

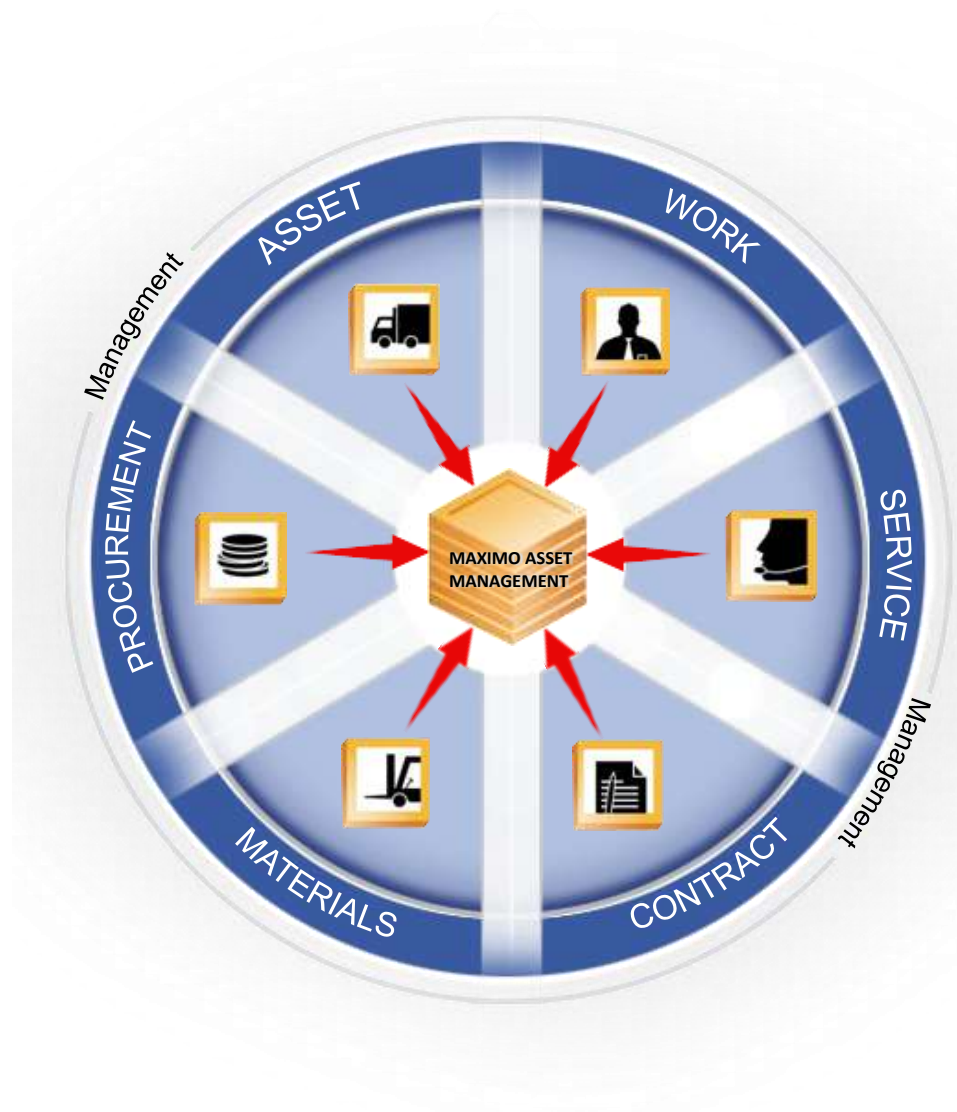
IBM Maximo

Doug Wood, Architect Tivoli CTO's Office
Esther Burwell, Tech Lead Tivoli CTO's Office



