Pulse2011

Maximo Product Update and Roadmap

Anthony Honaker

Asset Management Product Strategy, Design & Architecture

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.

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Maximo - Asset Management for a Smarter Planet
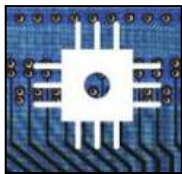
INSTRUMENTED

We now have the ability to measure, sense and see the exact condition of practically everything in near real-time.

INTERCONNECTED

People, buildings, plants, vehicles, campuses, cities, etc. are now interacting in entirely new ways.
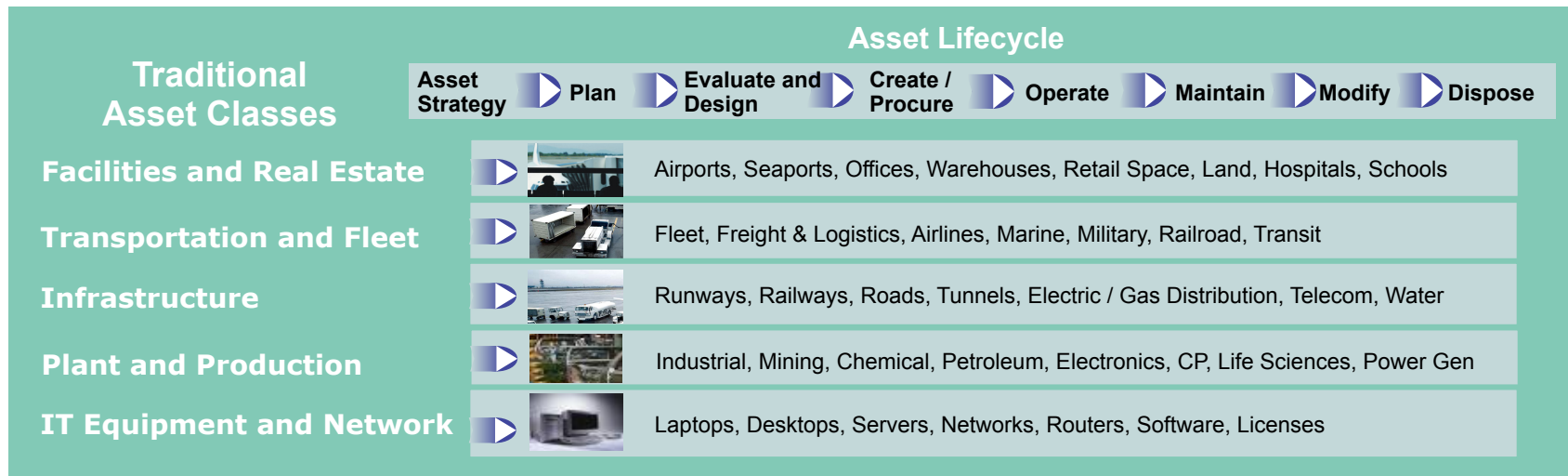
INTELLIGENT

All this information can be used to make optimal decisions that are based on historical trends and predicted events.

SMARTER

We can gather, synthesize and apply this information to achieve financial, environmental and operational benefits.

IBM

Smart is: Delivering Total Asset Lifecycle Management

Asset Lifecycle

Traditional Asset Classes	Asset Strategy ▷ Plan ▷ Evaluate and Design ▷ Create / Procure ▷ Operate ▷ Maintain ▷ Modify ▷ Dispose
Facilities and Real Estate	Airports, Seaports, Offices, Warehouses, Retail Space, Land, Hospitals, Schools
Transportation and Fleet	Fleet, Freight & Logistics, Airlines, Marine, Military, Railroad, Transit
Infrastructure	Runways, Railways, Roads, Tunnels, Electric / Gas Distribution, Telecom, Water
Plant and Production	Industrial, Mining, Chemical, Petroleum, Electronics, CP, Life Sciences, Power Gen
IT Equipment and Network	Laptops, Desktops, Servers, Networks, Routers, Software, Licenses

- **Drivers of Asset Management for A Smarter Planet:**
  - The emergence of pervasive devices, embedded chips, RFID, sensors, detectors and IP addresses attached to enterprise assets
  - Need to measure and manage the availability and use of all strategic assets
  - Improved risk management across the enterprise

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Maximo Development Principle: Drive Higher Customer Value

Objectives

- Enhance Maximo best-in-class capabilities and solutions

- Drive innovation with input from customer groups, advisory councils and business partners

- Continue to produce High Quality products; leverage customer input during every step of the development cycle

- Protect customer investment; upgrades to future Maximo versions

- Commit to Open Standards: J2EE, SOA

  - both IBM and non-IBM platform components

Maximo Development Focus

- Continue to Enhance Version 7 core capabilities, architecture, platform and technology

- Incremental Features and Value-add capabilities to extend Version 7

- Expand deep Industry Solution functionality and new Growth areas such as:

  - Intelligent Buildings

  - Safety, Risk and Compliance

  - Facilities Management/Space Planning

- Leverage IBM products and technology

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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

Maximo Asset Management Delivered Products 2010
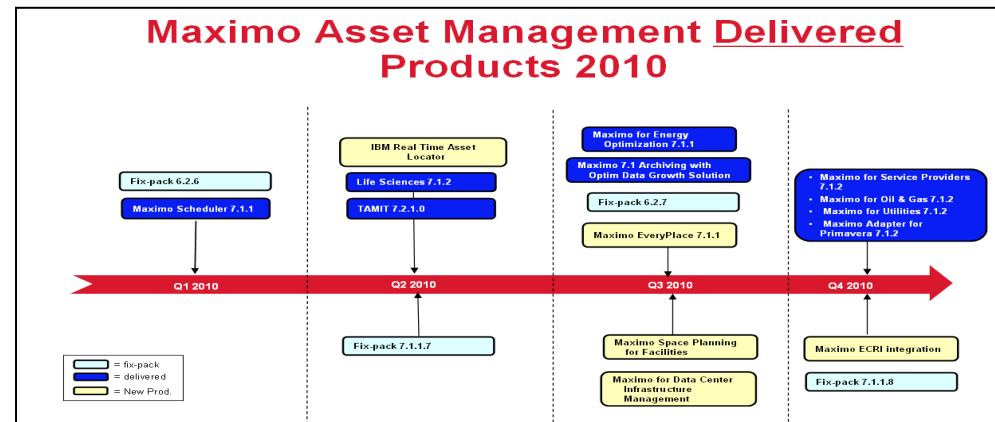
- **New Maximo Content added and available for download**
 - Maximo ECRI integration for Healthcare

