

Maximo Asset Management Product Update

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PCTY2011 Pulse Comes to You

Optimising the World's Infrastructure

Please note:

- IBM's statements regarding its plans, directions, and intent are subject to change or withdrawal at IBM's sole discretion. Information regarding potential future products is intended to outline our general product direction and it should not be relied on in making a purchasing decision.
- The information mentioned regarding potential future products is not a commitment, promise, or legal obligation to deliver any material, code or functionality. Information about potential future products may not be incorporated into any contract. The development, release, and timing of any future features or functionality described for our products remains at our sole discretion.

Maximo - Asset Management for a Smarter Planet



A smaller, flatter, faster and ... "smarter" planet







Transportation Assets

Facilities

Production Equipment

IT Hardware & Software

Communications infrastructure



THE CHALLENGE: more complexity in assets and processes, more capabilities required, more reliance on management systems

THE OPPORTUNITY: More insight and collaboration, more efficiency, growth and profit, more innovation

Maximo's role in a Smarter Planet:

- The IBM system to manage intelligent assets
- Leveraging asset intelligence to maximize their business value
- Reducing the cost of managing and operating intelligent assets

How Maximo does this:

- Visibility, control, and automation across IT and operational infrastructure
- Optimized operational and IT processes to achieve more with less
- Managing both the asset and the service to deliver customer value

Development Principle: Drive Higher Customer Value

Objectives

- Enhance Maximo best-in-class capabilities and solutions
- <u>Drive innovation</u> with input from customer groups, advisory councils and business partners
- Continue to produce <u>High Quality</u> products; leverage customer input during every step of the development cycle
- <u>Protect customer investment</u>; upgrades to future Maximo versions
- Commit to <u>Open Standards</u>: J2EE, SOA
 - both IBM and non-IBM platform components

Maximo Development Focus

- Continue to <u>Enhance Version 7</u> core capabilities, architecture, platform and technology
- <u>Incremental Features</u> and Value-add capabilities to extend Version 7
- Expand deep <u>Industry Solution</u> functionality and new Growth areas such as:
 - Intelligent Buildings
 - Safety, Risk and Compliance
 - Facilities Management/Space Planning
- <u>Leverage IBM products</u> and technology

2010 Roadmap Highlights

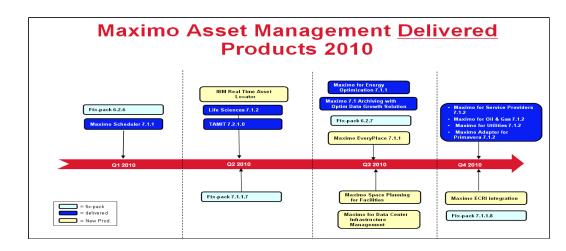
We had a very busy year.....

9 Product Releases

- Improvements to 4 add ons
 - Scheduler
 - Archiving
 - Everyplace
 - Primavera Adapter
- Improvements to 5 Industry Solutions
 - Service Provider
 - Internal Service Provider
 - Oil and Gas
 - Utilities
 - Life Sciences

4 new products released

- Maximo for Space Planning
- Maximo for Data Center Infrastructure Management
- Maximo Real Time Asset Locator
- Maximo Everyplace



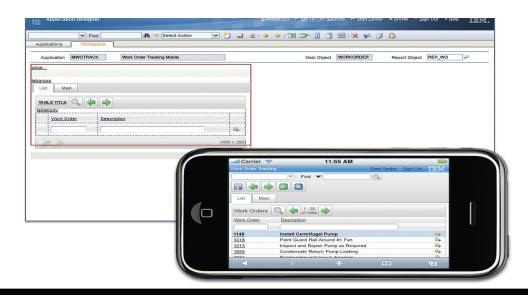
*New Maximo Content added and available for download

-Maximo ECRI integration for Healthcare

Note: Other content for download includes, Maximo FileNet integration and Maximo ITM for monitoring

IBM Maximo Everyplace

Allows users to access any existing IBM Maximo application on an iPhone, iPad, iPod touch, Android or other supported device without installing anything on those devices

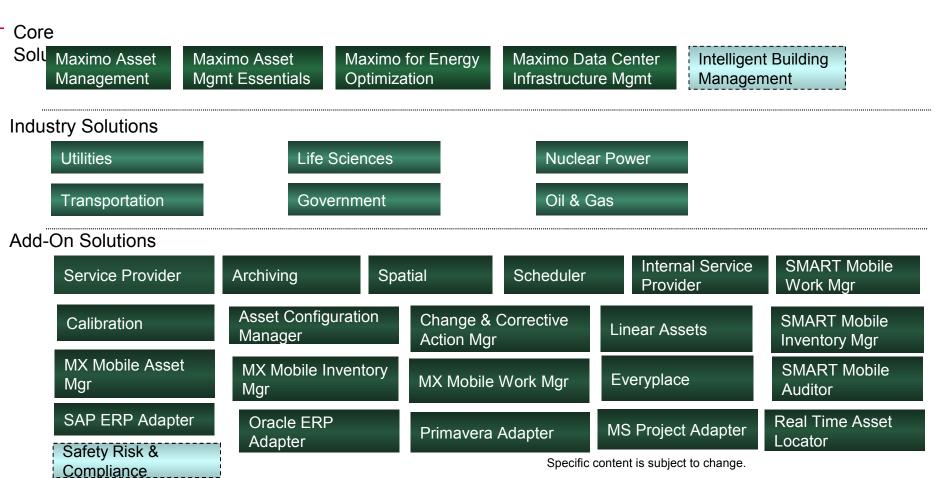


Maximo Everyplace enables users to:

- Shorten the lag time between an event's occurrence and the recording of that event in the system. There's no need to wait until they get back to their desk to enter or retrieve data.
- Increase accuracy of data in the system by allowing them to enter information while it's fresh in their minds
- Offer convenient, targeted access to Maximo for workers who don't regularly sit at a desk or use a desktop computer.