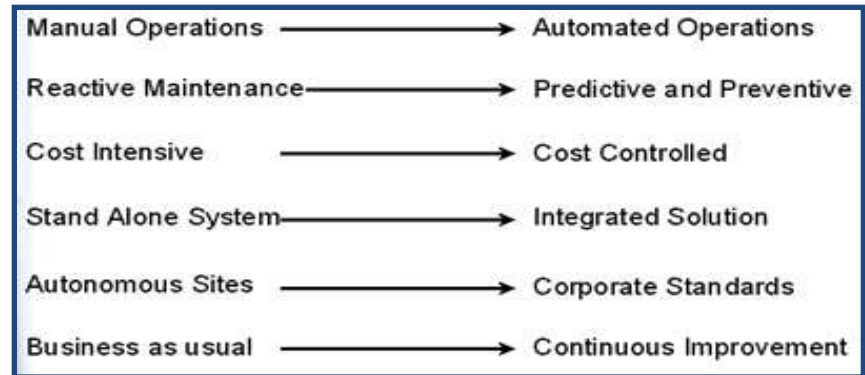
Maximo Asset Management

- **Asset Management**
 - Facilities, Operations, IT, Fleet
 - Assets, Locations, Failure Reporting, Condition Monitoring, Meters
- **Work Management**
 - Preventive, Corrective, Projects, Emergency, Safety Plans
 - Work Hierarchies, Planning, Status, Assignments, Actual Metrics
- **Procurement Management**
 - PR's, PO's, Receipts, Invoices
- **Materials Management**
 - Items, Storerooms, Inventory, Reorder, Issues, Returns
- **Contract Management**
 - Master, Purchase, Warranty, Lease/Rental, Labor Rate
- **Service Management**
 - Self Service Requests & Status
 - Platform for asset owners, asset managers and service providers
- **Next Generation Architecture**
 - J2EE Platform
 - Standards-based
 - Service Oriented Architecture (SOA)



Maximo Capabilities

- Documented maintenance plans through knowledge based solution leads to timely problem identification and resolution
- Increase wrench time through the use of advanced scheduling tools
- Clear tracking of responsibilities and asset maintenance strategy leading to reduced asset downtime
- Decreased capital investment through Improved asset useful life by identification of manufacturer related issues and accurate warranty tracking
- Manage contractors/vendors and service providers increasing the quality of services rendered
- Stock management for critical spares, linking to maintenance schedules, leading to reduced carrying costs
- Mobile devices support real-time access to assigned work and asset details for improved resolution times
- Facilities service desk to publish available services and provide increased customer satisfaction



Benefits:

- Improved warehouse productivity
- Support for Sarbanes-Oxley compliance
- Improved regulatory/safety compliance
- More accurate data for improved decision making
- Improved work planning/coordination
- Sales growth through improved service

Who uses Maximo? Asset Intensive Organizations



11 of the 12 largest PHARMACEUTICALS companies in the world are using Maximo

7 of the 10 largest AUTOMOTIVE companies in the world are using Maximo

8 of the 10 largest OIL & GAS companies in the world are using Maximo

11 of the 20 largest diversified UTILTY companies are using Maximo

11 of the 12 major AEROSPACE & DEFENSE companies in the world are using Maximo

9 of the 15 busiest AIRPORTS in the world are using Maximo

6 of the 10 largest ENERGY companies in the world are using Maximo

tested product

product name: IBM Maximo Enterprise Asset Management

product version: 7.1.1.8

Website: <http://www-142.ibm.com/software/products/us/en/category/tivoli/SW222>

COBie support is available for free download to IBM customer and partner at:

<http://www.ibm.com/software/ismlibrary?NavCode=1TW10MA44>

challenge scope

information	COBie.Sheet	Imported
spaces and equipment	Space, Type, Component	<input checked="" type="checkbox"/>
PM schedules	Job	<input type="checkbox"/>
safety procedures	Job	<input type="checkbox"/>
systems	System	<input checked="" type="checkbox"/>
system procedures	Job	<input type="checkbox"/>
materials, tools, training	Resource	<input type="checkbox"/>
associated documents	Document	<input type="checkbox"/>
replacement parts	Spare	<input type="checkbox"/>
space and equipment properties	Attribute	<input checked="" type="checkbox"/>
space zones	Zone	<input checked="" type="checkbox"/>