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

IBM.
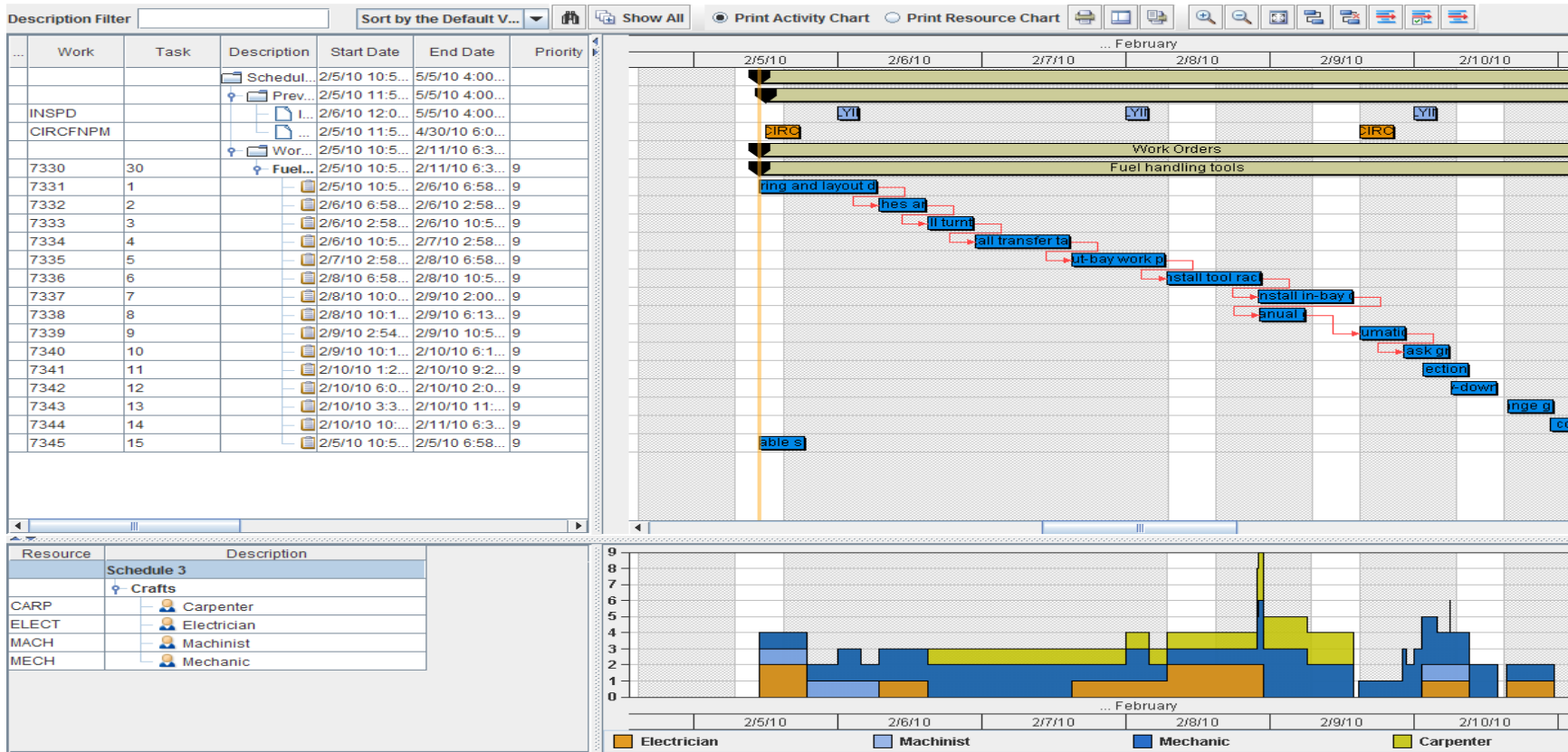
Real-time Asset Locator

- IBM Maximo Real-time Asset Locator allows Maximo customers to manage and trigger Asset events based on the real-time location of an asset from within the Maximo Asset Management

- IBM Maximo Real-time Asset Locator provides Maximo clients the ability to access the location of assets using RFID and other supported real-time location technologies. Support for multiple sensor solutions (Ultrasound, RFID, WiMax, etc.)

- Improves compliance support in highly regulated markets where events must be triggered based on locations.

- In highly regulated industries, like Healthcare and Life Sciences, the location of assets may trigger specific service management and disposition rules

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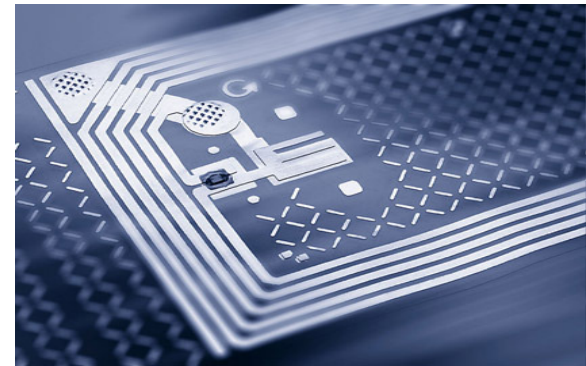
IBM Maximo Everyplace