Product Portfolio – 2011







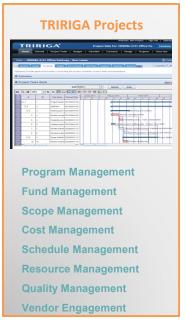
IBM Announces Acquisition of TRIRIGA, INC.

Let's Build a Smarter Planet: Smarter Buildings from the Earth Up



TRIRIGA is a leading provider of software solutions for Integrated Workplace Management Systems (IWMS)







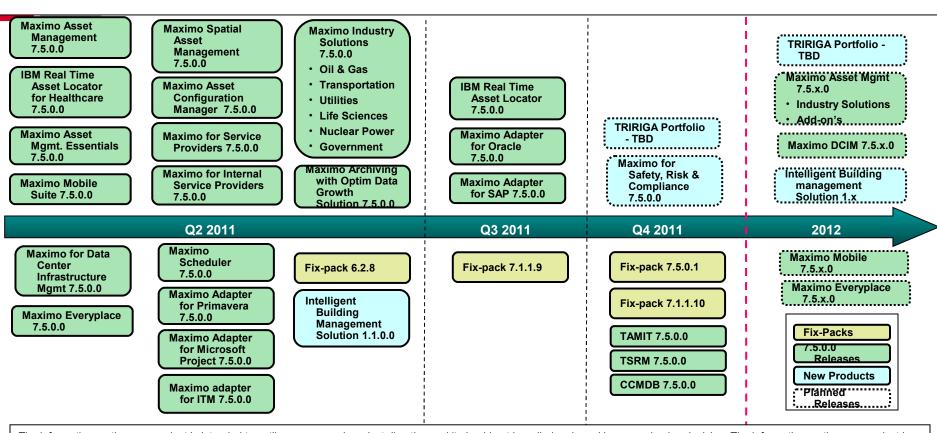




TRIRIGA Core Components

Geographies **People** Receiving **Customer Self Service** Reporting Locations **WPM Metrics Specifications** Invoicing News Graphics **Organizations Assets** Requests **GIS Mapping Vendors Contracts Tasks Document Management GANTT Schedules**

2011 Asset Management Product Roadmap



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What's Next?.....

Maximo 7.5!



Released on April 29, 2011

Maximo 7.5 – 3 Major Areas of Focus

- New & Enhanced Supply Chain Management
 - PO/PR/RFQ/Invoicing
 - Inventory/Receiving

- Expanded Capabilities
- Customer Driven Requirements
 - Satisfy Functional gaps
 - Improved Usability/Maintainability
 - Address Integration/ERP

- 2. Return on Investment
 - Automation Scripts
 - Application data Import/Export
 - Enhanced Migration Manager
 - Usability & Performance

- Additional Configuration
- Lower Cost of Implementation
- Lower Cost of Ownership
 - Easier to configure & support

- 3. Continued Leadership and Innovation in EAM
 - Enhanced Work & Asset Management
 - Linear Asset Visual Control

- Deep Vertical Functionality
- Improved End-User interaction

Maximo 7.5 – Expanded Footprint

Asset Work **Materials** Contract Service **Purchasing** Management Management Management Management Management **Service Groups Purchase Contracts** Locations Job Plans Item Master **Request for Quotation SLA Management** Repair Facilities Revisioning Storerooms Receiving **Master Contracts** Asset Work Order Tracking **Change Management Receiving Inspections** Inventory Warranty Contracts **Asset Templates** Assignment Tab Inventory Usage **Shipment Receiving** Incidents Lease/Rental Contracts **Failure Codes** Hard/Soft Reservations LIFO/FIFO Costing Purchase Requisitions Problems Labor Rate Contracts Linear Assets Repair Facilities Consignment Invoices Changes Premium Pay Rates Visual Control Transfer via Safety Invoice Reversals Releases **Payment Schedules Condition Monitoring Quick Reporting Shipment Purchase Orders** Solutions Meters Labor/Crafts Default Costing Revisioning Meter Groups **Tools** Condition Codes Receipt Tolerance

Enhanced Workflow - Event Driven, Context-based / Escalation Manager

Desktop Requisitions

Stocked Tools

Service Items

Preventive Maintenance

PM Forecasting

Assignment Manager

Master PM

KPIs / Reporting/ Ad-hoc Reporting / Cognos Integration

<u>Security/Administration/Configuration – Automation Scripts, Migration Manager</u>

Integration/Web Services – Import & Export direct from applications

Maximo 7.5 Beta program

- Maximo 7.5 Beta testing started on 12/14/2010
 - Hosted in a cloud by the beta team in India
 - Currently <u>15 client companies</u> & business partners
 - Global coverage with <u>cross-industry</u> representation
 - North America, Asia, Middle East & Europe
 - Southern Company, Duke, KNPC, Hong Kong Jockey Club, Bluewater, others
 - 44 individuals as registered testers, additional companies/testers added weekly
 - Excellent participation, customers actually testing
 - Over <u>50 unique postings</u> of feedback, questions, comments, bugs
 - Focus on Supply Chain, but also hitting Work Management applications



Maximo 7.5 Beta program – Participant Quotes

- "Happy to see Supply Chain getting new functionality".
- "Could see good amount of improvements, administration point of view, saves time/increases accuracy in migrations and reduces number of outages for smaller changes."
- "The Beta 7.5 was a great reference which desperately helped with insight into updates. For the majority I was pleased with the site.
 Maximo 7.5 incorporates major changes which allow more flexibility and less customization."

