Changes	Modify equipment, component and part serial numbers to reflect changes
Specifications	Multilevel hierarchy in Equipment record with attributes at various levels in the hierarchy
Telematics Data Management	Import Fault Codes and Health Monitoring data in XML format, retain history, create meter readings and work orders, in a manual or automated process
Transportation Reports & KPIs	Over 25 Transportation Reports. Industry specific Key Performance Indicators (KPI)
Vehicle Data	Key asset information such as Repair Location, Meter Input on Work Order, Fuel Type, etc.



Maximo for Transportation 7.5 Features

Warranty Alerts	Alert prior to the due date of a Warranty expiration
Warranty Recovery	Generate claims against warranty items, manages reimbursement in money, replacement parts, credits and other conditions
Warranty Tracking	Create and track OEM, Extended and After Market Warranties by Item, VMRS, and Manufacturer. Identify parts replaced and work performed under warranty for development of warranty claims
Work Types as Warranty Validation Exclusions	This capability allows defined work types to be excluded from warranty validation, eliminating additional alerts when a work type is not eligible for warranty recovery
Wheel & Tire Management	Module to manage installation and removal inventory transactions for tires (fleet) and wheels (rail), including axles. Support axle configurations, rotating of positions and validation of tolerances on all related actions.