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
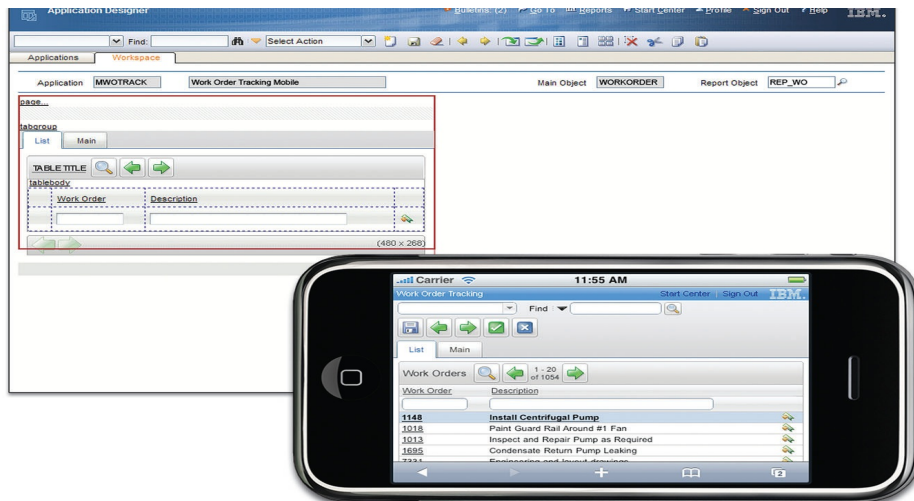
Maximo Everyplace enables users to:

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.

Pulse2011

Facilities Management on a Smarter Planet

The **need** for progress is clear

2
Real estate is the second largest expense on the income statement for most companies.

3
In most organizations the real estate portfolio is on the balance sheet as the third most valuable or expensive single asset.

30 percent
Facilities investments and operating costs can be more than 30% of corporate annual spending.

2025
By 2025, buildings worldwide will become the top energy consumers.

42 percent
Worldwide, buildings consume 42% of all electricity – up to 50% of which is wasted.

1
Buildings are the number 1 contributor to global CO_2 emissions.

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Maximo's History in Facilities Management

- Maximo has been providing Facilities Management solutions to large enterprises across various industries for almost two decades
- Historically, Maximo has focused on the Facilities Maintenance portion of the Facilities Management market
- Maximo is the market leader with 25% market share *
- A long-standing Facilities Management Users Group with over 600 active members

Representative Customers -

- *JCI*
- *UNNICO*
- *McCarran Airport*
- *General Dynamics*
- *LAUSD*
- *Woolworths*
- *The Venetian*

- *Target*
- *IBM RESO*
- *US National Parks*
- *Purdue University*
- *Calgary Catholic School District*
- *Alberta Health*
- *Brookhaven National Labs*
- *GSA*

* ARC EAM/CMMS Solutions Worldwide Outlook, July 2009

13 **... extends facilities maintenance to facilities management**

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TRIRIGA Corporate Overview

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

- Helping customers meet challenges in real estate portfolio management, capital project management, and energy and sustainability management

- Innovative TRIRIGA Real Estate Environmental Sustainability (TREES) solution drives lower energy consumption and emissions; recognized for industry leadership

- Founded in 2000

- Over 200 customers across industries with strong success in public sector and financial services

- Corporate headquarters in Las Vegas, NV with offices in Silicon Valley and Philadelphia, PA

- Privately held organization with approximately 200 employees

IBM.
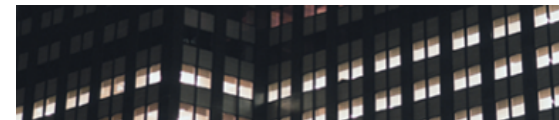
TRIRIGA Workplace Lifecycle Solution

TRIRIGA Real Estate

Portfolio Planning
Site Selection
Transaction Management
Lease Administration
Lease Accounting
AR Tenant Tracking
Payment Processing
Client Requests

TRIRIGA Projects

Program Management
Fund Management
Scope Management
Cost Management
Schedule Management
Resource Management
Quality Management
Vendor Engagement
Procurement

TRIRIGA Facilities

Space Management
Space Chargeback
Space Requests
Strategic Planning
Move Management
Reservation Management
Personnel Provisioning
CAD Management

TRIRIGA Operations

Contact Center
Service Management
Warranty Management
Preventive Maintenance
Facility Assessment
Security/Key Management
Inventory Management
Capital Planning
Resource Planning

TRIRIGA Environmental

CO2 Emission Tracking
Utility Tracking
Waste Disposal
Water Consumption
Green Opportunities Tracking
LEED/BREAM Certification
Energy Star Integration

TRIRIGA Core Services

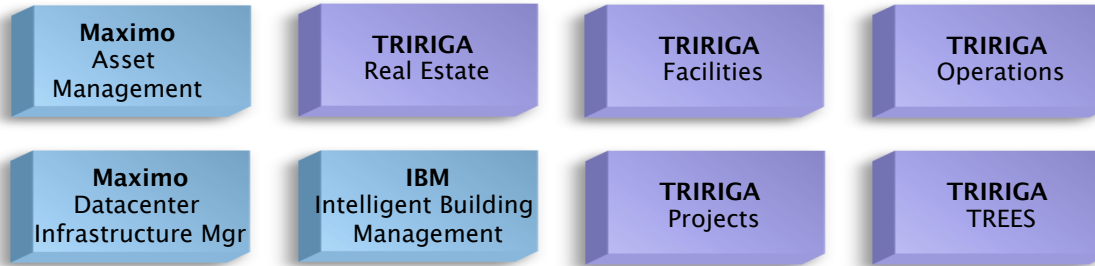| Geographies	People	Receiving	Customer Self Service	Reporting
Locations	Specifications	Invoicing	News	WPM Metrics
Organizations	Assets	Requests	Graphics	GIS Mapping
Vendors	Contracts	Tasks	Document Management	GANNT Schedules

Maximo and TRIRIGA Solutions

Core Solutions

Stand-alone solutions for asset, facility and real estate management.

Maximo Asset Management	TRIRIGA Real Estate	TRIRIGA Facilities	TRIRIGA Operations
Maximo Datacenter Infrastructure Mgr	IBM Intelligent Building Management	TRIRIGA Projects	TRIRIGA TREES

Industry Solutions

Industry-specific capabilities for the unique requirements of asset-intensive industries.