"Greatly Improved on the SCM side. Can see where the foundation is being laid for next generation Maximo to be a complete Supply

- Chain and Work Management Solution."
- "Some new features added on SCM that make it competitive to other ERP packages like SAP".
- "The Beta of Maximo 7.5 is impressive and superb! The new design, the speed and the quality are incredible. Happy to see that some changes requested from us are now in the core product."
- "Upgrading to Maximo 7.5 will require the least change management compared to any other Maximo upgrades we have applied."
- "The Modules in Maximo I've tested have been working perfect so far. No Errors encountered."
- "Better user interface. Better performance. Additional applications available."



Maximo 7.5 Highlights

PCTY2011

Optimising the World's Infrastructure

Maximo 7.5 Technical Platform

Developed on current R7.1 Architecture:

- J2EE based Enterprise Application
 - Web Application Interface for users to access Maximo applications via Browser
 - Fully configurable from presentation content to the business logic
 - Configurable Authentication (Database based or LDAP based)
 - Integration mechanisms via Web Services, JMS, HTTP, EJB, XML files, Flat files and Interface tables in database
 - Built-in reporting using BIRT/Cognos/TCR and support for integration with customer's reporting systems
- Supported Application Servers
 - IBM WebSphere Server
 - Oracle WebLogic Server
- Supported Database Platforms
 - DB2
 - Oracle

Maximo 7.5 Planned Platform Updates

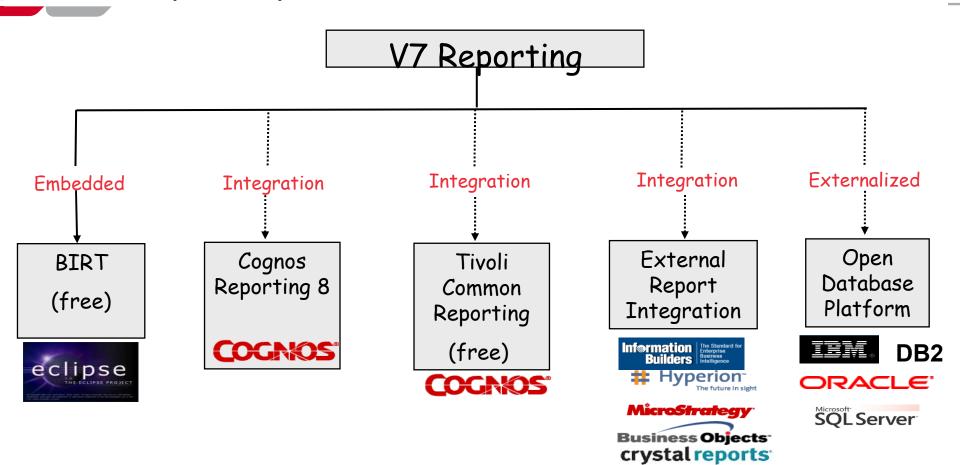
<u>Updated:</u>

- Operating Systems
 - AIX 7.1
 - RHEL 6
- Database
 - DB2 9.7
 - DB2 9.8
- Application Servers
 - Websphere Server 7
 - Weblogic Server 10.3
- LDAP
 - Tivoli Directory Server 6.3
 - Windows Server AD 2008 R2

<u>Deprecated:</u>

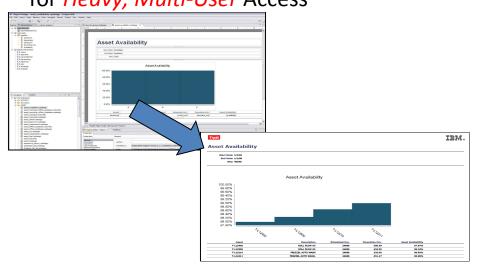
- Operating Systems
 - AIX 5.3
 - RHEL 3
 - RHEL 4
 - SLES 9
 - All Linux 32 bits flavors
- Database
 - DB2 8.2
 - DB2 9.1
- Application Servers
 - WebSphere 6.1

Maximo Open Report Architecture

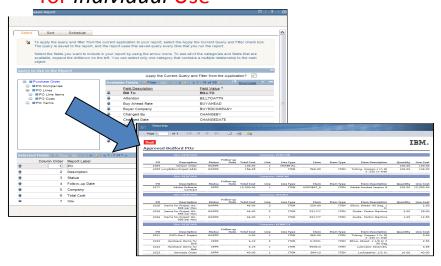


Types of Core BIRT Reports Available

Enterprise, Formatted Reports for *Heavy, Multi-User* Access



Created in BIRT Report Designer Requires Database/Java Skills Fixed Content/Format Ad Hoc, Dynamic Reports for *Individual* Use



Created on Fly

No Database/Java Skills Needed

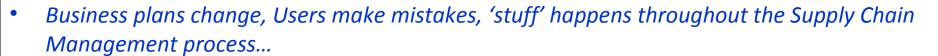
Variable Content/Format

Leads to Tremendous Time + Cost Savings!

Maximo 7.5 Reporting Enhancements

- Give the User the ability to copy an Ad Hoc Report and Edit it (add/delete fields) as needed
- Implement Report Schedule Limits by Security Group
- Direct Print with Attachments property added in V6. Equivalent Property value added for BIRT in V7.
- Enable localization of Report Object Structures (ROS) Values Cognos Packages as seen to the end user within Report Studio or Query Studio
- Enable report emails to be sent via links instead of pdf, xls attachments (new Report Viewer application)
- Report Schedule Limits Report Administration Report
- Enable Rich Text Formats to display in BIRT Reports
- Enable direct launch to Cognos from applications
- Additions/Deletions of Report Design files to provide continued value-add for clients (updated for 7.5 application enhancements)