configuration

BIM Configuration

Configuration For BIM Import

Site

Facility Classification System Classification

Floor Classification Zone Classification

Space Classification Asset Classification

Operation Location Classification Product Classification

OK Cancel

Building Model Import

Project Name Parent Location Site

Description Location Prefix

Import sessions

Session ID	Facility Name	Upload time	Status
1	PN 0001	10/27/11 5:07 AM	IMPORTING

Details

Upload time Description Status # of Errors

Facility description

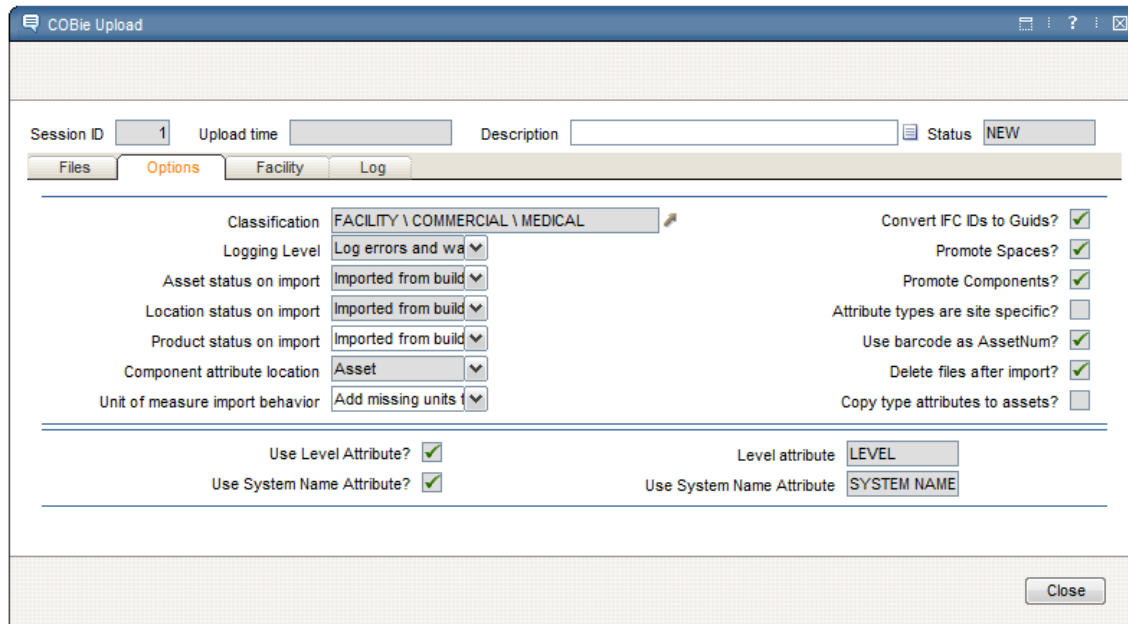
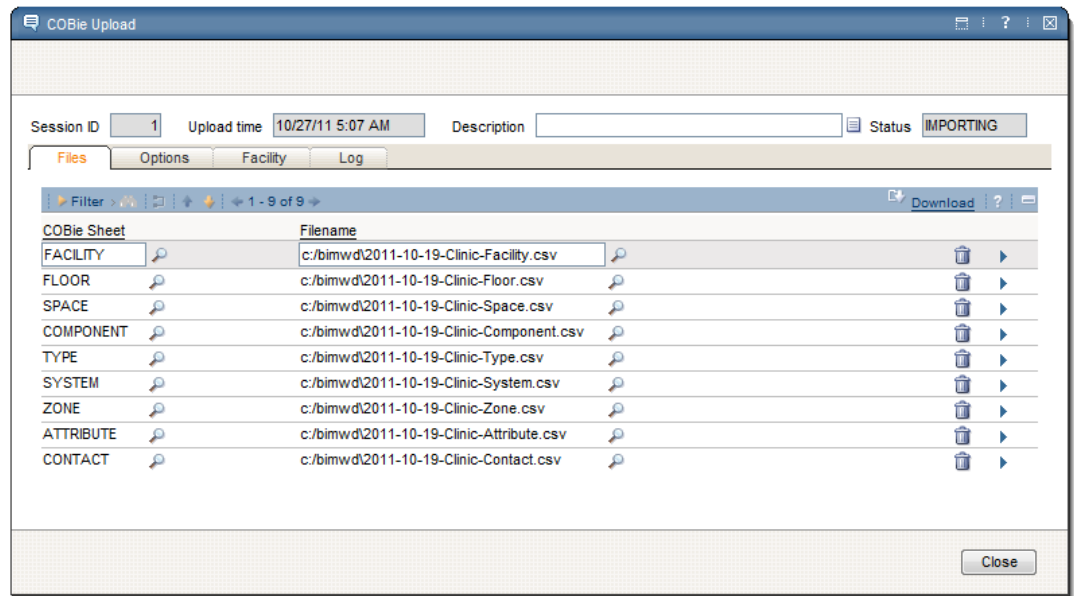
Facility Location ID Facility Name

Linear Units Volume Units

Area Units Currency Units

New Row

configuration



process

COBie Source	Maximo Import location
Facility	Location and COBie import project
Floor	Location
Space	Location
Component	Location and Asset
System	System categorized as System (Category configurable)
Zone	System categorized as Zones (Category configurable)
Type	Product (New for COBie support)
Attribute	Specifications for: Location, Asset, Product
Contact	Person

process

Locations

Find: [] Select Action []

List Location [] Assets [] History [] Safety [] Meters [] Specifications []

Location CC000212 2BS2 Model ID 0cbd931e-307b-4c69-bc6d-067af8cd669f Site IBM

Autodesk Search Name STAIR 2BS2

Properties

Attribute	Element	Value
Name		STAIR 2BS2
Id		410086
Number		2BS2
Historic		Historic
HistoricPreservationZoneName		Preservation Z 2B
Category Description		Stairway
Level		Level "Second Floor", #13874
Phase		Phase "New Construction", 961
Base Offset		0
Category Code		13-85 21 11
Upper Limit		Level "Second Floor", #13874
OmniClass Table 13 Category		Element "Stair #136557
Volume		1423.13 ft ³
LightingZoneName		Lighting Zone
Perimeter		56.86351907
RoomTag		RoomTag
FireAlarmZoneName		Fire Alarm Zor
CirculationZoneName		Circulation Zor
OccupancyZoneName		Occupancy Zo
Area		166.32 ft ²
Unbounded Height		9.186351706
VentilationZoneName		Ventilation Zor
Limit Offset		3.186351706