Maximo for Transportation	Maximo for Life Sciences	Maximo for Nuclear
Maximo for Utilities	Maximo for Government	Maximo for Oil & Gas

IBM
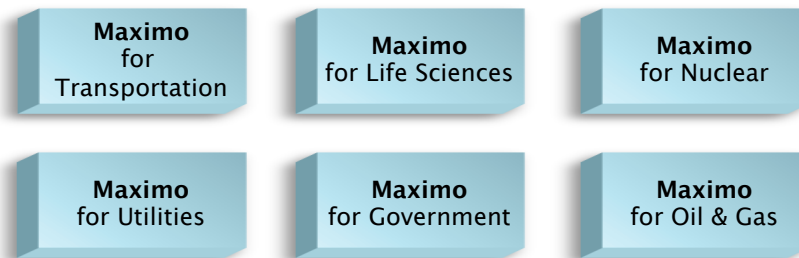
Maximo and TRIRIGA Solutions

☆ = planned for Q4 availability

Add-on Solutions

Additional options, used with core or industry solutions, provide deeper functionality for specific needs.

Maximo Service Provider	**Maximo** Calibration	**Maximo** Archiving	**Maximo** Spatial	**TRIRIGA** Strategic Facility Planning
Maximo Scheduler	**Maximo** Linear Asset Manager	**Maximo** Real Time Asset Locator	**Maximo** for Energy Optimization	**TRIRIGA** Facility Assessment
☆ **Maximo** Health, Safety & Environment Mgr	**Maximo** Asset Config. Manager	**Maximo** Mobile	**Maximo** Everyplace	SMART Mobile (Syclo)

Integration Adapters

Commercially-supported integration to other enterprise and 3rd party systems.

Maximo ERP Adapters	**TRIRIGA** Energy Star Connector	**TRIRIGA** GIS Connector for ESRI	**TRIRIGA** CAD Integrator	**TRIRIGA** Connector for RSMeans

TRIRIGA and IBM will address a total view of facilities and real estate management

Seven closely-connected sets of business functions are needed to reduce real estate costs and improve facilities operations.
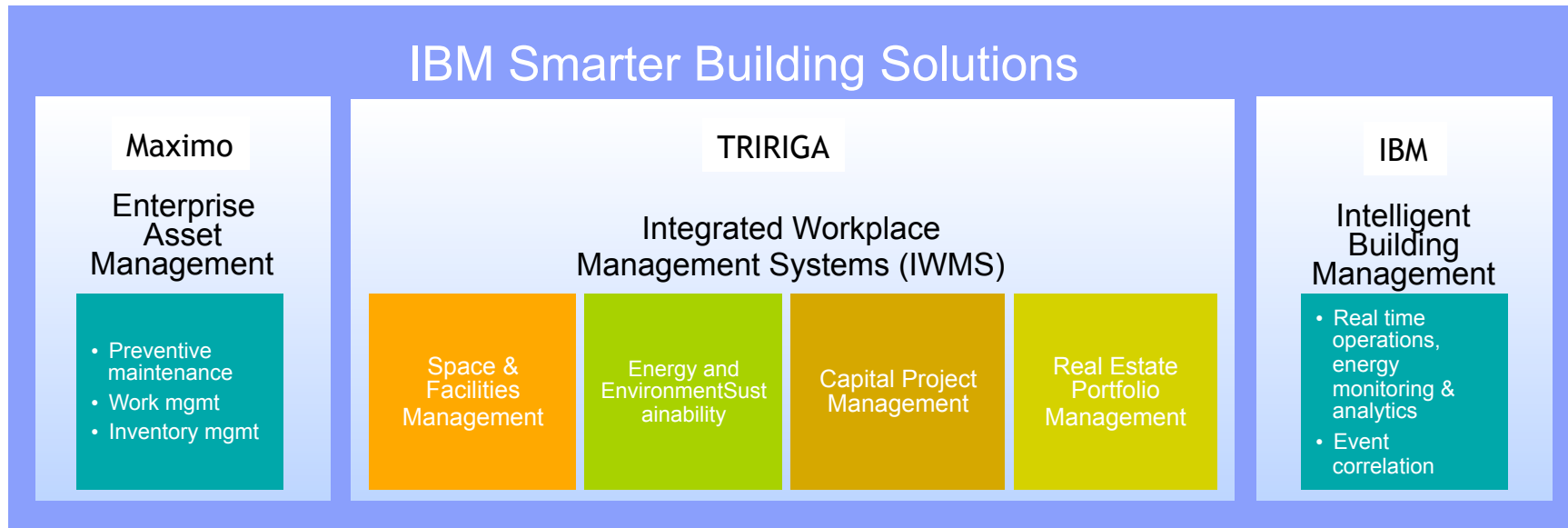
Critical business processes address the total building life cycle from construction, design, and project management to leasing, portfolio management, datacenter infrastructure management, maintenance management, energy and environmental sustainability and asset disposition.

Operations Management	Service Management	Datacenter Infrastructure Management	Space & Facilities Management	Energy and Environment Sustainability	Capital Project Management	Real Estate Portfolio Management
• Asset mgmt • Work mgmt • Inventory mgmt • Supply chain • Contracts • Key mgmt	• Facilities service desk • Service level agreements • Contracted services • Customer billing	• Space, power and cooling optimization • Allocation planning • Move, Add, Change	• Space utilization • Capacity planning • Move, add, change • Reservations	• Utility tracking • Environmental opportunity analysis • Carbon output measurement	• Condition assessment • Capital planning • Budgeting • Construction estimates • Project mgmt	• Strategic RE portfolio planning • Budgeting & forecasting RE expense drivers • Lease & contract admin

TRIRIGA and Maximo combine facility, real estate and enterprise asset management

IBM combines leadership solutions in two markets - Enterprise Asset Management and Integrated Workplace Management Systems (IWMS) - to create comprehensive Smarter Building solutions.