- Business plans change, Users make mistakes, 'stuff' happens throughout the Supply Chain Management process...
- Examples:
 - Submitted PO needs quantity adjustment or change item numbers: <u>PO Revisioning</u> allows user to modify, resubmit and retain history of original PO
 - Shipment is received, recording the receipt with incorrect packing slip number: User can now <u>Void Receipt</u>, <u>Receipt Quantity Tolerance</u> can prevent incorrect amounts from being received (saves time and reduces data entry errors)
 - Vendor Invoice was entered and approved, later it was discovered unit price for an item was incorrect: Action to <u>Reverse Invoice</u>, backs out approved invoice, user can duplicate, make corrections and approve

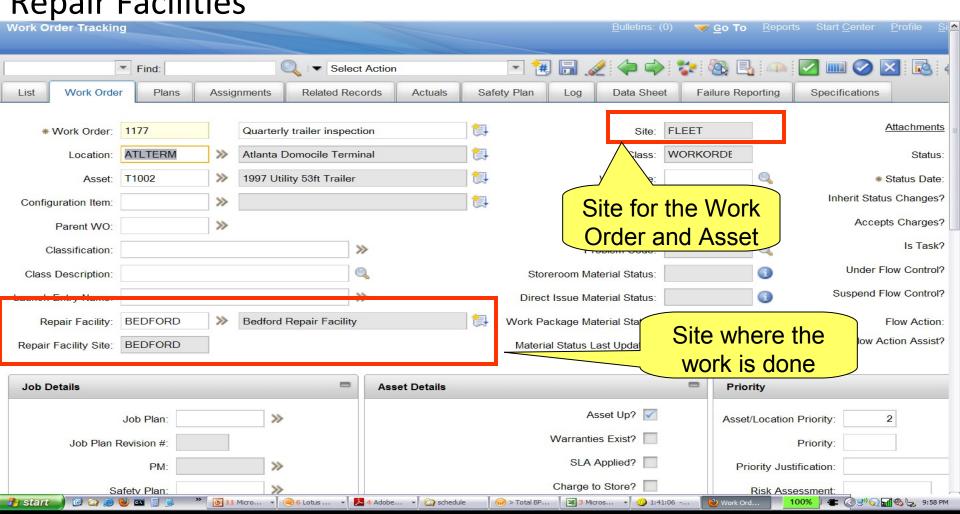


• Examples:

- Some of the Items we issue require inspections and approval before delivering the order: <u>Inventory</u>
 <u>Usage</u> streamlines the process, supports workflow for issues & transfers, staged and shipped items,
 multiple assets/bins per line.
- We need more flexibility with how we manage the cost of our inventory items...more like what we
 can do in our ERP system: 'New' costing method added to allow for valuation at actual receipt costs
 on a <u>LIFO or FIFO</u> basis
- Our work schedules are tight, we need to make sure reserved parts are available when we need them: Issues and transfers can now be defined as either <u>'Hard or Soft' reservations</u>...a 'hard' reservation blocks the reserved quantity from being available for other requests

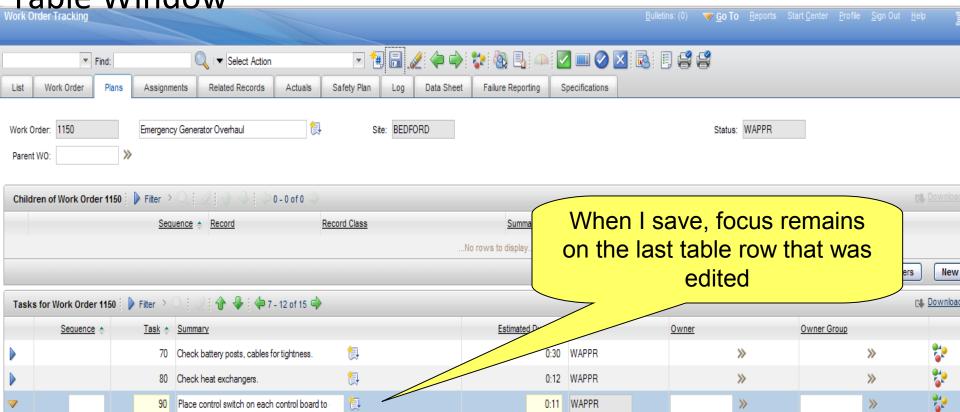
- Customers are pushing their maintenance staffs to be more efficient and require processes that support these efforts....
- Examples:
 - I need to enter a dozen of the same type of asset, it's painful to have to enter them each individually and making updates to them later on is just as bad: <u>Asset templates</u> can be used to create multiple assets or to update multiple existing assets with common asset information
 - Frequently a truck from one of our other sites pulls in and needs maintenance while they are here: <u>Repair Facility</u>
 locations enables work orders & PM's to be completed for Assets from different sites
 - We have stringent controls on when a Job Plan can be changed and we need to retain history: <u>Job Plan</u>
 <u>Revisioning</u> can be enabled, each previous version is kept for full history and compliance
 - We need to look ahead at our PM's scheduled dates: <u>PM Forecasting</u> tab allows generating forecasted PM dates, dates can be changed or re-forecast as necessary

Repair Facilities



- The user spends lots of time in Maximo and does a lot of data entry, they asked us to:
 - "Anticipate what I will need next and present it to me (don't make me hunt for it)"
 - "Don't let me make avoidable errors"
 - "Help me to complete my tasks in as few steps as possible"
 - "Don't slow me down when I'm on a roll"
 - "My eyes are bad, sometimes I can't read the screen"
- What's coming?
 - Improved <u>Table window</u> refresh behavior
 - Enabled <u>'heads down' data entry</u> (asynchronous validation)
 - <u>Browser zoom</u> enabled, users can zoom in (ctrl+) or zoom out (ctrl-) of application screens
 - Faster <u>date/time look up</u> (new calendar control)
 - <u>Rich-text editor</u> (can format text the way they want to see it)