Current Maximo record tracks model selection

Assets with open work order, service requests, or preventive maintenance due can be highlighted in the model

IFC GUID Binds Maximo records to import source

Simple search of key model properties

Work orders can be created for the asset selected in the model

COBie Systems and Zone are imported as Maximo Systems and can be viewed and edited

Property Sheets for all model properties

Model selection and focus track Maximo selected asset or location

Predefined views may be associated with the model

Selection sets hide or display model elements

Model Models: Clinic Views:

process

Associate Building Model with Location

Location Site

Details

Title Description

URL

Find Attribute Class Find Parameter Class

Find Attribute Name Find Parameter Name

Default views

Asset

Location

Lookup

Upload Model

Associate a Model file with a Facility location

Display Building Systems

Location Site

Building Systems Filter 11 - 20 of 21 Download

System	Classification	Description	Network	Primary System
CC004390	FACILITY \ ZONE	Radiology	<input type="checkbox"/>	<input type="checkbox"/>
CC004403	FACILITY \ ZONE	Optometry	<input type="checkbox"/>	<input type="checkbox"/>
CC004414	FACILITY \ ZONE	FlightMedicine	<input type="checkbox"/>	<input type="checkbox"/>
CC004427	FACILITY \ ZONE	AdultMedicine	<input type="checkbox"/>	<input type="checkbox"/>
CC004444	FACILITY \ ZONE	Records	<input type="checkbox"/>	<input type="checkbox"/>
CC004478	FACILITY \ ZONE	Dental	<input type="checkbox"/>	<input type="checkbox"/>
CC004499	FACILITY \ ZONE	MentalHealth	<input type="checkbox"/>	<input type="checkbox"/>
CC004513	FACILITY \ ZONE	EROM	<input type="checkbox"/>	<input type="checkbox"/>
CC004586	FACILITY \ SYSTEM	Air Distribution- 01	<input type="checkbox"/>	<input type="checkbox"/>
CC004667	FACILITY \ SYSTEM	Air Distribution- 02	<input type="checkbox"/>	<input type="checkbox"/>

System Location Site

Description Classification

- CC000001:PN 0001
 - CC000040:1B13
 - CC000042:1B15
 - CC000044:1B17
 - CC000045:1B19

Display and edit System and Zone as Maximo Systems

Display **Cancel**

process

Associate Building Model with Location

Location Site

Details

Title Description

URL

Find Attribute Class Find Parameter Class

Find Attribute Name Find Parameter Name

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Building Systems Filter 11 - 20 of 21

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System Location Site

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 - CC000045:1B19

Display **Cancel**

Display and edit System and Zone as Maximo Systems

process

Manage Product Types

Manage product types for the site. To create a new product type, click New Row.

Product ID	Product Name	Description
	Door	
▶ CC000274	Toilet Door	0865 x 1500mm
▶ CC000275	Door Type A	Flush Solid Core Wood - 0915 x
▶ CC000276	Door Type B	Flush Solid Core Wood w/Glass
▼ CC000277	Door Type C	Lead Lined Flush Solid Core Wo
▶ CC000278	Door Type E	Flush Steel - 0915 x 2134mm Ex

Description Details Warranty Assets Specifications

Model Reference Features

Physical Description

Size Shape

Nominal Length METERS Color

Nominal Width METERS Finish

Nominal Height METERS Material

Performance

Accessibility Performance Grade

Code Performance

Sustainability Performance Constituents

New Row

OK Cancel

Manage Product Types

Manage product types for the site. To create a new product type, click New Row.

Product ID	Product Name	Description	Site
	VAV		IBM
▶ CC000389	VAV 100 mm	100 mm	IBM
▶ CC000390	VAV 125 mm	125 mm	IBM
▶ CC000391	VAV 150 mm	150 mm	IBM
▶ CC000392	VAV 175 mm	175 mm	IBM
▼ CC000393	VAV 200 mm	200 mm	IBM

Description Details Warranty Assets Specifications

Details

Product ID Attachments

Status Created By

Model Number Created On

Asset Type Replacement Cost

Category Expected Life

Manufacturer

New Row

OK Cancel

New product application for COBie Types

contacts

COBie support

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email: Doug.wood@us.ibm.com

marketing POC

name: **Kim Woodbury**

phone: (978) 899-2644

email: **Kim Woodbury/Bedford/IBM**

COBie import demo



Company
logo