IBM Smarter Building Solutions

Maximo

Enterprise Asset Management

- Preventive maintenance
- Work mgmt
- Inventory mgmt

TRIRIGA

Integrated Workplace Management Systems (IWMS)

| Space & Facilities Management | Energy and EnvironmentSustainability | Capital Project Management | Real Estate Portfolio Management |

IBM

Intelligent Building Management

- Real time operations, energy monitoring & analytics
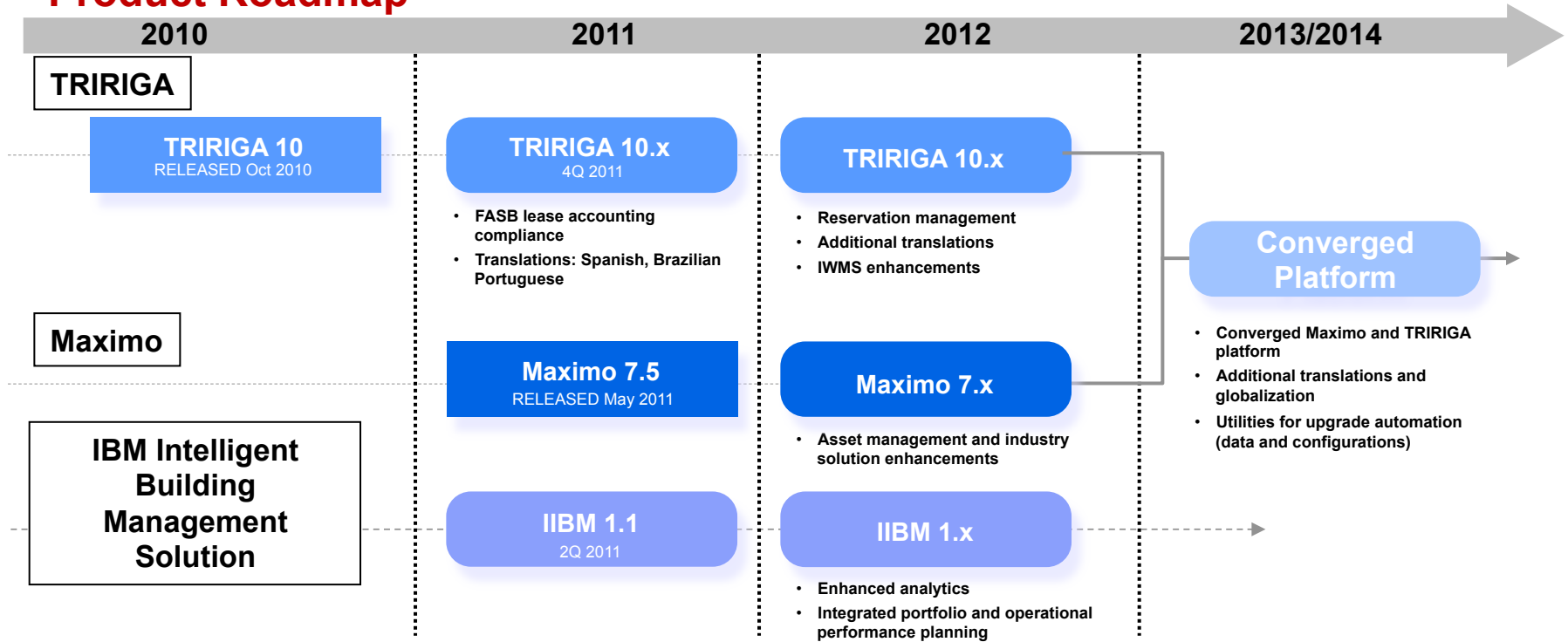- Event correlation

Maximo and TRIRIGA Product Strategy

- Investment in both Maximo and TRIRIGA solutions will continue with enhancements delivered in new future versions
  - New versions of TRIRIGA 10 are planned for release in 2011 and 2012

- Maximo and TRIRIGA capabilities will ultimately converge into a single platform with a common architecture, one underlying database, and one business process automation engine

- The converged product will offer customers the Maximo Enterprise Asset Management (EAM) capabilities combined with the breadth of the TRIRIGA Integrated Workplace Management Systems (IWMS) capabilities into a single comprehensive solution for managing facilities, real estate, energy and environmental sustainability

- Convergence will benefit from a legacy of similar design philosophy of both Maximo and TRIRIGA
  - Both are J2EE Java-based and web-architected
  - Same approach to use of meta-data that preserves configuration data
  - Similar use of role-based user experience

- IBM expects to offer customers an upgrade experience from their current Maximo or TRIRIGA implementations to the converged platform that is similar to a typical upgrade process