Table Window Work Order Tracking



0:12 WAPPR

1:00 WAPPR

0:18 WAPPR

>>

>>

>>

訇

100 Check V-belts, deflection 9/16 to 13/16 in...

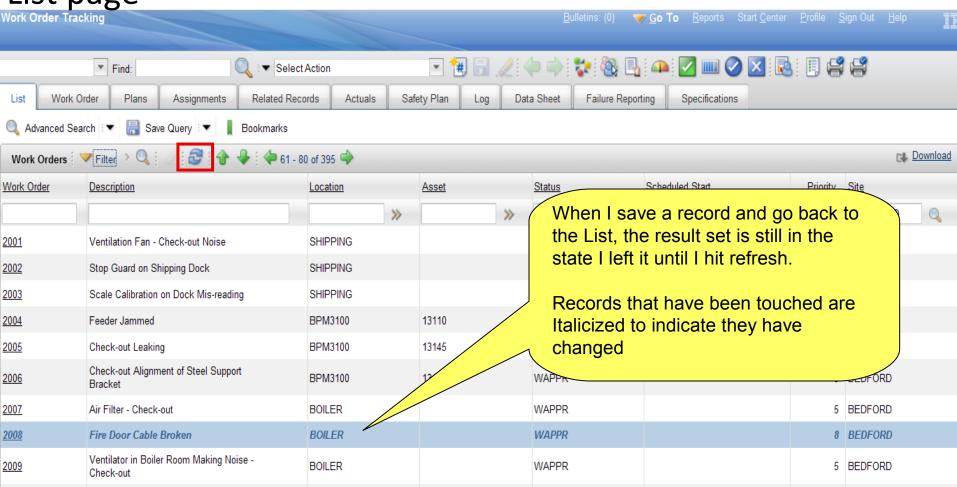
120 Remove and clean air induction filters.

110 Clean entire unit.

List page

3000

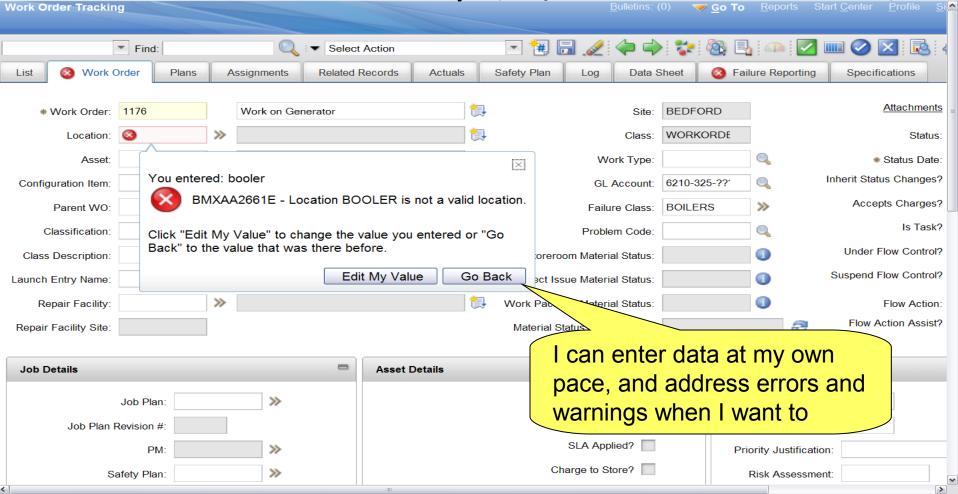
New fall 97 outage



WAPPR

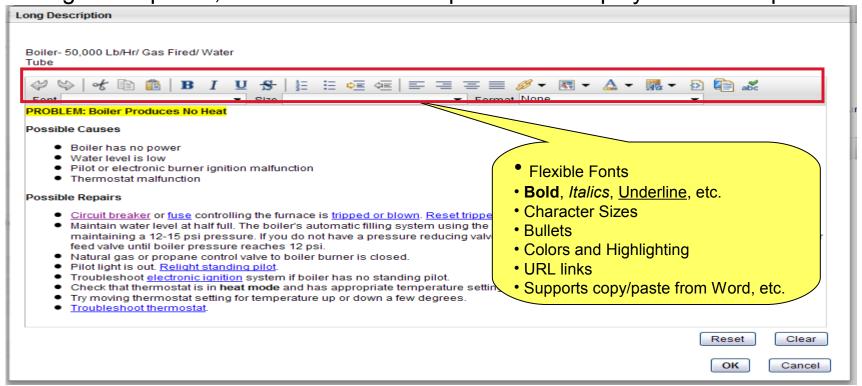
BEDFORD

'Heads down data entry' (Asynchronous Validation)

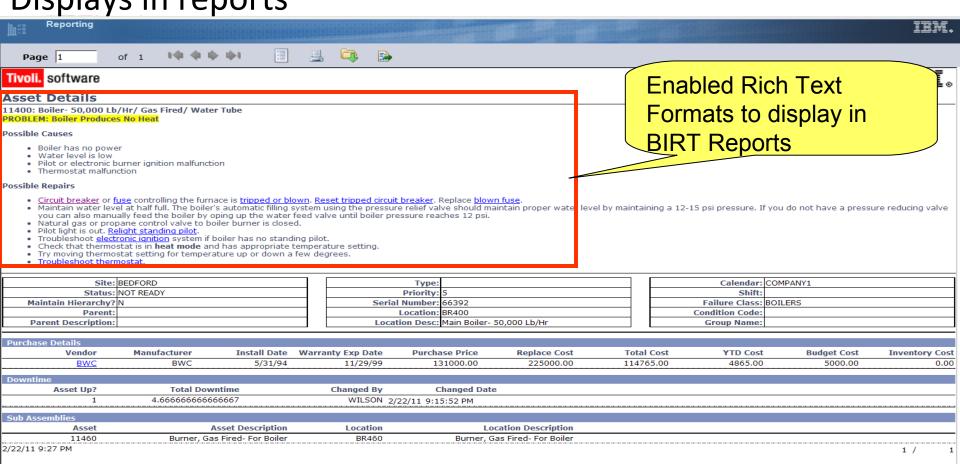


I can enter text in the format that I want on a Maximo screen. I don't need to rely on attachments for <u>rich-text formatting</u>.

