



Highlights

- Improve asset utilization and employee productivity by providing the current location of existing resources.
 - Reduce capital expenditure by reducing asset loss, shrinkage and resulting overpurchasing of assets.
 - Enforce business rules and regulatory requirements with location-based events and automatically triggered workflow.
-

Real-time asset location visibility improves operational efficiencies

Offering smart capabilities for asset tracking to dramatically improve efficiency and lower cost

Companies understand the enormous impact critical asset management has on their bottom line.

In today's environment, organizations are seeking to improve operational efficiencies and asset utilization while reducing costs. To achieve these objectives, organizations have increased their use of portable and movable assets to increase flexibility and facilitate quick asset reconfiguration.

The addition of real-time asset location capabilities to IBM Maximo® Asset Management provides complete visibility of an organization's total enterprise assets in real time. This unprecedented visibility enables an organization to improve asset utilization and employee productivity by providing the current location of existing resources.

Capabilities of real-time asset location

Although many factors affect asset management costs including operation efficiency, wrench time, asset utilization and asset loss, real-time visibility can provide key information to lower maintenance and service management costs. This is acutely felt for organizations that rely on expensive, mobile devices. As an example, hospitals report substantial staff time expenditures in searching for critical mobile equipment.



In addition, with increasing losses or misplacement of mobile assets annually, hospitals compensate by spending capital on excess capacity assets to ensure they meet demand. This leads to the underutilization of critical assets simply because they may not be readily available. In some cases the problem is exacerbated as assets are hoarded precisely because of the difficulty in finding them when needed. Also, without efficient asset controls critical equipment may become unusable as needed preventative maintenance and regulation-directed calibrations are not performed in a timely manner.

These business problems extend beyond the healthcare industry. Similar challenges around asset management exist in all industrial operations, including Manufacturing, Aerospace & Defense, Oil and Gas, Transportation and the Utilities sector.



Asset Management in a Smarter Planet

We've thought about IT as the world of data centers, software, PCs, routers, bandwidth.

We've thought about infrastructure as the world of buildings, factories, hospitals, roads, pipeline.

These worlds are converging.

Mobile asset visibility impacts productivity and cost control

In light of the increasingly affordable and widespread availability of sensor technologies, real-time location visibility exemplifies a smarter approach by combining sensory and location technologies with Maximo's industry-leading asset management capabilities. This improves asset visibility and achieves operational excellence through automated processes, which support business rules and approvable regulatory requirements.

Real-time location capabilities in conjunction with Maximo Asset Management supports:

- Management of critical resources (people and equipment) through real-time visibility.
- Reduced asset "shrinkage" through alerting capabilities whenever an asset leaves a zone.
- Improved asset utilization and employee productivity by providing the location of resources and ensuring assets are in the right place at the right time.
- Improved inventory management, procurement, reduced asset shortages, improved audit & compliance capabilities.
- Minimized downtime by optimizing preventive and predictive maintenance tasks.
- Monitoring of state, condition and utilization of assets to improve asset usage.

Example scenarios

Real-time asset location tracking can be leveraged across a range of industries and for a number of usage scenarios. Consider the following example use cases.

Automated asset location

"I need to perform preventive maintenance or recall isolation. Where are my assets? Are they in compliance?"

A technician triggers a real-time location event to find the current location of the asset/assets in question. Once preventive maintenance is complete and the assets are ready to be put back into service, the technician completes the PM and the new location information goes to Maximo Asset Management and a work flow automatically closes the open PM request ticket and makes the assets available for use.

Loss prevention

“An asset moves outside the perimeter of a secure area. What do I do?”

The real-time asset location capability enables the recognition that the asset has moved outside the defined secure area and triggers an automated event in Maximo Asset Management indicating the asset state is now in an unsecured location. Maximo generates a work request for security to address the situation.

Asset utilization report

“What is the utilization of my asset or assets? Who is using them? When have they been used?”

Maximo Asset Management captures information from the data collection service and generates a report showing the total time the asset was in service in each work zone or area based on location.

IBM Maximo Asset Management in conjunction with real-time asset location capabilities takes the power, performance and possibilities of asset management to an entirely new level. Built on a single software platform, Maximo Asset Management delivers a comprehensive view of all asset types across your enterprise. This holistic perspective allows you to see all of your assets, as well as identify all of the untapped potential within them. You gain the knowledge and control you need to closely align your organization’s goals with the overall goals of your business.