- IBM intends to provide automation utilities and tools to move data and configurations, enabling a faster and more efficient upgrade process
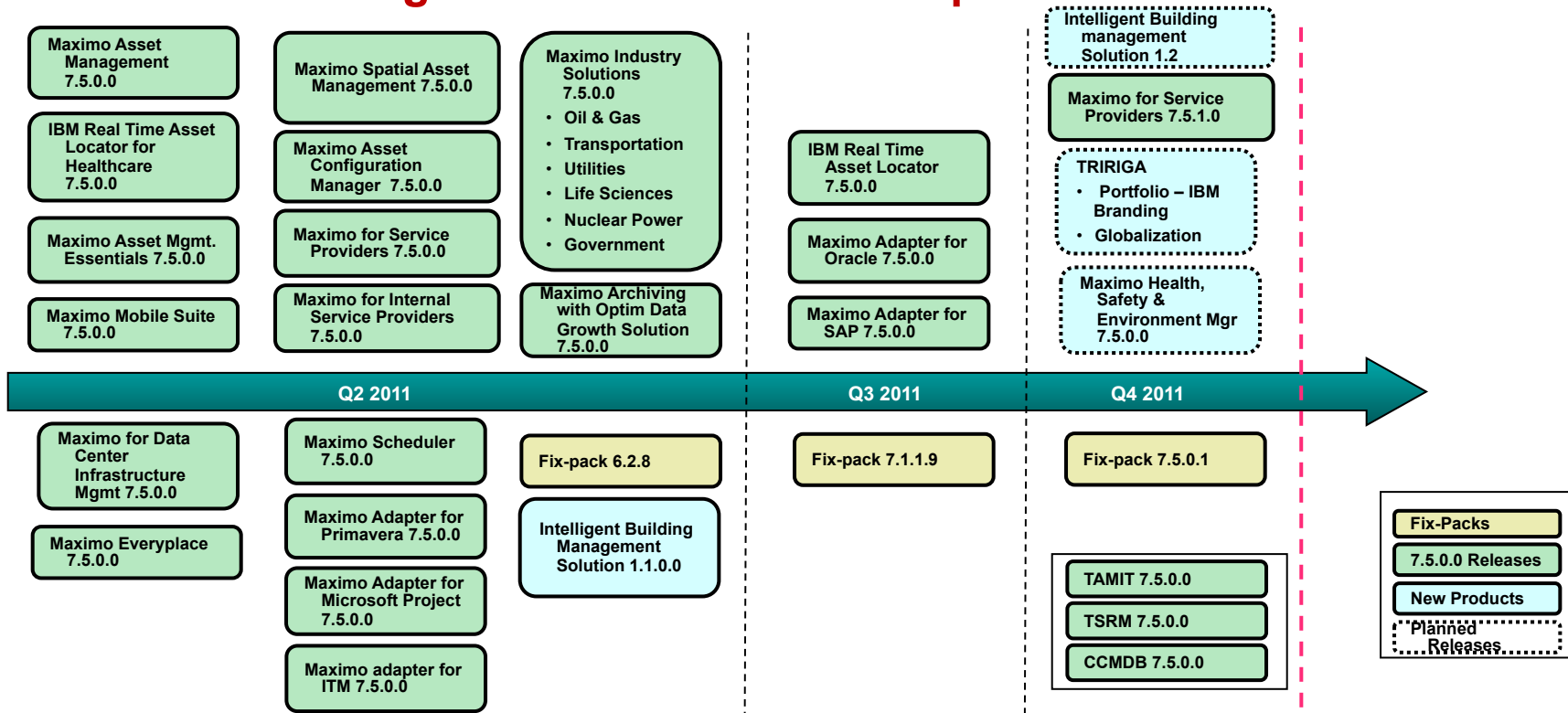
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Facilities, Real Estate, Energy and Environmental Sustainability Product Roadmap

2010	2011	2012	2013/2014

TRIRIGA

TRIRIGA 10
RELEASED Oct 2010

TRIRIGA 10.x
4Q 2011

- **FASB lease accounting compliance**
- **Translations: Spanish, Brazilian Portuguese**

TRIRIGA 10.x

- **Reservation management**
- **Additional translations**
- **IWMS enhancements**

Converged Platform

- **Converged Maximo and TRIRIGA platform**
- **Additional translations and globalization**
- **Utilities for upgrade automation (data and configurations)**

Maximo

Maximo 7.5
RELEASED May 2011

Maximo 7.x

- **Asset management and industry solution enhancements**

IBM Intelligent Building Management Solution

IIBM 1.1
2Q 2011

IIBM 1.x

- **Enhanced analytics**
- **Integrated portfolio and operational performance planning**

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2011 Asset Management Product Roadmap

Intelligent Building management Solution 1.2	

Maximo Asset Management 7.5.0.0

Maximo Spatial Asset Management 7.5.0.0

Maximo Industry Solutions 7.5.0.0
- Oil & Gas
- Transportation
- Utilities
- Life Sciences
- Nuclear Power
- Government

IBM Real Time Asset Locator 7.5.0.0

Maximo for Service Providers 7.5.1.0

IBM Real Time Asset Locator for Healthcare 7.5.0.0

Maximo Asset Configuration Manager 7.5.0.0

Maximo Adapter for Oracle 7.5.0.0

TRIRIGA
- Portfolio – IBM Branding
- Globalization

Maximo Asset Mgmt. Essentials 7.5.0.0

Maximo for Service Providers 7.5.0.0

Maximo Adapter for SAP 7.5.0.0

Maximo Mobile Suite 7.5.0.0

Maximo for Internal Service Providers 7.5.0.0

Maximo Archiving with Optim Data Growth Solution 7.5.0.0

Maximo Health, Safety & Environment Mgr 7.5.0.0

Q2 2011	Q3 2011	Q4 2011

Maximo for Data Center Infrastructure Mgmt 7.5.0.0

Maximo Scheduler 7.5.0.0

Fix-pack 6.2.8

Fix-pack 7.1.1.9

Fix-pack 7.5.0.1

Maximo Everyplace 7.5.0.0

Maximo Adapter for Primavera 7.5.0.0

Intelligent Building Management Solution 1.1.0.0

Maximo Adapter for Microsoft Project 7.5.0.0

TAMIT 7.5.0.0

Maximo adapter for ITM 7.5.0.0

TSRM 7.5.0.0

CCMDB 7.5.0.0

Fix-Packs
7.5.0.0 Releases
New Products
Planned Releases

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Representative Corporate Mission Statements

" ExxonMobil is committed to conducting business in a manner that protects and promotes the _safety and health_ of our employees, those involved with our operations, and the communities where we work"