Long Descriptions, Communication Templates and Displays in BIRT reports

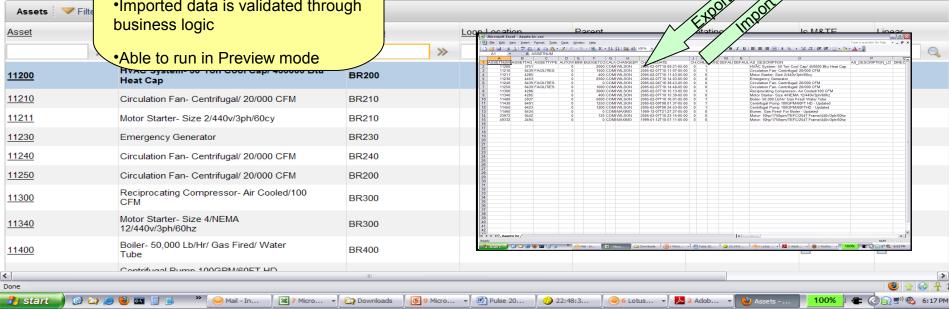


Displays in reports



- Maximo is pretty configurable, but there's always things to improve...
- Examples:
 - The Integration Framework is pretty powerful, but sometimes our business users have small sets of data they need access to or need to load into the system quickly: <u>Application Export/Import</u> can be configured through the UI. User can export a result set of records, make a series of quick changes within excel, xml, etc. and then import back to Maximo (bulk maintenance or loading small sets of new records)
 - We have developed some custom java class files to meet our business needs, however we'd like an easier way to configure logic without class files: With the <u>Automation Scripts</u> application, you can implement scripts to automate routine tasks without having to recompile Java files or restart the server. Permits an extra level of configuration capability (i.e. calculated fields)

Application Export/Import http://qawin16.swg.usma.ibm.com:9993/maximo/ui/?event=loadapp&value=asset&uisessionid=10 Google 🗖 Most Visited 🧻 Getting Started 🔝 Latest Headlines 🧻 e-meetings. Home page 🛂 Google 🧻 IBM Business Transfor... 🧻 IBM Lotus Sametime U... 🧻 IBM Standard Softwar... 🧻 Issues Database 🦳 issues 3.usma.ibm.com 🦳 IT Help Central 🧻 Join World Community. 🥝 Bookmark This! 🔎 Connections Bookmarks 🙈 My Bookmarks Assets Assets Export/Import toolbar buttons Added through Object structures Work Asset Controlled through Security Advanced Sea Imported data is validated through Assets : V Filte business logic Asset Able to run in Preview mode **BR200** 11200 **Heat Cap** 11210 Circulation Fan- Centrifugal/ 20/000 CFM BR210 11211 BR210 Motor Starter- Size 2/440v/3ph/60cy 11230 **Emergency Generator** BR230 Circulation Fan- Centrifugal/ 20/000 CFM 11240 BR240 11250 Circulation Fan- Centrifugal/ 20/000 CFM BR200 Reciprocating Compressor- Air Cooled/100 11300 BR300 CFM



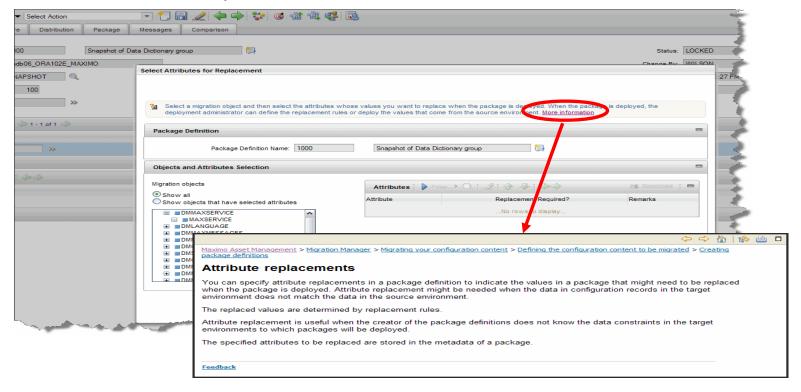
Enhancements to Help

 The overall objective toward the enhancements to Help is to allow the user to accomplish their work while staying in the product

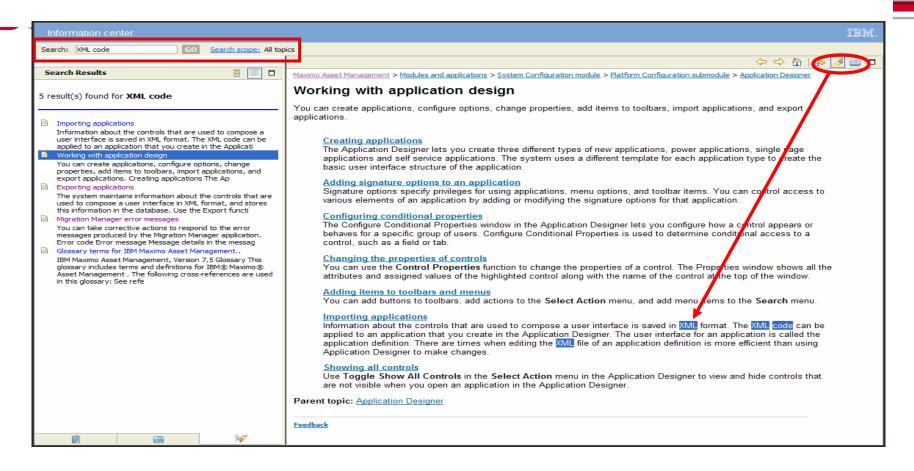
Feature	Benefit
Technical content of the product is now in one information center and installed on the customer network	Permits better access to a more complete library of information.
A single search for all products	All help for all Service Management products available in one place!