Real-time location sensor integration

When a sensor tag is attached to an asset, the location of that asset is continuously visible in real-time enabling optimization of asset utilization. Automated detection of asset movement can automatically trigger workflows (such as scheduling preventive maintenance). Staff can perform asset calibration, preventative maintenance, warranty policy requirements, and recall management more efficiently because the location of the asset can be quickly and accurately identified.

Maximo’s real-time asset location platform supports the collection, tracking and aggregation of data from a wide variety of sensor types including barcodes, passive and active RFID, WiFi, Ultrasonic, Infrared, Ultra Wide Band, and Zigbee. This allows organizations to deploy the appropriate sensor technology for the application and optimize different sensors technologies to the task and to take advantages of new innovations in sensors as they become available.

Real-time asset location sensor event processing services can process various sensor data using built-in rules based on complex event processing. This provides the capability to generate business events from sensor events.

All control you need is available to track and manage assets with location data throughout its entire asset life cycle.

- Establish location and asset hierarchies to roll up costs across systems, subsystems and locations.
- Monitor asset and location conditions to enable proactive—rather than reactive—maintenance that helps decrease unplanned downtime.
- Extend asset coverage to IT assets through IBM Tivoli® Asset Management and achieve a deeper awareness of all your critical assets and their interdependencies.

Maximo Mobile Asset Manager

You can increase the value you achieve with Maximo and real-time asset location capabilities with IBM Maximo Mobile Asset Manager. With Mobile Asset Manager you can use your mobile device to see the current location of any tracked asset in real time. This further reduces the time and resources wasted looking for your assets.

Business event derivation

The combination of Maximo and real-time asset location services integrate and derive actionable events from a range of sensor events. This in turn supports business processes that can take advantage of the access to new types of environmental data. These include not only location tracking data as we have discussed but also condition monitoring data (such as temperature, humidity, shock and vibration) and also identification data for use in physical gateway or threshold boundary tracking such as supply chain monitoring, inventory, work in process, and usage. All of this data creates an opportunity to identify new insights into the environment in which our world works, how businesses operate, and how to capitalize on these insights by optimizing the responsiveness to rapidly changing conditions.

Line-of-business personnel can establish and refine business rules to identify business events from a continuous flow of sensor event data. Business process execution is provided by a suite of IBM software products that can respond to these identified business events. This underlying technology is in use in deployments around the world and it has now been integrated and tested with IBM's Maximo Asset Management.

A smarter idea

Maximo Asset Management offers the leading capabilities to support operational excellence by optimizing asset utilization and reducing costly downtime. Real-time Asset Location capabilities provides a strategic and comprehensive approach

to address organizational requirements by combining sensory and location technologies with inventory management, operational analytics skills, business process management and business intelligence.

Consider the following questions to see if the value of real-time asset management can be of value to your business.

- How much time does your staff spend looking for assets?
- What amount of preventative maintenance time is allocated to finding assets?
- Could you benefit from getting asset configurations in real time?
- Would you like to know what critical tooling and parts are running on what production line?
- Can you improve operational efficiencies if you can find asset locations in real time?
- Do you know where all your high value assets are at all times?
- When and how would you determine if any assets went missing?
- Are all your high value assets utilized to their fullest, and scheduled effectively with the personnel that require them?
- Do you have a real-time means of viewing where these assets are and if they are in productive use?
- How much of your expense and capital budget is due to loss of mobile assets?

If answers to these questions lead you to consider how improved asset utilization, performance, optimization and management can benefit you, see the reference below for details on how to find out more about this solution.

For more information

To learn more about how IBM Tivoli asset management solutions can help you optimize business, contact your IBM representative or IBM Business Partner, or visit ibm.com/tivoli

Additionally, financing solutions from IBM Global Financing can enable effective cash management, protection from technology obsolescence, improved total cost of ownership and return on investment. Also, our Global Asset Recovery Services help address environmental concerns with new, more energy-efficient solutions. For more information on IBM Global Financing, visit: ibm.com/financing



© Copyright IBM Corporation 2010

IBM Corporation
Software Group
Route 100
Somers, NY 10589 U.S.A.

Produced in the United States of America
March 2010
All Rights Reserved

IBM, the IBM logo, ibm.com, Maximo and Tivoli are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml

Other product, company or service names may be trademarks or service marks of others.

References in this publication to IBM products and services do not imply that IBM intends to make them available in all countries in which IBM operates.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements (e.g. IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided.

The customer is responsible for ensuring compliance with legal requirements. It is the customer's sole responsibility to obtain advice of competent legal counsel as to the identification and interpretation of any relevant laws and regulatory requirements that may affect the customer's business and any actions the customer may need to take to comply with such laws. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the customer is in compliance with any law or regulation.



Please Recycle