" Demanding that everything we do leads to a cleaner, healthier, and _safer environment_"
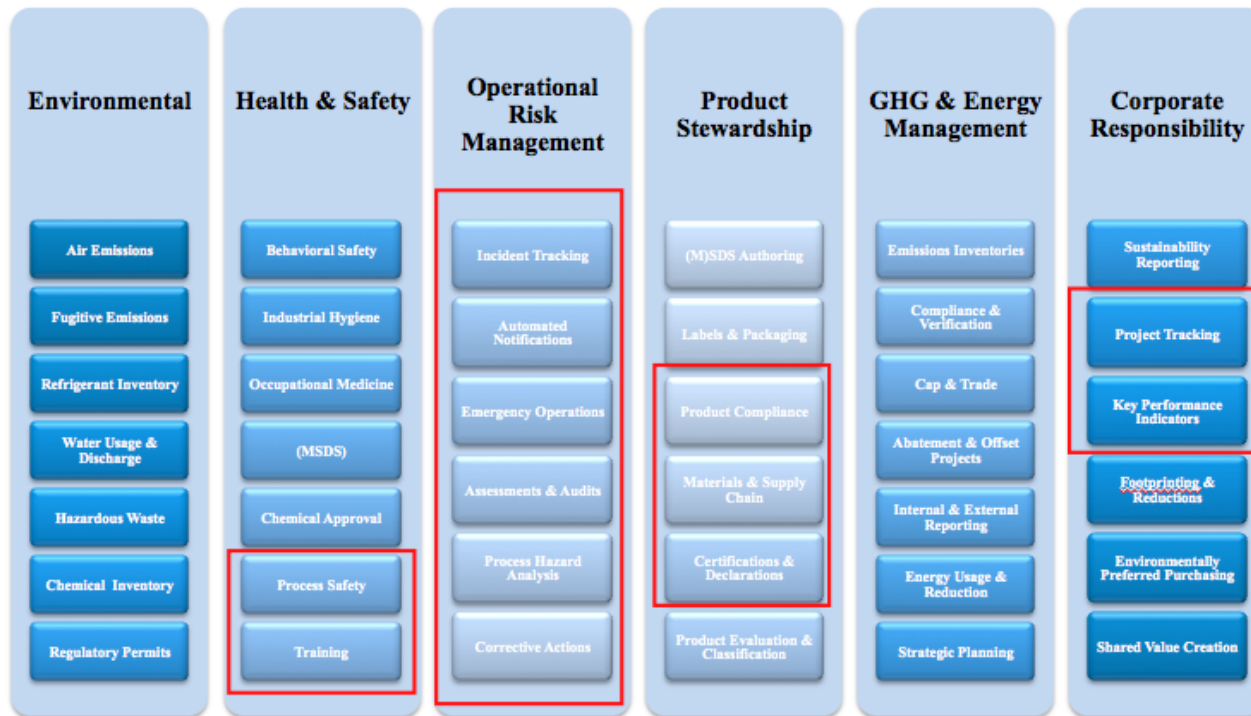
" ADM is committed to the _safety of our colleagues, contractors, and business partners._ ADM is also achieving notable gains in the area of Total Process Safety – the approach we take to help minimize the risk of incidents at our facilities"

" Our #1 priority – Be among the best industrial companies in _safety by ensuring a safe and healthy work environment_ for our stakeholders"

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HSE/Sustainability has over 40 Key Focus Areas

Environmental	Health & Safety	Operational Risk Management	Product Stewardship	GHG & Energy Management	Corporate Responsibility
Air Emissions	Behavioral Safety	Incident Tracking	(M)SDS Authoring	Emissions Inventories	Sustainability Reporting
Fugitive Emissions	Industrial Hygiene	Automated Notifications	Labels & Packaging	Compliance & Verification	Project Tracking
Refrigerant Inventory	Occupational Medicine	Emergency Operations	Product Compliance	Cap & Trade	Key Performance Indicators
Water Usage & Discharge	(MSDS)	Assessments & Audits	Materials & Supply Chain	Abatement & Offset Projects	Footprinting & Reductions
Hazardous Waste	Chemical Approval	Process Hazard Analysis	Certifications & Declarations	Internal & External Reporting	Environmentally Preferred Purchasing
Chemical Inventory	Process Safety	Corrective Actions	Product Evaluation & Classification	Energy Usage & Reduction	Shared Value Creation
Regulatory Permits	Training			Strategic Planning	

IT Requirements:

- A **central repository or database** for all product compliance information and a global system of record, with an understanding of the history, quality, and context of that data

- A **rules or workflow-based system** to ensure that procedures are followed, with the ability to identify specific events or exceptions.

- **Integration with other applications** or data sources such as ERP or materials or order management.

- **Reporting or analytics.**

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Maximo Health, Safety and Environment Manager

<u>Unparalleled HS&E capabilities for:</u>

- – Incident Management
- – Investigations
- – Change Management
- – Non-conformance Management
- – Competency Management
- – Operating Policy
- – Operating Procedures
- – Operators Log
- – Training Tracking
- – Action Tracking
- – Benefits & Losses
- – Failure Reporting
- – Improvements
- – Regulatory Compliance
- – Risk Assessments
- – Risk Matrices
- – Solutions
- – Defect Elimination

The primary objective of Health, Safety & Environment initiatives is to reduce overall risk, to comply with Federal, State and local regulations, and to create a safe yet efficient operating environment for a company.

Achieving this objective is as much about standardizing HS&E practices as integrating these practices with day-to-day operations management.

Maximo HSE Manager provides a foundational enterprise platform that integrates Health, Safety, and Environment processes with work and asset management.