Accomplish your work while you stay in the product

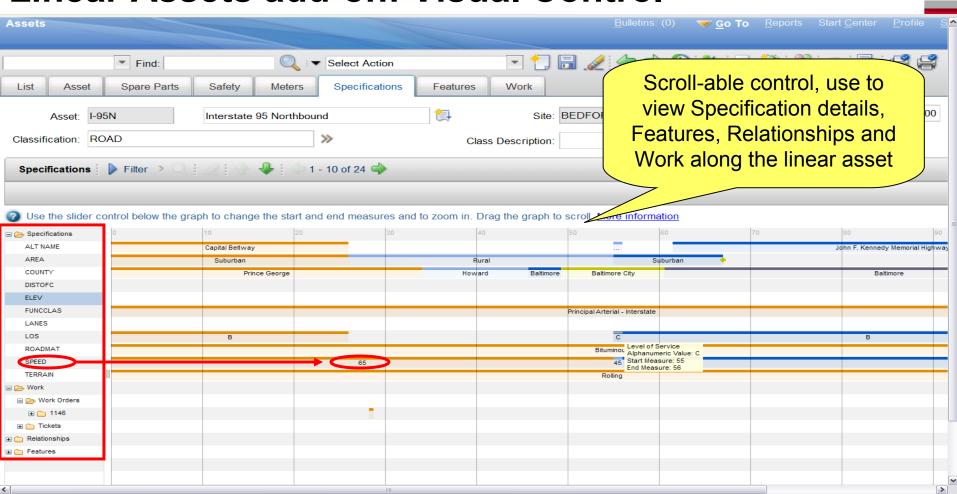
- Information content improvements made to complex areas of product
- Included links to relevant topics for more information



Search with highlighting



Linear Assets add-on: Visual Control



Continuing our innovation and leadership in the EAM market

- Maximo Functionality available out on ISM Library (OPAL) or through Support web site
 Available from IBM download site and is free to use for customers
 - ITM for Maximo: Available for 6.2,x, 7.1 and 7.5 Used for monitoring performance of Maximo environment (search Support website for: Maximo Monitoring)





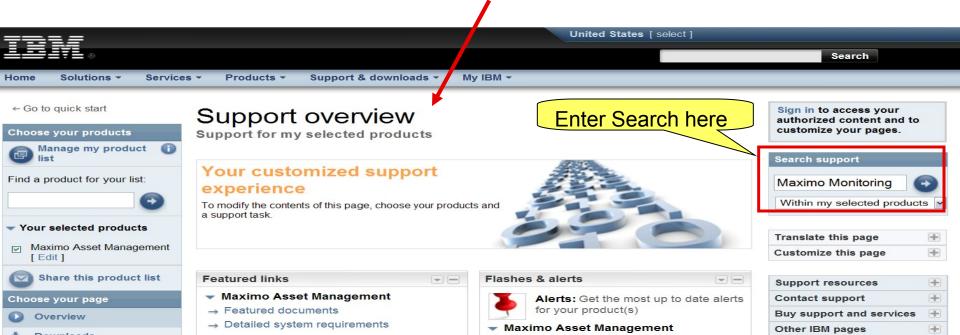
- ECRI Interface: Available on 7.1 and 7.5

 Provides real-time access to the AlertsTracker, a repository for hazard and recall alerts on medical devices. Identifies, within Maximo, any equipment on the hospital's inventory under a hazard and recall alert. (download from ISM Library)
- Email for Maximo: Available on 7.1 (available end of March 2011)
 Generates an email based on any condition. Receive a reply to update a record in
 Maximo. Send a confirmation email. Ideal for Work Order status updates and
 Approvals, workflow approvals. Works with BlackBerry or any email capable device (download from ISM Library)

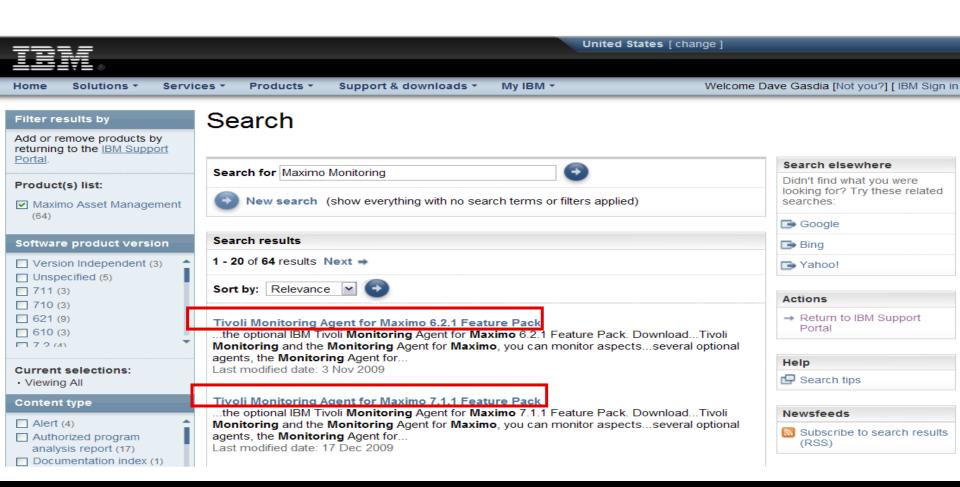


Download URL's

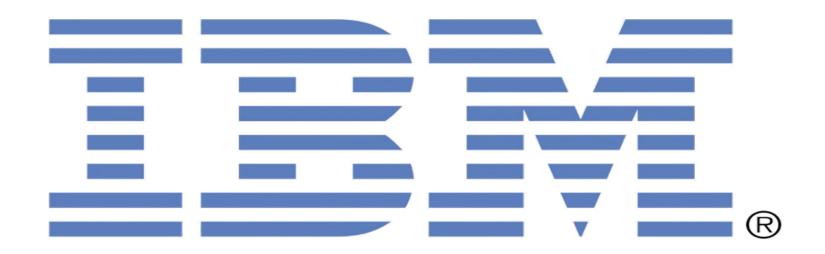
- URL Link to the ISM Library for downloads http://www-01.ibm.com/software/brandcatalog/ismlibrary/
- URL Link to the Maximo Asset Management Support website: http://www-947.ibm.com/support/entry/portal/Overview/Software/Tivoli/Maximo_Asset_Management



Downloads for Tivoli Monitoring for Maximo



Thank You....







Supply Chain Enhancements

Purchasing Enhancements

Purchase Order Revisions	Provides revision (update) capability to purchase order (PO) document
	Uniqueness of the record based on PO number and the Revision number
	View Revision History to keep track of changes
Purchasing – 360 view of Supply Chain	New action will be introduced within the Purchasing module, View Related Records
	Provides users with a view to all current SCM related records. The related records are PR, PO, RFQ, RECEIPT, INVOICE and CONTRACTS.
	User will be able to trace the status of PR, PO, Receipts, etc. One stop-shop for entire Supply Chain view
Purchasing - Taxes	Additional Tax Types - Provide an easy and configurable option to define additional tax types
	Tax Exempt Items - Provide the capability to flag an item as tax exempt
	Tax Code Hierarchy - Configurable screen where tax code determination hierarchy can be defined. Maximo tax engines leverages the hierarchy to derive tax code

Receiving Enhancements

User can define receipt tolerance at various levels

Establishes a tolerance threshold at which the user will be stopped during an over-receipt situation.

Reverses a receipt transaction without the use of a

Voided receipts will execute the same business logic as a return (balance/cost adjustment, etc.) but will not

Voiding available for unprocessed receipts. Receipts that have been matched cannot be voided. Receipts that have inspected cannot be

Based on non rotating items logic. Added validation to check for Move

Returning Service - Service Returns can be processed similar to Material returns. Simplifies return process for Service and makes

Returning Assets - User can select which assets to return

be available for inclusion on a credit invoice

return transaction.

return process consistent

voided

and Cost consistency

Receipt Tolerances

Voiding Receipts

Receiving Returns

Invoicing Enhancements Centralized Invoice

Reversed Invoice

Copy PO Lines

Consolidate PO from different sites on a Single Invoice Error correction feature used to

GL Post Date

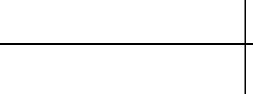
Invoicing purposes

New Date column containing **Invoice Post Date**

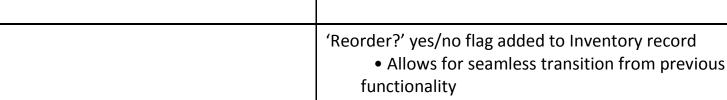
backout an approved invoice

Better View to select PO for

Item Master – Stock Category	Change to the Definition of Stock Category • Previously, stock category controlled automatic replenishment • Stock category will now control whether an item is
	'stockable' and can exist in a storeroom or whether it is only available for direct order from a vendor (non-







Benfits:

Stock Category Moved to Item/Organization level

and can exist in a storeroom or whether it is le for direct order from a vendor (nonstocked).

•Controls stockability for items within an organization 'Reorder?' yes/no flag added to Inventory record

Resolves functional gap on usage of stocked/non-stock item

terminology. Better alignment with ERP systems.

Inventory Costing

 Previously, costing method was defined at the site-level Costing method will now be set at the Inventory level * The costing method will continue to be defaulted from the site level * Costing method can be set differently between inventory records within the same storeroom and site
LIFO/FIFO Costing Method •'New' costing method to allow for valuation at actual receipt costs on a LIFO or FIFO basis

Default Costing Method

Consignment Inventory Adds support for 'vendor-owned' inventory valuation • Allows for items to be paid for on use rather than pay on receipt

Reservation Management	Reservations Can be Set as Hard or Soft • Allows users to specify reservation priority • Hard reservations affect available balance and require the balance to be on-hand at the time of reservation creation • Soft reservations would be considered to be uncommitted or contingency demand
	'Automatic' Reservation Processing •Reservations can be created under automatic processing. •The system will automatically set the reservation to APSOFT or APHARD depending on the required date of the item compared to the lead time to procure the item •'Backorder' functionality to indicate when a hard reservation is desired, but available balance on-hand is insufficient to satisfy a hard reservation.

New Application – Inventory Usage	Inventory usage reapplication •Simplified from the same

ry usage replaces the Issues and Transfers ion Simplified flow - Issues and transfers are recorded in the same tab

Inv

Inventory Usage records consist of a statusable header and related lines records.

•Allows for business process to be employed *prior* to transaction creation.

•Workflow can be enabled on Inventory Usage documents

Robust 'out-of-the-box' business functionality

Optional automatic creation of inventory usage documents.

Split quantities across multiple supplying bins.

Staging functionality to set aside balances for issue or transfer and hold these balances in a staging bin until 'picked up'.

Shipping - Transfers that require the use of an intermediary location (courier, shipper, truck, etc) can create shipment records to track items in transit.