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2012 Asset Management Product Roadmap
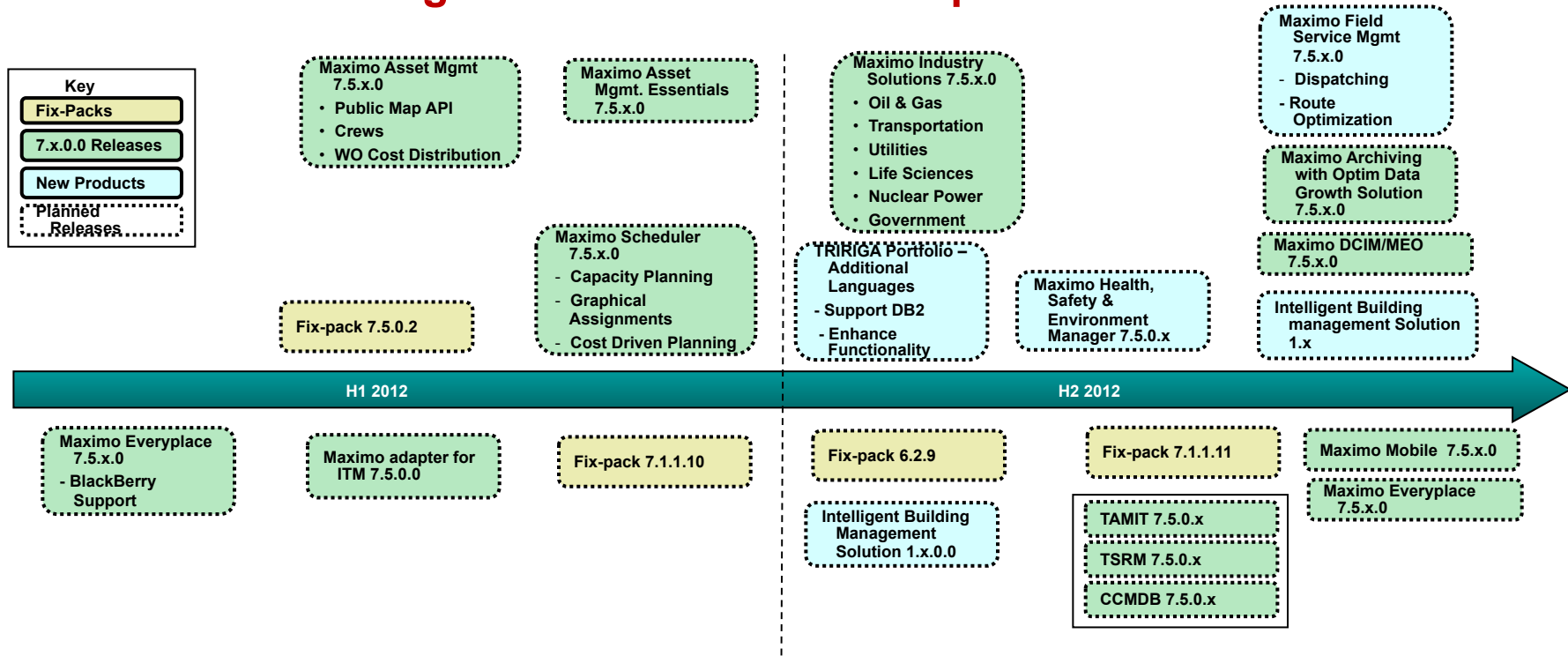
Key
- Fix-Packs
- 7.x.0.0 Releases
- New Products
- Planned Releases

Maximo Asset Mgmt 7.5.x.0
• Public Map API
• Crews
• WO Cost Distribution

Maximo Asset Mgmt. Essentials 7.5.x.0

Maximo Industry Solutions 7.5.x.0
• Oil & Gas
• Transportation
• Utilities
• Life Sciences
• Nuclear Power
• Government

Maximo Field Service Mgmt 7.5.x.0
- Dispatching
- Route Optimization

Maximo Archiving with Optim Data Growth Solution 7.5.x.0

Maximo Scheduler 7.5.x.0
- Capacity Planning
- Graphical Assignments
- Cost Driven Planning

TRIRIGA Portfolio – Additional Languages
- Support DB2
- Enhance Functionality

Maximo Health, Safety & Environment Manager 7.5.0.x

Maximo DCIM/MEO 7.5.x.0

Intelligent Building management Solution 1.x

Fix-pack 7.5.0.2

H1 2012 | **H2 2012**

Maximo Everyplace 7.5.x.0
- BlackBerry Support

Maximo adapter for ITM 7.5.0.0

Fix-pack 7.1.1.10

Fix-pack 6.2.9

Intelligent Building Management Solution 1.x.0.0

Fix-pack 7.1.1.11

TAMIT 7.5.0.x
TSRM 7.5.0.x
CCMDB 7.5.0.x

Maximo Mobile 7.5.x.0

Maximo Everyplace 7.5.x.0

Enhancing Scheduling & Mobile Workforce Management

Roles to Focus On

Capabilities to Address

Planner / Scheduler
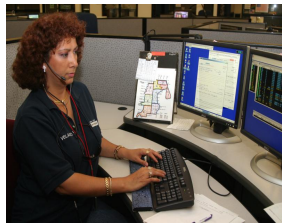
Dispatcher

Mobile Workforce

Capacity Planning

Resource Optimization

Maximo Scheduler features

Assignment

Maximo Field Services features

Dispatching

Real Time Communication
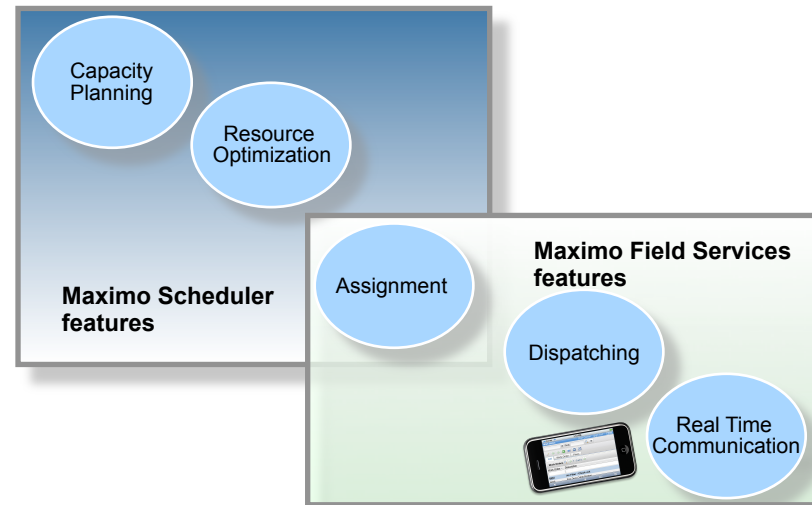
What's Now?......

Maximo 7.5 !

Maximo 7.5 – 3 Major Areas of Focus

1. 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

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Additional Functionality

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Continuing our innovation and leadership in the EAM market

Maximo Functionality available on ISM Library (fomerly 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)
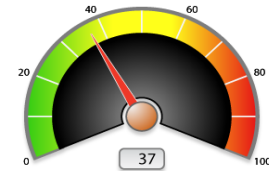
ECRI Interface: Available on 7.1 and 7.5
Provides real-time access to the AlertsTracker, a repository for hazard and recall alerts on medical devices. Identifies, within Maximo, any equipment on the hospital's inventory under a hazard and recall alert. (download from ISM Library)

Email for Maximo: Available on 7.1 and 7.5
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)

New
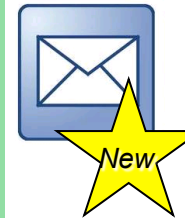
Introducing Service Management Connect

https://www.ibm.com/developerworks/servicemanagement/

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